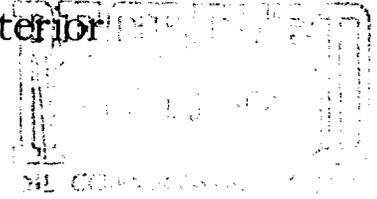




United States Department of the Interior

GEOLOGICAL SURVEY
Drawer 1857
Roswell, New Mexico 88201



December 18, 1974

159

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 Lindrith 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 five Pictured Cliffs wells from your 1974 supplemental plan to the 1975 plan due to a current shortage of tubular goods. Three approved copies are enclosed.

Sincerely yours,

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

December 5, 1974

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

Attention: Mr. D. N. Canfield

Re: 1975 Drilling Program,
Lindrith 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 1975 for the Lindrith Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

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

Commissioner of Public Lands
Santa Fe, New Mexico

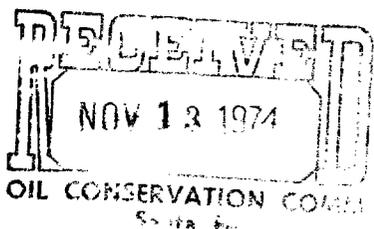
C

O

P

Y

El Paso Natural Gas Company



El Paso, Texas 79978

November 11, 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: Lindrith Unit I Sec. No. 713
Rio Arriba County, New Mexico
1975 DRILLING PROGRAM

Gentlemen:

By letters dated January 17, 1974 and May 6, 1974, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program and a Supplemental Drilling Program regarding the captioned unit for the calendar year 1974. Said Program provided for the drilling of nine (9) Pictured Cliffs wells. Pictured Cliffs wells Numbers 58, 77, 78 and 79 are currently drilling and will not cause an expansion of the Pictured Cliffs Participating Area, since they are already in the boundaries of the Participating Area. Wells Numbers 80, 81, 82, 83 and 84 will not be drilled until 1975, due to a shortage of tubular goods.

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

Pictured Cliffs (Gas)	60
Pictured Cliffs (Non-Commercial)	5
Dakota	1
Gallup	1
Plugged and Abandoned	12
	<u>79</u>

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

Pursuant to Section 9 of the Lindrith 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 during 1975, except those mentioned above that are being carried forward from the 1974 Drilling Program.

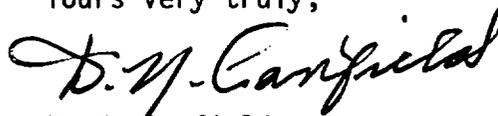
All the working interest owners have been contacted, and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

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

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

Copies of this Drilling Program are being sent to the working interest owners shown below.

Yours very truly,



D. N. Canfield
Director
Land Department
Energy Resource Development

DNC:DW:km
Enclosure
Lindrith 3.0, 4.1

cc: Continental Oil Company
Attention: Mr. L. P. Thompson
P. O. Box 460
1001 North Turner
Hobbs, New Mexico 88240

Tenneco Oil Company
Attention: Mr. A. D. Rial
Suite 1200, Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80203

Mobil Oil Corporation (3)
Attention: Mr. J. D. Howard
P. O. Box 633
Midland, Texas 79701

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

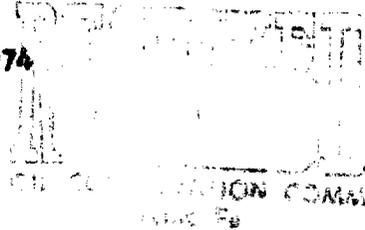
APPROVED: _____ DATE: _____
Commissioner of Public Lands
Subject to like approval by the
United States Geological Survey and
the Oil Conservation Commission

APPROVED:  _____ DATE: December 5, 1974
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 1975 Drilling Program for the
Lindrith Unit, I Sec. No. 713, Rio Arriba County, New Mexico.

154

November 18, 1974



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

Re: Lindrith Unit
Rio Arriba County, New Mexico
1975 DRILLING PROGRAM

ATTENTION: Mr. D. M. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your Drilling Program for the year 1975, which provides for the drilling of no wells during 1975, except those carried forward from the 1974 Drilling Program which are wells nos. 80, 81, 82, 83 and 84. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

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

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas Department

AJA/EDG/s
encl.
cc:

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

El Paso Natural Gas Company

El Paso, Texas 79978

June 5, 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: Lindrith Unit
Pictured Cliffs Formation
San Juan County, New Mexico
1974 DRILLING PROGRAM

Gentlemen:

This is to advise that the captioned Drilling Program for the Lindrith Unit was approved by the Regulatory Bodies on the following dates:

United States Geological Survey - May 23, 1974
Commissioner of Public Lands - May 13, 1974
Oil Conservation Commission - May 29, 1974

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

Yours very truly,

Terry Srsen

Terry Srsen
Landman, Land Department
Energy Resource Development

TS:lj

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

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

159

May 29, 1974

C
O
P
Y

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas -9978

Attention: Mr. D. N. Canfield

Re: Supplemental 1974 Drilling Program
Lindrith Unit, Rio Arriba County,
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the supplement to the 1974 Drilling Program providing for the drilling of five additional Pictured Cliffs wells for the Lindrith 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
U. S. Geological Survey - Roswell

El Paso Natural Gas Company

El Paso, Texas 79978

May 6, 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: Lindrith Unit I Sec. No. 713
Rio Arriba County, New Mexico
1974 Supplemental Drilling
Program

Gentlemen:

By letter dated January 17, 1974, El Paso Natural Gas Company submitted for your approval our 1974 Drilling Program for the captioned unit. Included in that program were wells #58, #77, #78 and #79 which you have previously approved.

El Paso Natural Gas Company now proposes five (5) additional Pictured Cliffs wells to be drilled during 1974 on the following locations:

<u>Well No.</u>	<u>Spacing Unit</u>
80	SW/4 Section 11, T-24-N, R-3-W
81	NW/4 Section 12, T-24-N, R-3-W
82	NE/4 Section 13, T-24-N, R-3-W
83	NW/4 Section 13, T-24-N, R-3-W
84	SE/4 Section 36, T-24-N, R-3-W

All of the working interest owners have been contacted, and this 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. Wells #80 and #84 are outside the participating area and, if commercial, will cause an expansion.

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

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Supplemental Drilling Program for the calendar year 1974 providing for the drilling of the previously-described wells at El Paso's sole cost. If this Supplemental Drilling Program is acceptable, please signify your approval as required by Section 9 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company. Copies of the Supplemental Drilling Program have been sent to the working interest owners shown below.

Yours very truly,



D. N. Canfield
Manager
Land Department
Energy Resource Development

DNC:1j

cc: Continental Oil Company
Attention: Mr. W. C. Blackburn
Pacific Western Life Building
152 North Durbin
Casper, Wyoming 82601

Tenneco Oil Company
Attention: Mr. C. W. Nance
Suite 1200, Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80203

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: May 29, 1974

The foregoing approvals are for the 1974 Supplemental Drilling Program for the Lindrith Unit I Sec. 713, Rio Arriba County, New Mexico.



United States Department of the Interior

GEOLOGICAL SURVEY
Drawer 1857
Roswell, New Mexico 88201

159
May 23, 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 supplement dated May 6, 1974, to the 1974 plan of development for the Lindrith unit area, Rio Arriba County, New Mexico, are enclosed. Such plan, proposing the drilling of five additional Pictured Cliffs wells was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

N. O. FREDERICK

N. O. FREDERICK
Area Oil and Gas Supervisor

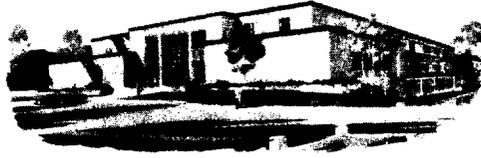
cc:

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

JAGillham:ds

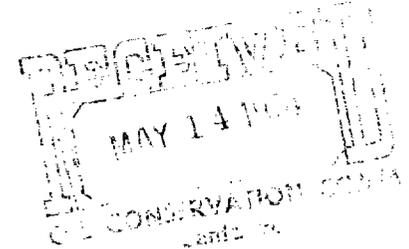
State of New Mexico

159
TELEPHONE
505-627-2748



Commissioner of Public Lands

May 13, 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: Lindrith Unit
Rio Arriba County, New Mexico
1974 Supplemental Drilling
Program

ATTENTION: Mr. D. N. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1974 Supplemental Drilling Program, which provides for the drilling of five (5) additional Pictured Cliffs wells. Therefore, the wells to be drilled during 1974 will be #58, #77, #78, #79, #80, #81, #82, #83 and #84. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

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

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas Department

AJA/RDG/s
encls.
cc:

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



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

February 5, 1974

159

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 Lindrith unit area, Rio Arriba County, New Mexico, proposing the drilling of four Pictured Cliffs wells, are enclosed. Such plan was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

CARL C. TRAYWICK
Acting Area Oil and Gas Supervisor

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

JAGillham:ds

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 29, 1974

159

C
O
P
Y

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

Attention: Mr. D. N. Canfield

Re: 1974 Drilling Program,
Lindrith 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 1974 providing for the drilling of four Pictured Cliffs well for the Lindrith 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,

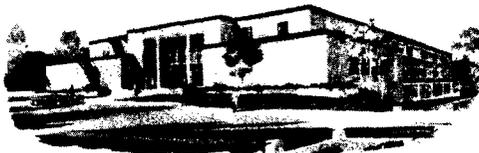
A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

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

State of New Mexico

TELEPHONE
505-827-2748



Commissioner of Public Lands

January 22, 1974

ALEX J. ARMIJO
COMMISSIONER

P. O. BOX 9148
SANTA FE, NEW MEXICO

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

Re: Lindrith Unit
Rio Arriba County, New Mexico
1974 Drilling Program

ATTENTION: Mr. D. H. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1974 Drilling Program, which provides for the drilling of four Pictured Cliffs formation wells in the Lindrith Unit, Rio Arriba County, New Mexico. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

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

Very truly yours,

RAY D. GRANN, Director
Oil and Gas Division

AJA/RDG/s
encls.
cc:

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

El Paso Natural Gas Company

El Paso, Texas 79978

January 17, 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: Lindrith Unit I Sec. No. 713
Rio Arriba County, New Mexico
1974 DRILLING PROGRAM

Gentlemen:

By letter dated January 12, 1973, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1973. Said Program provided for the drilling of four (4) Pictured Cliffs wells, and all wells have been timely drilled. Pictured Cliffs wells #73, #74 and #75 were within the existing Pictured Cliffs Participating Area and did not cause an expansion of the Pictured Cliffs Participating Area. Well #76 caused the nineteenth expansion of the Pictured Cliffs Participating Area.

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

Pictured Cliffs (Gas)	60
Pictured Cliffs (Non-Commercial)	5
Dakota	1
Gallup	1
Plugged and Abandoned	<u>12</u>
	79

January 17, 1974

Pursuant to Section 9 of the Lindrith 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-described Pictured Cliffs formation wells by El Paso Natural Gas Company, as Unit Operator, at El Paso's sole cost:

<u>Well No.</u>	<u>Spacing Unit</u>
58	SW/4 Sec. 20, T-24-N, R-2-W
77	SW/4 Sec. 12, T-24-N, R-3-W
78	SE/4 Sec. 11, T-24-N, R-3-W
79	SW/4 Sec. 18, T-24-N, R-2-W

Wells Nos. 58, 77, 78 and 79 are being drilled to further develop the lands within the Pictured Cliffs Participating Area.

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

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

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

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

January 17, 1974

Copies of this Drilling Program are being sent to the working interest owners shown below.

Yours very truly,



D. N. Canfield
Manager
Land Department
Energy Resource Development

DNC:DW:sv
Enclosure
Lindrith 3.0, 4.1

cc: Continental Oil Company
Attention: Mr. W. C. Blackburn
Pacific Western Life Building
152 North Durbin
Casper, Wyoming 82601

Tenneco Oil Company
Attention: Mr. C. W. Nance
Suite 1200, Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80203

APPROVED: _____ DATE: _____
Regional Oil and Gas Supervisor
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. L. Peterson* DATE: *January 29, 1974*
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 1974 Drilling Program for the
Lindrith Unit, I Sec. No. 713, Rio Arriba County, New Mexico.



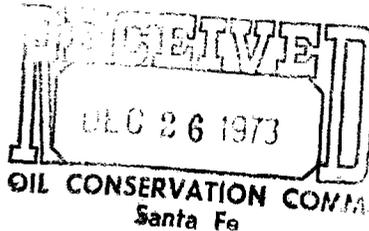
United States Department of the Interior

GEOLOGICAL SURVEY
Drawer 1857
Roswell, New Mexico 88201

159

December 19, 1973

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



Gentlemen:

Your application requesting approval of the nineteenth revision of the Pictured Cliffs participating area for the Lindrith unit agreement, Rio Arriba County, New Mexico, No. 713, was approved on December 19, 1973, by the Acting Oil and Gas Supervisor, U. S. Geological Survey, effective September 1, 1973.

The nineteenth revision adds 160.00 acres being the SW $\frac{1}{4}$ sec. 25, T. 24 N., R. 3 W., which enlarges the Pictured Cliffs participating area to 11,456.64 acres. This revision is based on the completion of the following unit well:

<u>Well No.</u>	<u>Location</u>	<u>Completion Date</u>	<u>Pictured Cliffs Interval</u>	<u>CAOF MCFFD</u>
76	SW $\frac{1}{4}$ -23-24N-3W	August 27, 1973	3178-3230	1762

Copies of the approved application are being distributed to the appropriate Federal offices and two approved copies are returned herewith. Please furnish all interested parties with suitable evidence of this approval.

Sincerely yours,

CARL C. TRAYWICK
Acting Area Oil & Gas Supervisor

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

JFSims:ds

State of New Mexico

751
TELEPHONE
505-827-2748



Commissioner of Public Lands

December 12, 1973

ALEX J. ARMIJO
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO

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

Re: Lindrith Unit Agreement
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE
NINETEENTH EXPANDED PARTICIPATING
AREA, Pictured Cliffs Formation
Effective, September 1, 1973

ATTENTION: Mr. James R. Fermenter

Gentlemen:

The Commissioner of Public Lands has approved as of this date the Nineteenth Expanded Participating Area, Pictured Cliffs Formation, to become effective as of September 1, 1973, for the Lindrith Unit. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are handing eight (8) copies of the application to the Oil Conservation Commission requesting them to forward five (5) copies to the United States Geological Survey at Roswell, New Mexico for their consideration. Two copies to be returned to the Commissioner of Public Lands and one copy should be retained by the Oil Conservation Commission. After this application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso Natural Gas Company.

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas Division

AJA/RDC/s
cc:

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

El Paso Natural Gas Company

El Paso, Texas 79978

December 6, 1973

RECEIVED

DEC 17 11 42 AM '73

STATE LAND OFFICE
SANTA FE, N.M.

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: Lindrith Unit Agreement, I Sec.
No. 713, Rio Arriba County,
New Mexico, REQUEST FOR APPROVAL
OF THE NINETEENTH EXPANDED PARTICI-
PATING AREA, Pictured Cliffs
Formation, effective September 1,
1973

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Nineteenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

NINETEENTH EXPANDED PARTICIPATING AREA - Effective September 1, 1973

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 24 North, Range 3 West, N.M.P.M.</u> Section 25: SW/4	160.00

The lands described above are proven productive by the following:

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

The Lindrith Unit #76 Well is located 1490' from the South line and 1710' from the West line of Section 25, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on June 19, 1973 and completed on August 27, 1973 at a total depth of 3291' as a tubingless completion in the Pictured Cliffs Formation. The Pictured Cliffs Formation in the intervals between 3178'-3188', 3200'-3206', 3218'-3230' was treated with a sand-water fracturing process on August 9, 1973. The well was shut-in on August 15, 1973, and after being shut-in for gauge for twelve (12) days, the well was tested in the Pictured Cliffs Formation on August 27, 1973, and following a three (3) hour blow down period gauged 1698 MCFGPD through a 3/4" choke and 1762 MCFGPD by the calculated absolute open-flow method, with an S_w of 884 psia. The committed spacing unit upon which this well is located is described as the SW/4 of Section 25, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

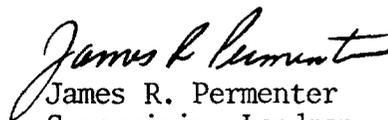
The effective date for the Nineteenth Expanded Participating Area is determined as September 1, 1973, the first day of the month following the testing of the Lindrith Unit #76 Well.

Attached hereto is Schedule XX showing the Nineteenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Nineteenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files.

A copy of this letter and schedule are being sent to the working interest owners indicated on the attached sheet.

Yours very truly,



James R. Permenter
Supervising Landman
Land Department
Energy Resource Development

JRP:DW:1j

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

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

DATE: December 12, 1973

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

DATE: Dec 14, 1973

The foregoing approvals are attached and made a part of the Request for Approval of the Nineteenth Expansion of the Pictured Cliffs Participating Area, Lindrith Unit, Rio Arriba County, New Mexico.

LINDRITH UNIT
Working Interest Owners

Continental Oil Company

Mobil Oil Corporation (3)

Tenneco Oil Company

El Paso Natural Gas Company

El Paso, Texas 79978

December 6, 1973

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

159

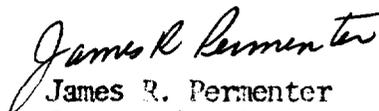
Re: Lindrith Unit Agreement, I Sec.
No. 713, Rio Arriba County,
New Mexico, REQUEST FOR APPROVAL
OF THE NINETEENTH EXPANDED PAR-
TICIPATING AREA, Pictured Cliffs
Formation, effective September 1,
1973

Gentlemen:

We are enclosing for your approval eight (8) copies of a Request for Approval of the Nineteenth Expanded Participating Area of the Gallup Formation for the referenced Unit.

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

Yours very truly,



James R. Permenter
Supervising Landman
Land Department
Energy Resource Development

JRP:lj
Enclosures

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

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

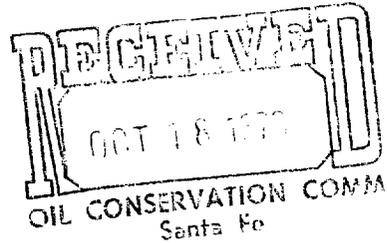
Mr. R. F. Lemon
Mr. John Ahlm

COPY

El Paso Natural Gas Company

El Paso, Texas 79978

October 17, 1973



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

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

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

Re: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
Pictured Cliffs Formation - NOTICE
OF COMPLETION OF ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit. These wells are as follows:

The Lindrith Unit #73 Well is located 1850' from the North line and 1520' from the East line of Section 19, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on June 7, 1973, and completed on September 20, 1973 at a total depth of 3196' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 3110'-3118', 3128'-3138', was treated with a sand-water fracturing process on August 9, 1973. The well was shut-in on September 4, 1973, and after being shut-in for gauge for sixteen (16) days, the well was tested on September 20, 1973, and following a three (3) hour blow-down period gauged 199 MCF/D through a 3/4" choke, and 199 MCF/D by the calculated absolute

October 17, 1973

open-flow method, with an SIPC of 600 psia. The spacing unit upon which this well is located is described as the NE/4 of Section 19, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This spacing unit was included in the Second Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1956, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #74 Well is located 1700' from the North line and 890' from the East line of Section 20, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on June 18, 1973, and completed on August 27, 1973, at a total depth of 3236' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 3090'-3102', 3116'-3128', and 3136'-3142', was treated with a sand-water fracturing process on August 9, 1973. This well was shut-in on August 20, 1973, and after being shut-in for gauge for seven (7) days, the well was tested on August 27, 1973, and following a three (3) hour blow-down period gauged 708 MCF/D through a 3/4" choke, and 712 MCF/D by the calculated absolute open-flow method, with an SIPC of 903 psia. The spacing unit upon which this well is located is described as the NE/4 of Section 20, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This spacing unit was included in the Second Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1956, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #75 Well is located 1104' from the North line and 952' from the West line of Section 20, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on June 8, 1973, and completed on September 7, 1973, at a total depth of 3303' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3212'-3224', 3234'-3244', was treated with a sand-water fracturing process on August 9, 1973. This well was shut-in on August 28, 1973, and after being shut-in for gauge for nine (9) days, the well was tested on September 7, 1973, and following a three (3) hour blow-down period gauged 700 MCF/D through a 3/4" choke, and 703 MCF/D by the calculated absolute open-flow method, with an SIPC of 1012 psia. The spacing unit upon which this well is located is described as the NW/4 of Section 20 Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

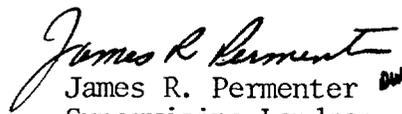
United States Geological Survey
Commissioner of Public Lands
Oil Conservation Commission
Page Three

October 17, 1973

This spacing unit was included in the Second Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1956, and the completion of this well does not warrant any further expansion of the participating area.

A copy of this letter is 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
Attachment
Lindrith Unit, 4.1.1

El Paso Natural Gas Company

El Paso, Texas 79978

February 15, 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

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

Re: 1973 DRILLING PROGRAM, Rio Arriba
and San Juan Counties, New Mexico

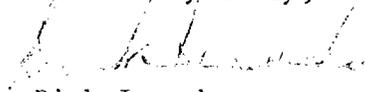
Gentlemen:

The 1973 Drilling Programs for the following Units were approved by the Regulatory Bodies on the dates indicated:

<u>Unit</u>	<u>USGS</u>	<u>CPL</u>	<u>OCC</u>
Cox Canyon I Sec. No. 946	1-24-73	1-22-73	1-23-73
✓ Lindrith I Sec. No. 713	1-24-73	1-22-73	1-23-73
Huerfanito I Sec. No. 943	2-1-73	1-22-73	1-23-73
San Juan 31-6 #14-08-001-464	1-30-73	1-22-73	1-23-73

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

Yours very truly,



Dick Isaacks
Senior Landman
Land Department
Energy Resource Development

DI:1j



United States Department of the Interior

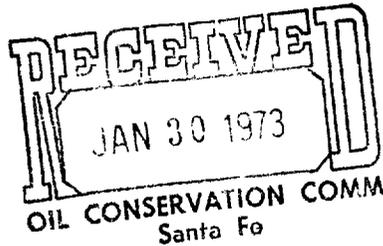
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

101

January 24, 1973

Mr. D. N. Canfield
El Paso Natural Gas Company
El Paso, Texas 79978



Dear Mr. Canfield:

On this date, your 1973 plan of development for the Lindrith unit area, Rio Arriba County, New Mexico, wherein you propose to drill four Pictured Cliffs 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,

CARL C. TRAYWICK
Acting Area Oil and Gas Supervisor

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

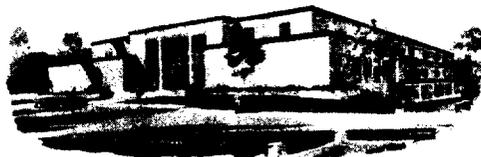
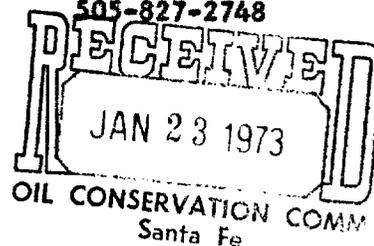
JAG:llham:ds:1/24/73

State of New Mexico

759
159

TELEPHONE

505-827-2748



Commissioner of Public Lands

January 22, 1973

ALEX J. ARMIJO
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO

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

Re: Lindrith Unit
Rio Arriba County, New Mexico
1973 Drilling Program

ATTENTION: Mr. D. N. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1973 Drilling Program, which provides for the drilling of four Pictured Cliffs formation wells in the Lindrith Unit, Rio Arriba County, New Mexico. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

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

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas Department

AJA/RDG/s

encl.

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

157

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

January 23, 1973

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

Attention: Mr. D. N. Canfield

Re: 1973 Drilling Program
Lindrith 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 four wells for the Lindrith 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 79978

January 12, 1973

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

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

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

Re: Lindrith Unit I Sec. No. 713
Rio Arriba County, New Mexico
1973 DRILLING PROGRAM

Gentlemen:

By letter dated January 17, 1972, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1972. Said Program provided for the drilling of no wells and none were drilled in the subject Unit during 1972.

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

Pictured Cliffs (Gas)	56
Pictured Cliffs (Non-Commercial)	5
Dakota	1
Gallup	1
Plugged & Abandoned	<u>12</u>
	75

Pursuant to Section 9 of the Lindrith 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-described Pictured Cliffs formation wells by El Paso Natural Gas Company, as Unit Operator, at El Paso's sole cost:

January 12, 1973

<u>Well No.</u>	<u>Spacing Unit</u>
73	NE/4 Sec. 19, T-24-N, R-2-W
74	NE/4 Sec. 20, T-24-N, R-2-W
75	NW/4 Sec. 20, T-24-N, R-2-W
76	SW/4 Sec. 25, T-24-N, R-3-W

The basis for drilling the No. 76 well is to extend the productive limits of the present Pictured Cliffs Participating Area, and wells Nos. 73, 74 and 75 are being drilled to further develop the lands within the Pictured Cliffs Participating Area.

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

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

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

Copies of this Drilling Program are being sent to the working interest owners shown below.

Yours very truly,



D. N. Canfield
Manager
Land Department
Energy Resource Development

DNC:CTR:nja
Enclosure
Lindrith 3.0, 4.1

cc: Continental Oil Company
Attention: Mr. W. C. Blackburn
Pacific Western Life Bldg.
152 North Durbin
Casper, Wyoming 82601

Tenneco Oil Company
Attention: Mr. C. W. Nance
Suite 1200, Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80203

APPROVED: _____ DATE: _____
Regional Oil and Gas Supervisor
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: January 23, 1973
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 1973 Drilling Program for the
Lindrith Unit, I Sec. No. 713, Rio Arriba County, New Mexico.

RECEIVED

MAR 15 1972

El Paso Natural Gas Company

El Paso, Texas 79978

March 8, 1972

159

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

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

Re: 1972 DRILLING PROGRAM
Rio Arriba and San Juan
Counties, New Mexico

Gentlemen:

The 1972 Drilling Programs for the following Units were approved by the Regulatory Bodies on the dates indicated:

<u>Unit</u>	<u>USGS</u>	<u>CPL</u>	<u>OCC</u>
✓ Lindreth I Sec. No. 713	3-2-72	1-21-72	2-11-72
San Juan 30-4 #14-08-001-1056	3-2-72	None Required	2-11-72
San Juan 31-6 #14-08-001-464	3-2-72	1-21-72	2-11-72
San Juan 32-5 #14-08-001-534	3-2-72	1-21-72	2-11-72
San Juan 32-7 #14-08-001-441	3-2-72	1-21-72	2-11-72

March 8, 1972

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

Yours very truly,



James R. Permenter
Supervising Landman
Land Department
Energy Resource Development

JP:CTR:khs

Lindreth

S.J. 30-4, 3.0

S.J. 31-6, 3.0

S.J. 32-5, 3.0

S.J. 32-7, 3.0

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

February 11, 1972

159

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

Attention: Mr. T. W. Bittick

Re: 1972 Drilling Program
Lindrith 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 1972 for the Lindrith Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

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

C
O
P
Y



IN REPLY REFER TO:

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

RECEIVED

MAR 7 1972

CONSERVATION COMM.

March 2, 1972

159

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 Lindrith 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,

N. O. FREDERICK
Regional Oil and Gas Supervisor

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

January 21, 1972

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

Re: Lindrith Unit
Rio Arriba County, New Mexico
1972 DRILLING PROGRAM

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1972 Drilling Program, which provides for the drilling of no wells during 1972. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

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

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas Department

AJA/RDG/s

encl.

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

El Paso Natural Gas Company

El Paso, Texas 79978

January 17, 1972

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

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

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

Re: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1972 DRILLING PROGRAM

Gentlemen:

By letter dated January 29, 1971, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1971. Said Program provided for the drilling of no wells and none were drilled in the subject Unit during 1971.

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

Pictured Cliffs (Gas)	56
Pictured Cliffs (Non-Commercial)	5
Dakota	1
Gallup	1
Plugged & Abandoned	<u>12</u>
	75

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1972, providing for the drilling of no wells during the year.

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

January 17, 1972

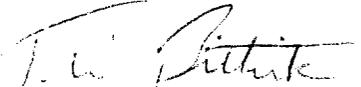
All the working interest owners have been contacted, and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

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

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

Copies of this Drilling Program are being sent to the working interest owners shown below.

Yours very truly,



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

TWB:CTR:nja
Enclosure
Lindrith 3.0

cc: Continental Oil Company
Attention: Mr. W. C. Blackburn
Pacific Western Life Building
152 North Durbin
Casper, Wyoming 82601

Mobil Oil Corporation (3)
Attention: Mr. J. D. Howard
P. O. Box 633
Midland, Texas 79701

Tenneco Oil Company
Attention: Mr. C. W. Nance
Suite 1200, Lincoln Tower Building
1860 Lincoln Street
Denver, Colorado 80203

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: Feb. 11, 1972

The foregoing approvals are for the 1972 Drilling Program for the Lindrith Unit,
I Sec. No. 713, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas 79999

April 16, 1971

APR 16 1971

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

157

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: 1971 DRILLING PROGRAMS
Rio Arriba County,
New Mexico

Gentlemen:

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

<u>Unit</u>	<u>USGS</u>	<u>CPL</u>	<u>OCC</u>
Lindrith, I Sec. No. 713	4-5-71	2-3-71	2-2-71
Rincon, I Sec. No. 916	4-5-71	1-20-71	1-15-71
San Juan 30-4, No. 14-08-001-1056	4-5-71	None Required	1-13-71
San Juan 31-6, No. 14-08-001-464	4-5-71	1-12-71	1-14-71

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

Yours very truly,

Charles T. Richardson
Charles T. Richardson
Senior Landman
Land Department

CTR:lj
Lindrith, Rincon, S.J. 30-4,
S.J. 31-6 Units - 3.0

Drawer 1857
Roswell, New Mexico 88201

APR 6 11 00 AM '71

April 5, 1971

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 Lindrith 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,

M. O. FREDERICK
Regional Oil and Gas Supervisor

cc:

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

159

971 FEB 4 10 17

February 3, 1971

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

Re: Lindrith Unit
Rio Arriba County, New Mexico
1971 DRILLING PROGRAM

ATTENTION: Mr. T. W. Sittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1971 Drilling Program, which provides for the drilling of no wells during 1971. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

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

Sincerely yours,

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

AJA/GGM/s

encl. 1.

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

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

February 2, 1971

159

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

Attention: Mr. T. W. Bittick

Re: 1971 Drilling Program
Lindrith Unit, Rio Arriba
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the drilling of no wells in the Lindrith Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

cc: United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

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

C
O
P
Y

El Paso Natural Gas Company

El Paso, Texas 79999

January 29, 1971

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

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

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

Re: Lindrith Unit, I Sec. No. 713
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 regarding the captioned Unit for the calendar year 1970. Said Program provided for the drilling of no wells and none were drilled in the subject Unit during 1970.

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

Pictured Cliffs (Gas)	56
Pictured Cliffs (Non-commercial)	8
Dakota	1
Gallup	1
Plugged & Abandoned	<u>12</u>
	78

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1971, providing for the drilling of no wells during the year.

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

January 29, 1971

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

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

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

Copies of this Drilling Program are being sent to the working interest owners shown below.

Yours very truly,



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

TWB:CTR:ec
Enclosures
Lindrith 3.0

cc: Continental Oil Company
Attention: Mr. W. C. Blackburn
Pacific Western Life Building
152 North Durbin
Casper, Wyoming 82601

Mobil Oil Corporation (3)
Attention: Mr. J. D. Howard
P. O. Box 633
Midland, Texas 79701

Tenneco Oil Company
Attention: Mr. C. W. Nance
Suite 1200, Lincoln Tower Building
1860 Lincoln Street
Denver, Colorado 80203

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

DATE: _____

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

DATE: _____

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

DATE: Feb. 2, 1971

The foregoing approvals are for the 1971 Drilling Program for the Lindrith Unit,
I Sec. No. 713, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas 79999

February 4, 1970

70 FEB 5 PM 1 04

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: 1970 DRILLING PROGRAMS,
San Juan and Rio Arriba
Counties, New Mexico

Gentlemen:

The 1970 Drilling Programs for the following Units were approved by the Regulatory Bodies on the dates indicated:

<u>Units</u>	<u>United States Geological Survey</u>	<u>Commissioner of Public Lands</u>	<u>Oil Conservation Commission</u>
San Juan 28-4 Unit #14-08-001-933	January 30, 1970	None Required	January 21, 1970
San Juan 29-4 Unit #14-08-001-1055	January 29, 1970	None Required	January 21, 1970
San Juan 29-5 Unit #14-08-001-437	January 30, 1970	January 19, 1970	January 21, 1970
San Juan 30-4 Unit #14-08-001-1056	January 29, 1970	None Required	January 22, 1970
San Juan 31-6 Unit #14-08-001-464	January 30, 1970	January 15, 1970	January 22, 1970
✓ Lindrith Unit I Sec. No. 713	January 29, 1970	January 15, 1970	January 21, 1970

Regional Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
Page 2

February 4, 1970

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

Yours very truly,

Charles Higgins
Charles Higgins
Supervising Landman
Land Department

CH:CTR:sf

S.J. 28-4, 3.0

S.J. 29-4, 3.0

S.J. 29-5, 3.0

S.J. 30-4, 3.0

S.J. 31-6, 3.0

Lindrith, 3.0

Drawn 185
Roswell, New Mexico 86201

MAIN OFFICE 010

FEB 2 AM 8 22

January 29, 1970

157

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 Lindrith 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 of plan)
Durango (w/cy of 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 87501

January 21, 1970

159

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

Attention: Mr. T. W. Bittick

**Re: 1970 Drilling Program
Lindrith 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 Lindrith 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/eq
Enclosure**

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

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

C
O
P
Y

JAN 19 1970

January 15, 1970

C
O
P
Y

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

Re: Lindrith Unit
Rio Arriba County,
New Mexico
1970 Drilling Program

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1970 Drilling Program, which provides for the drilling of no wells during 1970. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

Very truly yours,

Ted Bilberry, Director
Oil and Gas Department

TE/ML/s
encls.

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

El Paso Natural Gas Company

El Paso, Texas 79999

January 6, 1970

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

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

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

Re: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1970 DRILLING PROGRAM

Gentlemen:

By letter dated June 6, 1969, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned Unit for the calendar year 1969. Said Program provided for the drilling of no wells and none were drilled in the subject Unit during 1969.

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

Pictured Cliffs (Gas)	56
Pictured Cliffs (Non-commercial)	8
Dakota	1
Gallup	1
Plugged & Abandoned	<u>12</u>
TOTAL	78

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1970, providing for the drilling of no wells during the year.

All the working interest owners have been contacted, and this Drilling Program reflects their desires. El Paso Natural Gas Company,

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

January 6, 1970

as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

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

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

Copies of this Drilling Program are being sent to the working interest owners shown below.

Yours very truly,



T. W. Bittick
Manager
Land Department

TWB:CTR:sf
Enclosures
Lindrith Unit, 3.0

cc: Continental Oil Company
Attention: Mr. W. C. Blackburn
Pacific Western Life Building
152 North Durbin
Casper, Wyoming 82601

Mobil Oil Corporation (3)
Attention: Mr. J. D. Howard
P. O. Box 633
Midland, Texas 79701

Tenneco Oil Company
Attention: Mr. C. W. Nance
Suite 1200, Lincoln Tower Building
1860 Lincoln Street
Denver, Colorado 80203

El Paso Natural Gas Company

El Paso, Texas 79999

June 23, 1969

MAILED

JUN 24 1969

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

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

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

Re: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1969 DRILLING PROGRAM

Gentlemen:

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

United States Geological Survey	June 18, 1969
Commissioner of Public Lands	June 19, 1969
Oil Conservation Commission	June 12, 1969

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

Yours very truly,

Charles Higgins

Charles Higgins
Supervising Landman
Land Department

CH:JS:sf
Lindrith, 4.3

MAIN OFFICE

'69 JUN 20 A B

June 19, 1969

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

**Re: Lindrith Unit
Rio Arriba County, New Mexico
1969 Drilling Program**

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1969 Drilling Program, which provides for the drilling of no wells during 1969. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

Very truly yours,

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

**TE/ML/s
encl.**

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

**United States Geological Survey
Brewell, New Mexico**

C
O
P
Y

Drawer 1857
Roswell, New Mexico 88201

MAIL ROOM

JUN 19 AM 8 26

June 18, 1969

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1969 plan of development for the Lindrith 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.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

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

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

June 12, 1969

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

109

Attention: Mr. T. W. Bittick

Re: 1969 Drilling Program
Lindrith 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 dated June 6, 1969, for the Lindrith 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
Director, United States Geological Survey
Roswell, New Mexico

C

O

P

Y

El Paso Natural Gas Company

El Paso, Texas 79999

June 6, 1969

1969

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

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

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

Re: Lindrith Unit, I Sec. No. 713
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 regarding the captioned Unit for the calendar year 1968. Said Program provided for the drilling of four Pictured Cliffs wells, all of which were drilled to test the Pictured Cliffs Formation. The Lindrith Unit Wells No. 70, 71 and 72 were completed on lands in the Pictured Cliffs Participating Area and did not cause an expansion of the existing Participating Area. The Lindrith Unit Well No. 69 was drilled outside the Pictured Cliffs Participating Area but was plugged and abandoned as a dry hole.

