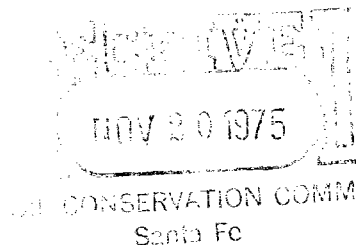


**El Paso** NATURAL GAS  
COMPANY



P.O. BOX 1492  
EL PASO, TEXAS 79978  
PHONE: 915-543-2600

November 17, 1975

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

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

Re: San Juan 27-4 Unit  
#14-08-001-1054, Rio  
Arriba County, New Mexico,  
Dakota Formation, NOTICE  
OF COMPLETION OF NON-  
COMMERCIAL WELL

Gentlemen:

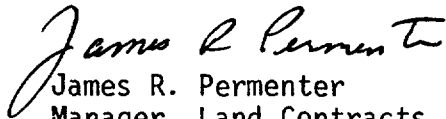
Pursuant to Section 11(b) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that the following well is not capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-4 Unit #98 well, located 1180' from the South line and 1840' from the West line of Section 10, Township 27 North, Range 4 West, N.M.P.M., was spudded on December 8, 1974 and completed on January 24, 1975 in the Dakota Formation at a total depth of 8174'. The Dakota Formation at the intervals 7886', 7960', 7986', 8030', 8052', 8060', and 8068' was treated with a sand-water fracturing process on January 12, 1975. The well was shut-in on January 17, 1975 and after being shut-in for seven (7) days the well was tested on January 24, 1975 and following a three (3) hour blow-down period, the Dakota Formation gauged 477 MCF/D through a 3/4" choke and 481 MCF/D by the calculated absolute open-flow method, with an SIPC of 2512 psia and an SIPT of 2512 psia. The spacing unit for this well is described as the W/2 of Section 10, Township 27 North, Range 4 West, containing 320.00 acres.

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

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

Yours very truly,

A handwritten signature in cursive script, reading "James R. Permenter".

James R. Permenter  
Manager, Land Contracts & Titles  
Land Department  
Energy Resource Development

JRP:DW:nm  
S.J. 27-4, 4.1.1

cc: Mr. Antonio Martinez

SAN JUAN 27-4 UNIT  
Working Interest Owners

Clifton Resources, Inc.

General American Oil Company of Texas

Thomas H. Harrington

PWG Partnership

Mr. M. A. Romero

# *El Paso Natural Gas Company*

*El Paso, Texas* 79975

April 25, 1975

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

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

Re: San Juan 27-4 Unit  
#14-08-001-1054, Rio Arriba  
County, New Mexico  
Pictured Cliffs Formation  
NOTICE OF COMPLETION OF  
ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates 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 27-4 Unit #78 Well, located 1840' from the South Line and 1115' from the West line of Section 21, Township 27 North, Range 4 West, N.M.P.M., was spudded on November 21, 1974, and completed on January 2, 1975, in the Pictured Cliffs Formation at a total depth of 3816'. The Pictured Cliffs Formation in the intervals between 3690'-3710' was treated with a sand-water fracturing process on December 2, 1974. The well was shut-in on December 10, 1974, and after being shut-in



for twenty-three (23) days, the well was tested on January 2, 1975, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1498 MCF/D through a 3/4" choke and 1530 MCF/D by the calculated absolute open-flow method, with an SIPC of 1068 psia. The spacing unit for this well is described as the W/2 of Section 21, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing unit was included in the San Juan 27-4 Unit Thirteenth Expanded Participating Area of the Pictured Cliffs Formation effective January 1, 1975, as a result of the completion of the San Juan 27-4 Unit #75 Well. Therefore, the Pictured Cliffs 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;sas  
Enclosure  
S.J. 27-4, 4.1.1

cc: Mr. Antonio Martinez  
New Mexico Oil & Gas  
Accounting Commission

Working Interest Owners  
San Juan 27-4 Unit

Clifton Resources, Inc.

General American Oil Company of Texas

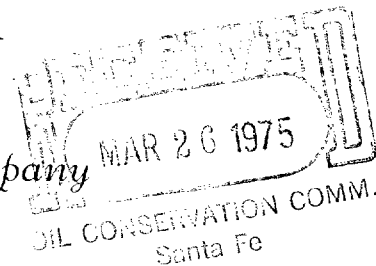
Thomas H. Harrington

PWG Partnership

Mr. M. A. Romero

# El Paso Natural Gas Company

El Paso, Texas 79978



March 21, 1975

554

Regional Oil & Gas Supervision  
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: 1975 Drilling Programs

Gentlemen:

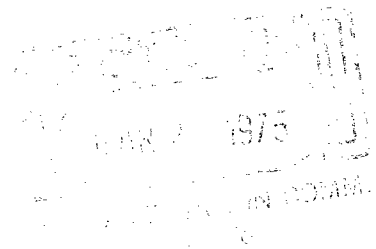
The 1975 Drilling Programs for the listed units were approved by the regulatory bodies on the dates indicated.

## APPROVAL

<u>Unit</u>	<u>USGS</u>	<u>CPL</u>	<u>OCC</u>
✓ San Juan 27-4	12-2-74	N/A	12-5-74
San Juan 28-4	12-2-74	N/A	12-5-74
San Juan 29-4	12-18-74	N/A	12-4-74
San Juan 29-7	1-6-75	12-3-74	12-5-74
San Juan 30-6	1-6-75	12-3-74	12-5-74
San Juan 32-5	1-6-75	11-1-74	12-5-74
Huerfanito	1-6-75	11-12-74	12-5-74
Huerfano	1-15-75	12-27-74	1-8-75
Lindrith	12-18-74	11-18-74	12-5-74
Rincon	1-6-75	12-3-74	12-5-74

COPY

Regional Oil & Gas Supervision  
Commissioner of Public Lands  
Oil Conservation Commission  
March 21, 1975  
Page 2



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

Yours very truly,

Don Wadsworth  
Landman  
Land Department  
Energy Resource Development

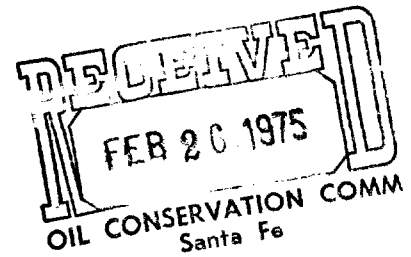
DW:nm  
SJ27-4 Unit 3.0  
SJ28-4 Unit 3.0  
SJ29-4 Unit 3.0  
SJ29-7 Unit 3.0  
SJ30-6 Unit 3.0  
SJ32-5 Unit 3.0  
Huerfanito Unit 3.0  
Huerfano Unit 3.0  
Lindrith Unit 3.0  
Rincon Unit 3.0

# El Paso Natural Gas Company

El Paso, Texas 79978

February 21, 1975

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



Commissioner of Public Lands (Information copy only)  
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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
ELEVENTH, TWELFTH AND THIRTEENTH  
EXPANDED PARTICIPATING AREAS,  
Pictured Cliffs Formation, Effective  
September 1, 1974, December 1, 1974  
and January 1, 1975, respectively

Gentlemen:

Pursuant to Section 11 (a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates indicated below that six (6) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include the wells that follow:

The San Juan 27-4 Unit #79 well, located 1450' from the South line and 875' from the West line of Section 22, Township 27 North, Range 4 West, N.M.P.M., was spudded on May 30, 1974, and completed on August 14, 1974, in the Pictured Cliffs Formation at a total depth of 4214'. The Pictured Cliffs Formation in the intervals between 3986'-4002', 4018'-4030' and 4044'-4068' was treated with a sand-water fracturing process on July 30, 1974. The well was shut-in on August 6, 1974, and after being shut-in for eight (8) days the well was tested on August 14, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2263 MCF/D through a 3/4" choke and 2376 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 W/2 of Section 22, Township 27 North, Range 4 West, containing 320.00 acres.

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

The foregoing drilling block is included in the San Juan 27-4 Unit Eleventh Expanded Participating Area of the Pictured Cliffs Formation, effective September 1, 1974.

The San Juan 27-4 Unit #81 well, located 1100' from the South line and 1097' from the West line of Section 24, Township 27 North, Range 4 West, N.M.P.M., was spudded on September 9, 1974, and completed on November 12, 1974, in the Pictured Cliffs Formation at a total depth of 4186'. The Pictured Cliffs Formation in the intervals between 4028'-4038', 4046'-4056', 4064'-4070' and 4084'-4094 was treated with a sand-water fracturing process on October 1, 1974. The well was shut-in on October 29, 1974, and after being shut-in for fourteen (14) days the well was tested on November 12, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1570 MCF/D through a 3/4" choke and 1604 MCF/D by the calculated absolute open-flow method, with an SIPC of 1117 psia. The spacing unit for this well is described as the W/2 of Section 24, Township 27 North, Range 4 West, containing 320.00 acres.

The foregoing drilling block is included in the San Juan 27-4 Unit Twelfth Expanded Participating Area of the Pictured Cliffs Formation, effective December 1, 1974.

The San Juan 27-4 Unit #75 well, located 790' from the North line and 790' from the West line of Section 21, Township 27 North, Range 4 West, N.M.P.M., was spudded on October 26, 1974, and completed on December 19, 1974, in the Pictured Cliffs Formation at a total depth of 4224'. The Pictured Cliffs Formation in the intervals between 4062'-4068', 4092'-4098' and 4110'-4116' was treated with a sand-water fracturing process on November 22, 1974. The well was shut-in on December 10, 1974, and after being shut-in for nine (9) days the well was tested on December 19, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2651 MCF/D through a 3/4" choke and 2834 MCF/D by the calculated absolute open-flow method, with an SIPC of 1084 psia. The spacing unit for this well is described as the W/2 of Section 21, Township 27 North, Range 4 West, containing 320.00 acres.

The San Juan 27-4 Unit #76 well, located 1680' from the North line and 930' from the East line of Section 21, Township 27 North, Range 4 West, N.M.P.M., was spudded on October 18, 1974, and completed on December 19, 1974, in the Pictured Cliffs Formation at a total depth of 4147'. The Pictured Cliffs Formation in the intervals between 3964'-3980', 3994'-4002' and 4014'-4038' was treated with a sand-water fracturing process on November 15, 1974. The well was shut-in on

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

December 11, 1974, and after being shut-in for eight (8) days the well was tested on December 19, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 3039 MCF/D through a 3/4" choke and 3314 MCF/D by the calculated absolute open-flow method, with an SIPC of 1088 psia. The spacing unit for this well is described as the E/2 of Section 21, Township 27 North, Range 4 West, containing 320.00 acres.

The San Juan 27-4 Unit #77 well, located 1760' from the South line and 1505' from the East line of Section 21, Township 27 North, Range 4 West, N.M.P.M., was spudded on October 5, 1974, and completed on December 4, 1974, in the Pictured Cliffs Formation at a total depth of 4139'. The Pictured Cliffs Formation in the intervals between 3998'-4004', 4034'-4040' and 4072'-4078' was treated with a sand-water fracturing process on November 15, 1974. The well was shut-in on November 27, 1974, and after being shut-in for seven (7) days the well was tested on December 4, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1497 MCF/D through a 3/4" choke and 1530 MCF/D by the calculated absolute open-flow method, with an SIPC of 1072 psia. The spacing unit for this well is described as the E/2 of Section 21, Township 27 North, Range 4 West, containing 320.00 acres.

The San Juan 27-4 Unit #80 well, located 1000' from the South line and 1760' from the East line of Section 24, Township 27 North, Range 4 West, N.M.P.M., was spudded on September 18, 1974, and completed on December 5, 1974, in the Pictured Cliffs Formation at a total depth of 4262'. The Pictured Cliffs Formation in the intervals between 4122'-4128', 4138'-4144', 4156'-4162', 4172'-4178' and 4200'-4206' was treated with a sand-water fracturing process on November 8, 1974. The well was shut-in on November 15, 1974, and after being shut-in for twenty (20) days the well was tested on December 5, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1092 MCF/D through a 3/4" choke and 1103 MCF/D by the calculated absolute open-flow method, with an SIPC of 1131 psia. The spacing unit for this well is described as the E/2 of Section 24, Township 27 North, Range 4 West, containing 320.00 acres.

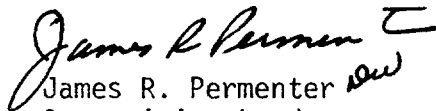
The foregoing drilling blocks are included in the San Juan 27-4 Unit Thirteenth Expanded Participating Area of the Pictured Cliffs Formation, effective January 1, 1975.

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

Attached are Schedules XII, XIII and XIV showing the Eleventh, Twelfth and Thirteenth Expanded Participating Areas respectively for the Pictured Cliffs Formation of the San Juan 27-4 Unit Area. These describe the Expanded Participating Areas and show the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, the Eleventh, Twelfth and Thirteenth Expanded Participating Areas will become effective as of September 1, 1974, December 1, 1974 and January 1, 1975, respectively.

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

Yours very truly,

A handwritten signature in cursive script, reading "James R. Permenter", followed by a stylized flourish.

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:km  
Enclosures  
San Juan 27-4, 4.1

cc: Mr. Antonio Martinez, Executive Director  
New Mexico Oil & Gas Accounting Commission



# El Paso Natural Gas Company

El Paso, Texas 79978

February 6, 1975

554

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

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

Re: San Juan 27-4 Unit  
#14-08-001-1054, Rio Arriba  
County, New Mexico  
Mesa Verde Formation  
NOTICE OF COMPLETION  
OF ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 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 Mesa Verde Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-4 Unit #126 Well, located 1680' from the South line and 1190' from the West line of Section 20, Township 27 North, Range 4 West, N.M.P.M., was spudded on October 20, 1974 and completed on December 13, 1974 in the Mesa Verde Formation at a total depth of 6163'. The Mesa Verde Formation, in the intervals between 5429'-5443', 5453'-5461', 5502'-5514', 5526'-5532', and 5544'-5558', was treated with a sand-water fracturing process on November 30, 1974, and between 5906'-5916', 5926'-5940', 5956'-5972', 5984'-5998', 6010'-6020', 6030'-6036', 6048'-6058', was treated with a sand-water fracturing

---

process on November 29, 1974. The well was shut-in on December 5, 1974, and after being shut-in for seven days the well was tested on December 13, 1974 and following a three (3) hour blow-down period, the Mesa Verde Formation gauged 3548 MCF/D through a 3/4" choke and 5429 MCF/D by the calculated absolute open-flow method, with an SIPC of 989 psia and an SIPT of 912 psia. The spacing unit for this well is described as the W/2 of Section 20, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing unit was including in the San Juan 27-4 Unit Eighteenth Expanded Participating Area of the Mesa Verde Formation effective December 1, 1973 as a result of the completion of the San Juan 27-4 Unit #16 Well. Therefore, the Mesa Verde Participating Area is not enlarged.

The San Juan 27-4 Unit #121 Well, located 1020' from the North line and 480' from the East line of Section 18, Township 27 North, Range 4 West, N.M.P.M., was spudded on November 4, 1974, and completed on December 19, 1974, in the Mesa Verde Formation at a total depth of 6104'. The Mesa Verde Formation, in the intervals between 5842'-5860', 5890'-5900', 5910'-5922', 5932'-5940', 5950'-5958', 5986'-5992', and 6066'-6074', was treated with a sand-water fracturing process on December 7, 1974 and between the intervals 5416'-5428' and 5446'-5458' was treated with a sand-water fracturing process on December 8, 1974. The well was shut-in on December 10, 1974, and after being shut-in for nine (9) days the well was tested on December 19, 1974, and following a three (3) hour blow-down period, the Mesa Verde Formation gauged 3992 MCF/D through a 3/4" choke and 6470 MCF/D by the calculated absolute open-flow method, with an SIPC of 1167 psia and an SIPT of 938 psia. The spacing unit for this well is described as the E/2 of Section 18, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing unit was included in the San Juan 27-4 Unit, Eighteenth Expanded Mesa Verde Participating Area effective December 1, 1973 as a result of the completion of the San Juan 27-4 Unit #16 Well. Therefore, the Mesa Verde 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;sas  
SJ 27-4, 4.2.1

cc: Mr. Antonio Martinez  
New Mexico Oil & Gas  
Accounting Commission

SAN JUAN 27-4 UNIT  
Working Interest Owners

Clifton Resources, Inc.

General American Oil Company of Texas

Thomas H. Harrington

PWG Partnership

Mr. M. A. Romero

# El Paso Natural Gas Company 554

El Paso, Texas 79974

February 6, 1975

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

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

RE: San Juan 27-4 Unit  
#14-08-001-1054, Rio  
Arriba County, New Mexico,  
Pictured Cliffs Formation,  
NOTICE OF COMPLETION OF  
ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 11 (a) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 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 Unit.

These wells are as follows:

The San Juan 27-4 Unit #82 well, located 1800' from the North line of 800' from the East line of Section 26, Township 27 North, Range 4 West, N.M.P.M., was spudded on September 26, 1974 and completed on December 10, 1974 in the Pictured Cliffs Formation at a total depth of 4175'. The Pictured Cliffs Formation in the intervals between 4016'-4022', 4034'-4040', 4056'-4062', 4072'-4078', and 4090'-4096' was treated with a sand-water fracturing process on November 8, 1974. The well was shut-in on

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

November 18, 1974, and after being shut-in for twenty-two (22) days the well was tested on December 10, 1974 and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1880 MCF/D through a 3/4" choke and 1942 MCF/D by the calculated absolute open-flow method, with an SIPC of 1099 psia. The spacing unit for this well is described as the E/2 of Section 26, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing unit was included in the San Juan 27-4 Unit Tenth Expanded Participating Area of the Pictured Cliffs Formation effective August 1, 1974 as a result of the completion of the San Juan 27-4 Unit #83 well. Therefore, the Pictured Cliffs Participating Area is not enlarged.

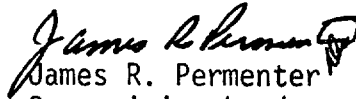
The San Juan 27-4 Unit #93 well, located 1115' from the North line and 1833' from the West line of Section 36, Township 27 North, Range 4 West, N.M.P.M., was spudded on September 1, 1974, and completed on December 5, 1974, in the Pictured Cliffs Formation at a total depth of 4227'. The Pictured Cliffs Formation in the intervals between 4114'-4126' and 4156'-4172' was treated with a sand-water fracturing process on October 2, 1974. The well was shut-in on November 18, 1974, and after being shut-in for seventeen (17) days the well was tested on December 5, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2357 MCF/D through a 3/4" choke and 2532 MCF/D by the calculated absolute open-flow method, with an SIPC of 937 psia. The spacing unit for this well is described as the W/2 of Section 36, Township 27 North, Range 4 West, containing 320.00 acres.

The foregoing drilling block was included in the San Juan 27-5 Unit Sixth Expanded Participating Area of the Pictured Cliffs Formation effective September 1, 1964 as a result of the San Juan 27-4 #36 well. Therefore, the Participating Area is not enlarged.

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

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

Yours very truly,

A handwritten signature in cursive script, reading "James R. Permenter". The signature is written in dark ink and includes a stylized flourish at the end.

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP;DW;dm  
S.J. 27-4, 4.1.1

CC: Mr. Antonio Martinez  
New Mexico Oil & Gas  
Accounting Commission

SAN JUAN 27-4 UNIT  
Working Interest Owners

Clifton Resources, Inc.

General American Oil Company of Texas

Thomas H. Harrington

PWG Partnership

Mr. M. A. Romero



OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE NEW MEXICO 87501

December 5, 1974

554

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

Attention: Mr. D. N. Canfield

Re: 1975 Drilling Program  
San Juan 27-4 Unit,  
Rio Arriba County,  
New Mexico.

O  
Gentlemen:

P  
This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program for the calendar year 1975, providing for the drilling of no wells other than those carried forward from the 1974 Drilling Program for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

Y  
One approved copy of the program is returned herewith.

Very truly yours,

A. L. Porter, Jr.  
Secretary-Director

ALP/JEK/og

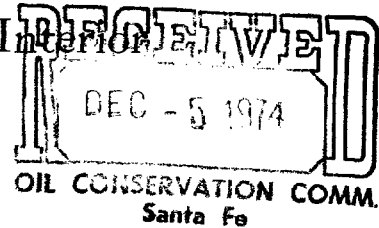
cc: United States Geological Survey  
Box 1857  
Roswell, New Mexico



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201



December 2, 1974

554

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

Gentlemen:

Your 1975 plan of development for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Such plan reschedules the drilling of 18 Pictured Cliffs, 5 Pictured Cliffs-Mesaverde, and 13 Dakota wells from the 1974 plan to the 1975 plan due to a current shortage of tubular material. Four approved copies are enclosed.

Sincerely yours,

(Orig. of N. O. Frederick)

N. O. FREDERICK  
Area Oil and Gas Supervisor

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

JAGillham:ds



# United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

November 6, 1974

554

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

Gentlemen:

Your supplement, dated October 2, 1974, to the 1974 plan of development for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico. Such supplement proposes to change the Mesaverde well to be drilled in the W $\frac{1}{2}$  of sec. 20, T. 27 N., R. 4 W., to a Pictured Cliffs-Mesaverde dual completion.

Three approved copies are enclosed.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Area Oil and Gas Supervisor

cc:

Durango (w/cy supplement)  
NMOCC, Santa Fe (ltr only)  
Com. Pub. Lands, Santa Fe (ltr only)

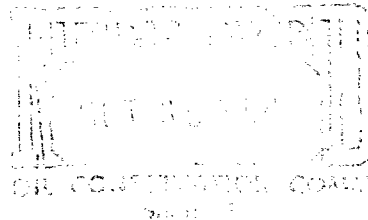
JAGillham:ds

# El Paso Natural Gas Company

El Paso, Texas 79978

554

October 25, 1974



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

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

Re: San Juan 27-4 Unit #14-08-001-1054,  
Rio Arriba County, New Mexico,  
Pictured Cliffs Formation,  
NOTICE OF COMPLETION OF  
ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 11 (a) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates 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 27-4 Unit #84 well, located 850 feet from the North line and 1620 feet from the East line of Section 27, Township 27 North, Range 4 West, N.M.P.M., was spudded on May 14, 1974 and completed on August 22, 1974, in the Pictured Cliffs Formation at a total depth of 4304'. The Pictured Cliffs Formation in the intervals between 4128' - 4140', 4150' - 4160' and 4172' - 4190' was treated with a sand-water fracturing process on July 30, 1974. The well was shut-in on August 15, 1974, and after being shut-in for seven (7) days the well was tested on August 22, 1974 and following a three (3) hour


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

blow-down period, the Pictured Cliffs Formation gauged 1640 MCF/D through a 3/4" choke and 1685 MCF/D by the calculated absolute open-flow method, with an SIPC of 1051 psia. The spacing unit for this well is described as the E/2 of Section 27, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing unit was included in the San Juan 27-4 Unit Eighth Expanded Participating Area of the Pictured Cliffs Formation effective June 1, 1974 as a result of the completion of the San Juan 27-4 Unit #63 well. Therefore, the Pictured Cliffs 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:km  
San Juan 27-4, 4.1.1

cc: Mr. Antonio Martinez  
Executive Director, New Mexico  
Oil and Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

Working Interest Owners  
San Juan 27-4 Unit

Clifton Resources, Inc.

General American Oil Company of Texas

Thomas H. Harrington

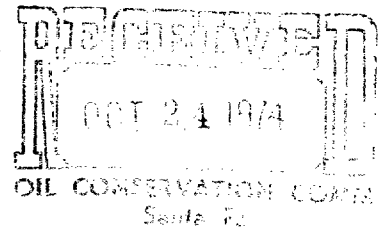
PWG Partnership

Mr. M. A. Romero

# El Paso Natural Gas Company

El Paso, Texas 79978

October 17, 1974



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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1975 DRILLING PROGRAM

Gentlemen:

By letters dated January 9, 1974, August 9, 1974 and October 2, 1974, El Paso Natural Gas Company, as Unit Operator, filed a drilling program, supplemental drilling program and an amended supplemental drilling program for the captioned Unit for the year 1974, providing for the drilling of thirty-eight (38) Pictured Cliffs wells, two (2) Mesaverde wells, seventeen (17) Dakota wells and five (5) dual Pictured Cliffs/Mesaverde wells. Pictured Cliffs wells Nos. 84, 85, 86, and 89 were drilled within the existing boundaries of the Pictured Cliffs Participating Area and did not cause an expansion of the Pictured Cliffs Participating Area. Pictured Cliffs wells Nos. 87, 88 and 91 and Pictured Cliffs wells Nos. 83 and 92 were drilled outside of the existing Pictured Cliffs Participating Area and caused the Ninth and Tenth expansions of the Pictured Cliffs Participating Areas respectively. Dakota well No. 49 was completed within the existing Dakota Participating Area and did not cause an expansion of the Dakota Participating Area. Pictured Cliffs well No. 79 was drilled outside of the Pictured Cliffs Participating Area and is currently being evaluated to determine if it will cause an expansion of the Pictured Cliffs Participating Area.

Pictured Cliffs wells Nos. 77, 80, 81, 82 and 93 are currently drilling. Pictured Cliffs wells Nos. 72, 74, 75 and 76, Dakota wells Nos. 94, 95 and 98, Mesaverde well No. 121 and Pictured Cliffs/Mesaverde dual well No. 126 are scheduled to be drilled prior to the end of 1974. The following listed wells also included in our 1974 Drilling Program and previously approved, will not be drilled until 1975 due to a shortage of tubular goods.

<u>Well No.</u>	<u>Formation</u>	<u>Drilling Block or Spacing Unit</u>
73	PC - Mesaverde	E/2 Section 17, T-27-N, R-4-W
78	Pictured Cliffs	W/2 Section 21, T-27-N, R-4-W
90	Pictured Cliffs	E/2 Section 31, T-27-N, R-4-W
96	Dakota	E/2 Section 9, T-27-N, R-4-W
97	Dakota	E/2 Section 10, T-27-N, R-4-W
99	Dakota	W/2 Section 16, T-27-N, R-4-W
100	Dakota	W/2 Section 22, T-27-N, R-4-W
101	Dakota	E/2 Section 28, T-27-N, R-4-W
102	Dakota	E/2 Section 33, T-27-N, R-4-W
104	Pictured Cliffs	W/2 Section 17, T-27-N, R-4-W
105*	PC - Mesaverde	E/2 Section 19, T-27-N, R-4-W
106	Pictured Cliffs	E/2 Section 19, T-27-N, R-4-W
107	Pictured Cliffs	W/2 Section 20, T-27-N, R-4-W
108	Pictured Cliffs	E/2 Section 20, T-27-N, R-4-W
109	Pictured Cliffs	E/2 Section 23, T-27-N, R-4-W
110	Pictured Cliffs	W/2 Section 23, T-27-N, R-4-W
111	Pictured Cliffs	W/2 Section 28, T-27-N, R-4-W
112	Pictured Cliffs	E/2 Section 28, T-27-N, R-4-W
113	Pictured Cliffs	W/2 Section 29, T-27-N, R-4-W
114	Pictured Cliffs	E/2 Section 29, T-27-N, R-4-W
115	Pictured Cliffs	W/2 Section 32, T-27-N, R-4-W
116	Pictured Cliffs	E/2 Section 32, T-27-N, R-4-W
117	Pictured Cliffs	E/2 Section 33, T-27-N, R-4-W
118	Pictured Cliffs	W/2 Section 33, T-27-N, R-4-W
119	Pictured Cliffs	W/2 Section 34, T-27-N, R-4-W
120	Pictured Cliffs	W/2 Section 34, T-27-N, R-4-W
123	PC - Mesaverde	E/2 Section 7, T-27-N, R-4-W
124	PC - Mesaverde	W/2 Section 8, T-27-N, R-4-W
125	PC - Mesaverde	E/2 Section 8, T-27-N, R-4-W
127	Dakota	E/2 Section 3, T-27-N, R-4-W
128	Dakota	W/2 Section 11, T-27-N, R-4-W
129	Dakota	E/2 Section 15, T-27-N, R-4-W
130	Dakota	W/2 Section 15, T-27-N, R-4-W
131	Dakota	E/2 Section 22, T-27-N, R-4-W
132	Dakota	E/2 Section 27, T-27-N, R-4-W
133	Dakota	W/2 Section 27, T-27-N, R-4-W

\* Well No. 105 was originally proposed as a single Pictured Cliffs well, but will be drilled as a dual Pictured Cliffs/Mesaverde, thus eliminating the No. 122 Mesaverde well previously proposed for the E/2 Sec. 19, T-27-N, R-4-W.



United States Geological Survey  
Oil Conservation Commission  
Page Three

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	24
Mesaverde	11
Dakota	30
Dakota-Gallup (CWWO)	1
Pictured Cliffs-Mesaverde	8
Mesaverde-Dakota	1
Mesaverde-Dakota, plugged back and completed in the Mesaverde only	2
Non-Commercial Mesaverde	1
Plugged and Abandoned, Dakota	1
Plugged and Abandoned, Mesaverde-Dakota	1
Plugged and Abandoned, Mesaverde, Recompletion Dakota	<u>1</u>
	81

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1975 providing for the drilling of no wells other than those previously listed as being carried forward from the 1974 Drilling Program.

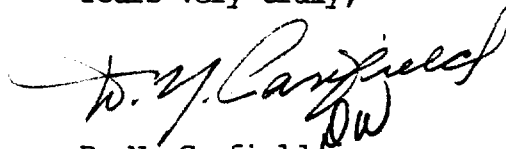
All working interest owners have been contacted, and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

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

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 as shown on the attached sheet.

Yours very truly,



D. N. Canfield  
Manager  
Land Department  
Energy Resource Development

DNC:DW:saw

Enclosures

San Juan 27-4 Unit 3.0


cc: Commissioner of Public Lands (Info. only)

APPROVED: \_\_\_\_\_

Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Oil Conservation Commission

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

APPROVED: \_\_\_\_\_

  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey

DATE: Dec. 5, 1974

The foregoing approvals are for the 1975 Drilling Program for the San Juan 27-4  
Unit #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

Clifton Resources, Inc.

General American Oil Company of Texas

Thomas H. Harrington

PWG Partnership

M. A. Romero

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE NEW MEXICO 87501

October 10, 1974

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

Attention: Mr. D. N. Canfield

Re: Amended 1974 Supplemental  
Drilling Program, San Juan  
27-4 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Amended 1974 Supplemental Drilling Program providing for the drilling of the well to be located in the W/2 of Section 20, Township 27 North, Range 4 West, as a Pictured Cliffs-Mesaverde Dual rather than a Mesaverde well for the San Juan 27-4 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

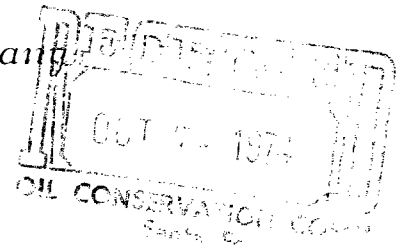
Commissioner of Public Lands  
Santa Fe, New Mexico

C  
O  
P  
Y

# El Paso Natural Gas Company

El Paso, Texas 79978

October 2, 1974



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 27-4 Unit  
Rio Arriba County, New Mexico  
AMENDED 1974 SUPPLEMENTAL DRILLING PROGRAM

Gentlemen:

On August 9, 1974, El Paso Natural Gas Company, as Unit Operator, filed a 1974 Drilling Program for the captioned unit providing for the drilling of seventeen (17) Pictured Cliffs wells, three (3) Mesaverde wells, four (4) Pictured Cliffs - Mesaverde wells and seven (7) Dakota wells.

El Paso Natural Gas Company proposes that the Mesaverde well proposed to be drilled in the W/2 of Section 20, T-27-N, R-4-W, be changed to a Pictured Cliffs - Mesaverde dual completion.

This well is owned 100% by El Paso Natural Gas Company. If this meets with your approval, please sign and return an approved copy of this Amended Supplemental Drilling Program to this office.

Yours very truly,

D. N. Canfield  
Director of Land  
Energy Resource Development


sn  
Enclosure  
S.J. 27-4, 3.0

APPROVED: \_\_\_\_\_  
Regional Oil & 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: October 10, 1974

The foregoing approvals are for the San Juan 27-4 Unit 1974 Amended Supplemental Drilling Program.

# El Paso Natural Gas Company

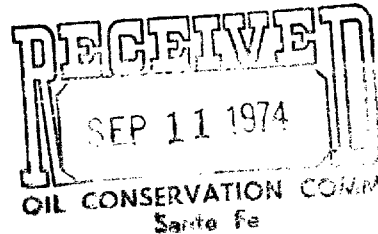
El Paso, Texas 79978

September 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 27-4 Unit  
Rio Arriba County, New Mexico  
1974 Supplemental Drilling Program  
San Juan 29-5 Unit  
Rio Arriba County, New Mexico  
1974 Drilling Program

Gentlemen:

The 1974 Drilling Programs for the above referenced units were approved by the Regulatory Bodies on the following dates:

	<u>San Juan 27-4</u>	<u>San Juan 29-5</u>
United States Geological Survey	9-3-74	5-21-74
Commissioner of Public Lands	-----	3-15-74
Oil Conservation Commission	8-27-74	3-18-74

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

Yours very truly,

A handwritten signature in cursive script that reads "Don Wadsworth".

Don Wadsworth  
Landman  
Land Department  
Energy Resource Development

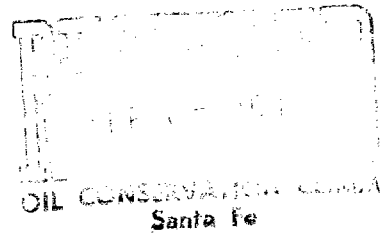
DW:sn  
S.J. 27-4, 3.0  
S.J. 29-5, 3.0

# El Paso Natural Gas Company

El Paso, Texas 79978

554

September 4, 1974



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

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

Re: San Juan 27-4 Unit  
#14-08-001-1054, Rio  
Arriba County, New Mexico,  
Pictured Cliffs Formation,  
NOTICE OF COMPLETION OF  
ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that six (6) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to the Unit. Well #67 would normally be declared non-commercial, but since it is on a drilling block already committed to the Participating Area, its participation is mandatory. These wells are as follows:

The San Juan 27-4 Unit #62 well, located 1500' from the North line and 800' from the West line of Section 26, Township 27 North, Range 4 West, N.M.P.M., was spudded on December 22, 1973, and completed on July 23, 1974, in the Pictured Cliffs Formation at a total depth of 4343'. The Pictured Cliffs Formation in the intervals between 4144'-4160' and 4192'-4216'



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

was treated with a sand-water fracturing process on April 23, 1974. The well was shut-in on May 1, 1974, and after being shut-in for eighty-three (83) days the well was tested on July 23, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2407 MCF/D through a 3/4" choke and 2542 MCF/D by the calculated absolute open-flow method, with an SIPC of 1102 psia. The spacing unit for this well is described as the W/2 of Section 26, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing unit was included in the San Juan 27-4 Unit Seventh Expanded Participating Area of the Pictured Cliffs Formation effective October 1, 1964 as a result of the completion of the San Juan 27-4 Unit #35 well. Therefore, the Pictured Cliffs Participating Area is not enlarged.

The San Juan 27-4 Unit #66 well, located 1930' from the North line and 430' from the West line of Section 31, Township 27 North, Range 4 West, N.M.P.M. was spudded on November 11, 1973, and completed on June 12, 1974, in the Pictured Cliffs Formation at a total depth of 4222'. The Pictured Cliffs Formation in the intervals between 4102'-4114', and 4125'-4136' was treated with a sand-water fracturing process on April 29, 1974. The well was shut in on June 4, 1974, and after being shut-in for eight (8) days the well was tested on June 12, 1974, and following a 3 hour blow-down period, the Pictured Cliffs Formation gauged 1481 MCF/D through a 3/4" choke and 1539 MCF/D by the calculated absolute open-flow method, with an SIPC of 800 psia. The spacing unit for this well is described as the W/2 of Section 31, Township 27 North, Range 4 West, containing 323.16 acres.

The above described spacing unit was included in the San Juan 27-4 Unit Initial Expanded Participating Area of the Pictured Cliffs Formation effective September 4, 1956, as a result of the completion of the San Juan 27-4 Unit #6 well. Therefore the Pictured Cliffs Participating Area is not enlarged.

The San Juan 27-4 Unit #67 well, located 1840' from the North line and 1660' from the East line of Section 36, Township 27 North, Range 4 West, N.M.P.M., was spudded on November 26, 1973, and completed on July 10, 1974, in the

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

Pictured Cliffs Formation at a total depth of 4247'. The Pictured Cliffs Formation in the intervals between 4084'-4092', 4104'-4112', and 4135'-4151' was treated with a sand-water fracturing process on April 23, 1974. The well was shut-in on June 27, 1974, and after being shut-in for thirteen (13) days the well was tested on July 10, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 185 MCF/D through a 3/4" choke and 185 MCF/D by the calculated absolute open-flow method, with an SIPC of 1013 psia. The spacing unit for this well is described as the E/2 of Section 36, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing unit was included in the San Juan 27-4 Unit Ninth Expanded Participating Area of the Pictured Cliffs Formation effective July 1, 1974 as a result of the completion of the San Juan 27-4 Unit #68 well. Therefore the Pictured Cliffs Participating Area is not enlarged.

The San Juan 27-4 Unit #85 well, located 1765' from the South line and 830' from the East line of Section 27, Township 27 North, Range 4 West, N.M.P.M., was spudded on May 13, 1974, and completed on July 10, 1974, in the Pictured Cliffs Formation at a total depth of 4203'. The Pictured Cliffs Formation in the intervals between 4095'-4122' and 4138'-4147' was treated with a sand-water fracturing process on June 17, 1974. The well was shut-in on June 27, 1974, and after being shut-in for thirteen (13) days the well was tested on July 10, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1487 MCF/D through a 3/4" choke and 1520 MCF/D by the calculated absolute open-flow method, with an SIPC of 1056 psia. The spacing unit for this well is described as the E/2 of Section 27, Township 27 North, Range 4 West, containing 320.00 acres.

The San Juan 27-4 Unit #86 well, located 2210' from the South line and 2340' from the West line of Section 27, Township 27 North, Range 4 West, N.M.P.M., was spudded on May 29, 1974, and completed on August 8, 1974, in the Pictured Cliffs Formation at a total depth of 4118'. The Pictured Cliffs Formation at the intervals of 4008', 4009', 4013', 4014', 4030', 4031', 4032', 4033', 4056', and 4057', with one shot per foot was treated

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

with a sand-foam fracturing process on July 29, 1974. The well was shut-in on July 30, 1974, and after being shut-in for nine (9) days, the well was tested on August 8, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 3253 MCF/D through a 3/4" choke and 3634 MCF/D by the calculated absolute open-flow method, with an SIPC of 1044. The spacing unit for this well is described as the W/2 of Section 27, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing units were included in the San Juan 27-4 Unit Eighth Expanded Participating Area of the Pictured Cliffs Formation effective June 1, 1974 as a result of the completion of the San Juan 27-4 Unit #63 well. Therefore the Pictured Cliffs Participating Area is not enlarged.


The San Juan 27-4 Unit #89 well, located 1825' from the South line and 1460' from the East line of Section 30, Township 27 North, Range 4 West, N.M.P.M., was spudded on April 17, 1974, and completed on July 10, 1974, in the Pictured Cliffs Formation at a total depth of 3708'. The Pictured Cliffs Formation in the intervals between 3560'-3584', and 3604'-3628' was treated with a sand-water fracturing process on June 4, 1974. The well was shut-in on June 27, 1974, and after being shut-in for thirteen (13) days the well was tested on July 10, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2329 MCF/D through a 3/4" choke and 2449 MCF/D by the calculated absolute open-flow method, with an SIPC of 1068 psia. The spacing unit for this well is described as the E/2 of Section 30, Township 27 North, Range 4 West, containing 320.00 acres.

The above described spacing unit was included in the San Juan 27-4 Unit Third Expanded Participating Area of the Pictured Cliffs Formation effective September 1, 1958 as a result of the completion of the San Juan 27-4 Unit #17 well. Therefore, the Pictured Cliffs Participating Area is not enlarged.

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

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

Yours very truly,

  
James R. Permenter<sup>DW</sup>  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:sn  
S.J. 27-4, 4.1.1

cc: Mr. Antonio Martinez  
New Mexico Oil & Gas  
Accounting Commission

Working Interest Owners  
San Juan 27-4 Unit

Clifton Resources, Inc.

General American Oil Company of Texas

Thomas H. Harrington

PWG Partnership

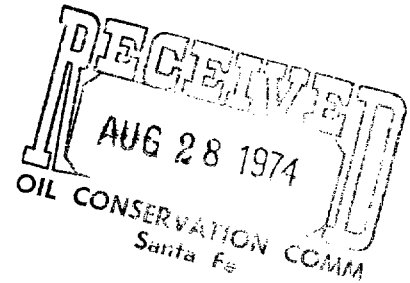
Mr. M. A. Romero

# El Paso Natural Gas Company

El Paso, Texas 79978

August 28, 1974

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



Commissioner of Public Lands (Information copy only)  
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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
EIGHTH, NINTH AND TENTH EXPANDED  
PARTICIPATING AREAS, Pictured Cliffs  
Formation, Effective June 1, July 1,  
and August 1, 1974 respectively

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates indicated below that eight (8) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include the wells that follow:

The San Juan 27-4 #61 well, located 800' from the South line and 1500' from the East line of Section 22, Township 27 North, Range 4 West, N.M.P.M., was spudded on December 5, 1973, and completed on May 16, 1974, in the Pictured Cliffs Formation at a total depth of 4318'. The Pictured Cliffs Formation in the intervals between 4120'-4130', 4140'-4146' and 4170'-4188' was treated with a sand-water fracturing process on April 23, 1974. The well was shut in on April 30, 1974, and after being shut-in for sixteen (16) days the well was tested on May 16, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1892 MCF/D through a 3/4" choke and 1955 MCF/D by the calculated absolute open-flow method, with an SIPC of 1096 psia. The spacing unit for this well is described as the E/2 of Section 22, Township 27 North, Range 4 West, containing 320.00 acres.

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

The San Juan 27-4 #63 well, located 1838' from the North line and 1765' from the West line of Section 27, Township 27 North, Range 4 West, N.M.P.M., was spudded on December 14, 1973, and completed on May 16, 1974, in the Pictured Cliffs Formation at a total depth of 4280'. The Pictured Cliffs Formation in the intervals between 4102'-4126' and 4152'-4162', was treated with a sand-water fracturing process on April 23, 1974. The well was shut-in on April 29, 1974, and after being shut-in for seventeen (17) days the well was tested on May 16, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1966 MCF/D through a 3/4" choke and 2042 MCF/D by the calculated absolute open-flow method, with an SIPC of 1069 psia. The spacing unit for this well is described as the W/2 of Section 27, Township 27 North, Range 4 West, containing 320.00 acres.

The foregoing drilling blocks are included in the Eighth Expanded Participating Area of the Pictured Cliffs Formation for the San Juan 27-4 Unit, effective June 1, 1974.

The completion of the San Juan 27-4 Unit #63 Well in the Pictured Cliffs Formation creates one (1) intervening drilling block described as the E/2 of Section 27, Township 27 North, Range 4 West, containing 320.00 acres. Under the terms of the Unit Agreement, this intervening drilling block is also admitted to the Pictured Cliffs Participating Area, effective June 1, 1974, and a well must be commenced on this intervening drilling block by June 1, 1975.

The San Juan 27-4 #68 well, located 870' from the South line and 920' from the East line of Section 36, Township 27 North, Range 4 West, N.M.P.M., was spudded on November 18, 1973, and completed on June 12, 1974, in the Pictured Cliffs Formation at a total depth of 4190'. The Pictured Cliffs Formation in the intervals between 4024'-4040' and 4066'-4088' was treated with a sand-water fracturing process on April 23, 1974. The well was shut-in on June 4, 1974, and after being shut-in for eight (8) days the well was tested on June 12, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 3877 MCF/D through a 3/4" choke and 4651 MCF/D by the calculated absolute open-flow method, with an SIPC of 991 psia. The spacing unit for this well is described as the E/2 of Section 36, Township 27 North, Range 4 West, containing 320.00 acres.

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

The San Juan 27-4 #87 well, located 1820' from the North line and 1820' from the East line of Section 28, Township 27 North, Range 4 West, N.M.P.M., was spudded on April 22, 1974, and completed on June 28, 1974, in the Pictured Cliffs Formation at a total depth of 4106'. The Pictured Cliffs Formation in the intervals between 3962'-3970', 3980'-4002', and 4014'-4026' was treated with a sand-water fracturing process on June 4, 1974. The well was shut-in on June 18, 1974, and after being shut-in for ten (10) days the well was tested on June 28, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 3513 MCF/D through a 3/4" choke and 3999 MCF/D by the calculated absolute open-flow method, with an SIPC of 1050 psia. The spacing unit for this well is described as the E/2 of Section 28, Township 27 North, Range 4 West, containing 320.00 acres.

The San Juan 27-4 #88 well, located 960' from the South line and 1120' from the West line of Section 28, Township 27 North, Range 4 West, N.M.P.M., was spudded on April 19, 1974, and completed on June 28, 1974, in the Pictured Cliffs Formation at a total depth of 4232'. The Pictured Cliffs Formation in the intervals between 4056'-4066', 4076'-4084', 4092'-4104', and 4120'-4132' was treated with a sand-water fracturing process on June 4, 1974. The well was shut-in on June 20, 1974, and after being shut-in for eight (8) days the well was tested on June 28, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1698 MCF/D through a 3/4" choke and 1750 MCF/D by the calculated absolute open-flow method, with an SIPC of 1020 psia. The spacing unit for this well is described as the W/2 of Section 28, Township 27 North, Range 4 West, containing 320.00 acres.

The San Juan 27-4 #91 well, located 1610' from the South line and 1690' from the East line of Section 33, Township 27 North, Range 4 West, N.M.P.M., was spudded on April 18, 1974, and completed on June 28, 1974, in the Pictured Cliffs Formation at a total depth of 4179'. The Pictured Cliffs Formation in the intervals between 4030'-4040', 4050'-4062', and 4089'-4096' was treated with a sand-water fracturing process on June 4, 1974. The well was shut-in on June 20, 1974, and after being shut-in for eight (8) days the well was tested on June 28, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1277 MCF/D through a 3/4" choke and 1299 MCF/D by the calculated absolute open-flow method with an SIPC of 1030 psia. The spacing unit for this well is described as the E/2 of Section 33, Township 27 North, Range 4 West, containing 320.00 acres.



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

The foregoing drilling blocks are included in the Ninth Expanded Participating Area of the Pictured Cliffs Formation for the San Juan 27-4 Unit, effective July 1, 1974.

The San Juan 27-4 #83 well, located 1600' from the South line and 1650' from the East line of Section 26, Township 27 North, Range 4 West, N.M.P.M., was spudded on May 10, 1974, and completed on July 23, 1974, in the Pictured Cliffs Formation at a total depth of 4321'. The Pictured Cliffs Formation in the intervals between 4146'-4160', 4170'-4184' and 4196'-4214' was treated with a sand-water fracturing process on June 17, 1974. The well was shut-in on July 9, 1974, and after being shut-in for fourteen (14) days the well was tested on July 23, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2947 MCF/D through a 3/4" choke and 3250 MCF/D by the calculated absolute open-flow method, with an SIPC of 1012 psia. The spacing unit for this well is described as the E/2 of Section 26, Township 27 North, Range 4 West, containing 320.00 acres.

The San Juan 27-4 #92 well, located 940' from the North line and 860' from the East line of Section 34, Township 27 North, Range 4 West, N.M.P.M., was spudded on May 9, 1974, and completed on July 10, 1974, in the Pictured Cliffs Formation at a total depth of 4255'. The Pictured Cliffs Formation in the intervals between 4112'-4122', 4130'-4142', 4154'-4164', and 4174'-4182' was treated with a sand-water fracturing process on June 17, 1974. The well was shut-in on July 2, 1974, and after being shut-in for eight (8) days the well was tested on July 10, 1974, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 3125 MCF/D through a 3/4" choke and 3505 MCF/D by the calculated absolute open-flow method, with an SIPC of 991 psia. The spacing unit for this well is described as the NE/4 of Section 34, Township 27 North, Range 4 West, containing 160.00 acres.

The foregoing drilling blocks are included in the Tenth Expanded Participating Area of the Pictured Cliffs Formation for the San Juan 27-4 Unit, effective August 1, 1974.

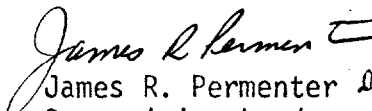
The completion of the San Juan 27-4 Unit #92 Well in the Pictured Cliffs Formation creates one (1) intervening drilling block described as the W/2 of Section 34 Township 27 North, Range 4 West, containing 320.00 acres. Under the terms of the Unit Agreement, this intervening drilling block is also admitted to the Pictured Cliffs Participating Area, effective August 1, 1974, and a well must be commenced on this intervening drilling block by August 1, 1975.

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

Attached are Schedules IX, X and XI showing the Eighth, Ninth and Tenth Expanded Participating Areas respectively for the Pictured Cliffs Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, the Eighth, Ninth and Tenth Expanded Participating Areas will become effective as of June 1, 1974, July 1, 1974 and August 1, 1974 respectively.

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

Yours very truly,

  
James R. Permenter *dw*  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:sn  
Enclosure  
San Juan 27-4, 4.1

cc: Mr. Antonio Martinez  
New Mexico Oil & Gas  
Accounting Commission

SAN JUAN 27-4 UNIT  
Working Interest Owners

Clifton Resources, Inc.

General American Oil Company of Texas

Thomas H. Harrington

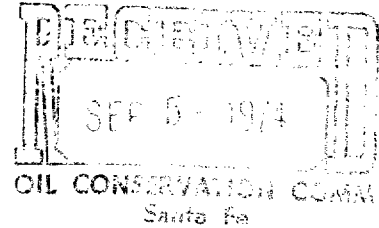
PWG Partnership

M. A. Romero

# El Paso Natural Gas Company

El Paso, Texas 79978

August 27, 1974



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

Re: San Juan 27-4 Unit #14-08-  
001-1054, NOTICE OF COMPLETION  
OF ADDITIONAL WELLS, Dakota  
Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 the Unit. This well is as follows:


The San Juan 27-4 Unit #49 well, located 1550' from the South line and 1720' from the West line of Section 30, Township 27 North, Range 4 West, N.M.P.M., was spudded on May 20, 1974, and completed on July 10, 1974, in the Dakota Formation at a total depth of 8023'. The Dakota Formation at the following depths, 7972', 7938', 7904', 7888', 7766' and 7754' was treated with a sand-water fracturing process on June 17, 1974. The well was shut-in on June 28, 1974, and after being shut-in for twelve (12) days the well was tested on July 10, 1974, and following a three (3) hour blow-down period, the Dakota Formation gauged 2552 MCF/D through a 3/4" choke and 2618 MCF/D by the calculated absolute open-flow method, with an SIPC of 2386 psia and an SIPT of 1344 psia. The spacing unit for this well is described as the W/2 of Section 30, Township 27 North, Range 4 West, containing 320.00 acres.

United States Geological Survey  
Oil Conservation Commission  
Page Two

This spacing unit was included in the San Juan 27-4 Unit Eleventh Expanded Participating Area for the Dakota Formation, effective October 1, 1968 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,

  
James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:sn  
S.J. 27-4, 4.3.1

cc: Commissioner of Public Lands  
(Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

Mr. Antonio Martinez  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico

Working Interest Owners  
San Juan 27-4 Unit

Clifton Resources, Inc.

General American Oil Company of Texas

Thomas H. Harrington

PWG Partnership

Mr. M. A. Romero

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE NEW MEXICO 87501

August 27, 1974

554

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

Re: 1974 Supplemental Drilling Program,  
San Juan 27-4 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1974 Supplemental Drilling Program providing for the drilling of 31 additional wells for the San Juan 27-4 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

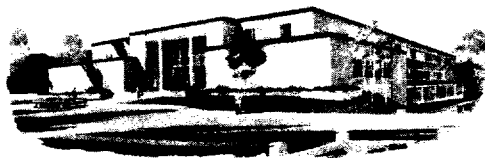
ALP/JEK/og

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

C  
O  
P  
Y

# State of New Mexico

TELEPHONE  
505-827-2748



## Commissioner of Public Lands

August 15, 1974

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 27-4 Unit  
Rio Arriba County, New Mexico  
1974 SUPPLEMENTAL DRILLING PROGRAM

ATTENTION: Mr. D. N. Canfield

Gentlemen:

We are in receipt of three copies of your 1974 Supplemental Drilling Program for the San Juan 27-4 Unit, Rio Arriba County, New Mexico.

This unit contains no State of New Mexico lands, therefore, the Commissioner's approval is not required. We are retaining one copy for record purposes only and returning the remaining copies to you.

Very truly yours,

RAY D. GRAHAM, Director  
Oil and Gas Department

AJA/RDG/s  
encls.  
cc:

USOS-Roswell, New Mexico  
OCC-Santa Fe, New Mexico ✓



# El Paso Natural Gas Company

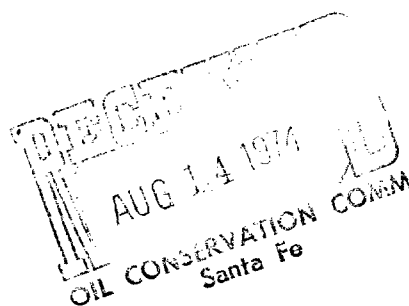
El Paso, Texas 79978

August 9, 1974

Acting 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 27-4 Unit  
Rio Arriba County, New Mexico  
1974 Supplemental Drilling Program

Gentlemen:

On January 9, 1974, El Paso Natural Gas Company, as Unit Operator, filed a 1974 Drilling Program for the captioned unit providing for the drilling of twenty-seven (27) Pictured Cliffs wells and ten (10) Dakota wells.

In addition, El Paso Natural Gas Company proposes that the following wells be drilled during the calendar year 1974 by El Paso Natural Gas Company, as Unit Operator:

<u>Formation</u>	<u>Drilling Block or Spacing Unit</u>
Pictured Cliffs	W/2 Sec. 17, T-27-N, R-4-W
Pictured Cliffs	E/2 Sec. 19, T-27-N, R-4-W
Pictured Cliffs	E/2 Sec. 19, T-27-N, R-4-W
Pictured Cliffs	W/2 Sec. 20, T-27-N, R-4-W
Pictured Cliffs	E/2 Sec. 20, T-27-N, R-4-W
Pictured Cliffs	E/2 Sec. 23, T-27-N, R-4-W
Pictured Cliffs	W/2 Sec. 23, T-27-N, R-4-W
Pictured Cliffs	W/2 Sec. 28, T-27-N, R-4-W
Pictured Cliffs	E/2 Sec. 28, T-27-N, R-4-W
Pictured Cliffs	W/2 Sec. 29, T-27-N, R-4-W
Pictured Cliffs	E/2 Sec. 29, T-27-N, R-4-W
Pictured Cliffs	W/2 Sec. 32, T-27-N, R-4-W
Pictured Cliffs	E/2 Sec. 32, T-27-N, R-4-W

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

<u>Formation</u>	<u>Drilling Block or Spacing Unit</u>
Pictured Cliffs	E/2 Sec. 33, T-27-N, R-4-W
Pictured Cliffs	W/2 Sec. 33, T-27-N, R-4-W
Pictured Cliffs	W/2 Sec. 34, T-27-N, R-4-W
Pictured Cliffs	W/2 Sec. 34, T-27-N, R-4-W
Mesaverde	E/2 Sec. 18, T-27-N, R-4-W
Mesaverde	E/2 Sec. 19, T-27-N, R-4-W
PC - Mesaverde	E/2 Sec. 7, T-27-N, R-4-W
PC - Mesaverde	W/2 Sec. 8, T-27-N, R-4-W
PC - Mesaverde	E/2 Sec. 8, T-27-N, R-4-W
PC - Mesaverde	E/2 Sec. 17, T-27-N, R-4-W
Mesaverde	W/2 Sec. 20, T-27-N, R-4-W
Dakota	E/2 Sec. 3, T-27-N, R-4-W
Dakota	W/2 Sec. 11, T-27-N, R-4-W
Dakota	E/2 Sec. 15, T-27-N, R-4-W
Dakota	W/2 Sec. 15, T-27-N, R-4-W
Dakota	E/2 Sec. 22, T-27-N, R-4-W
Dakota	E/2 Sec. 27, T-27-N, R-4-W
Dakota	W/2 Sec. 27, T-27-N, R-4-W

With the exception of the Dakota well located on the W/2 of Section 11, all wells are owned 100% by El Paso Natural Gas Company. All working interest owners have been notified and furnished a copy of the supplemental program. If it meets with your approval, please sign and return the accompanying acknowledgement page.

Yours very truly,

*D N Canfield*

D. N. Canfield  
Director of Land  
Energy Resource Development


DNC:TS:sn  
Enclosure

APPROVED: \_\_\_\_\_  
Regional Oil & 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: August 26, 1974

The foregoing approvals are for the San Juan 27-4 Unit 1974 Supplemental Drilling Program.

# El Paso Natural Gas Company

El Paso, Texas 79978

February 25, 1974

554

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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
EIGHTEENTH EXPANDED PARTICIPATING  
AREA, Mesaverde Formation,  
Effective December 1, 1973

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #16 well, located 990' from the North line and 990' from the East line of Section 17, Township 27 North, Range 4 West, N.M.P.M., was spudded on October 6, 1973, and completed on November 21, 1973, in the Mesaverde Formation at a total depth of 6000'. The Mesaverde Formation in the intervals between 5232' - 5240', 5292' - 5300', 5314' - 5322', 5348' - 5356', 5366' - 5380', 5712' - 5728', 5742' - 5750', 5764' - 5772', 5782' - 5798', 5812' - 5820', 5832' - 5840', 5856' - 5864', 5922' - 5938', 5956' - 5966' was treated with a sand-water fracturing process on October 7, 1973. The well was shut-in on October 10, 1973, and after being shut-in for forty-two (42) days the well was tested on November 21, 1973, and following a three (3) hour blow-down period, the Mesaverde

Formation gauged 4618 MCFGPD through a 3/4" choke and 5728 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1177 psia and an SIPT of 721 psia. The spacing unit for this well is described as the W/2 of Section 17, Township 27 North, Range 4 West, containing 320.00 acres.

The foregoing drilling block is included in the Eighteenth Expanded Participating Area of the Mesaverde Formation for the San Juan 27-4 Unit, effective December 1, 1973.

The San Juan 27-4 Unit #16 Well, was initially completed in the Dakota Formation, but was plugged as part of the recompletion of the well in the Mesaverde Formation.

The completion of the San Juan 27-4 Unit #16 Well in the Mesaverde Formation creates two (2) intervening drilling blocks described as the E/2 of Section 18, and the W/2 of Section 20, Township 27 North, Range 4 West, containing 640.00 acres. Under the terms of the Unit Agreement, these intervening drilling blocks are also admitted to the Mesaverde Participating Area, effective December 1, 1973, and a well must be commenced on each intervening drilling block by December 1, 1974.

Attached is Schedule XIX showing the Eighteenth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Eighteenth Expanded Participating Area will become effective as of December 1, 1973.