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

Pictured Cliffs (Gas)	56
Pictured Cliffs (Non-commercial)	9
Dakota	1
Gallup	1
Plugged & Abandoned	<u>11</u>
TOTAL	78

Mr. John A. Anderson et al
Page 2

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

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

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

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

Copies of this Drilling Program are being sent to the working interest owners shown below.

Yours very truly,



T. W. Bittick
Manager
Land Department

TWB:JS:sf
Enclosures
Lindrith Unit 3.0

cc: Continental Oil Company
Attention: Mr. W. C. Blackburn
200 North Wolcott
Casper, Wyoming 82601

Tenneco Oil Company
Attention: Mr. C. W. Nance
Suite 1200, Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80203

Mobil Oil Company
P. O. Box 633
Midland, Texas 79701

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico 87401

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

Date: _____

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

Date: _____

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

Date: _____

The foregoing approvals are for the 1969 Drilling Program for the Lindrith Unit
I Sec. No. 713, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas 79999

June 26, 1968

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 87501

Re: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
Pictured Cliffs Formation - NOTICE
OF COMPLETION OF ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit. These wells are as follows:

The Lindrith Unit #70 Well is located 1840' from the North line and 1840' from the East line of Section 23, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on April 21, 1968, and completed on May 28, 1968, at a total depth of 3295' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 3218'-3232', 3246'-3256', was treated with a sand-water fracturing process on May 29, 1968. The well was shut-in on June 5, 1968, and after being shut-in for gauge for seven (7) days, the well was tested on June 12, 1968, and following a three (3) hour blow-down period gauged 1705 MCFGPD through a 3/4" choke, and 1759 MCFGPD by the calculated absolute open-flow method, with an SIPC of 973 psia. The spacing unit upon which this well is located is described as the NE/4 of Section 23, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This spacing unit was included in the Third Expanded Participating Area of the Pictured Cliffs Formation, effective September 1, 1956, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #71 Well is located 1180' from the South line and 1830' from the East line of Section 24, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on April 18, 1968, and completed on May 24, 1968, at a total depth of 3238' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 3190'-3200', 3210'-3222' was treated with a sand-water fracturing process on May 29, 1968. This well was shut-in on June 4, 1968, and after being shut-in for gauge for eight (8) days, the well was tested on June 12, 1968, and following a three (3) hour blow-down period gauged 1380 MCFGPD through a 3/4" choke, and 1408 MCFGPD by the calculated absolute open-flow method, with an SIPC of 972 psia. The spacing unit upon which this well is located is described as the SE/4 of Section 24, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This spacing unit was included in the Ninth Expanded Participating Area of the Pictured Cliffs Formation, effective November 1, 1958, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #72 Well is located 800' from the North line and 1800' from the West line of Section 25, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on April 23, 1968, and completed on May 20, 1968, at a total depth of 3261' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3148'-3172', 3197'-3203', was treated with a sand-water fracturing process on May 29, 1968. This well was shut-in on June 4, 1968, and after being shut-in for gauge for eight (8) days, the well was tested on June 12, 1968, and following a three (3) hour blow-down period gauged 2269 MCFGPD through a 3/4" choke, and 2445 MCFGPD by the calculated absolute open-flow method, with an SIPC of 837 psia. The spacing unit upon which this well is located is described as the NW/4 of Section 25, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This spacing unit was included in the Thirteenth Expanded Participating Area of the Pictured Cliffs Formation, effective October 1, 1960, and the completion of this well does not warrant any further expansion of the participating area.

A copy of this letter is being sent to the working interest owners indicated below.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By 
Charles Higgins
Supervising Landman
Land Department

CH:JS:d1

cc: Continental Oil Company
200 N. Wolcott
Casper, Wyoming 82601
Attention: Mr. W. C. Blackburn

Mobil Oil Corporation (3)
P. O. Box 1652
Casper, Wyoming 82601
Attention: Production Manager

Mobil Oil Corporation
P. O. Box 778
Farmington, New Mexico 87401

Tenneco Oil Company
Lincoln Tower Building
1360 Lincoln St.
Denver, Colorado 80203
Attention: Mr. D. B. Brown

Tenneco Oil Company
P. O. Box 2410
Denver, Colorado 80201
Attention: Mr. J. P. Wasinger

El Paso Natural Gas Company

El Paso, Texas 79999

March 25, 1968

151

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

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

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

RECEIVED
50 MAR 27 AM 9 00

Re: 1968 DRILLING PROGRAM
LINDRITH UNIT I. Sec. No. 713
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
Oil Conservation Commission
Commissioner of Public Lands

February 23, 1968
March 19, 1968
January 22, 1968

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

Yours very truly,



Charles Higgins
Supervising Landman
Land Department

CH:JS:jlw

Lindrith Unit - 3.0

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

159

March 19, 1968

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

Attention: Mr. T. W. Bittick

Re: 1968 Drilling Program
Lindrith 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 four Pictured Cliffs wells for the Lindrith Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

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

C
O
P
Y



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

February 23, 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 Lindrith unit area, Rio Arriba County, New Mexico, proposing the drilling of four Pictured Cliffs wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

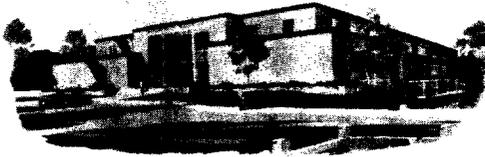
(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil & Gas Supervisor

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

68 FEB 27 AM 8 35

State of New Mexico



Commissioner of Public Lands



GUYTON B. HAYS
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO

January 22, 1968

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

Re: Lindrith Unit
Rio Arriba County,
New Mexico
1968 DRILLING PROGRAM

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1968 Plan of Development, which proposes the drilling of four Pictured Cliffs wells. This approval is subject to the approval by the United States Geological Survey and the Oil Conservation Commission.

MAIN OFFICE
68 JAN AM 8 43

One approved copy of the plan is enclosed.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:
Eddie Lopez, Supervisor
Unit Division

GBH/TR/EL/s
encl.

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

United States Geological Survey
Roswell, New Mexico

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

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: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1968 DRILLING PROGRAM

Gentlemen:

By letter dated February 15, 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 four Pictured Cliffs wells, all of which were drilled to test the Pictured Cliffs Formation. The Lindrith Unit Wells No. 65, 66 and 67 were completed on lands in the Pictured Cliffs Participating Area and did not cause an expansion of the existing Participating Area. The Lindrith Unit Well No. 64 was completed in the Pictured Cliffs Formation and its completion resulted in the Eighteenth Expansion of the Pictured Cliffs Participating Area.

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

Pictured Cliffs (Gas)	53
Pictured Cliffs (Noncommercial)	9
Dakota	1
Gallup	1
Plugged & Abandoned	<u>10</u>
Total	74

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:

March 17, 1968

The foregoing approvals are for the 1968 Drilling Program for
the Lindrith Unit I Sec. No. 713, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas 79999

December 19, 1967

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

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

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

151
MAIL OFFICE

'67 DEC 21 AM 8 35

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE EIGHTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective August 1,
1967

Gentlemen:

The above captioned Expansion was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - December 8, 1967
2. Commissioner of Public Lands - November 6, 1967
State of New Mexico
3. Oil Conservation Commission - November 7, 1967
State of New Mexico

A copy of this Letter is also being sent to the working interest owners of the Lindrith Unit Area.

Very truly yours,

Charles Higgins

Charles Higgins
Assistant Supervising Landman
Land Department

CH:JS:psr
Lindrith Unit - 4.1



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

121
December 13, 1967

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

Attention: Mr. Charles Higgins

Gentlemen:

The eighteenth revision of the Pictured Cliffs participating area, Lindrith unit agreement, Rio Arriba County, New Mexico, was approved on December 8, 1967, by the Acting Director, Geological Survey, effective August 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.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil & Gas Supervisor

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

MAIN OFFICE

'67 DEC 18 AM 8

El Paso Natural Gas Company 159

El Paso, Texas 79999

December 6, 1967

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

Re: Lindrith Unit
Designation of Sub-Operator
Rio Arriba County, New Mexico

Gentlemen:

Enclosed for your records is an original and two copies of a Designation of Sub-Operator in favor of Mr. Frank Yockey which relates to his operation of the Ingverson Federal #4 Well in the SE/4 Section 20, T-24-N, R-2-W, Rio Arriba County, New Mexico.

This well is located in the Lindrith Unit Area and was recently declared to be non-commercial in the Gallup Formation.

Yours very truly,

Charles Higgins

Charles Higgins
Assistant Supervising Landman
Land Department

MAIN OFFICE 000

CH:JS:vjh
Enclosures

'67 DEC 7 AM 8 34

cc: Commissioner of Public Lands (2)
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Mr. Frank Yockey (1)
821 Crestview Drive
Farmington, New Mexico

✓ Oil Conservation Commission (1)
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Mr. J. P. Musick, Jr. (1)
Farmington Office

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into effective as of the 15th day of April, 1967, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose address is Post Office Box 1492, El Paso, Texas 79999, hereinafter sometimes referred to as "Operator" and Frank Yockey, whose address is 821 Crestview Drive, Farmington, New Mexico, hereinafter sometimes referred to as "Sub-Operator";

WHEREAS, Operator is Unit Operator for the Lindrith Unit, 1 Sec. No. 713, Rio Arriba County, New Mexico; and

WHEREAS, Sub-Operator has reworked and recompleted the Ingwerson Federal No. 4 Well in the Gallup Formation pursuant to the provisions of Section Twelve (12) of the Lindrith Unit Agreement, said well being located on the following described land:

Township 24 North, Range 2 West, N.M.P.M.
Section 20: E/2

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

WHEREAS, Sub-Operator has requested the Operator execute this Designation in order that said Ingwerson Federal No. 4 Well may be operated by Sub-Operator.

NOW, THEREFORE, in order to permit Frank Yockey to operate the above-described well, El Paso Natural Gas Company, as Unit Operator of the Lindrith Unit, hereby designates Frank Yockey as Sub-Operator for the sole and only purpose of operating the Ingwerson Federal No. 4 Well on the above-described land.

Sub-Operator indicates its acceptance of this Designation by placing its signature in the space provided below and agrees to operate said Ingwerson Federal No. 4 Well as a reasonable and prudent operator in accordance with the terms and conditions of the Lindrith Unit Agreement and the Lindrith Unit Operating Agreement and also agrees to the following conditions:

1. Provide Operator with copies of all records required by the governmental agencies having jurisdiction of the well.
2. Notify Operator of any intention to plug and abandon the well.
3. Sub-Operator shall carry and pay for and file with Operator for its approval proper and acceptable evidence of the following insurance:
 - a. Workmen's Compensation and/or Employer's Liability Insurance which shall comply with the laws of the State in which this Agreement is to be performed and shall cover all of its employees engaged in the activities to be performed under this Agreement.

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

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

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

With copies to:
El Paso Natural Gas Company
Post Office Box 990
Farmington, New Mexico
Attention: Area Exploration Manager

Frank Yockey
821 Crestview Drive
Farmington, New Mexico

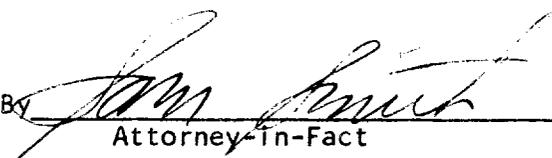
Sub-Operator shall comply with all applicable laws, rules, and regulations of any governmental authority having jurisdiction over operations performed under this Designation, and shall indemnify, protect and hold Operator harmless from and against any and all claims, demands or causes of action for injuries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

THIS DESIGNATION shall be effective from the date as set out above and thereafter until terminated by Operator. It is agreed that Operator may terminate this Designation of Sub-Operator at any time by notice sent by Registered Mail to Sub-Operator at the address of Sub-Operator as shown above, or to such other address that from time to time might be applicable.

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

OPERATOR

EL PASO NATURAL GAS COMPANY

By 
Attorney-In-Fact *CR*

SUB-OPERATOR

FRANK YOCKEY

By *Frank Yockey*

STATE OF TEXAS)
)
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this 14th day of November, 1967, by SAM SMITH, Attorney-in-Fact for EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

My Commission Expires:

March 1, 1967

[Signature]
Notary Public

STATE OF NEW MEXICO)
)
COUNTY OF SAN JUAN)

The foregoing instrument was acknowledged before me this 3rd day of October, 1967, by FRANK YOCKEY.

My Commission Expires:

October 5, 1968

[Signature]
Notary Public



151

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

November 17, 1967

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

Attention: Mr. Charles Higgins

Gentlemen:

Your notice of November 8, 1967, advises that as operator of the Lindrith unit, Rio Arriba County, New Mexico, you have determined that well No. 4 Ingerson Federal in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 24 N., R. 2 W., N.M.P.M., lease Santa Fe 078909, is not capable of producing unitized substances in paying quantities from the Gallup formation.

Well No. 4 Ingerson Federal was completed July 2, 1966, and tested August 1, 1966, for an initial absolute open flow potential of 3,282 MCF of gas per day from the Gallup, 6,500 - 6,555 feet. Production from the well has averaged 152 MCF of gas per day from the date of first delivery, March 27, 1967, through September 1, 1967.

This office concurs with your determination that the well is not capable of producing unitized substances in paying quantities under existing conditions.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

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

El Paso Natural Gas Company

El Paso, Texas 79999

November 8, 1967

129

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

87 Nov 13 1967

Re: Lindrith Unit, 1 Sec. No. 713
Rio Arriba County, New Mexico
NOTICE OF COMPLETION OF NON-
COMMERCIAL WELL - Gallup Formation

Dear Mr. Anderson:

Pursuant to Section 10 of the Lindrith Area Unit Agreement, 1 Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, has determined that the following well is incapable of producing unitized substances in paying quantities from the Gallup Formation. This well is as follows:

The Ingwerson #4 Well, located 660' from the South line and 1,980' from the East line of Section 20, Township 24 North, Range 2 West, Rio Arriba County, New Mexico, was re-entered by Frank Yockey under a Designation of Sub-Operator, and completed July 15, 1966, at a total depth of 6,700' in the Gallup Formation. The Gallup Formation in the interval between 6520'-6555' was treated with a sand-water fracturing process on July 2, 1966. This well was shut in on July 30, 1966, and after being shut-in for two (2) days, the well was tested in the Gallup Formation on August 1, 1966, and following a three (3) hour blow-down period gauged 2788 MCFGPD through a 3/4" choke and 3282 MCFGPD by the calculated absolute open-flow method with an SIPC of 1632 psia and an SIPT of 1632 psia. The spacing unit upon which this well is located is described as the SE/4 of Section 20, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This well was tied-in on January 23, 1967, and first delivered to the pipeline on March 27, 1967. The well's producing capabilities have been observed over the last few months, and since the date of first delivery through September 1, 1967, it has produced at an average daily rate of only 152 MCFGPD. Therefore, based on this information and related geological data, the Unit Operator has determined that the well is non-commercial.

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

Mr. John A. Anderson

-2-

November 8, 1967

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

Yours very truly,

EL PASO NATURAL GAS COMPANY

By: Charles Higgins
Charles Higgins
Assistant Supervising Landman
Land Department

CH:JS:psr

APPROVED: _____ DATE: _____
Supervisor, United States Geological Survey

cc: 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

Continental Oil Company
Attention: Mr. H. D. Haley
P. O. Box 1621
Durango, Colorado 81302

Mobil Oil Corporation (3)
P. O. Box 1652
Casper, Wyoming 82601
Attention: Production Manager

Mobil Oil Corporation
P. O. Box 778
Farmington, New Mexico 87401

Tenneco Oil Company
Attention: Mr. R. E. Siverson
P. O. Box 1714
Durango, Colorado 81302

Tenneco Oil Company
900 Wilco Building
Midland, Texas 79701
Attention: Mr. Weaver W. Ralls, Supervisor
Division Records and Rentals

Mr. Frank Yockey
821 Crestview Drive
Farmington, New Mexico 87401

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

157

November 7, 1967

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

Attention: Mr. Charles Higgins

Re: Eighteenth Expanded
Participating Area, Pictured
Cliffs, Lindrith Unit, Rio
Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Eighteenth Expanded Participating Area, Pictured Cliffs Formation, to be effective as of August 1, 1967, for the Lindrith Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

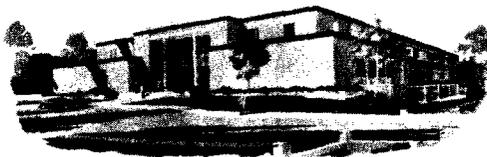
ALP/JEK/og

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

United States Geological Survey - Roswell

C
O
P
Y

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS
COMMISSIONER



November 6, 1967

P. O. BOX 1148
SANTA FE, NEW MEXICO

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

Re: Lindrith Unit Agreement
Eighteenth Expanded Parti-
cipating Area, Pictured Cliffs
Formation,
Rio Arriba County, New Mexico

1967 Nov 6 PM 10 30

ATTENTION: Mr. Charles Higgins

Gentlemen:

The Commissioner of Public Lands has approved as of this date the Eighteenth Expanded Participating Area, Pictured Cliffs Formation, to become effective as of August 1, 1967, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two (2) copies and handing six (6) approved copies to the Oil Conservation Commission, and requesting them to mail five (5) copies to the United States Geological Survey for their disposition.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS
BY:
Eddie Lopez, Supervisor
Unit Division

GBH/TH/EL/s

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

El Paso Natural Gas Company

El Paso, Texas 79999

November 1, 1967

Director
United States Geological Survey
Department of the Interior
Washington 25, D. C.

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

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

RECEIVED
NOV 3 8 42 AM '67
STATE LAND OFFICE
SANTA FE, N.M.

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE EIGHTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective August 1, 1967

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Eighteenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Eighteenth Expanded Participating Area - Effective August 1, 1967

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 24 North, Range 2 West, N.M.P.M.</u> Section 30: SE/4	160.00

The lands described above are proven productive by the following:

The Lindrith Unit #64 Well is located 990' from the South line and 900' from the East line of Section 30, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on May 5, 1967, and completed on May 25, 1967, at a total depth of 3169' as a tubingless completion in the Pictured Cliffs Formation. The Pictured Cliffs Formation in the interval between 3058'-3112' was treated with a sand-water fracturing process on

June 19, 1967. The well was shut-in on June 28, 1967, and after being shut-in for gauge for twenty-two (22) days, the well was tested in the Pictured Cliffs Formation on July 20, 1967, and following a three (3) hour blow-down period gauged 1857 MCFGPD through a 3/4" choke and 1938 MCFGPD by the calculated absolute open-flow method, with an SIPC of 870 psia. The committed spacing unit upon which this well is located is described as the SE/4 of Section 30, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

The effective date for the Eighteenth Expanded Participating Area is determined as August 1, 1967, the first day of the month following the testing of the Lindrith Unit #64 Well.

Attached hereto is Schedule XIX showing the Eighteenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Eighteenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files.

A copy of this letter and schedule are being sent to the working interest owners indicated on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
Charles Higgins
Assistant Supervising Landman
Land Department

CH:JS:psr
Enclosures

Lindrith Unit, 4.1

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

DATE: _____

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

DATE: *November 6, 1967*

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

DATE: *Nov 9, 1967*

The foregoing approvals are attached and made a part of the Request for Approval of the Eighteenth Expansion of the Pictured Cliffs Participating Area for the Lindrith Unit, Rio Arriba County, New Mexico.

LINDRITH UNIT
Working Interest Owners

Continental Oil Company
Attention: Mr. H. D. Haley
P. O. Box 1621
Durango, Colorado 81302

Mobil Oil Corporation
P. O. Box 1652
Attention: Production Manager
Casper, Wyoming

Mobil Oil Corporation
P. O. Box 778
Farmington, New Mexico 87401

Tenneco Oil Company
Attention: Mr. R. E. Siverson
P. O. Box 1714
Durango, Colorado 81302

Tenneco Oil Company
900 Wilco Building
Midland, Texas 79701
Attention: Mr. Weaver W. Ralls, Supervisor
Division Records & Rentals

El Paso Natural Gas Company

El Paso, Texas 79999

November 1, 1967

159

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

Re: Lindrith Unit Agreement,
I Sec. No. 713
El Arriba County, New Mexico

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Eighteenth Expanded Participating Area of the Pictured Cliffs Formation for the referenced unit.

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

Yours very truly,

Charles Higgins

Charles Higgins
Assistant Supervising Landman
Land Department

*Approved by CCC
11/7/67*

67 NOV 3 1967

CH:JS:psr

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

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

COPY

El Paso Natural Gas Company

El Paso, Texas 79999

September 1, 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 87501

Re: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
Pictured Cliffs Formation - NOTICE
OF COMPLETION OF ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit. These wells are as follows:

The Lindrith Unit #65 Well is located 1650' from the North line and 950' from the East line of Section 30, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on May 2, 1967, and completed on May 29, 1967, at a total depth of 3133' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 2992'-3000', 3008'-3016', 3029'-3037', was treated with a sand-water fracturing process on July 17, 1967. The well was shut-in on July 21, 1967, and after being shut-in for gauge for twelve (12) days, the well was tested on August 2, 1967, and following a three (3) hour blow-down period gauged 817 MCFGPD through a 3/4" choke, and 823 MCFGPD by the calculated absolute open-flow method, with an SIPC of 944 psia. The spacing unit upon which this well is located is described as the NE/4 of Section 30, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This spacing unit was included in the Thirteenth Expanded Participating Area of the Pictured Cliffs Formation, effective October 1, 1960, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #66 Well is located 1460' from the North line and 1600' from the West line of Section 30, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on May 10, 1967, and completed on June 2, 1967, at a total depth of 3170' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 3084'-3090', 3114'-3126', 3138'-3144', was treated with a sand-water fracturing process on July 17, 1967. This well was shut-in on July 21, 1967, and after being shut-in for gauge for twelve (12) days, the well was tested on August 2, 1967, and following a three (3) hour blow-down period gauged 1931 MCFGPD through a 3/4" choke, and 2009 MCFGPD by the calculated absolute open-flow method, with an SIPC of 949 psia. The spacing unit upon which this well is located is described as the NW/4 of Section 30, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 152.19 acres, more or less.

This spacing unit was included in the Thirteenth Expanded Participating Area of the Pictured Cliffs Formation, effective October 1, 1960, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #67 Well is located 1830' from the South line and 1830' from the West line of Section 19, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on May 19, 1967, and completed on June 5, 1967, at a total depth of 3132' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3048'-3056', 3066'-3074', was treated with a sand-water fracturing process on July 7, 1967. This well was shut-in on July 21, 1967, and after being shut-in for gauge for twelve (12) days, the well was tested on August 2, 1967, and following a three (3) hour blow-down period gauged 1458 MCFGPD through a 3/4" choke, and 1491 MCFGPD by the calculated absolute open-flow method, with an SIPC of 953 psia. The spacing unit upon which this well is located is described as the SW/4 of Section 19, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 152.10 acres, more or less.

This spacing unit was included in the Second Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1956, and the completion of this well does not warrant any further expansion of the participating area.

A copy of this letter is being sent to the working interest owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
Charles Higgins
Assistant Supervising Landman
Land Department

CH:JS:psr

cc: Continental Oil Company
P. O. Box 1621
Durango, Colorado
Attention: Mr. H. D. Haley

Mobil Oil Corporation (3)
P. O. Box 1652
Casper, Wyoming 82601
Attention: Production Manager

Mobil Oil Corporation
P. O. Box 778
Farmington, New Mexico 87401

Tenneco Oil Company
Attention: Mr. R. E. Siverson
P. O. Box 1714
Durango, Colorado 81302

Tenneco Oil Company
900 Wilco Building
Midland, Texas 79701
Attention: Mr. Weaver W. Ralls, Supervisor
Division Records and Rentals

El Paso Natural Gas Company

El Paso, Texas 79999

July 13, 1967

57 JUL 14 PM 1 20

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: Lindrith Unit No. 62 Well (PC)
Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico

Gentlemen:

This is to advise that by letter dated July 7, 1967, the United States Geological Survey concurred in the determination by El Paso Natural Gas Company, as Unit Operator, that the referenced well is incapable of producing unitized substances in commercial quantities from the Pictured Cliffs Formation.

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

Yours very truly,

Charles Higgins

Charles Higgins
Assistant Supervising Landman
Land Department

CH:JS:cjt

Lindrith Unit 5.0, 4.1



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

101
July 7, 1967

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

Attention: Mr. Harry Gevertz

Gentlemen:

Your notice of July 8, 1966, supplemented by your letter of June 7, and economic analysis of July 6, 1967, advises that El Paso Natural Gas Company, as unit operator of the Lindrith unit agreement, Rio Arriba County, New Mexico, has determined unit well No. 62 in the NW $\frac{1}{4}$ sec. 10, T. 24 N., R. 3 W., N.M.P.M., incapable of producing unitized substances in paying quantities from the Pictured Cliffs formation. Unit well No. 62 was completed on June 3, 1966, for an initial open flow potential of 1,215 MCF of gas per day from the Pictured Cliffs 3,363-3,394 feet. The well had a total cumulative production of 36,600 MCF of gas as of May 1, 1967.

We concur with your determination that unit well No. 62 is incapable of producing unitized substances in paying quantities from the Pictured Cliffs formation under existing conditions.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc:

Washington (w/cy of notice & ltr of June 7 and economic analysis)
Farmington (w/cy of notice & ltr of June 7 and economic analysis)
NMOCC, Santa Fe (ltr. only) ✓
Com. of Pub. Lands, Santa Fe (ltr. only)
Accounts

67 JUL 11 AM 8 12

El Paso Natural Gas Company

El Paso, Texas 79999

May 4, 1967

MAIN OFFICE

'67 MAY 5 PM 1 2'

151

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

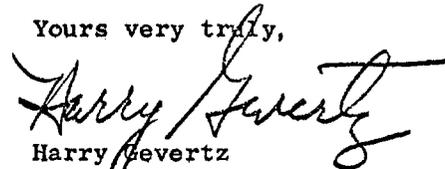
-2-

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

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

151

April 11, 1967

C

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

O

Attention: Mr. T. W. Bittick

Re: 1967 Drilling Program
Lindrith Unit, Rio Arriba
County, New Mexico

P

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1967 Drilling Program dated February 15, 1967, for the Lindrith Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Y

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe

United States Geological Survey - Roswell



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

MANAGEMENT
'67 APR 3 AM 8

IN REPLY REFER TO:

March 30, 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 February 15, 1967, for the Lindrich unit area, Rio Arriba County, New Mexico, proposing the drilling of four Pictured Cliffs wells has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

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

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS
COMMISSIONER



P. O. BOX 1148
SANTA FE, NEW MEXICO

March 2, 1967

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

Re: Lindrith Unit
Rio Arriba County,
New Mexico
1967 Drilling Program

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1967 Drilling Program for the captioned unit.

We are returning one approved copy for your files.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:
Ted Bilberry, Director
Oil and Gas Department

GBH/MMR/s
encl. 1.
cc: USGS-Roswell
OCC-Santa Fe

El Paso Natural Gas Company

El Paso, Texas 79999

February 15, 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: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1967 DRILLING PROGRAM

Gentlemen:

By letter dated February 23, 1966, 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 four Pictured Cliffs wells, all of which were drilled to test the Pictured Cliffs Formation. Two wells, the Lindrith Unit No. 61 and No. 63 were plugged and abandoned. The Lindrith Unit Well No. 60 was completed in the Pictured Cliffs Formation, and was determined to be commercial, but its completion did not cause an expansion of the existing Participating Area. The Lindrith Unit Well No. 62,* though completed in the Pictured Cliffs Formation, has been declared non-commercial.

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

Pictured Cliffs (Gas)	49
Pictured Cliffs (Non-commercial)	8
Dakota	1
Gallup (Old well worked over)	1
Plugged & Abandoned	10
Total	<u>69</u>

*Formal approval pending

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby submits a proposed Drilling Program for the calendar year 1967, providing for the drilling of four Pictured Cliffs wells at the following locations:

<u>Well No.</u>	<u>Spacing Unit</u>	<u>Formation</u>
64	SE/4 Sec. 30, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
65	NE/4 Sec. 30, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
66	NW/4 Sec. 30, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
67	SW/4 Sec. 19, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs

The basis for drilling the Lindrith Unit No. 64 is to extend the productive limits of the Pictured Cliffs Participating Area, and Unit Nos. 65, 66 and 67 are being drilled to further develop lands within the Pictured Cliffs Participating Area.

El Paso Natural Gas Company intends to drill these Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary tools. Surface casing will be set to approximately 100' from the surface, and then a production string of casing will be set and cemented through the Pictured Cliffs Formation. Mud will be used in drilling through the Pictured Cliffs Formation and a wire line unit will be used for completion work. The Pictured Cliffs Formation will be subjected to a hydraulic fracturing process. Due care will be taken to protect all horizons.

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

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
T. W. Bittick, Manager
Land Department

TWB:JS:ct

cc: Continental Oil Company
P. O. Box 1621
Durango, Colorado
Tenneco Oil Company
P. O. Box 1714
Durango, Colorado

Mobil Oil Company
P. O. Box 1652
Casper, Wyoming
Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

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

DATE: *April 11, 1967*

The foregoing approvals are for the 1967 Drilling Program for the
Lindrith Unit I Sec. No. 713, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas 79999

July 8, 1966

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

Re: Lindrith Unit, 1 Sec. No. 713
Rio Arriba County, New Mexico
NOTICE OF COMPLETION OF NON-
COMMERCIAL WELL

Dear Mr. Anderson:

Pursuant to Section 10 of the Lindrith Area Unit Agreement, 1 Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the test date set out below that the following well is incapable of producing unitized substances in paying quantities from the Pictured Cliffs Formation. This well is as follows:

The Lindrith Unit #62 Well, located 1,650' from the North-line and 1,040' from the West line of Section 10, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on May 3, 1966, and completed June 3, 1966, at a total depth of 3,440' in the Pictured Cliffs Formation as a Tubingless Completion. The Pictured Cliffs Formation in the intervals between 3,368' - 3,376', 3,386' - 3,394' was treated with a sand-water fracturing process on May 23, 1966. This well was shut in on May 26, 1966, and after being shut-in for eight (8) days, the well was tested in the Pictured Cliffs Formation on June 3, 1966, and following a three (3) hour blow-down period gauged 1196 MCFGPD through a 3/4" choke and 1215 MCFGPD by the calculated absolute open-flow method with a SIPC of 966 psia. The spacing unit upon which this well is located is described as the NW/4 of Section 10, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

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

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

Yours very truly,

EL PASO NATURAL GAS COMPANY

BY: 
Harry Gevertz
Supervising Landman
Land Department

HG:GWO:kw

APPROVED: _____
Supervisor, United States Geological Survey

DATE: _____

cc: Commissioner Of Public Lands
State of New Mexico
Post Office Box 791
Santa Fe, New Mexico

Continental Oil Company
Post Office Box 1121
Durango, Colorado

Mobil Oil Corporation
Attention: Mr. William H. Kay
Post Office Box 3371
Durango, Colorado

Mobil Oil Corporation
10737 South Shoemaker Road
Santa Fe Springs, California

Oil Conservation Commission
State of New Mexico
Post Office Box 871
Santa Fe, New Mexico

Tenneco Oil Company
Post Office Box 1714
835 Second Avenue
Durango, Colorado

El Paso Natural Gas Company

El Paso, Texas 79999

July 6, 1966

159
1966 JUL 11 11 11 AM '66

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

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

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

Re: Lindrith Unit, I-SEC. 713
Rio Arriba County, New Mexico
Pictured Cliffs Formation
**NOTICE OF PLUGGED AND ABANDONED
WELLS**

Gentlemen:

El Paso Natural Gas Company, as Unit Operator of the Lindrith Unit, hereby advises that the following listed wells, which were included on the 1966 Lindrith Plan of Development, were plugged and abandoned on the dates indicated below:

<u>Well Name</u>	<u>Location</u>	<u>Formation</u>	<u>Total Depth</u>	<u>Date Plugged and Abandoned</u>
1. Lindrith Unit #61	NE/4 Sec. 32, T-24-N, R-2-W	P. C.	3100'	April 24, 1966
2. Lindrith Unit #63	SE/4 Sec. 13, T-24-N, R-3-W	P. C.	3180'	April 29, 1966

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


Harry Gevertz
Supervising Landman
Land Department

HG:GWO:sb
Attachment
Lindrith Unit 3.0

Lindrith Unit
Working Interest Owners

Continental Oil Company
Attention: Mr. H. D. Haley
P. O. Box 1621
Durango, Colorado 81302

Mobil Oil Company
10737 So. Shoemaker Road
Santa Fe Springs, California

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

Tenneco, Inc.
Attention: Mr. R. E. Siverson
P. O. Box 1714
Durango, Colorado

Tenneco, Inc.
Attention: Mr. Weaver W. Ralls
4th Floor, 201 Wall Building
Midland, Texas 79701

El Paso Natural Gas Company

El Paso, Texas 79999

April 6, 1966

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

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

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

Re: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
1966 DRILLING PROGRAM

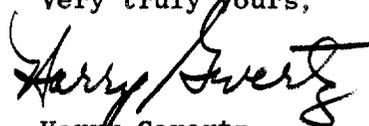
Gentlemen:

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

1. United States Geological Survey - March 30, 1966
2. Commissioner of Public Lands, - March 15, 1966
State of New Mexico
3. Oil Conservation Commission, - April 1, 1966
State of New Mexico

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

Very truly yours,



Harry Gevertz
Supervising Landman
Land Department

HG:GWO:sb

Lindrith Unit 3.0

El Paso Natural Gas Company

El Paso, Texas 79999

July 5, 1966

1966 JUL 13 AM 7 30

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

Commissioner of Public Lands
State of New Mexico
Post Office Box 791
Santa Fe, New Mexico

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

Re: Lindrith Unit Area, 1 Sec. No. 713
Rio Arriba County, New Mexico
Pictured Cliffs Formation - NOTICE
OF COMPLETION OF ADDITIONAL WELL

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, 1 Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that a well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to this unit. This well is as follows:

The Lindrith Unit #60 Well is located 800' from the South line and 800' from the East line of Section 25, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on April 24, 1966, and completed on June 3, 1966, at a total depth of 3,191', in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 3,130' - 3,140', 3,152' - 3,162' was treated with a sand-water fracturing process on May 20, 1966. The well was shut-in on May 26, 1966, and after being shut-in for gauge for eight (8) days, the well was tested on June 3, 1966, and following a three (3) hour blow-down period gauged 2,554 MCFGPD through a 3/4" choke, and 2,823 MCFGPD by the calculated absolute open-flow method, with an SIPC of 829 psia. The spacing unit upon which this well is located is described as the SE/4 of Section 25, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

159

April 1, 1966

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

Attention: Mr. T. W. Bittick

Re: 1966 Drilling Program
Lindrith 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 dated February 23, 1966, for the Lindrith 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/og

cc: U. S. G. S., Roswell, New Mexico
Commissioner of Public Lands - Santa Fe

C

O

P

Y

MAIL OFFICE

MAR 31 PM 12 56
-Drawer 1857
Roswell, New Mexico 88201

March 30, 1966

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1966 plan of development dated February 23, 1966, for the Lindrith unit area, Rio Arriba County, New Mexico, proposing the drilling of Four Pictured Cliffs wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SIB.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil & Gas Supervisor

cc:

Washington (w/cy of plan)

Farmington (w/cy of plan)

N.M.G.C.C. - Santa Fe (ltr. only) ✓

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

El Paso Natural Gas Company

El Paso, Texas 79999

February 23, 1966

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

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

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

Re: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1966 DRILLING PROGRAM

Gentlemen:

By letter dated December 23, 1964, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1965. Said Program provided for the drilling of four Pictured Cliffs wells. All of the wells were completed in the Pictured Cliffs Formation. All four wells, the Lindrith Unit No. 55, No. 56, No. 57 and No. 59 Wells were determined to be commercial in the Pictured Cliffs Formation and the Seventeenth Expansion of the Pictured Cliffs Participating Area has been approved by the regulatory bodies.

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

Pictured Cliffs	54	(7 noncommercial)
Dakota	1	
Plugged and abandoned	<u>9</u>	
	64	

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby submits a proposed Drilling Program for the calendar year 1966, providing for the drilling of four Pictured Cliffs wells at the following locations:

<u>Spacing Unit</u>	<u>Formation</u>
1. SE/4 Sec. 25, T-24-N, R-3-W, N.M.P.M.	Pictured Cliffs
2. NE/4 Sec. 32, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
3. NW/4 Sec. 10, T-24-N, R-3-W, N.M.P.M.	Pictured Cliffs
4. SE/4 Sec. 13, T-24-N, R-3-W, N.M.P.M.	Pictured Cliffs

The basis for drilling the Lindrith Unit Nos. 61 and 62 is to extend the productive limits of the Pictured Cliffs Participating Area, and Unit Nos. 60 and 63 are being drilled to further develop lands within the Pictured Cliffs Participating Area.

El Paso Natural Gas Company intends to drill these Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary tools. Surface casing will be set to approximately 100' from the surface, and then a production string of casing will be set and cemented through the Pictured Cliffs Formation. Mud will be used in drilling through the Pictured Cliffs Formation and a wire line unit will be used for completion work. The Pictured Cliffs Formation will be subjected to a hydraulic fracturing process. Due care will be taken to protect all horizons.

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

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
T. W. Bittick, Manager
Land Department

TWB:GWO:sb

cc: Continental Oil Company
P. O. Box 3312
Durango, Colorado

Mobil Oil Company
10737 South Shoemaker Road
Santa Fe Springs, California

Tenneco Oil Company
P. O. Box 1714
Durango, Colorado

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

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: 2-1-66

The foregoing approvals are for the 1966 Drilling Program for the Lindrith
Unit I Sec. No. 713, Rio Arriba County, New Mexico.

159
MAIN OFFICE OCC

Drawer 1857
Roswell, New Mexico 88201

JAN 28 AM 11:16

January 27, 1966

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

Attention: Mr. Harry Coverts

Gentlemen:

Your letter of January 20 transmits a ratification and joinder executed by T. W. and Vivian M. Stevenson committing their basic royalty interest in fee tract 23 to the Lindrith unit agreement, I-Sec. No. 713, New Mexico.

Copies of the ratification and joinder are being distributed to the appropriate Federal offices and one copy surplus to our needs is returned herewith.

Sincerely yours,

JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil & Gas Supervisor

cc:

Washington (w/cy of joinder)
Farmington (w/cy of joinder)
HM - Santa Fe (ltr. only)
N.M.O.C.S. - Santa Fe (ltr. only) ✓
Com. of Pub. Lands - Santa Fe (ltr. only)

157
El Paso Natural Gas Company

MAIN OFFICE OGC

El Paso, Texas 79999

JAN 24 AM 3 21

January 20, 1966

Oil Conservation Commission
State of New Mexico
Post Office Box ~~2028~~
Santa Fe, New Mexico

Gentlemen:

You will find enclosed two (2) duplicate original copies and one (1) Xerox copy of a Ratification of Unit Agreement that has been signed by Mr. T. W. Stevenson and his wife, Vivian M. Stevenson. The Ratification covers interest held by the Stevensons in the Lindrith Unit Tract 25. The enclosed Ratification has also been approved by Socony Mobil Oil Company, Inc., Continental Oil Company and Tenneco Oil Company. El Paso has approved as Unit Operator and Working Interest Owner.

If after your examination you find the enclosed Ratification to be in order, we respectfully request that you process the Agreement so that this interest will be effectively committed to the Lindrith Unit. We will also appreciate your returning to us one fully approved copy of this Agreement.

Very truly yours,



Harry Gevertz
Supervising Landman
Land Department

HG:GWO:rr
Enclosures

NM 4722
Lindrith Unit, 1.0

cc: 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

El Paso Natural Gas Company

MAIN OFFICE QCC
El Paso, Texas 79999

JAN 24 AM ~~January 20~~ 1966

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1887
Roswell, New Mexico

Dear Mr. Anderson:

You will find enclosed five (5) duplicate original copies of a Ratification of Unit Agreement that has been signed by Mr. T. W. Stevenson and his wife, Vivian M. Stevenson. The Ratification covers interest held by the Stevensons in the Lindrith Unit Tract 25. The enclosed Ratification has also been approved by Socony Mobil Oil Company, Inc., Continental Oil Company and Tenneco Oil Company. El Paso has approved as Unit Operator and Working Interest Owner.

If after your examination you find the enclosed Ratification to be in order, we respectfully request that you process the Agreement so that this interest will be effectively committed to the Lindrith Unit. We will also appreciate your returning to us one fully approved copy of this Agreement.

Very truly yours,

Original Signed by

HARRY GEVERTZ

Harry Gevertz

Supervising Landman

Land Department

BG:GWO:rr
Enclosures

RM 4722
Lindrith Unit, 1.0

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 87501

COPY

8:21

El Paso Natural Gas Company
MAIN OFFICE OCC

El Paso, Texas 79999

JAN 24 AM 8:21

January 20, 1966

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

Gentlemen:

You will find enclosed one (1) duplicate original copy and one (1) Xerox copy of a Ratification of Unit Agreement that has been signed by Mr. T. W. Stevenson and his wife, Vivian M. Stevenson. The Ratification covers interest held by the Stevensons in the Lindrith Unit Tract 25. The enclosed Ratification has also been approved by Socony Mobil Oil Company, Inc., Continental Oil Company and Tenneco Oil Company. El Paso Gas approved as Unit Operator and Working Interest Owner.

If after your examination you find the enclosed Ratification to be in order, we respectfully request that you process the Agreement so that this interest will be effectively committed to the Lindrith Unit.

Very truly yours,

Original Signed by

NARRY GEVERTZ

Narry Geverts

Supervising Landman
Land Department

NG:GWO:rr
Enclosures

RM 4722
Lindrith Unit, 1.0

cc: 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

COPY

APPROVED AND CONSENTED TO:
SOCOBY MOBIL OIL COMPANY, INC.

BY [Signature]
Attorney-in-Fact
Working Interest Owner

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARriba COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

SIGNATURES AND ADDRESSES

Lee D. Dalton: _____

TRACT NO. 19

Alvena Dalton: _____

Address Lindrith, N. M.

Date _____

Ben Loeson: _____

TRACT NO. 24

Gussie Loeson: _____

Address Lindrith, N. M.

Date _____

T. W. Stevenson: T W Stevenson

TRACT NO. 25

Marian M. Stevenson: Marian M Stevenson

Address Lindrith, N. M.

Date Febr. 27, 1950

APPROVED AND CONSENTED TO:
EL PASO NATURAL GAS COMPANY

BY [Signature]
Attorney-in-Fact
Unit Operator

& Working Interest Owner

APPROVED AND CONSENTED TO:
CONTINENTAL OIL COMPANY

BY [Signature]
Attorney-in-Fact
Working Interest Owner

APPROVED AND CONSENTED TO:
TENNECO OIL COMPANY

BY [Signature]
Agent and Attorney-in-Fact
Working Interest Owner

Authority of J. D. Beach to execute as
Agent and Attorney-in-Fact on the
General Qualifications file.



STATE OF NEW MEXICO }
COUNTY OF _____ } SS

On this ____ day of January, 19 50, before me personally appeared Lee D. Dalton and Alvona Dalton, his wife, to me known to be the person_s described in and who executed the foregoing instrument, and acknowledged that the yexecuted the same as their free act and deed.

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

My Commission Expires _____

Notary Public

STATE OF NEW MEXICO }
COUNTY OF _____ } SS

On this ____ day of January 19 50, before me personally appeared Ben Leeson (married to Gussie Leeson), 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.

My Commission Expires _____

Notary Public

STATE OF NEW MEXICO }
COUNTY OF Rio Arriba } SS

On this 27th day of January-February 19 50, before me personally appeared T. W. Stevenson and Vivian M. Stevenson, his wife, to me known to be the person_s described in and who executed the foregoing instrument, and acknowledged that the yexecuted the same as their free act and deed.

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

My Commission Expires _____

June 29, 1950

Theron J. Anson
Notary Public

El Paso Natural Gas Company

El Paso, Texas

December 2, 1965

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

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

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

151

Re: Lindrith Unit Agreement, 1 Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE SEVENTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective August 1, 1965

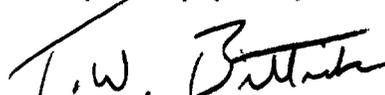
Gentlemen:

The above captioned Expansion was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - November 19, 1965
2. Commissioner of Public Lands - September 29, 1965
State of New Mexico
3. Oil Conservation Commission - October 1, 1965
State of New Mexico

A copy of this letter is also being sent to the working interest owners of the Lindrith Unit Area.

Very truly yours,


T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:kf

Lindrith Unit, 4.1

El Paso Natural Gas Company

El Paso, Texas 79999

December 1, 1965

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

121

Re: Lindrith Unit Agreement, 1 Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE SEVENTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective August 1, 1965

Gentlemen:

You will find enclosed for your information and files a completely executed copy of the Seventeenth Expanded Participating Area of the Pictured Cliffs Formation for the Lindrith Unit, effective August 1, 1965.

Very truly yours,



T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:kf
Enclosure

Lindrith Unit, 5.0

159

DEC 1 - 1965

Drawer 1837
Roswell, New Mexico 88201

November 30, 1965

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

Attention: Mr. T. W. Bartick

Gentlemen:

The seventeenth revision of the Pictured Cliffs participating area for the Lindrich unit agreement, Rio Arriba County, New Mexico, was approved on November 19, 1965, by the Acting Director, Geological Survey, effective as of August 1, 1965.

Three 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.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil & Gas Supervisor

- cc:
- Washington (ltr. only)
- Farmington (w/cy of appln.)
- RLM - Santa Fe (w/cy of appln.)
- N.M.A.C.C. - Santa Fe (ltr. only) ✓
- Com. of Pub. Lands - Santa Fe (ltr. only)

ILLEGIBLE

OIL CONSERVATION COMMISSION

P. O. ~~BOX 271~~ BOX 2038
SANTA FE, NEW MEXICO

159

October 1, 1965

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

Attention: Mr. T. W. Bittick

**Re: Seventeenth Expanded
Pictured Cliffs Participating
Area, Lindrith Unit, Rio
Arriba County, New Mexico**

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this late approved the Seventeenth Expanded Participating Area, Pictured Cliffs Formation for the Lindrith 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 United States Geological Survey, Roswell, New Mexico.

Very truly yours,

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

ALP/JEK/og

cc: United States Geological Survey - Roswell

Commissioner of Public Lands - Santa Fe

C
O
P
Y

September 29, 1965

El Paso Natural Gas Company
Post Office Box 1492
El Paso, Texas

Re: Lindrith Unit
Rio Arriba County,
New Mexico

Attention: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has approved as of this date the Seventeenth Expanded Participating Area, Pictured Cliffs Formation, to become effective as of August 1, 1965, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing eight (8) approved copies to the Oil Conservation Commission. They will forward at least seven (7) copies to the United States Geological Survey for their disposition.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:

Ted Bilberry, Director
Oil and Gas Department

MBR/e

cc: United States Geological Survey
Roswell, New Mexico

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

C
O
P
Y

El Paso Natural Gas Company

El Paso, Texas 79999

September 23, 1965

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

SEP 27 9 35 AM '65
STATE OF NEW MEXICO
LAND DEPARTMENT

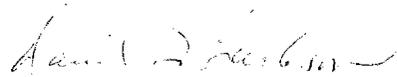
Re: Lindrith Unit
Rio Arriba County,
New Mexico

Dear Sir:

We are enclosing for your approval ten (10) copies of Request for Approval of the Seventeenth Expanded Participating Area of the Pictured Cliffs Formation covering the captioned Unit.

If this Expansion meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for their approval and execution. After this Expansion has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file and seven (7) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for their approval and further handling. After this Expansion has been approved and signed by the United States Geological Survey, four (4) copies should be returned to El Paso for further handling.

Very truly yours,



David T. Burleson
Assistant Supervising Landman
Land Department

DTB:GWO:kf
Enclosures

Lindrith, 4.1

cc: Mr. John A. Anderson
Regional Oil & 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

El Paso Natural Gas Company

El Paso, Texas

September 16, 1965

Director
United States Geological Survey
Department of the Interior
Washington 25, D. C.

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

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

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE SEVENTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective August 1, 1965

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Seventeenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Seventeenth Expanded Participating Area - Effective August 1, 1965

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 24 North, Range 2 West, N.M.P.M.</u>	
Section 31: E/2	320.00
Section 32: W/2	320.00
	<u>640.00</u>

The lands described above are proven productive by the following:

1. The Lindrith Unit #55 Well is located 800' from the South line and 1650' from the West line of Section 32, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on June 2, 1965, and completed on June 29, 1965, at a total depth of 3199' as a tubingless completion in the Pictured Cliffs Formation. The Pictured Cliffs Formation in the intervals between 3095' - 3103', 3113' - 3121' was treated with a sand-water fracturing process on June 28, 1965. The well was shut-in on July 2, 1965, and after being shut-in for gauge for seven (7) days, the well was tested in the Pictured Cliffs Formation on July 9, 1965, and following a three (3) hour blow-down period gauged 4296 MCFGPD through a 3/4" choke and 5328 MCFGPD by the calculated absolute open flow method, with an SIPC of 964 psia. The committed spacing unit upon which this well is located is described as the SW/4 of Section 32, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.
2. The Lindrith Unit #56 Well is located 1650' from the South line and 800' from the East line of Section 31, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on June 7, 1965, and completed on June 29, 1965, at a total depth of 3227' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the interval between 3116' - 3136', was treated with a sand-water fracturing process on June 28, 1965. The well was shut-in on July 2, 1965, and after being shut-in for gauge for seven (7) days, the well was tested on July 9, 1965, and following a three (3) hour blow-down period gauged 3791 MCFGPD through a 3/4" choke, and 4506 MCFGPD by the calculated absolute open-flow method, with an SIPC of 942 psia. The spacing unit upon which this well is located is described as the SE/4 of Section 31, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.
3. The Lindrith Unit #57 Well is located 1550' from the North line and 1800' from the East line of Section 31, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on June 14, 1965, and completed on June 29, 1965, at a total depth of 3229' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the interval between 3125' - 3145' was treated with a sand-water fracturing process on June 28, 1965. This well was shut-in on July 2, 1965, and after being shut-in for gauge for seven (7) days, the well was tested on July 9,

1965, and following a three (3) hour blow-down period gauged 6158 MCFGPD through a 3/4" choke, and 13,708 MCFGPD by the calculated absolute open-flow method, with an SIPC of 831 psia. The spacing unit upon which this well is located is described as the NE/4 of Section 31, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

4. The Lindrith Unit #59 Well is located 1650' from the North line and 890' from the West line of Section 32, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on June 19, 1965, and completed on June 29, 1965, at a total depth of 3190' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3084' - 3100', 3140' - 3144' was treated with a sand-water fracturing process on June 28, 1965. This well was shut-in on July 2, 1965, and after being shut-in for gauge for seven (7) days, the well was tested on July 9, 1965, and following a three (3) hour blow-down period gauged 7488 MCFGPD through a 3/4" choke, and 18,517 MCFGPD by the calculated absolute open-flow method, with an SIPC of 966 psia. The spacing unit upon which this well is located is described as the NW/4 of Section 32, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

The effective date for the Seventeenth Expanded Participating Area is determined as August 1, 1965, the first day of the month following the testing of the Lindrith Unit #55, #56, #57 and #59 Wells.

Attached hereto is Schedule XVIII showing the Seventeenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Seventeenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files.

A copy of this letter and schedule are being sent to the working interest owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By: T. W. Bittick

T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:kf
Enclosures

Lindrith Unit, 4.1

cc: Continental Oil Company
Attention: Mr. H. D. Haley
P. O. Box 1621
Durango, Colorado

Mobil Oil Company
10737 South Shoemaker Road
Santa Fe Springs, California

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

Tenneco Oil Company
Attention: Mr. R. E. Siverson
P. O. Box 1714
Durango, Colorado

SEP 27 0 37 AM '65
STANDARD OIL CO
DURANGO, COLORADO

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

DATE: _____

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

DATE: Sept 29, 1965

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

DATE: Oct 1, 1965

The foregoing approvals are attached and made a part of the Request for Approval of the Seventeenth Expansion of the Pictured Cliffs Participating Area for the Lindrith Unit, Rio Arriba County, New Mexico.

SEP 27 6 37 AM '65
STATE OFFICE
SANTA FE, N.M.

El Paso Natural Gas Company

El Paso, Texas 79909

September 13, 1965

MAILED

SEP 17 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: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1965 DRILLING PROGRAM

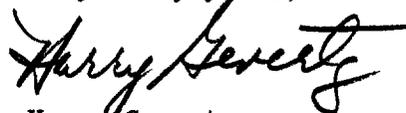
Gentlemen:

The 1965 Drilling Program for the Lindrith 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 - August 30, 1965
3. Oil Conservation Commission,
State of New Mexico - September 8, 1965

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

Very truly yours,



Harry Gevertz
Supervising Landman
Land Department

HG:GWO:rr
Lindrith Unit, 3.0

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

159

September 8, 1965

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

Attention: Mr. Sam Smith

Re: 1965 Drilling Program,
Lindrith 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 Lindrith 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/JEX/og

cc: United States Geological Survey - Roswell

Commissioner of Public Lands - Santa Fe

C
O
P
Y



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

MAIN OFFICE JULY
IN REPLY REFER TO:
AUG 3 AM 10:11
'65

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 for the Lindrith unit area, Rio Arriba County, New Mexico, proposing the drilling of four Pictured Cliffs wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(Orig.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)

El Paso Natural Gas Company

El Paso, Texas

December 23, 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: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1965 DRILLING PROGRAM

Gentlemen:

By letter dated March 12, 1964, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1964. Said Program provided for the drilling of four Pictured Cliffs wells. All of the wells were completed in the Pictured Cliffs Formation. Of these wells, the Lindrith Unit No. 47, No. 52 and No. 54 Wells were drilled within the Pictured Cliffs Participating Area. The fourth well, the Lindrith Unit No. 53 Well, was determined to be commercial in the Pictured Cliffs Formation and the Sixteenth Expansion of the Pictured Cliffs Participating Area, which the No. 53 Well occasioned, has been submitted to the regulatory bodies for approval.

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

Pictured Cliffs	51 (8 non-commercial)
Dakota	1
Plugged and abandoned	8
	<u>60</u>

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby submits a proposed Drilling Program for the calendar year 1965, providing for the drilling of four Pictured Cliffs wells at the following locations:

<u>Spacing Unit</u>	<u>Formation</u>
1. SW/4 Sec. 32, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
2. SE/4 Sec. 31, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
3. NE/4 Sec. 31, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
3. SW/4 Sec. 20, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs

The basis for drilling the location set out in 1. above is to prevent drainage by the Amerada Jicarilla Apache No. 1-H Pictured Cliffs well in the NW/4 of Section 5, T-23-N, R-2-W, N.M.P.M., with an initial potential of 2.9 M²CF and delivering 1,280 MCF/D and which offsets this location. The locations set out in 2, 3 and 4 above are being drilled to extend the productive limits of the Pictured Cliffs Participating Area.

El Paso Natural Gas Company intends to drill these Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary tools. Surface casing will be set to approximately 100' from the surface, and then a production string of casing will be set and cemented through the Pictured Cliffs Formation. Mud will be used in drilling through the Pictured Cliffs Formation and a wire line unit will be used for completion work. The Pictured Cliffs Formation will be subjected to a hydraulic fracturing process. Due care will be taken to protect all horizons.

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

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By Sam Smith
Sam Smith, Manager
Land Department

SS:GWO:js

cc: Continental Oil Company
P. O. Box 3312
Durango, Colorado

Mobil Oil Company
10737 So. Shoemaker Road
Santa Fe Springs, California

Tenneco Oil Company
P. O. Box 1714
Durango, Colorado

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

APPROVED:

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

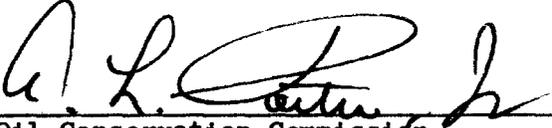
DATE: _____

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: 9-7-65

The foregoing approvals are for the 1965 Drilling Program for the Lindrith
Unit I Sec. No. 713, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas

January 19, 1965

100 Jan 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: Lindrith Unit Agreement, I Sec. #713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE SIXTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective July 1,
1964

Gentlemen:

The above captioned expansion was approved by the regulatory bodies on the following dates:

United States Geological Survey - January 5, 1965.
Commissioner of Public Lands of
the State of New Mexico - November 3, 1964.
Oil Conservation Commission of
the State of New Mexico - November 5, 1964.

A copy of this letter is also being sent to the working interest owners of the Lindrith Unit Area.

Very truly yours,



Harry Gevertz
Regional Landman
Land Department

HG:GWO:js

Lindrith Unit, 4.1



IN REPLY REFER TO:

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

101
January 13, 1965

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

Attention: Mr. T. W. Bittick

Gentlemen:

The sixteenth revision of the Pictured Cliffs participating area for the Lindrith unit, Rio Arriba County, New Mexico, was approved by the Acting Director, Geological Survey, on January 3, 1965, effective as of July 1, 1964.

One approved copy of the application is enclosed. It is requested that you 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)
Farmington (w/cy appln.)
ELM, Santa Fe (w/cy appln.)
HMOCC (ltr. only) ✓
Com. of Pub. Lands, Santa Fe (ltr. only)

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

159

November 5, 1964

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

Attention: Mr. Harry Geverts

Re: Sixteenth Expanded Pictured
Cliffs Participating Area,
Lindrith Unit, Rio Arriba
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Sixteenth Expanded Pictured Cliffs Participating Area for the Lindrith 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/dg

cc: Commissioner of Public Lands
Santa Fe, New Mexico

United States Geological Survey - Roswell

C
O
P
Y

MAIL ROOM

'64 Nov 4 AM 10

November 4, 1964

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

Re: Lindrith Unit Agreement
Rio Arriba County, New Mexico
Sixteenth Expanded Participating
Area, Pictured Cliffs Formation

Attention: Mr. Harry Gevertz

Gentlemen:

The Commissioner of Public Lands approved as of November 3, 1964, the Application for the Sixteenth Expanded Participating Area, Pictured Cliffs formation, Lindrith Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are handing six approved copies of this Application to the Oil Conservation Commission and requesting that they forward at least five copies to the United States Geological Survey, Roswell, New Mexico.

El Paso Natural Gas Company
Attention: Mr. Harry Gevertz
November 4, 1964
- page 2 -

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
Ted Bilberry, Director
Oil & Gas Department

ESW/mar/v

cc:

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

Oil Conservation Commission
Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas

October 30, 1964

Director
United States Geological Survey
Department of the Interior
Washington 25, D. C.

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

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

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
**REQUEST FOR APPROVAL OF THE SIXTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective July 1, 1964.**

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Sixteenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 2 West, N.M.P.M.
Section 32: SE/4

The lands described above are proven productive by the following:

1. The Lindrith Unit #53 Well is located 900' from the South line and 1750' from the East line of Section 32, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on May 11, 1964, and completed on June 4, 1964, at a total depth of 3250' as a tubingless completion in the Pictured Cliffs Formation. The Pictured Cliffs Formation in the intervals between 3085' - 3091', 3101' - 3113' was treated with a sand-water fracturing

process on June 2, 1964. The well was shut-in on June 4, 1964, and after being shut-in for gauge for thirteen (13) days, the well was tested in the Pictured Cliffs Formation on June 17, 1964, and following a three (3) hour blow-down period gauged 2720 MCFGPD through a 3/4" choke and 2934 MCFGPD by the calculated absolute open flow method, with an SIPC of 977 psia. The committed spacing unit upon which this well is located is described as the SE/4 of Section 32, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

The effective date for the Sixteenth Expanded Participating Area is determined as July 1, 1964, the first of the month following the testing of the Lindrith Unit #53 Well.

Attached hereto is Schedule XVII showing the Sixteenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Sixteenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files.

A copy of this letter and schedule are being sent to the working interest owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

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

RECEIVED
NOV 2 9 59 AM '64
STATE LAND OFFICE
SANTA FE, N.M.

TWB:GWO:kp

cc: Continental Oil Company
P. O. Box 3312
Durango, Colorado
Attention: Mr. H. D. Haley

Mobil Oil Company
10737 So. Shoemaker Road
Santa Fe Springs, California

Tenneco Oil Company
P. O. Box 2511
Houston, Texas 77001

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

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

DATE: _____

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

DATE: November 2, 1964

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

DATE: 11/5/64

The foregoing approvals are attached and made a part of the Request for Approval of the Sixteenth Expansion of the Pictured Cliffs Participating Area for the Lindrith Unit, Rio Arriba County, New Mexico.

REC'D
NOV 2 9 59 AM '64
STATE LAND OFFICE
SANTA FE, N.M.

MAIN OFFICE

NOV 2 AM 11

El Paso Natural Gas Company

El Paso, Texas 79999

October 30, 1964

159

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

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
**REQUEST FOR APPROVAL OF THE SIXTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective July 1, 1964.**

Gentlemen:

Attached are eight copies of the subject Sixteenth Expanded Participating Area for the Pictured Cliffs Formation for the Lindrith Unit, together with the appropriate exhibits and geological information.

If this Expansion meets with your approval, please execute all copies in the space provided and secure the approval of the Oil Conservation Commission on all copies thereof. Upon approval of the Oil Conservation Commission and your office, will you please retain two copies for your files and have the Oil Conservation Commission retain one copy for their files and forward the remaining five copies to the United States Geological Survey.

Very truly yours,



Harry Gevertz
Regional Landman
Land Department

HG:GWO:js
Enclosures

cc: United States Geological Survey
Oil Conservation Commission ✓

Lindrith, 4.1

El Paso Natural Gas Company

El Paso, Texas

October 30, 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 87501

Re: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
Pictured Cliffs Formation - NOTICE
OF COMPLETION OF ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit. These wells are as follows:

The Lindrith Unit #47 Well is located 990' from the South line and 1650' from the West line of Section 30, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on May 24, 1964, and completed on June 5, 1964, at a total depth of 3320' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 3152' - 3164', 3184' - 3190' was treated with a sand-water fracturing process on June 2, 1964. The well was shut-in on June 5, 1964, and after being shut-in for gauge for ten (10) days, the well was tested on June 15, 1964, and following a three (3) hour blow-down period gauged 3450 MCFGPD through a 3/4" choke, and 3899 MCFGPD by the calculated absolute open-flow method, with an SIPC of 990 psia. The spacing unit upon which this well is located is described as the SW/4 of Section 30, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 152.25 acres, more or less.

This spacing unit was included in the Fourteenth Expanded Participating Area of the Pictured Cliffs Formation, effective June 1, 1962, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #52 Well is located 1470' from the North line and 830' from the West line of Section 14, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on May 30, 1964, and completed on June 22, 1964, at a total depth of 3215' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation in the intervals between 3080' - 3092', 3114' - 3120', 3132' - 3138' was treated with a sand-water fracturing process on June 18, 1964. This well was shut-in on June 22, 1964, and after being shut-in for gauge for nine (9) days, the well was tested on July 1, 1964, and following a three (3) hour blow-down period gauged 1492 MCFGPD through a 3/4" choke, and 1530 MCFGPD by the calculated absolute open-flow method, with an SIPC of 912 psia. The spacing unit upon which this well is located is described as the NW/4 of Section 14, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This spacing unit was included in the Third Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1956, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #54 Well is located 1500' from the South line and 1550' from the West line of Section 31, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on May 19, 1964, and completed on June 5, 1964, at a total depth of 3188' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3060' - 3068', 3110' - 3118', was treated with a sand-water fracturing process on June 2, 1964. This well was shut-in on June 5, 1964, and after being shut-in for gauge for ten (10) days, the well was tested on June 15, 1964, and following a three (3) hour blow-down period gauged 1280 MCFGPD through a 3/4" choke, and 1303 MCFGPD by the calculated absolute open-flow method, with an SIPC of 947 psia. The spacing unit upon which this well is located is described as the SW/4 of Section 31, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 152.07 acres, more or less.

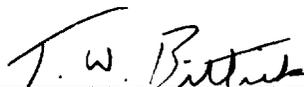
This spacing unit was included in the Fourteenth Expanded Participating Area of the Pictured Cliffs Formation, effective June 1, 1962, and the completion of this well does not warrant any further expansion of the participating area.

A copy of this letter is being sent to the working interest owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:kp

cc: Continental Oil Company
P. O. Box 3312
Durango, Colorado
Attention: Mr. H. D. Haley

Tenneco Oil Company
P. O. Box 2511
Houston, Texas 77001

Mobil Oil Company
10737 So. Shoemaker Road
Santa Fe Springs, California

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

El Paso Natural Gas Company

MAIN OFFICE OCC

El Paso, Texas

1964 JUL 2 PM 1:28

June 30, 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: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE FIFTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective November 1,
1963

Gentlemen:

This is to advise that the captioned Fifteenth Expanded Participating Area was approved by the Regulatory Bodies on the following dates:

1. Acting Director, United States Geological Survey - June 12, 1964
2. Commissioner of Public Lands, State of New Mexico - March 10, 1964
3. Oil Conservation Commission, State of New Mexico - March 12, 1964

A copy of this letter is being sent to the working interest owners of the Lindrith Unit.

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js
Lindrith, 4.1



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

159
June 23, 1964

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

Attention: Mr. T. W. Kirtick

Gentlemen:

The fifteenth revision of the Pictured Cliffs participating area for the Lindrich unit area, Rio Arriba County, New Mexico, was approved by the Acting Director, Geological Survey on June 12, 1964, effective as of November 1, 1963.

One approved copy of the application is enclosed. It is requested that you 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)
Farmington (w/cy of appln.)
BEM, Santa Fe (w/cy of appln.)
BENCKE, Santa Fe (ltr. only) ✓
Com. of Pub. Lands, Santa Fe (ltr. only)

El Paso Natural Gas Company 157

El Paso, Texas

May 15, 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: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1964 DRILLING PROGRAM

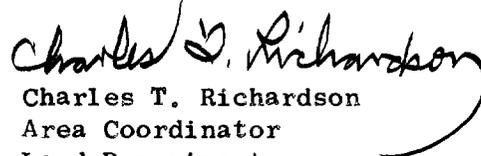
Gentlemen:

The 1964 Drilling Program for the Lindrith 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 - March 30, 1964
3. Oil Conservation Commission,
State of New Mexico - April 7, 1964

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

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js

Lindrith 3.0

157

Drawer 1857
Roswell, New Mexico 88201

MAIL OFFICE 000
1964 MAY 12 AM 11 15
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 12, 1964, for the Lindrith unit area, Rio Arriba County, New Mexico, proposing the drilling of four Pictured Cliffs wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. 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

159

April 7, 1964

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

Attention: Mr. Sam Smith

Re: 1964 Drilling Program
Lindrith 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 Lindrith 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/JER/eg

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

C
O
P
Y

MAIN OFFICE OCC

1964 MAR 31 PM 1 25

March 31, 1964

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

Re: Lindrith Unit
Rio Arriba County, New Mexico
1964 Drilling Program

Attention: Mr. Sam Smith

Gentlemen:

The Commissioner of Public Lands approved as of March 30, 1964, the 1964 Drilling Program for the Lindrith Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are returning one approved copy of this Plan.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

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

ESW/mmr/v

cc: Oil Conservation Commission

United States Geological Survey
Roswell, New Mexico

El Paso Natural Gas Company
MAIN OFFICE OCC

El Paso, Texas 1964 MAR 17 AM 8:14

March 12, 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: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1964 DRILLING PROGRAM

Gentlemen:

By letter dated February 12, 1963, El Paso Natural Gas Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1963. Said Program provided for the drilling of four (4) Pictured Cliffs wells. All of the wells were completed in the Pictured Cliffs Formation. Two (2) of the wells were drilled within the Pictured Cliffs Participating Area and the remaining two (2) wells were determined to be commercial in the Pictured Cliffs Formation and a proposed expansion of the Pictured Cliffs Formation based on this determination is being submitted to the regulatory bodies for approval.

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

Pictured Cliffs	47 (8 non-commercial)
Dakota	1
Plugged and abandoned	8
	<u>56</u>

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby submits a proposed Drilling Program for the calendar year 1964, providing for the drilling of four (4) Pictured Cliffs wells at the following locations:

<u>Well Name and Spacing Unit</u>	<u>Formation</u>
1. Lindrith Unit No. 47 SW/4 Sec. 30, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
2. Lindrith Unit No. 52 NW/4 Sec. 14, T-24-N, R-3-W, N.M.P.M.	Pictured Cliffs
3. Lindrith Unit No. 53 SE/4 Sec. 32, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs
4. Lindrith Unit No. 54 SW/4 Sec. 31, T-24-N, R-2-W, N.M.P.M.	Pictured Cliffs

The basis for drilling the Lindrith Unit No. 47 development well is to gain further geological information regarding locations to the Southwest. Basis for drilling the Lindrith Unit No. 52 Well is to further develop lands within the Pictured Cliffs Participating Area. Basis for drilling the Lindrith Unit No. 53 Well is to offset Shar-Alan's Tamara No. 1 in the SW/4 of Section 33, Township 24 North, Range 2 West, with an AOF of 2384 MCF/D. Basis for drilling the Lindrith Unit No. 54 Well is to offset August Wagenseller's Jicarilla No. 1D-6 in the NW/4 of Section 6, Township 23 North, Range 2 West, which is not connected.

An alternate Pictured Cliffs location covering the SW/4 of Section 25, Township 24 North, Range 3 West, N.M.P.M., has been selected in the event one of the above described wells cannot be drilled during 1964.

El Paso Natural Gas Company intends to drill the Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary and cable tools. Surface casing will be set to approximately 100' from the surface, and then a production string of casing will be set through the Pictured Cliffs Formation. Mud will be used in drilling through the Pictured Cliffs Formation and cable tools will be used for completion work. The entire Pictured Cliffs Formation will be subjected to a hydraulic fracturing process. Due care will be taken to protect all horizons.

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 9 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 Sam Smith, Manager
Land Department

SS:GWO:js

cc: Delhi-Taylor Oil Corporation
2630 Fidelity Union Tower
Dallas, Texas

Mobil Oil Company
10737 So. Shoemaker Road
Santa Fe Springs, California

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

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

DATE: _____

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

DATE: _____

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

DATE: 4-7-64

The foregoing approvals are for the 1964 Drilling Program for the Lindrith
Unit I Sec. No. 713, Rio Arriba County, New Mexico.

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

159

March 11, 1964

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

Attention: Mr. T. W. Bittick

Re: Fifteenth Expanded
Participating Area,
Pictured Cliffs Formation,
Lindrith Unit, Rio Arriba
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fifteenth Expanded Participating Area, Pictured Cliffs Formation for the Lindrith Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

Very truly yours,

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

ALP/JEK/og

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

C
O
P
Y

MAIN OFFICE OCC

1964 MAR 11 AM 8:37

March 10, 1964

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

Re: Lindrith Unit Agreement
Rio Arriba County, New Mexico
Fifteenth Expanded Participating
Area, Pictured Cliffs Formation

Attention: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has approved as of this date the Fifteenth Expanded Participating Area, Pictured Cliffs Formation, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are handing six copies of this Participating Area to the Oil Conservation Commission, requesting them to forward at least five copies to the United States Geological Survey, Roswell, New Mexico.

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

United States Geological Survey

El Paso Natural Gas Company

El Paso, Texas

MAIN OFFICE OCC

1964 MAR 4 PM 1:16

March 2, 1964

Registered Mail

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

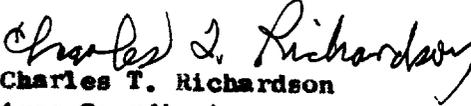
Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico - REQUEST
FOR APPROVAL OF THE FIFTEENTH EXPANDED
PARTICIPATING AREA, Pictured Cliffs
Formation, Effective November 1, 1963.