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

Very truly yours,



James R. Permenter <sup>SW</sup>  
Supervising Landman  
Land Department  
Energy Resource Development

JP:DW:mcv  
Enclosure  
San Juan 27-4, 4.2

cc: Mr. Antonio Martinez  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

PWG Partnership  
1219 Simms Building  
Albuquerque, New Mexico 87103

Mr. M. A. Romero  
P. O. Box 14189 - Station G  
Albuquerque, New Mexico 87111

Thomas H. Harrington  
P. O. Box 4026 - Station A  
Albuquerque, New Mexico 87106

Clifton Resources, Inc.  
R.R. #1, Box 6  
Braman, Oklahoma 74632

SCHEDULE XIX  
EIGHTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
NM 013297	TRACT 1					
	T-27-N, R-4-W	319.91				
	Sec. 1: Lots 3,4, S/2 NW/4, SW/4		Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50% 83.75% 3.75% <u>100.00%</u>	12.50% 83.75% 3.75% <u>100.00%</u>	<u>3.841402%</u>
	TOTAL					
	TRACT 2					
SF 079527	TRACT 2					
	T-27-N, R-4-W	960.00				
	Sec. 26: All Sec. 36: W/2		Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50% 83.75% 3.75% <u>100.00%</u>	12.50% 83.75% 3.75% <u>100.00%</u>	<u>11.527447%</u>
	TOTAL					
	TRACT 4					
SF 080668	TRACT 4					
	T-27-N, R-4-W	319.20				
	Sec. 4: Lots 3,4, S/2 NW/4, SW/4		Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50% 82.50% 5.00% <u>100.00%</u>	12.50% 82.50% 5.00% <u>100.00%</u>	<u>3.832876%</u>
	TOTAL					
	TRACT 5					
SF 080669	TRACT 5					
	T-27-N, R-4-W	1440.84				
	Sec. 17: NW/4, E/2 SW/4 Sec. 18: Lots 1,2, E/2 NW/4, NE/4, S/2 SE/4		Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50% 82.50% 5.00% <u>100.00%</u>	12.50% 82.50% 5.00% <u>100.00%</u>	<u>17.301257%</u>
	Sec. 19: Lot 1, E/2 NW/4, NE/4 SW/4					
	Sec. 20: All					

## SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080670	T-27-N, R-4-W	1924.72	TRACT 6			
	Sec. 29: All		Royalty;	12.50%	12.50%	23.111570%
	Sec. 30: All		Working Interest:	82.50%	82.50%	
	Sec. 31: All		E1 Paso Natural Gas Co.; ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	
SF 080671-A	T-27-N, R-4-W	320.00	TRACT 8			
	Sec. 11: W/2		Royalty;	12.50%	12.50%	3.842482%
			Working Interest:	82.50%	82.50%	
			E1 Paso Natural Gas Co.; ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	
SF 080672	T-27-N, R-4-W	640.00	TRACT 9			
	Sec. 14: W/2		Royalty;	12.50%	12.50%	7.684964%
	Sec. 23: W/2		Working Interest:	82.50%	82.50%	
			E1 Paso Natural Gas Co.; ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	
SF 080673	T-27-N, R-4-W	1281.52	TRACT 10			
	Sec. 6: Lots 1,2,3,4,5, 6,7, SE/4 NW/4, S/2 NE/4, E/2 SW/4, SE/4		Royalty;	12.50%	12.50%	15.388181%
			Working Interest:	82.50%	82.50%	
			E1 Paso Natural Gas Co.; ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	
	Sec. 7: Lots 1,2,3,4, E/2 W/2					
	Sec. 5: Lots 1,2, S/2 NE/4, SE/4					



SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
F 080674	T-27-N, R-4-W	320.00	TRACT 11 Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	12.50%	12.50%	<u>3.842482%</u>
	Sec. 15: E/2			82.50%	82.50%	
				5.00%	5.00%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
F 080675	T-27-N, R-4-W	320.00	TRACT 12 Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	12.50%	12.50%	<u>3.842482%</u>
	Sec. 33: W/2			82.50%	82.50%	
				5.00%	5.00%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
F 080676	T-27-N, R-4-W	321.13	TRACT 13 Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	12.50%	12.50%	<u>3.856051%</u>
	Sec. 19: Lots 2,3,4, SE/4 SW/4			82.50%	82.50%	
	Sec. 18: N/2 SE/4			5.00%	5.00%	
	Sec. 17: W/2 SW/4			<u>100.00%</u>	<u>100.00%</u>	
F 080677	T-27-N, R-4-W	160.63	TRACT 14 Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	12.50%	12.50%	<u>1.928806%</u>
	Sec. 18: Lots 3,4, E/2 SW/4			85.00%	85.00%	
				2.50%	2.50%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	

Effective December 1, 1973

SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		

RECAPITULATION

Description of Lands in Participating Area:

Township 27 North, Range 4 West, N.M.P.M.  
Sections 1,4,7,11,14,17,19,23,33,36:  
 Sections 5,15,  
 Sections 6,18,20,26,29,30,31:

W/2  
 E/2  
 All

Total Number of Acres in Participating Area:

8327.95

Effective December 1, 1973

# El Paso Natural Gas Company

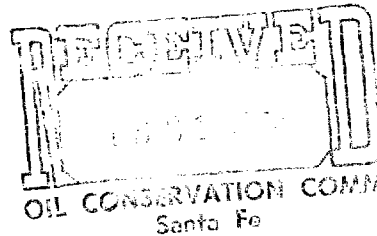
El Paso, Texas 79978

February 19, 1974

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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
EIGHTEENTH EXPANDED PARTICIPATING  
AREA, Mesaverde Formation  
Effective December 1, 1973

Gentlemen:

Please refer to Mr. Permenter's Notice of the Eighteenth Expanded Participating Area, Mesaverde Formation, which was mailed to you on February 7, 1974. One additional intervening drilling block was not included in this expansion. Please destroy the applications you have received. Corrected copies will be forwarded for your consideration.

Yours very truly,

Don Wadsworth  
Landman  
Land Department  
Energy Resource Development

DW:mcv

San Juan 27-4, 4.2

cc: Mr. Antonio Martinez  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

PWG Partnership  
1219 Simms Building  
Albuquerque, New Mexico 87103

Mr. M. A. Romero  
P. O. Box 14189 - Station G  
Albuquerque, New Mexico 87111

Thomas H. Harrington  
P. O. Box 4026 - Station A  
Albuquerque, New Mexico 87106

Clifton Resources, Inc.  
R.R. #1, Box 6  
Braman, Oklahoma 74632

# El Paso Natural Gas Company

554

El Paso, Texas 79978  
February 7, 1974

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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
EIGHTEENTH EXPANDED PARTICIPATING  
AREA, Mesaverde Formation,  
Effective December 1, 1973

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #16 well, located 990' from the North line and 990' from the East line of Section 17, Township 27 North, Range 4 West, N.M.P.M., was spudded on October 6, 1973, and completed on November 21, 1973, in the Mesaverde Formation at a total depth of 6000'. The Mesaverde Formation in the intervals between 5232' - 5240', 5292' - 5300', 5314' - 5322', 5348' - 5356', 5366' - 5380', 5712' - 5728', 5742' - 5750', 5764' - 5772', 5782' - 5798', 5812' - 5820', 5832' - 5840', 5856' - 5864', 5922' - 5938', 5956' - 5966' was treated with sand-water fracturing process on October 7, 1973. The well was shut-in on October 10, 1973, and after being shut-in for forty-two (42) days the well was tested on November 21, 1973, and following a three (3) hour blow-down period, the Mesaverde

Formation gauged 4618 MCFGPD through a 3/4" choke and 5728 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1177 psia and an SIPT of 721 psia. The spacing unit for this well is described as the W/2 of Section 17, Township 27 North, Range 4 West, containing 320.00 acres.

The foregoing drilling block is included in the Eighteenth Expanded Participating Area of the Mesaverde Formation for the San Juan 27-4 Unit, effective December 1, 1973.


The San Juan 27-4 #16 Well, was initially completed in the Dakota Formation, but was plugged as part of the recompletion of the well in the Mesaverde Formation.

The completion of the San Juan 27-4 Unit #16 Well in the Mesaverde Formation creates one (1) intervening drilling block described as the E/2 of Section 18, Township 27 North, Range 4 West, containing 320.00 acres. Under the terms of the Unit Agreement, this intervening drilling block is also admitted to the Mesaverde Participating Area, effective December 1, 1973, and a well must be commenced on this intervening drilling block by December 1, 1974.

Attached is Schedule XIX showing the Eighteenth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Eighteenth Expanded Participating Area will become effective as of December 1, 1973.

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

Very truly yours,

  
James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JP:DW:mcv  
Enclosure  
San Juan 27-4, 4.2

cc: Mr. Antonio Martinez  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

PWG Partnership  
1219 Simms Building  
Albuquerque, New Mexico 87103

Mr. M. A. Romero  
P. O. Box 14189 - Station G  
Albuquerque, New Mexico 87111

Thomas H. Harrington  
P. O. Box 4026 - Station A  
Albuquerque, New Mexico 87106

Clifton Resources, Inc.  
R.R. #1, Box 6  
Braman, Oklahoma 74632

SCHEDULE XIX  
EIGHTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
TRACT 1						
NM 013297	T-27-N, R-4-W	319.91	Royalty;	12.50%	12.50%	3.994905%
	Sec. 1: Lots 3,4, S/2 NW/4, SW/4		Working Interest: El Paso Natural Gas Co.;	83.75%	83.75%	
			ORRI;	3.75%	3.75%	
	TOTAL			100.00%	100.00%	
TRACT 2						
SF 079527	T-27-N, R-4-W	960.00	Royalty;	12.50%	12.50%	11.988087%
	Sec. 26: All		Working Interest: El Paso Natural Gas Co.;	83.75%	83.75%	
	Sec. 36: W/2		ORRI;	3.75%	3.75%	
	TOTAL			100.00%	100.00%	
TRACT 4						
SF 080668	T-27-N, R-4-W	319.20	Royalty;	12.50%	12.50%	3.986039%
	Sec. 4: Lots 3,4, S/2 NW/4, SW/4		Working Interest: El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
	TOTAL			100.00%	100.00%	
TRACT 5						
SF 080669	T-27-N, R-4-W	1120.84	Royalty;	12.50%	12.50%	13.996591%
	Sec. 17: NW/4, E/2 SW/4		Working Interest:	82.50%	82.50%	
	Sec. 18: Lots 1,2, E/2 NW/4, NE/4, S/2 SE/4		El Paso Natural Gas Co.;	5.00%	5.00%	
	Sec. 19: Lot 1, E/2 NW/4, NE/4 SW/4		ORRI;	100.00%	100.00%	
	Sec. 20: E/2		TOTAL			



SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		

SF 080670	T-27-N, R-4-W Sec. 29: All Sec. 30: All Sec. 31: All	1924.72	<u>TRACT 6</u>			
	Royalty;			12.50%	12.50%	<u>24.035115%</u>
	Working Interest:					
	El Paso Natural Gas Co.;			82.50%	82.50%	
	ORRI;			5.00%	5.00%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	

SF 080671-A	T-27-N, R-4-W Sec. 11: W/2	320.00	<u>TRACT 8</u>			
	Royalty;			12.50%	12.50%	<u>3.996029%</u>
	Working Interest:					
	El Paso Natural Gas Co.;			82.50%	82.50%	
	ORRI;			5.00%	5.00%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	

SF 080672	T-27-N, R-4-W Sec. 14: W/2 Sec. 23: W/2	640.00	<u>TRACT 9</u>			
	Royalty;			12.50%	12.50%	<u>7.992058%</u>
	Working Interest:					
	El Paso Natural Gas Co.;			82.50%	82.50%	
	ORRI;			5.00%	5.00%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	

SF 080673	T-27-N, R-4-W Sec. 6: Lots 1,2,3,4,5, 6,7, SE/4 NW/4, S/2 NE/4, E/2 SW/4, SE/4 W/2	1281.52	<u>TRACT 10</u>			
	Royalty;			12.50%	12.50%	<u>16.003097%</u>
	Working Interest:					
	El Paso Natural Gas Co.;			82.50%	82.50%	
	ORRI;			5.00%	5.00%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
	Sec. 7: Lots 1,2,3,4, E/2 W/2					
	Sec. 5: Lots 1,2, S/2 NE/4, SE/4					

SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080674	T-27-N, R-4-W Sec. 15: E/2	320.00	<u>TRACT 11</u>			<u>3.996029%</u>
			Royalty;	12.50%	12.50%	
			Working Interest:			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
SF 080675	T-27-N, R-4-W Sec. 33: W/2	320.00	<u>TRACT 12</u>			<u>3.996029%</u>
			Royalty;	12.50%	12.50%	
			Working Interest:			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
Fee	T-27-N, R-4-W Sec. 19: Lots 2,3,4, SE/4 SW/4	321.13	<u>TRACT 13</u>			<u>4.010140%</u>
			Royalty;	12.50%	12.50%	
			Working Interest:			
			El Paso Natural Gas Co.	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
Fee	T-27-N, R-4-W Sec. 18: Lots 3,4, E/2 SW/4	160.63	<u>TRACT 14</u>			<u>2.005881%</u>
			Royalty;	12.50%	12.50%	
			Working Interest:			
			El Paso Natural Gas Co.;	85.00%	85.00%	
			ORRI;	2.50%	2.50%	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	

Effective December 1, 1973

SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		

R E C A P I T U L A T I O N

Description of Lands in Participating Area:

Township 27 North, Range 4 West, N.M.P.M.	
Sections 1,4,7,11,14,17,19,23,33,36:	W/2
Sections 5,15,20, :	E/2
Sections 6,18,26,29,30,31:	All

Total Number of Acres in Participating Area: 8007.95

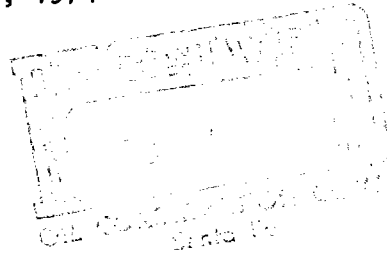
Effective December 1, 1973

# El Paso Natural Gas Company

El Paso, Texas 79978  
February 7, 1974

554

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

Re: San Juan 27-4 Unit #14-08-001-  
1054, NOTICE OF COMPLETION OF  
ADDITIONAL WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Dakota Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-4 Unit #69 well, located 1500' from the North line and 835' from the West line of Section 34, Township 27 North, Range 4 West, N.M.P.M., was spudded on August 20, 1973, and completed on November 16, 1973, in the Dakota Formation at a total depth of 8473'. The Dakota Formation at the following depths 8196', 8198', 8221', 8223', 8230', 8328', 8330', and 8327' was treated with a sand-water fracturing process on October 2, 1973. The well was shut-in on October 4, 1973, and after being shut-in for forty-three (43) days the well was tested on November 16, 1973, and following a three (3) hour blow-down period, the Dakota Formation gauged 1170 MCFGP/D through a 3/4" choke and 1231 MCFGP/D by the calculated absolute open-flow method, with an SIPC of 2264 psia and an SIPT of 1154 psia. The spacing unit for this well is described as W/2 of Section 34, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Fifth Expanded Participating Area of the Dakota Formation, effective September 1, 1964, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

Regional Oil & Gas Supervisor  
Oil Conservation Commission  
Page Two

The San Juan 27-4 Unit #70 well, located 1550' from the South line and 990' from the West line of Section 4, Township 27 North, Range 4 West, N.M.P.M., was spudded on September 16, 1973, and completed on November 29, 1973, in the Dakota Formation at a total depth of 8535'. The Dakota Formation at the following depths, 8300', 8336', 8368', 8396', 8398', 8446', 8448', 8476' and 8478' was treated with a sand-water fracturing process on October 22, 1973. The well was shut-in on October 25, 1973, and after being shut-in for thirty-five (35) days the well was tested on November 29, 1973, and following a three (3) hour blow-down period, the Dakota Formation gauged 1846 MCFGP/D through a 3/4' choke and 1893 MCFGP/D by the calculated absolute open-flow method, with an SIPC of 2552 psia and an SIPT of 2591 psia. The spacing unit for this well is described as the W/2 of Section 4, Township 27 North, Range 4, West, containing 319.20 acres.

This spacing Unit was included in the San Juan 27-4 Unit Twelfth Expanded Participating Area of the Dakota Formation, effective June 1, 1971, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

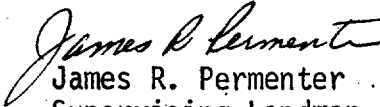
The San Juan 27-4 Unit #71 well, located 1650' from the North line and 1754' from the East line of Section 16, Township 27 North, Range 4 West, N.M.P.M., was spudded on August 4, 1973, and completed on October 11, 1973, in the Dakota Formation at a total depth of 8532'. The Dakota Formation at the following depths 8312', 8394', 8422', 8424', 8468', 8500', and 8502' was treated with a sand-water fracturing process on September 28, 1973. The well was shut-in on October 1, 1973, and after being shut-in for ten (10) days the well was tested on October 11, 1973, and following a three (3) hour blow-down period, the Dakota Formation gauged 1210 MCFGP/D through a 3/4" choke and 1258 MCFGP/D by the calculated absolute open-flow method, with an SIPC of 2572 psia and an SIPT of 1134 psia. The spacing unit for this well is described as the E/2 of Section 16, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Fourth and Eleventh Expanded Participating Areas of the Dakota Formation, effective October 1, 1968 and November 1, 1961, respectively, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

Regional Oil & Gas Supervisor  
Oil Conservation Commission  
Page Three

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

JP:DW:mcv  
S.J. 27-4, 4.3.1

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

Mr. Antonio Martinez  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

San Juan 27-4 Unit  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

PWG Partnership

Mr. M. A. Romero

Clifton Resources, Inc.



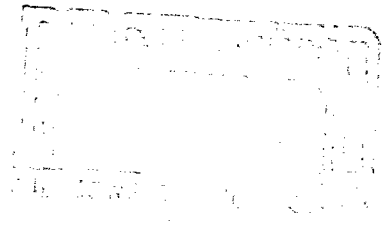
# United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

554

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 27-4 unit area, Rio Arriba County, New Mexico, proposing the drilling of 22 Pictured Cliffs wells and 10 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.)

CARL C. TRAYWICK  
Acting Area Oil and Gas Supervisor

cc:

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

JAGillham:ds



OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

554

January 15, 1974

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

Attention: Mr. D. N. Canfield

Re: 1974 Drilling Program  
San Juan 27-4 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 twenty-two Pictured Cliffs and ten Dakota wells during the calendar year 1974 for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

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

C  
O  
P  
Y

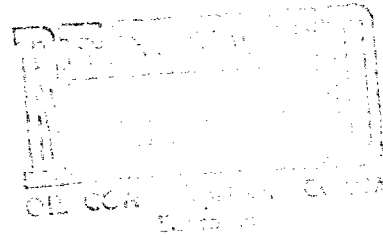
# El Paso Natural Gas Company

El Paso, Texas 79978

January 9, 1974

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

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



Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1974 DRILLING PROGRAM

Gentlemen:

By letter dated January 11, 1973, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program for the captioned Unit for the year 1973 providing for the drilling of eight (8) Pictured Cliffs wells and three (3) Dakota wells. Each of these wells has been timely drilled. Pictured Cliffs wells #62, #64, #65, and #66 were drilled inside the existing Pictured Cliffs Participating Area boundaries and did not cause an expansion of the Dakota Participating Area. Dakota wells #69, 70, and 71 were drilled within the existing Dakota Participating Area boundaries and did not cause an expansion of the Dakota Participating Area. Pictured Cliffs wells #61, #63, #67 and #68 were completed outside the existing Pictured Cliffs Participating Area and are currently being evaluated to determine if they will cause an expansion of the Pictured Cliffs Participating Area.

San Juan 27-4 Unit #16 well was plugged in the Dakota formation and recompleted in the Mesaverde formation. The #16 well is currently being evaluated to determine if it will cause an expansion of the Mesaverde Participating Area.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	14
Mesaverde	11
Dakota	29
Dakota-Gallup (OWWO)	1
Pictured Cliffs-Mesaverde	8
Mesaverde-Dakota	1
Mesaverde-Dakota, plugged back and completed in the Mesaverde only	1
Non-Commercial Mesaverde	1
Plugged and Abandoned, Dakota	1
Plugged and Abandoned, Mesaverde-Dakota	1
Plugged and Abandoned, Mesaverde, Recompletion Dakota	1
	<u>69</u>

January 9, 1974

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1974 providing for the drilling of the following wells:

<u>Well No.</u>	<u>Formation</u>	<u>Drilling Block or Spacing Unit</u>
#72	Pictured Cliffs	W/2 Sec. 16, T-27-N, R-4-W
#73	Pictured Cliffs	E/2 Sec. 17, T-27-N, R-4-W
#74	Pictured Cliffs	E/2 Sec. 17, T-27-N, R-4-W
#75	Pictured Cliffs	W/2 Sec. 21, T-27-N, R-4-W
#76	Pictured Cliffs	E/2 Sec. 21, T-27-N, R-4-W
#77	Pictured Cliffs	E/2 Sec. 21, T-27-N, R-4-W
#78	Pictured Cliffs	W/2 Sec. 21, T-27-N, R-4-W
#79	Pictured Cliffs	W/2 Sec. 22, T-27-N, R-4-W
#80	Pictured Cliffs	E/2 Sec. 24, T-27-N, R-4-W
#81	Pictured Cliffs	W/2 Sec. 24, T-27-N, R-4-W
#82	Pictured Cliffs	E/2 Sec. 26, T-27-N, R-4-W
#83	Pictured Cliffs	E/2 Sec. 26, T-27-N, R-4-W
#84	Pictured Cliffs	E/2 Sec. 27, T-27-N, R-4-W
#85	Pictured Cliffs	E/2 Sec. 27, T-27-N, R-4-W
#86	Pictured Cliffs	W/2 Sec. 27, T-27-N, R-4-W
#87	Pictured Cliffs	E/2 Sec. 28, T-27-N, R-4-W
#88	Pictured Cliffs	W/2 Sec. 28, T-27-N, R-4-W
#89	Pictured Cliffs	E/2 Sec. 30, T-27-N, R-4-W
#90	Pictured Cliffs	E/2 Sec. 31, T-27-N, R-4-W
#91	Pictured Cliffs	E/2 Sec. 33, T-27-N, R-4-W
#92	Pictured Cliffs	E/2 Sec. 34, T-27-N, R-4-W
#93	Pictured Cliffs	W/2 Sec. 36, T-27-N, R-4-W
#94	Dakota	W/2 Sec. 3, T-27-N, R-4-W
#95	Dakota	E/2 Sec. 8, T-27-N, R-4-W
#96	Dakota	E/2 Sec. 9, T-27-N, R-4-W
#97	Dakota	E/2 Sec. 10, T-27-N, R-4-W
#98	Dakota	W/2 Sec. 10, T-27-N, R-4-W
#99	Dakota	W/2 Sec. 16, T-27-N, R-4-W
#100	Dakota	W/2 Sec. 22, T-27-N, R-4-W
#101	Dakota	E/2 Sec. 28, T-27-N, R-4-W
#102	Dakota	E/2 Sec. 33, T-27-N, R-4-W
#49	Dakota	W/2 Sec. 30, T-27-N, R-4-W

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

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

January 9, 1974

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 as shown on the attached sheet.

Yours very truly,



D. N. Canfield  
Manager  
Land Department  
Energy Resource Development

DNC:DW:sn  
Enclosures  
San Juan 27-4 Unit 3.0

cc: Commissioner of Public Lands  
(Information Only)

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Oil Conservation Commission.

APPROVED: A. L. Porter, Jr. DATE: January 15, 1974  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey.

The foregoing approvals are for the 1974 Drilling Program for the San Juan  
27-4 Unit #14-08-001-1054, Rio Arriba County, New Mexico.

JOAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

PWG Partnership

M. A. Romero

# El Paso Natural Gas Company

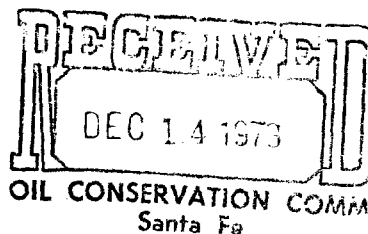
El Paso, Texas 79978

December 11, 1973

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

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

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



Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
Pictured Cliffs Formation  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 had been completed upon acreage committed to the unit. This well is as follows:

The San Juan 27-4 Unit #65 Well, located 1760' from the North line and 830' from the West line of Section 30, Township 27 North, Range 4 West, N.M.P.M., was spudded on August 31, 1973, and completed on November 23, 1973, in the Pictured Cliffs Formation in the intervals between 3542'-3558', 3570'-3594', 3604'-3612' was treated with a sand-water fracturing process on September 22, 1973. The well was shut-in on October 1, 1973. After being shut-in for 53 days, the well was tested on November 23, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1757 MCF/D through a 3/4" choke and 1821 MCF/D by the calculated absolute open-flow method, with an SIPC of 1072 psia. The spacing unit for this well is described as Lots 1,2,3,4, E/2 W/2, (W/2) of Section 30, Township 27 North, Range 4 West, N.M.P.M., containing 321.56 acres.

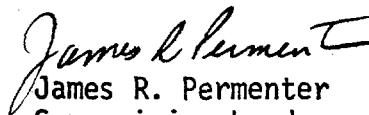
United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission

December 11, 1973

The foregoing drilling block was included in the San Juan 27-4 Unit First Expanded Participating Area of the Pictured Cliffs Formation, effective November 1, 1957 as a result of the completion of the San Juan 27-4 Unit #12 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:sn  
S.J. 27-4 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 27-4 UNIT  
WORKING INTEREST OWNERS

General American Oil Company of Texas

Thomas H. Harrington

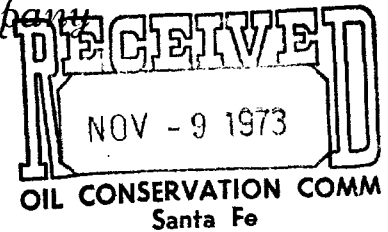
PWG Partnership

Mr. M. A. Romero

554  
*El Paso Natural Gas Company*

*El Paso, Texas* 79978

November 8, 1973



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

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
Pictured Cliffs Formation  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 had been completed upon acreage committed to the unit. This well is as follows:

The San Juan 27-4 Unit #64 Well, located 1700' from the North line and 790' from the West line of Section 19, Township 27 North, Range 4 West, N.M.P.M., was spudded on July 1, 1973, and completed on October 17, 1973, in the Pictured Cliffs Formation in the intervals between 3494'-3514' and 3523'-3544' was treated with a sand-water fracturing process on September 9, 1973. The well was shut-in on September 18, 1973. After being shut-in for 29 days, the well was tested on October 17, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1406 MCF/D through a 3/4" choke and 1430 MCF/D by the calculated absolute open-flow method, with an SIPC of 1074 psia. The spacing unit for this well is described as Lots 1,2,3,4, E/2 W/2, (W/2) of Section 19, Township 27 North, Range 4 West, N.M.P.M., containing 321.48 acres.

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

November 8, 1973

The foregoing drilling block was included in the San Juan 27-4 Unit Fifth Expanded Participating Area of the Pictured Cliffs Formation, effective January 1, 1960 as a result of the completion of the San Juan 27-4 Unit #23 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. 27-4 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 27-4 UNIT  
WORKING INTEREST OWNERS

General American Oil Company of Texas

Thomas H. Harrington

Mr. M. A. Romero

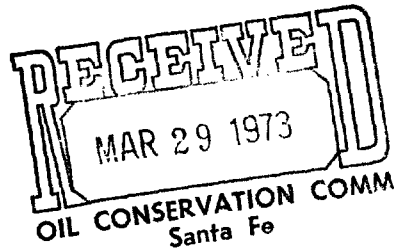
PWG Partnership

# El Paso Natural Gas Company

El Paso, Texas 79978

March 26, 1973

554



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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1973 DRILLING PROGRAM

Gentlemen:

The 1973 Drilling Program for the captioned Unit was approved by the Regulatory Bodies on the dates indicated.

United States Geological Survey - January 31, 1973  
Oil Conservation Commission - January 23, 1973

Copies of this letter are being sent to the working interest owners of the above-described 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:LAP:dks  
San Juan 27-4 Unit 3.0

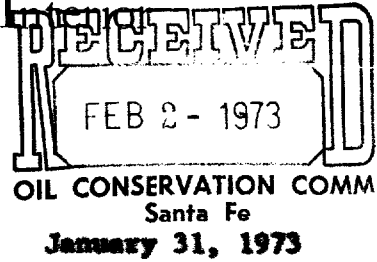
cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87501



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201



554

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

Gentlemen:

On this date, your 1973 plan of development for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, wherein you propose to drill eight Pictured Cliffs wells and three Dakota wells, was approved. Such approval is subject to like approval by the appropriate officials of the State of New Mexico.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIGINAL)

CARL C. TRAYWICK  
Acting Area Oil and Gas Supervisor

cc:

Regional Mgr., Denver (ltr. only)

Washington (w/cy plan)

Durango (w/cy plan)

✓ NMOCC, Santa Fe (ltr. only)

JAGillham:ds

January 23, 1973

554

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

Attention: Mr. D. N. Canfield

RE: 1973 Drilling Program  
San Juan 27-4 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 1973 providing for the drilling of eleven wells for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

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

# El Paso Natural Gas Company

El Paso, Texas 79978

January 11, 1973

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1973 DRILLING PROGRAM

Gentlemen:

By letter dated January 20, 1972, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program for the captioned Unit for the year 1972 providing for the drilling of two (2) Dakota wells. Each of these wells was timely drilled within the Dakota Participating Area and did not cause a further expansion.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	12
Dakota	26
Dakota-Gallup (OWWO)	1
Pictured Cliffs-Mesaverde	8
Mesaverde-Dakota	1
Mesaverde-Dakota, plugged back and completed in the Mesa- verde only	1
Non-Commercial Mesaverde	1
Plugged and Abandoned, Dakota	1
Plugged and Abandoned, Mesa- verde-Dakota	1
	<u>58</u>



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

January 11, 1973

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1973 providing for the drilling of the following wells:

<u>Well No.</u>	<u>Formation</u>	<u>Drilling Block or Spacing Unit</u>
61	Pictured Cliffs	E/2 Sec. 22, T-27-N, R-4-W
62	Pictured Cliffs	W/2 Sec. 26, T-27-N, R-4-W
63	Pictured Cliffs	W/2 Sec. 27, T-27-N, R-4-W
64	Pictured Cliffs	W/2 Sec. 19, T-27-N, R-4-W
65	Pictured Cliffs	W/2 Sec. 30, T-27-N, R-4-W
66	Pictured Cliffs	W/2 Sec. 31, T-27-N, R-4-W
67	Pictured Cliffs	E/2 Sec. 36, T-27-N, R-4-W
68	Pictured Cliffs	E/2 Sec. 36, T-27-N, R-4-W
69	Dakota	W/2 Sec. 34, T-27-N, R-4-W
70	Dakota	W/2 Sec. 4, T-27-N, R-4-W
71	Dakota	E/2 Sec. 16, T-27-N, R-4-W


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

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

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 as shown on the attached sheet.

Yours very truly,



D. N. Canfield  
Manager  
Land Department  
Energy Resource Development

DNC:DI:nja  
Enclosures  
San Juan 27-4 Unit 3.0  
cc: Commissioner of Public Lands  
(Information Only)

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

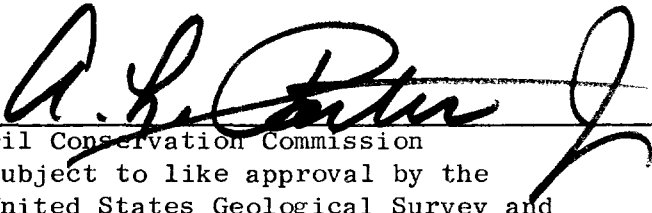
DATE: \_\_\_\_\_

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 31, 1973

The foregoing approvals are for the 1973 Drilling Program for the San Juan  
27-4 Unit #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

Rincon Oil & Gas Corporation

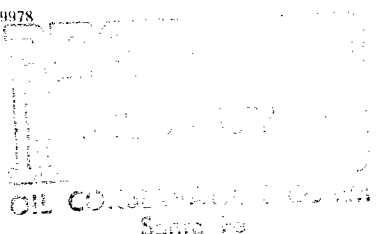
M. A. Romero

# El Paso Natural Gas Company

554

El Paso, Texas 79978

June 28, 1972



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

Re: San Juan 27-4 Unit #14-08-001-  
1054, NOTICE OF COMPLETION OF  
ADDITIONAL WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 paying quantities from the Dakota Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-4 Unit #16-Y Well is located 819' from the South line and 1145' from the West line of Section 17, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on April 27, 1972, and completed on May 21, 1972, at a total depth of 8021'. The Dakota Formation in the intervals between 7732' - 7740', 7752' - 7764', 7858' - 7866', 7926' - 7938' was treated with a sand-water fracturing process on May 20, 1972. The Dakota Formation was shut-in on May 21, 1972, and after being shut-in for ten (10) days, the Dakota Formation was tested on May 31, 1972 and following a three (3) hour blow-down period gauged 4115 MCF/D through a 3/4" choke and 4498 MCF/D by the calculated absolute open-flow method, with an SIPC of 1778 psia and an SIPT of 2322 psia. The spacing unit for this well is described as the W/2 of Section 17, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Third Expanded Participating Area of the Dakota Formation, effective July 1, 1958 and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

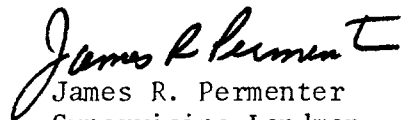
June 28, 1972

The San Juan 27-4 Unit #60 Well is located 990' from the East line and 990' from the North line of Section 21, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on April 6, 1972, and completed on April 26, 1972, at a total depth of 8483'. The Dakota Formation in the intervals between 8210' - 8220', 8303' - 8313', 8332' - 8342', 8369' - 8379', 8403' - 8413', 8450' - 8460' was treated with a sand-water fracturing process on April 25, 1972. The Dakota Formation was shut-in on April 26, 1972, and after being shut-in for fourteen (14) days, the Dakota Formation was tested on May 3, 1972, and following a three (3) hour blow-down period gauged 2108 MCF/D through a 3/4" choke and 2159 MCF/D by the calculated absolute open-flow method, with an SIPC of 2582 psia and an SIPT of 2606 psia. The spacing unit for this well is described as the E/2 of Section 21, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Eleventh Expanded Participating Area of the Dakota Formation, effective October 1, 1968 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,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JP:DI:dks  
S.J. 27-4, 4.3

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

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

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

Rincon Oil & Gas Corporation

Mr. M. A. Romero



El Paso Natural Gas Company

El Paso, Texas 79975

RECEIVED  
APR 4 1972

April 3, 1972

554

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
APPROVAL OF THE TWELFTH REVISION  
OF THE PARTICIPATING AREA FOR THE  
DAKOTA FORMATION

Gentlemen:

This is to advise that the captioned Expansion for the San Juan 27-4 Unit was approved by the Regulatory Bodies on the following dates:

United States Geological Survey - March 28, 1972  
Oil Conservation Commission - March 8, 1972

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Yours very truly,



Dick Isaacks  
Senior Landman  
Land Department  
Energy Resource Development

DI:1j  
S.J. 27-4 4.3

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

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

RECEIVED  
MAR 31 1972  
CONSERVATION COMM.

March 28, 1972

554

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

Attention: Mr. James R. Permenter

Gentlemen:

The 12th revision of the Dakota participating area for the San Juan 27-4 unit agreement, Rio Arriba County, New Mexico, was approved on March 28, 1972, by the Regional Oil and Gas Supervisor, U. S. Geological Survey, effective as of June 1, 1971. The 12th revision of the Dakota participating area adds 638.40 acres described as sec. 4, T. 27 N., R. 4 W., N.M.P.M., and is based upon the completion of unit well No. 59 in the SW 1/4 sec. 4 as a paying well pursuant to the terms of the unit agreement. Unit well No. 59 was tested on June 17, 1971, at a calculated absolute open flow potential of 2,181 MCF of gas per day from the Dakota, 8,404 to 8,572 feet.

Copies of the approved application are being distributed to the Federal offices involved and two 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. SCD) N. O. FREDERICK

N. O. FREDERICK  
Regional Oil and Gas Supervisor

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

JWillock:lh



# El Paso Natural Gas Company

El Paso, Texas 79978

March 14, 1972

RECEIVED

MAR 17 1972

CONSERVATION COMM.  
SANTA FE

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1972 DRILLING PROGRAM

Gentlemen:

The 1972 Drilling Program for the captioned Unit was approved by the Regulatory Bodies on the dates indicated.

Regional Oil & Gas Supervisor - March 3, 1972  
Oil Conservation Commission - February 11, 1972

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DI:ks

San Juan 27-4 Unit 3.0

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87501

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

March 8, 1972

554

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

**Attention: Mr. James R. Permenter**

**Re: Twelfth Expanded Dakota  
Participating Area  
San Juan 27-4 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 for the Dakota Formation for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.**

**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**

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IN REPLY REFER TO:

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

**RECEIVED**

MAR 7 1972

OIL CONSERVATION COMM.

March 3, 1972

554

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1972 plan of development for the San Juan 27-4 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.) 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) ✓

# El Paso Natural Gas Company

El Paso, Texas 79978

March 2, 1972

RECEIVED  
MAR 6 5 22 AM '72  
SANTA FE, N.M.

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
TWELFTH EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
June 1, 1971

Gentlemen:

We are enclosing for your approval six (6) 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, retain one copy for your file and forward the remaining copies 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,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JP:Dr:nja  
Enclosures  
S.J. 27-4, 4.3

cc: 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  
(Information only - w/encls.)

# El Paso Natural Gas Company

El Paso, Texas 79978

March 2, 1972

RECEIVED  
APR 6 1972  
OIL CONSERVATION COMMISSION  
SANTA FE

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
TWELFTH EXPANDED PARTICIPATING AREA,  
Dakota Formation, Effective June 1,  
1971

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 June 1, 1971

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 4 West, N.M.P.M.</u>	
Section 4: Lots 1,2,3,4, S/2 N/2, S/2	638.40

This proposed Twelfth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #59 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 #59 Well is located 1460 feet from the North line and 1800 feet from the East line of Section 4, Township 27 North, Range 4 West, N.M.P.M.

March 2, 1972

This well was spudded on May 10, 1971, and completed on May 24, 1971, at a total depth of 8641 feet. The Dakota Formation in the intervals between 8404'-8414', 8470'-8476', 8496'-8506', 8552'-8572' was treated with a sand-water fracturing process on May 23, 1971. The Dakota Formation was shut-in on June 8, 1971, and after being shut-in for nine (9) days, the Dakota Formation was tested on June 17, 1971, and following a three-hour blow-down period gauged 2150 MCF/D through a 3/4" choke and 2181 MCF/D by the calculated absolute open-flow method, with an SI'C of 2611 psia and an SIPT of 2611 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 Twelfth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "B"

Geologic Report on the Twelfth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto is Schedule XIII which shows the proposed Twelfth Expanded Participating Area for the Dakota Formation in the San Juan 27-4 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.

United States Geological Survey  
Oil Conservation Commission  
Page Three

March 2, 1972

If this Twelfth Expanded Participating Area of the Dakota Formation meets with your approval, please indicate such approval in the space provided on the attached page 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,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DI:nja  
Enclosures  
S.J. 27-4, 4.3

cc: Commissioner of Public Lands (Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

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

APPROVED: \_\_\_\_\_

Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Oil Conservation Commission

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

APPROVED: \_\_\_\_\_

*A. L. Carter, Jr.*  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey

DATE: March 8, 1972

The foregoing approvals are for the Twelfth Expanded Participating Area of the  
Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba County, New Mexico.



San Juan 27-4 Unit  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

Rincon Oil & Gas Corporation

M. A. Romero

# El Paso Natural Gas Company

El Paso, Texas 79999

November 15, 1971

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

**RECEIVED**  
NOV 17 1971

OIL CONSERVATION COMM.  
SANTA FE

554

Re: San Juan 27-4 Unit #14-08-001-1054, NOTICE OF COMPLETION OF ADDITIONAL WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Dakota Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-4 Unit #56 Well is located 1800 feet from the South line and 900 feet from the West line of Section 21, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on September 7, 1971, and completed on September 22, 1971, at a total depth of 8145 feet. The Dakota Formation in the intervals between 7852'-7862', 7884'-7892', 7952'-7958', 7980'-7988', 8026'-8036', 8058'-8068' was treated with a sand-water fracturing process on September 21, 1971. The Dakota Formation was shut-in on September 22, 1971, and after being shut-in for thirty-six (36) days, the Dakota Formation was tested on October 28, 1971, and following a three (3) hour blow-down period gauged 1507 MCF/D through a 3/4" choke and 1629 MCF/D by the calculated absolute open-flow method, with an SIPC of 2331 psia and an SIPT of 2331 psia. The spacing unit for this well is described as the W/2 of Section 21, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Eleventh Expanded Participating Area of the Dakota Formation, effective October 1, 1968 and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

November 15, 1971

The San Juan 27-4 Unit #57 Well is located 990 feet from the South line and 850 feet from the West line of Section 28, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on August 24, 1971, and completed on September 7, 1971, at a total depth of 8517 feet. The Dakota Formation in the intervals between 8254'-8266', 8278'-8290', 8388'-8400', 8462'-8468' was treated with a sand-water fracturing process on September 6, 1971. The Dakota Formation was shut-in on September 7, 1971, and after being shut-in for nine (9) days, the Dakota Formation was tested on September 16, 1971, and following a three (3) hour blow-down period gauged 1915 MCF/D through a 3/4" choke and 2013 MCF/D by the calculated absolute open-flow method, with an SIPC of 2337 psia and an SIPT of 2327 psia. The spacing unit for this well is described as the W/2 of Section 28, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Eleventh Expanded Participating Area of the Dakota Formation, effective October 1, 1968 and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-4 Unit #58 Well is located 790 feet from the South line and 1190 feet from the West line of Section 31, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on August 11, 1971, and completed on August 23, 1971, at a total depth of 8536 feet. The Dakota Formation in the intervals between 8266'-8272', 8282'-8288', 8370'-8378', 8394'-8402', 8468'-8472' was treated with a sand-water fracturing process on August 22, 1971. The Dakota Formation was shut-in on August 24, 1971, and after being shut-in for nine (9) days, the Dakota Formation was tested on September 2, 1971, and following a three (3) hour blow-down period gauged 4018 MCF/D through a 3/4" choke and 4259 MCF/D by the calculated absolute open-flow method, with an SIPC of 2372 psia and an SIPT of 2376 psia. The spacing unit for this well is described as the S/2 of Section 31, Township 27 North, Range 4 West, containing 322.70 acres.

This spacing Unit was included in the San Juan 27-4 Unit Fourth Expanded Participating Area of the Dakota Formation, effective November 1, 1961 and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

Regional Oil & Gas Supervisor  
Oil Conservation Commission  
Page Three

November 15, 1971

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:DI:lj  
S.J. 27-4 Unit, 4.3

cc: Commissioner of Public Lands (Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

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

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

Rincon Oil & Gas Corporation

Mr. M. A. Romero

# El Paso Natural Gas Company

El Paso, Texas 79999

January 29, 1971

JAN 1 1971

554

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

Re: San Juan 27-4 Unit  
#14-08-001-1054  
Rio Arriba County, New Mexico  
1971 DRILLING PROGRAM


Gentlemen:

The 1971 Drilling Program dated January 6, 1971 for the referenced Unit was approved by the Regulatory Bodies on the dates indicated below:

United States Geological Survey - January 25, 1971  
Oil Conservation Commission - January 15, 1971

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

Yours very truly,



Dick Isaacks  
Senior Landman  
Land Department

DI:ks  
S.J. 27-4 Unit 3.0

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87501



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

IN REPLY REFER TO:

January 25, 1971

554

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 27-4 unit area, Rio 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,

(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)

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 13, 1971

554

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

Attention: Mr. T. W. Bittick

Re: 1971 Drilling Program  
San Juan 27-4 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 four Dakota wells for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

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



71 JAN 13 PM 1 04

554

January 12, 1971

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

Re: 1971 Drilling Programs for  
San Juan 27-4, 29-4, 28-4,  
28-5, 30-4, Units.  
Rio Arriba County, New Mexico

ATTENTION: Mr. T. W. Bittick

Gentlemen:

We are in receipt of your 1971 Plan of Development for  
the captioned San Juan Units, Rio Arriba County, New Mexico.

These units contain no New Mexico lands, therefore,  
we are retaining the one copy, of each, for record purposes  
only.

Sincerely yours,

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

AJA/GCM/s

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

# El Paso Natural Gas Company

El Paso, Texas 79999

January 6, 1971

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1971 DRILLING PROGRAM

Gentlemen:

By letter dated January 6, 1970, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program for the captioned Unit for the year 1970 providing for the drilling of no wells. By letter dated May 19, 1970, El Paso Natural Gas Company filed a Revised 1970 Drilling Program providing for the drilling of one (1) Dakota well during 1970. The San Juan 27-4 Unit No. 55 Well was drilled within the existing boundaries of the San Juan 27-4 Dakota Participating Area and completion of the well did not cause an expansion of the Dakota Participating Area.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	12
Dakota	21
Dakota-Gallup (OWWO)	1
Pictured Cliffs-Mesaverde	8
Mesaverde-Dakota	1
Mesaverde-Dakota, plugged back and completed in the Mesaverde only	1
Non-Commercial, Mesaverde	1
Temporarily Abandoned, Dakota	1
Plugged and Abandoned, Mesaverde-Dakota	1
	<u>53</u>

January 6, 1971

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year of 1971 providing for the drilling of the following Dakota wells:

<u>Well No.</u>	<u>Spacing Unit</u>
56	W/2 Sec. 21, T-27-N, R-4-W
57	W/2 Sec. 28, T-27-N, R-4-W
58	S/2 Sec. 31, T-27-N, R-4-W
59	E/2 Sec. 4, T-27-N, R-4-W

Wells Nos. 58 and 59 are being drilled at the request of the United States Geological Survey as offsets to the Consolidated Oil & Gas Company Northwest No. 3 Well, located in the NW/4 of Section 6, T-26-N, R-4-W, and the San Juan 28-4 Unit No. 33 Well, located in the SW/4 of Section 33, T-28-N, R-4-W, respectively.

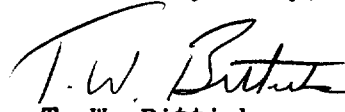
All working interest owners have been contacted and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

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

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:DI:nja  
Enclosures  
S. J. 27-4 Unit 3.0

cc: Commissioner of Public Lands (Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

APPROVED: \_\_\_\_\_

Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Oil Conservation Commission

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

APPROVED: \_\_\_\_\_

Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey

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

*January 13, 1971*

The foregoing approvals are for the 1971 Drilling Program for the San Juan  
27-4 Unit #14-08-001-1054, Rio Arriba County, New Mexico.

# El Paso Natural Gas Company

El Paso, Texas 79999

August 17, 1970

554

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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

Re: San Juan 27-4 Unit #14-08-001-  
1054, NOTICE OF COMPLETION OF  
ADDITIONAL WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 the Unit. This well is as follows:

The San Juan 27-4 Unit #55 Well is located 1700' from the North line and 1750' from the South line of Section 5, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on May 28, 1970, and completed on June 13, 1970 at a total depth of 8271'. The Dakota Formation in the intervals between 8057'-8062', 8133'-8138', 8154'-8164', 8206'-8216', 8226'-8236', 8246'-8256' was treated with a sand-water fracturing process on June 12, 1970. The Dakota Formation was shut-in on June 14, 1970, and after being shut-in for fifteen (15) days, the Dakota Formation was tested on June 29, 1970, and following a three (3) hour blow-down period gauged 2312 MCF/D through a 3/4" choke and 2366 MCF/D by the calculated absolute open-flow method, with an SIPC of 2418 psia and an SIPT of 2449 psia. The spacing Unit for this well is described as the E/2 of Section 5, Township 27 North, Range 4 West, containing 319.33 acres.

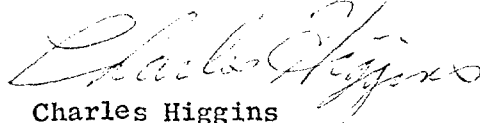
This spacing Unit was included in the San Juan 27-4 Unit Eleventh Expanded Participating Area of the Dakota Formation, effective October 1, 1968, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

Regional Oil & Gas Supervisor  
Oil Conservation Commission  
Page Two

August 17, 1970

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:DI:sf  
S.J. 27-4, 4.3

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

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

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

Rincon Oil & Gas Corporation

Mr. M. A. Romero

# El Paso Natural Gas Company

El Paso, Texas 79999

May 26, 1970

RECEIVED  
MAY 28 AM 8 11  
1970

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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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
REVISED 1970 DRILLING PROGRAM

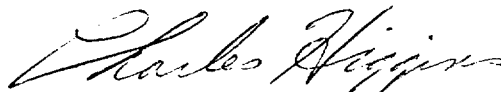
Gentlemen:

The Revised 1970 Drilling Program dated May 19, 1970 for the referenced Unit was approved by the Regulatory Bodies on the dates indicated below:

United States Geological Survey	-	May 22, 1970
Oil Conservation Commission	-	May 21, 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:DI:nja  
SJ 27-4, 3.0

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



554

Drawer 1857  
Roswell, New Mexico 88201

May 22, 1970

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1970 plan of development for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, proposing the drilling of no additional wells, was filed with this office on January 12, 1970. After reviewing your plan we requested that you consider the drilling of Dakota wells in the following locations to protect the San Juan 27-4 unit from drainage:

N $\frac{1}{2}$  sec. 4, T. 27 N., R. 4 W.  
N $\frac{1}{2}$  sec. 5, T. 27 N., R. 4 W.  
S $\frac{1}{2}$  sec. 31, T. 27 N., R. 4 W.

Your letter of April 17 advised us that a Dakota well would be drilled in the NE $\frac{1}{4}$  sec. 5 during 1970, and proposed to defer the drilling of a Dakota well in the NE $\frac{1}{4}$  sec. 4 until the performance of the well to be drilled in the NE $\frac{1}{4}$  sec. 5 could be observed. Your letter also included data showing that a Dakota well drilled in the SW $\frac{1}{4}$  sec. 31 would not be economically feasible and requested that the drilling of such well be deferred. Upon consideration of the information presented, we agree with your above described proposal.

Accordingly, your revised plan of development for 1970, dated May 19, 1970, proposing the drilling of one Dakota well in the San Juan 27-4 unit area, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the revised plan are enclosed.

cc:

Washington (w/cy plan)

Durango (w/cy plan)

NMOCC, Santa Fe (ltr. only)

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK

Acting Oil and Gas Supervisor



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

May 21, 1970

554

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

Attention: Mr. T. W. Bittick

Re: Revised 1970 Drilling  
Program, San Juan  
27-4 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Revised 1970 Drilling Program providing for the drilling of a Dakota well in the NE/4 of Section 5, Township 27 North, Range 4 West in the San Juan 27-4 Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

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

# *El Paso Natural Gas Company*

*El Paso, Texas* 79999

May 19, 1970

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
REVISED 1970 DRILLING PROGRAM

Gentlemen:

By letter dated January 6, 1970, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program for the captioned Unit for the year 1970, providing for the drilling of no wells.

In order to protect the San Juan 27-4 Unit Dakota participating area against drainage by the San Juan 28-4 Unit #31 Well located in the SW/4 Section 32, Township 28 North, Range 4 West, El Paso Natural Gas Company, as Unit Operator, pursuant to Section 10 of the San Juan 27-4 Unit Agreement, hereby respectfully requests the approval of a Revised Drilling Program for the calendar year of 1970, providing for the drilling of the following well:

San Juan 27-4 Unit #55 NE/4 Sec. 5, Dakota  
T-27-N, R-4-W Formation

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

United States Geological Survey  
Oil Conservation Commission  
Page Two

May 19, 1970

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

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:DI:ec  
Enclosures  
SJ 27-4, 3.0

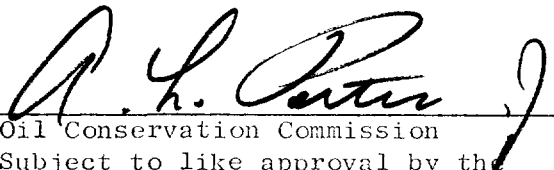
cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

APPROVED: \_\_\_\_\_

Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the Oil  
Conservation Commission of the  
State of New Mexico.

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

APPROVED: \_\_\_\_\_

  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey.

DATE: May 21, 1970

The foregoing approvals are for the 1970 Revised Drilling Program for  
the San Juan 27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

Rincon Oil & Gas Corporation

Mr. M. A. Romero

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 21, 1970

554

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

**Attention: Mr. T. W. Bittick**

**Re: 1970 Drilling Program  
San Juan 27-4 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 1970 for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.**

**One approved copy of the program is returned herewith.**

**Very truly yours,**

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

**ALP/JHK/og  
Enclosure**

**cc: United States Geological Survey  
Roswell, New Mexico**

JAN 13 1970

January 12, 1970

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

Re: San Juan 27-4 Unit  
Rio Arriba County,  
New Mexico  
1970 DRILLING PROGRAM

ATTENTION: Mr. T. W. Bittick

Gentlemen:

We are in receipt of your 1970 Drilling Program for the San Juan 27-4 Unit Rio Arriba County, New Mexico.

This unit contains no New Mexico lands, therefore, we are retaining one set for record purposes only and returning the remaining copies to you.

Very truly yours,

Ted Bilberry, Director  
Oil and Gas Department

TB/ML/s  
encl.

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



# El Paso Natural Gas Company

El Paso, Texas 79999

January 6, 1970

Mr. John A. Anderson  
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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1970 DRILLING PROGRAM

Gentlemen:

By letter dated February 14, 1969, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program for the captioned Unit for the year 1969, providing for the drilling of no wells.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	12
Dakota	20
Dakota-Gallup (OWWO)	1
Pictured Cliffs-Mesaverde	8
Mesaverde-Dakota	1
Mesaverde-Dakota, plugged back and completed in the Mesaverde only	1
Noncommercial, Mesaverde	1
Temporarily Abandoned, Dakota	1
Plugged and Abandoned, Mesaverde-Dakota	<u>1</u>
	52

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year of 1970, providing for the drilling of no wells during the year.

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

Mr. John A. Anderson  
Oil Conservation Commission  
Page 2

January 6, 1970

El Paso Natural Gas Company, as Unit Operator, plans to drill any off-set wells required to prevent drainage of unitized substances and any other wells deemed necessary or desirable by the Unit Operator and the working interest owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 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,



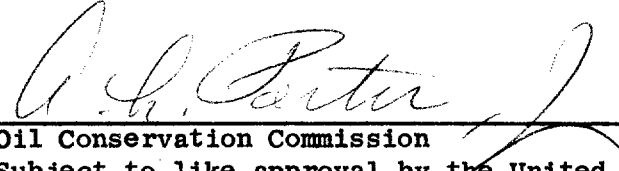
T. W. Bittick  
Manager  
Land Department

TWB:DI:sf  
Enclosures  
San Juan 27-4, 3.0

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the Oil  
Conservation Commission of the State  
of New Mexico.

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

APPROVED:  \_\_\_\_\_  
Oil Conservation Commission  
Subject to like approval by the United  
States Geological Survey.

DATE: January 21, 1970

The foregoing approvals are for the 1970 Drilling Program for the San Juan  
27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas

Thomas H. Harrington

Rincon Oil & Gas Corporation

Mr. M. A. Romero

# El Paso Natural Gas Company

El Paso, Texas 79999

April 11, 1969

69 APR 14 AM 8 10

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Mr. John A. Anderson  
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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
NINTH, TENTH AND ELEVENTH EXPANDED  
PARTICIPATING AREAS, Dakota Formation

Gentlemen:

The Ninth, Tenth and Eleventh Expanded Participating Areas for the referenced Unit were approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey  
Oil Conservation Commission

February 6, 1969  
January 27, 1969

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

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:DI:sf  
SJ 27-4, 4.3

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

Mrs. Pepita O. Jeffus  
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 14, 1969

Mr. John A. Anderson  
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

Re: 1969 DRILLING PROGRAM  
San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico

Gentlemen:

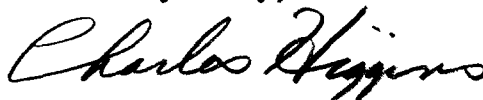
The 1969 Drilling Program for the referenced Unit was approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey  
Oil Conservation Commission

March 11, 1969  
March 3, 1969

It was not necessary to obtain approval of this Drilling Program by the Commissioner of Public Lands. 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

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87501

San Juan 27-4 Unit 3.0

1969 MAR 17 AM 8 00



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

March 11, 1969

IN REPLY REFER TO:

554

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 27-4 unit area, Rio Arriba County, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

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

**OIL CONSERVATION COMMISSION**

**P. O. BOX 2088**

**SANTA FE, NEW MEXICO 87501**

**March 3, 1969**

534

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

**Attention: Mr. T. W. Bittick**

**Re: 1969 Drilling Program  
San Juan 27-4 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 1969 for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.**

**One approved copy of the program is returned herewith.**

**Very truly yours,**

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

**ALP/JEK/eg**

**cc: United States Geological Survey - Roswell**

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# El Paso Natural Gas Company

El Paso, Texas 79999

8 MAR 1969  
FEB 18 1969

February 14, 1969

Mr. John 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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1969 DRILLING PROGRAM

Gentlemen:

By letter dated January 10, 1968, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program for the captioned Unit for the year 1968 providing for the drilling of no wells. On June 5, 1968, El Paso Natural Gas Company filed a Revised 1968 Drilling Program providing for the drilling of one (1) Dakota well. On July 8, 1968, El Paso Natural Gas Company filed a Revised 1968 Drilling Program providing for the drilling of ten (10) additional Dakota wells. On October 30, 1968, El Paso Natural Gas Company filed a Revised 1968 Drilling Program calling for the drilling of five (5) additional Dakota wells. All sixteen (16) of the proposed wells were drilled during 1968.

The completion of the San Juan 27-4 Unit #45 Well caused the Ninth Expansion of the Dakota Participating Area. The completion of the San Juan 27-4 Unit #46 Well caused the Tenth Expansion of the Dakota Participating Area. The completion of the San Juan 27-4 Unit Wells #39, #43, #51, #53 and #54 caused the Eleventh Expansion of the Dakota Participating Area. All other Dakota wells were drilled within the existing Dakota Participating Area and caused no expansion.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	12
Dakota	20
Dakota-Gallup (OWWO)	1
Pictured Cliffs-Mesaverde	8
Mesaverde-Dakota	1
Mesaverde-Dakota, plugged back and completed in the Mesaverde only	1
Non-commercial, Mesaverde	1
Temporarily Abandoned, Dakota	1
Plugged and Abandoned, Mesaverde- Dakota	<u>1</u>
	52

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year of 1969, providing for the drilling of no wells during the year.

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

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

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:DI:nja  
Attachments

cc: Commissioner of Public Lands (Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501


APPROVED: \_\_\_\_\_

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

Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Oil Conservation Commission of  
the State of New Mexico

APPROVED: \_\_\_\_\_

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

  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey

March 3, 1969

The foregoing approvals are for the 1969 Drilling Program for the  
San Juan 27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas

Mr. Thomas H. Harrington

Rincon Oil & Gas Corporation

Mr. M. A. Romero

El Paso Natural Gas Company

El Paso, Texas 79999

February 13, 1969

554

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
NINTH, TENTH AND ELEVENTH EXPANDED  
PARTICIPATING AREAS, Dakota Formation

Gentlemen:

This is to advise that the captioned Expansion for the San Juan 27-4 Unit was approved by the Regulatory Bodies on the following dates:

1. United States Geological Survey - February 6, 1969
2. Oil Conservation Commission for - January 27, 1969  
the State of New Mexico

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Yours very truly,

*Charles Higgins*

Charles Higgins  
Supervising Landman  
Land Department

CH:DI:ec  
SJ 27-4 4.3

cc: Commissioner of Public Lands (Information only)  
State of New Mexico

Mrs. Pepita O. Jeffus



12  
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico 88201

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February 6, 1969

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

10  
FEB 10 1969

Attention: Mr. Charles Higgins

Gentlemen:

The ninth, tenth, and eleventh revisions of the Dakota participating areas for the San Juan 27-4 unit agreement, Rio Arriba County, New Mexico, No. 14-08-001-1054, were approved on February 6, 1969, by the Regional Oil and Gas Supervisor, U. S. Geological Survey, effective as of August 1, September 1, and October 1, 1968, respectively.

By the ninth revision, the Dakota participating area is enlarged from 6,884.90 acres to 7,205.61 acres based on the completion of unit well No. 45. Unit well No. 45, located in the NE 1/4 sec. 19, T. 27 N., R. 4 W., was completed on August 14, 1968, for an initial calculated open flow potential of 3,746 MCFOPD from the Dakota formation 7,884 to 8,090 feet.

By the tenth revision, the Dakota participating area is enlarged from 7,205.61 acres to 7,526.77 acres based on the completion of unit well No. 46. Unit well 46, located in the SE 1/4 sec. 31, T. 27 N., R. 4 W., was completed on September 17, 1968, for an initial calculated open flow potential of 4,019 MCFOPD from the Dakota formation 7,814 to 8,032 feet.

By the eleventh revision, the Dakota participating area is enlarged from 7,526.77 acres to 11,048.43 acres based on the completion of unit wells Nos. 39, 43, 51, 53, and 54 as shown in the following tabulation:

<u>Well No.</u>	<u>Location</u>	<u>Completion Date</u>	<u>Initial Calculated Open Flow Potential MCFGPD</u>	<u>Producing Dakota Interval - Feet</u>
39	SE1/4 sec. 5 T. 27 N., R. 4 W.	10-7-68	3,543	7,896 - 8,100
43	SE1/4 sec. 17 T. 27 N., R. 4 W.	10-7-68	3,238	8,014 - 8,219
51	SE1/4 sec. 29 T. 27 N., R. 4 W.	10-22-68	5,397	7,945 - 8,167
53	NW1/4 sec. 30 T. 27 N., R. 4 W.	10-24-68	3,273	7,999 - 8,213
54	NE1/4 sec. 32 T. 27 N., R. 4 W.	10-16-68	3,644	8,170 - 8,406

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. SGN.) 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. of Pub. Lands, Santa Fe (ltr. only)

# El Paso Natural Gas Company

El Paso, Texas 79999

January 31, 1969

69 FEB PM 1 00

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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

Re: San Juan 27-4 Unit #14-08-001-1054  
NOTICE OF COMPLETION OF ADDITIONAL  
WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 Dakota Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-4 Unit #38 Well is located 1830 feet from the South line and 868 feet from the West line of Section 6, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on August 4, 1968, and completed on August 24, 1968, at a total depth of 8306 feet. The Dakota Formation in the intervals between 8068' - 8076', 8088' - 8096', 8152' - 8160', 8180' - 8192', 8240' - 8254', 8268' - 8276' was treated with a sand-water fracturing process on August 23, 1968. The Dakota Formation was shut-in on August 25, 1968, and after being shut-in for nine (9) days, the Dakota Formation was tested on September 3, 1968, and following a three (3) hour blow-down period gauged 4903 MCFGPD through a 3/4" choke and 6022 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2427 psia and an SIPT of 2476 psia. The spacing Unit for this well is described as the W/2 of Section 6, Township 27 North, Range 4 West, containing 320.84 acres.

This spacing Unit was included in the San Juan 27-4 Unit Seventh 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.