Gentlemen:

Attached are eight (8) copies of the subject Fifteenth Expanded Participating Area for the Pictured Cliffs Formation for the Lindrith Unit, together with the appropriate exhibits and geological information.

If this Fifteenth Expansion meets with your approval, please execute all copies in the space provided and secure the approval of the Oil Conservation Commission on all copies thereof. Upon approval of the Oil Conservation Commission and your office, will you please retain two copies for your files and have the Oil Conservation Commission retain one copy for their files and forward the remaining five copies to the United States Geological Survey for approval.

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js
Attachments

cc: United States Geological Survey
Oil Conservation Commission ✓

Lindrith, 4.1

COPY

El Paso Natural Gas Company

El Paso, Texas

February 28, 1964

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 2088
Santa Fe, New Mexico 87501

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE FIFTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective November 1,
1963.

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Fifteenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West, N.M.P.M.
Section 10: SE/4 - 160.00 acres, more or less
Section 22: NW/4 - 160.00 acres, more or less

The lands described above are proven productive by the following:

1. The Lindrith Unit #48 Well is located 800' from the South line and 1550' from the East line of Section 10, Township 24 North, Range 3 West, Rio Arriba County, New Mexico.

1964 MAR 11 AM 3 39
MAIN OFFICE OCC

This well was spudded on September 3, 1963, and completed on September 18, 1963, at a total depth of 3212' as a tubingless completion in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3099' - 3107', 3131' - 3139', 3149' - 3153' was treated with a sand-water fracturing process on September 18, 1963. The well was shut-in on September 27, 1963, and after being shut-in for gauge for seven (7) days, the well was tested in the Pictured Cliffs Formation on October 4, 1963, and following a three (3) hour blow-down period gauged 1909 MCFGPD through a 3/4" choke and 1980 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1008 psia. The committed spacing unit upon which this well is located is described as the SE/4 of Section 10, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

2. The Lindrith Unit #50 Well is located 790' from the North line and 1850' from the West line of Section 22, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on September 8, 1963, and completed on September 26, 1963, at a total depth of 3259' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3140' - 3156', 3176' - 3184' was treated with a sand-water fracturing process on September 26, 1963. This well was shut-in on September 30, 1963, and after being shut-in for gauge for seven (7) days, the well was tested on October 7, 1963, and following a three (3) hour blow-down period gauged 3160 MCFGPD through a 3/4" choke, and 3515 MCFGPD by the calculated absolute open-flow method, with an SIPC of 968 psia. The drilling block upon which this well is located is described as the NW/4 of Section 22, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

The effective date for the Fifteenth Expanded Participating Area is determined as November 1, 1963, the first of the month following the testing of the Lindrith Unit #48 Well and the Lindrith Unit #50 Well.

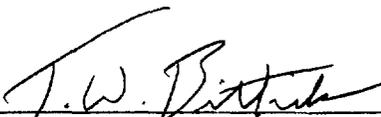
Attached hereto is Schedule XVI showing the Fifteenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Fifteenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files.

A copy of this letter and schedule are being sent to the working interest owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:js

cc: Delhi-Taylor Oil Corporation
2630 Fidelity Union Tower
Dallas, Texas

Mobil Oil Company
10737 South Shoemaker Road
Santa Fe Springs, California

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

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

DATE: _____

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

DATE: March 19, 1964

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

DATE: 3-12-64

The foregoing approvals are attached and made a part of the Application for the Fifteenth Expansion of the Pictured Cliffs Participating Area for the Lindrith Unit, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

MAIN OFFICE OCC

El Paso, Texas

1964 MAR 4 PM 1:20

February 28, 1964

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

157

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: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
Pictured Cliffs Formation - NOTICE
OF COMPLETION OF ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, 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 this unit. These wells are as follows:

The Lindrith Unit #49 Well is located 1550' from the North line and 1840' from the East line of Section 9, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on September 15, 1963, and completed on September 26, 1963, at a total depth of 3351' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3268' - 3276', 3288' - 3296' was treated with a sand-water fracturing process on September 26, 1963. The well was shut-in on October 17, 1963, and after being shut-in for gauge for seven (7) days, the well was tested on October 24, 1963, and following a three (3) hour blow-down period gauged 3126 MCFGPD through a 3/4" choke, and 3501 MCFGPD by the calculated absolute open-flow method, with an SIPC of 934 psia. The drilling block upon which this well is located is described as the NE/4 of Section 9, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This drilling block was included in the Third Expanded Participating Area of the Pictured Cliffs Formation, effective September 1, 1956, and the completion of this well does not warrant any further expansion of the participating area.

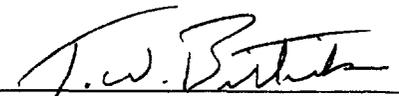
The Lindrith Unit #51 Well is located 1830' from the North line and 810' from the East line of Section 24, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on August 28, 1963, and completed on September 18, 1963, at a total depth of 3173' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3040' - 3046', 3074' - 3078', 3088' - 3100' was treated with a sand-water fracturing process on September 18, 1963. This well was shut-in on September 27, 1963, and after being shut-in for gauge for seven (7) days, the well was tested on October 4, 1963, and following a three (3) hour blow-down period gauged 1642 MCFGPD through a 3/4" choke, and 1688 MCFGPD by the calculated absolute open-flow method, with an SIPC of 990 psia. The drilling block upon which this well is located is described as the NE/4 of Section 24, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This drilling block was included in the Second Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1956, and the completion of this well does not warrant any further expansion of the participating area.

A copy of this letter and schedule are being sent to the working interest owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:js

cc: Delhi-Taylor Oil Corporation
2630 Fidelity Union Tower
Dallas, Texas

Mobil Oil Company
10737 South Shoemaker Road
Santa Fe Springs, California

Mobil Oil Company
P. O. Box 778
Farmington, New Mexico

El Paso Natural Gas Company

MAIN OFFICE OCC

El Paso, Texas

September 24, 1963 1963 SEP 30 AM 8 20

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: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1963 DRILLING PROGRAM

Gentlemen:

By letter dated February 12, 1963, El Paso Natural Gas Company, as Unit Operator, filed a drilling program for the Lindrith Unit for the calendar year 1963. Said program provided for the drilling of four (4) Pictured Cliffs wells, the locations of which were to be determined at a later date. The locations for the four (4) Pictured Cliffs tests have now been decided upon and said proposed locations are as follows:

DRILLING BLOCK

FORMATION

SE/4 Sec. 10, T-24-N, R-3-W	Pictured Cliffs
NE/4 Sec. 9, T-24-N, R-3-W	Pictured Cliffs
NW/4 Sec. 22, T-24-N, R-3-W	Pictured Cliffs
NE/4 Sec. 24, T-24-N, R-3-W	Pictured Cliffs

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

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

CTR:ag

El Paso Natural Gas Company

El Paso, Texas

May 27, 1963

1963 MAY 27 AM 11 23

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

159

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: Lindrith Unit
Exhibit "B"

Gentlemen:

Enclosed are copies of the Lindrith Unit Exhibit "B" which has been revised effective March 1, 1963.

This Exhibit "B" was mailed to the working interest owners of the Lindrith Unit under date of April 25, 1963, and were advised that if they should have any corrections or changes, to notify El Paso within ten (10) 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 Lindrith Unit.

Very truly yours,



Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js
Enclosure

Lindrith, 5.0

EXHIBIT "B"
 SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS INTEREST
 IN ALL LANDS IN THE LINDRITH UNIT AGREEMENT

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner and Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
<u>FEDERAL LANDS</u>							
1	T-25-N, R-2-W Sec. 31: Lots 1,2, 3,4 Sec. 32: N/2, N/2 S/2, S/2 SE/4, SE/4 SW/4	2316.51	SF 078907 3-1-48	U.S.A. 12 1/2% A11	Socony Mobil Oil Co., Inc. & Delhi-Taylor Oil Corp.	ALL DEPTHS: American Petrofina, Inc. 2.00000% GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: Mobil Oil Co. 3.12500% Delhi-Taylor Oil Corp. 3.12500% Squire Production Co. 2.01875% William G. Webb .10625% Frank A. Schultz, Jr. 2.12500%	GAS RIGHTS TO BASE OF PICTURED CLIFFS FORMATION: El Paso Natural Gas Co. A11 GAS RIGHTS FROM BASE OF PICTURED CLIFFS FORMATION TO TOP OF DAKOTA FORMATION AND OIL RIGHTS TO TOP OF DAKOTA FORMATION: Mobil Oil Co. 1/2 Delhi-Taylor Oil Corp. 1/2 OIL AND GAS RIGHTS BELOW TOP OF DAKOTA FORMATION: Mobil Oil Co. 3/4 Delhi-Taylor Oil Corp. 1/4
2	T-24-N, R-2-W Sec. 7: Lots 1,2,3, 4, E/2 W/2, E/2 Sec. 8: A11 Sec. 9: E/2 Sec. 18: Lots 1,2,4, E/2 NW/4, S/2 SE/4, SE/4 SW/4 Sec. 17: N/2 N/2, S/2 S/2 Sec. 16: W/2 W/2	2370.92	SF 078908 5-1-48	U.S.A. 12 1/2% A11	Socony Mobil Oil Co., Inc. & Delhi-Taylor	ALL DEPTHS T-24-N, R-2-W Sec. 7: E/2 9: E/2 18: Lot 4, SE/4 SW/4 American Petrofina, Inc. 2.00000% T-24-N, R-2-W Sec. 8: A11 18: Lots 1,2, E/2 NW/4, S/2 SE/4 17: N/2 N/2, S/2 S/2 16: W/2 W/2 Sec. 7: Lots 1,2,3,4, E/2 W/2 Atlas Minerals, Division of Atlas Corp. 2.00000%	See Tract 1 for Ownership (By O/A dated 4-26-57 EPNG owns P. C. oil rights in NE/4 SE/4, Sec. 9)

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner and Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
2	(Continued)					GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: See Tract 1 for Ownership	
3	T-24-N, R-2-W Sec. 15: W/2 Sec. 16: NE/4, S/2 SE/4 Sec. 19: Lots 3, 4, E/2 SW/4, SE/4 Sec. 20: All Sec. 21: S/2 Sec. 22: W/2 Sec. 30: Lots 1, 2 E/2 NW/4, NE/4 T-24-N, R-3-W Sec. 24: E/2 SE/4	2544.29	SF 078909 5-1-48	U.S.A. 12 2/3% All	Socony Mobil Oil Co., Inc. & Delhi-Taylor Oil Corp.	ALL DEPTHS American Petrofina, Inc. 2.00000% GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: See Tract 1 for Ownership	See Tract 1 for Ownership
4	T-24-N, R-2-W Sec. 28: E/2, N/2 NW/4 Sec. 29: NE/4, W/2 SE/4 Sec. 30: Lots 3, 4, E/2 SW/4, SE/4 Sec. 31: Lots 1, 2, 3, 4, E/2 W/2, E/2 Sec. 32: All T-24-N, R-3-W Sec. 24: SW/4, W/2 SE/4	2456.53	SF 078910 2-1-48	U.S.A. 12 2/3% All	Socony Mobil Oil Co., Inc. & Delhi-Taylor Oil Corp.	ALL DEPTHS T-24-N, R-2-W Sec. 28: SE/4 Sec. 29: W/2 SE/4 Sec. 30: Lots 3, 4, E/2 SW/4, SE/4 Sec. 31: Lots 1, 2, 3, 4, E/2 W/2, E/2 Sec. 32: All Atlas Minerals, Division of Atlas Corp. 2.00000% T-24-N, R-3-W Sec. 24: SW/4, W/2 SE/4 American Petrofina, Inc. 2.00000%	See Tract 1 for Ownership

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner and Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
4	(Continued)						
5	<u>T-24-N, R-3-W</u> Sec. 1: Lots 1,2, 3,4, S/2 N/2, S/2 Sec. 2: Lots 1,2, 3,4, S/2 N/2, S/2 Sec. 3: Lots 1,2,3,4, S/2 N/2, S/2 <u>T-25-N, R-3-W</u> Sec. 35: SE/4 Sec. 36: S/2	2451.24	SF 078911 2-1-48	U.S.A. 12 ¹ / ₂ % A11	Socomy Mobil Oil Co., Inc. & Delht-Taylor Oil Corp.	ALL DEPTHS American Petrofina, Inc. 2.000000% GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: See Tract 1 for Ownership	See Tract 1 for Ownership
6	<u>T-24-N, R-3-W</u> Sec. 10: A11 Sec. 11: N/2, SE/4, E/2 SW/4 Sec. 12: NW/4 NW/4, SW/4, W/2 SE/4, SE/4 SE/4 Sec. 13: NE/4, E/2 NW/4, NW/4 NW/4, S/2 SW/4 Sec. 14: E/2, S/2 SW/4 Sec. 24: NW/4, W/2 NE/4, SE/4 NE/4	2560.00	SF 078912 2-1-48	U.S.A. 12 ¹ / ₂ % A11	Socomy Mobil Oil Co., Inc. & Delht-Taylor Oil Corp.	ALL DEPTHS American Petrofina, Inc. 2.000000% GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: See Tract 1 for Ownership	See Tract 1 for Ownership
7	<u>T-24-N, R-3-W</u> Sec. 15: A11 Sec. 16: A11 Sec. 21: A11 Sec. 22: A11	2560.00	SF 078913 2-1-48	U.S.A. 12 ¹ / ₂ % A11	Socomy Mobil Oil Co., Inc. & Delht-Taylor Oil Corp.	ALL DEPTHS <u>T-24-N, R-3-W</u> Sec. 21: A11 Atlas Minerals, Division of Atlas Corp. 2.000000%	See Tract 1 for Ownership

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
7	(Continued)					<p><u>T-24-N, R-3-W</u> Sec. 15: All Sec. 16: All Sec. 22: All American Petrofina, Inc. 2.000000%</p> <p>GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: See Tract 1 for Ownership</p>	
8	<p><u>T-24-N, R-3-W</u> Sec. 25: All Sec. 26: All Sec. 27: All Sec. 28: All</p>	2560.00	SF 078914 2-1-48	U.S.A. 12 ¹ / ₂ % All	Socony Mobil Oil Co., Inc. & Delht-Taylor Oil Corp.	<p>ALL DEPTHS Atlas Minerals, Division of Atlas Corp. 2.000000% GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: See Tract 1 for Ownership</p>	See Tract 1 for Ownership
9	<p><u>T-24-N, R-3-W</u> Sec. 23: All Sec. 34: All Sec. 35: All Sec. 36: All</p>	2560.00	SF 078915 2-1-48	U.S.A. 12 ¹ / ₂ % All	Socony Mobil Oil Co., Inc. & Delht-Taylor Oil Corp.	<p>ALL DEPTHS <u>T-24-N, R-3-W</u> Sec. 23: All American Petrofina, Inc. 2.000000%</p> <p><u>T-24-N, R-3-W</u> Sec. 34: All Sec. 35: All Sec. 36: All Atlas Minerals, Division of Atlas Corp. 2.000000% GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: See Tract 1 for Ownership</p>	See Tract 1 for Ownership
10	<p><u>T-25-N, R-3-W</u> Sec. 34: NW/4 SE/4</p>	40.00	SF 080804 5-1-50	U.S.A. 12 ¹ / ₂ % All	Socony Mobil Oil Co., Inc. & Delht-Taylor Oil Corp.	<p>ALL DEPTHS A. L. Duff, Jr. 2.500000% GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFF FORMATION: See Tract 1 for Ownership</p>	See Tract 1 for Ownership

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner and Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
10	(Continued)						
11	T-24-N, R-2-W Sec. 16: N/2 SE/4, E/2 W/2	240.00	SF 081230 5-1-50	U.S.A. 12 ¹ / ₂ % All	Socomy Mobil Oil Co., Inc. & Delhi-Taylor Oil Corp.	Mobil Oil Co. 3.12500% Delhi-Taylor Oil Corp. 3.12500% Squire Production Co. 1.78125% William G. Webb .09375% Frank A. Schultz, Jr. 1.87500%	See Tract 1 for Ownership
TOTAL FEDERAL LANDS		22,659.49					

Tract No.	Description	No. of Acres	Land Owner and Percentage of Royalty Payable to Lessors and Others	Lessee and Date of Lease	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
12	T-24-N, R-2-W Sec. 17: S/2 N/2, N/2 S/2	320.00	5/128 - Jerry Curtis 7/256 - S. P. Yates 7/256 - Martin Yates, III 1/64 - L. A. Nordan 1/64 - Midwest Oil Corp.	Unleased		
13	T-24-N, R-2-W Sec. 29: W/2	320.00		Socony Mobil Oil Co., Inc. & Delhi-Taylor Oil Corp., & El Paso Natural Gas Co.	AS TO GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION ON LEASE INTEREST (3/4) ONLY: Mobil Oil Co. 3.12500% Delhi-Taylor Oil Corp. 3.12500% Squire Production Co. 2.96875% William G. Webb .15625% Frank A. Schultz, Jr. 3.12500%	GAS RIGHTS TO BASE OF PICTURED CLIFFS FORMATION: El Paso Natural Gas Co. 3/4 GAS RIGHTS FROM BASE OF PICTURED CLIFFS FORMATION TO TOP OF DAKOTA FORMATION AND OIL RIGHTS TO TOP OF DAKOTA FORMATION: Mobil Oil Co. 3/8 Delhi-Taylor Oil Corp. 3/8 OIL AND GAS RIGHTS BELOW TOP OF DAKOTA FORMATION: Mobil Oil Co. 9/16 Delhi-Taylor Oil Corp. 3/16
13a	T-24-N, R-2-W Sec. 33: N/2	320.00	G. E. Boring, et al	Unleased		
13b	T-24-N, R-2-W Sec. 28: SW/4, S/2 NW/4 Sec. 29: E/2 SE/4	320.00		Socony Mobil Oil Co., Inc. & Delhi-Taylor Oil Corp., & El Paso Natural Gas Co.	AS TO GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION ON LEASED INTEREST (1/2) ONLY: Mobil Oil Co. 3.12500% Delhi-Taylor Oil Corp. 3.12500% Squire Production Co. 2.96875% William G. Webb .15625% Frank A. Schultz, Jr. 3.12500%	GAS RIGHTS TO BASE OF PICTURED CLIFFS FORMATION: El Paso Natural Gas Co. 1/2 GAS RIGHTS FROM BASE OF PICTURED CLIFFS FORMATION TO TOP OF DAKOTA FORMATION AND OIL RIGHTS TO TOP OF DAKOTA FORMATION: Mobil Oil Co. 1/4 Delhi-Taylor Oil Corp. 1/4

Tract No.	Description	No. of Acres	Land Owner and Percentage of Royalty Payable to Lessors and Others	Lessee and Date of Lease	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
13b	(Continued)					
14	T-24-N, R-2-W Sec. 10: SW/4, S/2 NW/4	240.00	(1) 3/64 - A. G. Johnson, et ux (2) 1/64 - G. E. Borling (3) 1/16 - Fanny J. Hill	Socomy Mobil Oil Co., Inc. & Delht-Taylor Oil Corp. 9-16-55	AS TO GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: Mobil Oil Co. Delht-Taylor Oil Corp.	Mobil Oil Co. and Delht-Taylor Oil Corp. 1/2 1/2 mineral rights are unleased
15	T-25-N, R-3-W Sec. 35: SW/4	160.00		Unleased		
16	T-24-N, R-2-W Sec. 18: NE/4, N/2 SE/4, NE/4 SW/4, Lot 3	315.96	1/8 - Estate of R. E. Adams	Socomy Mobil Oil Co., Inc. & Delht-Taylor Oil Corp., & El Paso Natural Gas Co. 4-19-49	AS TO GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: Mobil Oil Co. Delht-Taylor Oil Corp. Squire Production Co. William G. Webb Frank A. Schultz, Jr.	GAS RIGHTS TO BASE OF PICTURED CLIFFS FORMATION: El Paso Natural Gas Co. All GAS RIGHTS FROM BASE OF PICTURED CLIFFS FORMATION TO TOP OF DAKOTA FORMATION AND OIL RIGHTS TO TOP OF DAKOTA FORMATION: Mobil Oil Co. 1/2 Delht-Taylor Oil Corp. 1/2
17	T-24-N, R-3-W Sec. 9: All	640.00	1/8 - W. O. Hughes and wife, Agatha B. Hughes	Socomy Mobil Oil Co., Inc., & Delht-Taylor Oil Corp., & El Paso Natural Gas Co. 2-1-47	See Tract 16 for Ownership	See Tract 16 for Ownership

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Land Owner and Percentage of Royalty Payable to Lessors and Others</u>	<u>Lessee and Date of Lease</u>	<u>Overriding Royalty Owner and Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
18	T-24-N, R-2-W Sec. 19: NE/4, E/2 NW/4, Lots 1 & 2, (N/2)	311.98	1/16 - Ernest Willis Meahrg and wife, Klossie Nell Meahrg 1/32 - Mary E. Lance 1/32 - Allen M. Tonkin, et ux	Socony Mobil Oil Co., Inc., & Delhi-Taylor Oil Corp., & El Paso Gas Co. 2-1-47 1-17-48	See Tract 16 for Ownership	See Tract 16 For Ownership
19	T-24-N, R-3-W Sec. 13: N/2 S/2, SW/4 NW/4, S/2 SE/4 Sec. 24: NE/4 NE/4	320.00	1/8 - E. W. Meahrg, et ux	Socony Mobil Oil Co., Inc., & Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 2-1-47	See Tract 16 for Ownership	See Tract 16 for Ownership
20	T-24-N, R-3-W Sec. 33: E/2	320.00	Lee D. Dalton	Unleased		
21	T-24-N, R-2-W Sec. 5: Lots 1,2, S/2 NE/4, SE/4 (E/2)	326.52	1/16 - Estate of Edwin L. Browning, Deceased 1/32 - Jessie Avent 1/160 - G. E. Borling 1/128 - Erema Borling Sheldon 1/128 - L. A. Nordan 1/128 - Midwest Oil Corp. 1/640 - M. D. Rueckhaus	Socony Mobil Oil Co., Inc. & Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 4-19-49 3-27-47	See Tract 16 for Ownership	See Tract 16 for Ownership

Tract No.	Description	No. of Acres	Land Owner and Percentage of Royalty Payable to Lessors and Others	Lessee and Date of Lease	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
22	T-24-N, R-2-W Sec. 9: W/2	320.00	1/32 - Jessie Avant 1/40 - G. E. Borling 1/64 - L. A. Nordan 1/64 - Midwest Oil Corp. 1/32 - Erema Borling Sheldon	Socony Mobil Oil Co., Inc., & Delhi-Taylor Oil Corp., & El Paso Natural Gas Co.	See Tract 16 for Ownership	See Tract 16 for Ownership
23	T-25-N, R-3-W Sec. 34: S/2 S/2, NE/4 SE/4, N/2 NW/4	280.00		Unleased		
24	T-24-N, R-3-W Sec. 11: W/2 SW/4 Sec. 14: NW/4, N/2 SW/4	320.00	1/8 - Ben Leeson and wife, Gussie Leeson (not committed)	Socony Mobil Oil Co., Inc., & Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 3-28-47	TO ALL DEPTHS Benjamin James Gardner, Lloyd M. Gardner, Martin Luther Gardner, J. M. Anderson and Cleeta Anderson .500000%	See Tract 16 for Ownership
25	T-24-N, R-2-W Sec. 21: N/2, except the land described under Tract 25a	318.00	1/16 - T. W. Stevenson and wife, Vivian M. Stevenson 1/32 - R. B. McFarlin, et al 1/32 - Felmont Oil Co.	Socony Mobil Oil Co., Inc., & Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 5-24-47	AS TO GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: Mobil Oil Co. 3.125000% Delhi-Taylor Oil Corp. 3.125000% Squire Production Co. 2.731250% William G. Webb .143750% Frank A. Schultz, Jr. 2.875000%	See Tract 16 for Ownership (Stevenson's interest not committed)

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Land Owner and Percentage of Royalty Payable to Lessors and Others</u>	<u>Lessees and Date of Lease</u>	<u>Overriding Royalty Owner and Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
25a	T-24-N, R-2-W A portion of the SE/4 NE/4, Sec. 21	2.00	G. D. Grigsby, et ux	Unleased		
26	T-24-N, R-3-W Sec. 12: NE/4	160.00	1/8 - Rex L. Clinkenbeard, T. J. Clinkenbeard, Rosalie Klenlets, Eva Blanche Austin, Clifford L. Clinkenbeard, Hal H. Clinkenbeard, Vera C. Doud	Unleased		
27	T-24-N, R-3-W Sec. 12: E/2 NW/4, SW/4 NW/4, NE/4 SE/4	160.00	1/16 - Horace F. McKay, Jr., et ux 1/16 - Carroll T. Payne, et ux	Socomy Mobil Oil Co., Inc., & Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 4-19-48	See Tract 16 for Ownership	See Tract 16 for Ownership
28	T-24-N, R-2-W Sec. 5: Lots 3, 4, S/2 NW/4, SW/4	326.44	1/8 - Curtis Evans, O. C. Evans, Hazel M. Evans	El Paso Natural Gas Co. 11-21-56	Curtis Evans - 7/15 of 1/32 O. C. Evans - 4/15 of 1/32 Hazel M. Evans - 4/15 of 1/32	El Paso Natural Gas Co. All
TOTAL PATENTED LANDS		5800.90				

Revised: March 1, 1963

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>State No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner and Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment Percentage of Interest</u>
29	T-25-N, R-2-W Sec. 32: SW/4 SW/4	40.00	E-1214-6 2-19-47	State of New Mexico 12 2/3 All	Socomy Mobil Oil Co., Inc. & Delhi-Taylor Oil Corp.	TO ALL DEPTHS Ben Dansby Until \$50.00/acre has been recovered AS TO GAS AND ASSOCIATED LIQUID HYDROCARBONS TO BASE OF PICTURED CLIFFS FORMATION: Mobil Oil Co. Delhi-Taylor Oil Corp.	GAS RIGHTS TO BASE OF PICTURED CLIFFS FORMATION: El Paso Natural Gas Co. All GAS RIGHTS FROM BASE OF PICTURED CLIFFS FORMATION TO TOP OF DAKOTA FORMATION AND OIL RIGHTS TO TOP OF DAKOTA FORMATION: Mobil Oil Co. 1/2 Delhi-Taylor Oil Corp. 1/2 OIL AND GAS RIGHTS BELOW TOP OF DAKOTA FORMATION: Mobil Oil Co. 3/4 Delhi-Taylor Oil Corp. 1/4

TOTAL STATE LANDS 40.00

TOTAL LANDS IN LINDRITH UNIT AREA - 28,500.39 acres

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

Federal Lands	22,659.49 acres
State Lands	40.00 acres
Fee Lands	5,800.90 acres

Total Number of Acres in
Lindrith Unit Area 28,500.39 acres

El Paso Natural Gas Company

El Paso, Texas

April 11, 1963

159

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: Lindrith Unit
Rio Arriba County, New Mexico
1963 DRILLING PROGRAM

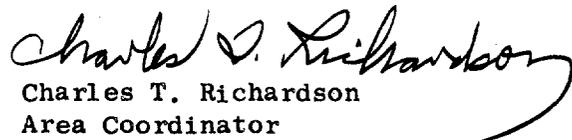
Gentlemen:

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

1. United States Geological Survey - March 27, 1963
2. Commissioner of Public Lands - February 22, 1963
3. Oil Conservation Commission - April 2, 1963

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

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

159

April 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,
Lindrith 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 Lindrith 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. FORNER, Jr.,
Secretary-Director

ALP/JEK/lq
Enclosure

cc: United States Geological Survey
Roswell, New Mexico

Commissioner of Public Lands
Santa Fe, New Mexico

2003 MAR 25 AM 8:14
Drawer 1857
Roswell, New Mexico

March 27, 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 12, 1963, for the Lindrith unit area, Rio Arriba County, New Mexico, proposing the drilling of four Pictured Cliffs wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Very truly yours,

(Orig. Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting 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)

15 07:10 000
1963 MAR 4 PM 1:35

February 22, 1963

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

Re: Lindrith Unit,
Rio Arriba County,
New Mexico. 1963
Drilling Program

Attention: Mr. Sam Smith

Gentlemen:

The Commissioner of Public Lands has approved as of February 22, 1963, the 1963 Drilling Program for the Lindrith Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are returning one approved copy of this Program.

Very truly yours,

E. S. Johnny Walker
COMMISSIONER OF PUBLIC LANDS

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

ESW/mar/e
encl:
cc:

United States Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas

February 12, 1963

PLAIN OFFICE 000

1963 FEB 13 AM 8 23

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

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

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

Re: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1963 DRILLING PROGRAM

Gentlemen:

By letter dated April 17, 1962, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1962. Said Program provided for the drilling of four (4) Pictured Cliffs wells. All of the wells were completed in the Pictured Cliffs Formation. Three (3) of the wells were drilled within the Pictured Cliffs Participating Area and the remaining well was determined to be commercial in the Pictured Cliffs Formation and a proposed Expansion of the Pictured Cliffs Formation based on this determination has been submitted to the regulatory bodies for approval.

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

Pictured Cliffs	43 (8 non-commercial)
Dakota	1
Plugged and abandoned	8
	<u>52</u>

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby submits a proposed Drilling Program for the calendar year 1963, providing for the drilling of four (4) Pictured Cliffs wells at locations to be selected at a later date that will satisfy all unit obligations for the calendar year 1963.

In its selection of the locations to be drilled, El Paso Natural Gas Company, as Unit Operator, will provide for any offset wells required to prevent drainage of unitized substances, and any wells deemed necessary or desirable by the Unit Operator and the working interest owners.

El Paso Natural Gas Company intends to drill the Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary and cable tools. Surface casing will be set to approximately 100' from the surface, and then a production string of casing will be set through the Pictured Cliffs Formation. Mud will be used in drilling through the Pictured Cliffs Formation and cable tools will be used for completion work. The entire Pictured Cliffs Formation will be subjected to a hydraulic fracturing process. Due care will be taken to protect all horizons.

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 9 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


Sam Smith, Manager
Land Department

SS:GWO:ag

cc: Delhi-Taylor Oil Corporation
2630 Fidelity Union Tower Building
Akard and Pacific Streets
Dallas, Texas

Mobil Oil Company
P. O. Box 3371
Durango, Colorado

Mobil Oil Company
10737 South Shoemaker Road
Santa Fe Springs, California

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

DATE: _____

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

DATE: _____

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

DATE: 4/2/63

The foregoing approvals are for the 1963 Drilling Program for the
Lindrith Unit I Sec. No. 713, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

151

El Paso, Texas

March 15, 1963

RECORDED MAR 21 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: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE FOURTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective June 1, 1962

Gentlemen:

This is to inform you that the regulatory bodies approved the Fourteenth Expansion of the Pictured Cliffs Participating Area of the Lindrith Unit on the dates set out below:

1. Director, United States Geological Survey, on March 6, 1963.
2. Commissioner of Public Lands of the State of New Mexico, on January 22, 1963.
3. Oil Conservation Commission of the State of New Mexico, on January 17, 1963.

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

Very truly yours,

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

CTR:GWO:js

159

Drawer 1857
Roswell, New Mexico

March 12, 1963

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your application of January 8, 1963, requesting approval of the fourteenth revision of the Pictured Cliffs participating area, Lindrith unit agreement, Rio Arriba County, New Mexico was approved on March 6, 1963, by the Acting Director of the Geological Survey, effective as of June 1, 1962.

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.) JOHN A. ANDERSON
JOHN A. ANDERSON
Regional Oil and Gas Supervisor

- Copy to: Washington (ltr. only)
- Farmington (w/cy of appln.)
- ELM-Santa Fe (w/cy of appln.)
- ↳ BBOCC-Santa Fe (ltr. only)
- Com. of Pub. Lands-Santa Fe (ltr. only)

MAIN OFFICE
1963 JAN 25 AM 8:23

El Paso Natural Gas Company

El Paso, Texas

January 22, 1963

157

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

Commissioner of Public Lands
State of New Mexico
Post Office Box 791
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
Post Office Box 871
Santa Fe, New Mexico

Re: Lindrith Unit Area, I Sec. No. 713
Pictured Cliffs Formation
NOTICE OF COMPLETION OF ADDITIONAL
WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit. These wells are as follows:

The Lindrith Unit #42 Well is located 890' from the North line and 1090' from the East line of Section 22, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on May 6, 1962, and completed on May 20, 1962, at a total depth of 3310' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3207' - 3219', 3260' - 3268' was treated with a sand-water fracturing process on May 17, 1962. The well was shut-in on May 20, 1962, and after being shut-in for gauge for ten (10) days, the well was tested on May 30, 1962, and following a three (3) hour blow-down period gauged 1438 MCFGPD through a 3/4" choke, and 1470 MCFGPD by

by the calculated absolute open-flow method, with an SIPC of 968 PSIA. The drilling block upon which this well is located is described as the NE/4 of Section 22, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This drilling block was included in the Lindrith Unit Area in the Seventh Expanded Participating Area, effective August 1, 1957, and the completion of this well does not warrant any further expansion of the participating area.

The Lindrith Unit #45 Well is located 1000' from the South line and 1600' from the East line of Section 14, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on May 14, 1962, and completed on May 25, 1962, at a total depth of 3323' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3220' - 3226', 3234' - 3240' was treated with a sand-water fracturing process on May 22, 1962. This well was shut-in on May 25, 1962, and after being shut-in for gauge for thirteen (13) days, the well was tested on June 7, 1962, and following a three (3) hour blow-down period gauged 1716 MCFGPD through a 3/4" choke, and 1766 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1004 PSIA. The drilling block upon which this well is located is described as the SE/4 of Section 10, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This drilling block was included in the Lindrith Unit Area in the Third Expanded Participating Area effective September 1, 1956. The completion of the #45 Well does not warrant any further expansion of the Participating Area.

The Lindrith Unit #46 Well is located 1500' from the North line and 1650' from the East line of Section 15, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on May 8, 1962, and completed on May 26, 1962, at a total depth of 3238' in the Pictured Cliffs Formation as a tubingless completion. The Pictured Cliffs Formation between 3136' - 3142', 3154' - 3160' was treated with a sand-water fracturing process on May 22, 1962. This well was shut-in on May 26, 1962, and after being shut-in for gauge for twelve (12) days, the well was tested on June 7, 1962, and following a three (3) hour blow-down period gauged 1645 MCFGPD through a 3/4" choke, and 1691 MCFGPD by the calculated absolute open-flow

method, with an SIPC of 867 PSIA. The committed drilling block upon which this well is located is described as the NE/4 of Section 15, Township 24 North, Range 3 West, N.M.P.M., containing 160.00 acres, more or less.

This drilling block was included in the Lindrith Unit Area in the Third Expanded Participating Area, effective September 1, 1956. The drilling of this well did not supply any additional information which would warrant an expansion of the present participating area.

Very truly yours,

EL PASO NATURAL GAS COMPANY

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

TWB:GWO:ag

cc: Delhi-Taylor Oil Corporation
Mobil Oil Company

MAIN OFFICE OCC

1963 JAN 23 AM 9 54

159

January 22, 1963

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

Re: Lindrith Unit Agreement,
Fourteenth Expanded Participating Area, Pictured Cliffs Formation, Rio Arriba County, New Mexico
Effective: June 1, 1962

Attention: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has of this date approved the Fourteenth Expansion of the Pictured Cliffs Participating Area, Lindrith Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

Five approved copies are being forwarded to the United States Geological Survey, Roswell, New Mexico, Attention: Mr. John A. Anderson.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:

(Mrs.) Marian M. Shea, Supervisor
Unit Division

ESW/mmz/e

cc: Mr. John A. Anderson
United States Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

159

January 17, 1963

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

Attention: Mr. T. W. Bittick

**Re: Fourteenth Expanded
Pictured Cliffs Partici-
pating Area, Lindrith
Unit, Rio Arriba County,
New Mexico**

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fourteenth Expanded Participating Area, Pictured Cliffs Formation for the Lindrith 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: Commissioner of Public Lands
Santa Fe, New Mexico**

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

C
O
P
Y

El Paso Natural Gas Company
MAIN OFFICE OCC

El Paso, Texas

1963 JAN 15 PM 1 : 25

January 11, 1963

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

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE FOURTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective June 1, 1962

Gentlemen:

Attached are eight (8) copies of the subject expansion of the Lindrith Unit, together with map exhibits and geological information.