The San Juan 27-4 Unit #40 Well is located 1775 feet from the North line and 1474 feet from the East line of Section 6, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on August 29, 1968, and completed on September 13, 1968, at a total depth of 8300 feet. The Dakota Formation in the intervals between 8072' - 8082', 8092' - 8102', 8150' - 8158', 8176' - 8188', 8238' - 8250', 8260' - 8268' was treated with a sand-water fracturing process on September 12, 1968. The Dakota Formation was shut-in on September 13, 1968, and after being shut-in for seven (7) days, the Dakota Formation was tested on September 20, 1968, and following a three (3) hour blow-down period gauged 2497 MCFGPD through a 3/4" choke and 2740 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2458 psia and an SIPT of 2496 psia. The spacing Unit for this well is described as the E/2 of Section 6, Township 27 North, Range 4 West, containing 319.79 acres.

This spacing Unit was included in the San Juan 27-4 Unit Eighth Expanded Participating Area of the Dakota Formation, effective February 1, 1968, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-4 Unit #41 Well is located 1550 feet from the South line and 1550 feet from the West line of Section 7, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on August 25, 1968, and completed on September 11, 1968, at a total depth of 8204 feet. The Dakota Formation in the intervals between 7970' - 7990', 8080' - 8095', 8132' - 8147', 8160' - 8175' was treated with a sand-water fracturing process on September 10, 1968. The Dakota Formation was shut-in on September 12, 1968, and after being shut-in for seven (7) days, the Dakota Formation was tested on September 19, 1968, and following a three (3) hour blow-down period gauged 5148 MCFGPD through a 3/4" choke and 6550 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2540 psia and an SIPT of 2568 psia. The spacing Unit for this well is described as the W/2 of Section 7, Township 27 North, Range 4 West, containing 321.56 acres.

This spacing Unit was included in the San Juan 27-4 Unit Initial Expanded Participating Area of the Dakota Formation, effective October 1, 1955, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-4 Unit #42 Well is located 1500 feet from the South line and 1550 feet from the West line of Section 8, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on August 13, 1968, and completed on August 27, 1968, at a total depth of 8000 feet. The Dakota Formation in the intervals between 7794' - 7804', 7814' - 7824', 7884' - 7894', 7912' - 7924', 7966' - 7978', 7990' - 7996' was treated with a sand-water fracturing process on August 27, 1968. The Dakota Formation was shut-in on August 28, 1968, and after being shut-in for thirteen (13) days, the Dakota Formation was tested on September 10, 1968, and following a three (3) hour blow-down period gauged 3059 MCFGPD through a 3/4" choke and 3386 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2563 psia and an SIPT of 2608 psia. The spacing Unit for this well is described as the W/2 of Section 8, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit First Expanded Participating Area of the Dakota Formation, effective August 1, 1956, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-4 Unit #44 Well is located 1825 feet from the North line and 1190 feet from the East line of Section 18, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on July 28, 1968, and completed on August 11, 1968, at a total depth of 7974 feet. The Dakota Formation in the intervals between 7702' - 7710', 7720' - 7730', 7828' - 7838', 7892' - 7898', 7908' - 7924', 7924' - 7928' was treated with a sand-water fracturing process on August 10, 1968. The Dakota Formation was shut-in on August 12, 1968, and after being shut-in for eleven (11) days, the Dakota Formation was tested on August 23, 1968, and following a three (3) hour blow-down period gauged 4604 MCFGPD through a 3/4" choke and 5843 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2482 psia and an SIPT of 2493 psia. The spacing Unit for this well is described as the E/2 of Section 18, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Second Expanded Participating Area of the Dakota Formation, effective December 1, 1957, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-4 Unit #47 Well is located 1190 feet from the North line and 1450 feet from the East line of Section 20, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on August 3, 1968, and completed on September 14, 1968, at a total depth of 8154 feet. The Dakota Formation in the intervals between 7872' - 7892', 7978' - 7988', 8006' - 8016', 8053' - 8063', 8078' - 8093', 8115' - 8125' was treated with a sand-water fracturing process on September 13, 1968. The Dakota Formation was shut-in on September 15, 1968, and after being shut-in for nine (9) days, the Dakota Formation was tested on September 24, 1968, and following a three (3) hour blow-down period gauged 3051 MCFGPD through a 3/4" choke and 3507 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2488 psia and an SIPT of 2489 psia. The spacing Unit for this well is described as the N/2 of Section 20, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Third Expanded Participating Area of the Dakota Formation, effective July 1, 1958, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-4 Unit #48 Well is located 1750 feet from the South line and 850 feet from the West line of Section 20, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on October 12, 1968, and completed on October 24, 1968, at a total depth of 8173 feet. The Dakota Formation in the intervals between 7942' - 7952', 7962' - 7977', 8072' - 8084', 8146' - 8158' was treated with a sand-water fracturing process on October 23, 1968. The Dakota Formation was shut-in on October 25, 1968, and after being shut-in for twelve (12) days, the Dakota Formation was tested on November 5, 1968, and following a three (3) hour blow-down period gauged 4168 MCFGPD through a 3/4" choke and 4489 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2533 psia and an SIPT of 2549 psia. The spacing Unit for this well is described as the S/2 of Section 20, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Eleventh Expanded Participating Area of the Dakota Formation, effective October 1, 1968, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-4 Unit #50 Well is located 1500 feet from the South line and 1575 feet from the West line of Section 19, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on October 17, 1968, and completed on November 9, 1968, at a total depth of 7910 feet. The Dakota Formation in the intervals between 7688' - 7694', 7704' - 7716', 7814' - 7826', 7862' - 7868', 7890' - 7900' 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 seven (7) days, the Dakota Formation was tested on December 17, 1968, and following a three (3) hour blow-down period gauged 4976 MCFGPD through a 3/4" choke and 5804 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2457 psia and an SIPT of 2439 psia. The spacing Unit for this well is described as the W/2 of Section 19, Township 27 North, Range 4 West, containing 321.48 acres.

This spacing Unit was included in the San Juan 27-4 Unit Eleventh Expanded Participating Area of the Dakota Formation, effective October 1, 1968, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-4 Unit #52 Well is located 1750 feet from the South line and 1180 feet from the West line of Section 29, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on September 27, 1968, and completed on October 16, 1968, at a total depth of 8390 feet. The Dakota Formation in the intervals between 8185' - 8195', 8205' - 8215', 8316' - 8328', 8365' - 8373' was treated with a sand-water fracturing process on October 15, 1968. The Dakota Formation was shut-in on October 17, 1968, and after being shut-in for twelve (12) days, the Dakota Formation was tested on October 29, 1968, and following a three (3) hour blow-down period gauged 4508 MCFGPD through a 3/4" choke and 4870 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2465 psia and an SIPT of 2490 psia. The spacing Unit for this well is described as the W/2 of Section 29, Township 27 North, Range 4 West, containing 320.00 acres.

This spacing Unit was included in the San Juan 27-4 Unit Eleventh Expanded Participating Area of the Dakota Formation, effective

October 1, 1968, 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,

A handwritten signature in cursive script that reads "Charles Higgins".

Charles Higgins  
Supervising Landman  
Land Department

CH:DI:sf

cc: Commissioner of Public Lands (Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

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

San Juan 27-4 Unit, 4.3

**SAN JUAN 27-4 UNIT**  
**Working Interest Owners**

**General American Oil Company of Texas**  
**Attention: Mr. James W. Goss, Jr.**  
**Meadows Building**  
**Dallas, Texas 75206**

**Thomas H. Harrington**  
**P. O. Box 4026, Station "A"**  
**Albuquerque, New Mexico 87106**

**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**

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 27, 1969

554

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

Attention: Mr. Charles Higgins

Re: Ninth, Tenth, and Eleventh  
Expanded Dakota Participating  
Area, San Juan 27-4 Unit, Rio  
Arriba County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil  
Conservation Commission has this date approved the Ninth,  
Tenth, and Eleventh Expanded Participating Areas for the  
Dakota Formation in the San Juan 27-4 Unit Area, Rio Arriba  
County, New Mexico, subject to like approval by the United  
States Geological Survey.

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

C  
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*El Paso Natural Gas Company*

*El Paso, Texas*

January 22, 1969

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
NINTH, TENTH AND ELEVENTH EXPANDED  
PARTICIPATING AREAS, Dakota Formation

Gentlemen:

We are enclosing for your approval six (6) copies of an Application for Approval of the Ninth, Tenth and Eleventh Expanded Participating Areas of the Dakota Formation for the referenced unit.

If this Application meets with your approval, please execute all copies, retain one copy for your file and forward the remaining copies 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:DI:ec  
Enclosures

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

Commissioner of Public Lands w/encls.  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501  
(Information Only)



# El Paso Natural Gas Company

El Paso, Texas 79999

January 22, 1969

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
NINTH, TENTH AND ELEVENTH EXPANDED  
PARTICIPATING AREAS, Dakota Formation

Gentlemen:

Pursuant to the provisions of Section (11)b of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Ninth, Tenth and Eleventh Expanded Participating Areas for the Dakota Formation, to wit:

NINTH EXPANDED PARTICIPATING AREA - Effective August 1, 1968

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M.	
Section 19: Lots 1, 2, E/2 NW/4, NE/4 (N/2)	320.71

This proposed Ninth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #45 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 #45 Well is located 1035 feet from the North line and 900 feet from the East line of Section 19, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on July 10, 1968, and completed on July 26, 1968, at a total depth of 8155 feet. The Dakota Formation in the intervals between 7,884'-7,894', 7,904-7,918', 8,008'-8,018', 8,056'-8,062', 8,082'-8,090', was treated with a sand-water fracturing process on July 25, 1968. The Dakota Formation was shut-in on July 27, 1968, and after being shut-in for eighteen (18) days, the Dakota Formation was tested on August 14, 1968, and following a three (3) hour blow-down period gauged 3,285 MCFGPD through a 3/4"

choke and 3,746 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,629 psia and an SIPT of 2,686 psia.

TENTH EXPANDED PARTICIPATING AREA - Effective September 1, 1968

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M.	
Section 31: Lots 1, 2, E/2 NW/4, NE/4 (N/2)	321.16

This proposed Tenth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #46 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 #46 Well is located 1750 feet from the North line and 850 feet from the East line of Section 31, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on August 6, 1968, and completed on September 4, 1968, at a total depth of 8060 feet. The Dakota Formation in the intervals between 7,814'-7,824', 7,836'-7,846', 7,947'-7,957', 8,026'-8,032', was treated with a sand-water fracturing process on September 3, 1968. The Dakota Formation was shut-in on September 4, 1968, and after being shut-in for thirteen (13) days, the Dakota Formation was tested on September 17, 1968, and following a three (3) hour blow-down period gauged 3,646 MCFGPD through a 3/4" choke and 4,019 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,472 psia and an SIPT of 2,448 psia.

ELEVENTH EXPANDED PARTICIPATING AREA - Effective October 1, 1968

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M.	
Section 5: Lots 1, 2, S/2 NE/4, SE/4 (E/2)	319.33
Section 16: S/2	320.00
Section 19: Lots 3, 4, E/2 SW/4, SE/4 (S/2)	320.77
Section 20: S/2	320.00
Section 21: All	640.00
Section 28: W/2	320.00
Section 29: All	640.00
Section 30: Lots 1, 2, 3, 4, E/2 W/2, E/2 (All)	641.56
	<u>3,521.66</u>

This proposed Eleventh Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #39 Well, San Juan 27-4 Unit #43 Well, San Juan 27-4 Unit #51 Well, San Juan 27-4 Unit #53 Well and the San Juan 27-4 Unit #54 Well

are capable of producing unitized substances in paying quantities from the Dakota Formation. These wells are as follows:

The San Juan 27-4 Unit #39 Well is located 846 feet from the South line and 1693 feet from the West line of Section 5, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on September 14, 1968, and completed on September 28, 1968, at a total depth of 8121 feet. The Dakota Formation in the intervals between 7,896'-7,906', 7,979'-7,989', 8,006'-8,016', 8,054'-8,064', 8,074'-8,084', 8,090'-8,100', was treated with a sand-water fracturing process on September 27, 1968. The Dakota Formation was shut-in on September 29, 1968, and after being shut-in for eight (8) days, the Dakota Formation was tested on October 7, 1968, and following a three (3) hour blow-down period gauged 3,116 MCFGPD through a 3/4" choke and 3,543 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,563 psia and an SIPT of 2,559 psia.

The San Juan 27-4 Unit #43 Well is located 1750 feet from the North line and 990 feet from the East line of Section 17, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on September 15, 1968, and completed on September 28, 1968, at a total depth of 8258 feet. The Dakota Formation in the intervals between 8,014'-8,029', 8,104'-8,109', 8,134'-8,149', 8,180'-8,185', 8,204'-8,219', was treated with a sand-water fracturing process on September 27, 1968. The Dakota Formation was shut-in on September 29, 1968, and after being shut-in for eight (8) days, the Dakota Formation was tested on October 7, 1968, and following a three (3) hour blow-down period gauged 2,904 MCFGPD through a 3/4" choke and 3,238 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,553 psia and an SIPT of 2,564 psia.

The San Juan 27-4 Unit #51 Well is located 1450 feet from the North line and 800 feet from the East line of Section 29, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on September 29, 1968, and completed on October 11, 1968, at a total depth of 8173 feet. The Dakota Formation in the intervals between 7,945'-7,955', 7,967'-7,977', 8,075'-8,085', 8,119'-8,134', 8,162'-8,167', was treated with a sand-water fracturing process on October 10, 1968. The Dakota Formation was shut-in on October 12, 1968, and after being shut-in for ten (10) days, the Dakota Formation was tested on October 22, 1968, and following a three (3) hour blow-down period gauged 4,762 MCFGPD through a 3/4" choke and 5,397 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,562 psia and an SIPT of 2,573 psia.

The San Juan 27-4 Unit #53 Well is located 900 feet from the North line and 1460 feet from the East line of Section 30, Town-

ship 27 North, Range 4 West, N.M.P.M. This well was spudded on September 30, 1968, and completed on October 13, 1968, at a total depth of 8256 feet. The Dakota Formation in the intervals between 7,999'-8,007', 8,017'-8,035', 8,084'-8,094', 8,128'-8,138', 8,172'-8,178', 8,203'-8,213', was treated with a sand-water fracturing process on October 12, 1968. The Dakota Formation was shut-in on October 13, 1968, and after being shut-in for eleven (11) days, the Dakota Formation was tested on October 24, 1968, and following a three (3) hour blow-down period gauged 2,992 MCFGPD through a 3/4" choke and 3,273 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,558 psia and an SIPT of 2,557 psia.

The San Juan 27-4 Unit #54 Well is located 810 feet from the North line and 910 feet from the East line of Section 32, Township 27 North, Range 4 West, N.M.P.M. This well was spudded on September 5, 1968, and completed on September 25, 1968, at a total depth of 8415 feet. The Dakota Formation in the intervals between 8,170'-8,180', 8,192'-8,212', 8,308'-8,323', 8,352'-8,362', 8,386'-8,406', was treated with a sand-water fracturing process on September 24, 1968. The Dakota Formation was shut-in on September 26, 1968, and after being shut-in for twenty (20) days, the Dakota Formation was tested on October 16, 1968, and following a three (3) hour blow-down period gauged 3,202 MCFGPD through a 3/4" choke and 3,644 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,359 psia and an SIPT of 2,188 psia.

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

EXHIBIT "A"

Ownership maps reflecting the boundaries of the unit and the proposed Ninth, Tenth and Eleventh Expanded Participating Areas of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "B"

Geologic Report on the Ninth, Tenth and Eleventh Expanded Participating Areas of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Mr. John A. Anderson  
Oil Conservation Commission  
January 22, 1969

Page 5

Attached hereto are Schedules X, XI and XII which show the proposed Ninth, Tenth, and Eleventh Expanded Participating Areas for the Dakota Formation in the San Juan 27-4 Unit Area. These Schedules describe the expanded Participating Areas, show the percentage of unitized substances allocated to each unitized tract, and the percentages of ownership in each tract.

If these Ninth, Tenth and Eleventh Expanded Participating Areas of the Dakota Formation meet with your approval, please indicate such approval in the space provided on the attached page 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:DI:ec  
Enclosures  
SJ 27-4 4.3

cc: Commissioner of Public Lands (Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

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

APPROVED: \_\_\_\_\_  
Oil and Gas Supervisor, United States  
Geological Survey  
Subject to like approval by the Oil  
Conservation Commission

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

APPROVED: *A. L. Carter* \_\_\_\_\_  
Oil Conservation Commission  
Subject to like approval by the United  
States Geological Survey

DATE: *January 27, 1969*

The foregoing approvals are for the Ninth, Tenth and Eleventh Expanded Participating Areas of the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas 79901

November 20, 1968

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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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
REVISED 1968 DRILLING PROGRAM

Gentlemen:

The Revised 1968 Drilling Program dated October 30, 1968,  
for the referenced Unit was approved by the regulatory bodies on  
the dates indicated below:

United States Geological Survey - November 14, 1968  
Oil Conservation Commission - November 6, 1968

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:DI:nja

San Juan 27-4 Unit, 3.0

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



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

IN REPLY REFER TO:

November 14, 1968

554

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your supplemental plan of development dated October 30, 1968, proposing the drilling of 5 Dakota wells in the San Juan 27-4 unit area, Rio Arriba County, New Mexico, 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,

(ENC. SGD.) BILLY J. SHOGER

BILLY J. SHOGER  
Acting Oil and Gas Supervisor

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



**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

November 6, 1968

554

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

**Attention: Mr. T. W. Bittick**

**Re: Revised 1968 Drilling Program  
San Juan 27-4 Unit, Rio Arriba  
County, New Mexico**

**Gentlemen:**

**This is to advise that the New Mexico Oil Conservation Commission has this date approved the Revised 1968 Drilling Program dated October 30, 1968, for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.**

**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**

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# El Paso Natural Gas Company

El Paso, Texas 79999

October 30, 1968

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
REVISED 1968 DRILLING PROGRAM

Gentlemen:

By letter dated January 10, 1968, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1968. This program provided for the drilling of no wells during the calendar year 1968. By letter dated June 5, 1968, El Paso Natural Gas Company filed a Revised 1968 Drilling Program for the captioned unit providing for one Dakota well to be drilled in the W/2 of Section 6, T-27-N, R-4-W within the existing Dakota Participating Area. By letter dated July 8, 1968, El Paso Natural Gas Company filed a Revised 1968 Drilling Program for the captioned unit providing for ten Dakota wells to be drilled, seven within the existing Dakota Participating Area and three outside the existing Dakota Participating Area.

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Revised Drilling Program which provides for the completion of five (5) additional wells during the 1968 calendar year. These wells are as follows:

<u>Well Name</u>	<u>Spacing Unit</u>	<u>Formation</u>
San Juan 27-4 Unit #50	W/2 Section 19, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #51	E/2 Section 29, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #52	W/2 Section 29, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #53	E/2 Section 30, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #54	E/2 Section 32, T-27-N, R-4-W	Dakota

Well No. 54 will be drilled within the existing Dakota Participating Area. Wells No. 50, 51, 52 and 53 will be drilled outside of the existing Dakota Participating Area to extend the productive limits of the Participating Area.

Mr. John A. Anderson  
Oil Conservation Commission  
Page Two

October 30, 1968

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 3800', and then a production casing string will be run to the base of the Dakota Formation, which is estimated to be approximately 8000'. 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.

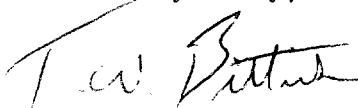
Since each of these wells is to be drilled within the existing Dakota Participating Area, in which El Paso is the only working interest owner, or on acreage outside of the existing Dakota Participating Area on which El Paso is the working interest owner, no other working interest owner in the Unit will share in the cost of the wells and the consent of the other working interest owners in the Unit is not necessary; however, by copy of this letter they are being advised of our plans.

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 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,



T. W. Bittick  
Manager  
Land Department

TWB:DI:mb  
Enclosures

cc: Commissioner of Public Lands (Info only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

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

APPROVED: \_\_\_\_\_

Supervisor, United States Geological Survey.  
Subject to like approval by the Oil Conservation  
Commission of the State of New Mexico

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

APPROVED: \_\_\_\_\_

*A. L. Carter*  
Oil Conservation Commission.  
Subject to like approval by the United States  
Geological Survey

DATE: Nov 6, 1968

The foregoing approvals are for the Revised 1968 Drilling Program for the San Juan  
27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

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

Mr. M. A. Romero  
P. O. Box 11585 - Station "E"  
Albuquerque, New Mexico 87112

# El Paso Natural Gas Company

El Paso, Texas 79999

July 30, 1968

564

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

Re: 1968 DRILLING PROGRAMS  
San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico

Gentlemen:

The Revised 1968 Drilling Programs for the captioned Unit dated June 5, 1968 and July 8, 1968 were approved by the Regulatory Agencies on the dates indicated:

United States Geological Survey - July 11, 1968  
Oil Conservation Commission - July 24, 1968

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:DI:vjh

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico

San Juan 27-4 Unit - 3.0

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OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

554

July 24, 1968

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

Attention: Mr. T. W. Bittick

Re: Revised 1968 Drilling  
Programs - San Juan 27-4  
Unit, Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Revised Drilling Programs dated June 5, 1968 and July 8, 1968, for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

One approved copy of each program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

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

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IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

July 11, 1968

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your supplemental plans of development dated June 5, 1968, and July 8, 1968, proposing the drilling of 11 Bakota wells in the San Juan 27-4 unit area, Rio Arriba County, New Mexico, have been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of each plan are enclosed.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

47/100-10-11

80 JUL 15 AM 8 13

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



# El Paso Natural Gas Company

El Paso, Texas 79999

July 8, 1968

RECEIVED

68 JUL 11 AM 8 40

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
REVISED 1968 DRILLING PROGRAM

Gentlemen:

By letter dated January 10, 1968, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1968. This program provided for the drilling of no wells during the calendar year 1968. By letter dated June 5, 1968, El Paso Natural Gas Company, filed a Revised 1968 Drilling Program for the captioned unit providing for one Dakota well to be drilled in the W/2 of Section 6, T-27-N, R-4-W within the existing Dakota Participating Area.

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Revised Drilling Program which provides for the completion of ten (10) additional wells during the 1968 calendar year. These wells are as follows:

<u>Well Name</u>	<u>Spacing Unit</u>	<u>Formation</u>
San Juan 27-4 Unit #39	W/2 Section 5, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #40	E/2 Section 6, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #41	W/2 Section 7, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #42	W/2 Section 8, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #43	E/2 Section 17, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #44	E/2 Section 18, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #45	E/2 Section 19, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #46	N/2 Section 31, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #47	N/2 Section 20, T-27-N, R-4-W	Dakota
San Juan 27-4 Unit #48	S/2 Section 20, T-27-N, R-4-W	Dakota

July 8, 1968

Page 2

Well Nos. 39, 40, 41, 42, 43, 44, and 47 will be drilled within the existing Dakota Participating Area. Well Nos. 45, 46, and 48 will be drilled outside of the existing Dakota Participating Area to extend the productive limits of the Participating Area.

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 3800', and then a production casing string will be run to the base of the Dakota Formation, which is estimated to be approximately 8000'. 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.


Since each of these wells is to be drilled within the existing Dakota Participating Area, in which El Paso is the only working interest owner, or on acreage outside of the existing Dakota Participating Area on which El Paso is the working interest owner, no other working interest owner in the Unit will share in the cost of the wells and the consent of the other working interest owners in the Unit is not necessary; however, by copy of this letter they are being advised of our plans.

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 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.

Very truly yours,

  
T. W. Bittick  
Manager  
Land Department

TWB:DI:dl  
Enclosures

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Supervisor, United States Geological  
Survey. Subject to like approval by  
the Oil Conservation Commission of  
the State of New Mexico

APPROVED: A. L. Porter DATE: July 24, 1968  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey

The foregoing approvals are for the Revised 1968 Drilling Program for the San  
Juan 27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Thomas H. Harrington  
P. O. Box 4026, Station A  
Albuquerque, New Mexico 87106

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

# El Paso Natural Gas Company

El Paso, Texas 79999

June 26, 1968

554

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
EIGHTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective February 1, 1968

Gentlemen:

This is to advise that the captioned Expansion for the San Juan 27-4 Unit was approved by the Regulatory Bodies on the following dates:

1. United States Geological Survey - June 19, 1968
2. Oil Conservation Commission for - April 2, 1968  
the State of New Mexico

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:DI:vjh

1968 JUN 27 AM 10 06

San Juan 27-4 Unit, 4.3

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
Mrs. Pepita O. Jeffus  
New Mexico Oil & Gas Accounting Commission



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

June 24, 1968

554

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

Attention: Mr. Charles Higgins

Gentlemen:

The eighth revision of the Dakota participating area for the San Juan 27-4 unit agreement, Rio Arriba County, New Mexico, was approved on June 19, 1968, by the Acting Director, U. S. Geological Survey, effective as of February 1, 1968.

Two 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,

(SIGNED) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

cc:  
Washington (ltr. only)  
NMGCC, Santa Fe (ltr. only) ✓  
Farmington (w/cy. of app. appln.)

MAIN FILE

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OIL CONSERVATION COMMISSION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

554

April 2, 1968

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

Attention: Mr. Charles Higgins

Re: Eighth Expanded Dakota Participating  
Area, San Juan 27-4 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Eighth Expanded Participating Area, Dakota formation, for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

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, New Mexico

Commissioner of Public Lands  
Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas 79999

April 1, 1968

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

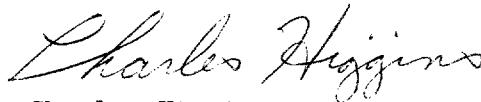
Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
EIGHTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective February 1, 1968

Gentlemen:

We are enclosing for your approval six (6) copies of an Application for Approval of the Eighth Expanded Participating Area of the Dakota Formation for the referenced unit.

If this Application meets with your approval, please execute all copies, retain one copy for your file and forward the remaining copies 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:DI:vjh  
Enclosures

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

Commissioner of Public Lands w/encls.  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501  
(Information Only)



# El Paso Natural Gas Company

El Paso, Texas 79999  
April 1, 1968

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
EIGHTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective February 1, 1968

Gentlemen:

Pursuant to the provisions of Section (11)b of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Eighth Expanded Participating Area for the Dakota Formation, to wit:

EIGHTH EXPANDED PARTICIPATING AREA - Effective February 1, 1968

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M.	639.38
Section 5: Lots 3,4, S/2 NW/4, SW/4 (W/2)	
Section 6: Lots 1,2, S/2 NE/4, SE/4 (E/2)	

This proposed Eighth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 28-4 Unit #31 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 28-4 Unit #31 Well is located 800 feet from the South line and 1,090 feet from the West line of Section 32, Township 28 North, Range 4 West, N.M.P.M. This well was spudded on January 16, 1968, and completed on February 2, 1968, at a total depth of 8,344 feet. The Dakota Formation in the intervals between 8,102'-8,120', 8,173'-8,181', 8,192'-8,214', 8,258'-8,290', was treated

with a sand-water fracturing process on January 31, 1968. The Dakota Formation was shut-in on February 3, 1968, and after being shut-in for eleven (11) days, the Dakota Formation was tested on February 14, 1968, and following a three (3) hour blow-down period gauged 3,654 MCFGPD through a 3/4" choke and 4,305 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,632 psia and an SIPT of 2,656 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 Eighth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "B"

Geological Report on the Eighth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.

EXHIBIT "D"

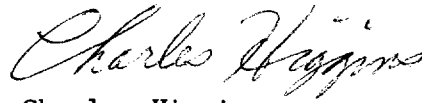
Table 1: Dakota production and deliverability.

Attached hereto is Schedule IX which shows the proposed Eighth Expanded Participating Area for the Dakota Formation in the San Juan 27-4 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 Eighth Expanded Participating Area of the Dakota Formation meets with your approval, please indicate such approval in the space provided on the attached page 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,

A handwritten signature in cursive script, reading "Charles Higgins".

Charles Higgins  
Supervising Landman  
Land Department

CH:DI:vjh  
Enclosures

cc: Commissioner of Public Lands (Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

San Juan 27-4 Unit, 4.3

APPROVED: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the Oil  
Conservation Commission

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

APPROVED: A. H. Porter, Jr.  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey

DATE: April 2, 1968

The foregoing approvals are for the Eighth Expanded Participating  
Area of the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba  
County, New Mexico.

EL PASO NATURAL GAS COMPANY

Memorandum

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To Mr. J. P. Musick, Jr.

Date: March 28, 1968

From: Charles Higgins

Place: Land Department

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico

The Notice of Completion of Non-Commercial Well dated March 11, 1968, has been approved by the United States Geological Survey on March 15, 1968.

*Charles Higgins*

CH:DI:vjh

San Juan 27-4 Unit, 5.0

cc: Mr. R. F. Lemon  
Proration  
Gas Accounting (4)  
Drafting  
Mr. P. K. Odell

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

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

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IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

554

March 15, 1968

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

MAIN OFFICE

Attention: Mr. Charles Higgins

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Gentlemen:

Your letter of March 11, 1968, advises that as operator of the San Juan 27-4 unit, Rio Arriba County, New Mexico, you have determined that unit well No. 30 in the SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 27 N., R. 4 W., N.M.P.M., lease Santa Fe 080670, is not capable of producing unitized substances in paying quantities from the Gallup formation.

Well No. 30 was completed on October 29, 1961, as a commercial Dakota well. On November 26, 1967, operations were commenced to dually complete the well in the Dakota and Gallup formations. The Gallup was perforated and treated in the interval from 7,486 to 7,706 feet. On January 16, 1968, the Gallup was tested for an absolute open flow potential of 766 MCF of gas per day.

This office concurs with your determination that the well is not capable of producing unitized substances in paying quantities from the Gallup formation under existing conditions. Two surplus copies of the notice are attached.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

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

# El Paso Natural Gas Company

El Paso, Texas 79999

March 11, 1968

MAIL OFFICE

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF NON-COMMERCIAL  
WELL IN GALLUP FORMATION

Dear Sir:

Pursuant to the provisions of Section 11 (b) of the San Juan 27-4 Unit Agreement, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, has determined that the following described well is not capable of producing unitized substances in paying quantities from the Gallup Formation.


The San Juan 27-4 Unit #30 Well, located 800' from the South line and 1450' from the West line of Section 32, T-27-N, R-4-W, Rio Arriba County, New Mexico, was completed in the Dakota Formation on October 29, 1961, at a total depth of 8494'. Operations were commenced on November 26, 1967, to dually complete the well in both the Dakota and Gallup Formations. These operations were completed on December 5, 1967, after packers were set at 7461' and 8100'. The Gallup Formation from 7486'-7500'; 7677'-7689'; 7700'-7706' was treated with a sand-water fracturing process. The Gallup Formation was shut-in for gauge on December 9, 1967, and after being shut-in for nineteen (19) days, the Gallup Formation was tested on December 28, 1967, and following a three (3) hour blow-down period gauged 939 MCF/D through a 3/4" choke, and 952 MCF/D by the calculated open flow method, with a SIPT of 1326 psia. The Gallup Formation was shut-in for gauge again on December 28, 1967, and after being shut-in for nineteen (19) days, the Gallup Formation was retested on January 16, 1968, and following a three (3) hour blow-down period gauged 759 MCF/D through a 3/4" choke, and 766 MCF/D calculated by the absolute open flow method with a SIPT of 1314 psia.

Based on the low initial potential of the Gallup Formation, and related geological data, the Unit Operator has determined that the well is non-commercial in the Gallup Formation.

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 working interest owners shown on the attached sheet.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:DI:vb

San Juan 27-4, 5.0  
NM 2111

APPROVED: \_\_\_\_\_  
United States Geological Survey

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

cc: 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



San Juan 27-4 Unit  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

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

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

# El Paso Natural Gas Company

El Paso, Texas 79999

March 8, 1968

554

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SEVENTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective June 1, 1967

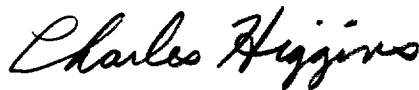
Gentlemen:

This is to advise that the captioned Expansion for the San Juan 27-4 Unit was approved by the Regulatory Bodies on the following dates:

1. United States Geological Survey - February 21, 1968
2. Oil Conservation Commission - January 25, 1968  
for the State of New Mexico

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:DI:vjh

San Juan 27-4 Unit, 4.3

cc: Commissioner of Public Lands (Information Only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

MAIL DEPT

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# El Paso Natural Gas Company 554

El Paso, Texas 79999  
March 1, 1968

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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

Re: 1968 DRILLING PROGRAM  
San Juan 27-4 Unit, #14-08-001-1054  
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 27, 1968
Oil Conservation Commission	- January 25, 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:DI:vjh

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico

San Juan 27-4 Unit - 3.0



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

354

February 29, 1968

MAIN OFFICE

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

\*68 MAR 4 PM 2 49

Attention: Mr. T. W. Bittick

Gentlemen:

The seventh revision of the Dakota participating area for the San Juan 27-4 unit agreement, Rio Arriba County, New Mexico, was approved on February 21, 1968, by the Acting Director, U. S. Geological Survey, effective as of June 1, 1967.

Two 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,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

cc:  
Washington (ltr. only)  
MNOCC, Santa Fe (ltr. only)  
Farmington (w/cy. of app. appln.)



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

554

February 27, 1968

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1968 plan of development for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

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

MAIN OFFICE

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OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

554

January 25, 1968

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

Attention: Mr. Charles Higgins

Re: Seventh Expanded Participating  
Area, Dakota Formation, San Juan  
27-4 Unit, Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Seventh Expanded Participating Area, Dakota Formation, for the San Juan 27-4 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: United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

Commissioner of Public Lands  
Santa Fe, New Mexico

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**OIL CONSERVATION COMMISSION**

**P. O. BOX 2088**

**SANTA FE, NEW MEXICO 87501**

554

**January 25, 1968**

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

**Attention: Mr. T. W. Bittick**

**Re: 1968 Drilling Program  
San Juan 27-4 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 no wells for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.**

**One approved copy of the program is returned herewith.**

**Very truly yours,**

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

**ALP/JEK/esr  
Enclosure**

**cc: United States Geological Survey  
Drawer 1857  
Roswell, New Mexico**

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

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# El Paso Natural Gas Company

El Paso, Texas 79999

January 19, 1968

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SEVENTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective June 1, 1967

Gentlemen:

Enclosed for your approval are six copies of the Seventh Expanded Participating Area of the Dakota Formation covering the above described unit. If this Expansion meets with your approval, please execute all copies and forward five copies to the United States Geological Survey in Roswell, New Mexico, for approval. One copy should be retained for your files. After this Expansion has been approved and signed by the United States Geological Survey, one copy thereof should be returned to El Paso.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

MAIN OFFICE 616

CH:DI:vjh  
Enclosures

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San Juan 27-4 Unit, 4.3, 5.0

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

Commissioner of Public Lands (Information  
State of New Mexico Only)  
P. O. Box 1148  
Santa Fe, New Mexico 87501  
w/attachment

Mr. R. F. Lemon  
Mr. J. P. Musick



# El Paso Natural Gas Company

El Paso, Texas 79999

January 17, 1968

MAIN OFFICE 0111  
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Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SEVENTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective June 1, 1967

Gentlemen:

Pursuant to the provisions of Section (11)b of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Seventh Expanded Participating Area for the Dakota Formation, to wit:

SEVENTH EXPANDED PARTICIPATING AREA - Effective June 1, 1967

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M. Section 6: Lots 3,4,5,6,7 E/2 SW/4, SE/4 NW/4 (W/2)	320.84

This proposed Seventh Expanded 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 #106 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 #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 a SIPC of 2448 psia and a SIPT of 2448 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 Seventh Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "B"

Geological Report on the Seventh Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto is Schedule VIII which shows the proposed Seventh Expanded Participating Area for the Dakota Formation in the San Juan 27-4 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.

APPROVED: \_\_\_\_\_

Director, United States Geological Survey  
Subject to like approval by the Oil  
Conservation Commission

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

APPROVED: \_\_\_\_\_



Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey

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

1-25-68

The foregoing approvals are for the Seventh Expanded Participating Area of the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

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

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

# El Paso Natural Gas Company

El Paso, Texas 79999

January 10, 1968

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1968 DRILLING PROGRAM

Gentlemen:


By letter dated January 3, 1967, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1967. Said program provided for the drilling of no wells during the 1967 calendar year. However, by letter dated November 9, 1967, El Paso Natural Gas Company filed a Revised 1967 Drilling Program which provided for the dual completion of Unit Well #30 in the Gallup Formation. This work has been completed and the well is presently shut-in for gauge.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	12
Dakota	4
Dakota-Gallup (OWWO)	1
Pictured Cliffs-Mesaverde	8
Mesaverde-Dakota	1
Mesaverde-Dakota, plugged back and completed in the Mesaverde only	1
Noncommercial, Mesaverde	1
Temporarily Abandoned, Dakota	1
Plugged and Abandoned, Mesaverde-Dakota	1
	<u>36</u>

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year of 1968, providing for the drilling of no wells during the year.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Supervisor, United States Geological Survey  
Subject to like approval by the Oil Conservation Commission of the State of New Mexico

APPROVED:  \_\_\_\_\_ DATE: 1-25-68  
Oil Conservation Commission  
Subject to like approval by the United States Geological Survey

The foregoing approvals are for the 1968 Drilling Program for the San Juan 27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico

SAN JUAN 27-4 UNIT

Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

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

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

554

December 7, 1967

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

Attention: Mr. T. W. Bittick

Re: Revised 1967 Drilling Program,  
San Juan 27-4 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Revised 1967 Drilling Program dated November 9, 1967, for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

Two approved copies of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEX/og

cc: United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88001

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

November 21, 1967

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your revised 1967 plan of development dated November 9, 1967, for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, proposing the dual completion of unit well No. 30 in the Dakota and Gallup, has been approved on this date subject to like approval by the appropriate State officials. Such well is presently producing from the Dakota.

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

1967 NOV 22 11:11

# El Paso Natural Gas Company

El Paso, Texas 79999

November 9, 1967

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

37 Nov 13 AM 10 1967

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
REVISED 1967 DRILLING PROGRAM

Gentlemen:

By letter dated January 3, 1967, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1967. This program provided for the drilling of no wells during the calendar year 1967.

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Revised Drilling Program which provides for the dual completion of one (1) well during the 1967 calendar year. This well is as follows:

<u>Location</u>	<u>Present Formation</u>	<u>New Formation</u>
San Juan 27-4 Unit #30 Well SW/4 Section 32, T-27-N, R-4-W	Dakota	Gallup

This well was originally drilled and completed as a single Dakota Formation well and it is our intention to re-enter this well and dually complete it in the Gallup Formation.

El Paso Natural Gas Company, as Unit Operator, intends to dually complete this well in the following manner:

Set choke in tubing and pull tubing. Set a top drill cast iron bridge plug at approximately 8100'. Perforate and sand-water frac the Gallup formation in zones as specified by the geologist. Test Gallup formation. If Gallup is economical to produce, drill out the bridge plug at 8100', set a Baker Model "D" production at approximately 8100' and a second Baker Model "FA" production

November 9, 1967

packer with special equipment at approximately 7025'. Run 2 1/16" integral joint tubing from bottom packer to top packer, run 2 3/8" EUE tubing from top packer to surface. Dakota zone will have production tubing between the packers but will produce through the tubing-casing annulus above the top packer. Gallup formation will produce through 2 3/8" EUE tubing.

In addition to the above well, 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 Revised Drilling Program reflects, insofar as possible, their requests for additional drilling.

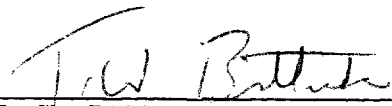
If this Revised Drilling Program is acceptable, please signify your approval, as required under Section 10 of the Unit Agreement, in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this Revised 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

cc: Commissioner of Public Lands (Information only)  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87501

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

Supervisor, United States Geological Survey  
Subject to like approval by the Oil Conservation Commission,  
State of New Mexico

APPROVED:  \_\_\_\_\_ DATE: Dec. 7, 1967

Oil Conservation Commission  
Subject to like approval by the United States Geological Survey

The foregoing approvals are for the Revised 1967 Drilling Program for  
the San Juan 27-4 Unit, #14-08-001-1054.

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

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

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

# El Paso Natural Gas Company

El Paso, Texas 79999

May 4, 1967

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

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

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

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

Gentlemen:

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

- |   |                   |
|---|-------------------|
| 1. Cox Canyon Unit, I Sec. No. 946:       |                   |
| Commissioner of Public Lands -            | January 20, 1967  |
| Oil Conservation Commission -             | January 24, 1967  |
| United States Geological Survey -         | February 20, 1967 |
| 2. Huerfanito Unit, I Sec. No. 943:       |                   |
| United States Geological Survey -         | January 24, 1967  |
| Commissioner of Public Lands -            | February 3, 1967  |
| Oil Conservation Commission -             | April 26, 1967    |
| 3. Lindrith Unit, I Sec. No. 713:         |                   |
| United States Geological Survey -         | March 30, 1967    |
| Commissioner of Public Lands -            | March 2, 1967     |
| Oil Conservation Commission -             | April 11, 1967    |
| 4. San Juan 27-4 Unit, #14-08-001-1054: ✓ |                   |
| United States Geological Survey -         | February 20, 1967 |
| Commissioner of Public Lands -            | January 18, 1967  |
| Oil Conservation Commission -             | January 26, 1967  |

Mr. John A. Anderson,  
Commissioner of Public Lands and  
Oil Conservation Commission

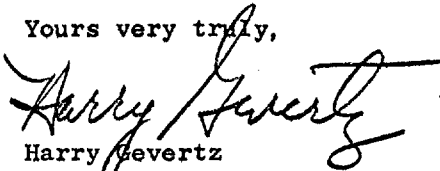
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May 4, 1967

- |   |                   |
|---|-------------------|
| 5. San Juan 28-4 Unit, #14-08-001-933:  |                   |
| United States Geological Survey -       | February 14, 1967 |
| Commissioner of Public Lands -          | January 18, 1967  |
| Oil Conservation Commission -           | April 26, 1967    |
| 6. San Juan 29-4 Unit, #14-08-001-1055: |                   |
| United States Geological Survey -       | February 9, 1967  |
| Commissioner of Public Lands -          | March 2, 1967     |
| Oil Conservation Commission -           | March 28, 1967    |
| 7. San Juan 29-5 Unit, #14-08-001-437:  |                   |
| United States Geological Survey -       | February 20, 1967 |
| Commissioner of Public Lands -          | February 23, 1967 |
| Oil Conservation Commission -           | April 11, 1967    |

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

Yours very truly,

  
Harry Gevertz  
Supervising Landman  
Land Department

HG:JS:cjt

Cox Canyon Unit, Huerfanito Unit,  
Lindrith Unit, San Juan 27-4 Unit,  
San Juan 28-4 Unit, San Juan 29-4  
Unit, San Juan 29-5 Unit - 3.0



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IN REPLY REFER TO:

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

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February 20, 1967

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1967 plan of development dated January 3, 1967, for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

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



OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

51-4

January 26, 1967

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

Attention: Mr. T. W. Bittick

Re: 1967 Drilling Program  
San Juan 27-4 Unit,  
Rio Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1967 Drilling Program dated January 3, 1967 for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United Geological Survey.

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  
Drawer 1857  
Roswell, New Mexico 88201

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# El Paso Natural Gas Company

El Paso, Texas 79999

January 3, 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  
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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1967 DRILLING PROGRAM

Gentlemen:

Pursuant to Section 10 of the San Juan 27-4 Unit, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1966. Said program provided for the drilling of no wells during the 1966 calendar year and none were drilled during the year.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	12
Dakota	5
Pictured Cliffs-Mesaverde	8
Mesaverde-Dakota	1
Mesaverde-Dakota, plugged back and completed in the Mesaverde only	1
Non-Commercial, Mesaverde	1
Temporarily Abandoned, Dakota	1
Plugged and Abandoned, Mesaverde-Dakota	1
	<hr/> 36

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year of 1967, providing for the drilling of no wells during the year.

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

El Paso Natural Gas Company, as Unit Operator, plans to drill any offset wells required to prevent drainage of unitized substances and any other wells deemed necessary or desirable by the Unit Operator and the Working Interest Owners.

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 T. W. Bittick  
T. W. Bittick, Manager  
Land Department

TWB:JS:ep

APPROVED: \_\_\_\_\_

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


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

APPROVED: \_\_\_\_\_

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

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

APPROVED: \_\_\_\_\_

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

DATE: January 26, 1967

The foregoing approvals are for the 1967 Drilling Program for the San Juan 27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

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

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas 79999

August 13, 1966

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

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

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Re; San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico

Gentlemen:

This is to advise that the requested indefinite extension of the drilling of the intervening Mesaverde-well in the W/2 of Section 23, T-27-N, R-4-W, Rio Arriba County, New Mexico was approved by the regulatory bodies on the dates indicated.

1. United States Geological Survey - July 25, 1966.
2. Oil Conservation Commission - August 4, 1966.  
State of New Mexico

Copies of this letter are being sent to the Working Interest Owners in the captioned Unit.

Yours very truly,

EL PASO NATURAL GAS COMPANY

*Harry Gevertz*

Harry Gevertz *by car*  
Supervising Landman  
Land Department

HG:JS:kw

San Juan 27-4, 3.0

# El Paso Natural Gas Company

El Paso, Texas

August 11, 1966

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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: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
1966 DRILLING PROGRAM

Gentlemen:

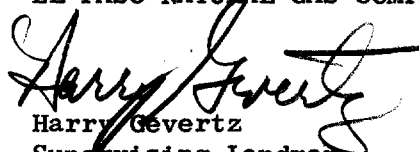
The 1966 Drilling Program for the San Juan 27-4 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - August 4, 1966.
2. Commissioner of Public Lands - April 5, 1966.  
State of New Mexico
3. Oil Conservation Commission - March 14, 1966.  
State of New Mexico

Copies of this letter are being sent to all working interest owners of the San Juan 27-4 Unit.

Yours very truly,

EL PASO NATURAL GAS COMPANY

  
Harry Gevertz  
Supervising Landman  
Land Department

HG:JS:kw

San Juan 27-4, 3.0

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

August 4, 1966

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

Attention: Mr. T. W. Bittick

Re: Intervening Drilling Block  
W/2 Section 23, Township 27  
North, Range 4 West, San Juan  
27-4 Unit, Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved your request for an indefinite extension of time for the drilling of a Mesaverde Formation well in the intervening drilling block described as the W/2 of Section 23, Township 27 North, Range 4 West, on the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

One approved copy of the request is returned herewith.

Very truly yours,

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

ALP/JEK/og  
cc: United States Geological Survey  
Roswell, New Mexico



# El Paso Natural Gas Company

El Paso, Texas 79999

August 2, 1966

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

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Re: San Juan 27-4 Unit  
Intervening Drilling Block  
W/2 Section 23, T-27-N, R-4-W  
Rio Arriba County, New Mexico

'66 AUG 4 PM 1 31

Gentlemen:

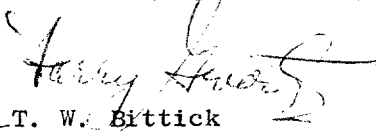
Under date of June 29, 1966, we furnished you with a request for an indefinite extension of time for the drilling of a Mesaverde Formation well on the referenced intervening drilling block.

We have subsequently received approval for the requested extension from the United States Geological Survey by letter dated July 29, 1966, copy of which is enclosed.

It would be appreciated if you would view our request in light of the decision favored us by the United States Geological Survey and advise us of your decision at the earliest opportunity.

Very truly yours,

EL PASO NATURAL GAS COMPANY

  
for T. W. Bittick  
Manager  
Land Department

TWB:JS:cah  
Enclosure

27-4 Unit 3.0



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON, D.C. 20242



JUL 29 1966

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

Gentlemen:

On July 25, 1966, Arthur A. Baker, Acting Director of the Geological Survey, approved your application for an indefinite extension of time for commencing the drilling of a well in the intervening drilling block (W 1/2 of Sec. 23), under the San Juan 27-4 unit agreement, Rio Arriba County, New Mexico, No. 14-08-001-1054. This approval is subject to the condition that the indefinite extension may be terminated at any time when, in our opinion, future circumstances indicate the objectives of unitization would be furthered by the drilling of a well in the W 1/2 of Sec. 23.

66 AUG 4 PM 1 22

Enclosed are two copies of the approved application for your records. We request that you furnish all interested principals with whatever evidence of this approval is deemed appropriate.

Sincerely yours,

For the Director

Enclosures 2

# *El Paso Natural Gas Company*

*El Paso, Texas* 79999

June 29, 1966

Director  
United States Geological Survey  
Washington, D. C.

through

Mr. John A. Anderson  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico

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

Commissioner of Public Lands (Information Copy Only)  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico

Re: San Juan 27-4 Unit  
Intervening Drilling Block  
W/2 Section 23, T-27-N, R-4-W  
Rio Arriba County, New Mexico

Gentlemen:

By letter dated July 23, 1965, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-4 Unit, requested an indefinite extension of time for the drilling of a Mesaverde Formation well on an intervening drilling block described as the W/2 of Section 23, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. On September 13, 1965, the Acting Director of the United States Geological Survey granted a one-year extension of time in which to drill this intervening drilling block.

A well located in the SW/4 SW/4 of Section 23 will have approximately nine (9) feet of Cliff House reservoir quality sand and twenty-five (25) feet of Point Lookout reservoir quality sand. This sand thickness should result in an initial potential of about 4000 Mcf/D and an initial stabilized deliverability of approximately 500 Mcf/D for a limited period of time. However, the Mesaverde wells in this area experience a rapid and severe decline in producing ability and it is expected that a Mesaverde well in the W/2 of Section 23 will deliver less than 200 Mcf/D within four years.

The deliverabilities of the two San Juan 27-4 Unit Mesaverde wells closest to this intervening drilling block support this prediction. These wells are:

<u>Location</u>	<u>Average 1964</u>	<u>Average 1965</u>	<u>Average 1966 through April</u>
San Juan 27-4 #22 Well SW/4 Sec. 14, T-27-N, R-4-W	90 Mcf/D (For 251 Days)	69 Mcf/D (For 275 Days)	83 Mcf/D (For 114 Days)
San Juan 27-4 #29 Well NE/4 Sec. 26, T-27-N, R-4-W	204 Mcf/D (For 220 Days)	117 Mcf/D (For 240 Days)	74 Mcf/D (For 94 Days)

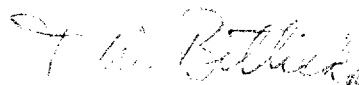
The San Juan 27-4 Unit No. 22 Well was completed with an initial potential of 3.8 M<sup>2</sup>cf/D and first delivered in April of 1960 and the San Juan 27-4 Unit No. 29 Well was completed with an initial potential of 5.0 M<sup>2</sup>cf/D and first delivered in June 1962. Furthermore, these two wells are producing from 37 and 40 feet, respectively, of reservoir quality sand whereas the SW/4 of Section 23 location should encounter only 34 feet of pay zone. A Mesaverde well at a depth of 6000 feet, with such producing characteristics, is not economically feasible to drill until or unless the price of gas increases to the point where recovery of investment becomes a possibility.

Paragraph 11 of the Unit Agreement provides that the commencement of a well on an intervening drilling block may be extended by the Director, Commissioner, and Commission. Pursuant to this paragraph, El Paso Natural Gas Company respectfully requests an indefinite extension for the drilling of this well.

A copy of this letter is being sent to the working interest owners of the San Juan 27-4 Unit.

Very truly yours,

EL PASO NATURAL GAS COMPANY




T. W. Bittick  
Manager  
Land Department

TWB:GWO:sb

San Juan 27-4, 3.0

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the Oil  
Conservation Commission

APPROVAL:  \_\_\_\_\_ DATE: Aug 5, 1966  
Oil Conservation Commission  
Subject to like approval by the United  
States Geological Survey

Indefinite extension of time in which to drill the intervening drilling block described as the W/2 of Section 23, T-27-N, R-4-W, N.M.P.M., pursuant to Section 11 of the San Juan 27-4 Unit Agreement is hereby approved.

# El Paso Natural Gas Company

El Paso, Texas 79999

June 6, 1966

MAIN OFFICE 000

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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 87501

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SIXTH EXPANDED PARTICIPATING AREA  
OF THE DAKOTA FORMATION

Gentlemen:

The Sixth Expanded Participating Area of the Dakota Formation for the San Juan 27-4 Unit #14-08-001-1054, Rio Arriba County, New Mexico, was approved by the regulatory bodies on the following dates:

United States Geological Survey - May 23, 1966

Oil Conservation Commission - May 6, 1966

Formal approval of the Commissioner of Public Lands to this Expansion was not requested in accordance with the Commissioner's desire not to approve Expansions of units in which the State of New Mexico has no leasehold interest.

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Very truly yours,

EL PASO NATURAL GAS COMPANY

  
Harry Gevertz  
Supervising Landman  
Land Department

HG:GWO:sb  
San Juan 27-4, 4.3



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

MAIN OFFICE ( )

24  
AM 9 2  
JUN 2 1966

IN REPLY REFER TO:

June 1, 1966

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

Attention: Mr. T. W. Bittick

Gentlemen:

The sixth revision of the Dakota participating area for the San Juan 27-4 unit agreement, Rio Arriba County, New Mexico, was approved on May 23, 1966, by the Acting Director, U. S. Geological Survey, effective as of September 1, 1965.

Two 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,

(ORIG. SGD.) BILLY J. SHOGER

BILLY J. SHOGER  
Acting Oil and Gas Supervisor

cc:  
Washington (ltr. only)  
Farmington (w/cy of app. appln.)  
NMOCC - Santa Fe (ltr. only) ✓

554

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

5-4

May 6, 1966

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

Attention: Mr. T. W. Bittick

Re: Sixth Expanded Participating  
Area, Dakota Formation, San  
Juan 27-4 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Sixth Expanded Participating Area, Dakota Formation for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

One approved copy of the application for expansion is returned herewith and five copies are being returned 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  
P. O. Drawer 1857  
Roswell, New Mexico

C  
O  
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Y





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

May 4, 1966

MAIN OFFICE 000

'66 MAY 5 AM 9 58

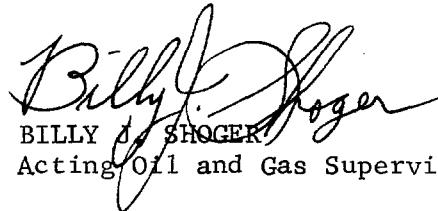
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico

Gentlemen:

In accordance with a telephone request of May 3 by Mr. Charles Richardson of El Paso Natural Gas Company, El Paso, Texas, we are forwarding to your office five copies of an application for the sixth revision of the Dakota participating area, San Juan 27-4 unit agreement, Rio Arriba County, New Mexico.

Upon approval of the application by the Commission, please return the five copies to this office so that we may transmit them to Washington for appropriate action by the Director.

Sincerely yours,

  
BILLY J. SHOGER  
Acting Oil and Gas Supervisor

# El Paso Natural Gas Company

El Paso, Texas 79999

April 15, 1966

RECEIVED  
APR 27 1966  
U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SIXTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective September 1, 1965

Gentlemen:

Pursuant to the provisions of Section (11)b of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Sixth Expanded Participating Area for the Dakota Formation, to wit:

SIXTH EXPANDED PARTICIPATING AREA - Effective September 1, 1965

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M.	
Section 32: N/2	320.00
Section 33: N/2	<u>320.00</u>
Total	640.00

This proposed Sixth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #37 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 #37 Well is located 990' from the South line and 1550' from the West line of Section 33, Township 27 North, Range 4 West, N.M.P.M. Said well was spudded on August 5, 1965, and completed on August 29, 1965, at a total depth of 8463'. The Dakota Formation in the intervals between 8138'-8148', 8164'-8174', 8277'-8287', 8325'-8330' was treated with a sand-water fracturing process on August 28, 1965. The Dakota Formation was shut-in on

August 29, 1965, and after being shut-in for eleven (11) days, the Dakota Formation was tested on September 9, 1965, and following a three (3) hour blow-down period gauged 1629 MCFGPD through a 3/4" choke and 1742 MCFGPD by the calculated absolute open flow method, with a SIPC of 2346 psia and a SIPT of 1454 psia, plus liquids.

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 Sixth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "B"

Geological Report on the Sixth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto is Schedule VII which shows the proposed Sixth Expanded Participating Area for the Dakota Formation in the San Juan 27-4 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 Sixth 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.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By

  
T. W. Bittick

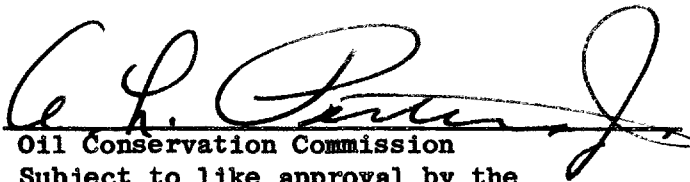
Manager

Land Department

TWB:GWO:sb

APPROVED: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the Oil  
Conservation Commission

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

APPROVED:  \_\_\_\_\_  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey

DATE: May 6, 1966

The foregoing approvals are for the Sixth Expanded Participating  
Area of the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba  
County, New Mexico.

**SAN JUAN 27-4 UNIT**  
**Working Interest Owners**

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

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

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico

SCHEDULE VII  
SIXTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080668	T-27-N, R-4-W Sec. 9: All	640.00	<u>Tract 4</u>			
			Royalty;	12.50%	12.50%	<u>10.802271%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
	TOTAL	100.00%	100.00%			
SF 080669	T-27-N, R-4-W Sec. 17: N/2, E/2 SW/4, SE/4 Sec. 18: Lots 1, 2, E/2 NW/4, NE/4, S/2 SE/4 Sec. 20: N/2	1,280.49	<u>Tract 5</u>			
			Royalty;	12.50%	12.50%	<u>21.612813%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
	TOTAL	100.00%	100.00%			
SF 080670	T-27-N, R-4-W Sec. 31: Lots 3,4, E/2 SW/4, SE/4 Sec. 32: All	962.00	<u>Tract 6</u>			
			Royalty;	12.50%	12.50%	<u>16.237164%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
	TOTAL	100.00%	100.00%			
SF 080673	T-27-N, R-4-W Sec. 7: Lots 1,2,3,4 E/2 W/2, E/2 (All) Sec. 8: All	1,281.56	<u>Tract 10</u>			
			Royalty;	12.50%	12.50%	<u>21.630873%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
	TOTAL	100.00%	100.00%			

SCHEDULE VII

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080674	<u>T-27-N, R-4-W</u> Sec. 16: N/2	320.00	<u>Tract 11</u>			
			Royalty;	12.50%	12.50%	<u>5.401135%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	<u>5.00%</u>	<u>5.00%</u>	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
SF 080675	<u>T-27-N, R-4-W</u> Sec. 33: All Sec. 34: N/2, SW/4	1120.00	<u>Tract 12</u>			
			Royalty;	12.50%	12.50%	<u>18.903975%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	<u>5.00%</u>	<u>5.00%</u>	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
Fee	<u>T-27-N, R-4-W</u> Sec. 17: W/2 SW/4 Sec. 18: N/2 SE/4	160.00	<u>Tract 13</u>			
			Royalty;	12.50%	12.50%	<u>2.700568%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	<u>5.00%</u>	<u>5.00%</u>	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
Fee	<u>T-27-N, R-4-W</u> Sec. 18: Lots 3,4, E/2 SW/4	160.63	<u>Tract 14</u>			
			Royalty;	12.50%	12.50%	<u>2.711201%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	85.00%	85.00%	
			ORRI;	<u>2.50%</u>	<u>2.50%</u>	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	

SCHEDULE VII  
SIXTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION  
SAN JUAN 27-4 UNIT AREA

RECAPITULATION

Description of Lands in Participating Area:

Township 27 North, Range 4 West, N.M.P.M.

Section 7: All  
Section 8: All  
Section 9: All  
Section 16: N/2  
Section 17: All  
Section 18: All  
Section 20: N/2  
Section 31: S/2  
Section 32: All  
Section 33: All  
Section 34: N/2, SW/4

Total Number of Acres in Participating Area:	5,924.68
Total Number of Acres Participating:	5,924.68
Percent of Basic Royalty Committed:	100.00%
Percent of Working Interest Committed:	100.00%
Percent of O.R.R.I. Committed:	100.00%



OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

564

April 5, 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 27-4 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 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

One approved copy of the plan 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

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P  
Y

# El Paso Natural Gas Company

El Paso, Texas 79999

FEB 20 AM 7 50

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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1966 DRILLING PROGRAM

Gentlemen:

By letter dated May 4, 1965, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1965. This Drilling Program provided for the drilling of one Dakota Well and contained a request to defer the drilling of a Mesaverde Intervening Drilling Block. The San Juan 27-4 Unit No. 37 Dakota Well was completed and has occasioned the sixth revision of the Dakota Participating Area. This revision has been submitted to the Oil Conservation Commission and the United States Geological Survey for approval. A one year deferment until September 1, 1966 was granted for the drilling of the Mesaverde Intervening Drilling Block.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	14
Dakota	5
Pictured Cliffs-Mesaverde	7
Mesaverde-Dakota	1
Non-Commercial, Mesaverde	1
Temporarily Abandoned, Dakota	1
Plugged and Abandoned, Dakota	1
	<u>36</u>

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of no wells. Production from the Mesaverde Wells in the area of the Intervening Drilling Block is being reviewed, and the results of this study along with our recommended course of action will be submitted for regulatory body approval prior to the commencement date for this 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 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 T. W. Bittick  
T. W. Bittick, Manager  
Land Department


TWB:GO'N:cg

APPROVED: \_\_\_\_\_  
Supervisor, United States Geological Survey  
Subject to like approval by the appropriate  
State officials.