It is requested, upon your approval, that you kindly sign all copies in the space provided, retaining one (1) copy of the expansion and attached exhibits and forwarding the remaining seven (7) copies to the Commissioner of Public Lands for the State of New Mexico. By copy of this letter we are requesting the Commissioner of Public Lands, upon his approval, to forward five (5) approved copies to Mr. John Anderson, United States Geological Survey, Roswell, New Mexico.

Very truly yours,



Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js
Enclosures

cc: Commissioner of Public Lands

cc: United States Geological Survey

El Paso Natural Gas Company

El Paso, Texas

January 8, 1963

RECORDED
JAN 15 1963
1 25

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: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE FOURTEENTH
EXPANDED PARTICIPATING AREA, Pictured
Cliffs Formation, effective June 1, 1962

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Fourteenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 2 West, N.M.P.M.

Section 30: Lots 3,4, E/2 SW/4 - 152.25 acres, more or less

Section 31: Lots 1,2,3,4, E/2 W/2 - 304.28 acres, more or less

The lands described above are proven productive by the following:

The Lindrith Unit #43 Well is located 1650' from the North line and 990' from the West line of Section 31, Township 24 North, Range 2 West, Rio Arriba County, New Mexico. This well was spudded on May 3, 1962, and completed on May 20, 1962, at a total depth of 3258' as a tubingless completion

in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3118' - 3124', 3130' - 3136' was treated with a sand-water fracturing process on May 17, 1962. The well was shut-in on May 20, 1962 and after being shut-in for gauge for ten (10) days, the well was tested in the Pictured Cliffs Formation on May 30, 1962, and following a three (3) hour blow-down period gauged 7424 MCFGPD through a 3/4" choke and 16,333 MCFGPD by the calculated absolute open-flow method, with an SIPC of 984 psia. The committed spacing unit upon which this well is located is described as the NW/4 of Section 31, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 152.21 acres.

The effective date for the Fourteenth Expanded Participating Area is determined as June 1, 1962, the first of the month following the testing of the Lindrith Unit #43 Well.

Attached hereto is Schedule XV showing the Fourteenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Fourteenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files. A copy of this letter and a copy of the schedule are being sent to the working interest owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By


T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:js

cc: Mobil Oil Company
P. O. Box 3371
Durango, Colorado

Delhi-Taylor Oil Corporation
2630 Fidelity Union Tower
Dallas 1, Texas

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

DATE: _____

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

DATE: _____

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

DATE: Jan 17, 1963

The foregoing approvals are attached and made a part of the application for the Fourteenth Expansion of the Pictured Cliffs Participating Area for the Lindrith Unit, Rio Arriba County, New Mexico.

**SCHEDULE XV
 FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIPPS FORMATION
 LINDRITH UNIT AREA**

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION	
			OWNERSHIP	PERCENTAGE		
SF 078908	<u>T-24-N, R-2-W</u>	227.88	<u>Tract 2</u>		<u>2.29333%</u>	
	Sec. 18: Lots 1, 2, 4,		Royalty;	12.50%		12.50%
	E/2 NW/4,		Working Interest;	75.00%		75.00%
	SE/4 SW/4		El Paso Natural Gas Co.;	<u>12.50%</u>		<u>12.50%</u>
	TOTAL		<u>100.00%</u>	<u>100.00%</u>		
			<u>Tract 3</u>			
SF 078909	<u>T-24-N, R-2-W</u>	1504.29	Royalty;	12.50%	12.50%	
	Sec. 19: Lots 3, 4,		Working Interest;	75.00%	75.00%	
	E/2 SW/4, SE/4		El Paso Natural Gas Co.;	<u>12.50%</u>	<u>12.50%</u>	
	Sec. 20: All		ORRI;	<u>100.00%</u>	<u>100.00%</u>	
	TOTAL		<u>100.00%</u>	<u>100.00%</u>		
			<u>Tract 4</u>			
SF 078910	<u>T-24-N, R-2-W</u>	1,096.53	Royalty;	12.50%	12.50%	
	Sec. 28: NE/4		Working Interest;	75.00%	75.00%	
	N/2 NW/4		El Paso Natural Gas Co.;	<u>12.50%</u>	<u>12.50%</u>	
	Sec. 29: NE/4		ORRI;	<u>100.00%</u>	<u>100.00%</u>	
	TOTAL		<u>100.00%</u>	<u>100.00%</u>		
					<u>11.03522%</u>	

Effective June 1, 1962

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 078912	<u>T-24-N, R-3-W</u>	1840.00				
	Sec. 10: SW/4		Royalty;	12.50%	12.50%	<u>18.51733%</u>
	Sec. 11: E/2		Working Interest;			
	Sec. 12: SW/4, NW/4 NW/4,		El Paso Natural Gas Co.;	75.00%	75.00%	
	S/2 SE/4, NW/4		ORRI;	<u>12.50%</u>	<u>12.50%</u>	
	SE/4		TOTAL	<u>100.00%</u>	<u>100.00%</u>	
	Sec. 13: E/2 NW/4, NW/4					
	NW/4, S/2 SW/4,					
	NE/4					
	Sec. 14: E/2, S/2 SW/4					
	Sec. 24: NW/4, W/2 NE/4,					
	SE/4 NE/4					
			<u>Tract 6</u>			
SF 078913	<u>T-24-N, R-3-W</u>	1920.00				
	Sec. 15: All		Royalty;	12.50%	12.50%	<u>19.32243%</u>
	Sec. 16: All		Working Interest;			
	Sec. 21: W/2, NE/4		El Paso Natural Gas Co.;	75.00%	75.00%	
	Sec. 22: NE/4		ORRI;	<u>12.50%</u>	<u>12.50%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
	<u>Tract 7</u>					
S 078914	<u>T-24-N, R-3-W</u>	480.00				
	Sec. 25: N/2, SE/4		Royalty;	12.50%	12.50%	<u>4.83061%</u>
			Working Interest;			
			El Paso Natural Gas Co.;	75.00%	75.00%	
			ORRI;	<u>12.50%</u>	<u>12.50%</u>	
	TOTAL	<u>100.00%</u>	<u>100.00%</u>			
	<u>Tract 8</u>					

Effective June 1, 1962

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE	
SF 078915	T-24-N, R-3-W	640.00	Royalty;	12.50%	<u>6.44081%</u>
	Sec. 23: NW/4, E/2		Working Interest;	75.00%	
	Sec. 36: NE/4		El Paso Natural Gas Co.;	12.50%	
			TOTAL	100.00%	100.00%
			<u>Tract 9</u>		
Patented	T-24-N, R-2-W	*160.00	Royalty;	9.375%	<u>1.20765%</u>
	Sec. 29: NW/4		Working Interest;	56.250%	
	*Undivided 120.00 net acres committed		El Paso Natural Gas Co.;	25.000%	
			TOTAL	9.375%	9.375%
			<u>Tract 13</u>		
Patented	T-24-N, R-2-W	*80.00	Royalty;	6.250%	<u>.40255%</u>
	Sec. 28: S/2 NW/4		Working Interest;	37.500%	
	*Undivided 40.00 net acres committed		El Paso Natural Gas Co.;	12.500%	
			TOTAL	6.250%	6.250%
			<u>Tract 13-B</u>		
			Royalty;	6.250%	<u>6.250%</u>
			Working Interest;	37.500%	
			El Paso Natural Gas Co.;	12.500%	
			Felmont Oil Co.;	.625%	
			Jane P. Guild;	.312%	
			M. Dodge;	25.000%	
			Wlb & Co.;	6.250%	
			C. W. Gillette;	4.688%	
			James S. Gardner;	.625%	
			Augustus P. Loring, III;	6.250%	
			ORRI;	100.000%	
			TOTAL	100.000%	

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
Patented	T-24-N, R-2-W	75.96				<u>.76444%</u>
	Sec. 18: Lot 3,		Royalty;	12.50%	12.50%	
	NE/4 SW/4		Working Interest;			
			El Paso Natural Gas Co.;	75.00%	75.00%	
			ORRI;	<u>12.50%</u>	<u>12.50%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
			Tract 16			
Patented	T-24-N, R-3-W	640.00				<u>6.44081%</u>
	Sec. 9: All		Royalty;	12.50%	12.50%	
			Working Interest;			
			El Paso Natural Gas Co.;	75.00%	75.00%	
			ORRI;	<u>12.50%</u>	<u>12.50%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
			Tract 17			
Patented	T-24-N, R-2-W	311.98				<u>3.13969%</u>
	Sec. 19: Lots 1,2,		Royalty;	12.50%	6.25%	
	E/2 NW/4,		Working Interest;			
	NE/4		El Paso Natural Gas Co.;	75.00%	75.00%	
			ORRI;	<u>12.50%</u>	<u>12.50%</u>	
			TOTAL	<u>100.00%</u>	<u>93.75%</u>	
			Tract 18			
Patented	T-24-N, R-3-W	320.00				<u>3.22041%</u>
	Sec. 13: SW/4 NW/4,		Royalty;	12.50%	12.50%	
	N/2 S/2,		Working Interest;			
	S/2 SE/4		El Paso Natural Gas Co.;	75.00%	75.00%	
	Sec. 24: NE/4 NE/4		ORRI;	<u>12.50%</u>	<u>12.50%</u>	
			TOTAL	<u>100.00%</u>	<u>100.00%</u>	
			Tract 19			

Effective June 1, 1962

SCHEDULE XV

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
Patented	<u>T-24-N, R-2-W</u> Sec. 9: NW/4	160.00	<u>Tract 22</u>		12.50%	1.61020%
			Royalty;	12.50%		
			Working Interest:	81.25%		
			El Paso Natural Gas Co.;	6.25%		
	TOTAL	100.00%		100.00%		
			<u>Tract 24</u>			
Patented	<u>T-24-N, R-3-W</u> Sec. 14: NW/4, N/2 SW/4	240.00	<u>Tract 25</u>		00.00%	2.41530%
			Royalty;	12.50%		
			Working Interest:	75.00%		
			El Paso Natural Gas Co.;	12.50%		
	TOTAL	100.00%		87.00%		
			<u>Tract 27</u>			
Patented	<u>T-24-N, R-2-W</u> Sec. 21: NW/4	160.00	<u>Tract 27</u>		3.125%	1.61020%
			Royalty;	12.50%		
			Working Interest:	75.00%		
			El Paso Natural Gas Co.;	12.50%		
	TOTAL	100.00%		90.625%		
Patented	<u>T-24-N, R-3-W</u> Sec. 12: NE/4 SE/4, S/2 NW/4, NE/4 NW/4	160.00	<u>Tract 27</u>		12.50%	1.61020%
			Royalty;	12.50%		
			Working Interest:	75.00%		
			El Paso Natural Gas Co.;	12.50%		
	TOTAL	100.00%		100.00%		

Effective June 1, 1962

SCHEDULE XV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
LINDRITH UNIT AREA

RECAPITULATION

Description of Lands in Participating Area;

Township 24 North, Range 2 West, N.M.P.M.
 Section 9: NW/4
 Section 18: Lots 3,4, E/2 SW/4, (SW/4), NW/4
 Section 19: Lots 1,2,3,4, E/2 W/2, E/2 (All)
 Section 20: All
 Section 21: W/2
 Section 28: N/2
 Section 29: N/2
 Section 30: Lots 1,2,3,4, E/2 W/2, NE/4
 Section 31: Lots 1,2,3,4, E/2 W/2

Township 24 North, Range 3 West, N.M.P.M.
 Section 9: All
 Section 10: SW/4
 Section 11: E/2
 Section 12: SE/4, W/2
 Section 13: All
 Section 14: All
 Section 15: All
 Section 16: All
 Section 21: W/2, NE/4
 Section 22: NE/4
 Section 23: N/2, SE/4
 Section 24: All
 Section 25: N/2, SE/4
 Section 36: NE/4

Total Number of Acres in Participating Area: 10,016.64
 Total Number of Acres Participating: 9,936.64

EXHIBIT "B"
GEOLOGICAL REPORT CONCERNING
THE FOURTEENTH EXPANSION
OF THE PICTURED CLIFFS FORMATION IN THE
EL PASO NATURAL GAS COMPANY
LINDRITH UNIT

EL PASO NATURAL GAS COMPANY

BY: A. M. Derrick
A. M. DERRICK, MANAGER
Reservoir Engineering
Department

EXHIBIT "B"

Geological Summary Pertaining to the Fourteenth Expansion of the Pictured Cliffs Participating Area within the Lindrith Unit.

GENERAL INFORMATION

The Pictured Cliffs formation within the Lindrith Unit of Rio Arriba County, New Mexico, is of upper Cretaceous age and is considered to be predominately sandstone deposited in bands of varying widths. These bands have a northwest-southeast trend and are separated by zones of shaly sandstones and/or bentonitic sandstones. The Pictured Cliffs formation is erratic in development and an abrupt "shale-out" of the sand can occur as well as rapid local thickening. This can cause great variance in well potentials as evidenced in the Lindrith Unit Area. Enclosed with this report is a Structure map, Exhibit "C", Figure No. 1 and an Isopach map as Exhibit "C", Figure No. 2.

The following expansion is proposed:

NEW EXPANSION

Fourteenth Expansion - Effective Date: June 1, 1962

NW/4 Section 31, T-24N, R-2W Lindrith No. 43

This well was tested on May 30, 1962 for an Initial Potential of 7424 Mcf/D and an AOF of 16,333 Mcf/D. On the basis of this test the acreage is proven commercial and should be admitted to the Participating Area.

SW/4 Section 30, T-24N, R-2W

This quarter section lies as a north offset to the prolific No. 43 Lindrith and is also bounded to the west and north by acreage which has previously been admitted to the Participating Area. Its position in respect to surrounding commercial acreage would make it reasonable to assume that the subject acreage would also lie within the limits of commercial production. This also is substantiated by the fact that the acreage lies in a general northwest-southeast trend, between the No. 34 and No. 43 Lindrith wells, both of which have shown substantial initial potentials.

SW/4 Section 31, T-24N, R-2W

This quarter section lies as a south offset to No. 43 Lindrith (previously discussed) and as a north offset to the August & Wagenseller No. 1D-6 Jicarilla, located adjacent to the Lindrith Unit in the NW/4 of Section 6, T-23N, R-2W. The No. 1D-6 was completed on October 22, 1960 for an Initial Potential of 498 Mcf/D and an AOF of 499 Mcf/D. The commercialability of this well would be questionable based on its low AOF;

however, due to the excellent AOF of the No. 43 Lindrith it is indicated that a well drilled in the SW/4 of Section 31 would be capable of gas production in commercial quantities.

In view of the lack of well control to the east and west of the Proposed Participating acreage, further expansion in this area is not recommended at this time.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

159

Drawer 1857
Roswell, New Mexico

June 8, 1962

El Paso Natural Gas Company
P. O. Box 1942
El Paso, Texas

Attention: Mr. Sam Smith

Gentlemen:

Your 1962 plan of development dated April 17, 1962, for the Lindrith unit area, Rio Arriba County, New Mexico, which proposes the drilling of four Pictured Cliffs wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Very truly yours,

(Orig. Sgd.) CARL C. TRAYWICK

for JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Attachments

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)

JUN 11 1962

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

189

May 31, 1962

**El Paso Natural Gas Company
El Paso, Texas**

Attention: Mr. Sam Smith

**Re: 1962 Drilling Program
Lindrith 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 Lindrith 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: U. S. Geological Survey - Roswell
Commissioner of Public Lands - Santa Fe**

C
O
P
Y

May 16, 1962

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

Re: Lindrith Unit,
Rio Arriba County,
New Mexico
1962 Drilling Program

Attention: Mr. Sam Smith

Gentlemen:

The Commissioner of Public Lands has this date approved the 1962 Drilling Program for the Lindrith Unit Area, Rio Arriba County, New Mexico, subject to like approval by the U. S. Geological Survey and the Oil Conservation Commission.

We are returning one approved copy of this application.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

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

ESW/umr/v
encl:

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

C

O

P

Y

El Paso Natural Gas Company

APR 17 1962 El Paso, Texas

April 17, 1962

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

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

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

Re: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
1962 DRILLING PROGRAM

Gentlemen:

By letter dated January 16, 1961, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1961. Said program provided for the drilling of four (4) Pictured Cliffs wells. All of the wells were completed in the Pictured Cliffs Formation. Three (3) of the wells were drilled within the Pictured Cliffs Participating Area and the remaining well was declared as non-commercial in the Pictured Cliffs Formation.

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

Pictured Cliffs	39	(8 non-commercial)
Plugged and abandoned	8	

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is herewith submitting this Drilling Program providing for the drilling of the following described wells during the period from January 1, 1962 to December 31, 1962:

<u>LOCATION</u>	<u>FORMATION</u>
NE/4 Section 22, T-24-N, R-3-W	Pictured Cliffs
NW/4 Section 31, T-24-N, R-2-W	Pictured Cliffs
NE/4 Section 23, T-24-N, R-3-W	Pictured Cliffs
SE/4 Section 14, T-24-N, R-3-W	Pictured Cliffs

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 blocks.

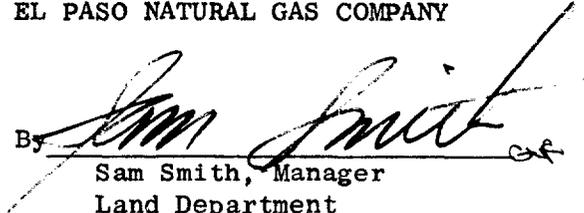
El Paso Natural Gas Company intends to drill the Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary and cable tools. Surface casing will be set to approximately 100' from the surface, and then a production string of casing will be set through the Pictured Cliffs Formation. Mud will be used in drilling through the Pictured Cliffs Formation and cable tools will be used for completion work. The entire Pictured Cliffs Formation will be subjected to a hydraulic fracturing process. Due care will be taken to protect all horizons.

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

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

Sam Smith, Manager
Land Department

SS:PNP:js

cc: Mr. P. M. Barry
District Superintendent
Mobil Oil Corporation
Post Office Box 3371
Durango, Colorado

Delhi-Taylor Oil Corporation
2630 Fidelity Union Tower
Dallas 1, Texas

El Paso Natural Gas Company
MAIN OFFICE OCC

El Paso, Texas

1962 JAN 24 AM 8:15

January 19, 1962

159

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: Lindrith Unit
Revised Exhibit "B"
Effective November 1, 1961

Gentlemen:

We enclose copies of the Revised Exhibit "B" covering the Lindrith Unit Area which has been revised effective December 1, 1961.

The Exhibit "B" was mailed to the working interest owners of the Lindrith Unit under date of November 22, 1961, and they were advised that if they should have any corrections or changes, to notify El Paso within ten (10) days. We have not been advised of any changes, therefore, this Exhibit "B" is presumed to reflect the correct interests of each working interest owner.

Very truly yours,

EL PASO NATURAL GAS COMPANY

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

CTR:AJM:cah
Attachment

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

DATE: _____

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

DATE: _____

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

DATE: 6-1-62

The foregoing approvals are for the 1962 Drilling Program for the Lindrith Unit
I Sec. No. 713, Rio Arriba County, New Mexico.

EXHIBIT "B"

SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS INTEREST
IN ALL LANDS IN THE LINDRITH UNIT AGREEMENT

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
-----------	-------------	--------------	---------------------------	----------------------------------	------------------	---	---

FEDERAL LANDS

1	T-25-N, R-2-W Sec. 31: Lots 1,2,3,4 Sec. 32: N/2, N/2 S/2, S/2 SE/4, SE/4 SW/4	2316.51	SF 078907 3-1-48	U.S.A. 12 1/2% A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths American Petrofina, Inc. 2.000000% Gas and Associated Liquid Hydrocarbons to base of Pictured Cliffs Formation Mobil Oil Co. 3.125000% Delhi-Taylor Oil Corp. 3.125000%	Gas Rights to base of Pictured Cliffs Formation: El Paso Natural Gas Co. A11 Gas rights from base of Pictured Cliffs Formation to top of Dakota Formation and Oil rights to top of Dakota Formation: Mobil Oil Co. 1/2 Delhi-Taylor Oil Corp. 1/2
	T-24-N, R-2-W Sec. 3: Lot 4, SW/4 NW/4, W/2 SW/4 Sec. 4: Lots 1,2,3,4, S/2 N/2, S/2 Sec. 6: Lots 1 thru 7, S/2 NE/4, SE/4 NW/4, SE/4, E/2 SW/4 Sec. 10: N/2 NW/4					Squire Production Co. 2.01875% William G. Webb .10625% Frank A. Schultz, Jr. 2.125000%	Oil and gas rights below top of Dakota Formation: Mobil Oil Co. 3/4 Delhi-Taylor Oil Corp. 1/4

2	T-24-N, R-2-W Sec. 7: Lots 1,2,3, 4, E/2 W/2, E/2 Sec. 8: A11 Sec. 9: E/2 Sec. 18: Lots 1,2,4, E/2 NW/4, S/2 SE/4, SE/4 SW/4 Sec. 17: N/2 N/2, S/2 S/2 Sec. 16: W/2 W/2	2370.92	SF 078908 5-1-48	U.S.A. 12 1/2% A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths T-24-N, R-2-W Sec. 7: E/2 9: E/2 18: Lot 4, SE/4 SW/4 American Petrofina, Inc. 2.000000% T-24-N, R-2-W Sec. 8: A11 18: Lots 1,2, E/2 NW/4, S/2 SE/4 17: N/2 N/2, S/2 S/2 16: W/2 W/2 Sec. 7: Lots 1,2,3,4, E/2 W/2 Petro-Atlas, Inc. 2.000000%	See Tract 1 for Ownership (By O/A dated 4-26-57 EPNG owns P. C. oil rights in NE/4 SE/4, Sec. 9)
---	--	---------	---------------------	-----------------------	--	---	---

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
2	(Continued)						
3	T-24-N, R-2-W Sec. 15: W/2 Sec. 16: NE/4, S/2 SE/4 Sec. 19: Lots 3,4, E/2 SW/4, SE/4 Sec. 20: A11 Sec. 21: S/2 Sec. 22: W/2 Sec. 30: Lots 1,2, E/2 NW/4, NE/4 T-24-N, R-3-W Sec. 24: E/2 SE/4	2544.29	SF 078909 5-1-48	U.S.A. 12 ¹ / ₂ % A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths American Petrofina, Inc. 2.00000% Gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation See Tract 1 for Ownership	See Tract 1 for Ownership
4	T-24-N, R-2-W Sec. 28: E/2, N/2 NW/4 Sec. 29: NE/4, W/2 SE/4 Sec. 30: Lots 3,4, E/2 SW/4, SE/4 Sec. 31: Lots 1,2,3,4, E/2 W/2, E/2 Sec. 32: A11 T-24-N, R-3-W Sec. 24: SW/4, W/2 SE/4	2456.53	SF 078910 2-1-48	U.S.A. 12 ¹ / ₂ % A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths American Petrofina, Inc. 2.00000% Gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation See Tract 1 for Ownership	See Tract 1 for Ownership
5	T-24-N, R-3-W Sec. 1: Lots 1,2, 3,4,S/2 N/2, S/2 Sec. 2: Lots 1,2, 3,4,S/2 N/2, S/2	2451.24	SF 078911 2-1-48	U.S.A. 12 ¹ / ₂ % A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths American Petrofina, Inc. 2.00000% Gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation See Tract 1 for Ownership	See Tract 1 for Ownership

Revised: November 1, 1961

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment Percentage of Interest
5	(Continued) Sec. 3: Lots 1,2, 3,4, S/2 N/2, S/2 <u>T-25-N, R-3-W</u> Sec. 35: SE/4 Sec. 36: S/2						
6	<u>T-24-N, R-3-W</u> Sec. 10: A11 Sec. 11: N/2, SE/4, E/2 SW/4 Sec. 12: NW/4 NW/4, SW/4, W/2 SE/4, SE/4 SE/4 Sec. 13: NE/4, E/2 NW/4, NW/4 NW/4, S/2 SW/4 Sec. 14: E/2, S/2 SW/4 Sec. 24: NW/4, W/2 NE/4, SE/4 NE/4	2560.00	SF 078912 2-1-48	U.S.A. 12 1/2% A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths American Petrofina, Inc. 2.00000% Gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation See Tract I for Ownership	See Tract I for Ownership
7	<u>T-24-N, R-3-W</u> Sec. 15: A11 Sec. 16: A11 Sec. 21: A11 Sec. 22: A11	2560.00	SF 078913 2-1-48	U.S.A. 12 1/2% A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths T-24-N, R-3-W Sec. 21: A11 Petro-Atlas, Inc. T-24-N, R-3-W Sec. 15: A11 16: A11 22: A11 American Petrofina, Inc. 2.00000% Gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation See Tract I for Ownership	See Tract I for Ownership

Revised: November 1, 1961

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
8	<u>T-24-N, R-3-W</u>	2560.00	SF 078914 2-1-48	U.S.A. 12 ¹ / ₂ A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths Petro-Atlas, Inc. Gas and associated liquid hydrocarbons to base of <u>liquid</u> <u>hydrocarbons to base of</u> <u>Pictured Cliffs Formation</u> See Tract 1 for Ownership	See Tract 1 for Ownership
	Sec. 25: A11						
	Sec. 26: A11						
9	<u>T-24-N, R-3-W</u>	2560.00	SF 078915 2-1-48	U.S.A. 12 ¹ / ₂ A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths <u>T-24-N, R-3-W</u> Sec. 23: A11 American Petrofina, Inc. 2.00000%	See Tract 1 for Ownership
	Sec. 23: A11						
	Sec. 34: A11						
10	<u>T-25-N, R-3-W</u>	40.00	SF 080804 5-1-50	U.S.A. 12 ¹ / ₂ A11	Mobil Oil Co. & Delhi-Taylor Oil Corp.	All Depths A. L. Duff, Jr. Gas and associated liquid hydrocarbons to base of <u>liquid</u> <u>hydrocarbons to base of</u> <u>Pictured Cliffs Formation</u> Mobil Oil Co. Delhi-Taylor Oil Corp. Squire Production Co. William G. Webb Frank A. Schultz, Jr.	See Tract 1 for Ownership
	Sec. 34: NM/4						
	SE/4						

Revised: November 1, 1961

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
11	T-24-N, R-2-W Sec. 16: N/2 SE/4, E/2 W/2	240.00	SF 081230 5-1-50	U.S.A. 12 ¹ / ₈ % All	Mobil Oil Co. & Delhi-Taylor Oil Corp.	Gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation Mobil Oil Co. Delhi-Taylor Oil Corp. Squire Production Co. William G. Webb Frank A. Schultz, Jr.	See Tract 1 for Ownership
						3.12500% 3.12500% 2.96875% .15625% 3.12500%	

TOTAL FEDERAL LANDS

22,659.49

Tract No.	Description	No. of Acres	Land Owner and Percentage of Royalty Payable to Lessors and Others	Lessee and Date of Lease	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
12	T-24-N, R-2-W Sec. 17: S/2 N/2, N/2 S/2	320.00	5/128 - Jerry Curtis 7/256 - S. P. Yates 7/256 - Martin Yates, III 1/64 - L. A. Nordan 1/64 - Midwest Oil Corp.	Unleased		
13	T-24-N, R-2-W Sec. 29: W/2	320.00	1/32 - Fanny J. Hill 1/32 - Belmont Oil Co. 1/80 - G. E. Boring 1/320 - M. D. Rueckhaus 1/64 - Erema Boring Sheldon 1/32 - Belmont Oil Co.	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 3-12-47 10-13-53 10-13-53 10-13-53 10-13-53 Unleased	As to gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation On lease interest (3/4) only Delhi-Taylor Oil Corp. Squire Production Co. William G. Webb Frank A. Schultz, Jr.	Gas rights to base of Pictured Cliffs Formation: El Paso Natural Gas Co. 3/4 Gas rights from base of Pictured Cliffs Formation to top of Dakota Formation and Oil rights to top of Dakota Formation: Mobil Oil Co. 3/8 Delhi-Taylor Oil Corp. 3/8 Oil and Gas rights below top of Dakota Formation: Mobil Oil Co. 9/16 Delhi-Taylor Oil Corp. 3/16
13a	T-24-N, R-2-W Sec. 33: N/2	320.00	G. E. Boring, et al	Unleased		
13b	T-24-N, R-2-W Sec. 28: SW/4, S/2 NW/4 Sec. 29: E/2 SE/4	320.00	1/32 - June Price 1/80 - G. E. Boring 1/320 - M. D. Rueckhaus	Mobil Oil Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 11-30-53 10-13-53 10-13-53	As to gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation On leased interest (1/2) only Mobil Oil Co. Delhi-Taylor Oil Corp.	Gas rights to base of Pictured Cliffs Formation: El Paso Natural Gas Co. 1/2 Gas rights from base of Pictured Cliffs Formation to top of Dakota Formation and

Revised: November 1, 1961

Tract No.	Description	No. of Acres	Land Owner and Percentage of Royalty Payable to Lessors and Others	Lessee and Date of Lease	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
13b	(Continued)					
			1/64 - Erema Boring Sheldon	10-13-53	Squire Production Co.	Oil rights to top of Dakota Formation:
			1/64 - Felmont Oil Co., et al	Unleased	William G. Webb Frank A. Schultz, Jr.	Mobil Oil Co. 1/4 Delhi-Taylor Oil Corp. 1/4
						Oil and Gas rights below top of Dakota Formation:
						Mobil Oil Co. 3/8 Delhi-Taylor Oil Corp. 1/8
14	<u>T-24-N, R-2-W</u> Sec. 10: SW/4, S/2 NW/4	240.00	(1) 3/64 - A. G. Johnson, et ux (2) 1/64 - G. E. Boring (3) 1/16 - Fanny J. Hill	(3) Mobil Oil Co. and Delhi-Taylor Oil Corp. 9-16-55		Mobil Oil Co. and Delhi-Taylor Oil Corp. 1/2 1/2 mineral rights are unleased
15	<u>T-25-N, R-3-W</u> Sec. 35: SW/4	160.00		Unleased		
16	<u>T-24-N, R-2-W</u> Sec. 18: NE/4, N/2 SE/4, NE/4 SW/4, Lot 3	315.96	1/8 - Estate of R. E. Adams	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 4-19-49	As to gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation Mobil Oil Co. Delhi-Taylor Oil Corp. Squire Prod. Co. William G. Webb Frank A. Schultz, Jr.	Gas rights to base of Pictured Cliffs Formation: El Paso Natural Gas Co. All Gas rights from base of Pictured Cliffs Formation to top of Dakota Formation and Oil rights to top of Dakota Formation: Mobil Oil Co. 1/2 Delhi-Taylor Oil Corp. 1/2
						Oil and gas rights below top of Dakota Formation: Mobil Oil Co. 3/4 Delhi-Taylor Oil Corp. 1/4

Revised: November 1, 1961

Tract No.	Description	No. of Acres	Land Owner and Percentage of Royalty Payable to Lessors and Others	Lessee and Date of Lease	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
17	T-24-N, R-3-W Sec. 9: All	640.00	1/8 - W. O. Hughes and wife, Agatha B. Hughes	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 2-1-47	See Tract 16 for Ownership	See Tract 16 for Ownership
18	T-24-N, R-2-W Sec. 19: NE/4, E/2 NW/4, Lots 1 & 2, (N/2)	311.98	1/16 - Ernest Willis Meharg and wife, Klossie Nell Meharg 1/32 - Mary E. Lance 1/32 - Allen M. Tonkin, et ux	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 2-1-47 1-17-48	See Tract 16 for Ownership	See Tract 16 for Ownership
19	T-24-N, R-3-W Sec. 13: N/2 S/2, SW/4 NW/4, S/2 SE/4 Sec. 24: NE/4 NE/4	320.00	1/8 - E. W. Meharg, et ux	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 2-1-47	See Tract 16 for Ownership	See Tract 16 for Ownership
20	T-24-N, R-3-W Sec. 33: E/2	320.00	Lee D. Dalton	Unleased		
21	T-24-N, R-2-W Sec. 5: Lots 1,2, S/2 NE/4, SE/4 (E/2)	326.52	1/16 - Estate of Edwin L. Browning, Deceased	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co.	See Tract 16 for Ownership	See Tract 16 for Ownership

Revised: November 1, 1961

Tract No.	Description	No. of Acres	Land Owner and Percentage of Royalty Payable to Lessors and Others	Lessee and Date of Lease	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
21	(Continued)					
		1/32	- Jessie Avant	3-27-47		
		1/160	- G. E. Boring			
		1/128	- Erema Boring Sheldon			
		1/128	- L. A. Nordan			
		1/128	- Midwest Oil Corp.			
		1/640	- M. D. Rueckhaus			
22	<u>T-24-N, R-2-W</u> Sec. 9: W/2	320.00	1/32 - Jessie Avant 1/40 - G. E. Boring 1/64 - L. A. Nordan 1/64 - Midwest Oil Corp. 1/32 - Erema Boring Sheldon	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Company 3-27-47	See Tract 16 for Ownership	See Tract 16 for Ownership
23	<u>T-25-N, R-3-W</u> Sec. 34: S/2 S/2, NE/4 SE/4, N/2 NW/4	280.00	1/160 - M. D. Rueckhaus	Unleased		
24	<u>T-24-N, R-3-W</u> Sec. 11: W/2 SW/4 Sec. 14: NW/4, N/2 SW/4	320.00	1/8 - Ben Leeson and wife, Gussie Leeson (not committed)	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Company 3-28-47	To All Depths Benjamin James Gardner, Lloyd M. Gardner, Martin Luther Gardner, J. M. Anderson and Cleeta Anderson .500000%	See Tract 16 for Ownership
				As to gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation		
				Mobil Oil Co.	3.125000%	
				Delhi-Taylor Oil Corp.	3.125000%	
				Squire Prod. Co.	2.731250%	
				William G. Webb	.143750%	
				Frank A. Schultz, Jr.	2.875000%	

Revised: November 1, 1961

Tract No.	Description	No. of Acres	Land Owner and Percentage of Royalty Payable to Lessors and Others	Lessee and Date of Lease	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
25	<u>T-24-N, R-2-W</u> Sec. 21: N/2, except the land described under Tract 25a	318.00	1/16 - T. W. Stevenson and wife, Vivian M. Stevenson 1/32 - R. B. McFarlin, et al 1/32 - Belmont Oil Co.	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 5-24-47	See Tract 16 for Ownership	See Tract 16 for Ownership (Stevenson's interest not committed)
25a	<u>T-24-N, R-2-W</u> A portion of the SE/4 NE/4, Sec. 21	2.00	G. D. Grigsby, et ux	Unleased		
26	<u>T-24-N, R-3-W</u> Sec. 12: NE/4	160.00	1/8 - Rex L. Clinkenbeard, T. J. Clinkenbeard, Rosalie Rienlets, Eva Blanche Austin, Clifford L. Clinkenbeard, Hal H. Clinkenbeard, Vera C. Doud	Unleased		
27	<u>T-24-N, R-3-W</u> Sec. 12: E/2 NW/4, SW/4 NW/4, NE/4 SE/4	160.00	1/16 - Horace F. McKay, Jr., et ux 1/16 - Carroll T. Payne, et ux	Magnolia Petroleum Co., Delhi-Taylor Oil Corp., & El Paso Natural Gas Co. 4-19-48	See Tract 16 for Ownership	See Tract 16 for Ownership
28	<u>T-24-N, R-2-W</u> Sec. 5: Lots 3, 4, S/2 NW/4, SW/4	326.44	1/8 - Curtis Evans, O. C. Evans, Hazel M. Evans	EPNG Co. 11-21-56	Curtis Evans - 7/15 of 1/32 O. C. Evans - 4/15 of 1/32 Hazel M. Evans - 4/15 of 1/32	El Paso Natural Gas Co. All
TOTAL PATENTED LANDS		5800.90				

Revised: November 1, 1961

Tract No.	Description	No. of Acres	State No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
-----------	-------------	--------------	--------------------------	----------------------------------	------------------	---	---

STATE LANDS

29	T-25-N, R-2-W Sec. 32: SW/4 SW/4	40.00	E-1214-6 2-19-47	State of New Mexico 12 1/2% All	Mobil Oil Co. & Delhi-Taylor Oil Corp.	To All Depths Ben Dansby Until \$50.00/ acre has been recovered	Gas rights to base of Pictured Cliffs Formation: E1 Paso Natural Gas Co. All
----	-------------------------------------	-------	---------------------	------------------------------------	---	---	--

As to gas and associated liquid hydrocarbons to base of Pictured Cliffs Formation
 Mobil Oil Co. 3.1250%
 Delhi-Taylor Oil Corp. 3.1250%

Gas rights from base of Pictured Cliffs Formation to top of Dakota Formation and Oil rights to top of Dakota Formation:
 Mobil Oil Co. 1/2
 Delhi-Taylor Oil Co. 1/2

Oil and Gas rights below top of Dakota Formation:
 Mobil Oil Co. 3/4
 Delhi-Taylor Oil Corp. 1/4

TOTAL STATE LANDS 40.00

El Paso Natural Gas Company

El Paso, Texas

November 17, 1961

159

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

Commissioner of Public Lands
State of New Mexico
Post Office Box 791
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
Post Office Box 871
Santa Fe, New Mexico

Re: Lindrith Unit Area, I Sec. No. 713
Pictured Cliffs Formation
NOTICE OF COMPLETION OF ADDITIONAL
WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to this unit. These wells are as follows:

1. The Lindrith Unit #39 Well is located 800' from the North line and 990' from the East line of Section 16, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on June 12, 1961, and completed on July 14, 1961, at a total depth of 3158' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3078' - 3084', 3090' - 3096', 3110' - 3116' was treated with a sand-water fracturing process. The well was shut-in on July 14, 1961, and after being shut-in for gauge for eleven (11) days, the well was tested on July 25, 1961, and following a three (3) hour blow-down period gauged 5091 MCFGPD through a 3/4" choke, and 8685 MCFGPD by the calculated absolute open-flow method, with an SIPC of 777 PSIA. The drilling block upon which this well is located is described as the NE/4 of Section 16, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This drilling block was included in the Lindrith Unit Area in the Third Expanded Participating Area, effective September 1, 1956 and the completion of this well does not warrant any further expansion of the participating area.