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

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

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

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

DATE: 2-5-66

The foregoing approvals are for the 1966 Drilling Program for the San Juan 27-4 Unit,  
#14-08-001-1054, Rio Arriba County, New Mexico.

**SAN JUAN 27-4 UNIT**  
**Working Interest Owners**

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

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

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico

Drawer 1857  
Roswell, New Mexico

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
**FIFTH EXPANDED PARTICIPATING AREA**  
**OF THE DAKOTA FORMATION**

# El Paso Natural Gas Company

MAIN OFFICE CCC

El Paso, Texas 79999

JAN 20 PM 11 05

January 13, 1966

564

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, Mexico

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FIFTH EXPANDED PARTICIPATING AREA  
OF THE DAKOTA FORMATION

Gentlemen:

The Fifth Expanded Participating Area of the Dakota Formation for the San Juan 27-4 Unit #14-08-001-1054, Rio Arriba County, New Mexico, was approved by the regulatory bodies on the following dates:

United States Geological Survey - January 3, 1966

Oil Conservation Commission - October 14, 1965

Formal approval of the Commissioner of Public Lands to this Expansion was not requested in accordance with the Commissioner's desire not to approve Expansions of units in which the State of New Mexico has no leasehold interest.

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Very truly yours,



Harry Gevertz  
Supervising Landman  
Land Department

HG:JRP:rr  
San Juan 27-4, 4.3



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1067  
Brewer, New Mexico 88201

IN REPLY REFER TO:

January 21, 1966

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

Attention: Mr. T. W. Burch

Gentlemen:

The fifth revision of the Wilbrea parcel spacing area for the San Juan 27-4 unit agreement, Rio Arriba County, New Mexico, was approved on January 3, 1966, by the Acting Director U. S. Geological Survey, effective as of September 1, 1964.

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. SEC.) J. A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

cc:

Washington (ltr. only)

Farmington (w/cy of appln.)

BLM, Santa Fe (w/cy of appln.)

NEOCC, Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

154

January 5, 1966

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79900

Attention: Mr. T. W. Bittick

Re: Sixth Expanded Participating  
Area, Dakota Formation, San  
Juan 27-4 Unit, Rio Arriba  
County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Sixth Expanded Participating Area for the Dakota Formation for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

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

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# *El Paso Natural Gas Company*

*El Paso, Texas* 79999

December 30, 1965

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

Re: San Juan 27-4 Unit #14-08-001-1064  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
SIXTH EXPANDED PARTICIPATING AREA  
OF THE DAKOTA FORMATION, effective  
September 1, 1965

Gentlemen:

Attached are six copies of the Sixth Expanded Participating Area for the Dakota Formation, San Juan 27-4 Unit, together with appropriate exhibits and geological information.

If this Sixth Expansion meets with your approval, please execute all copies in the space provided. Upon such approval, we request that you retain one copy thereof for your files and forward the remaining copies to the United States Geological Survey for approval.

By copy of this letter, we are furnishing the Commissioner of Public Lands for the State of New Mexico with information copies only of this Expansion. This action is taken in accordance with the Commissioner's previous request, since they do not desire to approve expansion in Units where they have no interest.

Yours very truly,



Harry Gevertz  
Supervising Landman  
Land Department

JRP:saz  
Enclosure

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

# El Paso Natural Gas Company

El Paso, Texas

December 21, 1965

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D.C.

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SIXTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective September 1, 1965

Gentlemen:

Pursuant to the provisions of Section (11)b of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Sixth Expanded Participating Area for the Dakota Formation, to wit:

## SIXTH EXPANDED PARTICIPATING AREA - Effective September 1, 1965

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, NMPM Section 33: N/2	320.00

This proposed Sixth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #37 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 #37 Well is located 990' from the South line and 1550' from the West line of Section 33, Township 27 North, Range 4 West, NMPM. Said well was spudded on August 5, 1965, and completed on August 29, 1965 at a total depth of 8463'. The Dakota Formation in the intervals between 8138'-8148', 8164'-8174', 8277'-8287', 8325'-8330' was treated with a sand-water fracturing process on August 28, 1965. The Dakota Formation was shut-in on August 29, 1965, and after being shut-in for eleven (11) days, the Dakota Formation was tested on September 9, 1965,

and following a three (3) hour blow-down period gauged 1629 MCFGPD through a 3/4" choke and 1742 MCFGPD by the calculated absolute open flow method, with a SIPC of 2346 psia and a SIPT of 1454 psia, plus liquids.

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 Sixth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "B"

Geological Report on the Sixth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.


Attached hereto is Schedule VII which shows the proposed Sixth Expanded Participating Area for the Dakota Formation in the San Juan 27-4 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 Sixth 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 Commissioner of Public Lands of the State of New Mexico and 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

APPROVED:

DATE:

Director, United States Geological  
Survey

Subject to like approval by the Oil  
Conservation Commission

APPROVED:

*A. H. Porter, Jr.*  
Oil Conservation Commission

DATE:

*Jan 5, 1966*

Subject to like approval by the  
United States Geological Survey

The foregoing approvals are for the Sixth Expanded Participating  
Area of the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba  
County, New Mexico.

OIL CONSERVATION COMMISSION

P. O. ~~BOX 2088~~ BOX 2088  
SANTA FE, NEW MEXICO

554

October 14, 1965

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

Attention: Mr. Harry Gevertz

Re: Fifth Expanded  
Participating Area,  
Dakota Formation, San  
Juan 27-4 Unit, Rio  
Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fifth Expanded Participating Area for the Dakota Formation for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

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

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# El Paso Natural Gas Company

El Paso, Texas 79999

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October 5, 1965

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
FIFTH EXPANDED PARTICIPATING AREA  
OF THE DAKOTA FORMATION, effective  
September 1, 1964

Gentlemen:

Attached are six copies of the Fifth Expanded Participating Area for the Dakota Formation, San Juan 27-4 Unit, together with appropriate exhibits and geological information.

If this Fifth Expansion meets with your approval, please execute all copies in the space provided. Upon such approval, we request that you retain one copy thereof for your files and forward the remaining copies to the United States Geological Survey for approval.

By copy of this letter, we are furnishing the Commissioner of Public Lands for the State of New Mexico with information copies only of this Expansion. This action is taken in accordance with the Commissioner's previous request, since they do not desire to approve expansion in Units where they have no interest.

Very truly yours,



Harry Gevertz  
Supervising Landman  
Land Department

HG:JRP:kf  
Enclosures

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

SJ 27-4, 5.0  
SJ 27-4, 4.3

5814

September 29, 1965

El Paso Natural Gas Company  
Post Office Box 1492  
El Paso, Texas

Re: San Juan 27-4 Unit  
Rio Arriba County,  
New Mexico

Attention: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands approved as of September 29, 1965, your request for a one year extension within in which to commence operations for a Mesaverde well on the W/2 of Section 23, Township 27 North, Range 4 West.

This approval is in concurrence with approval by the United States Geological Survey as the State of New Mexico has no acreage in San Juan 27-4 Unit.

We are returning two approved copies of this extension.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:

Ted Bilberry, Director  
Oil and Gas Department

MMR/e

cc: United States Geological Survey  
Roswell, New Mexico

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

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# El Paso Natural Gas Company

El Paso, Texas

September 22, 1965

MAILED

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Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D.C.

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FIFTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective September 1, 1964

Gentlemen:

Modifying our letter of July 7, 1965 in accordance with instructions from the United States Geological Survey and pursuant to the provisions of Section (11)b of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Fifth Expanded Participating Area for the Dakota Formation, to wit:

## FIFTH EXPANDED PARTICIPATING AREA - Effective September 1, 1964

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, NMPM	
Section 33: S/2	320.00
Section 34: N/2, SW/4	480.00

This proposed Fifth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #34 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 #34 Well is located 1180' from the South line and 1700' from the East line of Section 34, Township 27 North, Range 4 West, NMPM. Said well was spudded on May 30, 1964, and completed on July 14, 1964, at a total depth of 8435'. The Dakota Formation in the intervals between 8084' - 8094', 8115' - 8120', 8223' - 8233', 8275' - 8280' was treated with a sand-water fracturing process on July 12, 1964. The Dakota Formation was shut-in on July 19, 1964, and after being



shut-in for forty-six (46) days, the Dakota Formation was tested on September 3, 1964, and following a three (3) hour blow-down period gauged 1183 Mcfgpd through a 3/4" choke and 1424 Mcfgpd by the calculated absolute open flow method, with a SIPC of 1932 psia and a SIPT of 1705 psia, plus liquids.

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 Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "B"

Geological Report on the Fifth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto is Schedule VI which shows the proposed Fifth Expanded Participating Area for the Dakota Formation in the San Juan 27-4 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 Fifth 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 Commissioner of Public Lands of the State of New Mexico and to the working interest owners shown on the attached sheet.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By

  
T.W. Bittick

Assistant Manager  
Land Department

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the Oil  
Conservation Commission

APPROVED: A. L. Carter, Jr. DATE: October 14, 1960  
Oil Conservation Commission  
Subject to like approval by the United  
States Geological Survey

The foregoing approvals are for the Fifth Expanded Participating  
Area of the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba  
County, New Mexico.

# El Paso Natural Gas Company

El Paso, Texas

September 21, 1965

MAILED

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

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

Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
Contract No. 14-08-001-950

Gentlemen:

As indicated by the enclosed letter, the United States Geological Survey has denied El Paso Natural Gas Company's request of July 23, 1965 for an indefinite extension but has granted us an extension of one year within which to commence drilling operations for a Mesaverde well within the W/2 of Section 23, Township 27 North, Range 4 West, NMPM.

We hereby request your consideration and similar approval of such extension.

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By L. W. Bittner  
Assistant Manager  
Land Department

# El Paso Natural Gas Company

El Paso, Texas

August 17, 1965

MAIN OFFICE  
AUG 23 1965

554

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 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
1965 DRILLING PROGRAM

Gentlemen:

The 1965 Drilling Program for the San Juan 27-4 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - July 30, 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 27-4 Unit.

Very truly yours,

*Harry Gevertz*

Harry Gevertz  
Regional Landman  
Land Department

HG:GWO:rr

SJ 27-4, 3.0

OIL CONSERVATION COMMISSION

P. O. BOX 2088  
SANTA FE, NEW MEXICO

554

August 13, 1965

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

Re: Fifth Expansion Dakota  
Participating Area, San Juan  
27-4 Unit, Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fifth Expanded Participating Area, Dakota Formation for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

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, New Mexico

Commissioner of Public Lands  
Santa Fe, New Mexico

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# El Paso Natural Gas Company

El Paso, Texas 79999

August 11, 1965

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

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

Gentlemen:

Your letter dated July 19, 1965, questions why certain lands that have been eliminated from the San Juan 27-4 Unit are included in the proposed Fifth Expanded Participating Area, Dakota Formation, San Juan 27-4 Unit.

The eliminated acreage is the SE/4 of Section 34 and all of Section 35. This acreage is shown under Tracts 2-A and 3 of Schedule VI of the FIFTH EXPANDED PARTICIPATING AREA. You will note that there is no allocation of production made to these two tracts as is shown in Schedule VI, proposed Fifth Expanded Participating Area, San Juan 27-4 Unit.

The reason this acreage is described is based upon the following language, contained in Provision 11 (b) of the San Juan 27-4 Unit:

"that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities;"

This has been interpreted by the United States Geological Survey to require such determinations on all acreage within the unit boundary, regardless of commitment.

It is hoped that this answers your question, and that you can now approve this expansion and forward it to the United States Geological Survey.

Very truly yours,



Harry Gevertz  
Regional Landman  
Land Department

HG:GWO:rr

SJ 27-4, 4.3

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

August 11, 1965

564

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

Attention: Mr. Sam Smith

Re: 1965 Drilling Program  
San Juan 27-4 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 27-4 Unit calling for the drilling of one Dakota well in the SW/4 of Section 33, Township 27 North, Range 4 West, NMPM, subject to like approval by the United States Geological Survey. One approved copy of the program is returned herewith.

Approval of the program is not to be construed as also approving an extension of time within which to commence drilling the Mesaverde well in the intervening drilling block described as the W/2 of Section 23, Township 27 North, Range 4 West, NMPM.

Very truly yours,

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

ALP/JEK/og

cc: United States Geological Survey - Roswell

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Drawer 1857  
Roswell, New Mexico 88201

July 30, 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 4, 1965, for the San Juan 27-4 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.

Approval of this plan does not constitute approval of your request for an indefinite extension of time within which to commence a Mesaverde well in the intervening drilling block described as the W $\frac{1}{2}$  sec. 23, T. 27 N., R. 4 W., N.M.P.M. Any extension of the September 1, 1965, obligation date within which to commence the well will require approval of a formal application by the Director and appropriate State officials.

The W $\frac{1}{2}$  sec. 23 was admitted to the Mesaverde participating area as an intervening drilling block on September 1, 1964, and pursuant to Section 11(a) of the unit agreement, a Mesaverde well must be commenced on the drilling block on or before September 1, 1965. Inasmuch as the drilling of this well is a contractual obligation under the terms of the San Juan 27-4 unit agreement, we would be reluctant to recommend any extension of the September 1 commencement date.

Sincerely yours,

(Orig.Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil & Gas Supervisor

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



# El Paso Natural Gas Company

El Paso, Texas

July 23, 1965

MAIN

SEP 27 AM 10

Director  
United States Geological Survey  
Washington, D. C.

through

Mr. John A. Anderson  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico

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

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

RECEIVED  
U. S. GEOLOGICAL SURVEY  
WASHINGTON, D. C.

Re: Unit Agreement for the Development  
and Operation of the San Juan 27-4 Unit Area  
Rio Arriba County, New Mexico,  
Contract #14-08-001-950

Gentlemen:

In the 1965 Drilling Program letter, dated May 4, 1965, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-4 Unit, requested an indefinite extension of time prior to commencement of operations for the drilling of a Mesaverde Formation well in an intervening drilling block described as the W/2 of Section 23, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This drilling block was admitted to the Mesaverde Participating Area in the Seventeenth Expansion, effective September 1, 1964.

The United States Geological Survey requested that Unit Operator make application for this extension by separate letter. Therefore, pursuant to Paragraph 11(a) of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, requests an indefinite extension of its obligation to drill this well, presently required to be commenced on or before September 1, 1965.

Under conditions of oversupply that now exist in the San Juan Basin, prudent operation demands more strongly than ever that only those wells capable of sustained deliverabilities at commercial levels be drilled. Although the Mesaverde wells in this area show a high potential, their sustained deliverability is marginal. Two wells located within one quarter of a mile of this drilling block have had the following sustained deliverabilities from the Mesaverde Formation:

San Juan 27-4 Unit Well	Average 1964	From 1-1-65 To 6-30-65
No. 22, SW/4 Sec 14, T-27-N, R-4-W, NMPM	90 MCF/D (for 251 days)	94 MCF/D (for 110 days)
No. 29, NE/4 Sec 26, T-27-N, R-4-W, NMPM	204 MCF/D (for 220 days)	170 MCF/D (for 81 days)

Within an approximate mile radius of this drilling block there are three other wells, with the following sustained deliverabilities:

San Juan 27-4 Unit Well	Average 1964	From 1-1-65 To 6-30-65
No. 3, NE/4 Sec 15, T-27-N, R-4-W, NMPM	None (Cannot produce into line)	Could produce only in June, averaging 2 MCF/D (for 23 days)
No. 28, SW/4 Sec 11, T-27-N, R-4-W, NMPM	147 MCF/D (for 304 days)	121 MCF/D (for 138 days)
No. 35, SW/4 Sec 26, T-27-N, R-4-W, NMPM		330 MCF/D from date of first delivery on 4-22-65 to 6-30-65 (for 41 days)

(A plat is enclosed setting out the information pertaining to these adjacent wells).

Therefore, deliverability in this area establishes that the drilling of a Mersaverde well in the W/2 of Section 23 would not be economically feasible under present market conditions.

Paragraph 11 of the Unit Agreement provides that the time for commencement of a well on an intervening drilling block may be extended by the Director, the Commissioner and the Commission. In accordance with this provision, we respectfully request that El Paso Natural Gas Company be granted an indefinite extension for the drilling of this well in view of the facts presented.

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Your favorable consideration of this request will be sincerely appreciated.

Date Approved: SEP 13 1965

Extension of time in which to drill the intervening drilling block described as the W/2 of Sec. 23, T-27-N, R-4-W, N.M.P.M., pursuant to Sec. 11 of the San Juan 27-4 Unit Agreement is hereby approved for a period of one year only as the requested indefinite period is deemed excessive.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By   
Attorney-in-Fact

SS:CTR:rr  
Enclosure

  
Acting Director, U.S. Geological Survey

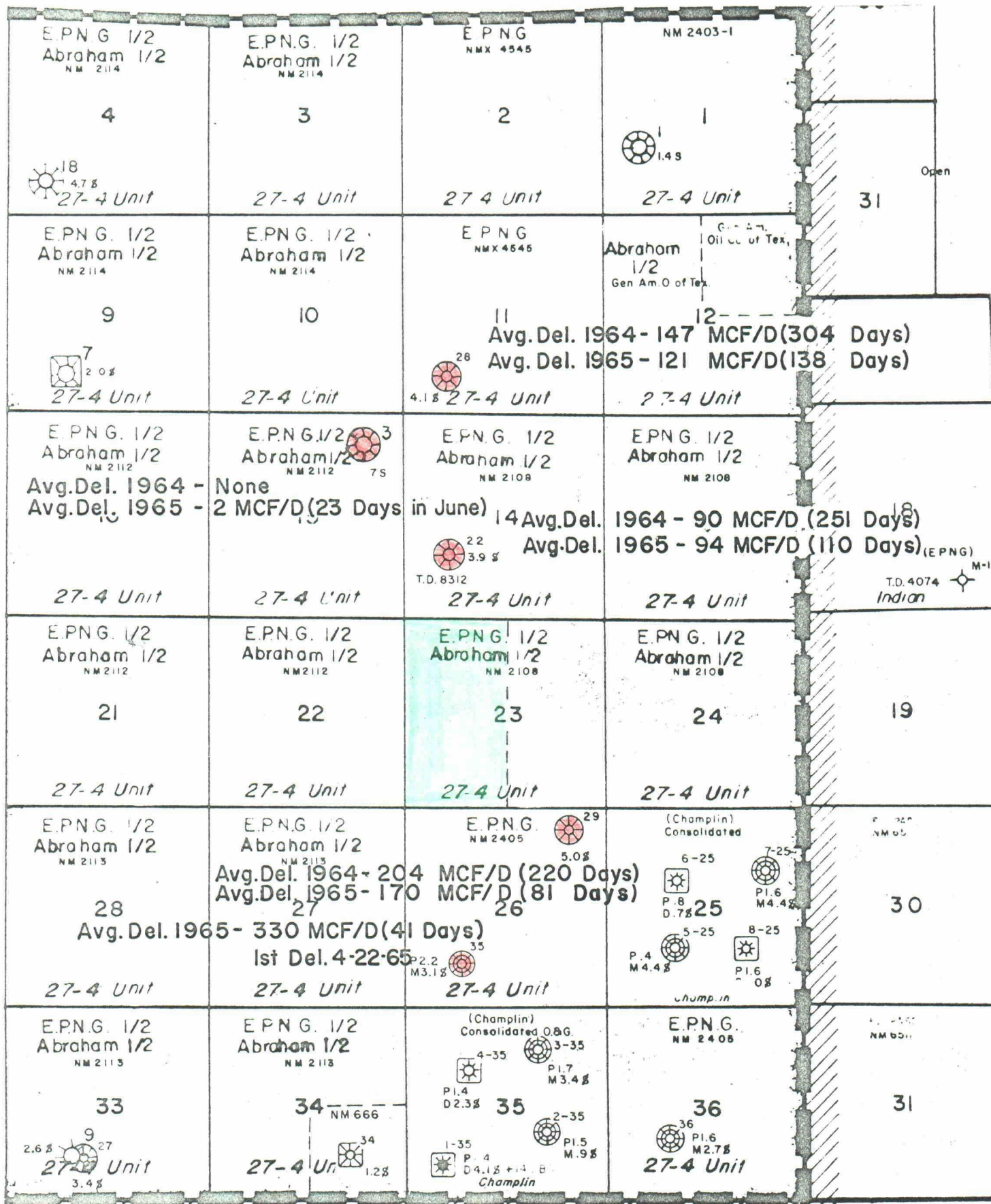
APPROVED: \_\_\_\_\_  
Commissioner of Public Lands  
Subject to like approval by the  
United States Geological Survey  
and the Oil Conservation Commission

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

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

Extension of time in which to drill the intervening drilling block described as the W/2 of Sec. 23, T-27-N, R-4-W, NMPPM, pursuant to Sec. 11 of the San Juan 27-4 Unit Agreement is hereby approved for a period of one year.



OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

July 19, 1965

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

Attention: Mr. T. W. Bittick

Re: San Juan 27-4 Unit,  
Proposed Fifth Expanded  
Participating Area  
Dakota Formation

Gentlemen:

The Fifth Expansion of the Dakota Participating Area proposes the inclusion of the S/2 of Section 33, all of Section 34, and all of Section 35 in the Participating Area Dakota Formation of San Juan 27-4 Unit, Rio Arriba County, New Mexico. The Geologic Report accompanying your application points out that all of Sections 12, 25, 35 and the southeast quarter of 34 have been eliminated from the Unit, how then, can you now include all of Section 35 and the southeast quarter of 34 as part of the Dakota Participating Area? Action by the Commission on the subject application will be deferred until an adequate explanation has been received.

Very truly yours,

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

ALP/JEK/og

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El Paso Natural Gas Company

El Paso, Texas 79999

July 9, 1965

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
FIFTH EXPANDED PARTICIPATING AREA  
OF THE DAKOTA FORMATION, effective  
September 1, 1964

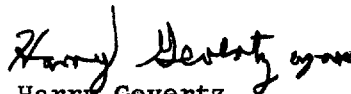
Gentlemen:

Attached are six copies of the Fifth Expanded Participating Area for the Dakota Formation, San Juan 27-4 Unit, together with appropriate exhibits and geological information.

If this Fifth Expansion meets with your approval, please execute all copies in the space provided. Upon such approval, we request that you retain one copy thereof for your files and forward the remaining copies to the United States Geological Survey for approval.

By copy of this letter, we are furnishing the Commissioner of Public Lands for the State of New Mexico with information copies only of this Expansion. This action is taken in accordance with the Commissioner's previous request, since they do not desire to approve expansion in Units where they have no interest.

Yours very truly,

  
Harry Gevertz  
Regional Landman  
Land Department

HG:CTR:jm

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

SJ 27-4 Unit, 5.0, 4.3

# El Paso Natural Gas Company

El Paso, Texas

July 7, 1965

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FIFTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective September 1, 1964

Gentlemen:

Pursuant to the provisions of Section(11)b of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Fifth Expanded Participating Area for the Dakota Formation, to wit:

FIFTH EXPANDED PARTICIPATING AREA - Effective September 1, 1964

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M.	
Section 33: S/2	320.00
Section 34: All	640.00
Section 35: All	640.00

This proposed Fifth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #34 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 #34 Well is located 1180' from the South line and 1700' from the East line of Section 34, Township 27 North, Range 4 West, N.M.P.M. Said well was spudded on May 30, 1964, and completed on July 14, 1964, at a total depth of 8435'. The Dakota Formation in the intervals between 8084' - 8094', 8115' - 8120', 8223' - 8233', 8275' - 8280' was treated with a sand-water fracturing process on July 12, 1964. The Dakota Formation was shut-in on July 19, 1964, and after being shut-in for forty-six (46) days, the

Dakota Formation was tested on September 3, 1964, and following a three (3) hour blow-down period gauged 1183 MCFGPD through a 3/4" choke and 1424 MCFGPD by the calculated absolute open-flow method, with a SIPC of 1932 psia and a SIPT of 1705 psia, plus liquids.

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 Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "B"

Geological Report on the Fifth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto is Schedule VI which shows the proposed Fifth Expanded Participating Area for the Dakota Formation in the San Juan 27-4 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 Fifth 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 Commissioner of Public Lands of the State of New Mexico and 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 Oil  
Conservation Commission.

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

APPROVED: \_\_\_\_\_

*A. L. Porter, Jr.*  
Oil Conservation Commission  
Subject to like approval by the United  
States Geological Survey.

DATE: *8-13-65*

The foregoing approvals are for the Fifth Expanded Participating  
Area of the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba  
County, New Mexico.

May 24, 1965

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

Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
1965 Drilling Program

Gentlemen:

We do not believe it necessary for the operator to obtain the Commissioner's approval on documents pertaining to units which do not contain State of New Mexico land.

We will approve this particular plan for the San Juan 27-4 Unit as a courtesy. However, in the future, we will return them unapproved when the papers pertain to units not containing State of New Mexico land.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

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

GBH/MMR/d  
Enclosure  
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

# El Paso Natural Gas Company

El Paso, Texas

May 4, 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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1965 DRILLING PROGRAM

Gentlemen:

By letter dated March 5, 1964, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1964. This Drilling Program provided for the drilling of two Pictured Cliffs-Mesaverde dual wells and one Dakota well by Unit Operator in the Unit during 1964. All the wells were completed, and the San Juan 27-4 Unit No. 35 and 36 Pictured Cliffs-Mesaverde dual wells occasioned the Sixth and Seventh Revisions of the Pictured Cliffs Participating Area, and the Sixteenth and Seventeenth Revisions of the Mesaverde Participating Area of the Unit which have been submitted to the regulatory bodies. A determination is presently being made as to whether the San Juan 27-4 Unit No. 34 Dakota well is commercial. If this No. 34 well is found to be commercial, it will occasion the Fifth Revision of the Dakota Participating Area of the Unit.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	14
Dakota	3
Pictured Cliffs-Mesaverde	7
Mesaverde-Dakota	1
Non-Commercial, Mesaverde	1
Dakota (Determination as to commerciality pending)	1
Temporarily Abandoned, Dakota	1
Plugged and Abandoned, Dakota	<u>1</u>
	35

Pursuant to Section 10 of the San Juan 27-4 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 period from January 1, 1965, to December 31, 1965.

<u>Location</u>	<u>Formation</u>
SW/4 Sec. 33, T-27-N, R-4-W	Dakota

The basis for drilling this well is to offset the Pan American 102 #9 Dakota Well in the NE/4 of Section 4, T-26-N, R-4-W, which had an initial potential of 2.7 M<sup>2</sup>CF and a deliverability of 881 MCF/D; and the Pan American 102 #10 Dakota Well in the NW/4 of Section 4, T-26-N, R-4-W, which had an initial potential of 1.3 M<sup>2</sup>CF and a deliverability of 588 MCF/D.

El Paso Natural Gas Company intends to drill this 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 3200', 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 deemed necessary or desirable by the Unit Operator and the working interest owners.

The below-described intervening drilling block would, by the terms of the Unit Agreement, be required to be commenced by September 1, 1965, unless an extension of the time for commencement thereof is granted pursuant to Section 11(a) of the said Unit Agreement by the United States Geological Survey, the Commissioner of Public Lands for the State of New Mexico and the Oil Conservation Commission:

<u>Location</u>	<u>Formation</u>
W/2 Sec. 23, T-27-N, R-4-W	Mesaverde

In the judgment of Unit Operator and the working interest owners, it would not be economically feasible to drill a well on this location at this time, particularly under present market conditions. Although the Mesaverde wells in this area show a high initial potential, their sustained deliverability is no better than 300 MCF/D. Therefore, El Paso Natural Gas Company hereby requests that the drilling of this well on the above-described intervening drilling block be deferred until such time as market conditions improve sufficiently so that development and operating costs can be recovered within a reasonable period of time.

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 and you approve our request for deferment of drilling operations on the above intervening drilling block, please signify your approval as required under sections 10 and 11(a) 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: \_\_\_\_\_

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: 5-11-65

The foregoing approvals are for the 1965 Drilling Program for the San Juan  
27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

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

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas

FEB 19 1965

105 FEB 25 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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SEVENTH EXPANDED PARTICIPATING AREA  
Pictured Cliffs Formation  
Effective October 1, 1964

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #35 (PM) Well, located 1090' from the South line and 1550' from the West line of Section 26, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on July 5, 1964, and completed on July 26, 1964, at a total depth of 6470'. The Pictured Cliffs Formation from 4136' - 4142', 4182' - 4194' was treated with a sand-water fracturing process on July 22, 1964. After being shut-in for thirty-seven (37) days, the well was tested in the Pictured Cliffs Formation on September 2, 1964, and following a three (3) hour blow-down period gauged 2175 MCFGPD through a 3/4" choke and 2237 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1051 psia and an SIPT of 1050 psia. The committed drilling block upon which this well is located is described as the W/2 of Section 26, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 320.00 acres, more or less.



The effective date for the Seventh Expanded Participating Area is determined as October 1, 1964, the first of the month following the testing of the Pictured Cliffs Formation of the San Juan 27-4 Unit #35 (PM) Well.

The San Juan 27-4 Unit #35 (PM) Well is a dual completion well, having been completed in both the Pictured Cliffs and Mesaverde Formations. Said well was included in the Seventeenth Expanded Participating Area for the Mesaverde Formation, effective September 1, 1964, which will be submitted under separate cover.

Attached is Schedule VIII showing the Seventh Expanded Participating Area for the Pictured Cliffs Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval this Seventh Expanded Participating Area will become effective as of October 1, 1964.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



T. W. Bittick  
Assistant Manager  
Land Department

TWB:GWO:js

# El Paso Natural Gas Company

El Paso, Texas

FEB 19 1965

25 JUL 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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SEVENTEENTH EXPANDED PARTICIPATING  
AREA, Mesaverde Formation,  
Effective September 1, 1964

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #35 (PM) Well, located 1090' from the South line and 1550' from the West line of Section 26, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on July 5, 1964, and completed on July 26, 1964, at a total depth of 6470'. The Mesaverde Formation in the intervals between 5934' - 5940', 5952' - 5956', 5966' - 5970', 5984' - 5988', 6276' - 6288', 6303' - 6315', 6355' - 6361' was treated with a sand-water fracturing process on July 22, 1964. This well was shut-in on July 27, 1964. After being shut-in for fourteen (14) days the well was tested on August 10, 1964, and following a three (3) hour blow-down period gauged 3077 MCFGPD through a 3/4" choke, and 5628 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1024 psia and an SIPT of 1144 psia. The committed drilling block upon which this well is located is described as the W/2 of Section 26, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 320.00 acres.

The foregoing drilling block is included in the Seventeenth Expanded Participating Area of the Mesaverde Formation for the San Juan 27-4 Unit, effective September 1, 1964.

The completion of the San Juan 27-4 Unit #35 (PM) Well in the Mesaverde Formation creates one (1) intervening drilling block described as the W/2 of Section 23, Township 27 North, Range 4 West, containing 320.00 acres. Under the terms of the Unit Agreement, this intervening drilling block is also admitted to the Mesaverde Participating Area, effective September 1, 1964, and a well must be commenced on this intervening drilling block by September 1, 1965.

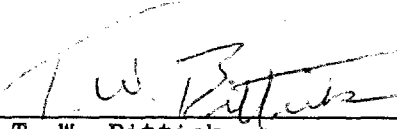
Attached is Schedule XVIII showing the Seventeenth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Seventeenth Expanded Participating Area will become effective as of September 1, 1964.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By

  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:GWO:js

# El Paso Natural Gas Company

El Paso, Texas

FEB 19 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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SIXTEENTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation,  
Effective August 1, 1964

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. This well is as follows:

The San Juan 27-4 Unit #36 (PM) Well, located 1650' from the South line and 1700' from the West line of Section 36, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on June 21, 1964, and completed on July 21, 1964, in the Pictured Cliffs and Mesaverde Formations at a total depth of 6410'. The Mesaverde Formation in the intervals between 5872' - 5878', 5893' - 5899', 6198' - 6204', 6222' - 6228', 6238' - 6244' was treated with a sand-water fracturing process on July 16, 1964. This well was shut-in on July 21, 1964. After being shut-in for nine (9) days the well was tested on July 30, 1964, and following a three (3) hour blow-down period gauged 2669 MCFGPD through a 3/4" choke and 4441 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1043 psia. The committed drilling block upon which this well is located is described as the W/2 of Section 36, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 320.00 acres.

The effective date for the Sixteenth Expanded Participating Area is determined as August 1, 1964, the first of the month following the date of testing the San Juan 27-4 #36 (PM) Well.


Attached is Schedule XVII showing the Sixteenth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Sixteenth 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 shown on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



T. W. Bittick  
Assistant Manager  
Land Department

TWB:GWO:js

# El Paso Natural Gas Company

El Paso, Texas

FEB 19 1965

FILED FEB 25 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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SIXTH EXPANDED PARTICIPATING AREA  
Pictured Cliffs Formation  
Effective September 1, 1964

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #36 (PM) Well, located 1650' from the South line and 1700' from the West line of Section 36, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on June 21, 1964, and completed on July 21, 1964, at a total depth of 6410'. The Pictured Cliffs Formation in the intervals between 4080' - 4092', 4122' - 4134' was treated with a sand-water fracturing process on July 17, 1964. After being shut-in for sixteen (16) days, the well was tested in the Pictured Cliffs Formation on August 6, 1964, and following a three (3) hour blow-down period gauged 1561 MCFGPD through a 3/4" choke and 1584 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1073 psia. The committed drilling block upon which this well is located is described as the W/2 of Section 36, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 320.00 acres, more or less.

The effective date for the Sixth Expanded Participating Area is determined as September 1, 1964, the first of the month following the testing of the Pictured Cliffs Formation of the San Juan 27-4 Unit #36 (PM) Well.

The San Juan 27-4 Unit #36 (PM) Well is a dual completion well, having been completed in both the Pictured Cliffs and Mesaverde Formations. Said well was included in the Sixteenth Expanded Participating Area for the Mesaverde Formation, effective August 1, 1964, which will be submitted under separate cover.

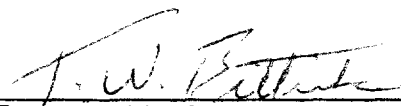
Attached is Schedule VII showing the Sixth Expanded Participating Area for the Pictured Cliffs Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Sixth Expanded Participating Area will become effective as of September 1, 1964.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By

  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:GWO:js

# El Paso Natural Gas Company

El Paso, Texas 79999

January 21, 1965

564  
JAN 22 1965

United States Geological Survey  
Drawer 1857  
Roswell, New Mexico

Attention: Mr. John A. Anderson

Re: Wells drilled during 1964 in the San Juan  
27-4, San Juan 27-5 and Huerfanito Units,  
Rio Arriba & San Juan Counties, New Mexico

Gentlemen:

By previous correspondence you requested that El Paso Natural Gas Co., as Operator of the Units hereinafter indicated, furnish your office with determinations as to whether the after-described wells are capable of producing unitized substances in paying quantities. Additionally, if these wells were determined to be commercial, you requested that Unit Operator furnish the regulatory bodies with appropriate revisions of the participating areas affected.

El Paso has determined that all the following wells are commercial and will occasion the expansions indicated:

## A. San Juan 27-4 Unit

1. San Juan 27-4 Unit No. 34 (Kd) Well, SE/4 Section 34, T-27-N, R-4-W, N.M.P.M. This well was drilled by El Paso and will occasion the Fifth Expansion of the Dakota Participating Area, effective September 1, 1964.

2. San Juan 27-4 Unit No. 35 (PM) Well, SW/4 Section 26, T-27-N, R-4-W, N.M.P.M. This well was drilled by El Paso and will occasion the Seventh Pictured Cliffs Expansion, effective October 1, 1964, and the Seventeenth Mesaverde Expansion, effective September 1, 1964.

3. San Juan 27-4 Unit No. 36 (PM) Well, SW/4 Section 36, T-27-N, R-4-W, N.M.P.M. This well was drilled by El Paso and will occasion the Sixth Pictured Cliffs Expansion, effective September 1, 1964, and the Sixteenth Mesaverde Expansion, effective August 1, 1964.

## B. San Juan 27-5 Unit

The following wells were drilled by El Paso and will occasion the Twenty-First Pictured Cliffs Expansion, effective August 1, 1964:

1. San Juan 27-5 Unit No. 94 (PC) Well, SE/4 Section 15, T-27-N, R-5-W, N.M.P.M.

2. San Juan 27-5 Unit No. 95 (PC) Well, SW/4 Section 15, T-27-N, R-5-W, N.M.P.M.

C O P Y



**C. Huerfanito Unit**

1. The following well will occasion the First Expansion of the Mesaverde Formation and the Sixth Expansion of the Dakota Formation and both these Expansions will be effective April 1, 1964:

Huerfanito Unit No. 78 (MD) Well, NW/4 Section 36, T-27-N, R-9-W, N.M.P.M. This well was drilled by Southern Union Production Company under a Designation of Sub-Operator.

2. The following three wells will occasion the Second Expansion of the Mesaverde Participating Area and the Seventh Expansion of the Dakota Participating Area:

a. Huerfanito Unit No. 79 (MD) Well, NE/4 Section 26, T-27-N, R-9-W, N.M.P.M. This well was drilled by La Plata Gathering System, Inc. under a Designation of Sub-Operator.

b. Navajo No. 2-25 (MD) Well, NE/4 Section 25, T-27-N, R-9-W, N.M.P.M. This well was drilled by La Plata Gathering System, Inc. outside the boundaries of the Unit, however, it will prove acreage in both formations within the Unit commercial by inference.

c. Navajo No. 6 (MD) Well, NW/4 Section 6, T-26-N, R-8-W, N.M.P.M. This well was drilled by Southern Union Production Company outside the Unit boundaries, however, it will also prove Unit acreage in both formations commercial by inference.

The above referenced Expansions are presently being prepared and will be furnished to the regulatory bodies for approval in the very near future. However, please do not hesitate to contact this office if you have any questions regarding these Expansions prior to the time they are submitted.

Very truly yours,

Original Signed by

HARRY GEVERTZ

Harry Gevertz  
Regional Landman  
Land Department

HG:CTR:js

cc: Commissioner of Public Lands,  
Oil Conservation Commission,  
Mr. D. N. Canfield,  
Reservoir Engineering Dept.

SJ 27-4, 5.0, 4.1, 4.2, 4.3

SJ 27-5, 5.0, 4.1

Huerfanito, 5.0, 4.2, 4.3

567

# El Paso Natural Gas Company

El Paso, Texas

1964 MAY 22 PM 1 23

May 13, 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 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1964 DRILLING PROGRAM


Gentlemen:

The 1964 Drilling Program for the San Juan 27-4 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - May 8, 1964
2. Commissioner of Public Lands,  
State of New Mexico - April 1, 1964
3. Oil Conservation Commission,  
State of New Mexico - April 10, 1964

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Very truly yours,

  
Charles T. Richardson  
Area Coordinator  
Land Department

CTR: JH: js

SJ 27-4, 3.0



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

May 8, 1964

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1964 plan of development dated March 5, 1964, for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, proposing the drilling of one Dakota and two dual Pictured Cliffs - Mesaverde 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)

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

554

April 8, 1964

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

Attention: Mr. Sam Smith

Re: 1964 Drilling Program  
San Juan 27-4 Unit, Rio  
Arriba County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1964 Drilling Program for the San Juan 27-4 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  
United States Geological Survey - Roswell

# El Paso Natural Gas Company

El Paso, Texas

April 3, 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

1964 APR 9 AM 8:21  
MAIN OFFICE OCC

Re: San Juan 27-4 Unit  
Exhibit "B"

Gentlemen:

Enclosed are copies of the San Juan 27-4 Unit Exhibit "B" which which has been revised effective April 1, 1964.

This Exhibit "B" was mailed to the working interest owners of the San Juan 27-4 Unit under date of March 4, 1964, and they were advised that if they should have any corrections or changes, to notify El Paso Natural Gas Company within ten days. As of this date no working interest owner has notified El Paso of any corrections or changes, so this Exhibit "B" is presumed to reflect the correct interests of each working interest owner.

Since there were no changes a copy of this letter only is being sent to the working interest owners of the San Juan 27-4 Unit.

Very truly yours,

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

CTR:JH:js  
Enclosure

SJ 27-4, 5.0

EXHIBIT "B"

Schedule Showing the Percentage and Kind of Ownership of Oil and Gas Interests in all lands in the San Juan 27-4 Unit Agreement

MAIN OFFICE OCC  
1964 APR 9 AM No. of Acres

Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest

Tract No. Description

Serial No. and Lease Date  
Land Owner Percentage of Royalty  
Record Owner of Lease or Application  
Overriding Royalty Owner & Percentage

FEDERAL LANDS  
T-27-N, R-4-W

1	Sec. 1: All	639.88	NM 013297 8-1-48 5 years	USA 12 1/2% All	El Paso Natural Gas Company J. L. Tatum N. G. Penrose, Trustee	1.8750% .9375% .9375% 3.7500%	Gas Rights before payout: El Paso Natural Gas Co. Oil Rights at all times: General American Oil Co. Gas Rights after payout: El Paso Natural Gas Co. General American Oil Co.	All All 3/4 1/4
2	Sec. 26: All Sec. 36: All	1,280.00	SF 079527 8-1-48 5 years	USA 12 1/2% All	El Paso Natural Gas Company J. L. Tatum N. G. Penrose, Trustee	1.8750% .9375% .9375% 3.7500%	Gas Rights before payout: El Paso Natural Gas Co. Oil Rights at all times: General American Oil Co. Gas Rights after payout: El Paso Natural Gas Co. General American Oil Co.	All All 3/4 1/4
2A	Eliminated from Unit Area							
3	Eliminated from Unit Area							
4	Sec. 3: All Sec. 4: All Sec. 9: All Sec. 10: All	2,557.80	SF 080668 10-1-51 5 years	USA 12 1/2% All	Rincon Oil & Gas Corp. 1/2 El Paso Natural Gas Co. 1/2 J. R. Abraham M. F. Abraham O. Abraham Texas Nat'l Pet. Co. John C. Meadows Albert Ochsner and Helen Kerr Ochsner Elizabeth Graham Riasan Company** Central Nat'l Bank & Trust Co. of Des Moines, Iowa, Trustee under the Will of Gerald F. Harrington	1.116667% 1.000000% 1.000000% .150000% .037500% .075000% .037500% .791667%	Gas Rights before payout: El Paso Natural Gas Co. Oil Rights before payout: General American Oil Co. Gas Rights after payout: El Paso Natural Gas Co. Rincon Oil & Gas Corp. General American Oil Co. Oil Rights after payout: General American Oil Co. Rincon Oil & Gas Corp.	All All All 3/8 1/2 1/8 1/2 1/2
						.791666% 5.000000%		

Working Interest Owner Under  
Option Agreement, Operating  
Agreement or Assignment and  
Percentage of Interest

Overriding Royalty  
Owner & Percentage

Record Owner  
of Lease or  
Application

Land Owner  
Percentage  
of Royalty

Serial No.  
and  
Lease Date

No. of  
Acres

Tract  
No. Description

FEDERAL LANDS  
T-27-N, R-4-W

5	Sec. 17:	E/2, NW/4, 2,080.84	SF 080669	USA 12 1/2%	Rincon Oil & Gas Corp.	J. R. Abraham	1.116667%	Gas Rights before payout:	All
		E/2 SW/4	9-1-51	All		M. F. Abraham	1.000000%	El Paso Natural Gas Co.	
	Sec. 18:	Lots 1, 2, E/2 NW/4,	5 years		El Paso Natural Gas Co.	O. Abraham	1.000000%	Oil Rights before payout:	All
		NE/4, S/2 SE/4				Texas Nat'l Pet. Co.	.150000%	General American Oil Co.	
	Sec. 19:	Lot 1, E/2 NW/4,				Elizabeth Graham	.037500%	Gas Rights after payout:	3/8
		NE/4 SW/4, E/2				John C. Meadows	.037500%	El Paso Natural Gas Co.	1/2
	Sec. 20:	All				Albert Ochsner and Helen Kerr Ochsner	.075000%	Rincon Oil & Gas Corp.	1/8
						Riasan Company**	.791667%	General American Oil Co.	1/2
						Central Nat'l Bank & Trust Co. of Des Moines, Iowa, Trustee under the Will of Gerald F. Harrington		Oil Rights after payout:	1/2
							.791666%	General American Oil Co.	
							5.000000%	Rincon Oil & Gas Corp.	

6	Sec. 29:	All	2,564.72	USA 12 1/2%	Rincon Oil & Gas Corp.	J. R. Abraham	1.116667%	Gas Rights before payout:	All
	Sec. 30:	All		All		M. F. Abraham	1.000000%	El Paso Natural Gas Co.	
	Sec. 31:	All			El Paso Natural Gas Co.	O. Abraham	1.000000%	Oil Rights before payout:	All
	Sec. 32:	All				Elizabeth Graham	.037500%	General American Oil Co.	
						John C. Meadows	.037500%	Gas Rights after payout:	3/8
						Texas Nat'l Pet. Co.	.150000%	El Paso Natural Gas Co.	1/2
						Albert Ochsner and Helen Kerr Ochsner	.075000%	Rincon Oil & Ga Corp.	1/8
						Riasan Company**	.791667%	General American Oil Co.	
						Central Nat'l Bank & Trust Co. of Des Moines, Iowa, Trustee under the Will of Gerald F. Harrington		Oil Rights after payout:	1/2
							.791666%	General American Oil Co.	1/2
							5.000000%	Rincon Oil & Gas Corp.	

7 Eliminated from Unit Area

8	Sec. 2:	All	1,280.08	USA 12 1/2%	M. A. Romero	Charles C. Harlan, Jr.	1.25%	Gas Rights in Mesaverde only:	All
	Sec. 11:	All		All		Foster Morrell	3.75%	El Paso Natural Gas Co.*	
							5.00%	All Formations other than Mesaverde and All Oil:	
								M. A. Romero	All

Working Interest Owner Under  
Option Agreement, Operating  
Agreement or Assignment and  
Percentage of Interest

Overriding Royalty  
Owner & Percentage

Record Owner  
of Lease or  
Application

Land Owner  
Percentage  
of Royalty

Serial No.  
and  
Lease Date

No. of  
Acres

Tract  
No. Description

FEDERAL LANDS  
T-27-N, R-4-W

9	Sec. 13: All	2,560.00	SF 080672	USA 12 $\frac{1}{2}$ %	Rincon Oil & Gas Corp. 1/2	J. R. Abraham	1.116667%	Gas Rights before payout:	All
	Sec. 14: All		10-1-51	All	El Paso Natural Gas Co. 1/2	M. F. Abraham	1.000000%	El Paso Natural Gas Co.	All
	Sec. 23: All		5 years			O. Abraham	1.000000%	Oil Rights before payout:	All
	Sec. 24: All					Texas Nat'l Pet. Co.	.150000%	General American Oil Co.	
						Elizabeth Graham	.037500%	Gas Rights after payout:	3/8
						John C. Meadows	.037500%	El Paso Natural Gas Co.	1/2
						Albert Ochsner and		Rincon Oil & Gas Corp.	1/8
						Helen Kerr Ochsner	.075000%	General American Oil Co.	
						Riasan Company**	.791667%	Oil Rights after payout:	1/2
						Central Nat'l Bank & Trust		General American Oil Co.	1/2
						Co. of Des Moines, Iowa,		Rincon Oil & Gas Corp.	1/2
						Trustee under the Will of			
						Gerald F. Harrington	.791666%		
							5.000000%		

10	Sec. 5: All	2,561.11	SF 080673	USA 12 $\frac{1}{2}$ %	Rincon Oil & Gas Corp. 1/2	J. R. Abraham	1.116667%	Gas Rights before payout:	All
	Sec. 6: All		10-1-51	All	El Paso Natural Gas Co. 1/2	M. F. Abraham	1.000000%	El Paso Natural Gas Co.	All
	Sec. 7: All		5 years			O. Abraham	1.000000%	Oil Rights before payout:	All
	Sec. 8: All					Texas Nat'l Pet. Co.	.150000%	General American Oil Co.	
						Elizabeth Graham	.037500%	Gas Rights after payout:	3/8
						John C. Meadows	.037500%	El Paso Natural Gas Co.	1/8
						Albert Ochsner and		General American Oil Co.	1/2
						Helen Kerr Ochsner	.075000%	Rincon Oil & Gas Corp.	
						Riasan Company**	.791667%	Oil Rights after payout:	1/2
						Central Nat'l Bank & Trust		Rincon Oil & Gas Corp.	1/2
						Co. of Des Moines, Iowa,		General American Oil Co.	1/2
						Trustee under the Will			
						Gerald F. Harrington	.791666%		
							5.000000%		

11	Sec. 15: All	2,560.00	SF 080674	USA 12 $\frac{1}{2}$ %	Rincon Oil & Gas Corp. 1/2	J. R. Abraham	1.116667%	Gas Rights before payout:	All
	Sec. 16: All		10-1-51	All	El Paso Natural Gas Co. 1/2	M. F. Abraham	1.000000%	El Paso Natural Gas Co.	All
	Sec. 21: All		5 years			O. Abraham	1.000000%	Oil Rights before payout:	All
	Sec. 22: All					Texas Nat'l Pet. Co.	.150000%	General American Oil Co.	
						Elizabeth Graham	.037500%	Gas Rights after payout:	3/8
						John C. Meadows	.037500%	El Paso Natural Gas Co.	



Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Record Owner of Lease or Application	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
11	Continued					Albert Ochsner and Helen Kerr Ochsner Riasan Company** Central Nat'l Bank & Trust Co., of Des Moines, Iowa, Trustee under the Will of Gerald F. Harrington	General American Oil Co. 1/8 Rincon Oil & Gas Corp. 1/3 Riasan Co. 1/6 Oil Rights after payout: 1/2 General American Oil Co. 1/3 Rincon Oil & Gas Corp. 1/6 Riasan Co. 1/6
						.075000% .791667%	
						<u>5.0000000%</u>	
12	Sec. 27: All	2,400.00	SF 080675	USA 12 1/2%	Rincon Oil & Gas Corp. 1/2	J. R. Abraham	Gas Rights before payout: All
	Sec. 28: All		10-1-51	All	El Paso Natural Gas Co. 1/2	M. F. Abraham	El Paso Natural Gas Co. 1/3
	Sec. 33: All		5 years			O. Abraham	Oil Rights before payout: All
	Sec. 34: N/2, SW/4				Texas Nat'l Pet. Co. 1/2		General American Oil Co. 3/8
					Elizabeth Graham		Gas Rights after payout: 1/8
					John C. Meadows		El Paso Natural Gas Co. 1/6
					Albert Ochsner and Helen Kerr Ochsner Riasan Company**		General American Oil Co. 1/3
					Central Nat'l Bank & Trust Co. of Des Moines, Iowa, Trustee under the Will of Gerald F. Harrington		Oil Rights after payout: 1/2
							General American Oil Co. 1/3
						.075000% .791667%	
						<u>5.0000000%</u>	

10 FEDERAL LAND TRACTS - 20,484.43 ACRES

Working Interest Owner Under  
Option Agreement, Operating  
Agreement or Assignment and  
Percentage of Interest

Tract No.	Description	No. of Acres	Land Owner Percentage of Royalty	Lessee and Date of Lease	Overriding Royalty Owner & Percentage	2.50% 2.00% .50% 5.00%	E1 Paso Natural Gas Co.	All
13	Sec. 17: W/2 SW/4 Sec. 18: N/2 SE/4 Sec. 19: Lots 2, 3, 4, SE/4 SW/4	321.13	Jose Perfecto Esquibel and Maximiliano Esquibel 12 1/2 %	E1 Paso Natural Gas Company 10-3-53 5 years	Manuel A. Sanchez Edna E. Morrell Charles C. Harlan, Jr.			
14	Sec. 18: Lots 3, 4, E/2 SW/4	160.63	E. W. Greene 12 1/2 %	E1 Paso Natural Gas Company 9-7-55 5 years	Foster Morrell	2.50%	E1 Paso Natural Gas Co.	All

2 PATENTED LAND TRACTS - 481.76 ACRES

RECAPITULATION

	<u>Number of Tracts</u>	<u>Acreage</u>	<u>Percentage</u>
Federal Land	10	20,484.43	97.70%
State Land	0	None	None
Patented Land	<u>2</u>	<u>481.76</u>	<u>2.30%</u>
	12	20,966.19	100.00%

\*Reverts to M. A. Romero after payout and recovery of 5,000,000 mcf of gas.

\*\*Assignment dated March 16, 1962 assigns to Albuquerque National Bank of Albuquerque, New Mexico, all oil and gas runs attributable to this interest for the period of time during which such assignment remains in force and effect.

1964 APR 1 10 24

April 1, 1964

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

Re: San Juan 27-4 Unit  
San Juan 28-4 Unit  
San Juan 28-5 Unit  
San Juan 29-4 Unit  
1964 Drilling Program  
Rio Arriba County, New Mexico

Attention: Mr. Sam Smith

Gentlemen:

The Commissioner of Public Lands approves as of April 1, 1964, the above designated Plan of Development for 1964, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

The State does not have any acreage in these above listed Agreements therefore we are retaining only one and are returning two copies of each Plan.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

BY:

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

ESW/mmrv

cc: United States Geological Survey  
Roswell, New Mexico

Oil Conservation Commission  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas

1964 MAR 10 PM 1:16

March 5, 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 791  
Santa Fe, New Mexico

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1964 DRILLING PROGRAM

Gentlemen:

By letter dated February 7, 1963, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1963. Said Drilling Program provided for the drilling of no wells, and no wells were drilled in subject Unit during 1963.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	14
Dakota	3
Pictured Cliffs-Mesaverde	5
Mesaverde-Dakota	1
Non-Commercial, Mesaverde	1
Temporarily Abandoned, Dakota	1
Plugged and Abandoned, Dakota	1
	<u>32</u>

Pursuant to Section 10 of the San Juan 27-4 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 period from January 1, 1964 to December 31, 1964:

<u>Location</u>	<u>Formation</u>
1. *E/2 Sec. 34, T-27-N, R-4-W	Dakota
2. W/2 Sec. 26, T-27-N, R-4-W	Dual, Pictured Cliffs- Mesaverde
3. W/2 Sec. 36, T-27-N, R-4-W	Dual, Pictured Cliffs- Mesaverde

The basis for drilling the Dakota well provided for in 1. above is to offset Consolidated Oil & Gas Company's #1-35 Champlin located in the SW/4 of Section 35, T-27-N, R-4-W, with an AOF of 6070 MCF/D in the Dakota Formation, and to offset Pan American Petroleum Corporation's #7 Jicarilla Apache 102 located in the NE/4 of Section 3, T-26-N, R-4-W, with an AOF of 2592 MCF/D in the Dakota Formation. The Pictured Cliffs-Mesaverde well provided for in 2. above is being drilled to offset Consolidated Oil & Gas Company's Mesaverde #3-35 Champlin located in the NE/4 of Section 35, T-27-N, R-4-W, with an AOF of 3703 MCF/D in the Pictured Cliffs Formation and an Initial Potential of 3700 MCF in the Mesaverde Formation and to offset Consolidated Oil & Gas Company's Pictured Cliffs #4-35 Champlin in the NW/4 of Section 35, T-27-N, R-4-W, with an AOF of 3976 in the Pictured Cliffs Formation. The Pictured Cliffs-Mesaverde well provided for in 3. above is to offset Consolidated Oil & Gas Company's Mesaverde #3-35 Champlin in the NE/4 of Section 35, T-27-N, R-4-W, with an AOF of 3703 MCF/D in the Pictured Cliffs Formation and an Initial Potential of 3700 MCF in the Mesaverde Formation, and to offset Consolidated Oil & Gas Company's #2-35 Champlin in the SE/4 of Section 35, T-27-N, R-4-W, delivering 512 MCF/D in the Mesaverde Formation with an AOF of 3811 MCF/D in the Pictured Cliffs Formation.

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 deemed necessary or desirable by the Unit Operator and the working interest owners.

El Paso Natural Gas Company intends to drill the Dakota 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 3200', 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.

El Paso Natural Gas Company intends to drill the dual Pictured Cliffs-Mesaverde wells to the base of the Mesaverde Formation using rotary tools. Surface casing will be set to approximately 150' below the surface and an intermediate string will be set through the Pictured Cliffs Formation to a depth of approximately 3200'. A production liner will be set from this point through

\*The SE/4 of Section 34 was automatically eliminated from this Unit on May 17, 1961; therefore, the SE/4 of said Section must be communitized with the NE/4 thereof, which is still committed to the Unit.

the Mesaverde Formation. The Mesaverde Formation will then be selectively perforated and subjected to a hydraulic fracturing process, after which a bridging plug will be set above the Mesaverde Formation and the Pictured Cliffs Formation will be selectively perforated and subjected to a hydraulic fracturing process. For completion, a production packer will be set between the two formations using 2" tubing to produce the Mesaverde Formation. A string of 1 $\frac{1}{4}$ " tubing will be run through which the Pictured Cliffs Formation will be produced. Mud will be used in setting the intermediate string of casing and the hole below the intermediate string will be drilled with gas. Due care will be taken to protect all horizons.

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

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: JH: js

APPROVED: \_\_\_\_\_

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

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

APPROVED: \_\_\_\_\_

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

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

APPROVED: \_\_\_\_\_

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

DATE: 4-8-64

The foregoing approvals are for the 1964 Drilling Program for the San Juan 27-4  
Unit, #14-08-001-1054, Rio Arriba County, New Mexico.



SAN JUAN 27-4 UNIT  
Working Interest Owners

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

Riasan Company  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas 1, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas

May 16, 1963

554

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

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

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

Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
1963 DRILLING PROGRAM

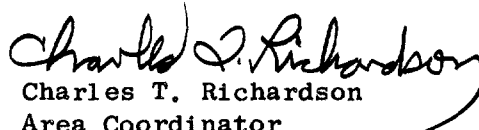
Gentlemen:

The 1963 Drilling Program for the San Juan 27-4 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - April 9, 1963
2. Commissioner of Public Lands - February 13, 1963
3. Oil Conservation Commission - May 2, 1963

Copies of this letter are being sent to all the working interest owners of the San Juan 27-4 Unit.

Very truly yours,

  
Charles T. Richardson  
Area Coordinator  
Land Department

CTR:GWO:js

El Paso Natural Gas Company

El Paso, Texas

554

May 6, 1963

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

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FOURTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective November 1, 1961

Gentlemen:

This is to advise you that the captioned Expansion has been approved by the regulatory bodies on the following dates:

1. Acting Director, United States Geological Survey, on April 22, 1963.
2. Commissioner of Public Lands, on October 19, 1962.
3. Oil Conservation Commission, on October 17, 1962.

Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Very truly yours,

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

CTR:GWO:js  
SJ 27-4, 4.3

OIL CONSERVATION COMMISSION

P. O. BOX 871  
SANTA FE, NEW MEXICO

554

May 2, 1963

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

Attention: Mr. Sam Smith

Re: 1963 Drilling Program  
San Juan 27-4 Unit, Rio  
Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1963 Drilling Program for the San Juan 27-4 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/ig

cc: Commissioner of Public Lands  
Santa Fe, New Mexico

United States Geological Survey  
Roswell, New Mexico

RECEIVED OGC

1963 MAY 12

PM 12

57 Drawer 1857

Roswell, New Mexico

554

April 30, 1963

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

Attention: Mr. T. W. Bittick

Gentleman:

Your application of October 10, 1962, requesting approval of the fourth revision of the Dakota participating area for the San Juan 27-4 unit agreement, Rio Arriba County, New Mexico, was approved on April 22, 1963, by the Acting Director, Geological Survey, effective as of November 1, 1961.

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.

Very truly yours,

(Orig.Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

Copy to: Washington (ltr. only)  
Farmington (w/ey of appln.)  
ELM - Santa Fe (w/ey of appln.)  
NMOCC - Santa Fe (ltr. only) ✓  
Com. of Pub. Lands - Santa Fe (ltr. only)

RECEIVED OFFICE OF THE ATTORNEY GENERAL

1963 APR 10 PM 1:07  
Drawer 1857  
Roswell, New Mexico

April 9, 1963

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1963 plan of development dated February 7, 1963, for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, proposing the drilling of no wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Very truly yours,

(Orig Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

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

MAIN OFFICE 000

1963 FEB 15 PM 4 32

February 13, 1963

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

Re: San Juan 27-4 Unit,  
Rio Arriba County,  
New Mexico, 1963  
Drilling Program

Attention: Mr. Sam Smith

Gentlemen:

The Commissioner of Public Lands has approved as of this date the 1963 Drilling Program for the San Juan 27-4 Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

We are returning one approved copy.

Very truly yours,

E. S. Johnny Walker  
COMMISSIONER OF PUBLIC LANDS

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

ESW/mmr/e

encl: United States Geological Survey  
cc: Roswell, New Mexico

Oil Conservation Commission  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas FEB 11 AM 8 20

February 7, 1963

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

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1963 DRILLING PROGRAM

Gentlemen:

By letter dated March 9, 1962, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1962. Said Drilling Program provided for the drilling of no wells.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	14
Dakota	4
Pictured Cliffs-Mesaverde	5
Mesaverde-Dakota	1
Non-Commercial (Mesaverde)	1
Plugged & Abandoned (Dakota)	1
	<u>32</u>

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program which provides for the drilling of no wells from January 1, 1963 to December 31, 1963.