2. The Lindrith Unit #40 Well is located 1100' from the South line and 840' from the West line of Section 10, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on June 16, 1961, and completed on July 22, 1961, at a total depth of 3181' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3124' - 3134', 3144' - 3154', was treated with a sand-water fracturing process. This well was shut-in on July 22, 1961, and after being shut-in for gauge for fourteen (14) days, the well was tested on August 5, 1961, and following a three (3) hour blow-down period gauged 2610 MCFGPD through a 3/4" choke, and 2804 MCFGPD by the calculated absolute open-flow method, with an SIPC of 967 PSIA. The drilling block upon which this well is located is described as the SW/4 of Section 10, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres, more or less.

This drilling block was included in the Lindrith Unit Area in the Third Expanded Participating Area effective September 1, 1956. The completion of the #40 Well does not justify expanding the present participating area, as evidenced by the attached isopach map which shows less than 10' of net pay for the SE/4 of Section 10, Township 24 North, Range 3 West.

3. The Lindrith Unit #41 Well is located 1840' from the South line and 1460' from the West line of Section 15, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on June 9, 1961, and completed on July 14, 1961, at a total depth of 3231'. The Pictured Cliffs Formation between 3118' - 3126', 3148' - 3156', 3178' - 3186' was treated with a sand-water fracturing process. This well was shut-in on July 14, 1961 and after being shut-in for gauge for eleven (11) days, the well was tested on July 25, 1961, and following a three (3) hour blow-down period gauged 5370 MCFGPD through a 3/4" choke, and 8517 MCFGPD by the calculated absolute open-flow method, with an SIPC of 867 PSIA. The committed drilling block upon which this well is located is described as the SW/4 of Section 15, Township 24 North, Range 3 West, N.M.P.M., containing 160.00 acres, more or less.

This drilling block was included in the Lindrith Unit Area in the Third Expanded Participating Area, effective September 1, 1956. The drilling of this well did not supply any additional information which would warrant an expansion of the present participating area.

Very truly yours,

EL PASO NATURAL GAS COMPANY

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

CTR:AJM:js

cc: Delhi-Taylor Oil Corporation
Mobil Oil Company

El Paso Natural Gas Company

El Paso, Texas

November 17, 1961

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

Re: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
NOTICE OF COMPLETION OF NON-
COMMERCIAL WELL

Dear Mr. Anderson:

Pursuant to Section 10 of the Lindrith Area Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that the following well was incapable of producing unitized substances in paying quantities from the Pictured Cliffs Formation. This well is as follows:

The Lindrith Unit #38 Well, located 1090' from the North line and 800' from the East line of Section 26, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on June 6, 1961 and completed on July 14, 1961 at a total depth of 3283' in the Pictured Cliffs Formation. The Pictured Cliffs Formation from 3215' - 3220', 3232' - 3242' was treated with a sand water fracturing process. This well was shut-in on July 14, 1961 and after being shut-in for eleven (11) days, the well was tested in the Pictured Cliffs Formation on July 25, 1961, and following a three (3) hour blow-down period gauged 1018 MCFGPD through a 3/4" choke and 1029 MCFGPD by the calculated absolute open-flow method with an SIPC of 955 PSIA. The drilling block upon which this well is located is described as the NE/4 of Section 26, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres. The determination that this well is not capable of producing unitized substances in paying quantities was made on July 25, 1961.

Inasmuch as this well is incapable of production of unitized substances in paying quantities, the drilling block cannot be admitted to the Participating Area under the terms of the Lindrith Area Unit Agreement. Therefore, the Participating Area is not enlarged.

Very truly yours,

EL PASO NATURAL GAS COMPANY

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

CTR:AJM:js

cc: Delhi-Taylor Oil Corporation
2630 Fidelity Union Tower Building
Dallas, Texas

Mobil Oil Company
Attention: Mr. P. M. Barry
P. O. Box 3371
Durango, Colorado

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

El Paso Natural Gas Company

El Paso, Texas

August 17, 1961

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

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

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

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE TWELFTH AND
THIRTEENTH EXPANDED PARTICIPATING AREAS
Pictured Cliffs Formation - Effective
September 1, 1960 and October 1, 1960

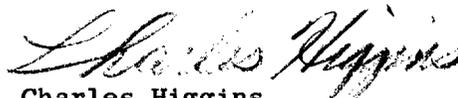
Gentlemen:

This is to inform you that the regulatory bodies approved the Twelfth and Thirteenth Expansions of the Pictured Cliffs Formation of the Lindrith Unit on the dates set out below:

1. Director, United States Geological Survey - 8-3-61
2. Commissioner of Public Lands - 5-31-61
3. Oil Conservation Commission - 5-22-61

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

Very truly yours,



Charles Higgins
Area Coordinator
Land Department

CH:OL:js



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

159

August 15, 1961

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your applications of May 22, 1961, for the twelfth and thirteenth revisions of the Pictured Cliffs participating area for the Lindrith unit area, Rio Arriba County, New Mexico, were approved August 3, 1961, by the Acting Director, Geological Survey, effective as of September 1, and October 1, 1960, respectively.

One approved copy of each application is enclosed. It is assumed that you will furnish the State of New Mexico and any other interested party with appropriate evidence of this approval.

Very truly yours,

[Orig. Sgd.] JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

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

Case # 159

May 31, 1961

C
O
P
Y

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

Attention: Mr. T. W. Bittick

Re: Twelfth and Thirteenth
Expansion of the Pictured
Cliffs Participating Area,
Lindrith Unit, Rio Arriba
County, New Mexico.

Gentlemen:

The Commissioner of Public Lands approved as of May 31, 1961, the Twelfth and Thirteenth Expansions of the Pictured Cliffs Participating Area, for the Lindrith Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey.

Five approved copies of each expansion are enclosed.

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

BY:
Ted Silberry, Supervisor
Oil and Gas Division

ESW/mm/s
cc:

Oil Conservation Commission
Santa Fe, New Mexico

US Geological Survey
Reesville, New Mexico

CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

Case #159

May 22, 1961

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

ATTENTION: Mr. T. W. Bittick

Re: Twelfth and Thirteenth
Expansion of the Pictured
Cliffs Participating Area,
Lindrith Unit, Rio Arriba
County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Twelfth and Thirteenth Expansion of the Pictured Cliffs Participating Area, for the Lindrith 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 each expansion are handed to Mr. Wm. Check.

Very truly yours,

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

ALP/JEK/ig

cc: United States Geological Survey
Commissioner of Public Lands

C
O
P
Y

El Paso Natural Gas Company

El Paso, Texas

May 22, 1961

100-1-7

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

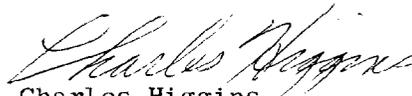
Re: Lindrith Unit Agreement I Sec. No. 713
Rio Arriba County, New Mexico
REQUESTS FOR APPROVAL
TWELFTH EXPANDED PARTICIPATING AREA
THIRTEENTH EXPANDED PARTICIPATING AREA
Pictured Cliffs Formation

Gentlemen:

Attached are eight (8) copies each of the subject expansions of the Lindrith Unit, together with map exhibits and geological information.

It is requested, upon your approval, that you kindly sign all copies in the space provided, retaining one (1) copy of each expansion and attached exhibits and forwarding the remaining seven copies of each to the office of the Commissioner of Public Lands for his consideration.

Very truly yours,



Charles Higgins
Area Coordinator
Land Department

CH:WVC:cah
Attachments

El Paso Natural Gas Company

El Paso, Texas

May 22, 1961

Director
United States Geological Survey
Department of the Interior
Washington 25, D. C.

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: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE THIRTEENTH
EXPANDED PARTICIPATING AREA
Pictured Cliffs Formation
Effective October 1, 1960

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Thirteenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West, N.M.P.M.
Section 25: N/2, SE/4

Township 24 North, Range 2 West, N.M.P.M.
Section 30: N/2

The lands described above are proven productive by the following:

The Lindrith Unit #34 Well is located 1190' from the North line and 1700' from the East line of Section 25,

Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on July 15, 1960, and completed on August 5, 1960, at a total depth of 3213' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3112' - 3122', 3132' - 3142', 3160' - 3166' was treated with a sand-water fracturing process. After being shut-in for gauge for thirty-four (34) days, the well was tested in the Pictured Cliffs Formation on September 8, 1960, and following a three (3) hour blow-down period gauged 2004 MCFGPD through a 3/4" choke and 4112 MCFGPD by the calculated absolute open-flow method, with an SIPT of 970# and an SIPC of 970#. The committed spacing unit upon which this well is located is described as the NE/4 of Section 25, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres.

The effective date for the Thirteenth Expanded Participating Area is determined as October 1, 1960, the first of the month following the testing of the Lindrith Unit #34 Well.

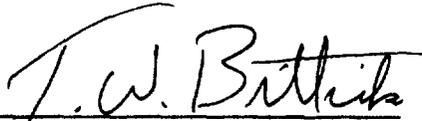
Attached hereto is Schedule XIV showing the Thirteenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Thirteenth Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Thirteenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files. A copy of this letter and a copy of the schedule are being sent to the Working Interest Owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By


T. W. Bittick
Assistant Manager
Land Department

TWB: JNN: cah

cc: Mobil Oil Company
P.O. Box 3371
Durango, Colorado

Delhi-Taylor Oil Corporation
1507 Pacific Avenue
2630 Fidelity Union Tower
Dallas, Texas

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: Aug 22, 1961
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
Thirteenth Expansion of the Pictured Cliffs Participating Area for the Lindrith
Unit, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas

May 22, 1961

121

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

Commissioner of Public Lands
State of New Mexico
Post Office Box 791
Santa Fe, New Mexico

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

Re: Lindrith Unit Area, I Sec. No. 713
Pictured Cliffs Formation
NOTICE OF COMPLETION OF
ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, 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 had been completed upon acreage committed to this unit. These wells are as follows:

1. The Lindrith Unit #37 Well is located 1090' from the North line and 990' from the East line of Section 21, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on July 28, 1960, and completed on August 28, 1960, at a total depth of 3302' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3209' - 3219', 3236' - 3242', 3256' - 3260', 3264' - 3268' was treated with a sand-water fracturing process. The well was shut-in on September 5, 1960, and after being shut-in for gauge for ten (10) days, the well was tested on September 15, 1960, and following a three (3) hour blow-down period gauged 699

MCFGPD through a 3/4" choke, and 702 MCFGPD by the calculated absolute open-flow method, with an SIPC of 954# and an SIPT of 954#.

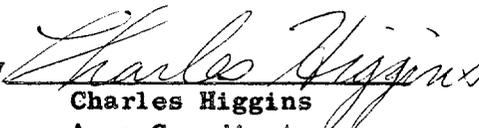
The drilling block was included in the Lindrith Unit Area in the Tenth Expanded Participating Area, effective June 1, 1959. The low potential of this well and its position on an apparently low potential trend indicates that any offset acreage would be only capable of non-commercial or extremely marginal production at best, and consequently any expansion based on this well is not warranted at the present time.

2. The Lindrith Unit #35 Well is located 1750' from the South line and 1550' from the East line of Section 15, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on September 11, 1960, and completed on September 22, 1960, at a total depth of 3316' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3220' - 3230', 3234' - 3244', 3252' - 3264' was treated with a sand-water fracturing process. After being shut-in for gauge for nineteen (19) days, the well was tested on October 11, 1960, and following a three (3) hour blow-down period gauged 2465 MCFGPD through a 3/4" choke, and 2622 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1002#. This well was completed without tubing.

This drilling block was included in the Lindrith Unit Area in the Third Expanded Participating Area effective September 1, 1956. The test indicates a capability of commercial production. However, the well was drilled on acreage already within the Participating Area and well within a known trend of commercial production. The drilling of this well has not supplied any additional information which would warrant an expansion of the present Participating Area, consequently no expansion is proposed.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
Charles Higgins
Area Coordinator
Land Department

CH:JNN:cah

cc: Delhi-Taylor Oil Corporation
Mobil Oil Company

El Paso Natural Gas Company

El Paso, Texas

May 4, 1961

62-1-1

Mr. John A. Anderson
Regional Oil & Gas Supervisor
United States Geological Survey
Post Office 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: 1961 Drilling Program
Lindrith Unit

Gentlemen:

The 1961 Drilling Program for the Lindrith Unit was approved by the regulatory bodies on the dates indicated:

- | | |
|------------------------------------|-----------------|
| 1. United States Geological Survey | March 13, 1961 |
| 2. Commissioner of Public Lands | April 3, 1961 |
| 3. Oil Conservation Commission | April 28, 1961. |

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

Very truly yours,

Charles Higgins

Charles Higgins
Area Coordinator
Land Department

CHJNN: cah

El Paso Natural Gas Company

El Paso, Texas

May 22, 1961

Director
United States Geological Survey
Department of the Interior
Washington 25, D. C.

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: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE TWELFTH
EXPANDED PARTICIPATING AREA
Pictured Cliffs Formation
Effective September 1, 1960

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Twelfth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West, N.M.P.M.
Section 23: SE/4

The lands described above are proven productive by the following:

The Lindrith Unit #36 Well is located 1650' from the South line and 890' from the East line of Section 23, Township 24 North, Range 3 West, Rio Arriba County, New Mexico. This well was spudded on July 22, 1960, and completed on August 10, 1960, at a total depth of 3266' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3214' - 3226', 3242' - 3252' was treated with a sand-water fracturing process.

After being shut-in for gauge for twenty (20) days, the well was tested in the Pictured Cliffs Formation on August 30, 1960, and following a three (3) hour blow-down period gauged 1977 MCFGPD through a 3/4" choke and 2035 MCFGPD by the calculated absolute open-flow method, with an SIPT of 978# and an SIPC of 977#. The committed spacing unit upon which this well is located is described as the SE/4 of Section 23, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres.

The effective date for the Twelfth Expanded Participating Area is determined as September 1, 1960, the first of the month following the testing of the Lindrith Unit #36 Well.

Attached hereto is Schedule XIII showing the Twelfth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Twelfth 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 ownership in said tract.

If the Twelfth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files. A copy of this letter and a copy of the schedule are being sent to the Working Interest Owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



T. W. Bittick
Assistant Manager
Land Department

TWB: JNN: cah

cc: Mobil Oil Company
P.O. Box 3371
Durango, Colorado

Delhi-Taylor Oil Corporation
1507 Pacific Avenue
2630 Fidelity Union Tower
Dallas, Texas

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 United States Geological Survey and the Oil Conservation Commission.

APPROVED: *Al Porter*
Oil Conservation Commission

DATE: May 22, 1961

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 Twelfth Expansion of the Pictured Cliffs Participating Area for the Lindrith Unit, Rio Arriba County, New Mexico.

L CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

Copy

April 28, 1961

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

Attention: Mr. Sam Smith

Re: 1961 Drilling Program
Lindrith 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 Lindrith 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

C
O
P
Y

April 4, 1961

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

Re: Lindrith Unit
Rio Arriba County, New Mexico
1961 Drilling Program

Attention: Mr. Sam Smith

Gentlemen:

Your Plan of Development for 1961 for the Lindrith Unit Area, Rio Arriba County, New Mexico, which proposes the drilling of four Pictured Cliffs well during 1961, has been approved as of April 3, 1961 by the Commissioner of Public Lands, one approved copy of the plan is enclosed.

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

BY:
Marian M. Rhea, Supervisor
Unit Division

ESW/mmr/s
cc:

Oil Conservation Commission
Santa Fe, New Mexico

United States Geological Survey
Reswell, New Mexico

C
O
P
Y



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P.O. Box 6721
Roswell, New Mexico

March 13, 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 Lindrith unit area, Rio Arriba County, New Mexico, which proposes the drilling of four Pictured Cliffs formation wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

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)

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: Lindrith Unit, I Sec. No. 713
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) Pictured Cliffs wells. All of the wells were completed in the Pictured Cliffs Formation. Two (2) of the wells were drilled within the Pictured Cliffs Participating Area and the determination is being made as to the lands which will be included in the Participating Area by the completion of the two (2) wells drilled outside of the Participating Area.

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

Pictured Cliffs - 35 (7 non-commercial)
Plugged and abandoned - 8

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is herewith 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>LOCATION</u>	<u>FORMATION</u>
SW/4 of Section 10, T-24-N, R-3-W	Pictured Cliffs
SW/4 of Section 15, T-24-N, R-3-W	Pictured Cliffs
NE/4 of Section 16, T-24-N, R-3-W	Pictured Cliffs
NE/4 of Section 26, T-24-N, R-3-W	Pictured Cliffs

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 blocks.

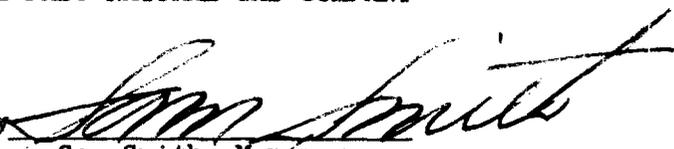
El Paso Natural Gas Company intends to drill the above listed Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary and cable tools. Surface casing will be set to approximately 100' from the surface, and then a production string of casing will be set through the Pictured Cliffs 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.

All of the Working Interest Owners have been contacted, and this Drilling Program reflects, insofar as possible, their requests for additional drilling.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

Sam Smith, Manager
Land Department

SS:JNN:js

cc: Mr. P. M. Barry
District Superintendent
Mobil Oil Corporation
Post Office Box 3371
Durango, Colorado

Delhi-Taylor Oil Corporation
2630 Fidelity Union Tower Building
Akard & Pacific Streets
Dallas, Texas

P. O. Box 6721
Roswell, New Mexico

Case #159

March 14, 1960

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your application of December 4, 1959, for approval of the tenth revision (671.92 acres) of the Pictured Cliffs participating area (now total, 8,447.92 acres), under the Lindrith unit agreement, New Mexico (I-Sec. No. 713), was approved by the Acting Director, U. S. Geological Survey, on March 2, 1960.

Two approved copies of the application are enclosed. Please furnish all other interested parties with appropriate evidence of this approval.

Very truly yours,

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Copy to: Wash. (ltr only)
Farmington Artesia (w/cy approved application)
ELM-Santa Fe (w/cy approved application)
NM Comm. Pub. Lands, Attn: Mrs. Rhea (ltr only)
WIOCC-Santa Fe (ltr only)

CCTraywick: ibm

In reply refer to:
Unit Division

February 16, 1960

Case # 159

C
O
P
Y

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

ATTENTION: Mr. Sam Smith

Re: Lindrith Unit Area
Rio Arriba County,
New Mexico
1960 Drilling Program

Gentlemen:

We are enclosing two copies of the 1960 Drilling Program for the Lindrith Unit Area, which was approved by the Commissioner of Public Lands, February 16, 1960.

May we please have another copy upon the complete execution of this document.

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

In reply refer to:
Unit Division

Case 149

January 25, 1960

C
O
P
Y

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

Re: Lindrith Unit Agreement
Rio Arriba County, New Mexico

ATTENTION: Mr. Harry Geverts

Gentlemen:

Please be advised that the Commissioner of Public Lands has of this date approved the Tenth Expanded Participating Area for the Pictured Cliffs Formation, effective June 1, 1959 for the Lindrith Unit, Rio Arriba County, New Mexico.

We are enclosing six copies of the before mentioned application.

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

IL CONSERVATION COMMIS. ON

P. O. BOX 871

SANTA FE, NEW MEXICO

January 20, 1960

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

ATTENTION: MR. HARRY GEVERTZ

RE: Eleventh Expanded Participating
Area Pictured Cliffs Formation
Lindrith Unit Rio Arriba County,
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Eleventh Expanded Participating Area Pictured Cliffs Formation for the Lindrith 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 application have been forwarded to the State Land Office.

Very truly yours,

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

ALP/JEK/ig

cc: State Land Office - Santa Fe
US Geological Survey - Roswell

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

January 19, 1960

C
O
P
Y

El Paso Natural Gas Company
El Paso, Texas

ATTENTION: Mr. Harry Gevertz

RE: Revised Tenth Expanded
Participating Area
Pictured Cliffs Formation
Lindrith Unit, Rio Arriba
County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Revised Tenth Expanded Participating Area Pictured Cliffs Formation for the Lindrith 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 application have been forwarded to the State Land Office.

Very truly yours,

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

ALP/JEK/ig

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

El Paso Natural Gas Company

El Paso, Texas

December 11, 1959

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

Re: Revised Request for Approval of the
Tenth Expanded Participating Area
Pictured Cliffs Formation
Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico

Gentlemen:

We are enclosing for your approval eight (8) revised copies of our Request for Approval of the Tenth Expanded Participating Area for the Pictured Cliffs Formation of the Lindrith Unit, dated December 4, 1959, and effective June 1, 1959. Attached to each application is a schedule showing the tract percentages of participation in the unitized substances produced from the Expanded Participating Area and also a map showing the Expanded Participating Area.

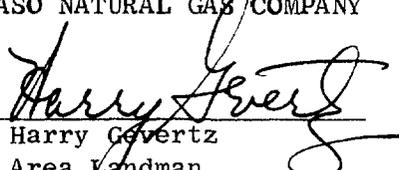
The necessity for revising the said Tenth Expansion was occasioned by a request from Mr. John A. Anderson of the United States Geological Survey in Roswell for us to also include the NE/4 of Section 21, Township 24 North, Range 3 West, N.M.P.M., in said Expansion.

Upon your approval of the captioned Expansion, kindly forward seven (7) copies thereof for like approval by the Commissioner of Public Lands. By copy of this letter to Mrs. Marion Rhae, we ask that she return six (6) fully executed copies of the Request for our further processing.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By


Harry Gevertz
Area Landman
Land Department

HG:JPMc:n1

cc: Mrs. Marion Rhae
c/o Commissioner of Public Lands
Capitol Annex Building
Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas

December 4, 1959

Director
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

Re: Lindrith Unit Agreement I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE TENTH
EXPANDED PARTICIPATING AREA
Pictured Cliffs Formation
Effective June 1, 1959

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Tenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West
Section 21: NW/4, NE/4

Township 24 North, Range 2 West
Section 18: NW/4

The lands described above are proven productive by the following:

1. The Lindrith Unit #29 Well, located 1650' from the North line and 800' from the West line of Section 21, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on

April 4, 1959, and completed on May 2, 1959, at a total depth of 3187' in the Pictured Cliffs Formation. On April 29, 1959, the Pictured Cliffs Formation from 3104' - 3114', 3122' - 3130', 3137' - 3146' was treated with a sand-water fracturing process. After being shut-in for eleven (11) days, the well was tested in the Pictured Cliffs Formation on May 14, 1959, and following a three (3) hour blow-down period gauged 1651 MCFGPD through a 3/4" choke, and 1687 MCFGPD by the calculated absolute open-flow method, with an SIPT of 963# and an SIPC of 963#. The committed spacing unit upon which this well is located is described as the NW/4 of Section 21, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres.

2. The Lindrith Unit #30 Well, located 990' from the North line and 1650' from the West line of Section 18, Township 24 North, Range 2 West, Rio Arriba County, New Mexico, was spudded on April 11, 1959, and completed on May 10, 1959, at a total depth of 3413' in the Pictured Cliffs Formation. The Pictured Cliffs Formation from 3350' - 3360', 3368' - 3380' was treated with a sand-water fracturing process on May 4, 1959. After being shut-in on May 18, 1959 for nine (9) days, the well was tested in the Pictured Cliffs Formation on May 27, 1959, and following a three (3) hour blow-down period gauged 1334 MCFGPD through a 3/4" choke, and 1349 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1026# and an SIPC of 1026#. The committed spacing unit upon which this well is located is described as the NW/4 of Section 18, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 151.92 acres.

The effective date for the Tenth Expanded Participating Area is determined as June 1, 1959, the first of the month following the testing of the Lindrith Unit #29 and #30 Wells.

Attached hereto is Schedule XI showing the Tenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Tenth 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 ownership in said tract.

If the Tenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy

for our files. A copy of this letter and a copy of the schedule are being sent to the Working Interest Owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

T. W. Bittick
Assistant Manager
Land Department

TWB:JPMc:ch

cc: Mobil Oil Company
Post Office Box 900
Dallas 21, Texas

Delhi-Taylor Oil Corporation
823 Corrigan Tower
Dallas, Texas

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: *A. H. Porter* DATE: *Jan 19, 1966*
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
Tenth Expansion of the Pictured Cliffs Participating Area for the Lindrith Unit,
Rio Arriba County, New Mexico.

SCHEDULE XI
TENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
LINDRITH UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTU, PARTICIPATIOI
			OWNERSHIP	PERCENTAGE		
SF 078908	T-24-N, R-2-W	227.88				
	Sec. 18: Lots 1,2,4, E/2 NW/4, SE/4 SW/4				12.50%	<u>2.72326%</u>
			Royalty;	12.50%		
			Working Interest;	75.00%		
			El Paso Natural Gas Co.; ORRI;	<u>12.50%</u> <u>100.00%</u>		
		TOTAL				
			<u>Tract 2</u>			
SF 078909	T-24-N, R-2-W	1192.10				
	Sec. 19: Lots 3,4, E/2 SW/4, SE/4				12.50%	<u>14.24607%</u>
	Sec. 20: All		Royalty;	12.50%		
	Sec. 21: SW/4		Working Interest;	75.00%		
	T-24-N, R-3-W		El Paso Natural Gas Co.; ORRI;	<u>12.50%</u> <u>100.00%</u>		
		TOTAL				
			<u>Tract 3</u>			
SF 078910	T-24-N, R-2-W	640.00				
	Sec. 28: NE/4, N/2 NW/4				12.50%	<u>7.64826%</u>
	Sec. 29: NE/4		Royalty;	12.50%		
	T-24-N, R-3-W		Working Interest;	75.00%		
	Sec. 24: SW/4, W/2 SE/4		El Paso Natural Gas Co.; ORRI;	<u>12.50%</u> <u>100.00%</u>		
		TOTAL				
			<u>Tract 4</u>			

SCHEDULE XI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE	
<u>Tract 6</u>					
SF 078912	T-24-N, R-3-W Sec. 10: SW/4 Sec. 11: E/2 Sec. 12: SW/4, NW/4 NW/4, S/2 SE/4, NW/4 SE/4 Sec. 13: E/2 NW/4, NW/4 NW/4, S/2 SW/4, NE/4 Sec. 14: E/2, S/2 SW/4 Sec. 24: NW/4, W/2 NE/4, SE/4 NE/4	1840.00	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	12.50% 75.00% 12.50% 100.00%	21.98874%
<u>Tract 7</u>					
SF 078913	T-24-N, R-3-W Sec. 15: All Sec. 16: All Sec. 21: N/2 Sec. 22: NE/4	1760.00	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	12.50% 75.00% 12.50% 100.00%	21.03271%
<u>Tract 9</u>					
SF 078915	T-24-N, R-3-W Sec. 23: NE/4, NW/4 Sec. 36: NE/4	480.00	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	12.50% 75.00% 12.50% 100.00%	5.73619%

SCHEDULE XI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE	
<u>Tract 13</u>					
Patented	T-24-N, R-2-W Sec. 29: NW/4 *Undivided 120.00 net acres committed	*160.00	Royalty; Working Interest; El Paso Natural Gas Co.; Felmont Oil Co.; ORRI;	9.375% 56.250% 25.000% 9.375% <u>100.000%</u>	6.250% 56.250% .000% 9.375% <u>71.875%</u>
<u>Tract 13-B</u>					
Patented	T-24-N, R-2-W Sec. 28: S/2 NW/4 *Undivided 40.00 net acres committed	* 80.00	Royalty; Working Interest; El Paso Natural Gas Co.; Felmont Oil Co.; Jane P. Guild; M. Dodge; Wilb & Co.; C. W. Gillette; James S. Gardner; Augustus P. Loring, III; ORRI;	6.250% 37.500% 12.500% .625% .312% 25.000% 6.250% 4.688% .625% <u>100.000%</u>	6.250% 37.500% .000% .000% .000% .000% .000% .000% .000% <u>6.250%</u> <u>50.000%</u>
<u>Tract 16</u>					
Patented	T-24-N, R-2-W Sec. 18: Lot 3, NE/4 SW/4	75.96	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	12.50% 75.00% 12.50% <u>100.00%</u>	12.50% 75.00% 12.50% <u>100.00%</u>

SCHEDULE XI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION	
			OWNERSHIP	PERCENTAGE			
Patented	<u>T-24-N, R-3-W</u> Sec. 9: All	640.00	<u>Tract 17</u>				
			Royalty;	12.50%	12.50%		
			Working Interest;				
			El Paso Natural Gas Co.;	75.00%	75.00%		
			ORRI;	12.50%	12.50%		
	TOTAL		100.00%	100.00%		7.64826%	
Patented	<u>T-24-N, R-2-W</u> Sec. 19: Lots 1, 2, E/2 NW/4, NE/4	311.98	<u>Tract 18</u>				
			Royalty;	12.50%	12.50%		
			Working Interest;				
			El Paso Natural Gas Co.;	75.00%	75.00%		
			ORRI;	12.50%	12.50%		
	TOTAL		100.00%	93.75%		3.72829%	
Patented	<u>T-24-N, R-3-W</u> Sec. 13: SW/4 NW/4, N/2 S/2, S/2 SE/4 Sec. 24: NE/4 NE/4	320.00	<u>Tract 19</u>				
			Royalty;	12.50%	12.50%		
			Working Interest;				
			El Paso Natural Gas Co.;	75.00%	75.00%		
			ORRI;	12.50%	12.50%		
	TOTAL		100.00%	100.00%		3.82413%	
Patented	<u>T-24-N, R-2-W</u> Sec. 9: NW/4	160.00	<u>Tract 22</u>				
			Royalty;	12.50%	12.50%		
			Working Interest;				
			El Paso Natural Gas Co.;	81.25%	81.25%		
			ORRI;	6.25%	6.25%		
	TOTAL		100.00%	100.00%		1.91206%	

UNIT AREA EXPANSION SCHEDULE E - SAN JUAN BASIN

Form 21-71M (5-59)

SCHEDULE XI

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
Patented	T-24-N, R-3-W Sec. 14: NW/4, N/2 SW/4	240.00	<u>Tract 24</u>			
			Royalty;	12.50%	.00%	<u>2.86809%</u>
			Working Interest;	75.00%	75.00%	
			El Paso Natural Gas Co.;	12.50%	12.00%	
	TOTAL		100.00%	87.00%		
Patented	T-24-N, R-2-W Sec. 21: NW/4	160.00	<u>Tract 25</u>			
			Royalty;	12.50%	3.125%	<u>1.91206%</u>
			Working Interest;	75.00%	75.000%	
			El Paso Natural Gas Co.;	12.50%	12.500%	
	TOTAL		100.00%	90.625%		
Patented	T-24-N, R-3-W Sec. 12: NE/4 SE/4, S/2 NW/4, NE/4 NW/4	160.00	<u>Tract 27</u>			
			Royalty;	12.50%	12.50%	<u>1.91206%</u>
			Working Interest;	75.00%	75.00%	
			El Paso Natural Gas Co.;	12.50%	12.50%	
	TOTAL		100.00%	100.00%		

SCHEDULE XI
TENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
LINDRITH UNIT AREA

RECAPITULATION

Description of Lands in Participating Area:

Township 24 North, Range 2 West, N.M.P.M.
Section 9: NW/4
Section 18: Lots 3, 4, E/2 SW/4, (SW/4), NW/4
Section 19: Lots 1, 2, 3, 4, E/2 W/2, E/2 (All)
Section 20: All
Section 21: W/2
Section 28: NW/4, NE/4
Section 29: N/2

Township 24 North, Range 3 West, N.M.P.M.
Section 9: All
Section 10: SW/4
Section 11: E/2
Section 12: SE/4, W/2
Section 13: All
Section 14: All
Section 15: All
Section 16: All
Section 21: N/2
Section 22: NE/4
Section 23: NE/4, NW/4
Section 24: All
Section 36: NE/4

Total number of acres in Participating Area: 8447.92
Total number of acres participating: 8367.92

Percent of Basic Royalty Committed 99.99144%
Percent of Working Interest Committed: 99.99373%
Percent of O.R.R.I. Committed: 99.99984%

11/15/59

P. O. Box 6721
Roswell, New Mexico

December 29, 1959

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

Attention: Harry Geverts

Gentlemen:

This is to acknowledge receipt of the following documents relating to Lindrith unit agreement, New Mexico I-Sec. No. 713:

1. Five copies of a Ratification and Joinder to the unit agreement, executed by J. Bryon Stephenson and Albuquerque National Bank, co-trustees under the will of Robert E. Adams, who control a partial interest in the basic royalty under patented land unit tract 16. Approval and Consent of El Paso Natural Gas Company, unit operator, and Magnolia Petroleum Company, Dalhi-Taylor Oil Corporation, and El Paso Natural Gas Company, working interest owners of unit tract 16, is affixed to each copy of the Ratification and Joinder.

2. Five copies of a Ratification and Joinder to the unit agreement, executed by Mrs. R. E. Adams who owns a partial interest in the basic royalty under patented land unit tract 16. Approval and Consent of El Paso Natural Gas Company, unit operator, and Magnolia Petroleum Company, Dalhi-Taylor Oil Corporation, and El Paso Natural Gas Company, working interest owners of unit tract 16, is affixed to each copy of the Ratification and Joinder.

Your letter of January 23, 1959, and the joinders themselves state that interests in unit tract No. 6 are being committed. The land description, however, indicates that interests in unit tract No. 16 are being committed.

By virtue of the Ratifications and Joinders listed above, the basic royalty interest under patented land unit tract 16 is considered effectively committed to the Lindrith unit agreement, effective February 1, 1959, the first day of the month following filing of the Ratifications and Joinders.

Copies of the Ratifications and Joinders are being distributed to appropriate Federal offices for inclusion in the official case records. It is assumed you will furnish other interested parties with appropriate evidence of this action. One copy of each of the Ratifications and Joinders is surplus to our needs and is returned herewith.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Copy to: Washington (w/cy of Joinders)
Farmington "
BLM-Santa Fe "
State Land Office, (Mrs. Rhea) (Letter only)
NMOCC ✓

El Paso Natural Gas Company

El Paso, Texas

December 11, 1959

159

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

Re: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE ELEVENTH
EXPANDED PARTICIPATING AREA
Pictured Cliffs Formation
Effective November 1, 1959

Gentlemen:

We are enclosing for your approval eight (8) copies of our Request for Approval of the Eleventh Expanded Participating Area for the Pictured Cliffs Formation of the Lindrith Unit dated December 9, 1959, effective November 1, 1959. Attached to each Application is a Schedule showing the tract percentages of participation in the unitized substances produced from the Expanded Participating Area, and also a map showing the Expanded Participating Area.

Upon your approval of the captioned expansion, kindly forward seven (7) copies thereof for like approval by the Commissioner of Public Lands. By copy of this letter to Mrs. Marion Rhea we ask that she return six (6) fully approved copies of the request for our further processing.