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

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

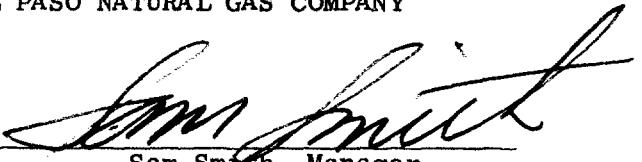
If this Drilling Program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

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:GWO:ag

APPROVED: \_\_\_\_\_

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

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

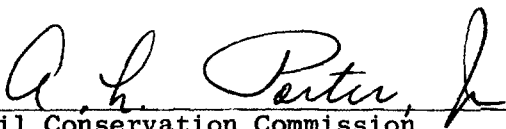
APPROVED: \_\_\_\_\_

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

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

APPROVED: \_\_\_\_\_

DATE: 5-2-63

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

The foregoing approvals are for the 1963 Drilling Program for the San Juan  
27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
Working Interest Owners

Mr. J. R. Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mrs. Rose Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

Riasan Company  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

254

October 19, 1962

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

Re: Fourth Expanded Participating  
Area, Dakota Formation, San  
Juan 27-4, Rio Arriba County,  
New Mexico

Attention: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has approved as of  
October 19, 1962, the Fourth Expanded Participating Area,  
Dakota Formation, San Juan 27-4, Rio Arriba County,  
New Mexico.

The State of New Mexico has no land in San Juan 27-4  
Unit, this approval is called for under the Unit terms  
and is subject to like approval by the United States  
Geological Survey.

We are enclosing five approved copies.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

BY:

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

ESW/MMR/v

cc: Oil Conservation Commission-Santa Fe, N.M.  
U. S. Geological Survey - Roswell, N. M.

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

554

October 17, 1962

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  
27-4 Unit, Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fourth Expanded Participating Area Dakota Formation for the San Juan 27-4 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.

Six approved copies of the proposed expansion are being forwarded to the Commissioner of Public Lands.

Very truly yours,

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

ALP/JEK/ig

cc: Commissioner of Public Lands  
Santa Fe, New Mexico

United States Geological Survey  
Roswell, New Mexico

C  
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# El Paso Natural Gas Company

El Paso, Texas

October 10, 1962

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FOURTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective November 1, 1961

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 November 1, 1961

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M.	
Section 31: Lots 3, 4, E/2 SW/4, SE/4	322.00
Section 32: S/2	320.00

This proposed Fourth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #30 Well is capable of producing unitized substances in paying quantities from the Dakota Formation.

This well is located in the SW/4 of Section 32, Township 27 North, Range 4 West, N.M.P.M. Said well was spudded on September 14, 1961, and completed on October 29, 1961, at a total depth of 8494'. After being shut-in for eleven (11) days, the Dakota Formation was tested on November 9, 1961, and following a three (3) hour blow-down period gauged 3462 MCFGPD through a 3/4" choke and 3788 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2364 PSIA and an SIPT of 2038 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 27-4 Unit.

EXHIBIT "B"

Geological Report on the Fourth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

- Figure No. 1: San Juan 27-4 Dakota Structure Map.
- Figure No. 2: San Juan 27-4 Dakota Isopach Map.
- Figure No. 3: Cross Section A-A'.
- Figure No. 4: Cross Section B-B'.

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 27-4 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

APPROVED: \_\_\_\_\_

Director, United States Geological Survey  
Subject to like approval by the appropriate  
State officials.

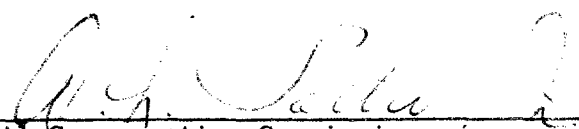
DATE: \_\_\_\_\_

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: 10-17-66

The foregoing approvals are for the Fourth Expanded Participating Area  
of the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba  
County, New Mexico.





654  
IN REPLY REFER TO  
26

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

September 19, 1962

El Paso Natural Gas Company  
Box 1492  
El Paso, Texas

Attention: Mr. Charles T. Richardson

Gentlemen:

Returned herewith, unapproved, are five copies of your application of July 9, filed with this office on August 6, for approval of the fourth revision of the Dakota participating area for the San Juan 27-4 unit area, Rio Arriba County, New Mexico.

In the opinion of this office, the available geologic information, as presented by your geologic report and exhibits thereto, is inadequate to indicate that the selection of lands proposed for inclusion in the fourth expansion of the Dakota participating area are reasonably proved productive of unitized substances in paying quantities. This matter was discussed in detail by telephone with Mr. A. M. Derrick of your office.

Please consider the selection of only the  $S\frac{1}{2}$  of sec. 31 and the  $S\frac{1}{2}$  of sec. 32, T. 27 N., R. 4 W., as the lands to be included in the fourth revision based on the completion of San Juan 27-4 unit well No. 30 in the  $SW\frac{1}{4}$  sec. 32, T. 27 N., R. 4 W., and advise us of your decision concerning such suggestion.

Very truly yours,

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

Enclosures: 5

554

July 27, 1962

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

Re: Fourth Expanded Participating  
Area, Dakota Formation,  
San Juan County 27-4 Unit,  
Rio Arriba County, New Mexico

Attention: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has approved as of July 27, 1962, the Fourth Expanded Participating Area, Dakota Formation, San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

Five approved copies are enclosed.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

BY:

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

ESW/nmr/v

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

Oil Conservation Commission  
Santa Fe, New Mexico

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C.L. CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

July 25, 1962

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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 27-4 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fourth Expanded Participating Area, Dakota Formation for the San Juan 27-4 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.

Seven approved copies of the Expansion are being forwarded to the Commissioner of Public Lands.

Very truly yours,

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

ALP/JEK/ig

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

Commissioner of Public Lands  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas

July 10, 1962

Oil Conservation Commission  
Of the State of New Mexico  
Post Office Box 871  
Santa Fe, New Mexico

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FOURTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective November 1, 1961

Gentlemen:

You will find enclosed eight (8) copies of the subject Fourth Expanded Participating Area of the San Juan 27-4 Unit, together with exhibits and geological information.

It is requested, upon your approval, that you kindly sign all copies in the space provided, retaining one copy of same and forward the remaining seven copies to the Commissioner of Public Lands for his approval and execution. Upon the approval by the Commissioner of Public Lands, they are to retain one (1) copy and return the remaining six copies to this office for our further handling in obtaining the approval of the United States Geological Survey.

After we have received fully executed and approved copies of these Expansions, we will forward one fully executed and approved copy of each to the Commissioner of Public Lands.

Very truly yours,

  
Charles T. Richardson  
Area Coordinator  
Land Department

CTR:GWO:cah  
Attachments

cc: Commissioner of Public Lands

# El Paso Natural Gas Company

El Paso, Texas

July 9, 1962

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FOURTH EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective November 1, 1961

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 November 1, 1961

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 4 West, N.M.P.M.	
Section 16: S/2	320.00
Section 19: All	641.48
Section 20: S/2	320.00
Section 21: All	640.00

Section 28:	N/2	320.00
Section 29:	All	640.00
Section 30:	All	641.56
Section 31:	All	643.16
Section 32:	All	640.00

This proposed Fourth Expanded Participating Area for the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #30 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is located in the SW/4 of Section 32, Township 27 North, Range 4 West, N.M.P.M. Said well was spudded on September 14, 1961, and completed on October 29, 1961, at a total depth of 8494'. After being shut-in for eleven (11) days, the Dakota Formation was tested on November 9, 1961, and following a three (3) hour blow-down period gauged 3462 MCFGPD through a 3/4" choke and 3788 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2364 PSIA and an SIPT of 2038 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 27-4 Unit.

EXHIBIT "B"

Geological Report on the Fourth Expanded Participating Area of the Dakota Formation within the San Juan 27-4 Unit.

EXHIBIT "C"

Figure No. 1: San Juan 27-4 Dakota Structure Map.  
Figure No. 2: San Juan 27-4 Dakota Isopach Map.  
Figure No. 3: Cross Section A-A'.  
Figure No. 4: Cross Section B-B'.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

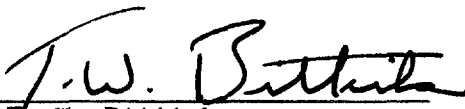
Attached hereto is Schedule V which shows the proposed Fourth Expanded Participating Area for the Dakota Formation in the San Juan 27-4 Unit Area. This Schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentages 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:cah

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the appropriate  
State officials.

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

APPROVED:  \_\_\_\_\_ DATE: 7-25-62  
Oil Conservation Commission  
Subject to like approval by the United States  
Geological Survey and the Commissioner of  
Public Lands.

The foregoing approvals are for the Fourth Expanded Participating Area of  
the Dakota Formation, San Juan 27-4 Unit #14-08-001-1054, Rio Arriba County,  
New Mexico.



El Paso Natural Gas Company  
El Paso, Texas  
1962 JUN 1 AM 15

May 29, 1962

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

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

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

Re: San Juan 27-4 Unit  
1962 Drilling Program

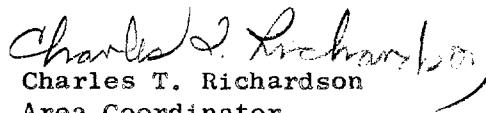
Gentlemen:

The 1962 Drilling Program for the San Juan 27-4 Unit has been approved by the regulatory bodies on the dates indicated:

1. United States Geological Survey - May 10, 1962
2. Commissioner of Public Lands - March 21, 1962
3. Oil Conservation Commission - March 28, 1962

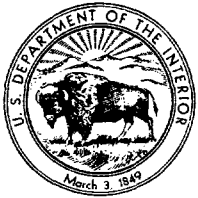
Copies of this letter are being sent to the working interest owners of the San Juan 27-4 Unit.

Very truly yours,

  
Charles T. Richardson  
Area Coordinator  
Land Department

CTR:GWO:js

SJ 27-4, 3.0



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Drawer 1857

Roswell, New Mexico

1962 MAY 17 AM 11:10  
MAIL ROOM 100

254  
May 10, 1962

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1962 plan of development dated March 9, 1962, for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, which proposes the drilling of no additional wells, has been approved on this date, subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Very truly yours,

(Orig.Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Regional Oil & Gas Supervisor

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

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

554

March 28, 1962

El Paso Natural Gas Company  
Box 1492  
El Paso, Texas

Attention: Mr. Sam Smith

Re: 1962 Drilling Program  
San Juan 27-4 Unit  
Rio Arriba County, New  
Mexico

Gentlemen:

This is to advise that the New Mexico Oil  
Conservation Commission has this date approved the 1962  
Drilling Program for the San Juan 27-4 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: U. S. Geological Survey - Roswell  
Commissioner of Public Lands - Santa Fe

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March 21, 1962

El Paso Natural Gas Company  
El Paso, Texas

Re: San Juan 27-4 Unit  
Rio Arriba County,  
New Mexico, 1962  
Drilling Program

Attention: Mr. Sam Smith

Gentlemen:

We are enclosing two approved copies of the 1962  
Drilling Program for the San Juan 27-4 Unit, Rio Arriba  
County, New Mexico, which was approved by the Commissioner  
of Public Lands March 21, 1962.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

ESW/mmr/v

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

Oil Conservation Commission  
Santa Fe, New Mexico

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# El Paso Natural Gas Company

El Paso, Texas

~~February 19, 1962~~

March 9, 1962

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

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1962 DRILLING PROGRAM

Gentlemen:

By letter dated January 6, 1961, as amended by letter dated March 10, 1961, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1961. Said Drilling Program provided for the drilling of one (1) Dakota well. This well has been completed and we are at present preparing a proposed expansion to the Dakota Participating Area which shall include said well.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	14
Dakota	4
Pictured Cliffs-Mesaverde	5
Mesaverde-Dakota	1
Non-Commercial (Mesaverde)	1
Plugged & Abandoned (Dakota)	1

As Unit Operator, El Paso Natural Gas Company has contacted all working interest owners within the unit in order to determine whether any owners desired wells to be drilled during 1962. No working interest owner has requested such development.

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of no wells from January 1, 1962, to December 31, 1962.

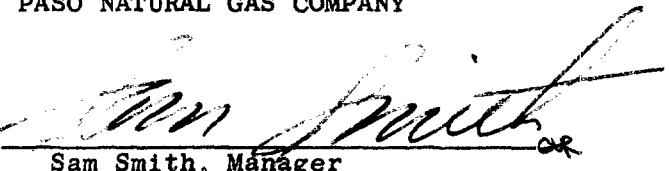
If this Drilling Program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

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:PNP:cah  
Attachment

APPROVED: \_\_\_\_\_

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

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

APPROVED: \_\_\_\_\_

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

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

APPROVED: *A. H. Rich*

DATE: *3/29/62*

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

The foregoing approvals are for the 1962 Drilling Program for the San Juan 27-4  
Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

**SAN JUAN 27-4 UNIT**  
**Working Interest Owners**

**Mr. J. R. Abraham**  
**814 Mercantile Bank Building**  
**Dallas 1, Texas**

**Mrs. Rose Abraham**  
**814 Mercantile Bank Building**  
**Dallas 1, Texas**

**General American Oil Company of Texas**  
**Attention: Mr. James W. Goss, Jr.**  
**Meadows Building**  
**Dallas, Texas**

**Riasan Company**  
**P. O. Box 4026, Station "A"**  
**Albuquerque, New Mexico**

**Mr. M. A. Romero**  
**P. O. Box 2011**  
**Santa Fe, New Mexico**



# El Paso Natural Gas Company

El Paso, Texas

October 6, 1961

524

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

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

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL WELL

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. This well is as follows:

The San Juan 27-4 Unit #31 Well, located 810' from the South line and 690' from the West line of Section 7, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on July 11, 1961, and completed on July 25, 1961, at a total depth of 5941'. On July 22, 1961, the Mesaverde Formation from 5305' - 5311', 5321' - 5327', 5351' - 5357', 5362' - 5368', 5740' - 5752' was treated with a sand-water fracturing process. This well was shut-in on July 25, 1961. After being shut-in for twenty-two (22) days, the well was tested in the Mesaverde Formation on August 16, 1961, and following a three (3) hour blow-down period gauged 3994 MCFGPD through a 3/4" choke and 4304 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1132 PSIA

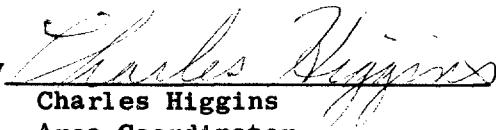
and an SIPC of 1129 PSIA. The committed drilling block upon which this well is located is described as the W/2 of Section 7, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 321.56 acres. The determination that this well is capable of producing unitized substances in paying quantities from the Mesaverde Formation was made on August 16, 1961.

The drilling block was included in the San Juan 27-4 Unit Thirteenth Expanded Participating Area for the Mesaverde Formation, effective December 1, 1960, as an intervening drilling block.

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  
Area Coordinator  
Land Department

CH:PNP:cah  
Attachment

27-4 4.2.1

**WORKING INTEREST OWNERS**  
**SAN JUAN 27-4 UNIT**

Mr. J R. Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Rose Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

Mr. M. A. Romero  
P.O. Box 2011  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas

August 11, 1961

*Aug 11 1961*

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 791  
Santa Fe, New Mexico

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

Re: San Juan 27-4 Unit #14-08-001-1054  
FIFTEENTH EXPANDED PARTICIPATING  
Mesaverde Formation  
Effective August 1, 1961

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #28 Well, located 990' from the South line and 1150' from the West line of Section 11, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on May 17, 1961, and completed on June 21, 1961, at a total depth of 6187'. The Mesaverde Formation from 5934' - 5942', 5982' - 5990', 6010' - 6020', 6086' - 6098' was treated with a sand-water fracturing process. This well was shut-in on June 21, 1961. After being shut-in for twenty-two (22) days the well was tested on July 13, 1961, and following a three (3) hour blow-down period gauged 4096 MCFGPD

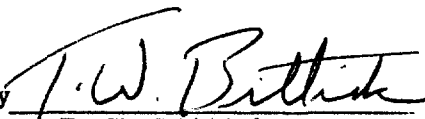
through a 3/4" choke, and 4493 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1169 PSIA and an SIPC of 1166 PSIA. The committed drilling block upon which this well is located is described as the W/2 of Section 11, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 320.00 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on July 13, 1961.

Attached is Schedule XVI showing the Fifteenth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Fifteenth Expanded Participating Area will become effective as of August 1, 1961.

Copies of this letter and schedule 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:OL:js

cc: Attached list

**SAN JUAN 27-4 UNIT**  
**WORKING INTEREST OWNERS**

Mr. J. R. Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Rose Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

Mr. M. A. Romero  
P.O. Box 2011  
Santa Fe, New Mexico

SCHEDULE XVI  
FIFTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
NM 013297	<u>T-27-N, R-4-W</u> Sec. 1: Lots 3,4, S/2 NW/4, SW/4	319.91	<u>TRACT 1</u>			
			Royalty;	12.50%	12.50%	<u>4.99239%</u>
			Working Interest:			
			El Paso Natural Gas Co.;	83.75%	83.75%	
			ORRI;	<u>3.75%</u>	<u>3.75%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #1 Well	<u>Sec. 1: W/2</u>	<u>319.91</u>			<u>100.00%</u>	<u>4.99239%</u>
SF 079527	<u>T-27-N, R-4-W</u> Sec. 26: E/2	320.00	<u>TRACT 2</u>			
			Royalty;	12.50%	12.50%	<u>4.99380%</u>
			Working Interest:			
			El Paso Natural Gas Co.;	83.75%	83.75%	
			ORRI;	<u>3.75%</u>	<u>3.75%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #29 Well	<u>Sec. 26: E/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>4.99380%</u>
SF 080668	<u>T-27-N, R-4-W</u> Sec. 4: Lots 3,4, S/2 NW/4, SW/4	319.20	<u>TRACT 4</u>			
			Royalty;	12.50%	12.50%	<u>4.98131%</u>
			Working Interest:			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	<u>5.00%</u>	<u>5.00%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #18 Well	<u>Sec. 4: W/2</u>	<u>319.20</u>			<u>100.00%</u>	<u>4.98131%</u>

SCHEDULE XVI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080669	<u>T-27-N, R-4-W</u> Sec. 20: E/2	320.00	<u>TRACT 5</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>4.99380%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
Sa. Juan 27-4 #13 Well	<u>Sec. 20: E/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>4.99380%</u>
SF 080669	<u>T-27-N, R-4-W</u> Sec. 19: Lot 1, E/2 NW/4, NE/4 SW/4	160.35	<u>TRACT 5</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>2.50236%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
Fee	<u>T-27-N, R-4-W</u> Sec. 19: Lots 2,3,4, SE/4 SW/4	161.13				
			<u>TRACT 13</u>	12.50%	12.50%	<u>2.51453%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #23 Well	<u>Sec. 19: W/2</u>	<u>321.48</u>			<u>100.00%</u>	<u>5.01689%</u>

Effective August 1, 1961



SCHEDULE XVI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080669	<u>T-27-N, R-4-W</u> Sec. 18: Lots 1, 2, E/2 NW/4	160.49	<u>TRACT 5</u>			
			Royalty;	12.50%	12.50%	<u>2.50454%</u>
			Working Interest:			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	<u>5.00%</u>	<u>5.00%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
<u>TRACT 14</u>						
Fee	<u>T-27-N, R-4-W</u> Sec. 18: Lots 3, 4, E/2 SW/4	160.63	Royalty;	12.50%	12.50%	<u>2.50673%</u>
			Working Interest:			
			El Paso Natural Gas Co.;	85.00%	85.00%	
			ORRI;	<u>2.50%</u>	<u>2.50%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
<u>TRACT 6</u>						
SF 080670	<u>T-27-N, R-4-W</u> Sec. 29: W/2	320.00	Royalty;	12.50%	12.50%	<u>4.99380%</u>
			Working Interest:			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	<u>5.00%</u>	<u>5.00%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
<u>TRACT 1</u>						
San Juan 27-4 #14-X Well	<u>Sec. 18: W/2</u>	<u>321.12</u>	Royalty;	12.50%	12.50%	<u>5.01127%</u>
			Working Interest:			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	<u>5.00%</u>	<u>5.00%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
<u>TRACT 2</u>						
San Juan 27-4 #17 Well	<u>Sec. 29: W/2</u>	<u>320.00</u>	Royalty;	12.50%	12.50%	<u>4.99380%</u>
			Working Interest:			
			El Paso Natural Gas Co.;	82.50%	82.50%	
			ORRI;	<u>5.00%</u>	<u>5.00%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	

Effective August 1, 1961

SCHEDULE XVI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080670	<u>T-27-N, R-4-W</u> Sec. 31: E/2	320.00	<u>TRACT 6</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>4.99380%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				100.00%	100.00%	
Sa.. Juan 27-4 #4 Well	<u>Sec. 31: E/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>4.99380%</u>
SF 080670	<u>T-27-N, R-4-W</u> Sec. 29: E/2	320.00	<u>TRACT 6</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>4.99380%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				100.00%	100.00%	
San Juan 27-4 #20 Well	<u>Sec. 29: E/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>4.99380%</u>
SF 080670	<u>T-27-N, R-4-W</u> Sec. 30: E/2	320.00	<u>TRACT 6</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>4.99380%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				100.00%	100.00%	
San Juan 27-4 #21 Well	<u>Sec. 30: E/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>4.99380%</u>

Effective August 1, 1961

SCHEDULE XVI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080670	T-27-N, R-4-W Sec. 31: Lots 1,2,3,4, E/2 W/2 (W/2)	323.16	TRACT 6	12.50%  82.50% 5.00% 100.00%	12.50%  82.50% 5.00% 100.00%	5.04311%
San Juan 27-4 #26 Well	Sec. 31: W/2	323.16	TRACT 6		100.00%	5.04311%
SF 080670	T-27-N, R-4-W Sec. 30: Lots 1,2,3,4, E/2 W/2 (W/2)	321.56		12.50%  82.50% 5.00% 100.00%	12.50%  82.50% 5.00% 100.00%	5.01814%
San Juan 27-4 #25 Well	Sec. 30: W/2	321.56	TRACT 8		100.00%	5.01814%
SF 080671-A	T-27-N, R-4-W Sec. 11: W/2	320.00		12.50%  82.50% 5.00% 100.00%	12.50%  82.50% 5.00% 100.00%	4.99380%
San Juan 27-4 #28 Well	Sec. 11: W/2	320.00	TRACT 9		100.00%	4.99380%
SF 080672	T-27-N, R-4-W Sec. 14: W/2	320.00		12.50%  82.50% 5.00% 100.00%	12.50%  82.50% 5.00% 100.00%	4.99380%
San Juan 27-4 #22 Well	Sec. 14: W/2	320.00	TOTAL		100.00%	4.99380%

SCHEDULE XVI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080673	<u>T-27-N, R-4-W</u>	319.79	<u>TRACT 10</u>			
	Sec. 6: Lots 1,2, S/2 NE/4, SE/4		Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50%  82.50% <u>5.00%</u> 100.00%	12.50%  82.50% <u>5.00%</u> 100.00%	<u>4.99052%</u>
	TOTAL					
San Juan 27-4 #15 Well		<u>Sec. 6: E/2</u>	<u>319.79</u>	<u>4.99052%</u>		
SF 080673	<u>T-27-N, R-4-W</u>	320.84	<u>TRACT 10</u>			
	Sec. 6: Lots 3,4, 5,6,7, SE/4 NW/4, E/2 SW/4		Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50%  82.50% <u>5.00%</u> 100.00%	12.50%  82.50% <u>5.00%</u> 100.00%	<u>5.00690%</u>
	TOTAL					
San Juan 27-4 #24 Well		<u>Sec. 6: W/2</u>	<u>320.84</u>	<u>5.00690%</u>		
SF 080673	<u>T-27-N, R-4-W</u>	321.56	<u>TRACT 10</u>			
	Sec. 7: Lots 1,2, 3,4, E/2 W/2		Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50%  82.50% <u>5.00%</u> 100.00%	12.50%  82.50% <u>5.00%</u> 100.00%	<u>5.01814%</u>
	TOTAL					
No Well		<u>Sec. 7: W/2</u>	<u>321.56</u>	<u>5.01814%</u>		

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080673	<u>T-27-N, R-4-W</u> Sec. 5: Lots 1,2, S/2 NE/4, SE/4	319.33	<u>TRACT 10</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%  82.50% 5.00% 100.00%	12.50%  82.50% 5.00% 100.00%	<u>4.98334%</u>
San Juan 27-4 #19 Well	<u>Sec. 5: E/2</u>	<u>319.33</u>			<u>100.00%</u>	<u>4.98334%</u>
SF 080674	<u>T-27-N, R-4-W</u> Sec. 15: E/2	320.00	<u>TRACT 11</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%  82.50% 5.00% 100.00%	12.50%  82.50% 5.00% 100.00%	<u>4.99380%</u>
San Juan 27-4 #3 Well	<u>Sec. 15: E/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>4.99380%</u>
SF 080675	<u>T-27-N, R-4-W</u> Sec. 33: W/2	320.00	<u>TRACT 12</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%  82.50% 5.00% 100.00%	12.50%  82.50% 5.00% 100.00%	<u>4.99379%</u>
San Juan 27-4 #27 Well	<u>Sec. 33: W/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>4.99379%</u>

SCHEDULE XVI

RECAPITULATION

Description of Lands in Participating Area:

Township 27 North, Range 4 West, N.M.P.M.  
Sections 1,4,7,11,14,18,19,33: W/2  
Sections 5,15,20,26: E/2  
Sections 6,29,30,31: All

Total Number of Acres in Participating Area: 6,407.95

# El Paso Natural Gas Company

El Paso, Texas

August 11, 1961

16-1 554

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 791  
Santa Fe, New Mexico

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

Re: San Juan 27-4 Unit #14-08-001-1054  
FOURTEENTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective July 1, 1961

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #29 Well is located 696' from the North line and 940' from the East line of Section 26, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on May 3, 1961, and completed on May 24, 1961, at a total depth of 6294'. The Mesaverde Formation from 6084' - 6090', 6094' - 6100', 6104' - 6114', 6120' - 6130', 6162' - 6168', 6210' - 6218' was treated with a sand-water fracturing process. The well was shut-in on May 31, 1961. After being shut-in for fourteen (14) days, the well was tested on June 14, 1961, and following a three (3) hour blow-down period gauged 5039 MCFGPD

through a 3/4" choke and 5789 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1122 PSIA and an SIPC of 1123 PSIA. The committed drilling block upon which this well is located is described as the E/2 of Section 26, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 320.00 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on June 14, 1961.

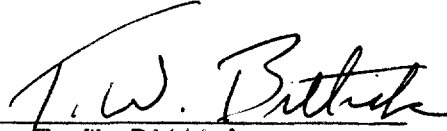
Attached is Schedule XV showing the Fourteenth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Fourteenth Expanded Participating Area will become effective as of July 1, 1961.

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:OL:js

cc: Attached list



SAN JUAN 27-4 UNIT  
WORKING INTEREST OWNERS

Mr. J R. Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Rose Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

Mr. M. A. Romero  
P.O. Box 2011  
Santa Fe, New Mexico

SCHEDULE XV  
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVENDE FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
NM 013297	<u>T-27-N, R-4-W</u> Sec. 1: Lots 3,4, S/2 NW/4, SW/4	319.91	<u>TRACT 1</u>			
			Royalty;	12.50%	12.50%	<u>5.25481%</u>
			Working Interest:	83.75%	83.75%	
			El Paso Natural Gas Co.;	<u>3.75%</u>	<u>3.75%</u>	
			ORRI;	100.00%	100.00%	
TOTAL						
San Juan 27-4 #1 Well	<u>Sec. 1: W/2</u>	<u>319.91</u>	<u>TRACT 2</u>			
			Royalty;	12.50%	12.50%	<u>5.25629%</u>
			Working Interest:	83.75%	83.75%	
			El Paso Natural Gas Co.;	<u>3.75%</u>	<u>3.75%</u>	
			ORRI;	100.00%	100.00%	
TOTAL						
San Juan 27-4 #29 Well	<u>Sec. 26: E/2</u>	<u>320.00</u>	<u>TRACT 2</u>			
			Royalty;	12.50%	12.50%	<u>5.25629%</u>
			Working Interest:	83.75%	83.75%	
			El Paso Natural Gas Co.;	<u>3.75%</u>	<u>3.75%</u>	
			ORRI;	100.00%	100.00%	
TOTAL						
SF 080668	<u>T-27-N, R-4-W</u> Sec. 4: Lots 3,4, S/2 NW/4, SW/4	319.20	<u>TRACT 4</u>			
			Royalty;	12.50%	12.50%	<u>5.24314%</u>
			Working Interest:	82.50%	82.50%	
			El Paso Natural Gas Co.;	<u>5.00%</u>	<u>5.00%</u>	
			ORRI;	100.00%	100.00%	
TOTAL						
San Juan 27-4 #18 Well	<u>Sec. 4: W/2</u>	319.20				
						<u>5.24314%</u>

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080669	<u>T-27-N, R-4-W</u> Sec. 20: E/2	320.00	<u>TRACT 5</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>5.25628%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
S <del>a</del> Juan 27-4 #13 Well	<u>Sec. 20: E/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>5.25628%</u>
SF 080669	<u>T-27-N, R-4-W</u> Sec. 19: Lot 1, E/2 NW/4, NE/4 SW/4	160.35	<u>TRACT 5</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>2.63389%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
Fee	<u>T-27-N, R-4-W</u> Sec. 19: Lots 2,3,4, SE/4 SW/4	161.13	<u>TRACT 13</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>2.64670%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #23 Well	<u>Sec. 19: W/2</u>	<u>321.48</u>			<u>100.00%</u>	<u>5.28059%</u>

Effective July 1, 1961

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080669	<u>T-27-N, R-4-W</u> Sec. 18: Lots 1,2, E/2 NW/4	160.49	<u>TRACT 5</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>2.63619%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
Fee	<u>T-27-N, R-4-W</u> Sec. 18: Lots 3,4, E/2 SW/4	160.63	<u>TRACT 14</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>2.63849%</u>
				85.00%	85.00%	
				<u>2.50%</u>	<u>2.50%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #14-X Well	<u>Sec. 18: W/2</u>	<u>321.12</u>			<u>100.00%</u>	<u>5.27468%</u>
SF 080670	<u>T-27-N, R-4-W</u> Sec. 29: W/2	320.00	<u>TRACT 6</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>5.25629%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #17 Well	<u>Sec. 29: W/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>5.25629%</u>

Effective July 1, 1961

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080670	T-27-N, R-4-W Sec. 31: E/2	320.00	TRACT 6  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>5.25628%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #4 Well	Sec. 31: E/2	<u>320.00</u>				<u>5.25628%</u>
SF 080670	T-27-N, R-4-W Sec. 29: E/2	320.00	TRACT 6  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>5.25629%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #20 Well	Sec. 29: E/2	<u>320.00</u>				<u>5.25629%</u>
SF 080670	T-27-N, R-4-W Sec. 30: E/2	320.00	TRACT 6  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>5.25628%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #21 Well	Sec. 30: E/2	<u>320.00</u>				<u>5.25628%</u>

Effective July 1, 1961

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080670	<u>T-27-N, R-4-W</u> Sec. 31: Lots 1,2,3,4, E/2 W/2 (W/2)	323.16	<u>TRACT 6</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>5.30819%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
Sa. Juan 27-4 #26 Well	<u>Sec. 31: W/2</u>	<u>323.16</u>			<u>100.00%</u>	<u>5.30819%</u>
SF 080670	<u>T-27-N, R-4-W</u> Sec. 30: Lots 1,2,3,4, E/2 W/2 (W/2)	321.56	<u>TRACT 6</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>5.28191%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #25 Well	<u>Sec. 30: W/2</u>	<u>321.56</u>			<u>100.00%</u>	<u>5.28191%</u>
SF 080672	<u>T-27-N, R-4-W</u> Sec. 14: W/2	320.00	<u>TRACT 9</u>  Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	12.50%	12.50%	<u>5.25629%</u>
				82.50%	82.50%	
				<u>5.00%</u>	<u>5.00%</u>	
				<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #22 Well	<u>Sec. 14: W/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>5.25629%</u>

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080673	<u>T-27-N, R-4-W</u> Sec. 6: Lots 1,2, S/2 NE/4, SE/4	319.79	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50% 82.50% <u>5.00%</u> 100.00%	12.50% 82.50% <u>5.00%</u> 100.00%	<u>5.25284%</u>
<u>TRACT 10</u>						
TOTAL						
San Juan 27-4 #15 Well	Sec. 6: E/2	<u>319.79</u>			<u>100.00%</u>	<u>5.25284%</u>
SF 080673	<u>T-27-N, R-4-W</u> Sec. 6: Lots 3,4, 5,6,7, SE/4 NW/4, E/2 SW/4	320.84	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50% 82.50% <u>5.00%</u> 100.00%	12.50% 82.50% <u>5.00%</u> 100.00%	<u>5.27008%</u>
<u>TRACT 10</u>						
TOTAL						
San Juan 27-4 #24 Well	Sec. 6: W/2	<u>320.84</u>			<u>100.00%</u>	<u>5.27008%</u>
SF 080673	<u>T-27-N, R-4-W</u> Sec. 7: Lots 1,2, 3,4, E/2 W/2	321.56	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	12.50% 82.50% <u>5.00%</u> 100.00%	12.50% 82.50% <u>5.00%</u> 100.00%	<u>5.28191%</u>
<u>TRACT 10</u>						
TOTAL						
No Well	Sec. 7: W/2	<u>321.56</u>			<u>100.00%</u>	<u>5.28191%</u>

Effective July 1, 1961

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080673	<u>T-27-N, R-4-W</u> Sec. 5: Lots 1,2, S/2 NE/4, SE/4	319.33	TRACT 10	12.50%	12.50%	<u>5.24528%</u>
	Royalty;					
	Working Interest:					
	El Paso Natural Gas Co.;			82.50%	82.50%	
	ORRI;			<u>5.00%</u>	<u>5.00%</u>	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #19 Well	<u>Sec. 5: E/2</u>	<u>319.33</u>			<u>100.00%</u>	<u>5.24528%</u>
SF 080674	<u>T-27-N, R-4-W</u> Sec. 15: E/2	320.00	TRACT 11	12.50%	12.50%	<u>5.25628%</u>
	Royalty;					
	Working Interest:					
	El Paso Natural Gas Co.;			82.50%	82.50%	
	ORRI;			<u>5.00%</u>	<u>5.00%</u>	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #3 Well	<u>Sec. 15: E/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>5.25628%</u>
SF 080675	<u>T-27-N, R-4-W</u> Sec. 33: W/2	320.00	TRACT 12	12.50%	12.50%	<u>5.25629%</u>
	Royalty;					
	Working Interest:					
	El Paso Natural Gas Co.;			82.50%	82.50%	
	ORRI;			<u>5.00%</u>	<u>5.00%</u>	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
San Juan 27-4 #27 Well	<u>Sec. 33: W/2</u>	<u>320.00</u>			<u>100.00%</u>	<u>5.25629%</u>

Effective July 1, 1961



SCHEDULE XV

RECAPITULATION

Description of Lands in Participating Area:

Township 27 North, Range 4 West, N.M.P.M.  
Sections 1,4,7,14,18,19,33: W/2  
Sections 5,15,20,26: E/2  
Sections 6,29,30,31: All

Total Number of Acres in Participating Area: 6,087.95

# El Paso Natural Gas Company

El Paso, Texas

July 26, 1961

*Case 254*

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 791  
Santa Fe, New Mexico

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
AUTOMATIC ELIMINATION FROM UNIT AREA

Gentlemen:

Pursuant to Section 22 of the San Juan 27-4 Unit Agreement, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby advises that the following described tracts are eliminated from the subject Unit.

Inasmuch as no portion of the following described leases was included within a participating area as of May 17, 1961, nor were drilling operations in progress on said leases at that time, the provisions of Section 22 apply. The leases to be eliminated effective as of May 17, 1961, are described as follows:

<u>UNIT TRACT NO.</u>	<u>LEASE NO. AND DATE</u>	<u>DESCRIPTION</u>
2-A	SF 079527-A 8-1-48	T-27-N, R-4-W, N.M.P.M. Sec. 25: All Sec. 35: All Containing 1,280.00 acres
3	SF 079607 12-1-49	T-27-N, R-4-W, N.M.P.M. Sec. 12: NE/4 Sec. 34: SE/4 Containing 320.00 acres

<u>UNIT TRACT NO.</u>	<u>LEASE NO. AND DATE</u>	<u>DESCRIPTION</u>
7	SF 080671 10-1-51	T-27-N, R-4-W, N.M.P.M. Sec. 12: W/2, SE/4 Containing 480.00 acres

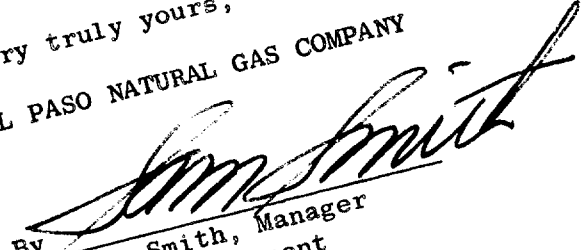
Therefore, pursuant to the terms of Section 22 of the San Juan 27-4 Unit Agreement, Tracts 2-A, 3, and 7 are automatically eliminated from the Unit Area as of May 17, 1961.

As a result of this elimination, the San Juan 27-4 Unit Area is contracted to a total of 20,484.43 acres.

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   
Sam Smith, Manager  
Land Department

SS:OL:cah

SAN JUAN 27-4 UNIT  
WORKING INTEREST OWNERS

Mr. J. R. Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Rose Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Champlin Oil & Refining Company  
Attention: Mr. Jack Yeisley  
First National Bank Building, Suite 2501  
Denver, Colorado

Champlin Oil & Refining Company  
Attention: Mr. C. Taylor Pruitt  
P.O. Box 9365  
Fort Worth, Texas

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

Mr. M. A. Romero  
P.O. Box 2011  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas

May 2, 1961

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Drawer 1837  
Roswell, New Mexico

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

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

Re: San Juan 27-4 Unit  
1961 Drilling Program

Gentlemen:

The 1961 Drilling Program for the San Juan 27-4 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - March 27, 1961
2. Commissioner of Public Lands - February 10, 1961
3. Oil Conservation Commission - April 27, 1961

Copies of this letter are being sent to all the working interest owners in the San Juan 27-4 Unit.

Very truly yours,



Charles Higgins  
Area Coordinator  
Land Department

CH:WVC:js

**C. CONSERVATION COMMISSION**

**P. O. BOX 871**

**SANTA FE, NEW MEXICO**

*Case # 554*

**April 27, 1961**

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

**Attention: Mr. Sam Smith**

**Re: 1961 Drilling Program  
San Juan 27-4 Unit Rio  
Arriba County, New Mexico**

**Gentlemen:**

**This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1961 Drilling Program for the San Juan 27-4 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 plan is returned herewith.**

**Very truly yours,**

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

**ALP/JEK/ig**

**cc: US Geological Survey  
Roswell, New Mexico**

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

# *El Paso Natural Gas Company*

*El Paso, Texas*

April 4, 1961

REGISTERED MAIL

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

Re: Amendment and Supplement to  
San Juan Unit Operating  
Agreement

Gentlemen:

We are enclosing herewith for your files and information an original, fully executed, copy of the Amendment and Supplement to the San Juan 27-4 Unit Operating Agreement.

Copies of the amendment have been distributed to the Commissioner of Public Lands and the United States Geological Survey and to the unit working interest owners.

Very truly yours,



Charles Higgins  
Area Coordinator  
Land Department

CH:JNN:js

Enclosures

AMENDMENT AND SUPPLEMENT TO  
SAN JUAN 27-4 UNIT OPERATING AGREEMENT  
RIO ARriba COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of June, 1957, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as "parties hereto",

W I T N E S S E T H:

WHEREAS, the parties hereto are the owners of working interests in the Unit Area subject to the Unit Agreement for the Development and Operation of the San Juan 27-4 Unit Area, Rio Arriba County, New Mexico, designated Contract Number 14-08-001-1054, and subject to the Unit Operating Agreement for the San Juan 27-4 Unit Area (said Unit Operating Agreement hereinafter referred to as "Unit Operating Agreement"), reference to which is here made for all purposes; and

WHEREAS, the parties hereto desire to provide for the drilling and operation of wells to be completed in dual formations and for the sharing and allocation of costs and risks incident thereto.

NOW, THEREFORE, in consideration of the premises and the promises herein contained, and other good and valuable consideration, the full receipt and sufficiency of which are hereby acknowledged, the parties hereto have agreed and do agree as follows:

ARTICLE I

Unit Agreement Confirmed

The Unit Agreement and all Exhibits attached thereto, are hereby confirmed and made a part of this agreement; and in the event of any conflict between the provisions of the Unit Agreement and the provisions of the Unit Operating Agreement, as amended and supplemented hereby, the provisions of the Unit Agreement shall prevail.

ARTICLE II

Unit Operating Agreement Amended

In order to prevent conflict between the provisions of this Amendment and Supplement and the provisions of the Unit Operating Agreement, the following quoted sentence in Section 9 of the Unit Operating Agreement is hereby deleted:

"In the event any one well is completed as a paying producer in more than one formation, the Working Interest Owners of the respective participating areas established for such formations shall arrange for appropriate allocation of investment and operating costs of such well by separate agreement."



## ARTICLE III

### Supplement to Unit Operating Agreement

The provisions which follow in this Article III are supplemental to the Unit Operating Agreement and are hereby adopted as part of said Agreement.

#### 1. Definitions

"Shallow Owners"

- the working interest owners either in the Unit Area, Participating Area, drilling block or in less than the Unit Area, whichever is applicable, owning the working interest in and to the shallower formation of a well to be drilled or which is completed in two formations.

"Deep Owners"

- the working interest owners either in the Unit Area, Participating Area, drilling block or in less than the Unit Area, whichever is applicable, owning the working interest in and to the deeper formation of a well to be drilled or which is completed in two formations.

#### 2. Formula for Allocation of Costs for Drilling and Completing Dual Wells.

Whenever in this Agreement it is provided that costs will be borne by Shallow Owners and Deep Owners in accordance with Section 2, Article III, the following procedures will be used:

At the same time Shallow and Deep Owners separately agree to the drilling of a well to be projected to dual formations, both such categories of Owners shall approve an estimate prepared by Unit Operator of the total costs of drilling and completing said well to the wellhead in both formations. Such approval shall be obtained in accordance with Section 7 of the Unit Operating Agreement. The estimated total costs shall be divided into the following categories:

- a) Costs to be incurred above the base of the shallower of the two formations, except those set forth in Subsection (c) hereof.
- b) Costs to be incurred below the base of the shallower of the two formations.
- c) Costs attributable to testing and completing in the shallower formation.

Upon completion of the well, the actual costs of drilling, completing, testing and equipping such well will be apportioned among the three categories set forth hereinabove, and these actual costs will be paid by the obligated parties as follows:

- a) Costs incurred above the base of the shallower formation except those set forth in Subsection (c) hereof will be shared equally by and between Shallow Owners and Deep Owners.
- b) The costs incurred below the base of the shallower formation shall be paid by Deep Owners.

- c) Costs attributable to testing and completing in the shallower formation shall be paid by Shallow Owners.

3. Drilling and Completing Dual Wells. Costs of drilling, testing, treating, equipping and completing wells to the wellhead which are begun with the objective of dual completion and which are completed as dual wells shall be borne by Shallow Owners and by Deep Owners in accordance with the provisions of Section 2, Article III. Until admission into a participating area the material and equipment thereon shall be owned by the party or parties paying the cost thereof pursuant to Section 2, Article III. Shallow Owners and Deep Owners shall respectively own, subject to allocation to an appropriate participating area, all unitized substances produced from their respective formations. Upon abandonment of the well if dry in both formations, costs of plugging and abandoning shall be shared equally by and between Shallow Owners and Deep Owners. Upon the completed well being admitted into a participating area or areas, the ownership of equipment and materials shall pass to the owners of the participating area or areas in accordance with the terms of Section 3 of the Unit Operating Agreement.
4. Completion of Well in Shallower Formation but Abandoned as to Deeper Formation. In the event that a well begun with the objective of dual completion is drilled to the deeper formation and results in discovery of unitized substances in paying quantities in the shallower formation but is dry in the deeper formation, all costs of drilling, testing and treating shall be borne by the Shallow Owners and Deep Owners in accordance with Section 2, Article III. All costs of equipping the well shall be borne by Shallow Owners. Further, Shallow Owners shall pay to Deep Owners the salvable value of the material and equipment or share thereof paid for or furnished by Deep Owners. Thereafter Shallow Owners shall own all material and equipment acquired in the drilling and completing of said well. Shallow Owners shall own all unitized substances produced from the shallow formation and shall bear all costs of plugging and abandonment of the well.

5. Completion of Well in Deeper Formation but Abandoned as to Shallower Formation. In the event that a well begun with the objective of dual completion results in discovery of unitized substances in paying quantities in the deeper formation, but dry in the shallower formation, all costs of drilling, testing and treating shall be borne by the Shallow Owners and the Deep Owners in accordance with the provisions of Section 2, Article III. All costs of equipping the well shall be borne by Deep Owners. Further, Deep Owners shall pay to Shallow Owners the salvable value of the material and equipment or share thereof paid for or furnished by Shallow Owners. Thereafter, Deep Owners shall own all material and equipment acquired in the drilling and completion of such well. Deep Owners shall own all unitized substances produced from the deeper formation, and shall bear all costs of plugging and abandoning the well.
6. Abandonment as to one Formation after Completion of Well in Both Formations. In the event that, after completion of a dual well, the working interest owners of one formation should decide to abandon the well as to their formation, the working interest owners of the remaining producing formation shall pay to the working interest owners of the formation to be abandoned, the salvage value of equipment belonging to the owners of the formation to be abandoned. The owners of the formation to be abandoned shall pay for the abandonment of that formation. After payment of the amount provided for above, the working interest owners of the formation from which the well continues to produce shall own all of such equipment. The working interest owners of the producing formation, after abandonment as to the other formation, shall also bear all costs of plugging and abandoning upon later abandonment of the well as to their formation.
7. Deepening a Shallow Well or Converting a Deeper Well for Dual Completion. Before any well which is completed in a single formation may be deepened or perforated at a shallower depth for purposes of completion as a dual well, the working interest owners of both formations must approve the operation under the general

provisions of the Unit Operating Agreement. The payment to the owners of the single existing completion by the owners desiring to dual the well shall be a fair value representative of the well. If the operation should result in an impairment of production from, or a loss of, the existing well, the provisions of Section 10, Article III shall govern unless otherwise provided for in the approval.

8. Allocation of General Operating and Maintenance Costs in Dual Wells.

After completion of a dual well, the costs of producing operations shall be borne by the working interest owners of the two formations as follows:

- a) The completion in each separate formation shall be treated as a separate well for overhead and district and camp expense. Such expense shall be borne by the working interest owners of the respective formations as a separate cost allocable to their interest;
- b) Each formation shall bear all costs of normal producing operations, including costs of labor, repairs, maintenance and replacement of equipment attributable to such formation. All costs of operations performed for the joint benefit of both formations shall be borne on a per well basis by the Shallow Owners to the extent of 50% of the total cost, and by the Deep Owners to the extent of 50% of total cost.

9. Allocation of Cost of Workover Operations for both Formations.

After completion of a dual well, the costs of any workover or other operations on such well involving both formations shall be borne by the working interest owners of such formations as follows:

- a) The costs of any operation which is directly related to one formation, including but not limited to operations such as treatments and perforations, shall be borne by the working interest owners of the formation for which the operation is performed.
- b) All costs of material, equipment, repairs, replacements and labor not directly related to one formation, including but not limited to repair and correction of leaks which may result in communication between the two formations within the well bore shall be borne by the Shallow Owners to the extent of 50% of the total cost and by Deep Owners to the extent of 50% of the total cost.
- c) Any material and equipment acquired by any such expenditures provided for in Subparagraph (a) and (b) above shall be owned by the Shallow Owners and the Deep Owners so as to be consistent with the ownership of the material and equipment as set forth in Section 3, Article III.
- d) The working interest owners of each formation shall not be responsible for nor be charged with any loss of production from any other formations during any such operation.

10. Workover Operations of One Formation. After completion of a dual well, any subsequent workover, deepening, plugging back, or other operations or repair as to one formation only of such well, which requires a separation of the formations for the repair or other work on any portion of the well, shall be governed by the provisions which follow:

- a) The proposed plan of operation must be approved in accordance with the voting procedure prescribed by Section 7 of the Unit Operating Agreement prior to commencement of operations by the working interest owners of the formation not to be worked upon, if there be no participating area; or the working interest owners of the participating area for the formation not to be worked upon, if such well be within a participating area for that formation; or by the working interest owners of such well, if it be excluded from the participating area; whichever is applicable.
- b) The costs and expenses of any such operations will be borne by the working interest owners of the formation to be worked upon, or the working interest owners of the participating area for the formation to be worked upon or by the working interest owners of such well in the formation to be worked upon, whichever is applicable.
- c) The working interest owners bearing the cost of the operation shall not be liable to the working interest owners of the formation not being worked upon for cessation of production during such operations for a period of time not exceeding a total of ninety (90) days. In the event such cessation of production during operations is for a longer period of time, the working interest owners of the formation being worked upon, hereinafter referred to as Remedial Owners, shall pay to the working interest owners of the formation not being worked upon, hereinafter referred to as Damaged Owners, damages in such amount as shall be determined by Remedial Owners and Damaged Owners jointly in accordance with the voting procedure prescribed by Section 7 of the Unit Operating Agreement for loss of production occurring after a ninety (90) day period.
- d) If such operations disturb or remove the means of separation of the two formations in the well bore or otherwise require a cessation of production from the other formation not being reworked, the operator shall, before and after the operation, conduct a test of the well as to such other formation for the purpose of determining whether or not the producing capacity as to said formation has been impaired, by employing the procedure set forth as follows:
  - (1) For an oil well producing capacity will be measured by actual production obtained for thirty (30) producing days immediately preceding the workover and compared with the actual production for thirty (30) producing days immediately following the workover operations. If either the conditions or equipment have in any way been changed during the period of comparison, then the production figures obtained shall be corrected by calculation to account for any such change or changes.
  - (2) With respect to gas wells connected to a gas gathering system, the producing capacity shall be determined by the actual production before and after the workover

and shall be the thirty (30) days in which there was actual production into the line immediately before or after the workover as applicable with the well producing under similar pressure differential and other conditions. If the producing conditions or equipment size are different or the well is not connected to a gathering system, an appropriate applicable method will be utilized to determine the effect on deliverabilities which the workover has caused.

- (3) If the producing capacity of the well as to such other formation has been reduced in excess of twenty per cent (20%), damages will be deemed to have occurred. If damage has occurred, the rights and liabilities between Remedial Owners and Damaged Owners shall be adjusted in accordance with the provisions set out below:

Remedial Owners may at their sole cost, risk and expense attempt to restore the well to 80% of its former capacity or may pay to Damaged Owners the cost of a replacement well completed in the damaged formation. If the attempt is unsuccessful, or if no attempt is made, and if the cost of a replacement well is not so paid, Remedial Owners shall pay damages to Damaged Owners in an amount determined by the following formula:

$$\text{Damage Payment} = \text{Cost of Replacement Well} \\ \times \left(1 - \frac{A}{0.80B}\right)$$

A = The capacity of the well from the damaged formation after the workover or other operation or after completion of any further work to restore the well as to the damaged formation which the Remedial Owners elect to perform.

B = The capacity of the well from the damaged formation before the workover or other operation which impaired the producing capacity of such well.

In no event, however, shall the amount of damages, computed in the manner hereinabove provided, exceed the value of the remaining recoverable reserves (less cost of recovery) of the formation as to which the well was damaged which could have been recovered from such well if it had not been damaged. If more than one capacity test is made after completion of the workover or other operation or work performed at the election of Remedial Owners, the last capacity obtained in such testing will be used in calculating the reduction of capacity. The Remedial Owners will pay such damages within fifteen (15) days following the date the amount of damages is determined. Payment of damages will not alter the ownership of formations or equipment except if cost of a replacement well is paid Remedial Owners shall own all material and equipment on or used in connection with the damaged well and shall bear all costs of plugging and abandonment. If an attempt to restore the well to 80% of its former capacity is made and such attempt is successful, Remedial Owners shall have no further liability.

- e) It is understood, however, that liability for loss or damages shall not accrue hereunder if: (1) in workover of the shallow formation such loss or damage exists prior to actual commencement of the operations to be performed in said formation, or,

in workover of the deep formation, loss or damage exists prior to penetration of workover equipment below the base of the shallow formation, and (2) the evidence is conclusive that the loss or damage resulted solely from the previously existing poor mechanical condition of the well.

11. Allocation of Overhead and District and Camp Expense in Dual Completion Operations. As to any well which was begun with the objective of dual completion and as to any well on which work is begun to deepen or to convert it into a dual completion, overhead charges during drilling shall be billed as though the well were a single well to be drilled to test the deepest formation, and for purposes of allocating district and camp expense among wells, each drilling well shall be treated as one well. Upon completion of such a well, each formation in which the well is completed shall be treated as a separate well for purposes of charging overhead and allocating field and camp expenses.

#### ARTICLE IV

##### Effective Date

When fully executed, as set forth in Article V, this Agreement shall be effective as to all parties hereto as of the first date hereinabove written, and unless otherwise terminated, it shall be effective as long as the Unit Agreement is effective. This Agreement may be terminated in any manner by which said Unit Agreement may be terminated.

#### ARTICLE V

##### Counterparts

This Amendment and Supplement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument in writing specifically referring hereto and shall be a binding agreement when all parties owning a working interest committed to the San Juan 27-4 Unit have executed such a counterpart, ratification or consent hereto, with the same force and effect as if all such parties had signed the same document.

EL PASO NATURAL GAS COMPANY

By

  
ATTORNEY-IN-FACT

Supplemental Execution Page to Amendment and Supplement to San Juan 27-4 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1957.

ATTEST:

GENERAL AMERICAN OIL COMPANY OF TEXAS

*[Signature]*  
ASSISTANT Secretary  
Date: June 6, 1957

By *[Signature]*  
VICE President

ATTEST:

CHAMPLIN OIL & REFINING COMPANY

*[Signature]*  
ASSISTANT Secretary  
Date: February 8, 1960

By *[Signature]*  
VICE President

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

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\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_



Supplemental Execution Page to Amendment and Supplement to San Juan 27-4 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1957.

ATTEST:

GENERAL AMERICAN OIL COMPANY OF TEXAS

\_\_\_\_\_  
Secretary  
Date: \_\_\_\_\_

By \_\_\_\_\_  
President

ATTEST:

CHAMPLIN OIL & REFINING COMPANY

\_\_\_\_\_  
Secretary  
Date: \_\_\_\_\_

By \_\_\_\_\_  
President

Date: 2/5/60

Mike Abraham

Date: 3/4/60

Pauline Abraham

Date: 7-17-60

WMA

Date: 3/17/60

Alicia R. Romero

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Supplemental Execution Page to Amendment and Supplement to San Juan 27-4 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1957.

ATTEST: GENERAL AMERICAN OIL COMPANY OF TEXAS

\_\_\_\_\_  
Secretary By \_\_\_\_\_  
Date: \_\_\_\_\_ President

ATTEST: CHAMPLIN OIL & REFINING COMPANY

\_\_\_\_\_  
Secretary By \_\_\_\_\_  
Date: \_\_\_\_\_ President

Date: 2/15/01 J. B. Alvarado ✓

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Supplemental Acknowledgement Page to Amendment and Supplement to San Juan 27-4 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1957.

STATE OF TEXAS

COUNTY OF EL PASO

The foregoing instrument was acknowledged before me this 6th day of February, 1961, by Sam Smith, ATTORNEY-IN-FACT of EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

My Commission expires:

NATALIE TAYLOR

Notary Public in and for El Paso County, Texas  
My Commission Expires June 1, 1961

Natalie Taylor  
Notary Public

STATE OF Texas

COUNTY OF Texas

The foregoing instrument was acknowledged before me this 6th day of June, 1960, by W. J. Hines, President of GENERAL AMERICAN OIL COMPANY OF TEXAS.

My Commission expires:

W. J. Hines  
Notary Public

STATE OF Texas

COUNTY OF Tarrant

The foregoing instrument was acknowledged before me this 8th day of February, 1960 by W. J. Hines, Vice President of CHAMPLIN OIL & REFINING COMPANY.

My Commission expires:

Patsy R. Hoover  
Notary Public

Supplemental Acknowledgement Page to Amendment and Supplement to San Juan 27-4  
Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective  
June 1, 1957.

STATE OF New Mexico :

COUNTY OF Santa Fe :

The foregoing instrument was acknowledged before me this 17<sup>th</sup> day  
of March, 1960, by M. A. Romero, and  
Alicia V. Romero, his wife.

My Commission expires:

L. Boning  
Notary Public

STATE OF :

COUNTY OF :

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day  
of \_\_\_\_\_, 19\_\_\_\_, by \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public

STATE OF N Mex :

COUNTY OF Bernalillo :

The foregoing instrument was acknowledged before me this 4<sup>th</sup> day  
of March, 1960, by Baseline Abraham  
wife of Mike Abraham

My Commission expires:

Cecil E. Young  
Notary Public

4-16-63

STATE OF Idaho :

COUNTY OF Idaho :

The foregoing instrument was acknowledged before me this 21<sup>st</sup> day  
of January, 19\_\_\_\_, by \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public

STATE OF Texas     |  
COUNTY OF Dallas   |

The foregoing instrument was acknowledged before me this 15th day of February, 1961, by J. R. Abraham.

My Commission expires: June 1, 1961  
Elmer Parker  
Notary Public

STATE OF             |  
COUNTY OF         |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, by \_\_\_\_\_.

My Commission expires: \_\_\_\_\_  
Notary Public

STATE OF             |  
COUNTY OF         |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, by \_\_\_\_\_.

My Commission expires: \_\_\_\_\_  
Notary Public

STATE OF             |  
COUNTY OF         |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, by \_\_\_\_\_.

My Commission expires: \_\_\_\_\_  
Notary Public



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico

March 27, 1961

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

Attention: Mr. Sam Smith

Gentlemen:

Your plan of development for 1961, dated January 6, 1961, for the San Juan 27-4 unit area, Rio Arriba County, New Mexico, which proposes the drilling of three Mesaverde formation wells and one Dakota formation well, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Very truly yours,  
(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Re Regional Oil and Gas Supervisor

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

# El Paso Natural Gas Company

El Paso, Texas

March 10, 1961

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office Box 6721  
Roswell, New Mexico

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1961 Drilling Program

Gentlemen:

By letter dated January 6, 1961, the proposed Drilling Program for the captioned unit was submitted for your approval. In that letter El Paso Natural Gas Company, as Unit Operator, stated plans to drill a Dakota Well in the W/2 of Section 31, Township 27 North, Range 4 West.

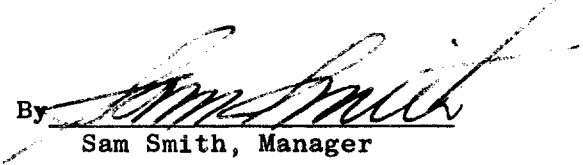
It has now been determined to change the location for the Dakota Well to the W/2 of Section 32, Township 27 North, Range 4 West.

This letter will be notice to you of this intention and copies of this letter are being sent to the working interest owners on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By

  
Sam Smith, Manager  
Land Department

SS:WVC:cah

SAN JUAN 27-4 UNIT  
Working Interest Owners

Mr. J. R. Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Rose Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Champlin Oil & Refining Company  
Attention: Mr. Jack Yeisley  
First National Bank Building, Suite 2501  
Denver, Colorado

Champlin Oil & Refining Company  
Attention: Mr. C. Taylor Pruitt  
P.O. Box 9365  
Fort Worth, Texas

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas

Mr. M. A. Romero  
P.O. Box 2011  
Santa Fe, New Mexico



In reply refer to:  
Unit Division

February 10, 1961

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

Re: 1961 Drilling Program  
San Juan 27-4 Unit  
Rio Arriba County,  
New Mexico

Attention: Mr. Sam Smith

Gentlemen:

There being no State lands within the boundaries of the San Juan 28-5 Unit Area, the Commissioner of Public Lands, herewith, approves the 1961 Drilling Program as a matter of record.

We are enclosing two approved copies of the Plan.

Very truly yours,

E. S. JOHNNY WALKER  
Commissioner of Public Lands

ESW/mmz/s

cc: US Geological Survey  
Roswell, New Mexico

Oil Conservation Commission  
Santa Fe, New Mexico

# *El Paso Natural Gas Company*

*El Paso, Texas*

January 6, 1961

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1961 DRILLING PROGRAM

Gentlemen:

By letter dated January 18, 1960, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1960. Said program provided for the drilling of four (4) Mesa-verde Wells. All four of these wells have been completed and have been admitted to the Mesaverde Participating Area.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	11
Dakota	3
Pictured Cliffs-Mesaverde	5
Mesaverde-Dakota	1
Non-Commercial (Mesaverde)	1
Plugged & Abandoned (Dakota)	1

Pursuant to Section 10 of the San Juan 27-4 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 period from January 1, 1961 to December 31, 1961:

<u>DRILLING BLOCK</u>	<u>FORMATION</u>
W/2 Section 31, T-27-N, R-4-W	Dakota
W/2 Section 7, T-27-N, R-4-W	Mesaverde
W/2 Section 11, T-27-N, R-4-W	Mesaverde
E/2 Section 26, T-27-N, R-4-W	Mesaverde

In addition to the above wells, El Paso Natural Gas Company, as Unit Operator, also plans to drill any offset wells required to prevent drainage of unitized substances, and any other wells deemed necessary or desirable by the Unit Operator and the working interest owners in the affected drilling block.

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

El Paso Natural Gas Company, as Unit Operator, intends to drill the Dakota 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 3200', 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.

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


If this Drilling Program is acceptable, please signify your approval, as required under Section 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:WVC:cah

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

DATE: 4-28-61

The foregoing approvals are for the 1961 Drilling Program for the San Juan 27-4 Unit, #14-08-001-1054, Rio Arriba County, New Mexico.

SAN JUAN 27-4 UNIT  
WORKING INTEREST OWNERS

James W. Goss  
General American Oil Company of Texas  
Meadows Building  
Dallas, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. Jack Yeisley  
Champlin Oil & Refining Company  
Suite 2501  
First National Bank Building  
Denver, Colorado

Mr. C. Taylor Pruitt  
Champlin Oil & Refining Company  
P.O. Box 9365  
Fort Worth, Texas

Mr. M. A. Romero  
P.O. Box 2011  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas

December 19, 1960

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

Re: San Juan 27-4 Unit #14-08-001-1054  
THIRTEENTH EXPANDED PARTICIPATING  
AREA, Mesaverde Formation  
Effective December 1, 1960

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #24 Well is located 1650' from the South line and 1090' from the West line of Section 6, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on October 1, 1960 and completed on October 22, 1960 at a total depth of 6267'. The Mesaverde Formation from 6032' - 6048', 6054' - 6062', 6068' - 6074', 6092' - 6098', 6108' - 6116', 6122' - 6128', 6132' - 6136', 6148' - 6154' was treated with a sand-water fracturing process. After being shut-in for eleven (11) days, the well was tested on November 2, 1960, and following a three (3) hour blow-down period gauged 3665 MCFGPD through a 3/4" choke, and 6073 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1090# and an SIPC of 1108#. The committed drilling block upon which this well is located is described as the W/2 of Section 6, Township 27 North,

Range 4 West, N.M.P.M., and consists of 320.84 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on November 2, 1960.

The completion of the San Juan 27-4 Unit #24 Well creates one (1) intervening drilling block which is described as the W/2 of Section 7, Township 27 North, Range 4 West, N.M.P.M., containing 321.56 acres. Under the terms of the San Juan 27-4 Unit Agreement, the above described drilling block is admitted to the Mesaverde Participating Area as of December 1, 1960 and a well must be commenced on the said block by December 1, 1961.

Attached is Schedule XIV showing the Thirteenth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Thirteenth Expanded Participating Area will become effective as of December 1, 1960.

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:BGI:js

cc: Attached list



# El Paso Natural Gas Company

El Paso, Texas

December 8, 1960

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
P.O. 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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL WELL

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 Mesaverde Formation has been completed upon acreage committed to this unit. This well is as follows:

The San Juan 27-4 Unit #25 Well, located 890' from the South line and 1180' from the West line of Section 30, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on October 3, 1960, and completed on October 17, 1960 at a total depth of 5944'. The Mesaverde Formation from 5772' - 5794', 5800' - 5812', 5820' - 5832', 5862' - 5868', 5877' - 5881' was treated with a sand-water fracturing process. After being shut-in for seven (7) days, the well was tested in the Mesaverde Formation on November 3, 1960, and following a three (3) hour blow-down period gauged 3494 MCFGPD through a 3/4" choke and 5021 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1138# and an SIPC of 1138#. The committed drilling block upon which this well is located is described as the W/2 of Section 30, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 321.56 acres. The determination that this well is capable of producing unitized substances in paying quantities from the Mesaverde Formation was made on November 3, 1960.

The drilling block was included in the San Juan 27-4 Unit Twelfth Expanded Participating Area for the Mesaverde Formation, effective November 1, 1960, as an intervening drilling block.

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  
Area Coordinator  
Land Department

CH:BGI:cah  
Attachment

**SAN JUAN 27-4 UNIT**

**Working Interest Owners**

Mr. James Goss  
General American Oil Company of Texas  
Meadows Building  
Dallas, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. Jack Yeisley  
Champlin Oil & Refining Company  
Suite 2501  
First National Bank Building  
Denver, Colorado

Mr. C. Taylor Pruitt  
Champlin Oil & Refining Company  
Post Office Box 9365  
Fort Worth, Texas

Mr. M. A. Romero  
Post Office Box 2011  
Santa Fe, New Mexico

# El Paso Natural Gas Company

El Paso, Texas

December 6, 1960

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

Re: San Juan 27-4 Unit #14-08-001-1054  
TWELFTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective November 1, 1960

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that two (2) additional wells capable of producing unitized substances in paying quantities from the Mesaverde Formation have been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include these wells as follows:

The San Juan 27-4 Unit #26 Well is located 860' from the South line and 790' from the West line of Section 31, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on September 16, 1960 and completed on October 1, 1960 at a total depth of 6460'. The Mesaverde Formation from 6280' - 6284', 6290' - 6298', 6302' - 6308', 6324' - 6336', 6350' - 6358', 6370' - 6376', 6386' - 6392', 6400' - 6408' was treated with a sand-water fracturing process. After being shut-in for twenty-six (26) days, the well was tested on October 27, 1960, and following a three (3) hour blow-down period gauged 2812 MCFGPD through a 3/4" choke, and 3502 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1166# and an SIPC of 1164#. The committed drilling block upon which this well is located is described as the W/2 of Section 31, Township 27 North, Range 4 West, N.M.P.M., and consists of 323.16 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on October 27, 1960.

The San Juan 27-4 Unit #27 Well is located 1090' from the South line and 1990' from the West line of Section 33, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on August 28, 1960 and completed on September 15, 1960 at a total depth of 6373'. The Mesaverde Formation from 6176' - 6184', 6214' - 6228', 6240' - 6256', 6282' - 6290', 6296' - 6304' was treated with a sand-water fracturing process. After being shut-in for forty-two (42) days, the well was tested on October 27, 1960 and following a three (3) hour blow-down period gauged 3435 MCFGPD through a 3/4" choke, and 4716 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1194# and an SIPC of 1184#. The committed drilling block upon which this well is located is described as the W/2 of Section 33, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on October 27, 1960.

The completion of the San Juan 27-4 Unit #26 Well creates one (1) intervening drilling block which is described as the W/2 of Section 30, Township 27 North, Range 4 West, N.M.P.M., containing 321.56 acres. Under the terms of the San Juan 27-4 Unit Agreement, the above described drilling block is admitted to the Mesaverde Participating Area as of November 1, 1960 and a well must be commenced on the said block by November 1, 1961.

Attached is Schedule XIII showing the Twelfth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Twelfth Expanded Participating Area will become effective as of November 1, 1960.

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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:BGI:js

cc: Attached list.

# El Paso Natural Gas Company

El Paso, Texas

April 8, 1960

*Case # 254*

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1960 Drilling Program

Gentlemen:

The 1960 Drilling Program for the San Juan 27-4 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey, March 16, 1960
2. Commissioner of Public Lands of the State of New Mexico, February 1, 1960
3. Oil Conservation Commission of the State of New Mexico, March 24, 1960

Copies of this letter are being sent to the Working Interest Owners of the subject unit.

Very truly yours,

*Charles Higgins*  
Charles Higgins  
Area Landman  
Land Department

CH:BI:js

RINCON UNIT

Mr. R. L. Caldwell  
Delhi-Taylor Oil Corporation  
823 Corrigan Tower  
Dallas 1, Texas

Mr. Paul W. Neuenschwander  
Southern Petroleum Exploration, Inc.  
Post Office Box 192  
Sistersville, West Virginia

Rock Island Oil and Refining Co., Inc.  
321 West Douglas Street  
Wichita 2, Kansas

Shoreline Petroleum Corporation  
Petroleum Center Building  
900 North East Military Drive  
San Antonio 9, Texas

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

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

Bert Fields

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

*Case # 254*

March 24, 1960

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

ATTENTION: Mr. Sam Smith

RE: 1960 Plan of Development  
San Juan 27-4 Unit Rio  
Arriba County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1960 Plan of Development for the San Juan 27-4 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 plan is returned herewith.

Very truly yours,

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

ALP/JEK/ig

cc: State Land Office - Santa Fe  
US Geological Survey - Roswell



P. O. Box 6721  
Roswell, New Mexico

March 16, 1960

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

Attention: Mr. Sam Smith

Gentlemen:

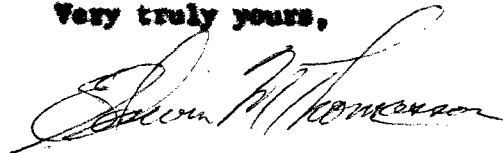
Your plan of development for 1960, dated January 18, 1960, for the San Juan 27-4 unit area, No. 14-08-001-1034, Rio Arriba County, New Mexico, which proposes the drilling of four Masoverde formation wells, has been approved on this date subject to like approval by the appropriate State Officials.

All of these wells are protection wells against drainage.

We note that wells proposed in the W<sub>1</sub> sec. 30, W<sub>1</sub> sec. 31, and W<sub>1</sub> sec. 33 will be in the same drilling block with Pictured Cliffs wells. Your well prognosis indicates that these wells will be new wells rather than deepened Pictured Cliffs producers.

Two approved copies of the plan are enclosed.

Very truly yours,



EDWIN M. THOMASSON  
Acting Oil and Gas Supervisor

Enclosures

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

# El Paso Natural Gas Company

El Paso, Texas

January 29, 1960

100-554

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Tenth Expanded Participating Area  
Mesaverde Formation  
Effective December 1, 1959

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #23 Well is located 1090' from the South line and 990' from the West line of Section 19, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on October 31, 1959 and completed on November 23, 1959 at a total depth of 5920'. The Mesaverde Formation from 5654' - 5664', 5672' - 5680', 5694' - 5704', 5736' - 5746', 5770' - 5778', 5786' - 5800' was treated with a sand-water fracturing process. After being shut-in for gauge for seven (7) days, the well was tested on November 30, 1959, and following a three (3) hour blow-down period gauged 2359 MCFGPD through a 3/4" choke, and 2616 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1097#. The committed drilling block upon which this well is located is described as the W/2 of Section 19, Township 27 North, Range 4 West, N.M.P.M., and consists of 321.48 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on November 30, 1959.

The San Juan 27-4 Unit #23 Well is a dual completion well, having been completed in both the Pictured Cliffs and Mesaverde Formations. Said well will be included in the Fifth Expanded Participating Area for the Pictured Cliffs Formation, effective January 1, 1960, which will be submitted under separate cover.

Attached is Schedule XI showing the Tenth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Tenth Expanded Participating Area will become effective as of December 1, 1959.

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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:BGI:ch

# El Paso Natural Gas Company

El Paso, Texas

January 29, 1960

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office Box 6721  
Roswell, New Mexico

*Case 254*

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FIFTH EXPANDED PARTICIPATING AREA  
Pictured Cliffs Formation  
Effective January 1, 1960

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #23 Well, located 1090' from the South line and 990' from the West line of Section 19, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on October 31, 1959 and completed on November 23, 1959 at a total depth of 5920'. The Pictured Cliffs Formation from 3540' - 3550', 3560' - 3570' was treated with a sand-water fracturing process. After being shut-in for seventeen (17) days, the well was tested in the Pictured Cliffs Formation on December 10, 1959, and following a three (3) hour blow-down period gauged 1270 MCFGPD through a 3/4" choke and 1285 MCFGPD by the calculated absolute open-flow method, with an SIPT of 962# and an SIPC of 965#. The committed drilling block upon which this well is located is described as the W/2 of Section 19, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 321.48 acres. The determination that this well is capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation was made on December 10, 1959.

The San Juan 27-4 Unit #23 Well is a dual completion well, having been completed in both the Pictured Cliffs and Mesaverde Formations. Said well was included in the Tenth Expanded Participating Area for the Mesaverde Formation, effective December 1, 1959, which will be submitted under separate cover.

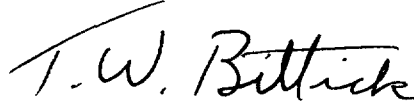
Attached is Schedule VI showing the Fifth Expanded Participating Area for the Pictured Cliffs Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Fifth Expanded Participating Area will become effective as of January 1, 1960.

Copies of this letter and Schedule 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:BGI:ch

# El Paso Natural Gas Company

El Paso, Texas

January 29, 1960

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office Box 6721  
Roswell, New Mexico

*Case # 354*

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

Re: San Juan 27-4 Unit #14-08-001-1054  
ELEVENTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective January 1, 1960

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #22 Well is located 1750' from the South line and 1095' from the West line of Section 14, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on September 21, 1959 and completed on November 24, 1959 at a total depth of 7890'. The Mesaverde Formation from 5952' - 5962', 5970' - 5980', 6020' - 6028', 6042' - 6052', 6058' - 6066' was treated with a sand-water fracturing process. After being shut-in for twenty (20) days, the well was tested on December 14, 1959, and following a three (3) hour blow-down period gauged 3865 MCFGPD through a 3/4" choke, and 6615 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1171# and an SIPC of 1171#. The committed drilling block upon which this well is located is described as the W/2 of Section 14, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on December 14, 1959.

The San Juan 27-4 Unit #22 Well was scheduled as a dual, Mesaverde-Dakota Well to be completed in both the Mesaverde Formation and the Dakota Formation. The well was drilled to a total depth of 8312' and the Dakota Formation was perforated, fractured, and tested but found to be incapable of producing gas. The well was then plugged back to a depth of 7890' and completed as a Mesaverde Well.

Attached is Schedule XII showing the Eleventh Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Eleventh Expanded Participating Area will become effective as of January 1, 1960.

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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:BGI:ch

# *El Paso Natural Gas Company*

*El Paso, Texas*

January 18, 1960

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1960 DRILLING PROGRAM

Gentlemen:

By letter dated January 2, 1959, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1959. Said program provided for the drilling of three (3) dual Pictured Cliffs-Mesaverde Wells, and one (1) dual Mesaverde-Dakota Well. All four wells have been completed but the San Juan 27-4 Unit #22 Well, located in the SW/4 of Section 14, Township 27 North, Range 4 West, which was intended to be dually completed in both the Mesaverde and Dakota Formations, was actually completed only in the Mesaverde Formation inasmuch as the Dakota Formation was found to be non-productive. All four (4) of these wells have either been admitted or are in the process of being admitted to their respective Participating Areas.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	7
Dakota	3
Pictured Cliffs-Mesaverde	5
Mesaverde-Dakota	1
Non-Commercial (Mesaverde)	1
Plugged & Abandoned (Dakota)	1



Pursuant to Section 10 of the San Juan 27-4 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 period from January 1, 1960 to December 31, 1960:

<u>DRILLING BLOCK</u>	<u>FORMATION</u>
W/2 Section 6, T-27-N, R-4-W	Mesaverde
W/2 Section 30, T-27-N, R-4-W	Mesaverde
W/2 Section 31, T-27-N, R-4-W	Mesaverde
W/2 Section 33, T-27-N, R-4-W	Mesaverde

In addition to the above wells, El Paso Natural Gas Company, as Unit Operator, also plans to drill any offset wells required to prevent drainage of unitized substances, and any other wells being necessary or desirable by the Unit Operator and the Working Interest Owners in the affected drilling block.

El Paso Natural Gas Company, as Unit Operator, intends to drill all of the above listed Mesaverde wells to the base of the Mesaverde Formation using rotary tools. Surface casing of 10 3/4" will be set to approximately 150' below the surface and an intermediate string of 7 5/8" will be set through the Pictured Cliffs Formation to a depth of approximately 3200'. A 5 1/2" production string will be set through the Mesaverde Formation, and the casing of the Mesaverde Formation will then be selectively perforated and the Mesaverde Formation will be subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing, and the hole below the intermediate string will be drilled with gas. Due care will be taken to protect all horizons.

All of the Working Interest Owners have been notified and this Drilling Program reflects, insofar as possible, their requests for additional drilling.


If this Drilling Program is acceptable, please signify your approval, as required under Section 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 list.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By

  
Sam Smith, Manager  
Land Department

SS:BGI:ch  
Attachment

**SAN JUAN 27-4 UNIT**  
**WORKING INTEREST OWNERS**

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas, Texas

Mr. M. A. Romero  
P.O. Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey  
Mr. M. J. Jordan  
El Paso Natural Gas Company  
Northwest Division  
Post Office Box 1526  
Salt Lake City 10, Utah

Mr. C. Taylor Pruitt  
Champlin Oil & Refining Company  
P.O. Box 9365  
Fort Worth, Texas

Mr. Jack Yeisley  
Champlin Oil & Refining Company  
2501 First National Bank Building  
Denver 2, Colorado

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

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

APPROVED: A. L. Porter DATE: 3/24/60  
Oil Conservation Commission  
Subject to like approval by the United States  
Geological Survey and the Commissioner of  
Public Lands.

The foregoing approvals are for the 1960 Drilling Program for the San Juan 27-4  
Unit, Rio Arriba County, New Mexico.

# El Paso Natural Gas Company

El Paso, Texas

August 4, 1959

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
P.O. 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

Re: San Juan 27-4 Unit #14-08-001-1054  
NINTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective July 1, 1959

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #21 Well is located 850' from the North line and 1800' from the East line of Section 30, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on May 3, 1959 and dually completed on May 26, 1959 at a total depth of 6180'. The Mesaverde Formation between 6000' - 6010', 6020' - 6030', 6040' - 6048', 6056' - 6066', 6108' - 6122' was treated with a sand-water fracturing process. After being shut-in for gauge for ten (10) days, the well was tested on June 5, 1959, and following a three (3) hour blow-down period gauged 2748 MCFGPD through a 3/4" choke, and 3162

MCFGPD by the calculated absolute open-flow method, with an SIPT of 1124#. The committed drilling block upon which this well is located is described as the E/2 of Section 30, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on June 5, 1959.

The San Juan 27-4 Unit #21 Well was a dually completed well in the Pictured Cliffs and Mesaverde Formations. The Pictured Cliffs Formation was expanded to include the E/2 of Section 30, Township 27 North, Range 4 West, as an intervening drilling block effective August 1, 1958, Third Expansion, and, the required Notice of Completion of Additional Well will be forwarded under separate cover.

Attached is Schedule X showing the Ninth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Ninth Expanded Participating Area will become effective as of July 1, 1959.

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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:JPMc:ch  
Attachments

# El Paso Natural Gas Company

El Paso, Texas

July 15, 1959

MAIN OFFICE 000  
DEC 11 11 15

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Pictured Cliffs Formation  
NOTICE OF COMPLETION OF ADDITIONAL WELL

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on June 18, 1959, that one (1) additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation had been completed upon acreage committed to the unit. This well is as follows:

The San Juan 27-4 Unit #21 Well, located 850' from the North line and 1800' from the East line of Section 30, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on May 3, 1959, and dually completed on May 26, 1959 at a total depth of 6180' in the Mesaverde Formation. The Pictured Cliffs Formation between 3820' - 3828', 3834' - 3848', 3858' - 3868', 3878' - 3890' was treated with a sand-water fracturing process. After being shut-in for gauge for twenty-three (23) days, the well was tested on June 18, 1959, and following a three (3) hour blow-down period gauged 2356 MCFGPD through a 3/4" choke and 2442 MCFGPD by the calculated absolute open-flow method with an SIPC of 1019# and an SIPT of 1021#.

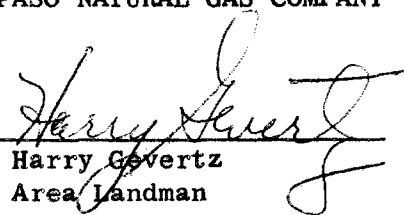
The San Juan 27-4 Unit #21 Well was a dually completed well determined to be commercial in both the Pictured Cliffs and Mesaverde Formations. The committed drilling block upon which said well is located was admitted to the Pictured Cliffs Participating Area as an intervening drilling block on September 1, 1958, by virtue of the Third Expansion. The Ninth Expanded Participating Area for the Mesaverde Formation, effective July 1, 1959, will be forwarded to you under separate cover.

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

  
Harry Gevertz  
Area Landman  
Land Department

HG:JPMc:ch  
Attachment



SAN JUAN 27-4 UNIT  
WORKING INTEREST OWNERS

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
P.O. Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey  
Mr. M. J. Jordan  
Pacific Northwest Pipeline Corporation  
P.O. Box 1526  
Salt Lake City 10, Utah

Mr. W. M. Mueller  
Champlin Oil & Refining Co.  
P.O. Box 9365  
Fort Worth, Texas

Mr. R. L. Walker  
Champlin Oil & Refining Co.  
Suite 2501  
First National Bank Building  
Denver, Colorado

# El Paso Natural Gas Company

El Paso, Texas

March 20, 1959

File  
6-7

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
EIGHTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective March 1, 1959

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #20 Well is located 1705' from the North line and 1521' from the East line of Section 29, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on January 7, 1959, and dually completed on January 31, 1959 at a total depth of 6199'. The Mesaverde Formation between 5608' - 5612', 5618' - 5628', 5836' - 5848', 5862' - 5874', 6002' - 6014', 6028' - 6034', 6048' - 6054', 6064' - 6076', 6102' - 6108', 6121' - 6133', was treated with a sand-water fracturing process. After being shut-in for gauge for seven (7) days, the well was tested on February 6, 1959, and following a three (3) hour blow-down period gauged 3908 MCFGPD through a 3/4" choke, and 5538 MCFGPD by the calculated absolute open-flow method with an SIPT of 1072#. The committed drilling block upon which this well is located is described as the E/2 of Section 29, Township 27 North, Range 4 West, N.M.P.M., and

consists of 320.00 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on February 6, 1959.

The San Juan 27-4 Unit #20 Well was a dually completed well in the Pictured Cliffs and Mesaverde Formations. The Pictured Cliffs Formation was expanded as an intervening drilling block effective March 1, 1958, Second Expansion, and, the required Notice of Completion of Additional Well will be forwarded under separate cover.

Attached is Schedule IX showing the Eighth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Eighth Expanded Participating Area will become effective as of March 1, 1959.

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

T. W. Bittick  
Assistant Manager  
Land Department

TWB:JPMc:ch  
Attachment

# El Paso Natural Gas Company

El Paso, Texas

March 20, 1959

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Pictured Cliffs Formation  
NOTICE OF COMPLETION OF ADDITIONAL WELL

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on February 18, 1959, that one (1) additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation had been completed upon acreage committed to the unit. This well is as follows:

The San Juan 27-4 Unit #20 Well, located 1705' from the North line and 1521' from the East line of Section 29, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on January 7, 1959, and dually completed on January 31, 1959 at a total depth of 6199' in the Mesaverde Formation. The Pictured Cliffs Formation between 3812' and 3840', 3852' and 3868' was treated with a sand-water fracturing process. After being shut-in for nineteen (19) days, the well was tested on February 18, 1959, and following a three (3) hour blow-down period gauged 2878 MCFGPD through a 3/4" choke and 3058 MCFGPD by the calculated absolute open-flow method with an SIPC of 942# and an SIPT of 941#.

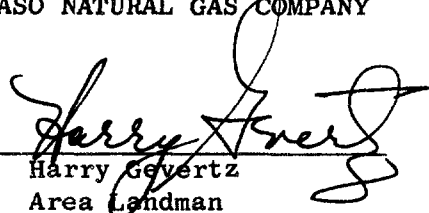
The San Juan 27-4 Unit #20 Well was a dually completed well determined to be commercial in both the Pictured Cliffs and Mesaverde Formations. The committed drilling block upon which said well is located was admitted to the Pictured Cliffs Participating Area as an intervening drilling block on March 1, 1958 by virtue of the Second Expansion. The Eighth Expanded Participating Area for the Mesaverde Formation, effective March 1, 1959, will be forwarded to you under separate cover.

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

  
Harry Gevertz  
Area Landman  
Land Department

HG: JPMc:ch  
Attachment

**SAN JUAN 27-4 UNIT**  
**WORKING INTEREST OWNERS**

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
Post Office Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey (2)  
Mr. M. J. Jordan (1)  
Pacific Northwest Pipeline Corporation  
Post Office Box 1526  
Salt Lake City 10, Utah

Mr. W. M. Mueller  
Champlin Oil & Refining Company  
Post Office Box 9365  
Fort Worth, Texas

Mr. R. L. Walker  
Champlin Oil & Refining Company  
Suite 2501  
First National Bank Building  
Denver, Colorado

# *El Paso Natural Gas Company*

*El Paso, Texas*

February 11, 1959

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1959 DRILLING PROGRAM

Gentlemen:

The 1959 Drilling Program for the San Juan 27-4 Unit Area was approved by the regulatory bodies on the following dates:

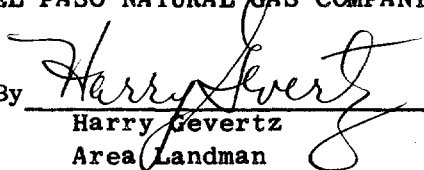
1. Oil Conservation Commission of the State of New Mexico,  
January 28, 1959
2. Commissioner of Public Lands of the State of New Mexico,  
February 4, 1959
3. United States Geological Survey, February 6, 1959

Copies of this letter are being sent to the Working Interest Owners of the above named unit.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By

  
Harry Gevertz  
Area Landman  
Land Department

HG:JPMc:ch

RECEIVED  
BUREAU OF LAND MANAGEMENT

1959 FEB 10 AM 9:55

14 N OFFICE 600  
FEB 10 AM 10:37 P. O. Box 6721  
Roswell, New Mexico

SANTA FE, NEW MEXICO

February 6, 1959

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1959 Plan of Development dated January 2, 1959 for the San Juan 27-4 unit area, No. 14-02-001-1034 Rio Arriba County, New Mexico proposing the drilling of three wells to be dually completed in the Pictured Cliffs and Mesaverde formations, and one well to be dually completed in the Mesaverde and Dakota formations, has been approved on this date, subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Very truly yours,

EDWIN M. THOMASSON  
Acting Oil and Gas Supervisor

Enclosure 2

Copy to: Washington (w/copy of plan)  
Farmington (w/copy of plan)  
NMOCC, Santa Fe (letter only)  
Comm. Pub. Lands, Santa Fe (letter only)



File  
554

MAIN OFFICE OCC

In reply refer to:  
Unit Division

FEB 10 AM 5:00

February 4, 1959

C  
O  
P  
Y

El Paso Natural Gas Company  
El Paso, Texas

ATTENTION: Mr. Sam Smith

Re: San Juan 27-4  
San Juan 28-5  
1959 Drilling Programs

Gentlemen:

We are enclosing two copies each of the 1959 Drilling Programs for the San Juan 27-4 and San Juan 28-5 Unit Areas.

The Commissioner of Public Lands has approved these Drilling Programs although there is not any State acreage within these units, therefore, the Commissioner's signature has no force or effect.

Very truly yours,  
MURRAY E. MORGAN  
Commissioner of PubL.

BY:  
Ted Bilberry, Supervisor  
Oil and Gas Division

MEM/MMR/m

cc:

OCC- Santa Fe  
USGS- Roswell

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

January 28, 1959

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

ATTENTION: Mr. Sam Smith

RE: 1959 Drilling Program  
San Juan 27-4 Unit  
Rio Arriba County,  
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1959 Drilling Program for the San Juan 27-4 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 application is returned herewith.

Very truly yours,

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

ALP/RLS/ig

cc: State Land Office - Santa Fe  
US Geological Survey - Roswell

C  
O  
P  
Y

1  
File  
554

# El Paso Natural Gas Company

El Paso, Texas

January 2, 1959

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
P. O. 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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
1959 DRILLING PROGRAM

Gentlemen:

By letter dated January 16, 1958, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1958. Said program provided for the drilling of three (3) Mesaverde Wells, one (1) dual Pictured Cliffs-Mesaverde Well, and one (1) dual Mesaverde-Dakota Well. All five wells have been completed but two (2) of them were not completed according to the original plans. In the first instance, the San Juan 27-4 Unit #19 Well, a proposed Mesaverde Well located in the NE/4 of Section 5, Township 27 North, Range 4 West, was instead completed dually in both the Pictured Cliffs and Mesaverde Formations. In the second instance, the San Juan 27-4 Unit #16 Well, located in the SW/4 of Section 17, Township 27 North, Range 4 West, and which was intended to be dually completed in both the Mesaverde and Dakota Formations, was actually completed only in the Dakota Formation. All five (5) of these wells have either been admitted or are in the process of being admitted to their respective Participating Areas.

As of this date, the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	5
Dakota	3
Pictured Cliffs-Mesaverde	2
Mesaverde-Dakota	1
Non-Commercial (Mesaverde)	1

Pursuant to Section 10 of the San Juan 27-4 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 period from January 1, 1959, to December 31, 1959:

DRILLING BLOCK

FORMATION

E/2 Section 29, T-27-N, R-4-W

Dual, Pictured Cliffs & Mesaverde

E/2 Section 30, T-27-N, R-4-W

Dual, Pictured Cliffs & Mesaverde

W/2 (SW/4) Section 14, T-27-N, R-4-W

Dual, Mesaverde & Dakota

W/2 Section 19, T-27-N, R-4-W

Dual, Pictured Cliffs & Mesaverde

In addition to the above wells, El Paso Natural Gas Company, as Unit Operator, also plans to drill any offset wells required to prevent drainage of unitized substances, and any other wells being necessary or desirable by the Unit Operator and the Working Interest Owners in the affected drilling block.

El Paso Natural Gas Company, as Unit Operator, intends to drill the above listed Mesaverde-Pictured Cliffs dual wells to the base of the Mesaverde Formation using rotary tools. Surface casing of 10 3/4" will be set to approximately 150' below the surface and an intermediate string of 7 5/8" will be set through the Pictured Cliffs Formation to a depth of approximately 3200'. A 5 1/2" production liner will be set from this point through the Mesaverde Formation. The Mesaverde Formation will then be selectively perforated and subjected to a hydraulic fracturing process, after which a bridging plug will be set above the Mesaverde Formation and the Pictured Cliffs Formation will be selectively perforated and subjected to a hydraulic fracturing process. For completion, a production packer will be set between the two formations using 2" tubing to produce the Mesaverde. A string of 1 1/4" tubing will be run through which the Pictured Cliffs Formation will be produced. Mud will be used in setting the intermediate string of casing and the hole below the intermediate string will be drilled with gas. Due care will be taken to protect all horizons.

El Paso Natural Gas Company, as Unit Operator, intends to drill the above listed Mesaverde-Dakota dual well to the base of the Dakota Formation using rotary tools. Surface casing of 13 3/8" will be set to the depth of approximately 150' and an intermediate string of 9 5/8" will be run through the Pictured Cliffs Formation to a depth of approximately 3200', and then Operator will run a production string of either 5 1/2" or 7" casing 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. A bridging plug will be used to separate the Mesaverde from the Dakota Formation and the Mesaverde Formation will be selectively perforated and subjected to a hydraulic fracturing process. A production packer will be run on 2" tubing with the Dakota producing through the tubing and the Mesaverde producing through the casing. Due care will be taken to protect all horizons.


All of the Working Interest Owners have been notified and this Drilling Program reflects, insofar as possible, their requests for additional drilling.

If this Drilling Program is acceptable, please signify your approval, as required under Section 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 list.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By   
Sam Smith  
Manager  
Land Department

SS:JPMc:ch  
Attachment

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Supervisor, United States Geological Survey  
Subject to like approval by the appropriate  
State officials.

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

APPROVED: *A. J. Carter* DATE: *Jan 29/1959*  
Oil Conservation Commission  
Subject to like approval by the United States  
Geological Survey and the Commissioner of Public Lands.

The foregoing approvals are for the 1959 Drilling Program for the San Juan 27-4 Unit,  
Rio Arriba County, New Mexico.

**WORKING INTEREST OWNERS**  
**San Juan 27-4 Unit**

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey (2)  
Mr. M. J. Jordan (1)  
Pacific Northwest Pipeline Corporation  
Post Office Box 1526  
Salt Lake City 10, Utah

Mr. W. M. Mueller  
Champlin Oil and Refining Company  
Post Office Box 9365  
Fort Worth, Texas

Mr. R. L. Walker  
Champlin Oil and Refining Company  
Suite 2501, First National Bank Building  
Denver 2, Colorado

# El Paso Natural Gas Company

El Paso, Texas

December 29, 1958

File  
554

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
SEVENTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective October 1, 1958

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #18 Well is located 1096' from the South line and 860' from the West line of Section 4, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on June 15, 1958, and completed on July 14, 1958, at a total depth of 6436'. The Mesaverde Formation between 6206' - 6226', 6240' - 6262', 6270' - 6278', 6310' - 6336', 6350' - 6362' was treated with a sand-water fracturing process. After being shut-in for gauge for fifty-nine (59) days, the well was tested on September 11, 1958, and following a three (3) hour blow-down period gauged 4722 MCFGPD through a 3/4" choke, and 10,086 MCFGPD by the calculated absolute open-flow method with an SIPC of 1180# and an SIPT of 1180#. The committed drilling block upon which this well is located is described as the W/2 of Section 4, Township 27 North, Range 4 West,



N.M.P.M., and consists of 319.20 acres. The determination that this well is capable of producing unitized substances in paying quantities was made on September 11, 1958.

Attached is Schedule VIII showing the Seventh Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Seventh Expanded Participating Area will become effective as of October 1, 1958.

Copies of this letter and Schedule 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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:JPMc:ch  
Attachment

# El Paso Natural Gas Company

El Paso, Texas

December 22, 1958

File  
554

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

Re: San Juan 27-4 Unit #14-08-001-1054  
SIXTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective September 1, 1958

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054 approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates indicated below that two (2) additional wells capable of producing unitized substances in paying quantities from the Mesaverde Formation have been completed on acreage committed to this Unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include these wells described as follows:

1. The San Juan 27-4 Unit #15 Well is located 798' from the North line and 1654' from the East line of Section 6, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on June 20, 1958, and completed on July 13, 1958, at a total depth of 6429'. The Mesaverde Formation between 6174'-6196', 6220'-6250', 6266'-6278', 6284'-6296', 6304'-6324' was treated with a sand-water fracturing process. After being shut in for gauge for thirteen (13) days, the well was tested on August 26, 1958, and following a three (3) hour blow-down period gauged 4618 MCFGPD through a 3/4" choke and 10,243 MCFGPD by the calculated absolute open flow method with an SIPC of 1154# and an SIPT of 1141#. The committed drilling block upon which this well is located is described as the E/2 of Section 6, Township 27 North, Range 4 West, N.M.P.M., and consists of 319.79 acres. The determination that this well is capable of producing unitized substances in paying quantities was made on August 26, 1958.

2. The San Juan 27-4 Unit #19 Well is located 915' from the North line and 1020' from the East line of Section 5, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on June 26, 1958, and dually completed on October 2, 1958, at a total depth of 6455'. The Mesaverde Formation between 6230'-6246', 6260'-6276', 6284'-6310', 6336'-6352', 6370'-6388' was treated with a sand-water fracturing process. After being shut-in for gauge for fifteen (15) days, the well was tested on August 26, 1958, and following a three (3) hour blow-down period gauged 3418 MCFGPD through a 3/4" choke and 4801 MCFGPD by the calculated absolute open-flow method, with an SIPT of 997#. Subsequently, a packer leakage was discovered and promptly corrected. After being shut-in for gauge for seventeen (17) days, the well was again tested on October 20, 1958, and following a three (3) hour blow-down period gauged 3099 MCFGPD through a 3/4" choke and 4056 MCFGPD by the calculated absolute open-flow method, with an SIPT of 993#. The committed drilling block upon which this well is located is described as the E/2 of Section 5, Township 27 North, Range 4 West, N.M.P.M., and consists of 319.33 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on August 26, 1958.

The completion of the previously mentioned San Juan 27-4 Unit Wells #15 and #19 would normally have resulted in creating an intervening drilling block out of the W/2 of Section 5. This acreage, however, has located on it the noncommercial San Juan 27-4 Unit #2 Well in the SW/4 of Section 5 and, hence, no intervening drilling block can be created.


The San Juan 27-4 Unit #19 Well was a dually completed well in the Pictured Cliffs and Mesaverde Formations, therefore, the Pictured Cliffs Participating Area will be expanded accordingly, and will be forwarded to you under separate cover.

Attached is Schedule VII showing the Sixth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Sixth Expanded Participating Area will become effective as of September 1, 1958.

Copies of this letter and Schedule 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

# El Paso Natural Gas Company

554

El Paso, Texas

December 19, 1958

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  
MAY 1959

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
FOURTH EXPANDED PARTICIPATING AREA  
Pictured Cliffs Formation  
Effective November 1, 1958

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054 approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated 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 this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #19 Well, located 915' from the North line and 1020' from the East line of Section 5, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on June 26, 1958, and dually completed on October 2, 1958, at a total depth of 6455'. The Pictured Cliffs Formation from 4074'-4100', 4114'-4130', 4142'-4158' was treated with a sand-water fracturing process. After being shut in for twenty-four (24) days, the well was tested in the Pictured Cliffs Formation on October 27, 1958, and following a three (3) hour blow-down period gauged 983 MCFGPD through a 3/4" choke and 990 MCFGPD by the calculated absolute open flow method, with an SIPT of 955# and an SIPC of 955#. The committed drilling block upon which this well is located is described as the E/2 of Section 5, Township 27 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, containing 319.33 acres. The determination that this well is capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation was made on October 27, 1958.

The San Juan 27-4 Unit #19 Well was a dually completed well in the Pictured Cliffs and Mesaverde Formations, therefore, the Mesaverde Participating Area will be expanded accordingly, and will be forwarded to you under separate cover.

Attached is Schedule V showing the Fourth Expanded Participating Area for the Pictured Cliffs Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval this Fourth Expanded Participating Area will become effective as of November 1, 1958.

Copies of this letter and schedule 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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:JPMc:jb

cc: Attached List

# El Paso Natural Gas Company

El Paso, Texas

December 9, 1958

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

Re: San Juan 27-4 Unit, #14-08-001-1054,  
FIFTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective August 1, 1958

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #17 Well is located 810' from the South line and 1150' from the West line of Section 29, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on June 20, 1958, and dually completed on July 17, 1958, at a total depth of 5988'. The Mesaverde Formation between 5768' - 5784', 5818' - 5846', 5858' - 5872', 5884' - 5904', 5922' - 5948' was treated with a sand-water fracturing process. After being shut-in for gauge for fourteen (14) days, the well was tested on July 31, 1958, and following a three (3) hour blow-down period gauged 2413 MCFGPD through a 3/4" choke and 2689 MCFGPD by the calculated absolute open-flow method with an SIPT of 1134#. The committed drilling block upon which this well is located is described as the W/2 of Section 29, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres. The determination that this well is capable of producing unitized substances

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554

from the Mesaverde Formation in paying quantities was made on July 31, 1958.

The San Juan 27-4 Unit #17 Well was a dually completed well in the Pictured Cliffs and Mesaverde Formations; therefore, the Pictured Cliffs Participating Area will be expanded accordingly and will be forwarded to you under separate cover.

Attached is Schedule VI showing the Fifth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Fifth Expanded Participating Area will become effective as of August 1, 1958.

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:JPMc:ch  
Attachment

# El Paso Natural Gas Company

El Paso, Texas

December 9, 1958

*File*  
*554*

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
THIRD EXPANDED PARTICIPATING AREA  
Pictured Cliffs Formation  
Effective September 1, 1958

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated 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 this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #17 Well is located 810' from the South line and 1150' from the West line of Section 29, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on June 20, 1958 and dually completed on July 17, 1958 at a total depth of 5988'. The Pictured Cliffs Formation between 3650' - 3674', 3690' - 3716' was treated with a sand-water fracturing process. After being shut-in for gauge for twenty-one (21) days, the well was tested on August 7, 1958, and following a three (3) hour blow-down period gauged 1715 MCFGPD through a 3/4" choke and 1749 MCFGPD by the calculated absolute open-flow method with an SIPC of 1018# and an SIPT of 1018#.



The committed drilling block upon which this well is located is described as the W/2 of Section 29, Township 27 North, Range 4 West, N.M.P.M. and consists of 320.00 acres. The determination that this well is capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation was made on August 7, 1958.

The San Juan 27-4 Unit #17 Well was a dually completed well in the Pictured Cliffs and Mesaverde Formations; therefore, the Mesaverde Participating Area will be expanded accordingly. Said well will be included in the Fifth Expanded Participating Area for the Mesaverde Formation, effective August 1, 1958, and will be forwarded to you under separate cover.

The completion of the San Juan 27-4 Unit #17 Well creates one (1) intervening drilling block. This intervening drilling block is described as the E/2 of Section 30, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres.

Under the terms of the San Juan 27-4 Unit Agreement, the above described intervening drilling block is admitted to the Pictured Cliffs Participating Area as of September 1, 1958. A well must be commenced on this intervening drilling block by September 1, 1959.

Attached is Schedule IV showing the Third Expanded Participating Area for the Pictured Cliffs Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Third Expanded Participating Area will become effective as of September 1, 1958.

Copies of this letter and Schedule 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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:JPMc:ch  
Attachment

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

File  
case  
554

September 19, 1958

El Paso Natural Gas Company  
El Paso, Texas

ATTENTION: Mr. Harry Gevertz

RE: Third Expanded Participating  
Area Dakota Formation San Juan  
27-4 Unit Rio Arriba County,  
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Third Expanded Participating Area Dakota Formation for the San Juan 27-4 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 returned herewith.

Very truly yours,

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

ig/

Cc: USGS-Roswell, New Mexico  
Land Office-Santa Fe

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**OIL CONSERVATION COMMISSION**

P. O. BOX 871

SANTA FE, NEW MEXICO

File  
Case  
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September 19, 1958

El Paso Natural Gas Company  
El Paso, Texas

Attention: Mr. Harry Gevertz

Re: Second Expanded Participating  
Area Dakota Formation San Juan  
27-4 Unit Rio Arriba County,  
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Second Expanded Participating Area, Dakota Formation for the San Juan 27-4 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 returned herewith.

Very truly yours,

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

lg/

cc: USGS-Roswell, New Mexico  
Land Office,- Santa Fe

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

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September 19, 1938

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El Paso Natural Gas Company  
El Paso, Texas

Attention: Mr. Harry Gevertz

Re: First Expanded Participating  
Area Dakota Formation, San  
Juan 27-4 Unit Rio Arriba  
County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the First Expanded Participating Area for the San Juan 27-4 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 returned herewith.

Very truly yours,

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

ig/

cc: USGS-Roswell, New Mexico  
Land Office-Santa Fe, New Mexico

MAIN OFFICE OCC

1958 SEP 18 AM 8:26

In reply refer to:  
Unit Division

September 17, 1958

File  
554

El Paso Natural Gas Company  
El Paso, Texas

Re: San Juan 27-4 Unit,  
THIRD EXPANDED PARTICIPATING AREA  
Dakota Formation  
Rio Arriba County, New Mexico

ATTENTION: Mr. Harry Gevertz

Gentlemen:

The Commissioner of Public Lands has this date approved  
The Third Expanded Participating Area, Dakota Formation, for  
the San Juan 27-4 Unit Area, subject to like approval by the  
United States Geological Survey and by the Oil Conservation  
Commission.

Six approved copies are being handed to Mr. Harry Gevertz.

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

BY:  
Ted Bilberry, Supervisor  
Oil and Gas Division

MEM/MMR/m

cc:

OCC: Santa Fe  
USGS: Roswell, New Mexico

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1958 SEP 18 AM 8:26

In reply refer to:  
Unit Division

September 17, 1958

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El Paso Natural Gas Company  
El Paso, Texas

Re: San Juan 27-4 Unit,  
SECOND EXPANDED PARTICIPATING AREA  
Dakota Formation  
Rio Arriba County, New Mexico

ATTENTION: Mr. Harry Gevertz

Gentlemen:

The Commissioner of Public Lands has this date approved the Second Expanded Participating Area, Dakota Formation, for the San Juan 27-4 Unit Area, subject to like approval by the United States Geological Survey and by the Oil Conservation Commission.

Six approved copies are being handed to Mr. Harry Gevertz.

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

BY:  
Ted Bilberry, Supervisor  
Oil and Gas Division

MEM/MMR/na

cc: OCC-SANTA FE  
USGS-ROSWELL, New Mexico

MAIN OFFICE OCC

1958 SEP 18 AM 8:26

In reply refer to:  
Unit Division

File

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September 17, 1958

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El Paso Natural Gas Company  
El Paso, Texas

Re: San Juan 27-4 Unit,  
FIRST EXPANDED PARTICIPATING AREA  
Dakota Formation  
Rio Arriba County, New Mexico

ATTENTION: Mr. Harry Gevertz

Gentlemen:

The Commissioner of Public Lands has this date approved the First Expanded Participating Area, Dakota Formation, for the San Juan 27-4 Unit Area, subject to like approval by the United States Geological Survey and by the Oil Conservation Commission.

Six approved copies are being handed to Mr. Harry Gevertz.

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

BY:  
Ted Bilberry, Supervisor  
Oil and Gas Division

MEM/MMR/m

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

# El Paso Natural Gas Company

El Paso, Texas

September 8, 1958

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D.C.

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
THIRD EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective August 1, 1958

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 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. The Participating Area for the Dakota Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #16 Well is located 790' from the South line and 790' from the West line of Section 17, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on April 16, 1958 and completed on June 26, 1958 at a total depth of 8016'. The Dakota Formation between 7874'-8016' was treated with an acidization process. After being shut-in for gauge for thirteen (13) days, the well was tested on July 10, 1958, and following a three hour blow-down period gauged 4412 MCFGPD through a 3/4" choke and 5594 MCFGPD by the calculated absolute open-flow method with an SIPC of 2487# and an SIPT of 2470#. The determination that this well is capable of producing unitized substances in paying quantities was made on July 10, 1958.



Although this well was originally scheduled to be a dual completion in the Mesaverde and Dakota Formations, upon reaching total depth, it was deemed advisable to complete the well in the Dakota Formation only so as not to endanger the high initial potential of the gas producing from the Dakota.

Attached as Exhibit "A" is a Schedule showing the Third Expanded Participating Area for the Dakota Formation of the San Juan 27-4 Unit Area. Said Exhibit "A" describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract.

Inasmuch as Section 11(b) of the San Juan 27-4 Unit Agreement provides that, "The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, unless a more appropriate effective date is specified in the schedule," this Third Expanded Dakota Participating Area will be effective as of August 1, 1958.

El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of this selection of lands for the Third Expanded Participating Area for the Dakota Formation, to be effective as of August 1, 1958. If this Expansion meets with your approval please indicate such approval in the space provided on the attached sheet.

Copies of this letter and Exhibit "A" are being sent to the Working Interest Owners listed on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

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

TWB:JNN:jr  
Attachments

cc: Attached sheet

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Director, United States Geological Survey

Subject to like approval by the appropriate State Officials.

APPROVED: W. M. Moynihan DATE: September 17, 1958  
Commissioner of Public Lands

Subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

APPROVED: A. H. Porter DATE: September 19, 1958  
Oil Conservation Commission

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

The foregoing approvals are attached and made a part of the application for the Third Expanded Participating Area of the Dakota Formation for the San Juan 27-4 Unit, Rio Arriba County, New Mexico.

# *El Paso Natural Gas Company*

*El Paso, Texas*

July 7, 1958

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
SECOND EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective December 1, 1957

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 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. The Participating Area for the Dakota Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #14-X Well is located 1660' from the South line and 1190' from the West line of Section 18, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on September 29, 1957, and completed on November 20, 1957, at a total depth of 7964'. The Dakota Formation between 7651' - 7682', 7834' - 7840', 7845' - 7850', 7856' - 7864', 7897' - 7931' was treated with a sand-water fracturing process. After being shut-in for gauge for seven (7) days, the well was tested on December 4, 1957, and following a three hour blow-down period gauged 963 MCFGPD through a 3/4" choke and 969 MCFGPD by the calculated absolute open-flow method with an SIPT of 1922#. The committed drilling block upon which this well is located is described as All of Section 18, Township 27 North, Range 4 West, N.M.P.M., and consists of 641.12 acres. The determination that this well is capable of producing unitized substances in paying quantities was made on December 4, 1957.

This well was originally drilled as the San Juan 27-4 #14 Well, but due to extreme drilling difficulties, the #14 Well was plugged and abandoned and the San Juan 27-4 #14-X Well was drilled as a direct offset.

Attached as Exhibit "A" is a Schedule showing the Second Expanded Participating Area for the Dakota Formation of the San Juan 27-4 Unit Area. Said Exhibit "A" describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract.

Inasmuch as Section 11(b) of the San Juan 27-4 Unit Agreement provides that, "The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, unless a more appropriate effective date is specified in the schedule," this Second Expanded Dakota Participating Area will be effective as of December 1, 1957.

El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of this selection of lands for the Second Expanded Participating Area for the Dakota Formation, to be effective as of December 1, 1957. If this Expansion meets with your approval please indicate such approval in the space provided on the attached sheet.

Copies of this letter and Exhibit "A" are being sent to the Working Interest Owners listed on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



T. W. Bittick  
Assistant Manager  
Land Department

TWB:JNN:jr  
Attachments

cc: Attached sheet

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Director, United States Geological Survey

Subject to like approval by the appropriate State officials.

APPROVED: W. M. Morgan DATE: September 17, 1958  
Commissioner of Public Lands

Subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

APPROVED: A. H. Porter DATE: September 19, 1958  
Oil Conservation Commission

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

The foregoing approvals are attached and made a part of the application for the Second Expanded Participating Area of the Dakota Formation for the San Juan 27-4 Unit, Rio Arriba County, New Mexico.

# El Paso Natural Gas Company

*El Paso, Texas*

June 24, 1958

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D.C.

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

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
FIRST EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective September 1, 1956

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 on acreage committed to this Unit. The Participating Area for the Dakota Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #7 Well is located 990' from the South line and 1700' from the West line of Section 9, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on May 13, 1956 and completed on June 26, 1956 at a total depth of 8075'. The Dakota Formation between 7680' - 7696', 7720' - 7750', 7870' - 7884', 7898' - 7912', 7946' - 7990', 8014' - 8026' was treated with a sand-water fracturing process. After being shut-in for gauge for sixteen (16) days the well was tested on August 2, 1956, and following a three hour blow down period gauged 1961 MCFGPD through a 3/4" choke, and 2131 MCFGPD by the calculated absolute open flow method with an SIPC of 1824#, and an SIPT of 1234#. The determination that this well is capable of producing unitized substances in paying quantities was made on August 2, 1956.

Attached as Exhibit "A" is a Schedule showing the First Expanded Participating Area for the Dakota Formation of the San Juan 27-4 Unit Area. Said Exhibit "A" describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract.


Inasmuch as Section 11 (b) of the San Juan 27-4 Unit Agreement provides that, "The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, unless a more appropriate effective date is specified in the schedule," this First Expanded Dakota Participating Area will be effective as of September 1, 1956.

El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of this selection of lands for the First Expanded Participating Area for the Dakota Formation, to be effective as of September 1, 1956. If this Expansion meets with your approval please indicate such approval in the space provided on the attached sheet.

Copies of this letter and Exhibit "A" are being sent to the Working Interest Owners listed on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By   
T. W. Bittick  
Assistant Manager  
Land Department

TWB:JNN:pc

cc: Attached List

APPROVED: \_\_\_\_\_

Supervisor, United States Geological Survey  
Subject to like approval by the appropriate  
State officials.

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

APPROVED: \_\_\_\_\_

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

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

*September 17, 1958*

APPROVED: \_\_\_\_\_

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

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

*September 19, 1958*

The foregoing approvals are for the First Expanded Participating Area for the  
Dakota Formation of the San Juan 27-4 Unit, Rio Arriba County, New Mexico.



P. O. Box 6721  
Roswell, New Mexico

May 27, 1958

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

Attention: Mr. Harry Geverts

Gentlemen:

Returned herewith are four copies of your application dated October 21, 1957, for approval of the first revision of the initial Dakota formation participating area for the San Juan 27-4 unit agreement, transmitted with your letter of April 29, 1958.

We have no information on unit well No. 7 other than the well log and test data in your application. In view of the length of time the well has been completed, we need a brief summary of the available production history, including the cumulative production to date and the deliverability rate, in order to concur with your determination that the well is capable of producing unitized substances in paying quantities.

Section 11 (b) of the San Juan 27-4 unit agreement provides that revisions of participating areas for formation below the base of the Mesaverde shall include lands regarded as reasonably proved productive of unitized substances in paying quantities, based on geologic inference rather than drilling blocks or dedicated acreage. It is requested that you consider the addition of at least all of sec. 8 and the NE $\frac{1}{4}$  sec. 16, T. 27 N., R. 4 W., N.M.P.M., to the first revision, as we feel that such land may be regarded as reasonably proved productive by the completion of unit well No. 7, SE $\frac{1}{4}$  sec. 9, T. 27 N., R. 4 W., N.M.P.M.

If you concur in our opinion that sec. 8 and the NE $\frac{1}{4}$  sec. 16 should be included in the revision, please submit five copies of the application so revised. A brief summary of the available production

data should also be furnished. If you believe that the additional acreage should not be included, please return the application plus one additional copy (five needed), with a statement of your reasons for adding only sec. 9 to the participating area.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

Enclosures: 4

Copy to: Farmington  
BROCC, Santa Fe  
Comm. of Public Lands, Santa Fe

CCTraywick:sm

# El Paso Natural Gas Company

El Paso, Texas

May 19, 1958

File  
554

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office Box 6721  
Roswell, New Mexico

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

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
SECOND EXPANDED PARTICIPATING AREA,  
Pictured Cliffs Formation,  
Effective March 1, 1958

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement #14-08-001-1054 approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated 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 this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #13 Well is located 1800' from the North line and 1500' from the East line of Section 20, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on November 25, 1957 and dually completed on January 9, 1958 at a total depth of 5975'. The Pictured Cliffs Formation between 3636' - 3664' was treated with a sand-water fracturing process. After being shut-in for gauge for twenty-four (24) days, the well was tested on February 3, 1958, and following a three hour blow-down period gauged 1965 MCFGPD through a 3/4" choke, and 2040 MCFGPD by the calculated absolute open flow method with an SIPC of 888# and an SIPT of 881#. The committed drilling block upon which this well is located is described as the E/2 of Section 20, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres. The determination that this well is capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation was made on February 3, 1958.

The San Juan 27-4 Unit #13 Well was a dually completed well in the Pictured Cliffs and Mesaverde Formations, therefore, the Mesaverde Participating Area will be expanded accordingly. Said well will be included in the Fourth Expanded Participating Area for the Mesaverde Formation, effective May 1, 1958, and will be forwarded to you under separate cover.

The completion of the San Juan 27-4 Unit #13 Well creates one (1) intervening drilling block. This intervening drilling block is described as the E/2 of Section 29, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres.

Under the terms of the San Juan 27-4 Unit Agreement, the above described intervening drilling block is admitted to the Pictured Cliffs Participating Area as of March 1, 1958. A well must be commenced on this intervening drilling block by March 1, 1959.

Attached is Schedule III showing the Second Expanded Participating Area for the Pictured Cliffs Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Second Expanded Participating Area will become effective as of March 1, 1958.

Copies of this letter and Schedule 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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB:JNN:pc

cc: Attached List

# El Paso Natural Gas Company

El Paso, Texas

May 16, 1958

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

*File*  
*554*

Re: San Juan 27-4 Unit #14-08-001-1054  
FOURTH EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective May 1, 1958

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054 approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed on acreage committed to this Unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #13 Well is located 1800' from the North line and 1500' from the East line of Section 20, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on November 25, 1957, and dually completed on January 9, 1958, at a total depth of 5975'. The Mesaverde Formation between 5406' - 5412', 5426' - 5442', 5522' - 5546', 5780' - 5800', 5815' - 5840', 5851' - 5866', 5876' - 5886', 5896' - 5906', 5924' - 5934' was treated with a sand-water fracturing process. After being shut in for gauge for one hundred and eight (108) days, the well was tested on April 28, 1958, and following a three (3) hour blow-down period gauged 4611 MCFGPD through a 3/4" choke and 7770 MCFGPD by the calculated absolute open flow method with an SIPT of 1094#. The committed drilling block upon which this well is located is described as the E/2 of Section 20, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on April 28, 1958.

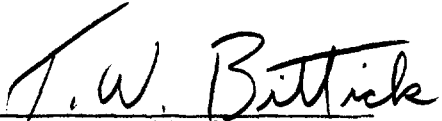
The San Juan 27-4 Unit #13 Well was a dually completed well in the Pictured Cliffs and Mesaverde Formations, therefore, the Pictured Cliffs Participating Area will be expanded accordingly. Said well will be included in the Second Expanded Participating Area for the Pictured Cliffs Formation, effective March 1, 1958, and will be forwarded to you under separate cover.

Attached is Schedule V showing the Fourth Expanded Participating Area for the Mesaverde Formation of the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval this Fourth Expanded Participating Area will become effective as of May 1, 1958.

Copies of this letter and schedule 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  
Assistant Manager  
Land Department

TWB:JNN:pc

cc: Attached List

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

April 28, 1958

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

*Core 554*

Attention: Mr. T. W. Bittick

Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
First Expanded Participating Area  
Dakota Formation

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the First Expanded Participating Area, Dakota Formation, dated October 24, 1957, for the San Juan 27-4 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

Six approved copies of the Application were handed to  
Mr. M. W. Coll.

Very truly yours,

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

ALP/RLS/ga

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

C  
O  
P  
Y

**OIL CONSERVATION COMMISSION**

P. O. BOX 871

SANTA FE, NEW MEXICO

*Case  
554*

**March 28, 1958**

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

**Attention: Mr. Sam Smith**

**Re: San Juan 27-4 Unit Area  
Rio Arriba County, New Mexico  
1958 Drilling Program**

**Gentlemen:**

**This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1958 Drilling Program for the San Juan 27-4 Unit Area, dated January 16, 1958, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.**

**One approved copy of the Plan is returned herewith.**

**Very truly yours,**

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

**ALP/RLS/ir**

**Enclosure**

C  
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Y





IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

MAIL OFFICE 600  
F. O. Box 6721  
Roswell, New Mexico

February 24, 1958

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

Attention: Mr. Sam Smith

Gentlemen:

Your plan of development dated January 16, 1958, for the San Juan 27-4 Unit Area, New Mexico, for the calendar year 1958, has been approved on this date subject to like approval by the appropriate State of New Mexico officials.

Two approved copies of the plan are enclosed.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

Enclosure

Copy to: Wash. (w/copy of plan)  
Farmington (w/copy of plan)  
Comm. of Public Lands, Santa Fe, (letter only)  
Oil Cons. Comm., Santa Fe (letter only)

Case 557

In reply refer to:  
Unit Division

February 10, 1958

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

Re: San Juan 2-4  
San Juan 28-5  
San Juan 30-4

Attention: Mr. Sam Smith

Gentlemen:

We are enclosing two copies on each of the above designated Unit Agreements, which were approved by the Commissioner of Public Lands February 10, 1958.

Very truly yours,

MURRAY E. MORGAN,  
Commissioner of Public Lands

BY:

Ted Bilberry, Supervisor  
Oil And Gas Division

MEM/mnr/s

cc: United States Geological Survey  
Roswell, New Mexico

✓ Oil Conservation Commission  
Santa Fe, New Mexico

*File 407*  
*W*  
El Paso Natural Gas Company

El Paso, Texas

January 22, 1958

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

Re: San Juan 27-4 Unit #14-08-001-1054  
THIRD EXPANDED PARTICIPATING AREA  
Mesaverde Formation  
Effective December 1, 1957

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated below that one (1) additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed on acreage committed to this Unit. The Participating Area for the Mesaverde Formation is expanded accordingly to include this well described as follows:

The San Juan 27-4 Unit #14-X Well is located 1660' from the South line and 1190' from the West line of Section 18, Township 27 North Range 4 West, Rio Arriba County, New Mexico. This well was spudded on September 29, 1957, and dually completed on November 20, 1957 at a total depth of 7964'. The Mesaverde Formation between 5636'-5676', 5694'-5704', 5712'-5720', 5726'-5738' was treated with a sand water fracturing process. After being shut in for gauge for seven (7) days, the well was tested on November 27, 1957, and following a three (3) hour blow-down period gauged 3219 MCFGPD through a 3/4" choke, and 3394 MCFGPD by the calculated absolute open flow method with an SIPC of 1033#. The committed drilling block upon which this well is located is described as the W/2 of Section 18, Township 27 North, Range 4 West, N.M.P.M., and consists of 321.12 acres. The determination that this well is capable of producing unitized substances from the Mesaverde Formation in paying quantities was made on November 27, 1957.

The San Juan 27-4 Unit #14 Well was drilled to a depth of 6427', however, due to extreme drilling difficulties and casing failure, the well was subsequently plugged and abandoned, and the San Juan 27-4 Unit #14-X Well was drilled as a direct offset.

The San Juan 27-4 Unit #14-X Well was a dual completion Mesaverde-Dakota Well. It has not as yet been determined if the Dakota Formation is capable of producing unitized substances in paying quantities. As soon as a determination is made, appropriate notice will be made to all parties concerned.