Your anticipated prompt attention to this matter is greatly appreciated by this office.

Very truly yours,


Harry Gevertz
Area Landman
Land Department

HG: JPMc:pc

cc: Mrs. Marion Rhea
c/o Commissioner of Public Lands
Capitol Annex Bldg.
Santa Fe, New Mexico

21-54-12

El Paso Natural Gas Company

El Paso, Texas
December 9, 1959

159

Director
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

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE ELEVENTH
EXPANDED PARTICIPATING AREA
Pictured Cliffs Formation
Effective November 1, 1959

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Eleventh Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West
Section 21: SW/4

The lands described above are proven productive by the following:

The Lindrith Unit #33 Well, located 1650' from the South line and 1650' from the West line of Section 21, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on August 22, 1959 and completed on September 20, 1959, at a total depth of 3173' in the Pictured Cliffs Formation. On September 17, 1959, the Pictured Cliffs Formation from 3065' - 3082', 3098' - 3112' was treated with a sand-water fracturing process. After being shut-in for twelve (12) days, the well was tested in the Pictured Cliffs Formation on October 2, 1959, and following a three (3) hour blow down period gauged 1529 MCFGPD through a 3/4" choke and 1560 MCFGPD by the calculated absolute open flow method with an SIPT of 987# and an SIPC of 985#. The committed spacing unit upon which this well is located is

described as the SW/4 of Section 21, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres.

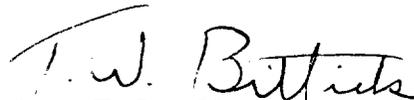
The effective date for the Eleventh Expanded Participating Area is determined as November 1, 1959, the first of the month following the testing of the Lindrith Unit #33 Well.

Attached hereto is Schedule XII showing the Eleventh Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Eleventh 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 ownership in said tract.

If the Eleventh Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files. A copy of this letter and a copy of the schedule are being sent to the Working Interest Owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

T. W. Bittick
Assistant Manager
Land Department

TWB:JPMc:pc

cc: Mobil Oil Company
Post Office Box 900
Dallas 21, Texas

cc: Delhi-Taylor Oil Corporation
823 Corrigan Tower
Dallas, Texas

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 United States
Geological Survey and the Oil Conservation
Commission.

APPROVED: *A. L. Porter, Jr.*
Oil Conservation Commission

DATE: *Jan 20, 1960*

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 Eleventh Expansion of the Pictured Cliffs Participating Area for the Lin-
drith Unit, Rio Arriba County, New Mexico.

**SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
LINDRITH UNIT AREA**

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 078908	T-24-N, R-2-W	227.88		<u>Tract 2</u>		
	Sec. 18: Lots 1, 2, 4, E/2 NW/4, SE/4 SW/4			12.50%	12.50%	<u>2.67216%</u>
			Royalty;			
			Working Interest;	75.00%	75.00%	
			El Paso Natural Gas Co.;	<u>12.50%</u>	<u>12.50%</u>	
	TOTAL		<u>100.00%</u>	<u>100.00%</u>		
SF 078909	T-24-N, R-2-W	1192.10		<u>Tract 3</u>		
	Sec. 19: Lots 3, 4, E/2 SW/4, SE/4			12.50%	12.50%	<u>13.97879%</u>
			Royalty;			
			Working Interest;	75.00%	75.00%	
			El Paso Natural Gas Co.;	<u>12.50%</u>	<u>12.50%</u>	
	TOTAL		<u>100.00%</u>	<u>100.00%</u>		
SF 078910	T-24-N, R-2-W	640.00		<u>Tract 4</u>		
	Sec. 28: NE/4, N/2 NW/4			12.50%	12.50%	<u>7.50476%</u>
			Royalty;			
			Working Interest;	75.00%	75.00%	
			El Paso Natural Gas Co.;	<u>12.50%</u>	<u>12.50%</u>	
	TOTAL		<u>100.00%</u>	<u>100.00%</u>		

SCHEDULE XII
LINDRITH UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION	
			OWNERSHIP	PERCENTAGE			
SF 078912	<u>Tract 6</u>						
	T-24-N, R-3-W	1840.00					
	Sec. 10: SW/4			12.50%	12.50%	<u>21.57619%</u>	
	Sec. 11: E/2						
	Sec. 12: SW/4, NW/4 NW/4, S/2 SE/4, NW/4 SE/4			75.00%	75.00%		
	Sec. 13: E/2 NW/4, NW/4 NW/4, S/2 SW/4, NE/4			<u>12.50%</u>	<u>12.50%</u>		
	Sec. 14: E/2, S/2 SW/4			<u>100.00%</u>	<u>100.00%</u>		
	Sec. 24: NW/4, W/2 NE/4, SE/4 NE/4						
	Royalty;						
	Working Interest:						
El Paso Natural Gas Co.;							
ORRI;							
TOTAL							
SF 078913	<u>Tract 7</u>						
	T-24-N, R-3-W	1920.00					
	Sec. 15: All			12.50%	12.50%	<u>22.51428%</u>	
	Sec. 16: All						
	Sec. 21: W/2, NE/4			75.00%	75.00%		
	Sec. 22: NE/4			<u>12.50%</u>	<u>12.50%</u>		
	Royalty;						
	Working Interest:						
	El Paso Natural Gas Co.;						
	ORRI;						
TOTAL							
SF 078915	<u>Tract 9</u>						
	T-24-N, R-3-W	480.00					
	Sec. 23: NE/4, NW/4			12.50%	12.50%	<u>5.62857%</u>	
	Sec. 36: NE/4						
	Royalty;						
	Working Interest:						
	El Paso Natural Gas Co.;						
	ORRI;						
	TOTAL						

SCHEDULE XII
LINDRITH UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTU PARTICIPATIO
			OWNERSHIP	PERCENTAGE		
Patented	T-24-N, R-2-W	*160.00	Tract 13		6.250%	<u>1.40714%</u>
	Sec. 29: NW/4		Royalty;	9.375%		
	*Undivided 120.00 net acres committed		Working Interest;	56.250%		
			El Paso Natural Gas Co.;	25.000%		
			Felmont Oil Co.;	9.375%		
			ORRI;	<u>100.000%</u>		
			TOTAL			
Patented	T-24-N, R-2-W	*80.00	Tract 13-B		6.250%	<u>.46905%</u>
	Sec. 28: S/2 NW/4		Royalty;	37.500%		
	*Undivided 40.00 net acres committed		Working Interest;	12.500%		
			El Paso Natural Gas Co.;	.625%		
			Felmont Oil Co.;	.312%		
			Jane P. Guild;	.000%		
			M. Dodge;	.000%		
			Wilb & Co.;	.000%		
			C. W. Gillette;	.000%		
			James S. Gardner;	.000%		
			Augustus P. Loring, III;	.625%		
			ORRI;	<u>6.250%</u>		
			TOTAL	<u>100.000%</u>		
Patented	T-24-N, R-2-W	75.96	Tract 16		12.50%	<u>.89072%</u>
	Sec 18: Lot 3, NE/4 SW/4		Royalty;	75.00%		
			Working Interest;	12.50%		
			El Paso Natural Gas Co.;	<u>100.00%</u>		
			ORRI;			
			TOTAL			

SCHEDULE XII
LINDRITH UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
Patented	<u>T-24-N, R-3-W</u> Sec. 9: All	640.00	<u>Tract 17</u>		12.50%	<u>7.50476%</u>
			Royalty;	12.50%		
			Working Interest;	75.00%		
			El Paso Natural Gas Co.; ORRI;	<u>12.50%</u> <u>100.00%</u>		
Patented	<u>T-24-N, R-2-W</u> Sec. 19: Lots 1, 2, E/2 NW/4, NE/4	311.98	<u>Tract 18</u>		6.25%	<u>3.65834%</u>
			Royalty;	12.50%		
			Working Interest;	75.00%		
			El Paso Natural Gas Co.; ORRI;	<u>12.50%</u> <u>93.75%</u>		
Patented	<u>T-24-N, R-3-W</u> Sec. 13: SW/4 NW/4, N/2 S/2, S/2 SE/4	320.00	<u>Tract 19</u>		12.50%	<u>3.75238%</u>
			Royalty;	12.50%		
			Working Interest;	75.00%		
			El Paso Natural Gas Co.; ORRI;	<u>12.50%</u> <u>100.00%</u>		
Patented	<u>T-24-N, R-2-W</u> Sec. 9: NW/4	160.00	<u>Tract 22</u>		12.50%	<u>1.87619%</u>
			Royalty;	12.50%		
			Working Interest;	81.25%		
			El Paso Natural Gas Co.; ORRI;	<u>6.25%</u> <u>100.00%</u>		

SCHEDULE XII
LINDRITH UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
Patented	T-24-N, R-3-W Sec. 14: NW/4, N/2 SW/4	240.00	<u>Tract 24</u>		00.00%	<u>2.81429%</u>
			Royalty;	12.50%		
			Working Interest;			
			El Paso Natural Gas Co.; ORRI;	75.00% 12.50% <u>87.00%</u>		
	TOTAL					
Patented	T-24-N, R-2-W Sec. 21: NW/4	160.00	<u>Tract 25</u>		3.125%	<u>1.87619%</u>
			Royalty;	12.50%		
			Working Interest;			
			El Paso Natural Gas Co.; ORRI;	75.00% 12.50% <u>90.625%</u>		
	TOTAL					
Patented	T-24-N, R-3-W Sec. 12: NE/4 SE/4, S/2 NW/4, NE/4 NW/4	160.00	<u>Tract 27</u>		12.50%	<u>1.87619%</u>
			Royalty;	12.50%		
			Working Interest;			
			El Paso Natural Gas Co.; ORRI;	75.00% 12.50% <u>100.00%</u>		
	TOTAL					

SCHEDULE XII
 ELEVENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
 LINDRITH UNIT AREA

RECAPITULATION

Description of Lands in Participating Area;

Township 24 North, Range 2 West, N.M.P.M.

- Section 9: NW/4
- Section 18: Lots 3,4, E/2 SW/4, (SW/4), NW/4
- Section 19: Lots 1,2,3,4, E/2 W/2, E/2 (All)
- Section 20: All
- Section 21: W/2
- Section 28: N/2
- Section 29: N/2

Township 24 North, Range 3 West, N.M.P.M.

- Section 9: All
- Section 10: SW/4
- Section 11: E/2
- Section 12: SE/4, W/2
- Section 13: All
- Section 14: All
- Section 15: All
- Section 16: All
- Section 21: W/2, NE/4
- Section 22: NE/4
- Section 23: N/2
- Section 24: All
- Section 36: NE/4

Total Number of Acres in Participating Area:

8607.92

Total Number of Acres Participating:

8527.92

Percent of Basic Royalty Committed:

99.99144%

Percent of Working Interest Committed:

99.99373%

Percent of O.R.R.I. Committed:

99.99984%

El Paso Natural Gas Company

El Paso, Texas

October 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: Lindrith Unit Area, I Sec. No. 713
Pictured Cliffs Formation
NOTICE OF COMPLETION OF ADDITIONAL WELL

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to this unit. This well is as follows:

The Lindrith Unit #32 Well, located 1646' from the South line and 1650' from the West line of Section 16, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on August 23, 1959 and completed on September 15, 1959 at a total depth of 3271' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3160' - 3184', 3210' - 3216', 3236' - 3242' was treated with a sand-water fracturing process on September 13, 1959. After being shut-in for eight (8) days, the well was tested on September 23, 1959, and following a three (3) hour blow-down period gauged 3819 MCFGPD through a 3/4" choke, and 4269 MCFGPD by the calculated absolute open-flow method, with an SIPC of 947# and an SIPT of 947#.

The acreage upon which this well is located was included in the Lindrith Unit Area in the First Expanded Participating Area, effective October 1, 1955.

Therefore, the present Participating Area is not enlarged.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

Harry Gevertz
Area Landman
Land Department

HG:JPMc:n1

cc: Delhi-Taylor Oil Corporation
Mobil Oil Company

In reply refer to:
Unit Division

October 1, 1959

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

ATTENTION: Mr. Harry Gervitz

Re: Tenth Expanded Participating
Area Pictured Cliffs Formation
Lindrieth Unit
Rio Arriba County, New Mexico

Gentlemen:

The Commissioner of Public Lands approved as of October 1, 1959 the Tenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrieth Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are enclosing six approved copies of this application.

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

BY:
Ted Bilberry, Supervisor
Oil and Gas Division

MEM/MSR/m

cc:

OCC- Santa Fe
OCCS- Roswell

C
O
P
Y

September 29, 1959

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

ATTENTION: Mr. Harry Geverts

RE: Tenth Expanded Participating
Area Pictured Cliffs Formation
Lindrith Unit, Rio Arriba County,
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Tenth Expanded Participating Area, Pictured Cliffs Formation for the Lindrith 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 application were forwarded to the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,

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

ALP/JEK/ig

cc: State Land Office - Santa Fe, New Mexico
U. S. Geological Survey - Roswell, New Mexico

C
O
P
Y

El Paso Natural Gas Company

El Paso, Texas 79901

September 25, 1959

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

Re: Lindrith Unit I Sec. No. 713
Rio Arriba County, New Mexico

Gentlemen:

We are enclosing for your approval eight (8) copies of our Request for Approval of the Tenth Expanded Participating Area for the Pictured Cliffs Formation of the Lindrith Unit dated August 21, 1959, effective June 1, 1959. Attached to each Application is a Schedule showing the tract percentages of participation in the unitized substances produced from the Expanded Participating Area and also a map showing the Expanded Participating Area.

Upon your approval of the captioned expansion kindly forward seven (7) copies thereof for like approval by the Commissioner of Public Lands. By copy of this letter to Mrs. Marion Rea we ask that she return six (6) fully approved copies of the request for our further processing.

Your anticipated prompt attention to this matter is greatly appreciated by this office.

Very truly yours,



Harry Gevertz
Area Landman
Land Department

HG: JPMc: ch

cc: Mrs. Marion Rae
c/o Commissioner of Public Lands
Capitol Annex Building
Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas

September 24, 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: Lindrith Unit Agreement I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF EIGHTH AND
NINTH EXPANDED PARTICIPATING AREAS
Pictured Cliffs Formation

Gentlemen:

This is to advise you that the captioned expansions have been approved by the Federal and State regulatory bodies as follows:

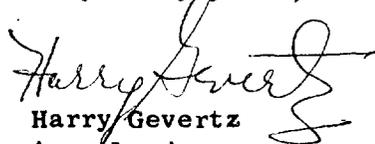
United States Geological Survey - September 16, 1959

Commissioner of Public Lands - June 5, 1959

Oil Conservation Commission - June 1, 1959

Copies of this letter and the captioned expansions are being sent to the Working Interest Owners of the Lindrith Unit Area.

Very truly yours,



Harry Gevertz
Area Landman
Land Department

HG: JPMc:ch

El Paso Natural Gas Company

El Paso, Texas

August 21, 1959

Director
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

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE TENTH
EXPANDED PARTICIPATING AREA
Pictured Cliffs Formation
Effective June 1, 1959

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Tenth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West
Section 21: NW/4

Township 24 North, Range 2 West
Section 18: NW/4

The lands described above are proven productive by the following:

1. The Lindrith Unit #29 Well, located 1650' from the North line and 800' from the West line of Section 21, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on April 4, 1959 and completed on May 2, 1959, at a total depth of 3187' in the Pictured Cliffs Formation. On April 29, 1959, the Pictured

Cliffs Formation from 3104' - 3114', 3122' - 3130', 3137' - 3146' was treated with a sand-water fracturing process. After being shut-in for eleven (11) days, the well was tested in the Pictured Cliffs Formation on May 14, 1959, and following a three (3) hour blow-down period gauged 1651 MCFGPD through a 3/4" choke and 1687 MCFGPD by the calculated absolute open-flow method, with an SIPT of 963# and an SIPC of 963#. The committed drilling block upon which this well is located is described as the NW/4 of Section 21, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres.

2. The Lindrith Unit #30 Well, located 990' from the North line and 1650' from the West line of Section 18, Township 24 North, Range 2 West, Rio Arriba County, New Mexico, was spudded on April 11, 1959 and completed on May 10, 1959 at a total depth of 3413' in the Pictured Cliffs Formation. The Pictured Cliffs Formation from 3350' - 3360', 3368' - 3380' was treated with a sand-water fracturing process on May 4, 1959. After being shut-in on May 18, 1959 for nine (9) days, the well was tested in the Pictured Cliffs Formation on May 27, 1959, and following a three (3) hour blow-down period gauged 1334 MCFGPD through a 3/4" choke and 1349 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1026# and an SIPC of 1026#. The committed drilling block upon which this well is located is described as the NW/4 of Section 18, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 151.92 acres.

The effective date for the Tenth Expanded Participating Area is determined as June 1, 1959, the first of the month following the testing of the Lindrith Unit #29 and #30 Wells.

Attached hereto is Schedule XI showing the Tenth Expanded Participating Area for the Pictured Cliffs Formation in the Lindrith Unit Area. This schedule describes the Tenth 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 ownership in said tract.

If the Tenth Expansion meets with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy

for our files. A copy of this letter and a copy of the schedule are being sent to the Working Interest Owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

T. W. Bittick
Assistant Manager
Land Department

TWB:JPMC:pc

cc: Magnolia Petroleum Company
Post Office Box 900
Dallas 21, Texas

cc: Delhi-Taylor Oil Corporation
823 Corrigan Tower
Dallas, Texas

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 United States Geological Survey and the Oil Conservation Commission.

APPROVED:  _____
Oil Conservation Commission

DATE: 9-24-59

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 Tenth Expansion of the Pictured Cliffs Participating Area for the Lindrith Unit, Rio Arriba County, New Mexico.

El Paso Natural Gas Company
El Paso, Texas
July 22, 1959

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Post Office Box 6721
Roswell, New Mexico

File
151

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: Lindrith Unit
Amended 1959 Drilling Program

Gentlemen:

This is to advise you that the Lindrith Unit Amended 1959 Drilling Program was approved by the regulatory bodies as follows:

1. United States Geological Survey
July 20, 1959
2. Commissioner of Public Lands
June 5, 1959
3. Oil Conservation Commission
June 1, 1959

Copies of this letter are being sent to the Working Interest Owners of the Lindrith Unit.

Very truly yours,
Harry Gevertz
Harry Gevertz
Area Landman
Land Department

HG: JPMc: ch

File case

159

MAIN OFFICE OCC

1959 JUL 21 P. O. Box 6721
Española, New Mexico

July 20, 1959

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

Attention: Mr. Sam Smith

Gentlemen:

Your amended 1959 Plan of Development, dated June 10, 1959, for the Lindrith Unit, I Sec. No. 713, Rio Arriba County, New Mexico, which proposes the drilling of six Pictured Cliffs wells, has been approved on this date subject to like approval by appropriate State Officials.

One approved copy of the plan is enclosed.

Very truly yours,

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

Enclosure 1

Copy to: Washington (2/ey of plan)
Farmington (2/ey of plan)
NOCCE, Santa Fe ✓
Comm. of Pub. Lands, Santa Fe

WFF:cs

El Paso Natural Gas Company

El Paso, Texas

July 15, 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: Lindrith Unit Area, I Sec. No. 713
Pictured Cliffs Formation
NOTICE OF COMPLETION OF ADDITIONAL WELLS

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, 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 had been completed upon acreage committed to this unit. These wells are as follows:

1. The Lindrith Unit #28 Well, located 1650' from the North line and 1450' from the East line of Section 28, Township 24 North, Range 2 West, Rio Arriba County, New Mexico, was spudded on April 23, 1959 and completed on June 4, 1959 at a total depth of 3217' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3110' - 3126', 3138' - 3146' was treated with a sand-water fracturing process on May 12, 1959, and said formation was again treated with a similar process between 3066' - 3078' on May 22, 1959. Finally, on May 30, 1959, this process was again applied between 3066' - 3078', 3108' - 3124', 3136' - 3144'. After being shut-in for eight (8) days, the well was tested on June 12, 1959, and following a three (3) hour blow-down period gauged 1759 MCFGPD through a 3/4" choke, and 1822 MCFGPD by the calculated absolute open-flow method, with an SIPC of 797# and an SIPT of 797#.

This drilling block was included in the Lindrith Unit Area in the Fourth Expanded Participating Area, effective November 1, 1956. Therefore, the Participating Area is not enlarged and the percentages allocated to the tracts shown on Schedule V for the Fourth Expanded Participating Area remain the same.

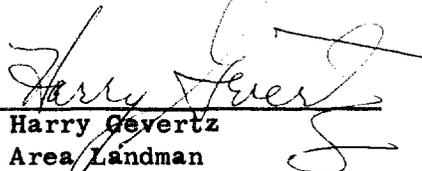
2. The Lindrith Unit #31 Well, located 1800' from the North line and 990' from the West line of Section 24, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on April 17, 1959 and completed on April 28, 1959 at a total depth of 3204' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3094' - 3104', 3124' - 3134', 3144' - 3156' was treated with a sand-water fracturing process. After being shut-in for gauge for seven (7) days, the well was tested on May 5, 1959, and following a three (3) hour blow-down period gauged 962 MCFGPD through a 3/4" choke, and 968 MCFGPD by the calculated absolute open-flow method, with an SIPC of 976# and an SIPT of 976#.

This drilling block was included in the Lindrith Unit Area in the Second Expanded Participating Area effective August 1, 1956. Therefore, the Participating Area is not enlarged and the percentages allocated to the tracts shown on Schedule III for the Second Expanded Participating Area remain the same.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By


Harry Gevertz
Area Landman
Land Department

HG:JPMc:ch

cc: Delhi-Taylor Oil Corporation
Magnolia Petroleum Company

MAIN OFFICE OCC

1959 JUL 14 AM 8:14

File 159

In reply refer to:
Unit Division

July 13, 1959

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

Re: Lindrith Unit Area,
Amended 1959 Drilling Program
Rio Arriba County, New Mexico

ATTENTION: Mr. Sam Smith

Gentlemen:

Your Amended 1959 Drilling Program, for the Lindrith Unit, Rio Arriba County, New Mexico, has been approved on this date by the Commissioner of Public Lands, subject to like approval by the United States Geological Survey.

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

BY:
Ted Bilberry, Supervisor
Oil and Gas Division

MEM/100/n
cc:

OCC-Santa Fe
USGS-Bowell

C
O
P
Y

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

File
159

July 10, 1959

C

El Paso Natural Gas Company
El Paso, Texas

ATTENTION: Mr. Sam Smith

RE: Amended 1959 Drilling
Program Lindrith Unit
Rio Arriba County, New
Mexico.

O

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Amended 1959 Drilling Program for the Lindrith 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

P

ALP/RLS/19

cc: State Land Office - Santa Fe
U S Geological Survey - Roswell

Y

El Paso Natural Gas Company

El Paso, Texas

MAIN OFFICE CCC

June 10, 1959

1959 JUL 9 PM 1:13

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: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
Amended 1959 Drilling Program

Gentlemen:

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, previously submitted a Plan of Development dated January 1, 1959, which provided for the drilling of four (4) wells for the period from January 1, 1959, to December 31, 1959. This Plan was approved by the Commissioner of Public Lands of the State of New Mexico and the Oil Conservation Commission of the State of New Mexico.

It has since become necessary to amend this program in order to provide adequate protection against drainage of the unit from the Pictured Cliffs Wells located in the SW/4 of Section 17 and also the SW/4 of Section 21 of Township 24 North, Range 3 West, N.M.P.M.

We therefore submit in its entirety an Amended 1959 Plan of Development that includes the four (4) wells on the original plan and two (2) additional locations which should provide sufficient protection against unit drainage. These wells will be drilled prior to December 31, 1959:

<u>WELL NAME</u>	<u>LOCATION</u>	<u>FORMATION</u>
Lindrith Unit #28	NE/4 Section 28 T 24-N, R-2-W	Pictured Cliffs
Lindrith Unit #29	NW/4 Section 21 T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #30	NW/4 Section 18 T-24-N, R-2-W	Pictured Cliffs
Lindrith Unit #31	NW/4 Section 24 T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #32	SW/4 Section 16 T-24 N, R-3-W	Pictured Cliffs
Lindrith Unit #33	SW/4 Section 21 T 24-N, R-3-W	Pictured Cliffs

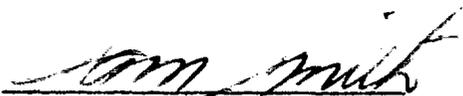
El Paso Natural Gas Company, as Unit Operator, intends to drill all of the above listed Pictured Cliffs Wells to the base of the Pictured Cliffs Formation using rotary and cable tools. Surface casing will be set to approximately 100' from the surface, and then a production string of 5 1/2" casing will 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.

All of the Working Interest Owners have been contacted, and this Amended Drilling Program reflects, insofar as possible, their requests for additional drilling.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
Sam Smith
Manager
Land Department

SS:JPMc:ic
Attachment

cc: Magnolia Petroleum Company
Delhi-Taylor Oil Corporation

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 U.S.G.S. and Oil Conservation Commission

APPROVED: A.L. Carter DATE: July 10, 1959
Oil Conservation Commission

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands.

The foregoing approvals are attached and made a part of the application for the Lindrith Unit Area, I Sec. No. 713, Amended 1959 Drilling Program.

C. L. CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

June 1, 1959

File
159

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

ATTENTION: Mr. T. W. Bittick

RE: Eighth and Ninth Expanded
Pictured Cliffs Participating
Area, Lindrith Unit, Rio
Arriba County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Eighth and Ninth Expanded Pictured Cliffs, Participating Area, for the Lindrith 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 application have been forwarded to the State Land Office.

Very truly yours,

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

ALP/RLS:ig

cc: US Geological Survey - Roswell
State Land Office - Santa Fe

C
O
P
Y

El Paso Natural Gas Company

El Paso Texas

May 27, 1959

77-159

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: Lindrith Unit, I Sec. No. 713
Rio Arriba County, New Mexico
NOTICE OF COMPLETION OF NON-COMMERCIAL WELL

Gentlemen:

Pursuant to Section 10 of the Lindrith Area Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that the following well was incapable of producing unitized substances in paying quantities from the Pictured Cliffs Formation. This well is as follows:

The Lindrith Unit #27 Well, located 990' from the South line and 990' from the West line of Section 8, Township 24 North, Range 2 West, Rio Arriba County, New Mexico, was spudded on May 30, 1958 and completed on August 17, 1958 at a total depth of 3394' in the Pictured Cliffs Formation. The Pictured Cliffs Formation from 3278' - 3288', 3325' - 3340' was treated with a sand water fracturing process. After being shut-in for sixty-four (64) days, the well was tested in the Pictured Cliffs Formation on October 20, 1958, and following a three (3) hour blow-down period gauged 645 MCFGPD by pitot tube gauge and 647 MCFGPD by the calculated absolute open-flow method, with an SIPT of 1007# and an SIPC of 1007#. The drilling block upon which this well is located is described as the SW/4 of Section 8, Township 24 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres. The determination that this well is not capable of producing unitized substances in paying quantities was made on October 20, 1958.

Inasmuch as this well is incapable of production of unitized substances in paying quantities, the drilling block cannot be admitted to the Participating Area under the terms of the Lindrith Area Unit Agreement. Therefore, the Participating Area is not enlarged and the percentages allocated to the tracts shown on the latest Schedule of the Expanded Participating Area remain the same.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By


Harry Gevertz
Area Landman
Land Department

HG:JPMc:pc

cc: Magnolia Petroleum Company
Post Office Box 900
Dallas, Texas

cc: Delhi-Taylor Oil Corporation
823 Corrigan Tower
Dallas 1, Texas

El Paso Natural Gas Company

El Paso, Texas

May 12, 1959

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: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF EIGHTH AND
NINTH EXPANDED PARTICIPATING AREAS
Pictured Cliffs Formation

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Eighth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West
Section 11: E/2
Section 12: W/2

The lands described above are proved productive by the following:

The Lindrith Unit #24 Well, located 990' from the North line and 990' from the East line of Section 11, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on May 12, 1958, and completed on June 2, 1958, at a total depth of 3388' in the Pictured Cliffs Formation. On May 26, 1958, the Pictured Cliffs

Formation from 3264' - 3280', 3312' -3328', 3334' - 3358' was treated with a sand-water fracturing process. After being shut-in for twenty-eight (28) days, the well was tested in the Pictured Cliffs Formation on June 30, 1958, and following a three (3) hour blow-down period gauged 1269 MCFGPD through a 3/4" choke and 1284 MCFGPD by the calculated absolute open-flow method, with an SIPT of 972# and an SIPC of 973#. The committed drilling block upon which this well is located is described as the NE/4 of Section 11, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres.

The effective date for the Eighth Expanded Participating Area is determined as July 1, 1958, the first of the month following the testing of the Lindrith Unit #24 Well.

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Ninth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West
Section 24: S/2
Containing 320.00 acres, more or less

The lands described above are proved productive by the following:

The Lindrith Unit #25 Well, located 1650' from the South line and 1650' from the West line of Section 24, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on May 23, 1958 and completed on August 12, 1958 at a total depth of 3229' in the Pictured Cliffs Formation. The Pictured Cliffs Formation from 3146' - 3160', 3168' - 3180', 3192' - 3202' was treated with a sand-water fracturing process. After being shut-in for sixty-nine (69) days, the well was tested in the Pictured Cliffs Formation on October 20, 1958, and following a three (3) hour blow-down period gauged 3325 MCFGPD through a 3/4" choke and 3583 MCFGPD by the calculated absolute open-flow method, with an SIPT of 999# and an SIPC of 999#. The committed drilling block upon which this well is located is described as the SW/4 of Section 24, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres.

Township 24 North, Range 3 West
Section 36: NE/4
Containing 160.00 acres, more or less

The lands described above are proved productive by the following:

The Lindrith Unit #26 Well, located 990' from the North line and 990' from the East line of Section 36, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on May 27, 1958, and completed on August 12, 1958, at a total depth of 3259' in the Pictured Cliffs Formation. On August 10, 1958, the Pictured Cliffs Formation from 3184' - 3198', 3208' - 3224' was treated with a sand-water fracturing process. After being shut-in for sixty-nine (69) days, the well was tested in the Pictured Cliffs Formation on October 20, 1958, and following a three (3) hour blow-down period gauged 3634 MCFGPD through a 3/4" choke, and 3990 MCFGPD by the calculated absolute open-flow method, with an SIPT of 983# and an SIPC of 983#. The committed drilling block upon which this well is located is described as the NE/4 of Section 36, Township 24 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico, containing 160.00 acres.

The effective date for the Ninth Expanded Participating Area is determined as November 1, 1958, the first of the month following the testing of the Lindrith Unit #25 and #26 Wells.

Attached hereto are Schedules IX and X showing the Eighth and Ninth Expanded Participating Areas respectively for the Pictured Cliffs Formation in the Lindrith Unit Area. These schedules describe the Eighth and Ninth Expanded Participating Areas, show the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Eighth and Ninth Expansions meet with your approval, please indicate such approval in the space provided on the attached sheet, and return an approved copy for our files. A copy of this letter and a copy of each schedule is being sent to the Working Interest Owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

T. W. Bittick
Assistant Manager
Land Department

TWB: JPMc: ch

cc: Magnolia Petroleum Company
Delhi-Taylor Oil Corporation

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: 6-1-59
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 Eighth and Ninth Expansions of the Pictured Cliffs Formation Participating Area
for the Lindrith Unit, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas

April 27, 1959

Case #129

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: 1959 Plan of Development
Lindrith Unit Area

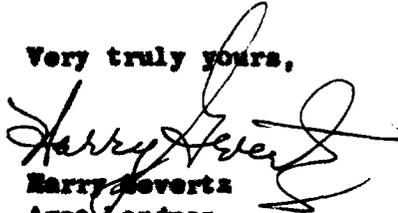
Gentlemen:

By letter of April 20, 1959, Mr. John Anderson of the United States Geological Survey returned, unapproved, our 1959 Plan of Development for the Lindrith Unit Area stating that he did not consider said Plan sufficiently adequate to give full protection against drainage.

We are now in the process of preparing a new Plan of Development and we therefore request that you take no further action on the Plan which we previously furnished you.

Upon final preparation thereof, copies of the new 1959 Plan of Development will be furnished you.

Very truly yours,


Harry Averts
Area Landman
Land Department

HS: JPMc: ch

COPY

Case # 159
P.O. Box 6721
Roswell, New Mexico

April 20, 1959

El Paso Natural Gas Company
Box 1492
El Paso, Texas

Attention: Mr. Sam Smith

Gentleman:

Returned herewith, unapproved, are five copies of your 1959 plan of development for the Lindrith unit, Rio Arriba County, New Mexico. This plan of development calls for the drilling of four Pictured Cliffs wells as follows:

NE $\frac{1}{4}$ sec. 28, T. 24 N., R. 2 W., N.M.P.M.
NW $\frac{1}{4}$ sec. 18, T. 24 N., R. 2 W., N.M.P.M.
NW $\frac{1}{4}$ sec. 24, T. 24 N., R. 3 W., N.M.P.M.
NW $\frac{1}{4}$ sec. 21, T. 24 N., R. 3 W., N.M.P.M.

According to Geological Survey records, the Lindrith unit is currently subject to drainage by wells in the following locations:

SE $\frac{1}{4}$ sec. 33, T. 25 N., R. 3 W., N.M.P.M.
SE $\frac{1}{4}$ sec. 17, T. 24 N., R. 3 W., N.M.P.M.
NE $\frac{1}{4}$ sec. 19, T. 24 N., R. 3 W., N.M.P.M.
SE $\frac{1}{4}$ sec. 20, T. 24 N., R. 3 W., N.M.P.M.
NW $\frac{1}{4}$ sec. 27, T. 24 N., R. 2 W., N.M.P.M.

Your 1959 plan of development provides for two protection wells to be drilled to prevent unit drainage but makes no definite commitment concerning the remainder of the protection wells.

Please resubmit your 1959 plan of development for the Lindrith unit with definite commitments to drill offsets to the wells listed immediately above, and all other wells that may be required to prevent unit drainage.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Enclosures 5

Copy to: Washington
Farmington

NMOCC, Santa Fe
Comm. Public Land, Santa Fe

In reply refer to:
Unit Division

March 4, 1959

File
127

C
O
P
Y

El Paso Natural Gas Company
El Paso, Texas

ATTENTION: Mr. Sam Smith

Re: Lindrith Unit Area
Rio Arriba County, New Mexico
1959 Drilling Program

Gentlemen:

We are enclosing one copy of the 1959 Drilling Program for the Lindrith Unit Area, which was approved by the Commissioner of Public Lands March 4, 1959.

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

BY:
Ted Bilberry, Supervisor
Oil and Gas Division

MEM/MER/m
cc:

YCC- Santa Fe
Bag- Roswell

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

File
157

February 9, 1959

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

ATTENTION: Mr. Sam Smith

RE: 1959 Drilling Program
Lindrith 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 Lindrith 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/RIS/ig

cc: State Land Office - Santa Fe
U. S. Geological Survey - Roswell

C
O
P
Y

El Paso Natural Gas Company

El Paso, Texas

January 1, 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: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
1959 DRILLING PROGRAM

Gentlemen:

The 1958 Drilling Program, as supplemented, provided for the drilling of five (5) Pictured Cliffs Formation Wells. All five (5) wells were completed during the calendar year 1958. Four (4) of these wells were completed as commercial producers, and one (1) was completed as a non-commercial well. The four (4) commercial wells are presently being submitted to the regulatory bodies for the approval of their inclusion into the Area. To date, twenty-eight (28) wells have been drilled to the Pictured Cliffs Formation within the Lindrith Unit Area.

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Plan of Development providing for the drilling of the following wells during the period from January 1, 1959 to December 31, 1959:

<u>WELL NAME</u>	<u>LOCATION</u>	<u>FORMATION</u>
Lindrith Unit #28	NE/4 Section 28 T-24-N, R-2-W	Pictured Cliffs
Lindrith Unit #29	NW/4 Section 21 T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #30	NW/4 Section 18 T-24-N, R-2-W	Pictured Cliffs
Lindrith Unit #31	NW/4 Section 24 T-24-N, R-3-W	Pictured Cliffs

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.