Attached is Schedule IV showing the Third Expanded Participating Area for the Mesaverde Formation on the San Juan 27-4 Unit Area. This describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Third Expanded Participating Area will become effective as of December 1, 1957.

Copies of this letter and schedule 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  
T. W. Bittick  
Assistant Manager  
Land Department

TWB: JNN: pc

cc: Attached List

San Juan 27-4 Unit  
Working Interest Owners

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. H. K. Greenleaf  
Champlin Oil and Refining Company  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
Post Office Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey (4)  
Mr. M. A. Ehrlich (1)  
Pacific Northwest Pipeline Corporation  
Post Office Box 1526  
Salt Lake City, Utah

SCHEDULE IV  
THIRD EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK AND	PERCENTAGE	PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
<u>Tract 1</u>							
NM 013297	T-27-N, R-4-W Sec. 1: Lots 3,4, S/2 NW/4, SW/4	319.91	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 83.75% 3.75%	12.50% 83.75% 3.75%	<u>24.97287%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 6</u>							
San Juan 27-4 #1 Well	Sec. 1: W/2	<u>319.91</u>	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>24.97287%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 5</u>							
SF 080669	T-27-N, R-4-W Sec. 18: Lots 1,2, E/2 NW/4	160.49	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>12.52820%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 5</u>							
San Juan 27-4 #4 Well	Sec. 31: E/2	<u>320.00</u>	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>24.97990%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	

SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK AND	PERCENTAGE	PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
Fee	T-27-N, R-4-W Sec. 18: Lots 3, 4, E/2 SW/4	160.63	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50% <u>100.00%</u>	12.50% 85.00% 2.50% <u>100.00%</u>	<u>12.53913%</u>
			TOTAL				
San Juan 27-4 #14-X Well	Sec. 18: W/2	321.12				100.00%	25.06733%
SF 080674	T-27-N, R-4-W Sec. 15: E/2	320.00	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50% <u>100.00%</u>	12.50% 85.00% 2.50% <u>100.00%</u>	<u>24.97990%</u>
			TOTAL				
San Juan 27-4 #3 Well	Sec. 15: E/2	320.00				100.00%	24.97990%

SCHEDULE IV  
 THIRD EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION  
 SAN JUAN 27-4 UNIT AREA

RECAPITULATION

Description of Lands in Participating Area  
Township 27 North, Range 4 West, N.M.P.M.  
Sections 1, 18: W/2  
 Sections 15, 31: E/2

Total Number of Acres in Participating Area:	1281.03
Percent of Basic Royalty Interest Committed:	100.00%
Percent of Working Interest Committed:	100.00%
Percent of O.R.R.I. Committed:	100.00%



*El Paso Natural Gas Company*

*El Paso, Texas*

January 16, 1958

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

Re: San Juan 27-4 Unit  
#14-08-001-1054  
Rio Arriba County, New Mexico  
1958 Drilling Program

Gentlemen:

By letter dated December 31, 1956, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1957. Said Program provided for the drilling of three (3) Pictured Cliffs wells; one (1) Mesaverde well; and one (1) dual Mesaverde-Dakota well. All five (5) wells have been completed or are in the process of being completed upon lands committed to the Unit, and have been admitted or are in the process of being admitted to their respective Participating Areas.\*

As of this date the total number of wells in the San Juan 27-4 Unit is as follows:

Pictured Cliffs	6
Mesaverde	3
Dakota	2
Mesaverde-Dakota	1
Non-Commercial	1 (Mesaverde)*

Pursuant to Section 10 of the San Juan 27-4 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the

\*It has not as yet been determined if the Dakota Formation of the above listed Mesaverde-Dakota well is capable of producing unitized substances in paying quantities. As soon as a determination is made, appropriate notice will be made to all parties concerned.

drilling of the following described wells during the period from January 1, 1958 to December 31, 1958:

<u>Drilling Block</u>	<u>Formation</u>
W/2 Section 4, T-27-N, R-4-W	Mesaverde
E/2 Section 5, T-27-N, R-4-W	Mesaverde
E/2 Section 6, T-27-N, R-4-W	Mesaverde
All Section 17, T-27-N, R-4-W	Dual, Mesaverde-Dakota
W/2 Section 29, T-27-N, R-4-W	Dual, Pictured Cliffs-Mesaverde

In addition to the above wells, El Paso Natural Gas Company, as Unit Operator, also plans to drill any offset wells required to prevent drainage of unitized substances, and any other wells being necessary or desirable by the Unit Operator and the Working Interest Owners in the affected drilling block.

El Paso Natural Gas Company, as Unit Operator, intends to drill all of the above listed Mesaverde wells to the base of the Mesaverde Formation using rotary tools. Surface casing of 10 3/4" will be set to approximately 150' below the surface and an intermediate string of 7 5/8" will be set through the Pictured Cliffs Formation to a depth of approximately 3200'. A 5 1/2" production string will be set through the Mesaverde Formation, and the casing of the Mesaverde Formation will then be selectively perforated and the Mesaverde Formation will be subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing, and the hole below the intermediate string will be drilled with gas. Due care will be taken to protect all horizons.

El Paso Natural Gas Company, as Unit Operator, intends to drill the above listed Mesaverde-Pictured Cliffs dual well to the base of the Mesaverde Formation using rotary tools. Surface casing of 10 3/4" will be set to approximately 150' below the surface and an intermediate string of 7 5/8" will be set through the Pictured Cliffs Formation to a depth of approximately 3200'. A 5 1/2" production liner will be set from this point through the Mesaverde Formation. The Mesaverde Formation will then be selectively perforated and subjected to a hydraulic fracturing process, after which a bridging plug will be set above the Mesaverde Formation and the Pictured Cliffs Formation will be selectively perforated and subjected to a hydraulic fracturing process. For completion, a production packer will be set between the two formations using 2" tubing to produce the Mesaverde. A string of 1 1/4" tubing will be run through which the Pictured Cliffs Formation will be produced. Mud will be used in setting the intermediate string of casing and the hole below the intermediate string will be drilled with gas. Due care will be taken to protect all horizons.

El Paso Natural Gas Company, as Unit Operator, intends to drill the above listed Mesaverde-Dakota dual well to the base of the Dakota Formation using rotary tools. Surface casing of 13 3/8" will be set to the depth of approximately 150' and an intermediate string of 9 5/8" will be run through the Pictured Cliffs Formation to a depth of approximately 3200', and then Operator will run a production string of either 5 1/2" or 7" casing 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. A bridging plug will be used to separate the Mesaverde from the Dakota Formation and the Mesaverde Formation will be selectively perforated and subjected to a hydraulic frac-

turing process. A production packer will be run on 2" tubing with the Dakota producing through the tubing and the Mesaverde producing through the casing. Due care will be taken to protect all horizons.

All of the Working Interest Owners have been notified and this Drilling Program reflects, insofar as possible, their requests for additional drilling.

If this Drilling Program is acceptable, please signify your approval, as required under Section 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 list.

Very truly yours,

EL PASO NATURAL GAS COMPANY

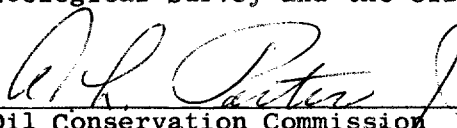
By 

Sam Smith  
Manager  
Land Department

SS:JNN:pc

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Supervisor, United States Geological Survey  
Subject to like approval by the appropriate  
State officials.

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

APPROVED:  \_\_\_\_\_ DATE: 3-28-58  
Oil Conservation Commission  
Subject to like approval by the United States  
Geological Survey and the Commissioner of Public Lands

The foregoing approvals are for the 1958 Drilling Program for the San Juan 27-4 Unit,  
Rio Arriba County, New Mexico.

San Juan 27-4 Unit  
Working Interest Owners

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
Post Office Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey (2)  
Mr. M. A. Ehrlich (1)  
Pacific Northwest Pipeline Corporation  
Post Office Box 1526  
Salt Lake City, Utah

Mr. W. M. Mueller  
Champlin Oil and Refining Company  
Post Office Box 9365  
Fort Worth, Texas

Mr. R. L. Walker  
Champlin Oil and Refining Company  
333 Logan Street  
Denver, Colorado

El Paso Natural Gas Company

El Paso, Texas

November 4, 1957

RECEIVED  
NOV 11 1957

Mr. John A. Anderson  
Regional Oil & 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

Re: San Juan 27-4 Unit #14-08-001-1054  
NOTICE OF COMPLETION OF ADDITIONAL WELLS  
Pictured Cliffs Formation

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 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 on acreage committed to the Unit.

These wells are as follows:

1. The San Juan 27-4 Unit #10 Well is located 1840' from the North line and 1500' from the East line of Section 32, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on August 30, 1957, and completed on September 21, 1957, at a total depth of 3756'. The Pictured Cliffs Formation between 3671' - 3689', 3711' - 3738' was treated with a sand-water fracturing process. After being shut-in for gauge for eleven (11) days the well was tested on October 2, 1957, and following a three (3) hour blow-down period gauged 1639 MCFGPD through a 3/4" choke, and 1757 MCFGPD by the calculated absolute open flow method with an SIPC of 1045# and an SIPT of 871#. The committed drilling block upon which this well is located is described as the E/2 of Section 32, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres. The determination that this well is capable of producing unitized substances in paying quantities was made on October 2, 1957.

San Juan 27-4 Unit  
Working Interest Owners

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. H. K. Greenleaf  
Champlin Oil & Refining Company  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
Post Office Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey (4)  
Mr. M. A. Ehrlich (1)  
Pacific Northwest Pipeline Corporation  
Post Office Box 1526  
Salt Lake City, Utah

C 100 557

# El Paso Natural Gas Company

El Paso, Texas

November 4, 1957

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office Box 6721  
Roswell, New Mexico

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

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
FIRST EXPANDED PARTICIPATING AREA,  
Pictured Cliffs Formation,  
Effective November 1, 1957

Gentlemen:

Pursuant to Section 11 (a) of the San Juan 27-4 Unit Agreement #14-08-001-1054 approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date indicated 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 this unit. The Participating Area for the Pictured Cliffs Formation is expanded accordingly to include this well described as follows:

1. The San Juan 27-4 Unit #12 Well is located 990' from the South line and 990' from the West line of Section 30, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on September 9, 1957 and completed on September 25, 1957 at a total depth of 3660'. The Pictured Cliffs Formation between 3571' - 3594', 3611' - 3642' was treated with a sand-water fracturing process. After being shut-in for gauge for seven (7) days, the well was tested on October 2, 1957, and following a three hour blow-down period gauged 2389 MCFGPD through a 3/4" choke, and 2737 MCFGPD by the calculated absolute open flow method with an SIPC of 1052# and an SIPT of 914#. The committed drilling block upon which this well is located is described as the W/2 of Section 30, Township 27 North, Range 4 West, N.M.P.M., and consists of 321.56 acres. The determination that this well is capable of producing unitized substances in paying quantities was made on October 2, 1957.



San Juan 27-4 Unit  
Working Interest Owners

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. H. K. Greenleaf  
Champlin Oil & Refining Company  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
Post Office Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey (4)  
Mr. M. A. Ehrlich (1)  
Pacific Northwest Pipeline Corporation  
Post Office Box 1526  
Salt Lake City, Utah

SCHEDULE II  
FIRST EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK AND	PERCENTAGE	PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
<u>Tract 6</u>							
SF 080670	T-27-N, R-4-W Sec. 31: W/2	323.16	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>16.78998%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 6</u>							
SF 080670	T-27-N, R-4-W Sec. 31: E/2	320.00	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>16.62579%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 6</u>							
SF 080670	T-27-N, R-4-W Sec. 32: W/2	320.00	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>16.62579%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 6</u>							
San Juan 27-4 #11 Well	Section 31: E/2	320.00					<u>16.62579%</u>
San Juan 27-4 #8 Well	Sec. 32: W/2	320.00					<u>16.62579%</u>

Effective November 1, 1957

SCHEDULE II  
FIRST EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK AND	PERCENTAGE	PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
<u>Tract 6</u>							
SF 080670	T-27-N, R-4-W Sec. 32: E/2	320.00	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>16.62579%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 6</u>							
San Juan 27-4 #10 Well	Sec. 32: E/2	<u>320.00</u>				<u>100.00%</u>	<u>16.62579%</u>
<u>Tract 6</u>							
SF 080670	T-27-N, R-4-W Sec. 30: Lots 1,2, 3,4, E/2 W/2	321.56	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>16.70686%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 12</u>							
San Juan 27-4 #12 Well	Sec. 30: W/2	<u>321.56</u>				<u>100.00%</u>	<u>16.70686%</u>
<u>Tract 12</u>							
SF 080675	T-27-N, R-4-W Sec. 33: W/2	320.00	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;		12.50% 85.00% 2.50%	12.50% 85.00% 2.50%	<u>16.62579%</u>
	TOTAL				<u>100.00%</u>	<u>100.00%</u>	
<u>Tract 12</u>							
San Juan 27-4 #9 Well	Sec. 33: W/2	<u>320.00</u>				<u>100.00%</u>	<u>16.62579%</u>

Effective November 1, 1957

SCHEDULE II  
FIRST EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
SAN JUAN 27-4 UNIT AREA

RECAPITULATION

Description of Lands in Participating Area	
<u>Township 27 North, Range 4 West, N.M.P.M.</u>	
Sections 30,33: W/2	
Sections 31,32: All	
 Total Number of Acres in Participating Area:	 1,924.72
Percent of Basic Royalty Committed:	100.00%
Percent of Working Interest Committed:	100.00%
Percent of O.R.R.I. Committed:	100.00%

# El Paso Natural Gas Company

*El Paso, Texas*

October 24, 1957

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office Box 6721  
Roswell, New Mexico

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

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

Re: San Juan 27-4 Unit #14-08-001-1054  
Rio Arriba County, New Mexico  
FIRST EXPANDED PARTICIPATING AREA  
Dakota Formation  
Effective September 1, 1956

Gentlemen:

Pursuant to Section 11 (a) of the San Juan 27-4 Unit Agreement #14-08-001-1054, approved September 3, 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 on acreage committed to this Unit. The Participating Area for the Dakota Formation is expanded accordingly to include this well as follows:

The San Juan 27-4 Unit #7 Well is located 990' from the South line and 1700' from the West line of Section 9, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on May 13, 1956 and completed on June 26, 1956 at a total depth of 8075'. The Dakota Formation between 7680' - 7696', 7720' - 7750', 7870' - 7884', 7898' - 7912', 7946' - 7990', 8014' - 8026' was treated with a sand-water fracturing process. After being shut in for gauge for sixteen (16) days, the well was tested on August 2, 1956, and following a three hour blow down period gauged 1961 MCFGPD through a 3/4" choke, and 2131 MCFGPD by the calculated absolute open flow method with an SIPC of 1824# and an SIPT of 1234#. The committed drilling block upon which this well is located is described as All of Section 9, Township 27 North, Range 4 West, N.M.P.M. and consists of 640.00 acres. The determination that this well is capable of producing unitized substances in paying quantities was made on August 2, 1956.

Attached as Exhibit "A" is a Schedule showing the First Expanded Participating Area for the Dakota Formation of the San Juan 27-4 Unit Area. Said Exhibit "A" describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each unitized tract.

Inasmuch as Section 11(b) of the San Juan 27-4 Unit Agreement provides that, "The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, unless a more appropriate effective date is specified in the schedule," this First Expanded Dakota Participating Area will be effective as of September 1, 1956.

El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of this selection of lands for the First Expanded Participating Area for the Dakota Formation, to be effective as of September 1, 1956. If this Expansion meets with your approval please indicate such approval in the space provided on the attached sheet.

Copies of this letter and Exhibit "A" are being sent to the working interest owners listed on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY


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

TWB:JNN:pc

cc: Attached sheet

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Supervisor, United States Geological Survey  
Subject to like approval by the appropriate State officials.

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

APPROVED:  \_\_\_\_\_ DATE: 4-28-58  
Oil Conservation Commission  
Subject to like approval by the United States Geological Survey and the  
Commissioner of Public Lands.

The foregoing approvals are for the First Expanded Participating Area for  
the Dakota Formation of the San Juan 27-4 Unit, Rio Arriba County, New Mexico.

# El Paso Natural Gas Company

El Paso, Texas

April 15, 1957

Mr. John A. Anderson  
Regional Oil & 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

Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
APPROVAL OF INITIAL PARTICIPATING AREA  
Pictured Cliffs Formation

Gentlemen:

Please be advised that the captioned participating area was approved by the proper Governmental Bodies as set out below:

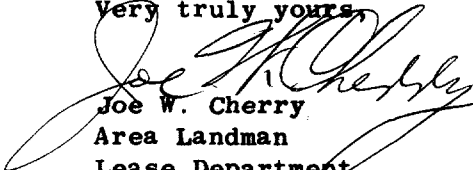
Acting Director, United States Geological Survey:  
Approved April 2, 1957

Commissioner of Public Lands of the State of New Mexico:  
Approved October 31, 1956

Oil Conservation Commission of the State of New Mexico:  
Approved February 28, 1957

Copies of this letter are being sent to the Working Interests as shown on the attached list.

Very truly yours,

  
Joe W. Cherry  
Area Landman  
Lease Department

JWC:JNN:cr  
cc: Attached List



# El Paso Natural Gas Company

El Paso, Texas

March 4, 1957

Mr. John A. Anderson  
Regional Oil & 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

Re: SF 079527-A  
San Juan 27-4 Unit  
Rio Arriba County, New Mexico

Gentlemen:

Please be advised that under Assignment of Oil and Gas Lease dated December 27, 1956, Pacific Northwest Pipeline Corporation assigned to the Chicago Corporation, now Champlin Oil and Refining Company, all of Pacific's right, title and interest in the captioned lease, said lease covering the following described lands:

Township 27 North, Range 4 West, N.M.P.M.

Section 25: All

Section 35: All

Rio Arriba County, New Mexico

This Assignment is made pursuant to the terms of a certain Operating and Development Agreement and Grant of All Overriding Royalty Interest dated February 22, 1955, between the aforementioned companies.

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: 

Joe W. Cherry

Area Landman

Lease Department

JWC:JNN:cr

cc: Attached List

554

# El Paso Natural Gas Company

El Paso, Texas

March 1, 1957

554

United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

600

Re: San Juan 27-4 Unit  
#14-08-001-1054  
Rio Arriba County, New Mexico  
NOTICE OF APPROVAL OF  
1957 DRILLING PROGRAM

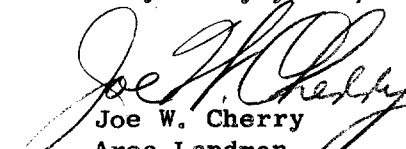
Gentlemen:

This is to advise that the 1957 Drilling Program for the captioned unit was approved by the Regulatory Bodies as follows:

- (1) Acting Regional Oil and Gas Supervisor, United States Geological Survey, Approved: January 28, 1957
- (2) Commissioner of Public Lands of the State of New Mexico Approved: January 10, 1957
- (3) Oil Conservation Commission of the State of New Mexico Approved: February 8, 1957

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

Very truly yours,

  
Joe W. Cherry  
Area Landman  
Lease Department

JWC:JNN:nn  
cc: Attached list

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 28, 1957

El Paso Natural Gas Company  
Box 1492  
El Paso, Texas

Attention: Mr. Samuel Smith


Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
Initial Participating Area  
Pictured Cliffs Formation

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Initial Participating Area for the Pictured Cliffs Formation in the above-captioned unit area, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

Five approved copies of the proposed participating area are enclosed herewith.

Very truly yours,

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

ALP/DSN/ir

bcc: USGS - Roswell  
Commissioner of Public Lands - Santa Fe

C  
O  
P  
Y

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 8, 1957

El Paso Natural Gas Company  
El Paso, Texas

Attention: Mr. R. L. Hamblin

Re: San Juan 27-4 Unit  
Rio Arriba County, N.M.  
1957 Drilling Program

Gentlemen:

This is to advise that the 1957 Drilling Program for the subject unit area, dated December 31, 1956, has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

You are reminded that approval of the Drilling Program does not constitute approval of the proposed dual completion, and that approval for said dual must be obtained in the prescribed manner.

One copy of the approved program is returned herewith.

Very truly yours,

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

ALP:DSN:ir

Enclosure



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

MAIN OFFICE  
1957 JAN 15 PM 2:11

P. O. Box 6721  
Roswell, New Mexico

January 28, 1957

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

Attention: Mr. R. L. Hamblin

Gentlemen:

Your plan of development dated December 31, 1956, for the San Juan 27-4 Unit Area, New Mexico, for the calendar year 1957, has been approved on this date subject to like approval by the appropriate State of New Mexico officials.

One approved copy of the plan is enclosed.

Very truly yours,

(Orig. Sgd.) R. E. CANFIELD

R. E. CANFIELD  
Acting Regional Oil and Gas Supervisor

Enclosure

Copy to: Wash. (w/copy of plan)  
Farmington(w/copy of plan)  
✓ Oil Cons. Comm., Santa Fe (letter only)

554

January 10, 1957

*file*

In reply refer to:  
Unit Division

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

Re: San Juan 27-4 Unit -  
1957 Drilling Program,  
Rio Arriba County, N. Mex.

Attention: Mr. R. L. Hamblin

Gentlemen:

We are enclosing one copy of the above designated Drilling Program, which was approved by the Commissioner of Public Lands, Mr. M. E. Morgan, on January 10, 1957, subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Commission.

Very truly yours,

MURRAY E. MORGAN  
Commissioner of Public Lands

MEM:MMR/m  
enc: 1

cc: OCC-Santa Fe  
USGS-Roswell

# El Paso Natural Gas Company

El Paso, Texas

December 31, 1956

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

*OK*  
*over*

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

Re: San Juan 27-4 Unit  
#14-08-001-1054  
Rio Arriba County, New Mexico  
1957 Drilling Program

Gentlemen:

By letter dated December 19, 1955, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1956. The following wells on this Drilling Program were completed on lands committed to this Unit:

<u>Well Name</u>	<u>Drilling Block</u>	<u>Initial Potential</u>	<u>Tied-In</u>	<u>Formation</u>
San Juan 27-4 #7	W/2 Section 9: T-27-N, R-4-W	1961 Choke Volume 2131 AOF	8-14-56	Dakota
San Juan 27-4 #6	W/2 Section 31: T-27-N, R-4-W	4957 Choke Volume 9488 AOF		Pictured Cliffs
San Juan 27-4 #8	W/2 Section 32: T-27-N, R-4-W	1757 Choke Volume 1787 AOF		Pictured Cliffs
San Juan 27-4 #9	W/2 Section 33: T-27-N, R-4-W	2539 Choke Volume 2621 AOF		Pictured Cliffs

Three (3) wells have been drilled to the Pictured Cliffs Formation and one (1) well has been drilled to the Dakota Formation upon lands committed to the Unit. Of the three (3) Pictured Cliffs wells, three (3) have been determined to be capable of producing unitized substances in paying quantities and have been admitted to the Pictured Cliffs Participating Area.

The above listed Dakota well is now being produced to determine whether the well will be considered commercial or not.

For the period from 7:00 o'clock A.M., on May 1, 1956, to 7:00 o'clock A.M., on November 30, 1956, the production from the Pictured Cliffs formation of the San Juan 27-4 Unit was 18,230 M.C.F. of gas having a value of \$2,188.05.

For the period from 7:00 o'clock A.M., on July 1, 1956, to 7:00 o'clock A.M., on November 30, 1956, the production from the Dakota formation of the San Juan 27-4 Unit was 15,518 M.C.F. of gas having a value of \$6,137.64.

El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of its Drilling Program for the calendar year 1957, consisting of five (5) wells. Three (3) wells are to be drilled to test the Pictured Cliffs Formation; one (1) well is to be drilled to test the Mesaverde Formation; and one (1) well is to be dually completed to test both the Dakota and the Mesaverde formations; such Drilling Program to constitute all of our drilling obligations for such year. These proposed drilling blocks are listed below as follows:

W/2 Section 30: T-27-N, R-4-W	Pictured Cliffs
* E/2 Section 31: T-27-N, R-4-W	Pictured Cliffs
* E/2 Section 32: T-27-N, R-4-W	Pictured Cliffs
E/2 Section 20: T-27-N, R-4-W	Mesaverde
W/2 Section 18: T-27-N, R-4-W	Dual, Dakota & Mesaverde

El Paso Natural Gas Company, as Unit Operator, intends to drill all of the above listed 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 5-1/2" 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.

El Paso Natural Gas Company, as Unit Operator, intends to drill the above listed Mesaverde well to the base of the Mesaverde formation using rotary tools. Surface casing of 10-3/4" will be set to approximately 150' below the surface and an intermediate string of 7-5/8" will be set through the Pictured Cliffs formation to a depth of approximately 3200'. A 5-1/2" production string will be set through the Mesaverde formation, and the casing of the Mesaverde formation will then be selectively perforated and the Mesaverde formation will be subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing, and the hole below the intermediate string will be drilled with gas. Due care will be taken to protect all horizons.

El Paso Natural Gas Company, as Unit Operator, intends to drill the above mentioned Dakota - Mesaverde well to the base of the Dakota formation using rotary tools. Surface casing of 13-3/8" will be set to the depth of approximately 150' and an intermediate string of 9-5/8" will be run through the Pictured Cliffs formation to a depth of approximately 3200', and then Operator will run a production string of either 5-1/2" or 7" casing 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. A bridging plug will be used to separate the Mesaverde from the Dakota formation and the Mesaverde formation will be selectively perforated and subjected to a hydraulic fracturing process. A production packer will be run on 2" tubing with the Dakota producing

\* Intervening Drilling Block - Must be drilled in 1957



through the tubing and the Mesaverde producing through the casing. Due care will be taken to protect all horizons

El Paso Natural Gas Company, as Unit Operator, will protect the Unit from drainage and will comply with any requirements set out by the United States Geological Survey for additional drilling.

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

If this Drilling Program is acceptable, please signify your approval of this Drilling Program, 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.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



R. L. Hamblin

Manager

Lease Department

RLH:JNN:cr

Attached Sheet

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Supervisor, United States Geological Survey

Subject to like approval by the appropriate State officials.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Commissioner of Public Lands

Subject to like approval by the U.S.G.S. and Oil Conservation Commission.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
Oil Conservation Commission

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands.

The foregoing approvals are for the 1957 Drilling Program for the  
\_\_\_\_\_ Unit, New Mexico.



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
P. O. Box 6721  
Roswell, New Mexico

December 19, 1956

*file*

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

Attention: Mr. Samuel Smith

Gentlemen:

Receipt is acknowledged of your letter of December 13 transmitting four copies of Schedule IX Eighth Expanded Participating Area for the Mesaverde Formation, (San Juan 28-5) Unit No. 14-08-001-949, effective October 1, 1956.

Please submit letter size plats to accompany Schedule IX showing by distinctive color or other clear identification the tracts being added by the eighth expansion as well as those in the existing participating area. These plats should accompany all notices of expansion of participating areas.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

Copy to: Commissioner of Public Lands  
Oil Conservation Commission

554

OFFICE OCC

MI 0125

October 31, 1956

In reply refer to:  
Unit Division

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

Re: San Juan 27-4 Unit  
Notice of Discovery,  
Initial Participating Area,  
Pictured Cliffs Formation

Attention: Mr. Joe W. Cherry  
Area Landman

Gentlemen:

We are enclosing six copies of the Initial Participating Area for the Pictured Cliffs Formation, which was approved by the Commissioner of Public Lands October 31, 1956. This approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Commission.

Very truly yours,

E. S. WALKER  
Commissioner of Public Lands

ESW:MMR/m  
enc: 6

cc: USGS-Roswell  
OCC-Santa Fe

# El Paso Natural Gas Company

El Paso, Texas

October 22, 1956

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

*File*

Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
**NOTICE OF DISCOVERY**  
Initial Participating Area  
Pictured Cliffs Formation

Gentlemen:

In accordance with Section 11 (a) of the San Juan 27-4 Unit Agreement, approved September 3, 1953, El Paso Natural Gas Company as Unit Operator has determined, subject to the approval of the Director, Commissioner and Commission, that the first three wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit, and that the Initial Pictured Cliffs Participating Area should be established, and that the effective date for the Initial Participating Area should be September 4, 1956. The Participating Area for these wells is: the W/2 of Section 31; the W/2 of Section 32; the W/2 of Section 33, all in Township 27 North, Range 4 West, Rio Arriba County, New Mexico.

These wells are as follows:

1. The San Juan 27-4 Unit #6 Well is located 863' from the South line and 970' from the West line of Section 31, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on August 8, 1956, and completed on August 31, 1956, at a total depth of 4249'. The Pictured Cliffs Formation between 4130' and 4164' was treated with a sand-water fracturing process. After being shut-in for gauge for seven days, the well was tested on September 4, 1956, and following a three hour blow-down period gauged 4957 MCFGPD

by the choke volume method and 9488 MCFGPD by the calculated absolute open flow method, with an SIPC of 1026# and an SIPT of 1026#. The committed drilling block upon which this well is located is described as the W/2 of Section 31, Township 27 North, Range 4 West, N.M.P.M., and consists of 323.16 acres.

2. The San Juan 27-4 Unit #8 Well is located 947' from the South line and 1800' from the West line of Section 32, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on July 30, 1956, and completed on August 28, 1956, at a total depth of 4007'. The Pictured Cliffs Formation between 3924' and 3956' was treated with a sand-water fracturing process. After being shut-in for gauge for seven days, the well was tested on September 4, 1956, and following a three hour blow-down period gauged 1757 MCFGPD by the choke volume method and 1787 MCFGPD by the calculated absolute open flow method with an SIPC of 1011# and an SIPT of 1011#. The committed drilling block upon which this well is located is described as the W/2 of Section 32, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres.
3. The San Juan 27-4 Unit #9 Well is located 990' from the South line and 1840' from the West line of Section 33, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on July 20, 1956, and completed on August 24, 1956, at a total depth of 4095'. The Pictured Cliffs Formation between 4000' and 4014', 4040' and 4068' was treated with a sand-water fracturing process. After being shut-in for gauge for eleven days, the well was tested on September 4, 1956, and following a three hour blow-down period gauged 2539 MCFGPD by the choke volume method and 2621 MCFGPD by the calculated absolute open flow method, with an SIPC of 1011# and an SIPT of 1012#. The committed drilling block upon which this well is located is described as the W/2 of Section 33, Township 27 North, Range 4 West, N.M.P.M., and consists of 320.00 acres.

The completion of the San Juan 27-4 Unit #6, #8, and #9 Wells creates two intervening drilling blocks. These intervening drilling blocks are described as the E/2 of Section 31 and the E/2 of Section 32, Township 27 North, Range 4 West, N.M.P.M., and consist of 320.00 acres each.

Under the terms of the San Juan 27-4 Unit Agreement, the above described intervening drilling blocks are admitted to the Pictured Cliffs Participating Area as of September 4, 1956, the same time of admission as of the San Juan 27-4 Unit #6, #8, and #9 Wells. Wells must be commenced on these intervening drilling blocks one year from the date of admission of the above described wells.

Director  
Commissioner  
Commission

Page 3

October 22, 1956

The royalty interest, working interest, and the overriding royalty interest are set out on the Exhibit "A" attached hereto. These wells have, as yet, not been tied in to the gathering system of El Paso Natural Gas Company.

A copy of this letter is being sent to the working interest owners as shown on the attached list.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By   
Sam Smith  
Assistant Manager  
Lease Department

SS:JWC:pb

cc: Attached List

APPROVED: \_\_\_\_\_  
Director, United States Geological Survey

Date: \_\_\_\_\_

Subject to like approval by the appropriate State officials.

APPROVED:   
Commissioner of Public Lands

Date: \_\_\_\_\_

Subject to like approval by the U.S.G.S. and Oil Conservation Commission.

APPROVED:   
Oil Conservation Commission

Date: 2-28-57

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands.

The foregoing approvals are for the Initial Participating Area for the Pictured Cliffs Formation, effective September 4, 1956, under the San Juan 27-4 Unit, New Mexico.

San Juan 27-4 Unit  
Working Interest Owners

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
Post Office Box 2011  
Santa Fe, New Mexico

Mr. R. N. Richey (4)  
Mr. M. A. Ehrlich (1)  
Pacific Northwest Pipeline Corporation  
Post Office Box 1526  
Salt Lake City, Utah



SAN JUAN 27-4 UNIT EXHIBIT "A"  
INITIAL PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
T-27-N, R-4-W, RIO ARriba COUNTY, NEW MEXICO

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK AND	PERCENTAGE	PERCENTAGE COMMITTED
<u>Tract 6</u>					
SF 080670	T-27-N, R-4-W Sec. 31: W/2	323.16	Royalty; - U.S.A. Working Interest; El Paso Natural Gas Co.; ORRI;	12.500000%	12.500000%
			T. N. Fidel	.616667%	.616667%
			F. P. Hamrah	.150000%	.150000%
			E. L. Meadows and		
			J. C. Meadows	.075000%	.075000%
			Albert Ochsner	.075000%	.075000%
			Riasan Co.	1.583333%	1.583333%
				100.000000%	100.000000%
<u>Tract 6</u>					
San Juan 27-4 #6 Well	Section 31: W/2	323.16	Royalty; - U.S.A. Working Interest; El Paso Natural Gas Co.; ORRI;	12.500000%	12.500000%
			T. N. Fidel	.616667%	.616667%
			F. P. Hamrah	.150000%	.150000%
			E. L. Meadows and		
			J. C. Meadows	.075000%	.075000%
			Albert Ochsner	.075000%	.075000%
			Riasan Co.	1.583333%	1.583333%
				100.000000%	100.000000%
<u>Tract 6</u>					
SF 080670	T-27-N, R-4-W Sec. 31: E/2	320.00	Royalty; - U.S.A. Working Interest; El Paso Natural Gas Co.; ORRI;	12.500000%	12.500000%
			T. N. Fidel	.616667%	.616667%
			F. P. Hamrah	.150000%	.150000%
			E. L. Meadows and		
			J. C. Meadows	.075000%	.075000%
			Albert Ochsner	.075000%	.075000%
			Riasan Co.	1.583333%	1.583333%
				100.000000%	100.000000%
No Well	Section 31: E/2	320.00			

SAN JUAN 27-4 UNIT EXHIBIT "A"  
INITIAL PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
T-27-N, R-4-W, RIO ARriba COUNTY, NEW MEXICO

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP AND	DRILLING BLOCK PERCENTAGE	PERCENTAGE COMMITTED
<u>Tract 6</u>					
SF 080670	T-27-N, R-4-W Sec. 32: W/2	320.00	Royalty; - U.S.A. Working Interest; El Paso Natural Gas Co.; ORRI; T. N. Fidel F. P. Hamrah E. L. Meadows and J. C. Meadows Albert Ochsner Riasan Co.	12.500000%  85.000000%  .616667% .150000%  .075000% .075000% 1.583333%	12.500000%  85.000000%  .616667% .150000%  .075000% .075000% 1.583333%
San Juan 27-4 #8 Well	Sec. 32: W/2	320.00		100.000000%	100.000000%
<u>Tract 6</u>					
SF 080670	T-27-N, R-4-W Sec. 32: E/2	320.00	Royalty; - U.S.A. Working Interest; El Paso Natural Gas Co.; ORRI; T. N. Fidel F. P. Hamrah E. L. Meadows and J. C. Meadows Albert Ochsner Riasan Co.	12.500000%  85.000000%  .616667% .150000%  .075000% .075000% 1.583333%	12.500000%  85.000000%  .616667% .150000%  .075000% .075000% 1.583333%
No Well	Sec. 32: E/2	320.00		100.000000%	100.000000%

SAN JUAN 27-4 UNIT EXHIBIT "A"  
INITIAL PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
T-27-N, R-4-W, RIO ARriba COUNTY, NEW MEXICO

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK AND		PERCENTAGE COMMITTED
			OWNERSHIP	PERCENTAGE	
SF 080675	<u>T-27-N, R-4-W</u>	320.00			
	Sec. 33: W/2				
	Royalty; - U.S.A.		12.500000%	12.500000%	
	Working Interest:				
	El Paso Natural Gas Co.;		85.000000%	85.000000%	
	ORRI;				
	Mike Abraham, et ux		.616667%	.616667%	
	F. P. Hamrah		.150000%	.150000%	
	E. L. Meadows and				
	J. C. Meadows		.075000%	.075000%	
San Juan 27-4 #9 Well	Albert Ochsner		.075000%	.075000%	
	Riasan Co.		<u>1.583333%</u>	<u>1.583333%</u>	
	Sec. 33: W/2	320.00	100.000000%	100.000000%	

El Paso Natural Gas Company  
OFFICE OCC

1956 APR 15 PM 1:24 El Paso, Texas

April 4, 1956

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

*file*

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
Notice of Approval of the San Juan 27-4  
Initial Participating Area  
Dakota Formation

Gentlemen:

This is to advise that the San Juan 27-4 Unit Initial Participating Area for the Dakota Formation was approved as follows:

1. Director, United States Geological Survey, March 26, 1956.
2. Commissioner of Public Lands of the State of New Mexico, February 10, 1956.
3. Oil Conservation Commission of the State of New Mexico, February 1, 1956.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By James C. Vandiver  
James C. Vandiver  
Area Landman  
Lease Department

JCV:BG:eb

cc: Attached List

In reply refer to:  
Unit Division

February 10, 1956

*file*

El Paso Natural Gas Company  
El Paso, Texas

Re: (San Juan 27-4 Unit,  
Rio Arriba County, N. Mex.  
Initial Participating Area,  
Dakota Formation

Gentlemen:

We are enclosing six copies of  
Initial Participating Area, dated  
December 7, 1955, for the San Juan 27-4  
Unit, which was approved by the Com-  
missioner of Public Lands on February 10,  
1956, subject to like approval by the  
United States Geological Survey and the  
New Mexico Oil Conservation Commission.

Very truly yours,

E. S. WALKER  
Commissioner of Public Lands

MMR/m  
enc: 6

cc: USGS-Roswell  
OCC-Santa Fe

SCHEDULE I  
INITIAL PARTICIPATING AREA FOR THE DAKOTA FORMATION  
SAN JUAN 27-4 UNIT AREA

RECAPITULATION

Description of lands in Participating Area:  
Township 27 North, Range 4 West, N.M.P.M.  
Section 7: All

Total number of acres in Participating Area	641.56
Total number of acres committed to Participating Area	641.56
Total number of acres not committed to Participating Area	000.00
Percentage of Basic Royalty Committed:	100.00%
Percentage of Working Interest Committed:	100.00%
Percentage of O.R.R.I. Committed:	100.00%

Approved \_\_\_\_\_, 1955

Approved \_\_\_\_\_, 1955

Approved FEB 1 - 1956, 1955

Subject to like approval by the appropriate State Officials, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Subject to like approval by the United States Geological Survey and Oil Conservation Commission of the State of New Mexico, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Director - United States Geological Survey

Commissioner of Public Lands of the State of New Mexico

U. B. Macey  
Oil Conservation Commissioner of the State of New Mexico

Effective October 1, 1955

PAGE 2

554  
UNIT OFFICE OCC

RECEIVED FEB 10 1956

In reply refer to:  
Unit Division

February 10, 1956  
*file*

El Paso Natural Gas Company  
El Paso, Texas

Re: (San Juan 27-4 Unit,  
Rio Arriba County, N. Mex.  
Initial Participating Area,  
Dakota Formation

Gentlemen:

We are enclosing six copies of  
Initial Participating Area, dated  
December 7, 1955, for the San Juan 27-4  
Unit, which was approved by the Com-  
missioner of Public Lands on February 10,  
1956, subject to like approval by the  
United States Geological Survey and the  
New Mexico Oil Conservation Commission.

Very truly yours,

E. S. WALKER  
Commissioner of Public Lands

MMR/m  
enc: 6

cc: USGS-Roswell  
OCC-Santa Fe



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

P. O. Box 6721  
Roswell, New Mexico

February 8, 1956

El Paso Natural Gas Company  
P. O. Box 1192  
El Paso, Texas

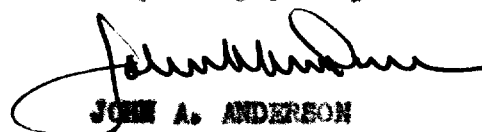
Attention: Mr. R. L. Hamblin

Gentlemen:

Your plan of development dated December 19, 1955, for the San Juan 27-4 Unit, New Mexico, for the calendar year 1956, has been approved on this date subject to like approval by the appropriate State of New Mexico officials.

One approved copy of the plan is enclosed.

Very truly yours,



JOHN A. ANDERSON

Enclosure

Copy to: Wash. (w/copy of plan)  
Farmington (w/copy of plan)  
Comm. of Public Lands, Santa Fe (letter only)  
Oil Comm., Santa Fe (letter only) ✓



OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 1, 1956

f'ic

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

Attention: Mr. R. L. Hamblin

Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
Initial Participating Area  
Dakota Formation

Gentlemen:

This is to advise that the Initial Participating Area for the Dakota Formation for the subject unit has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

Seven approved copies of the request are returned herewith.

Very truly yours,

W. B. Macey  
Secretary-Director

WBM:jh  
cc: U. S. Geological Survey, Roswell  
Commissioner of Public Lands, Santa Fe

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OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

January 30, 1956

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

Attention: Mr. R. L. Hamblin

*file*  
Re: (San Juan 27-4 Unit)  
Rio Arriba County, New Mexico  
1956 Drilling Program

Gentlemen:

This is to advise that the Drilling Program for calendar year 1956 for the San Juan 27-4 Unit Area, dated December 19, 1955 has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

W. B. Macey  
Secretary-Director

WBM:jh

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

C  
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Y

Unit Division

January 17, 1956

*file*

El Paso Natural Gas Company  
El Paso, Texas

Re: (San Juan 27-4) Unit  
Rio Arriba County, N. Mex.  
1956 Drilling Program

Gentlemen:

We are enclosing one copy of the San Juan 27-4 Unit 1956 Drilling Program, which was approved by the Commissioner of Public Lands as of January 17, 1956, subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Commission.

Very truly yours,

E. S. WALKER  
Commissioner of Public Lands

MMR/m  
enc: 1

cc: USGS-Roswell  
OCC-Santa Fe

# El Paso Natural Gas Company

El Paso, Texas

December 19, 1955

PLEASE RETURN TO  
LEASE DEPARTMENT

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit  
No. 14-08-001-1054  
Rio Arriba County, New Mexico  
1956 DRILLING PROGRAM

Gentlemen:

The San Juan 27-4 Unit #5 Well located in the NE/4 of Section 7, Township 27 North, Range 4 West, was spudded on July 16, 1955 and completed on August 11, 1955 at a total depth of 8330'. After being shut-in for gauge for fourteen (14) days, the well was tested on September 14, 1955 and gauged an IP of 4206 MCFGPD. This well was an obligation well to test the Dakota formation and was required to be drilled under Section 9 of the San Juan 27-4 Unit Agreement. We have submitted for your approval an Initial Participating Area for the Dakota formation containing all of Section 7, Township 27 North, Range 4 West, effective October 1, 1955. At the present time this Initial Participating Area for the Dakota formation has not yet been approved.

Since May 4, 1953, the effective date of the San Juan 27-4 Unit Agreement, the following wells have been completed on acreage committed to the Unit:

<u>WELL NAME</u>	<u>DRILLING BLOCK</u>	<u>INITIAL POTENTIAL</u>	<u>TIED-IN</u>
San Juan 27-4 # 1	W/2 Sec. 1, T-27-N, R-4-W	1450 MCF	No
San Juan 27-4 # 2	W/2 Sec. 5, T-27-N, R-4-W	223 MCF	No
San Juan 27-4 # 3	E/2 Sec. 15, T-27-N, R-4-W	600 MCF	No
San Juan 27-4 # 4	E/2 Sec. 31, T-27-N, R-4-W	657 MCF	No
San Juan 27-4 # 5	NE/4 Sec. 7, T-27-N, R-4-W	4206 MCF	No

There have been four (4) wells completed in the Mesaverde Formation. They are as follows:

The San Juan 27-4 Unit # 1 Well located in the W/2 of Section 1,

Township 27 North, Range 4 West was spudded on August 1, 1953 and completed on September 14, 1953 at a total depth of 6353'. After being shut-in for gauge for ten (10) days the well was tested on September 24, 1953 and gauged an IP of 1450 MCFGPD. This well was included in the Initial Participating Area for the Mesaverde formation, effective September 16, 1953.

The San Juan 27-4 Unit # 2 Well located in the W/2 of Section 5, Township 27 North, Range 4 West was spudded on September 18, 1953 and completed on February 11, 1954 at a total depth of 5960'. After being shut-in for gauge for eleven (11) days the well was tested on February 22, 1954 and gauged an IP of 223 MCFGPD. On the basis of the low IP, the well was declared to be non-commercial on March 8, 1954.

The San Juan 27-4 Unit # 3 Well located in the E/2 of Section 15, Township 27 North, Range 4 West was spudded on November 30, 1953 and completed on January 2, 1954 at a total depth of 6119'. After being shut-in for gauge for thirteen (13) days the well was tested on January 15, 1954 and gauged an IP of 600 MCFGPD. This well was included in the Second Expanded Participating Area for the Mesaverde formation, effective February 1, 1954.

The San Juan 27-4 Unit # 4 Well located in the E/2 of Section 31, Township 27 North, Range 4 West was spudded on October 20, 1953 and completed on November 16, 1953 at a total depth of 5960'. After being shut-in for gauge for eight (8) days the well was tested on November 24, 1953 and gauged an IP of 657 MCFGPD. This well was included in the First Expanded Participating Area for the Mesaverde formation, effective December 1, 1953.

El Paso Natural Gas Company's gathering line has not yet been extended to this Unit.

El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of its Drilling Program for the calendar year 1956, consisting of four (4) wells. Three (3) wells are to be drilled to test the Pictured Cliffs formation and one (1) well to be drilled to the Dakota formation. These drilling blocks are as follows:

	<u>DRILLING BLOCK</u>	<u>FORMATION</u>
SW/4	Section 9 T-27-N, R-4-W	Dakota
W/2	Section 31 T-27-N, R-4-W	Pictured Cliffs
W/2	Section 32 T-27-N, R-4-W	Pictured Cliffs
W/2	Section 33 T-27-N, R-4-W	Pictured Cliffs

El Paso Natural Gas Company, as Unit Operator, intends to drill the above mentioned well to the base of the Dakota formation using rotary tools. Surface casing of 13-3/8" will be set to the depth of approximately 150' and an intermediate string of 9-5/8" will be run through the Pictured Cliffs formation to a depth of approximately 3200'; and then Operator will run a production string of either 5-1/2" or 7" casing to the base of the Dakota formation. The casing in the Dakota formation will then be per-

forated and the Dakota formation subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing and the hole below the intermediate string of casing will be drilled in with gas. Due care will be taken to protect all horizons.

El Paso Natural Gas Company, as Unit Operator, intends to drill the Pictured Cliffs wells listed above to the base of the Pictured Cliffs formation using rotary and cable tools. Surface casing of 9-5/8" will be set to approximately 100' from the surface, and then a production string of 5-1/2" casing will be set on top of the Pictured Cliffs formation. Mud will be used in drilling to the top of the Pictured Cliffs formation and the Pictured Cliffs formation will be drilled in with cable tools. The entire Pictured Cliffs formation will be subjected to a hydraulic fracturing process. Due care will be taken to protect all horizons.

El Paso Natural Gas Company, as Unit Operator, will protect the Unit from drainage and will comply with any requirements set out by the United States Geological Survey for additional drilling.

All the working interest owners have been contacted and this drilling program reflects their requests for drilling.

If this Drilling Program is acceptable, please signify your approval of this Drilling Program 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.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By R. L. Hamblin  
R. L. Hamblin  
Manager  
Lease Department

RLH:BG:rb

APPROVED: \_\_\_\_\_  
Director, United States Geological Survey

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

Subject to like approval by the appropriate State officials.

APPROVED: \_\_\_\_\_  
Commissioner of Public Lands

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

Subject to like approval by the U.S.G.S. and Oil Conservation Commission.

APPROVED: W B Macey  
Oil Conservation Commission

DATE: JAN 30 1956

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands.

# El Paso Natural Gas Company

El Paso, Texas

December 8, 1955

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

Re: Request for Approval of Initial  
Participating Area  
Dakota Formation  
San Juan 27-4 Unit Area

Gentlemen:

By letter dated November 21, 1955, El Paso Natural Gas Company submitted to the United States Geological Survey, Commissioner of Public Lands of the State of New Mexico, and the Oil Conservation Commission of the State of New Mexico, a Request for Approval of Initial Participating Area for the Dakota Formation effective October 1, 1955. The United States Geological Survey requested that we revise this Initial Participating Area to contain a 641.56 acre dedication instead of a 640.00 acre dedication as originally set out in the letter.

We are now forwarding herewith eight (8) copies of the revised Request for Approval of Initial Participating Area for the Dakota Formation effective October 1, 1955. If this Initial Participating Area meets with your approval, will you please execute all copies and return seven (7) copies to our office, and in turn, we will forward these copies to the Commissioner of Public Lands for approval.

With kindest regards, we remain

Very truly yours,



T. W. Bittick  
Area Landman  
Lease Department

TWB:BG:eb  
Enclosures



# El Paso Natural Gas Company

El Paso, Texas

December 7, 1955

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

*Return to office*

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
Request for Approval of Initial  
Participating Area, Dakota Formation  
Effective October 1, 1955

Gentlemen:

Pursuant to the provisions of Section 11 (a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Initial Participating Area for the Dakota Formation. The Initial Participating Area contains 641.56 acres. This area is described as follows:

Township 27 North, Range 4 West

<u>Well</u>	<u>Participating Area</u>	<u>Acres</u>
San Juan 27-4 #5	Section 7: All	641.56

The well is located 1190' from the North line and 1065' from the East line of Section 7, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. The well was spudded on July 16, 1955, and completed on August 31, 1955, at a total depth of 8330'. The interval between 8089' and 8330' was treated with a sand-oil fracturing process on August 29, 1955. After being shut-in for gauge for fourteen days, the well was tested on September 14, 1955, and following a three hour blow-down, the well gauged an IP of 4206 MCFGPD with an SIPC of 2549# and an SIPT of 2545#.

Attached hereto is our Schedule I legally describing the proposed Participating Area showing percentage of unitized substances to be allocated to these unitized tracts and also showing the exact breakdown of the percentages as allocated to these tracts according to the various ownerships in said tracts. Also attached is a map, Exhibit "A", showing the location of this well and the outline of the Initial Participating Area.

If this Initial Participating Area meets with your approval, please indicate such approval in the space provided on said Schedule I and return approved copy for our files.

Copies of this letter are being sent to all Working Interest Owners, as indicated on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By R. L. Hamblin  
R. L. Hamblin  
Manager  
Lease Department

RLH:BG:eb

cc: Attached List

Re: San Juan 27-4 Unit

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

SCHEDULE I  
INITIAL PARTICIPATING AREA FOR THE DAKOTA FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK AND		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 080673	<u>T-27-N, R-4-W</u> <u>Sec. 7: All</u>	641.56	<u>Tract 10</u>			
			Royalty;	12.50%	12.50%	<u>100.00%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	85.00%	85.00%	
			ORRI;	2.50%	2.50%	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	

<u>San Juan 27-4</u> <u># 5 Well</u>	<u>Sec. 7: All</u>	<u>641.56</u>	<u>100.00%</u>	<u>100.00%</u>
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**OIL CONSERVATION COMMISSION**

**P. O. BOX 871**

**SANTA FE, NEW MEXICO**

**February 1, 1956**

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

**Attention: Mr. R. L. Hamblin**

**Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
Initial Participating Area  
Dakota Formation**

**Gentlemen:**

**This is to advise that the Initial Participating Area for the Dakota Formation for the subject unit has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.**

**Seven approved copies of the request are returned herewith.**

**Very truly yours,**

**W. B. Macey  
Secretary-Director**

**WBM:jh  
cc: U. S. Geological Survey, Roswell  
Commissioner of Public Lands, Santa Fe**

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Y**

MAIL ROOM 222

RECEIVED 12-11-55

December 7, 1955

*file  
27-4*

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

Re: San Juan 27-4 Unit,  
Rio Arriba County  
Initial Participating  
Area, Dakota Formation

Attention: Mr. R. L. Hamblin

Gentlemen:

This is to advise you that the Commissioner of Public Lands has this date approved the Initial Participating Area for the Dakota Formation for San Juan 27-4 Unit, subject to like approval by the United States Geological Survey and by the New Mexico Oil Conservation Commission. One approved copy of the application is returned herewith.

Very truly yours,

E. S. WALKER  
Commissioner of Public Lands

enci 1  
MMR/m

cc: USGS - Roswell  
OCC - Santa Fe

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

254

September 28, 1955

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El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas  
Mr. J. Hamblin  
Attention: Mr.

Re: San Juan 27-4 Unit  
Rio Arriba County, N. M.  
Initial Participating Area,  
Dakota Formation

Gentlemen: This is to advise that the New Mexico Oil Conservation  
has this date approved the Initial Participating Area for  
formation in the subject unit area, subject to like approval  
by the United States Geological Survey and by the Commissioner of  
the Lands of the State of New Mexico.

One approved copy of the application is returned herewith.

Very truly yours,

W. B. Macey  
Secretary-Director

#BM:jh  
cc: U. S. Geological Survey, Roswell  
Commissioner of Public Lands, Santa Fe

# El Paso Natural Gas Company

El Paso, Texas

November 22, 1955

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

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

*file*

Re: (San Juan 27-4 Unit)  
Tract 14

Gentlemen:

Please find enclosed one (1) copy each of the following  
Ratification and Joinders of the San Juan 27-4 Unit:

1. Ratification and Joinder of Unit Agreement  
executed by E. W. Greene, et ux committing  
their Basic Royalty interest under Tract 14.
2. Ratification and Joinder of Unit Agreement  
dated October 28, 1955, executed by Mr. H. F.  
Steen on behalf of El Paso Natural Gas Company,  
committing its working interest under Tract 14.
3. Ratification and Joinder of Unit Operating  
Agreement dated October 28, 1955 executed by  
Mr. H. F. Steen on behalf of El Paso Natural  
Gas Company, committing its working interest  
under Tract 14.

This tract was previously unleased, and El Paso Natural  
Gas Company has obtained a five year lease from Mr. E. W. Greene  
dated September 7, 1955.

We ask that you process these Ratification and Joinders in  
the usual manner to effectively commit this interest.

Very truly yours,

*T. W. Bittick*

T. W. Bittick  
Area Landman  
Lease Department

TWB:BG:eb  
Enclosures



RATIFICATION AND JOINDER OF UNIT OPERATING AGREEMENT UNDER  
UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE  
San Juan 27-4 Unit

In consideration of the execution of the Unit Operating Agreement under Unit Agreement for the Development and Operation of the said San Juan 27-4 Unit, in form approved by the Secretary of the Interior, the undersigned owners of lands or leases or interests therein presently held or which may arise under existing option agreements or other interests in production covered by said Unit Operating Agreement, each to the extent of his or her particular ownership or interest, as may appear, have consented to the inclusion of said lands within the Unit Area therein defined, and do hereby approve, adopt and ratify the said Unit Operating Agreement in the form and as submitted to the United States Geological Survey in connection with the submission of Unit Agreement for the Development and Operation of the said Unit Area.

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

ADDRESS

SIGNATURE

ATTEST: \_\_\_\_\_

EL PASO NATURAL GAS COMPANY \_\_\_\_\_

*A. L. Marten*

Assistant Secretary

By: *A. F. Steen*

Vice President *R. H. K.*

Date: 10-28-55

Date: \_\_\_\_\_

(Corporate Acknowledgment for New Mexico)

STATE OF TEXAS

COUNTY OF EL PASO

SS.:

On this 28th day of October, 1955, before me appeared H. F. Steen, to me personally known, who, being by me duly sworn, did say that he is the Vice President of EL PASO NATURAL GAS COMPANY and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said H. F. Steen acknowledged said instrument to be the free act and deed of said corporation.

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

My Commission expires:

MARTHA B. IVEY,

Notary Public, in and for El Paso County, Texas

My commission expires June 1, 1957

*Martha B. Ivey*  
Notary Public in and for El Paso County,

State of Texas

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

ADDRESS

812 Grandview Drive, S. E.

Albuquerque, New Mexico

Date: \_\_\_\_\_

Date: \_\_\_\_\_

SIGNATURE

E. W. Greene  
E. W. Greene

Xelpho N. Greene  
Xelpho N. Greene

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

APPROVED AND CONSENTED TO:  
EL PASO NATURAL GAS COMPANY  
H. F. Jones R. L. H.  
Vice President

JOINT OPERATOR

WORKING INTEREST  
OWNER

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF *New Mexico* )  
COUNTY OF *Bernalillo* ) SS.:

On this *21<sup>st</sup>* day of *September*, 195*5*, before me appeared

*E. W. Greene* and *Xelpho N. Greene*  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:  
My Commission Expires Dec. 28, 1958.

*Jeannie R. Brice*  
Notary Public in and for \_\_\_\_\_  
*Bernalillo* County,  
State of *New Mexico*

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27-4 Unit Area located within the County of Rio Arriba, State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said ~~Unit Agreement~~ hereby severally, each ~~to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the~~ Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

ADDRESS

SIGNATURE

ATTEST: \_\_\_\_\_

EL PASO NATURAL GAS COMPANY \_\_\_\_\_

\_\_\_\_\_  
*A. C. Martel*  
Assistant Secretary

BY: *H. F. [Signature]* *RRH*  
Vice President

Date: 10-28-55

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

STATE OF TEXAS )  
COUNTY OF EL PASO ) SS.:

On this 28th day of October, 1955, before me appeared

H. F. Steen, to me personally known, who, being  
by me duly sworn, did say that he is the Vice President of EL PASO NATURAL  
GAS COMPANY and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said H. F. Steen acknowledged said instrument to be his  
the free act and deed of said corporation.

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

My Commission expires:

MARTHA B. IVEY,  
Notary Public, in and for El Paso County, Texas  
My commission expires June 1, 1957

Martha B. Ivey  
Notary Public in and for  
El Paso County,  
State of Texas

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_ and \_\_\_\_\_  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

# El Paso Natural Gas Company

El Paso, Texas

November 21, 1955

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

Re: San Juan 27-4 Unit Area  
Request for Approval of  
Initial Participating  
Area, Dakota Formation

Gentlemen:

By letter dated October 20, 1955, El Paso Natural Gas Company submitted to the United States Geological Survey, Commissioner of Public Lands, and the Oil Conservation Commission, a Request for Approval of the Initial Participating Area for the Dakota formation, effective October 1, 1955. This was approved by the Commissioner of Public Lands on October 25, 1955. However, the U.S.G.S. requests that we revise the Initial Participating Area to contain a 640 acre dedication instead of a 360 acre dedication, as originally set out in the letter.

We are now forwarding herewith a revised Request for Approval of Initial Participating Area for the Dakota formation, effective October 1, 1955, showing the necessary changes.

Very truly yours,



T. W. Bittick  
Area Landman  
Lease Department

TWB:BG:pb  
Enclosures

*return to him*

# El Paso Natural Gas Company

El Paso, Texas

November 21, 1955

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
Request for Approval of Initial  
Participating Area, Dakota Formation  
Effective October 1, 1955

Gentlemen:

Pursuant to the provisions of Section 11 (a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Initial Participating Area for the Dakota Formation. The Initial Participating Area contains 640.00 acres. This area is described as follows:

Township 27 North, Range 4 West

<u>Well</u>	<u>Participating Area</u>	<u>Acres</u>
San Juan 27-4 #5	Section 7: All	640.00

The well is located 1190' from the North line and 1065' from the East line of Section 7, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. The well was spudded on July 16, 1955, and completed on August 31, 1955, at a total depth of 8330'. The interval between 8089' and 8330' was treated with a sand-oil fracturing process on August 29, 1955. After being shut-in for gauge for fourteen days, the well was tested on September 14, 1955, and following a three hour blow-down, the well gauged an IP of 4206 MCFGPD with an SIPC of 2549# and an SIPT of 2545#.

Attached hereto is our Schedule I legally describing the proposed Participating Area showing percentage of unitized substances to be allocated to these unitized tracts and also showing the exact breakdown of the percentages as allocated to these tracts according to the various ownerships in said tracts. Also attached is a map, Exhibit "A", showing the location of this well and the outline of the Initial Participating Area.

If this Initial Participating Area meets with your approval, please indicate such approval in the space provided on said Schedule I and return an approved copy for our files.

Copies of this letter are being sent to all Working Interest Owners, as indicated on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By R L Hamblin  
R. L. Hamblin, Manager  
Lease Department

RLH:BG:eb

cc: Attached List



Re: San Juan 27-4 Unit

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

Pacific Northwest Pipeline Corporation  
720 Simms Building  
Albuquerque, New Mexico  
Attention: Mr. R. N. Richey

SCHEDULE I  
INITIAL PARTICIPATING AREA FOR THE DAKOTA FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK AND PERCENTAGE	PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
SF 080673	T-27-N, R-4-W Sec. 7: All	640.00	Tract 10		
	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;		12.50%	12.50%	<u>100.00%</u>
			85.00%	85.00%	
			<u>2.50%</u>	<u>2.50%</u>	
	TOTAL		<u>100.00%</u>	<u>100.00%</u>	

San Juan 27-4 #5 Well	Sec. 7: All	<u>640.00</u>	<u>100.00%</u>	<u>100.00%</u>
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Effective October 1, 1955

SCHEDULE I  
INITIAL PARTICIPATING AREA FOR THE DAKOTA FORMATION  
SAN JUAN 27-4 UNIT AREA

RECAPITULATION

Description of lands in Participating Area:  
Township 27 North, Range 4 West, N.M.P.M.  
Section 7: All

Total number of acres in Participating Area	640.00
Total number of acres committed to Participating Area	640.00
Total number of acres not committed to Participating Area	000.00
Percentage of Basic Royalty Committed:	100.00%
Percentage of Working Interest Committed:	100.00%
Percentage of O.R.R.I. Committed:	100.00%

Approved \_\_\_\_\_, 1955

Approved \_\_\_\_\_, 1955

Approved 11-28, 1955

Subject to like approval by the appropriate State Officials, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Subject to like approval by the United States Geological Survey and Oil Conservation Commission of the State of New Mexico, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Director - United States Geological Survey

Commissioner of Public Lands of the State of New Mexico

W. G. Mearns  
Oil Conservation Commission of the State of New Mexico

October 25, 1955

# 554 file

El Paso Natural Gas Company  
El Paso, Texas

Re: (San Juan 27-4 Unit)  
(Request for Approval of  
Initial Participating Area  
Effective October 1, 1955)

Gentlemen:

This is to advise that the above designated document has this date been approved by the Commissioner of Public Lands, subject to like approval by the proper Officials, and same is enclosed herewith.

Very truly yours,

E. S. WALKER  
Commissioner of Public Lands

Encl.  
cc: USGS- Roswell  
OCC - Santa Fe  
MRB:m

# El Paso Natural Gas Company

El Paso, Texas

May 11, 1955

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

*file*

Re: San Juan 27-4 Unit  
~~San Juan 27-5 Unit~~  
Ratification and Joinders

Gentlemen:

Attached hereto please find the following:

1. Ratification and Joinder to the San Juan 27-4 Unit Agreement dated April 19, 1955 executed by Mr. H. F. Steen on behalf of El Paso Natural Gas Company committing its interest in tracts 13 and 15.
2. Ratification and Joinder to the San Juan 27-4 Unit Operating Agreement dated April 19, 1955 executed by Mr. H. F. Steen on behalf of El Paso Natural Gas Company committing its interest in tracts 13 and 15.
3. Ratification and Joinder to the San Juan 27-5 Unit Agreement dated April 19, 1955 executed by Mr. H. F. Steen on behalf of El Paso Natural Gas Company committing its interest in tracts 18 and 20.
4. Ratification and Joinder to the San Juan 27-5 Unit Operating Agreement dated April 19, 1955 executed by Mr. H. F. Steen on behalf of El Paso Natural Gas Company committing its interest in tracts 18 and 20.

We ask that you process this in the usual manner in order to effectively commit these interests to the Unit.

With kindest regards, we remain,

Very truly yours,

*T. W. Bittick*  
T. W. Bittick  
Area Landman  
Lease Department

TWB:BG:rb  
Enclosures

RATIFICATION AND JOINDER OF UNIT OPERATING AGREEMENT UNDER  
UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE

---

In consideration of the execution of the Unit Operating Agreement under Unit Agreement for the Development and Operation of the said San Juan  
27-4 Unit, in form approved by the Secretary of the Interior, the undersigned owners of lands or leases or interests therein presently held or which may arise under existing option agreements or other interests in production covered by said Unit Operating Agreement, each to the extent of his or her particular ownership or interest, as may appear, have consented to the inclusion of said lands within the Unit Area therein defined, and do hereby approve, adopt and ratify the said Unit Operating Agreement in the form and as submitted to the United States Geological Survey in connection with the submission of Unit Agreement for the Development and Operation of the said Unit Area.

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

ADDRESS

SIGNATURE

ATTEST:

EL PASO NATURAL GAS COMPANY

*QC Martch*

Assistant Secretary

By: *A. F. Shaw*

Vice President

Date: April 19, 1955

Date: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

)  
) SS.:  
)

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally appeared \_\_\_\_\_ to me known to be the person \_\_\_\_\_ described in and who executed the foregoing instrument, and acknowledged that \_\_\_\_\_ executed the same as \_\_\_\_\_ free act and deed.

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

My Commission expires: \_\_\_\_\_

Notary Public in and for \_\_\_\_\_  
County, State of \_\_\_\_\_

EL PASO NATURAL GAS COMPANY

By: *A. F. Shaw*  
Vice President

UNIT OPERATOR

STATE OF TEXAS                    I  
  I  
COUNTY OF EL PASO                I

On this 19th day of April, 1955, before me appeared H. F. Steen, to me personally known, who, being by me duly sworn, did say that he is the Vice President of EL PASO NATURAL GAS COMPANY, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors and said H. F. Steen acknowledged said instrument to be the free act and deed of said corporation.

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

My commission expires:  
\_\_\_\_\_

Helen Adams  
Notary Public in and for El Paso  
County, State of Texas.

Helen Adams  
Notary Public, in and for El Paso County, Texas  
My commission expires June 1, 1955

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27-4 Unit Area located within the County of Rio Arriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

ADDRESS

SIGNATURE

ATTEST:

EL PASO NATURAL GAS COMPANY

By:

Vice President

Assistant Secretary

Date: April 19, 1955

Date:

APPROVED AND CONSENTED TO:  
EL PASO NATURAL GAS COMPANY  
By A. F. Stearns  
Vice President  
UNIT OPERATOR



STATE OF Texas }  
COUNTY OF El Paso } SS.:

On this 19th day of April, 1955, before me appeared

H. F. Steen, to me personally known, who, being  
by me duly sworn, did say that he is the President of  
EL PASO NATURAL GAS COMPANY and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said H. F. Steen acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

Helen Adams  
Notary Public in and for El Paso  
County,  
State of Texas

Helen Adams  
Notary Public, in and for El Paso County, Texas  
My commission expires June 1, 1955

STATE OF }  
COUNTY OF } SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_ and \_\_\_\_\_  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF }  
COUNTY OF } SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

# El Paso Natural Gas Company

El Paso, Texas

November 21, 1955

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

Re: San Juan 27-4 Unit Area  
Request for Approval of  
Initial Participating  
Area, Dakota Formation

Gentlemen:

By letter dated October 20, 1955, El Paso Natural Gas Company submitted to the United States Geological Survey, Commissioner of Public Lands, and the Oil Conservation Commission, a Request for Approval of the Initial Participating Area for the Dakota formation, effective October 1, 1955. This was approved by the Commissioner of Public Lands on October 25, 1955. However, the U.S.G.S. requests that we revise the Initial Participating Area to contain a 640 acre dedication instead of a 360 acre dedication, as originally set out in the letter.

We are now forwarding herewith a revised Request for Approval of Initial Participating Area for the Dakota formation, effective October 1, 1955, showing the necessary changes.

Very truly yours,



T. W. Bittick  
Area Landman  
Lease Department

TWB:BG:pb  
Enclosures

*return to him*

# El Paso Natural Gas Company

El Paso, Texas

November 21, 1955

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit, #14-08-001-1054  
Rio Arriba County, New Mexico  
Request for Approval of Initial  
Participating Area, Dakota Formation  
Effective October 1, 1955

Gentlemen:

Pursuant to the provisions of Section 11 (a) of the San Juan 27-4 Unit Agreement, #14-08-001-1054, approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Initial Participating Area for the Dakota Formation. The Initial Participating Area contains 640.00 acres. This area is described as follows:

Township 27 North, Range 4 West

<u>Well</u>	<u>Participating Area</u>	<u>Acres</u>
San Juan 27-4 #5	Section 7: All	640.00

The well is located 1190' from the North line and 1065' from the East line of Section 7, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. The well was spudded on July 16, 1955, and completed on August 31, 1955, at a total depth of 8330'. The interval between 8089' and 8330' was treated with a sand-oil fracturing process on August 29, 1955. After being shut-in for gauge for fourteen days, the well was tested on September 14, 1955, and following a three hour blow-down, the well gauged an IP of 4206 MCFGPD with an SIPC of 2549# and an SIPT of 2545#.

Attached hereto is our Schedule I legally describing the proposed Participating Area showing percentage of unitized substances to be allocated to these unitized tracts and also showing the exact breakdown of the percentages as allocated to these tracts according to the various ownerships in said tracts. Also attached is a map, Exhibit "A", showing the location of this well and the outline of the Initial Participating Area.

If this Initial Participating Area meets with your approval, please indicate such approval in the space provided on said Schedule I and return an approved copy for our files.

Copies of this letter are being sent to all Working Interest Owners, as indicated on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By R L Hamblin  
R. L. Hamblin, Manager  
Lease Department

RLH:BG:eb

cc: Attached List

Re: San Juan 27-4 Unit

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. William P. Barnes  
General American Oil Company of Texas  
Meadows Building  
Dallas 6, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas 1, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

Pacific Northwest Pipeline Corporation  
720 Simms Building  
Albuquerque, New Mexico  
Attention: Mr. R. N. Richey

SCHEDULE I  
INITIAL PARTICIPATING AREA FOR THE DAKOTA FORMATION  
SAN JUAN 27-4 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK AND PERCENTAGE	PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
SF 080673	T-27-N, R-4-W Sec. 7: All	640.00	Tract 10		100.00%
	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;		12.50%	12.50%	
			85.00%	85.00%	
			2.50%	2.50%	
	TOTAL		100.00%	100.00%	

San Juan 27-4 #5 Well	Sec. 7: All	640.00		100.00%	100.00%
--------------------------	-------------	--------	--	---------	---------

Effective October 1, 1955

SCHEDULE I  
INITIAL PARTICIPATING AREA FOR THE DAKOTA FORMATION  
SAN JUAN 27-4 UNIT AREA

RECAPITULATION

Description of lands in Participating Area:  
Township 27 North, Range 4 West, N.M.P.M.  
Section 7: All

Total number of acres in Participating Area	640.00
Total number of acres committed to Participating Area	640.00
Total number of acres not committed to Participating Area	000.00
Percentage of Basic Royalty Committed:	100.00%
Percentage of Working Interest Committed:	100.00%
Percentage of O.R.R.I. Committed:	100.00%

Approved \_\_\_\_\_, 1955

Approved \_\_\_\_\_, 1955

Approved 11-28, 1955

Subject to like approval by the appropriate State Officials, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Subject to like approval by the United States Geological Survey and Oil Conservation Commission of the State of New Mexico, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Director - United States Geological Survey

Commissioner of Public Lands of the State of New Mexico

W. G. Mearns  
Oil Conservation Commission of the State of New Mexico

October 25, 1955

# 554 file

El Paso Natural Gas Company  
El Paso, Texas

Re: (San Juan 27-4 Unit)  
(Request for Approval of  
Initial Participating Area  
Effective October 1, 1955)

Gentlemen:

This is to advise that the above designated document has this date been approved by the Commissioner of Public Lands, subject to like approval by the proper Officials, and same is enclosed herewith.

Very truly yours,

E. S. WALKER  
Commissioner of Public Lands

Encl.  
cc: USGS- Roswell  
OCC - Santa Fe  
MRB:m



# El Paso Natural Gas Company

El Paso, Texas

May 11, 1955

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

*file*

Re: San Juan 27-4 Unit  
~~San Juan 27-5 Unit~~  
Ratification and Joinders

Gentlemen:

Attached hereto please find the following:

1. Ratification and Joinder to the San Juan 27-4 Unit Agreement dated April 19, 1955 executed by Mr. H. F. Steen on behalf of El Paso Natural Gas Company committing its interest in tracts 13 and 15.
2. Ratification and Joinder to the San Juan 27-4 Unit Operating Agreement dated April 19, 1955 executed by Mr. H. F. Steen on behalf of El Paso Natural Gas Company committing its interest in tracts 13 and 15.
3. Ratification and Joinder to the San Juan 27-5 Unit Agreement dated April 19, 1955 executed by Mr. H. F. Steen on behalf of El Paso Natural Gas Company committing its interest in tracts 18 and 20.
4. Ratification and Joinder to the San Juan 27-5 Unit Operating Agreement dated April 19, 1955 executed by Mr. H. F. Steen on behalf of El Paso Natural Gas Company committing its interest in tracts 18 and 20.

We ask that you process this in the usual manner in order to effectively commit these interests to the Unit.

With kindest regards, we remain,

Very truly yours,

*T. W. Bittick*  
T. W. Bittick  
Area Landman  
Lease Department

TWB:BG:rb  
Enclosures

RATIFICATION AND JOINDER OF UNIT OPERATING AGREEMENT UNDER  
UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE

---

In consideration of the execution of the Unit Operating Agreement under Unit Agreement for the Development and Operation of the said San Juan 27-4 Unit, in form approved by the Secretary of the Interior, the undersigned owners of lands or leases or interests therein presently held or which may arise under existing option agreements or other interests in production covered by said Unit Operating Agreement, each to the extent of his or her particular ownership or interest, as may appear, have consented to the inclusion of said lands within the Unit Area therein defined, and do hereby approve, adopt and ratify the said Unit Operating Agreement in the form and as submitted to the United States Geological Survey in connection with the submission of Unit Agreement for the Development and Operation of the said Unit Area.

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

ADDRESS

SIGNATURE

ATTEST:

EL PASO NATURAL GAS COMPANY

*Q. C. Martch*

Assistant Secretary

By: *A. F. Shaw*

Vice President

Date: April 19, 1955

Date: \_\_\_\_\_

STATE OF \_\_\_\_\_ )

COUNTY OF \_\_\_\_\_ )

SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally appeared \_\_\_\_\_ to me known to be the person \_\_\_\_\_ described in and who executed the foregoing instrument, and acknowledged that \_\_\_\_\_ executed the same as \_\_\_\_\_ free act and deed.

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

My Commission expires: \_\_\_\_\_

Notary Public in and for \_\_\_\_\_

County, State of \_\_\_\_\_

EL PASO NATURAL GAS COMPANY

By: *A. F. Shaw*  
Vice President


UNIT OPERATOR

STATE OF TEXAS                    I  
  I  
COUNTY OF EL PASO               I

On this 19th day of April, 1955, before me appeared H. F. Steen, to me personally known, who, being by me duly sworn, did say that he is the Vice President of EL PASO NATURAL GAS COMPANY, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors and said H. F. Steen acknowledged said instrument to be the free act and deed of said corporation.

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

My commission expires:  
\_\_\_\_\_

  
\_\_\_\_\_  
Notary Public in and for El Paso  
County, State of Texas.  
  
Helen Adams  
Notary Public, in and for El Paso County, Texas  
My commission expires June 1, 1955

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27-4 Unit Area located within the County of Rio Arriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

ADDRESS

SIGNATURE

ATTEST:

EL PASO NATURAL GAS COMPANY

By:

Vice President

Assistant Secretary

Date: April 19, 1955

Date:

APPROVED AND CONSENTED TO:  
EL PASO NATURAL GAS COMPANY  
By A. F. Stearns  
Vice President  
UNIT OPERATOR

STATE OF Texas }  
COUNTY OF El Paso } SS.:

On this 19th day of April, 1955, before me appeared

H. F. Steen, to me personally known, who, being  
by me duly sworn, did say that he is the President of  
EL PASO NATURAL GAS COMPANY and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said H. F. Steen acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

Helen Adams  
Notary Public in and for El Paso  
County,  
State of Texas

Helen Adams  
Notary Public, in and for El Paso County, Texas  
My commission expires June 1, 1955

STATE OF }  
COUNTY OF } SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_ and \_\_\_\_\_  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF }  
COUNTY OF } SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL OFFICE GEOLOGICAL SURVEY

1955 MARCH 10 AM 9:33 P. O. Box 6721  
Roswell, New Mexico

March 8, 1955

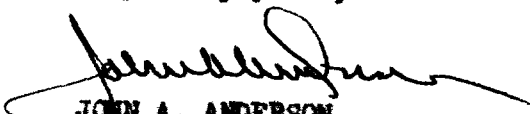
El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas

Gentlemen:

Reference is made to your letter of February 28, relating to the plan of development for the San Juan 27-4 unit area, New Mexico, for the calendar year 1955. You requested to be advised if the location of the proposed Dakota test well was satisfactory.

No objection is offered by this office to the proposed location in the SW<sup>1</sup> sec. 7, T. 27 N., R. 4 W., N.M.P.M., for the Dakota test well.

Very truly yours,

  
JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

Copy to: N.M.O.C.C., Santa Fe ✓

*El Paso Natural Gas Company*

*El Paso, Texas*

February 28, 1955

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

Mr. W. B. Macey, Secretary  
Oil Conservation Commission  
State of New Mexico  
Capitol Annex Building  
Santa Fe, New Mexico

Re: San Juan 27-4 Unit  
Rio Arriba County, N. M.  
1955 Drilling Program

Gentlemen:

Receipt is hereby acknowledged of your notification that our drilling program for the above unit has been conditionally approved by you, and that an additional five wells should be drilled on this unit during the calendar year 1955.

We previously forwarded to you, on December 31, 1954, our proposed drilling program for this unit, which was not sent to you for approval, but merely for your information. The San Juan 27-4 Unit Agreement was approved by the Director of the United States Geological Survey on September 3, 1953. Four Mesaverde wells were required to be drilled under the terms of this unit, and one Dakota well. The four Mesaverde wells have been completed, as we advised you in our drilling program dated December 31, 1954.

Section 9 of the Unit Agreement provides that "not later than two years after final approval of the Unit Agreement by the Director, the Unit Operator shall begin to drill an adequate test well at a location approved by the Supervisor, Commissioner, and Commission respectively, to test the Dakota formation." Section 10 of the Unit Agreement provides "within six months after completion of a well capable of producing unitized substances in paying quantities, or within six months after completion of the drilling program outlined in Section 9 above, whichever is the later date, Unit Operator shall submit for the approval of the Supervisor, the Commission, and the Commissioner, an acceptable plan of development."

*OK*

Mr. John A. Anderson  
Mr. W. B. Macey

-2-

February 28, 1955  
Re: 27-4 Unit  
Drilling Program

Therefore, under a strict construction of the Unit Agreement, we have until September 3, 1955 to commence the Dakota well, which we plan to drill during the year 1955. We are really not required to file any drilling program for your approval until six months after the completion of this Dakota well. We do, however, need your approval as to the location of the Dakota well. We attempted to point this out to you in our drilling program of December 31, 1954, and we also wanted to notify you of the status of this Unit Agreement and to advise you of what development had taken place and what would be done on this unit during the calendar year 1955.

We would appreciate your reviewing this Unit Agreement and advising us if the location of the Dakota test is satisfactory to each of you. Mr. E. S. Walker, Commissioner of Public Lands, has already approved the location of this well on February 2, 1955.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By R L Hamblin  
R. L. Hamblin, Manager  
Lease Department

RLH:ms

cc: Mr. E. S. Walker  
Commissioner of Public Lands  
Santa Fe, New Mexico

cc: Working Interest Owners  
per attached list

Approved.....Mar 22.....1955  
.....W B M.....  
Secretary-Director  
COMMISSIONER OF CONSERVATION COMMISSION



OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 9, 1955

C  
O  
P  
Y  
  
El Paso Natural Gas Co.  
P. O. Box 1492  
El Paso, Texas

Attention: Mr. R. L. Hamblin

file case 554  
  
Re: San Juan 27-4 Unit  
Rio Arriba County, New Mexico  
1955 Drilling Program

Gentlemen:

This is to advise that the Plan of Development for calendar year 1955, dated December 31, 1954, for the subject unit has this date been accepted by the New Mexico Oil Conservation Commission as minimum compliance with the obligation of unit operator to submit a Plan of Development, pursuant to Article 10 of the Unit Agreement.

This Plan of Development is therefore accepted only on the condition that on or before April 15, 1955, a supplemental Plan of Development be filed, providing for the drilling of a minimum of five development and/or exploratory wells to a depth sufficient to adequately test the Mesaverde formation, unless unitized substances in paying quantities are encountered at lesser depth. In addition, adequate provision must be made to protect the unitized lands from drainage. We feel that due to the large amount of acreage comprising this unit, such a Plan of Development is not unreasonable and should lead to the orderly development of the subject area.

This approval is being granted subject also to the condition that like approval be obtained from the United States Geological Survey and from the Commissioner of Public Lands of the State of New Mexico.

dan  
One approved copy of the Plan is herewith returned.

Very truly yours,

W. B. Macey  
Secretary - Director

cc: USGS-Roswell, Land Commissioner - Santa Fe  
ih



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

P. O. Box 6721  
Roswell, New Mexico

February 4, 1955

El Paso Natural Gas Company  
El Paso Natural Gas Building  
El Paso, Texas

Gentlemen:

The 1955 plan of development dated December 31, 1954, for the San Juan 27-4 unit agreement is accepted subject to similar acceptance by the appropriate State officials as bare compliance with that provision of Sec. 10 of the unit agreement requiring that a plan be filed. An amended plan of development for 1955 providing for the drilling of not less than five development and exploration wells drilled at least to the base of the Mesaverde formation unless production in paying quantities is found at a lesser depth and, in addition, adequate offsets to protect the unitized lands from drainage, must be submitted for approval not later than April 15, 1955.

One copy of said plan indicating acceptance by this office is returned herewith.

Very truly yours,

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

Copy to: Cons.Div., Wash.D.C. (w/1 copy of plan)  
Farmington (w/1 copy of plan)  
N.M.O.C.C., Santa Fe (ltr only)

# El Paso Natural Gas Company

El Paso, Texas

December 31, 1954

Mr. John A. Anderson  
Regional Supervisor  
United States Geological Survey  
Department of the Interior  
Post Office Building  
Roswell, New Mexico

Mr. E. S. Walker  
Commissioner of Public Lands  
State of New Mexico  
Capitol Annex Building  
Santa Fe, New Mexico

Mr. W. B. Macey, Secretary  
Oil Conservation Commission  
State of New Mexico  
Capitol Annex Building  
Santa Fe, New Mexico

*OK to Apr 15  
then - 5 months*

Re: San Juan 27-4 Unit  
#14-08-001-1054  
Rio Arriba County, New Mexico  
1955 Drilling Program

Gentlemen:

Since May 4, 1953, the effective date of the San Juan 27-4 Unit Agreement, the following wells have been completed on acreage committed to the Unit:

<u>Well Name</u>	<u>Drilling Block</u>	<u>Initial Potential</u>	<u>Tied-in</u>
San Juan 27-4 #1	W/2 1-27-4	1450 MCF	No
San Juan 27-4 #2	W/2 5-27-4	223 MCF	No
San Juan 27-4 #3	E/2 15-27-4	600 MCF	No
San Juan 27-4 #4	E/2 31-27-4	657 MCF	No

Four wells have been drilled to the Mesaverde Formation upon lands committed to the Unit. Of these four wells three have been determined to be capable of producing unitized substances in paying quantities and have been admitted to the Mesaverde Participating Area. One well, the San Juan 27-4 #2 well located in the W/2 of Section 5, T-27-N, R-4-W, was determined noncommercial. There are no wells in the present participating area that are producing into El Paso's gathering system.

El Paso Natural Gas Company, as Unit Operator, hereby notifies you of its proposed drilling program for the calendar year 1955, consisting of one (1) well to be drilled to the Dakota Formation on the following location:

(1) SW/4, Section 7, T-27-N, R-4-W

The drilling of this Dakota well is necessary to comply with the obligation for a Dakota test well as set forth in Section 9 of the 27-4 Unit Agreement, and therefore filing of a drilling program is not yet really necessary until 6 months after this Dakota test is completed.

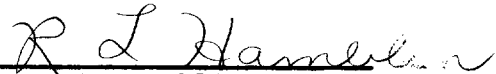
El Paso Natural Gas Company, as Unit Operator, intends to drill this well to the base of the Dakota Formation, using rotary tools. The entire Dakota Formation will be drilled in with gas and the formation will be treated with a sand oil fracturing process. Due care will be taken to protect all horizons.

All the Working Interest Owners have been contacted and this drilling program reflects, insofar as possible, their requests for additional drilling.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By: \_\_\_\_\_



R. L. Hamblin

Manager

Lease Department

RLH/BG/mas

APPROVED: \_\_\_\_\_  
Supervisor, United States Geological Survey

Date: \_\_\_\_\_

Subject to like approval by the appropriate State officials.

APPROVED: \_\_\_\_\_  
Commissioner of Public Lands

Date: \_\_\_\_\_

Subject to like approval by the U.S.G.S. and Oil Conservation Commission.

*ACCEPTED \**

APPROVED: \_\_\_\_\_  
Oil Conservation Commission

Date: \_\_\_\_\_

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands.

*\* Accepted subject to conditions of acceptance as set forth  
in attached letter of transmittal.*

Re: 27-4 Unit

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. W. H. Sparks  
General American Oil Company  
1404 Republic Bank Building  
Dallas, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

*El Paso Natural Gas Company*

TENTH FLOOR BASSETT TOWER

*El Paso, Texas*

July 8, 1954

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

Re: San Juan 27-4 Unit

Gentlemen:

Enclosed for your files are copies of Ratification and Joinder of Unit Agreement executed by Jose Perfecto and Maximiliano Esquibel, committing their basic royalty under Tracts 13 and 15 to the above numbered Unit. This instrument has been recorded in the office of the County Recorder, Rio Arriba County, New Mexico in Volume 22 Page 486.

Also enclosed is a copy of a Ratification and Joinder executed by Manuel A. Sanchez et ux, committing their overriding royalty interest under said tracts. The overriding royalty interest of Charles C. Harlan, Jr. and Edna E. Morrell, et vir under these tracts has previously been committed. This instrument has been filed with the United States Geological Survey and has been placed of record in the office of the County Recorder, Rio Arriba County, New Mexico in Volume 22 Page 485.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By 

Charles S. Deason  
Lease Department

CSD/mas  
Enclosures  
cc: Working Interest Owners

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARRIBA State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

*Jan. 13, 1954*

ADDRESS

SIGNATURE

356- Garcia St.  
Santa Fe, N.M.

Mamuel A. Sanchez  
Amalia S. Sanchez

Date: 4-20-54

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

APPROVED AND CONSENTED TO:  
EL PASO NATURAL GAS COMPANY  
By H. F. Skene  
Vice President  
WORKING INTEREST OWNER



STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF NEW MEXICO )  
COUNTY OF SANTA FE ) SS.:

On this 20th day of April, 1954, before me appeared

Manuel A. Sanchez and Amalia S. Sanchez  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

Feb. 17, 1955

Eugene H. Harte  
Notary Public in and for \_\_\_\_\_  
Santa Fe County,  
State of New Mexico

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of Rio Arriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

*Mr. 15/15*

ADDRESS

SIGNATURE

Tierra Amarilla, New Mexico

Jose Perfecto Esquivel

Tierra Amarilla, New Mexico

Maximiliano Esquivel

Date: October 22, 1951.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

APPROVED AND CONSENTED TO:  
EL PASO NATURAL GAS COMPANY  
By M. F. Jones  
Vice President

WORKING INTEREST OWNER

STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
\_\_\_\_\_ and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of \_\_\_\_\_

STATE OF NEW MEXICO )  
 ) SS.:  
COUNTY OF RIO ARriba )

On this 22nd day of November, 1953, before me appeared

Jose Perfecto Esquibel and Maximiliano Esquibel, both single persons,  
~~his wife~~ to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

March 30, 1954

Claudio S. Sena  
Notary Public in and for \_\_\_\_\_  
Santa Fe County,  
State of New Mexico

STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT OPERATING AGREEMENT UNDER  
UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE  
San Juan 27 - 4 Unit RIO ARRIBA COUNTY NEW MEXICO

In consideration of the execution of the Unit Operating Agreement under Unit Agreement for the Development and Operation of the said San Juan 27 - 4 Unit, in form approved by the Secretary of the Interior, the undersigned owners of lands or leases or interests therein presently held or which may arise under existing option agreements or other interests in production covered by said Unit Operating Agreement, each to the extent of his or her particular ownership or interest, as may appear, have consented to the inclusion of said lands within the Unit Area therein defined, and do hereby approve, adopt and ratify the said Unit Operating Agreement in the form and as submitted to the United States Geological Survey in connection with the submission of Unit Agreement for the Development and Operation of the said Unit Area.

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

ADDRESS

814 Mercantile Bank Building

Dallas, Texas

Date: June 29, 1953

SIGNATURE

Mike Abraham  
MIKE ABRAHAM

Rose Abraham  
ROSE ABRAHAM, ALSO KNOWN AS  
ROSELINE ABRAHAM

Date: \_\_\_\_\_

STATE OF New Mexico

COUNTY OF Arriba

SS.

On this 29th day of June, 1953,  
before me personally appeared Mike Abraham  
to me known to be the person \_\_\_\_\_ described in and who executed the foregoing  
instrument, and acknowledged that he executed the same as his  
free act and deed.

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

Notary Public in and for  
County, State of New Mexico

My commission expires:

June 1, 1955

STATE OF Oklahoma  
COUNTY OF  Tulsa  } SS:

On this 2nd day of July, 1953, before me personally appeared ROSE ABRAHAM, also known as Roseline Abraham, wife of Mike Abraham, to me known to be the person described in and who executed the foregoing instrument, and acknowledged to me that she executed the same as her free act and deed.

Josephine Greer  
Notary Public in and for Tulsa  
County, State of Oklahoma

My commission expires:

May 9, 1954

RATIFICATION AND JOINDER OF UNIT OPERATING AGREEMENT UNDER  
UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE  
San Juan 27 - 4 Unit RIO ARriba COUNTY NEW MEXICO

In consideration of the execution of the Unit Operating Agreement under Unit Agreement for the Development and Operation of the said San Juan 27 - 4 Unit, in form approved by the Secretary of the Interior, the undersigned owners of lands or leases or interests therein presently held or which may arise under existing option agreements or other interests in production covered by said Unit Operating Agreement, each to the extent of his or her particular ownership or interest, as may appear, have consented to the inclusion of said lands within the Unit Area therein defined, and do hereby approve, adopt and ratify the said Unit Operating Agreement in the form and as submitted to the United States Geological Survey in connection with the submission of Unit Agreement for the Development and Operation of the said Unit Area.

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

M. A. ROMERO ADDRESS

P. O. Box 2011

Santa Fe, N. M.

TR. 8

SIGNATURE

M. A. Romero  
Alicia V. Romero

Date: AUG 1 1953

Date: \_\_\_\_\_

STATE OF New Mexico )

COUNTY OF Santa Fe )

SS.

On this 1st day of August, 19 53,  
before me personally appeared M. A. Romero and Alicia V. Romero, his wife  
to me known to be the persons described in and who executed the foregoing  
instrument, and acknowledged that they executed the same as their  
free act and deed.

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

Ernest W. Bann  
Notary Public in and for Santa Fe  
County, State of New Mexico

My commission expires:

April 30, 1957



RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

Tr. 1

ADDRESS



1404 Republic Bank Building

Dallas, Texas

Date: June 17, 1953

Date: \_\_\_\_\_

SIGNATURE

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF TEXAS )  
COUNTY OF DALLAS ) SS.:

On this 17th day of June, 1953, before me appeared

J. K. RIGSBEE and MARY J. RIGSBEE  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

6-1-55

Mary Jane Rice (Mary Jane Rice)  
Notary Public in and for \_\_\_\_\_  
DALLAS County,  
State of TEXAS

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me person-

ally appeared \_\_\_\_\_, a single person, to  
me known to be the person described in and who executed the foregoing instrument,  
and acknowledged to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act  
and deed.

My Commission expires:

\_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARRIBA State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

ADDRESS

1220 Fair Bldg.  
Fort Worth 2, Texas

Date: 6 July, 1953

SIGNATURE

Roger B. Darrigo  
Lucy P. Darrigo

Date: \_\_\_\_\_

\_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF TEXAS )  
COUNTY OF TARRANT ) SS.:

On this 6 day of July, 1953, before me appeared

Roger B. Owings and Lucy P. Owings  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

LOIS KIMBRIEL  
MY COMMISSION EXPIRES JUNE 1, 1955

Lois Kimbriel  
Notary Public in and for \_\_\_\_\_  
TARRANT County,  
State of TEXAS

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me person-

ally appeared \_\_\_\_\_, a single person, to  
me known to be the person described in and who executed the foregoing instrument,  
and acknowledged to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act  
and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARRIBA State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

TR 2

ADDRESS

With variable rate wellhead

Initial: 0000

Date: July 1, 1977

Date: \_\_\_\_\_

SIGNATURE

[Signature]

[Signature]

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF TEXAS )  
COUNTY OF DALLAS ) SS.:

On this 15th day of July, 1953, before me appeared

D. V. LOFLIN and MAURICE B. LOFLIN  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

6-1-55

Mary Jane Rice (Mary Jane Rice)  
Notary Public in and for \_\_\_\_\_  
DALLAS County,  
State of TEXAS

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me person-

ally appeared \_\_\_\_\_, a single person, to  
me known to be the person described in and who executed the foregoing instrument,  
and acknowledged to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act  
and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of Rio Arriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

*Tr. 3*

ADDRESS

SIGNATURE

2510 Northwest 12th Street

Kathy Lee Wallace

Oklahoma City, Oklahoma

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

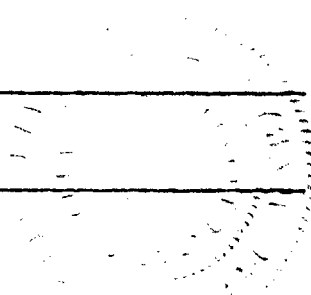
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_





STATE OF                    )  
COUNTY OF                ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
\_\_\_\_\_ and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF                    )  
COUNTY OF                ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_ and \_\_\_\_\_  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF OKLAHOMA        )  
COUNTY OF Oklahoma     ) SS.:

On this 15<sup>th</sup> day of August, 1953, before me personally

appeared Estate of Frank E. Wallace, Guthrie, Okla.  
~~Estate of Frank E. Wallace, sole heir of~~ a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

June 9, 1956

Mary A. Emery  
Notary Public in and for Okla  
Oklahoma County,  
State of Oklahoma.





RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARRIBA State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

T-4-27-910

ADDRESS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Date: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Date: \_\_\_\_\_

SIGNATURE

I N Fidei  
Ed Fidei Hotel  
Albino N. M.  
Clara Fidei  
\_\_\_\_\_  
\_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_ and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

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

My Commission expires: \_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County, \_\_\_\_\_  
State of \_\_\_\_\_

STATE OF New Mexico )  
COUNTY OF Luna ) SS.:

On this 23rd day of June, 195 3, before me appeared T. N. Fidel and Clara Fidel his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged to me they executed the same as their free act and deed.

My Commission expires: 4-10-52  
Notary Public in and for \_\_\_\_\_  
County, \_\_\_\_\_  
State of \_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally appeared \_\_\_\_\_, a single person, to me known to be the person described in and who executed the foregoing instrument, and acknowledged to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires: \_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County, \_\_\_\_\_  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARRIBA State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

TR. 4, 5, 6, 7, 9, 10, 11, 12,

ADDRESS

4416 Edmondson Avenue

Dallas, Texas

SIGNATURE

F. P. Hamrah.

F. P. Hamrah

Mary E. Hamrah

Mary E. Hamrah

Date: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
\_\_\_\_\_ and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of \_\_\_\_\_

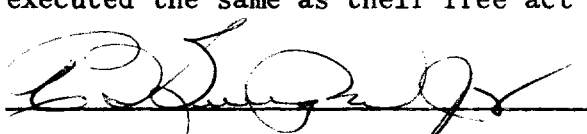
STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of June, 1953, before me appeared

J P Hamrah and Mary E Hamrah  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

6-1-54

  
Notary Public in and for \_\_\_\_\_  
Dallas County,  
State of Texas

STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARRIBA State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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TR 4, 5, 6, 7, 9, 10, 11, 12

ADDRESS

P.O. Box 86

Vidalia, Georgia

Date: June 26, 1953.

Date: June 26, 1953.

SIGNATURE

E. L. Meadows

E. L. Meadows

Sarah Meadows (his wife)

Sarah Meadows (his wife)

John C. Meadows

John C. Meadows

Evelyn Meadows (his wife)

Evelyn Meadows (his wife)

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_ and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF GEORGIA )  
COUNTY OF TOOMBS ) SS.:

On this 26 day of June, 1953, before me appeared E. I. Meadows and Sara Meadows, his wife, and John C. Meadows and Evelyn Meadows, his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged to me they executed the same as their free act and deed.

My Commission expires:

Jan. 19, 1954.

*W. E. Danna*  
Notary Public in and for \_\_\_\_\_  
Toombs County,  
State of Georgia.

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally appeared \_\_\_\_\_, a single person, to me known to be the person described in and who executed the foregoing instrument, and acknowledged to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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Tr. 4, 5, 6, 7, 9, 10, 11, 12

ADDRESS

Eastover Plantation

Spring Grove, Virginia

Date: June 18 1953

Date: \_\_\_\_\_

SIGNATURE

Albert H. Ochsner

Albert H. Ochsner

Helen Kerr Ochsner

Helen Kerr Ochsner



STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
\_\_\_\_\_ and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of \_\_\_\_\_

STATE OF Virginia, )  
 ) SS.:  
COUNTY OF Surry, )

On this 18th. day of June, 195 3, before me appeared

Albert H. Ochsner and Helen Kerr Ochsner  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

November 6, 1956

Jordan C. Dennyman  
Notary Public in and for \_\_\_\_\_  
Surry County,  
State of Virginia

STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARRIBA State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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

TR 4, 5, 6, 9, 10, 11, 12

ADDRESS

SIGNATURE

Attilio Sam Dezzo  
Secretary

RIASAN COMPANY

By Thomas F. Livingston

Date: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

STATE OF ~~NEW~~ MEXICO )  
 ) SS.:  
COUNTY OF ~~BERNALILLO~~ )

On this 29th day of July, 1953, before me appeared

THOMAS F. HARRINGTON, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of KLASAN COMPANY  
\_\_\_\_\_ and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said THOMAS F. HARRINGTON acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:  
11-15-1953

Ralando John Mattam:  
Notary Public in and for Bernalillo  
County,  
State of New Mexico

STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_ and  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:  
\_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF )  
 ) SS.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:  
\_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.



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TR. 8

ADDRESS

M. A. ROMERO  
P. O. Box 2011  
Santa Fe, N. M.

SIGNATURE

Date: AUG 1 1958

Date: \_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_ and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

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

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF New Mexico )  
COUNTY OF Santa Fe ) SS.:

On this 1st day of August, 1953, before me appeared M. A. Romero and Alicia V. Romero his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged to me they executed the same as their free act and deed.

My Commission expires:  
April 30, 1957

*Ernest W. Barr*  
Notary Public in and for \_\_\_\_\_  
Santa Fe County,  
State of New Mexico

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally appeared \_\_\_\_\_, a single person, to me known to be the person described in and who executed the foregoing instrument, and acknowledged to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:  
\_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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TR. 8

ADDRESS

SIGNATURE

P. O. Box 933

Charles C. Harlan Jr.

Roswell, New Mexico

Date: 14 August, 1953

Date: \_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
\_\_\_\_\_ and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of \_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_ and \_\_\_\_\_  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of \_\_\_\_\_

STATE OF NEW MEXICO )  
COUNTY OF CHAVES ) SS.:

On this 14th day of August, 1953, before me personally

appeared Charles C. Harlan, Jr., a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as his free act and deed.

My Commission expires:

3/16/57

Ernest E. C. Hodge  
Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_ County,  
State of NEW MEXICO

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARRIPE State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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ADDRESS

SIGNATURE

P. O. Box 933

Lester Morrell

Roswell, New Mexico

Eugene E. Morrell

Date: August 13, 1953

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_



STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF NEW MEXICO )  
COUNTY OF CHAVES ) SS.:

On this 10th day of August, 1953, before me appeared

Poster Correll and Edna L. Correll

his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

3/14/57

Ernest Lee Grogan

Notary Public in and for \_\_\_\_\_  
Chaves County,  
State of New Mexico

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

appeared \_\_\_\_\_, a single person, to me known to be  
the person described in and who executed the foregoing instrument, and acknowledged  
to me that \_\_\_\_\_ he executed the same as \_\_\_\_\_ free act and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the San Juan 27 - 4 Unit Area located within the County of RIO ARriba State of New Mexico in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his or her particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, ratify, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the terms of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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*Tom 11, 12*

ADDRESS

SIGNATURE

814 Mercantile Bank Building

Dallas, Texas

*Mike Abraham*  
MIKE ABRAHAM

Date: June 29, 1953

*Rose Abraham*  
ROSE ABRAHAM, ALSO KNOWN AS  
ROSELINE ABRAHAM

Date: \_\_\_\_\_

STATE OF Oklahoma  
COUNTY OF Delaware ) SS:

On this 3rd day of July, 1953, before me personally appeared ROSE ABRAHAM, also known as Roseline Abraham, wife of Mike Abraham, to me known to be the person described in and who executed the foregoing instrument, and acknowledged to me that she executed the same as her free act and deed.

My Commission expires:

May 9, 1954

*Josephine Carey*  
Notary Public in and for  
Delaware County, State of Oklahoma

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_, to me personally known, who, being  
by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_  
\_\_\_\_\_ and that the seal affixed to said instrument  
is the corporate seal of said corporation, and that said instrument was signed  
and sealed in behalf of said corporation by authority of its board of directors,  
and said \_\_\_\_\_ acknowledged said instrument to be  
the free act and deed of said corporation.

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

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me appeared

\_\_\_\_\_ and \_\_\_\_\_  
his wife, to me known to be the persons described in and who executed the fore-  
going instrument, and acknowledged to me they executed the same as their free act  
and deed.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

STATE OF )  
COUNTY OF ) SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 195\_\_\_\_, before me personally

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

My Commission expires:

June 1, 1953  
\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County,  
State of \_\_\_\_\_

554  
El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

El Paso, Texas

11 June 1954

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit No. 14-08-001-1054  
Rio Arriba County, New Mexico  
Noncommercial Well Mesaverde Formation  
Determined 8 March 1954

Gentlemen:

Pursuant to Section 11 (a) of the San Juan 27-4 Unit Agreement, No. 14-08-001-1054, approved 3 September 1953, El Paso Natural Gas Company as Unit Operator determined on 8 March 1954 that the following described well was not capable of producing unitized substances in paying quantities from the Mesaverde formation.

This well is as follows:

El Paso Natural Gas Company's San Juan 27-4 #2 Well, located 1650' North of the South line and 1654' East of the West line of Section 5, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on 18 September 1953, and reached a total depth of 6017'. The pay section between 5457' and 6017' was shot with 1540 quarts of S.N.G. The casing collapsed and no success was had trying to drill out this well, so it was plugged back to 3960' and redrilling operations started from that point. This well reached a new total depth of 5960', and the pay section between 5736' and 5960' was treated with a sand-oil frac. process. The well was tested on 22 February 1954, and after a three hour blow-down gauged an IP of 223 MCFGPD with an

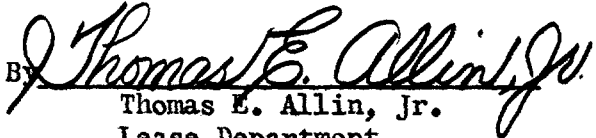
SIPC of 1045# and an SIPT of 1096#. The drilling block upon which this well is located is described as the W/2 of Section 5, Township 27 North, Range 4 West, N.M.P.M. and consists of 319.59 acres.

Inasmuch as this determination needs no official approval, no provision is made therefore and, in the absence of disapproval, this well will continue to be considered noncommercial.

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

Yours very truly,

EL PASO NATURAL GAS COMPANY

By   
Thomas E. Allin, Jr.  
Lease Department

TEA, Jr/mas  
cc: Attached List

El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

El Paso, Texas

4 June 1954

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit  
Revised Page One for  
Exhibit "B" dated  
6 May 1954

Gentlemen:

Enclosed please find a new Page one (1) revised to 2 June 1954, to be used in place of the Page one (1) revised to 6 May 1954 which you now possess. This change was brought about by the forwarding to us from the Chicago Corporation of additional title information on this Unit.

Yours very truly,

EL PASO NATURAL GAS COMPANY

  
By Thomas E. Allin, Jr.  
Lease Department

TEA, Jr/mas  
Enclosures  
cc: Attached List

501  
*El Paso Natural Gas Company*  
MAIN OFFICE 800

TENTH FLOOR BASSETT TOWER

*El Paso, Texas*

10 May 1954

1004 MAY 10 AM 9:30

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit  
Revised Exhibit "B"

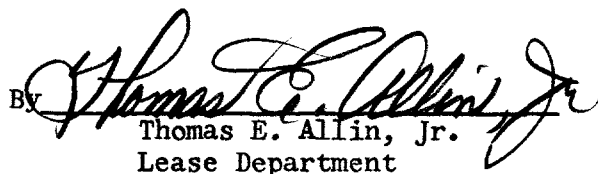
Gentlemen:

Enclosed please find copies of Exhibit "B" for the above noted Unit revised to 6 May 1954. You will note many changes which have been made due to a great deal of additional information having been obtained since distribution of the Exhibit "B" you now possess.

While the Working Interest on this Unit is one hundred percent committed, I still have some Ratifications and Joinders by Overriding Royalty Interest Owners which are currently being approved by the proper Working Interest Owners. As soon as this is accomplished I will forward these completed forms to your office.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By   
Thomas E. Allin, Jr.  
Lease Department

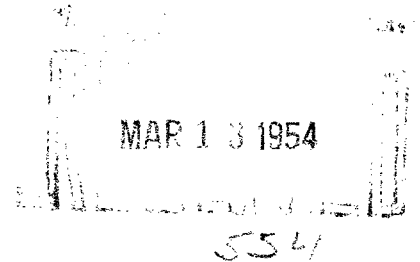
TEA, Jr/mas  
cc: Attached List

*El Paso Natural Gas Company*

TENTH FLOOR BASSETT TOWER

*El Paso, Texas*

March 8, 1954



Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit #1 Well  
Determination of effective  
date for Participating Area

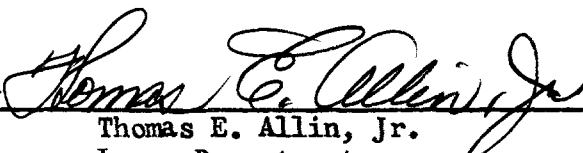
Gentlemen:

Pursuant to a recent directive, the effective date of an initial participating area is to be the date of first production which has been determined to be the date the well was completed. In accordance with the above, I am writing you at this time to notify you of our determination regarding the effective date of first production for the initial participating area of the Mesaverde formation for the San Juan 27-4 Unit #1 Well.

This well was completed on 16 September 1953, thus according to the above noted directive from your office, the effective date of this participating area for the Mesaverde formation is 16 September 1953.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By   
Thomas E. Allin, Jr.  
Lease Department

TEA,Jr:pap  
cc: Attached List

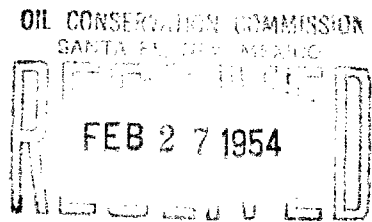


# El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

*El Paso, Texas*

27 January 1954



Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit No. 14-08-001-1054  
Rio Arriba County, New Mexico  
Second Expanded Participating Area  
Mesaverde Formation  
Effective 1 February 1954

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, No. 14-08-001-1054, approved 3 September 1953, El Paso Natural Gas Company as Unit Operator determined on 15 January 1954 that one additional well capable of producing untaxed substances in paying quantities from the Mesaverde Formation had been completed upon committed acreage to this unit and the participating area for the Mesaverde Formation is accordingly expanded.

This well is as follows:

El Paso Natural Gas Company's San Juan 27-4 #3 Well, located 990' South of the North line and 1750' West of the East line of Section 15, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on 30 November 1953, reached a total depth of 6119' and was completed on 2 January 1954. The pay section between 5469' and 5999' was shot with 1495 quarts of S.N.G. The well was tested on 15 January 1954 and after three-hour blow down gauged an IP of 600 MCFGPD with an SIPC of 881# and an SIPT of 883#. The committed drilling block upon which this well is located is described as the E/2 of Section 15, Township 27 North, Range 4 West, N.M.P.M. and consists of 320 acres.

San Juan 27-4 Unit

-2-

27 January 1954

Attached is Schedule III showing the Second Expanded Participating Area for the Mesaverde Formation for the San Juan 27-4 Unit Area. This describes the expanded participating area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownerships in said tract. Inasmuch as this needs no official approval no provision is made therefore, and in the absence of disapproval, this expanded participating area will become effective as of 1 February 1954.

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

Yours very truly,

EL PASO NATURAL GAS COMPANY

By Thomas E. Allin, Jr.  
Thomas E. Allin, Jr.  
Lease Department

TEAJr:je  
cc: Attached List

Re: 27-4 Unit

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. W. H. Sparks  
General American Oil Company  
1404 Republic Bank Building  
Dallas, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

SCHEDULE III  
SECOND EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION  
SAN JUAN 27-4 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>OWNERSHIP AND PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PERCENTAGE OF PARTICIPATION</u>
<u>Tract 1</u>					
NM 013297	T-27-N, R-4-W Sec. 1: W/2	319.91			
	Royalty Owner:				<u>33.3270%</u>
	United States of America;	12.50%	12.50%		4.1659%
	Working Interest Owner:				
	El Paso Natural Gas Co.;	85.00%	85.00%		28.3279%
	ORRI Owner:				
	Roger B. Owings;	<u>2.50%</u>	<u>2.50%</u>		<u>.8332%</u>
	TOTAL	<u>100.00%</u>	<u>100.00%</u>		<u>33.3270%</u>

San Juan 27-4 #1 Well

SCHEDULE III  
SECOND EXPANDED PARTICIPATING AREA FOR THE MESAVARDE FORMATION  
SAN JUAN 27-4 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>OWNERSHIP AND PERCENTAGE</u>		<u>PERCENTAGE COMMITTED</u>	<u>PERCENTAGE OF PARTICIPATION</u>
<u>Tract 6</u>						
SF 080670	T-27-N, R-4-W Sec. 31: E/2	320.00	Royalty Owner:			<u>33.3365%</u>
			United States of America;	12.50000%	12.50000%	4.1671%
			Working Interest Owner:			
			El Paso Natural Gas Co.;	85.91367%	85.91367%	28.6406%
			ORRI Owners:			
			F. P. Hamrah, et al;	<u>1.58633%</u>	<u>1.58633%</u>	<u>.5288%</u>
			TOTAL	<u>100.00000%</u>	<u>100.00000%</u>	<u>33.3365%</u>

San Juan 27-4 #4 Well

SCHEDULE III  
SECOND EXPANDED PARTICIPATING AREA FOR THE MESAVERT FORMATION  
SAN JUAN 27-4 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>OWNERSHIP AND PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PERCENTAGE OF PARTICIPATION</u>
<u>Tract 11</u>					
SF 080674	T-27-N, R-4-W Sec. 15: E/2	320.00	Royalty Owner: United States of America; Working Interest Owner: El Paso Natural Gas Co.; ORRI Owners: F. P. Hamrah, et al; TOTAL	12.50000% 12.50000% 85.91367% 85.91367% <u>1.58633%</u> 100.00000%	<u>33.3365%</u> 4.1671% 28.6406% <u>.5288%</u> 33.3365%

San Juan 27-4 #3 Well  
(New Well)

RECAPITULATION

Description of Lands in Participating Area:  
Township 27 North, Range 4 West, N.M.P.M.  
Section 1: W/2  
Section 31: E/2  
Section 15: E/2

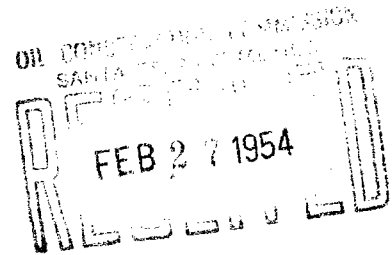
Total number of Acres in Participating Area: 959.91  
Percent of Working Interest and Royalty Interest committed: 100.00%

# El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

*El Paso, Texas*

27 January 1954



Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

Re: San Juan 27-4 Unit No. 14-08-001-1054  
Rio Arriba County, New Mexico  
First Expanded Participating Area  
Mesaverde Formation  
Effective 1 December 1953

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-4 Unit Agreement, No. 14-08-001-1054, approved 3 September 1953, El Paso Natural Gas Company as Unit Operator determined on 24 November 1953 that one additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation had been completed upon committed acreage to this unit and the participating area for the Mesaverde Formation is accordingly expanded.

This well is as follows:

El Paso Natural Gas Company's San Juan 27-4 #4 Well, located 822' South of the North line and 1090' West of the East line of Section 31, Township 27 North, Range 4 West, Rio Arriba County, New Mexico. This well was spudded on 20 October 1953, reached a total depth of 5960', and was completed on 16 November 1953. The pay section between 5350' and 5960' was shot with 1715 quarts of S.N.G. The well was tested on 24 November 1953 and after three-hour blow down gauged an IP of 657 MCFGPD with an SIPC of 585# and an SIPT of 671#. The committed drilling block upon which this well is located is described as the E/2 of Section 31, Township 27 North, Range 4 West, N.M.P.M. and consists of 320 acres.

27 January 1954

Attached is Schedule II showing the First Expanded Participating Area for the Mesaverde Formation for the San Juan 27-4 Unit Area. This describes the expanded participating area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownerships in said tract. Inasmuch as this needs no official approval no provision is made therefore, and in the absence of disapproval, this expanded participating area will become effective as of December 1, 1953.

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

Yours very truly,

EL PASO NATURAL GAS COMPANY

By   
Thomas E. Allin, Jr.  
Lease Department

TEAJr:je  
cc: Attached List



Re: 27-4 Unit

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. W. H. Sparks  
General American Oil Company  
1404 Republic Bank Building  
Dallas, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

SCHEDULE II  
FIRST EXPANDED PARTICIPATING AREA FOR THE MESAVARDE FORMATION  
SAN JUAN 27-4 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>OWNERSHIP AND PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PERCENTAGE OF PARTICIPATION</u>
<u>Tract 1</u>					
NM 013297	T-27-N, R-4-W Sec. 1: W/2	319.91			
	Royalty Owner:				<u>49.993%</u>
	United States of America;		12.50%	12.50%	6.249%
	Working Interest Owner:				
	El Paso Natural Gas Co.;		85.00%	85.00%	42.494%
	ORRI Owner:				
	Roger B. Owings;		<u>2.50%</u>	<u>2.50%</u>	<u>1.250%</u>
	TOTAL		100.00%	100.00%	49.993%

San Juan 27-4 #1 Well

SCHEDULE II  
FIRST EXPANDED PARTICIPATING AREA FOR THE MESAVARDE FORMATION  
SAN JUAN 27-4 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>OWNERSHIP AND PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PERCENTAGE OF PARTICIPATION</u>
<u>Tract 6</u>					
SF 080670	T-27-N, R-4-W Sec. 31: E/2	320.00			<u>50.007%</u>
	Royalty Owner:				
	United States of America;		12.50000%	12.50000%	6.251%
	Working Interest Owner:				
	El Paso Natural Gas Co.;		85.91367%	85.91367%	42.963%
	ORRI Owners:				
	F. P. Hamrah, et al;		<u>1.58633%</u>	<u>1.58633%</u>	<u>.793%</u>
	TOTAL		100.00000%	100.00000%	50.007%

San Juan 27-4 #4 Well  
(New Well)

RECAPITULATION

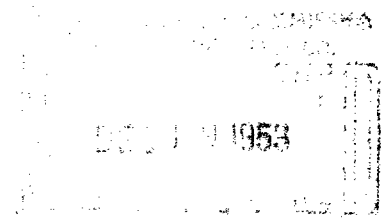
Description of lands in Participating Area:	
Township 27 North, Range 4 West, N.M.P.M.	
Section 1: W/2	
Section 31: E/2	
Total number of acres in Participating Area:	639.91
Percent of Working Interest and Royalty	
Interest committed:	100.00%

23  
550  
*El Paso Natural Gas Company*

TENTH FLOOR BASSETT TOWER

*El Paso, Texas*

December 11, 1953



Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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

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

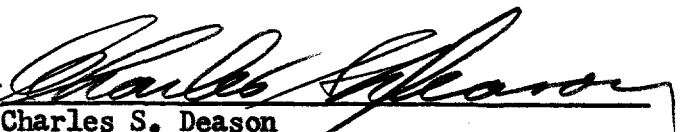
Re: San Juan 27-4 Unit  
No. 14-08-001-1054  
Rio Arriba County, New Mexico  
Approval of Initial Participating Area  
Mesaverde Formation

Gentlemen:

This is to advise that the Initial Participating Area, Mesaverde Formation, for the San Juan 27-4 Unit Area was approved by the Director, United States Geological Survey on November 18, 1953, the Commissioner of Public Lands of the State of New Mexico on November 10, 1953, and the Secretary of the Oil Conservation Commission of the State of New Mexico on November 3, 1953.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By   
Charles S. Deason  
Lease Department

CSD:rf  
cc: Attached List

Re: 27-4 Unit

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. W. H. Sparks  
General American Oil Company  
1404 Republic Bank Building  
Dallas, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

564

# El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

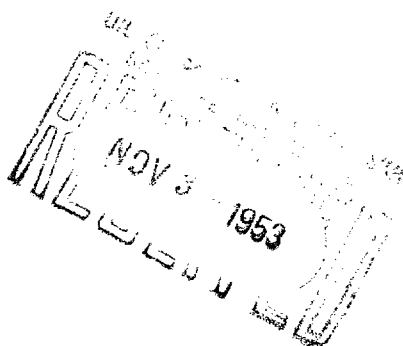
*El Paso, Texas*

October 29, 1953

Director  
United States Geological Survey  
Department of the Interior  
Washington, D. C.

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



Re: San Juan 27-4 Unit No. 14-08-001-1054  
Rio Arriba County, New Mexico  
Request for Approval of  
Initial Participating Area - Mesaverde Formation  
To Be Effective The Date of First Production

Gentlemen:

Pursuant to the provisions of Section 11(a) of the San Juan 27-4 Unit Agreement No. 14-08-001-1054 approved September 3, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Initial Participating Area for the Mesaverde Formation. On September 28, 1953, we sent out our Notice of Discovery. The discovery well was completed on September 16, 1953, after the effective date of the unit agreement.

The Initial Participating Area contains 319.91 acres and is composed of one drilling block with one discovery well located thereon:

Township 27 North Range 4 West

<u>Well</u>	<u>Drilling Block</u>	<u>Acres</u>
San Juan 27-4#1	W/2 Section 1	319.91

This well is located in the SW/4 of this section. It was completed September 16, 1953 at a total depth of 6353'. On a three-hour open blow test this well gauged an IP of 1450 MCFGPD with SIPC of 1296#. This well is not yet on production.

San Juan 27-4 Unit

-2-

October 29, 1953

Attached hereto is our Schedule I legally describing the proposed participating area showing the percentage of unitized substances to be allocated to this unitized tract and also showing the exact breakdown of the percentages so allocated to this tract according to the various ownerships in said tract. We are also attaching a map, Exhibit "A", showing the location of this well and the outline of this Initial Participating Area.

If this Initial Participating Area meets with your approval, please indicate such approval in the space provided on said Schedule I and return an approved copy for our files.

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

Yours very truly,

EL PASO NATURAL GAS COMPANY

By R. L. Hamblin  
R. L. Hamblin  
Lease Department

RL:rf  
cc: Attached List  
Encls.

Re: 27-4 Unit

Copies of the foregoing letter have been sent to the following Working Interest Owners:

Mr. W. H. Sparks  
General American Oil Company  
1404 Republic Bank Building  
Dallas, Texas

Mr. H. K. Greenleaf  
The Chicago Corporation  
2101 Continental Life Building  
Fort Worth, Texas

Mr. Mike Abraham  
814 Mercantile Bank Building  
Dallas, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico



SCHEDULE I  
INITIAL PARTICIPATING AREA FOR THE MESAVEERDE FORMATION  
SAN JUAN 27-4 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>OWNERSHIP AND PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PERCENTAGE OF PARTICIPATION</u>
<u>Tract 1</u>					
SF 079525	T-27-N, R-4-W Sec. 1: W/2	319.91	Royalty Owner: United States of America; 12.50% Working Interest Owner: El Paso Natural Gas Co.; 85.00% ORRI Owner: Roger B. Owings; <u>2.50%</u> TOTAL <u>100.00%</u>	<u>12.50%</u> <u>85.00%</u> <u>2.50%</u> <u>100.00%</u>	<u>100.000000%</u> <u>12.500000%</u> <u>85.000000%</u> <u>2.500000%</u> <u>100.000000%</u>

San Juan 27-4 #1 Well

To Be  
Effective Date of First Production

RECAPITULATION

Description of lands in Participating Area:  
Township 27 North, Range 4 West, N.M.P.M.  
Section 1: W/2

Total number of acres in Participating Area:  
Percent of Working Interest and Royalty Interest  
committed:

319.91  
100.00%

Approved: \_\_\_\_\_ 1953

Subject to like approval by the appropriate State Officials, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Approved: \_\_\_\_\_ 1953

Subject to like approval by the United States Geological Survey and Oil Conservation Commission of the State of New Mexico, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Approved: 3 Mar 1953

Subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico, effective Date of First Production, pursuant to the pertinent provisions of Sec. 11 of the Unit Agreement.

Director - United States Geological Survey

Commissioner of Public Lands of the State of New Mexico

R. E. Davis  
Oil Conservation Commission of the State of New Mexico