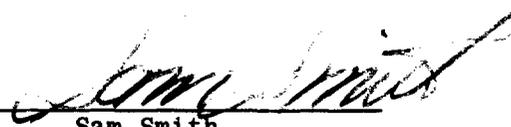
All of the Working Interest Owners have been contacted, and this Drilling Program reflects, insofar as possible, their requests for additional drilling.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



Sam Smith
Manager
Land Department

SS:JPMc:ch
Attachment

cc: Magnolia Petroleum Company
Delhi-Taylor Oil Corporation

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. Purtee* DATE: 2-9-59
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
Lindrith Unit, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas

January 23, 1959

File 107

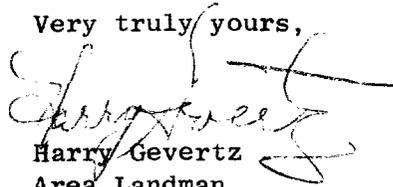
Oil Conservation Commission
Of the State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Gentlemen:

Transmitted herewith is one (1) copy of Ratification and Joinder of Unit Agreement for the Lindrith Unit Area, executed by J. Bryan Stephenson and the Albuquerque National Bank, Co-Trustees under the will of Robert E. Adams, deceased, and one (1) copy executed by Mrs. R. E. Adams, whereby they commit their interest under Tract No. 6 to this unit.

If you find the enclosed Ratifications and Joinders to be in order, we respectfully request that you process them so that this interest will be effectively committed to the Lindrith Unit.

Very truly yours,



Harry Gevertz
Area Landman
Land Department

HG:JPMc: jr
Enclosures

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

Handwritten signature and initials

August 15, 1958

El Paso Natural Gas Co.
Box 1492
El Paso, Texas

Attention: Harry Gevertz

Re: Corrected Fourth Through Seventh
Expanded Participating Areas,
Pictured Cliffs Formation Lindrith
Unit Rio Arriba County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the corrected Fourth Through Seventh Participating areas for the Lindrith 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

ig

cc: U. S. 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

MAIL OFFICE OCC
1958 AUG 23 PM 1:10

August 12, 1958

New Mexico Oil Conservation Commission
Post Office Box 871
Santa Fe, New Mexico

Attention: Mr. R. L. Stamets

Re: Lindrith Unit Agreement
Rio Arriba County, New Mexico
Third & Seventh Expanded
Participating Areas
Pictured Cliffs Formation

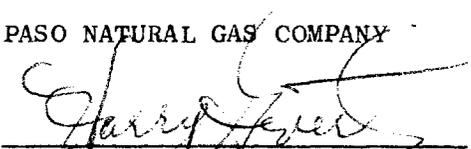
Gentlemen:

The conflict referred to in your correspondence of August 11, 1958, is due to an error in description concerning the Third Expansion with regard to the captioned matter. In the Third Expansion the NE/4 of Section 23, Township 24 North, Range 3 West, was erroneously described as the NW/4 of Section 23, Township 24 North, Range 3 West; whereas, the NW/4 of Section 23, Township 24 North, Range 3 West, is properly included within the Seventh Expansion for the Lindrith Unit.

Enclosed herewith is an additional copy of the application concerning the captioned matter.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By: 

Harry Gevertz
Area Landman
Land Department

HG:HKG:jb
Lindrith Unit 5.0

U
MAIN OFFICE El Paso Natural Gas Company

1958 AUG 8 PM 1:29 El Paso, Texas

August 7, 1958

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

Attention: Mr. Dick Stamitz

Re: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF FOURTH THROUGH
SEVENTH EXPANDED PARTICIPATING AREAS
Pictured Cliffs Formation

Gentlemen:

Pursuant to your request enclosed herewith are the revised schedules and accompanying letter for request for approval relative to the captioned matter.

The revisions previously forwarded to you were to be substituted for the Fourth through Seventh Expansions then in your possession. The material which they replaced could have been discarded.

Please remove all the previous expansions in your file concerning the Fourth through Seventh Expansions for the Lindrith Unit and supplement these enclosures in their place, as they are the corrected expansions with regard to the subject matter.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
Harry Gevertz
Area Landman
Land Department

HG:HKG:jb
Enclosures
Lindrith Unit 5.0
cc: Commissioner of Public Lands

El Paso Natural Gas Company
MAIN OFFICE

1958 AUG 4 AM 8/30 El Paso, Texas

July 28, 1958

File
Case 159

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: Lindrith Unit Agreement I Sec. No. 713
Rio Arriba County, New Mexico
NOTICE OF COMPLETION OF ADDITIONAL WELL

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, approved April 3, 1950, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to the Unit. This well is as follows:

The Lindrith Unit #23 Well, located 1105' from the South line and 1800' from the East line of Section 9, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on March 14, 1958, and completed on May 24, 1958 at a total depth of 3194' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3074' - 3094' and 3110' - 3120' was treated with a sand-water fracturing process. After being shut-in for thirty-eight (38) days, the well was tested on June 30, 1958, and following a three (3) hour blow-down period gauged 1754 MCFGPD through a 3/4" choke and 1807 MCFGPD by the calculated absolute open-flow method, with an SIPC of 985# and an SIPT of 987#. The committed drilling block upon which this well is located is described as the SE/4 of Section 9, Township 24 North, Range 3 West, N.M.P.M., containing 160.00 acres.

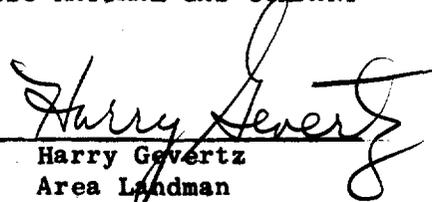
The committed drilling block upon which this well is located was included in the Third Expanded Participating Area for the Pictured Cliffs Formation, effective September 1, 1956. Therefore, the Participating Area is not enlarged and the percentages allocated to the tracts shown on Schedule IV for the Third Expanded Participating Area remain the same.

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:HKG:c1

cc: Delhi-Taylor Oil Corporation
Magnolia Petroleum Company

El Paso Natural Gas Company MAIN OFFICE OCC

El Paso, Texas

April 29, 1958

1958 AUG 8 PM 1:29

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: Lindrith Unit Agreement, I Sec. No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF FOURTH THROUGH
SEVENTH EXPANDED PARTICIPATING AREAS
Pictured Cliffs Formation

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Fourth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 2 West
Section 28: NE/4
Containing 160.00 acres, more or less

The lands described above are proved productive by the following:

The Magnolia Petroleum Company #1 John F. Brown Well, located 1650' from the West line and 990' from the North line of Section 27, Township 24 North, Range 2 West, Rio Arriba County, New Mexico, was spudded on September 14, 1956 and completed on September 24, 1956 at a total depth of 3265' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3148' and 3213' was treated with a sand-water fracturing process. After being shut-in for seven (7) days, the well was tested on October 1, 1956, and following a three hour blow-down period gauged 728 MCFGPD through a 3/4" choke with an SIPC of 878#. (Additional information is not readily available to this office as the well was drilled and is operated by Magnolia Petroleum Company.)

The effective date for the Fourth Expanded Participating Area is determined as November 1, 1956, the first of the month following the testing of the Magnolia Petroleum Company #1 John F. Brown Well.

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Fifth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 2 West
Section 9: NW/4
Containing 160.00 acres, more or less

The lands described above are proved productive by the following:

The Lindrith Unit #11 Well, located 1650' from the North line and 890' from the West line of Section 9, Township 24 North, Range 2 West, Rio Arriba County, New Mexico, was spudded on October 26, 1956 and completed on November 5, 1956 at a total depth of 3320' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3238' - 3246', 3264' - 3276', and 3284' - 3292' was treated with a sand-water fracturing process on November 3, 1956. After being shut-in for eighteen (18) days, the well was tested on November 23, 1956, and following a three hour blow-down period gauged 3675 MCFGPD through a 3/4" choke, and 4529 MCFGPD by the calculated absolute open-flow method with an SIPC of 918# and an SIPT of 918#.

The effective date for the Fifth Expanded Participating Area is determined as December 1, 1956, the first of the month following the testing of the Lindrith #11 Well.

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Sixth Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West
Section 12: SE/4
Section 13: NE/4
Containing 320.00 acres, more or less

The lands described above are proved productive by the following:

The Lindrith #19 Well, located 900' from the South line and 990' from the East line of Section 12, Township 24 North, Range 3 West, Rio Arriba County, New Mexico, was spudded on March 22, 1957, and completed on April 12, 1957, at a total depth of 3356' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3208' - 3290', 3308' - 3320', and 3332' - 3346' was treated with a sand-water fracturing process. After being shut-in for eight (8) days, the well was tested on May 14, 1957, and following a three hour blow-down period gauged 6192 MCFGPD through a 3/4" choke and 8273 MCFGPD by the calculated absolute open-flow method with an SIPC of 937# and an SIPT of 939#.

The effective date for the Sixth Expanded Participating Area is determined as June 1, 1957, the first of the month following the testing of the Lindrith Unit #19 Well.

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Seventh Expanded Participating Area for the Pictured Cliffs Formation, Lindrith Unit, Rio Arriba County, New Mexico, which includes in addition to the lands previously submitted, the following selection of lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation:

Township 24 North, Range 3 West
Section 22: NE/4
Section 23: NW/4
Containing 320.00 acres, more or less

The lands described above are proved productive by the following:

The Lindrith Unit #17-X Well, located 950' from the North line and 1713' from the West line of Section 23, Township 24 North, Range 2 West, Rio Arriba County, New Mexico, was spudded on June 8, 1957, and completed on June 22, 1957, at a total depth of 3260' in the Pictured Cliffs Formation. The Pictured Cliffs Formation between 3714' - 3792', and 3208' - 3218' was treated with a sand-water fracturing process. After being shut-in for seventeen (17) days, the well was tested on July 9, 1957, and following a three hour blow-down period gauged 6581 MCFGPD through a 3/4" choke and 8917 MCFGPD by the calculated absolute open-flow method with an SIPC of 1011# and an SIPT of 1011#.

The effective date for the Seventh Expanded Participating Area is determined as August 1, 1957, the first of the month following the testing of the Lindrith #17-X Well.

Attached hereto as Exhibit "A" is a map of the Lindrith Unit Area on which has been colored the Fourth through Seventh Expanded Participating Areas for the Pictured Cliffs Formation. Attached also are Schedules V through VIII showing the Fourth through Seventh Expanded Participating Areas respectively for the Pictured Cliffs Formation in the Lindrith Unit Area. These schedules describe the Fourth Expanded Participating Area and subsequent expansions thereof, show the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentage allocated to each tract according to the various ownership in said tract.

If the Fourth through Seventh Expansions meet with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy for our files. A copy of this letter and a copy of each schedule is being sent to the Working Interest Owners indicated below.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By T. W. Bittick

T. W. Bittick
Assistant Manager
Land Department

TWB:HKG:cl

cc: Magnolia Petroleum Company
Delhi-Taylor Oil Corporation

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: A. L. Porter, Jr.
Oil Conservation Commission

DATE: 8-15-58

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands.

The foregoing approvals are attached and made a part of the application for the Fourth through Seventh Expansions of the Pictured Cliffs Formation Participating Area for the Lindrith Unit, Rio Arriba County, New Mexico.

MAIN OFFICE OCC

In reply refer to:
Unit Division

1958 AUG 13 AM 8:40

August 11, 1958

*File
copy
151*

C
O
P
Y

El Paso Natural Gas Company
El Paso, Texas

Re: Lindrith Unit Agreement
Fourth through Seventh
Expanded Participating Areas
Pictured Cliffs Formation
Rio Arriba Acounaty, New Mexico

Attention: Mr. T. W. Bittick

Gentlemen:

We are enclosing one copy of the above designated document which was approved by the Commissioner of Public Lands, August 11, 1958.

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

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

159

March 28, 1958

C
O
P
Y

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

Attention: Mr. Sam Smith

Re: Lindrith 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 Lindrith Unit Area, dated January 17, 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 program is returned herewith.

Very truly yours,

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

ALP/RLS/ga

Enclosure

El Paso Natural Gas Company

El Paso, Texas

January 17, 1958

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: Lindrith Unit Area I Sec. No. 713
Rio Arriba County, New Mexico
1958 DRILLING PROGRAM

Gentlemen:

The 1957 Drilling Program, as supplemented, provided for the drilling of nine (9) Pictured Cliffs Formation Wells. All nine (9) wells were completed during the calendar year 1957. To date, twenty-three (23) wells have been drilled to the Pictured Cliffs Formation within the Lindrith Unit Area.

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Plan of Development providing for the drilling of the following wells during the period from January 1, 1958 to December 31, 1958.

<u>WELL NAME</u>	<u>LOCATION</u>	<u>FORMATION</u>
Lindrith Unit #23	SE/4 Section 9: T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #24	NE/4 Section 11: T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #25	SW/4 Section 24: T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #26	NE/4 Section 36: T-24-N, R-3-W	Pictured Cliffs

<u>WELL NAME</u>	<u>LOCATION</u>	<u>FORMATION</u>
Lindrith Unit #27	SW/4 Section 8: T-24-N, R-2-W	Pictured Cliffs

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.

All of the Working Interest Owners have been contacted, and this Drilling Program reflects, insofar as possible, their requests for additional drilling.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 

Sam Smith
Manager
Land Department

SS:CH:jr
Attachment

cc: Magnolia Petroleum Company
Delhi-Taylor Oil Corporation

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 Lindrith
Unit, Rio Arriba County, New Mexico.

El Paso Natural Gas Company

El Paso, Texas

February 26, 1958

File
1/1/

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

Re: Lindrith Unit I Sec. No. 713
Rio Arriba County, New Mexico
1958 Drilling Program

Gentlemen:

Pursuant to our letter of January 17, 1958 you were advised of the captioned Drilling Program and the request for approval of same. We have recently received approval from the United States Geological Survey; however, we have received no acknowledgement from your office relative to this matter.

Kindly give your immediate attention to the above in order that we may proceed with our 1958 Drilling Program of the Lindrith Unit.

Yours very truly,



Harry Gevertz
Area Landman
Land Department

HG:HKG:jr

Lindrith 5.0

IN REPLY REFER TO:



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 6721
Roswell, New Mexico

File

117

February 14, 1958

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

Attention: Mr. Sam Smith

Gentlemen:

Your plan of development dated January 17, 1958, for the Lindrith 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.

One approved copy of the plan is enclosed.

Very truly yours,

JAMES A. KNAUF
Acting 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)

RFEvens: fl

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

File
157

October 24, 1957

Mr. E. W. Meharg
P.O. Box 289
La Mesa, New Mexico

Re: Lindrith Unit

Dear Sir:

Reference is made to your letter dated October 12, 1957, wherein you complained of drainage from the Mesaverde formation underlying your property in the Lindrith Unit.

The records of this office indicate that there is no gas being produced from the Mesaverde formation nearer than eight or nine miles to your property. It is difficult to conceive of drainage occurring as a result of production from such distant wells. If, however, you have evidence that your land is in fact being drained we would appreciate having any further information on this matter.

Very truly yours,

William J. Cooley
Commission Attorney

WJC:bp

C
O
P
Y

MAIN OFFICE OCC
1957 OCT 15 PM 1:16

Box 289, La Mesa, N. M.
October 12, 1957.

New Mexico Oil Conservation Commission,
Santa Fe, New Mexico.

Dear Sirs:

I have 480 acres of land in the participating area of the Lindrith Unit located in township 24N, ranges two and three west, sections 19 and 20.

In 1950 I committed this land to a Unit Agreement, in which Magnolia Oil Co. was the designated Unit Operator. This Unit Agreement contains certain provisions:

1. Section b, page 3, concerning notification of proposed expansion or contraction of the unit area.
2. page 9. "The Unit Operator shall continue drilling diligently"
3. Section 15, page 16, concerning "drainage".

I have never been notified that there has been a change in unit operators; I have never been notified of any proposed expansion or contraction of the unit; the unit operator did not continue drilling

diligently; and nothing is being done to prevent drainage of unitized substances from the Mesa Verde formation.

Mr. W. C. Hughes and I are the only fee land owners in the participating area of the Lindrith Unit, our land is being drilled by an operator who is not allowed to go beyond the Pictured Cliffs formation, and we see dual completion wells being brought in all around us and producing gas from the same pay zone and the same gas reservoir that underlies our land.

I respectfully and sincerely ask you for the protection of my correlative rights.

Yours truly,

E. W. Meharg

E. W. Meharg.



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 6721
Roswell, New Mexico

March 7, 1957

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

Attention: Mr. Samuel Smith

Gentlemen:

Your determination dated February 19, 1957, that wells Marron-Federal No. 1, Hammond-Federal No. 1, Ingverson-Federal No. 3, and Lindrieth Unit No. 4 are incapable of producing unitised substances in paying quantities from the Pictured Cliffs formation, pursuant to section 10 of the Lindrieth unit agreement, I-Sec. No. 713, Rio Arriba County, New Mexico, was approved on February 26, 1957.

One approved copy of said determination is enclosed.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Enclosure

Copy to: Comm. Public Lands, Santa Fe (letter only)
Oil Cons. Comm., Santa Fe (letter only)

15-9

El Paso Natural Gas Company

El Paso, Texas

February 19, 1957

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

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: Lindrith Unit Area
I Sec. No. 713
Notice of Completion of
Non-Commercial Wells

Gentlemen:

El Paso Natural Gas Company succeeded Magnolia Petroleum Company as Unit Operator of the Lindrith Unit, receiving approval of Designation of Successor Unit Operator by the Acting Director, United States Geological Survey, on June 28, 1956, and Commissioner of Public Lands of the State of New Mexico on May 5, 1956. El Paso Natural Gas Company, as Unit Operator, has concluded that the following four Pictured Cliffs wells in the Lindrith Unit Area are not capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation.

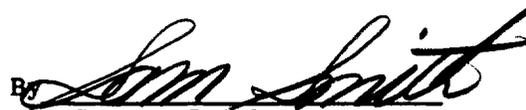
<u>NAME</u>	<u>LOCATION</u>	<u>T.D.</u>	<u>I.P.</u>	<u>COMPLETION DATE</u>
Marron-Federal #1	NE/4 Sec. 7 T-24-N, R-2-W	3445'	134 MCF	9-7-55
Hammond-Federal #1	SE/4 Sec. 22 T-24-N, R-3-W	3265'	224 MCF	8-28-55
Ingwerson-Federal #3	SE/4 Sec. 21 T-24-N, R-2-W	3190'	60 MCF	11-14-52
Lindrith Unit #4	NW/4 Sec. 3 T-24-N, R-3-W	3524'	217 MCF	8-9-55

Pursuant to Section 10 of the Lindrith Unit Agreement, I Sec. No. 713, Unit Operator hereby requests the approval of the foregoing determination by

the Regional Oil and Gas Supervisor, as the above described wells are located on Federal land.

Copies of this letter are being sent to the Working Interest Owners shown below.

Yours very truly,



Samuel Smith
Assistant Manager
Lease Department

JWC:HG:mm

cc: Magnolia Petroleum Company
Delhi-Taylor Oil Corporation

APPROVED: _____ DATE: _____
Supervisor, United States Geological Survey

The foregoing approval is for the recommendation declaring the four (4) above described Pictured Cliffs wells in the Lindrith Unit non-commercial, and excluding the acreage pertaining thereto from consideration as a part of the participating area in the Pictured Cliffs Formation.

129
El Paso Natural Gas Company

El Paso, Texas

February 18, 1957

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

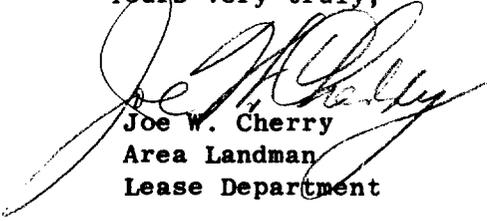
Re: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
DRILLING PROGRAM for 1957

Gentlemen:

We wish to advise that the 1957 Drilling Program for the captioned unit was approved by the Federal and State regulatory bodies as follows:

1. Regional Oil and Gas Supervisor, United States Geological Survey; Approved February 4, 1957.
2. Commissioner of Public Lands of the State of New Mexico; Approved January 7, 1957.
3. Oil Conservation Commission of the State of New Mexico; Approved February 11, 1957.

Yours very truly,


Joe W. Cherry
Area Landman
Lease Department

JWC:HG:mm
Enclosures

cc: Delhi-Taylor Oil Corporation
Magnolia Petroleum Company

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

159

February 11, 1957

C

**El Paso Natural Gas Company
El Paso, Texas**

O

Attention: Mr. R. L. Hamblin

**Re: Lindrith Unit Area
Rio Arriba County, New Mexico
1957 Drilling Program**

P

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1957 Drilling Program for the subject unit area, dated December 27, 1956, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

Y

One approved copy of the Program is returned herewith.

Very truly yours,

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

**ALP:DSN:dea
Enclosure**

El Paso Natural Gas Company

INCORPORATED IN TEXAS

El Paso, Texas

January 21, 1957

139

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

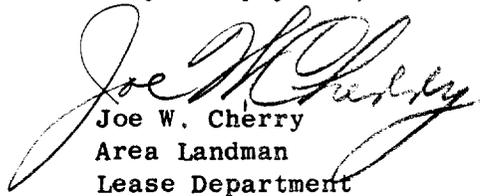
Re: Lindrith Unit Agreement
I Sec. No. 713

Gentlemen:

Please find enclosed one (1) copy each of Ratification and Joinder executed by Petro-Atlas Corporation and J. A. Chapman, et al, respectively the owners of a 2.000% overriding royalty interest in Tracts 1 through 9 and a 3.125% royalty interest in Tract 25 of the above captioned Unit.

We respectfully request that you process these instruments in the usual manner to effectively commit the aforementioned interests to the Lindrith Unit.

Very truly yours,


Joe W. Cherry
Area Landman
Lease Department

JWC:HG:nb
Enclosures
NM 4708
NM 4709
NM 4702
NM 4710
NM 4703
NM 4704
NM 4705
NM 4706
NM 4707
NM 4722

STATE OF TEXAS

COUNTY OF DALLAS

On this 10th day of December, 1958, before me appeared JOHN W. CLARK, to me personally known, who, being by me duly sworn, did say that he is the Vice President of MAGNOLIA PETROLEUM 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 JOHN W. CLARK 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
June 1, 1959

Jean Pitts

JEAN PITTS, Notary Public
Bernalillo County, New Mexico

My Commission expires:

July 1, 1959

Ruth P. Hughes

Notary Public in and for
Bernalillo County,
State of New Mexico

CORPORATION ACKNOWLEDGMENT

THE STATE OF TEXAS,
COUNTY OF DALLAS

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared

W. C. Smith, known to me to be the person and officer

whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said

Delhi-Taylor Oil Corporation

a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 20th day of January A. D. 19 59.

DOROTHY TIEBER

Notary Public, Dallas County, Texas

My Commission Expires June 1, 1959

Dorothy Tieber

Notary Public in and for

Dallas County, Texas.

844—THE ODER COMPANY, PUBLISHERS—DALLAS

STATE OF TEXAS)
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this 23rd day of January, 1959, by SAM SMITH, Attorney in Fact for EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

Eloise Busse
Notary Public

My Commission expires:

ELOISE BUSSE

Notary Public in and for El Paso County, Texas

My Commission Expires June 1, 1959

State of New Mexico

APPROVED AND CONSENTED TO:
DELHI-TAYLOR OIL CORPORATION

By [Signature]
Vice President
WORKING INTEREST OWNER

APPROVED AND CONSENTED TO:
MAGNOLIA PETROLEUM COMPANY

By [Signature]
Vice President
WORKING INTEREST OWNER

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Lindrith 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

P. O. Box 1344
Albuquerque, N. M.

Date: Nov. 24, 1958

SIGNATURE

[Signature]
J. BRYAN STEPHENSON, TRUSTEE
& Albuquerque National Bank, Co-Trustee
By [Signature] Trust Officer
under the will of Robert E. Adams, dec'd.

Date: _____

Tract 6
Township 24 North, Range 2 West
Section 18: NE/4, N/2 SE/4, NE/4 SW/4, Lot 3

APPROVED AND CONSENTED TO:
EL PASO NATURAL GAS COMPANY
BY [Signature]
Attorney-in-Fact
Unit Operator
& Working Interest Owner

APPROVED AND CONSENTED TO:
DELHI-TAYLOR OIL CORPORATION

By W. G. Smith
Vice President

WORKING INTEREST OWNER

APPROVED AND CONSENTED TO:
MAGNOLIA PETROLEUM COMPANY

By James S. Clark
Vice President

WORKING INTEREST OWNER

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Lindrith 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

Mrs. R.E. Adams

MRS. R.E. ADAMS

Date: _____

Date: _____

Tract 6
Township 24 North, Range 2 West
Section 18: NE/4, N/2 SE/4, NE/4 SW/4, Lot 3

APPROVED AND CONSENTED TO:
EL PASO NATURAL GAS COMPANY
BY [Signature]
Attorney-in-Fact
Unit Operator

& Working Interest Owner

COUNTY OF EL PASO

The foregoing instrument was acknowledged before me this 23 day of January, 1959, by SAM SMITH, Attorney in Fact for EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

[Signature]
Notary Public

My Commission expires:

ELCISE BUSSE
Notary Public in and for El Paso County, Texas
My Commission Expires June 1, 1959

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 [Signature] 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:

My commission expires
June 1, 1959

Jean Pitts
Notary Public in and for _____
County,
State of Texas

CORPORATION ACKNOWLEDGMENT

THE STATE OF TEXAS,
COUNTY OF DALLAS

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared

W. C. Smith, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Dalhi-Taylor Oil Corporation a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 20th day of January A. D. 1959.

DOROTHY TIEBER
Notary Public, Dallas County, Texas
My Commission Expires June 1, 1959
844—THE ODEE COMPANY, PUBLISHERS—DALLAS

Dorothy Tieber
Notary Public in and for Dallas County, Texas.

STATE OF ARIZONA }
COUNTY OF Cocconino } SS.:

On this 27 day of October, 1958, before me personally appeared MRS. R.E. ADAMS, a single person, 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:

June 1, 1960

Paul S. Garbarino
Notary Public in and for _____
County,
State of Arizona

APPROVED AND CONSENTED TO:
DELHI-TAYLOR OIL CORPORATION

By Cecil D. Robinson
Vice-President
WORKING INTEREST OWNER

APPROVED AND CONSENTED TO:
MAGNOLIA PETROLEUM COMPANY

By [Signature]
Vice-President
WORKING INTEREST OWNER

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Lindrith 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

P. O. Box 911

Tulsa, Oklahoma

Date: November 27, 1956

[Signature]
(J. A. Chapman)
[Signature]
(Leta M. Chapman)

Milam Bldg., San Antonio, Texas

Milam Bldg., San Antonio, Texas

Milam Bldg., San Antonio, Texas

Date: December 5, 1956

[Signature]
(E. B. McFarlin)
[Signature]
(Myrtle McFarlin)
[Signature]
(Robert B. McFarlin)
[Signature]
(Lucille McFarlin)
[Signature]
(John Elias McFarlin)
[Signature]
(Avilla McFarlin)

APPROVED AND CONSENTED TO:
EL PASO NATURAL GAS COMPANY
By [Signature]
Vice President
UNIT 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 OKLAHOMA)
COUNTY OF TULSA) SS.:

On this 27 day of November, 1956, before me appeared

J. A. Chapman and Leta M. Chapman

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:

August 18, 1958

Glenn Hillton
Notary Public in and for _____
Tulsa County,
State of Oklahoma

STATE OF TEXAS)
COUNTY OF BEXAR) SS.:

On this 5th day of December, 1956, before me personally

E. B. McFarlin, Myrtle McFarlin, Robert B. McFarlin, Lucile McFarlin, John Rhea
appeared ~~McFarlin and Avilla McFarlin~~, a single person, to me known to be
the persons described in and who executed the foregoing instrument, and acknowledged
to me that they executed the same as their free act and deed.

My Commission expires:

June 1, 1957

W. H. Small
Notary Public in and for _____
Bexar 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 Lindrith 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

Petro-Atlas Corporation
704 Sims Building
Albuquerque, New Mexico

SIGNATURE

PETRO-ATLAS CORPORATION

F. J. Anderson
Vice President

Date: December 10, 1956

ATTEST:

Robert A. Faxwirth
Assistant Secretary

Date: December 10, 1956

APPROVED AND CONSENTED TO:
MAGNOLIA PETROLEUM COMPANY

BY [Signature]
WORKING INTEREST OWNER

APPROVED AND CONSENTED TO:
DELMH-TAYLOR OIL CORPORATION

BY [Signature]
Vice President
WORKING INTEREST OWNER

APPROVED AND CONSENTED TO:

EL PASO NATURAL GAS COMPANY

By [Signature] RSH
Vice President
UNIT OPERATOR & WORKING INTEREST OWNER

APPROVED
Land <u>[Signature]</u>
Prod.
Lease.
Gen.
<u>[Signature]</u>

[Signature]
[Signature]
[Signature]

STATE OF OKLAHOMA)
COUNTY OF TULSA) SS.:

On this 10th day of December, 1956, before me appeared

F. I. ANDERSON, to me personally known, who, being by me duly sworn, did say that he is the Vice President of PETRO-ATLAS CORPORATION 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 F. I. ANDERSON 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:

My Commission Expires 06-1558

Harriet Haynes

Notary Public in and for Tulsa County, State of Oklahoma

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 foregoing 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 _____

159

Case # 159

January 7, 1957

In reply refer to:
Unit Division

f. 20

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

Re: Lindreth Unit Area -
1957 Drilling Program

Attention: Mr. R. L. Hamblin

Gentlemen:

We are enclosing one copy of your 1957 Drilling Program for the Lindreth Unit Area, which was approved by the Commissioner of Public Lands, Mr. M. E. Morgan, January 7, 1957.

This approval is 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

cc: OCC-Santa Fe
USGS-Roswell

1950

1950

1950

1950

1950

1950

1950

1950

1950

1950

1950

1950

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 11, 1957

C
El Paso Natural Gas Company
El Paso, Texas

O
Attention: Mr. R. L. Hamblin

Re: Lindrith Unit Area
Rio Arriba County, New Mexico
1957 Drilling Program

P
Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1957 Drilling Program for the subject unit area, dated December 27, 1956, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

Y
One approved copy of the Program is returned herewith.

Very truly yours,

A. L. PORTER, JR.
Secretary-Director

ALP:DSN:dea
Enclosure

THE CONSERVATION COMMISSION
P. O. BOX 877
SANTA FE, NEW MEXICO

Dear Sir:

I am writing to you regarding the matter of the
conservation of the natural resources of the State of
New Mexico. It is my duty to inform you of the
progress of the Commission's work in this field.

The Commission has been very busy in the past few
months, and we have made considerable progress in
the study of the various problems connected with the
conservation of our natural resources. We have held
many public hearings and have received many suggestions
from the people of the State. We are now in the
process of preparing a report on our findings and
recommendations.

Sincerely,
[Signature]

El Paso Natural Gas Company

El Paso, Texas

December 27, 1956

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

*OK
OK*

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: Lindrith Unit Area, I Sec. No. 713
Rio Arriba County, New Mexico
DRILLING PROGRAM FOR 1957

Gentlemen:

By letter dated July 18, 1956, 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 upon lands committed to this Unit:

<u>Well Name</u>	<u>Drilling Tract</u>	<u>I.P.</u>	<u>Formation</u>
Lindrith Unit #5	SE/4 Sec. 19, T-24-N, R-2-W	2,505 Choke Volume 2,587 AOF	Pictured Cliffs
Lindrith Unit #6	NE/4 Sec. 14, T-24-N, R-3-W	1,910 Choke Volume 1,943 AOF	Pictured Cliffs
Lindrith Unit #7	SW/4 Sec. 21, T-24-N, R-2-W	1,036 Choke Volume 1,052 AOF	Pictured Cliffs
Lindrith Unit #8	NW/4 Sec. 15, T-24-N, R-3-W	11,370 Choke Volume 27,586 AOF	Pictured Cliffs

By letter dated November 5, 1956, El Paso Natural Gas Company, as Unit Operator, filed a Supplemental Drilling Program for the calendar year 1956 that was changed by the Amended Supplemental Drilling Program, dated November 15, 1956. The following wells on this Amended Supplemental Drilling Program were drilled upon lands committed to the Unit:

<u>Well Name</u>	<u>Drilling Tract</u>	<u>I.P.</u>	<u>Formation</u>
Lindrith Unit #11	SW/4 Sec. 9, T-24-N, R-2-W	3,675 Choke Volume 4,925 AOF	Pictured Cliffs
Lindrith Unit #13	SE/4 Sec. 9, T-24-N, R-2-W	Testing	Pictured Cliffs
Lindrith Unit #10	SE/4 Sec. 33, T-24-N, R-3-W	Dry Hole Plugged & Abandoned	Pictured Cliffs
Lindrith Unit #9	SE/4 Sec. 34, T-25-N, R-3-W	Dry Hole Plugged & Abandoned	Pictured Cliffs

There were no locations on the Amended Supplemental 1956 Drilling Program that were not drilled.

Fifteen (15) wells have been drilled to the Pictured Cliffs Formation. Eight (8) wells are capable of producing unitized substances in paying quantities, and seven (7) of these wells are presently included in the participating area as approved. The Lindrith Unit #11 Well is a recent completion and not yet within the participating area although capable of producing in paying quantities. The Lindrith Unit #13 Well is still being tested. To date, none of the wells in the Lindrith Unit are tied in.

El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1957 consisting of seven (7) wells to be drilled to the Pictured Cliffs Formation, such drilling to constitute all of our drilling obligations for said year. These proposed drilling sites are listed as follows:

<u>Well Name</u>	<u>Drilling Tract</u>	<u>Formation</u>
Lindrith Unit #14	NW/4 Sec. 9, T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #15	SE/4 Sec. 16, T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #16	SE/4 Sec. 15, T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #17	NW/4 Sec. 23, T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #18	NW/4 Sec. 27, T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #19	SE/4 Sec. 12, T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #20	SW/4 Sec. 9, T-24-N, R-3-W	Pictured Cliffs

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.

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

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



R. L. Hamblin, Manager
Lease Department

RLH:HG:nb

Attachment

cc: Magnolia Petroleum Company
Delhi-Taylor Oil Corporation

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: _____

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands

The foregoing approvals are for the Drilling Program for 1957, consisting of seven (7) Pictured Cliffs wells to be drilled in the Lindrith Unit Area.

OFFICE 600

Truth or Consequences, New Mexico
January 7 - 1957.

PM 1:21

file

TO WHOM IT MAY CONCERN.

It has been brought to my attention by employees of the El Paso Natural Gas Co., that I will participate in wells drilled by that company, in the Lindrith Unit Area, and that the El Paso Gas Company is the Unit operator.

I do not feel that I can recognize El Paso Gas Co. as Unit Operator or that the Unit agreement can be in effect at all for the following reasons.

I have never been notified of any change of Unit Operator, and I understand the El Paso Gas Co. only has the right to the Pictured Cliff formation and could not develop any other possible production.

I have also never been notified of any activities, or progress of Unit Development, either by Magnolia Oil Co. or El Paso Gas Co.

I have the only Fee land in the west end of the proposed Unit, and the majority of the Fee Land Owners have never joined said Unit, leaving only me and the Federal Government to share in a possible participating Unit.

For these and other reasons and the fact that the only agreement I have is with the Magnolia Oil Co.. I do not feel that the terms of the Unit Agreement have been complied with and do not wish to be included in any participating Area with the El Paso Company's wells.

I am this Date declaring my agreement with the Unit, Null and Void.. As my land is in the north west corner and will not effect the working of your Unit in any way. as all wells are on Gov. land so I would like to withdraw quietly if possible.

Hoping for cooperation in this matter, I am
Respectfully.

COPY TO.
Magnolia Petroleum Co;
United States Geological Survey.
El Paso Natural Gas Co;
Oil Conservation Commission.

W. O . Hughes
312 S Foch St.
T og C, New Mex.

W. O. Hughes

15-9

El Paso Natural Gas Company

El Paso, Texas

December 17, 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**

file

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

**Re: Lindrith Unit Area
I Sec. No. 713
Rio Arriba County, New Mexico
APPROVAL OF INITIAL PARTICIPATING
AREA AND FIRST THROUGH THIRD EXPANDED
PARTICIPATING AREAS
Pictured Cliffs Formation**

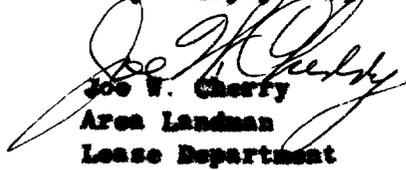
Gentlemen:

This is to advise that the Initial Participating Area, effective August 4, 1955, and First through Third Expanded Participating Areas, effective October 1, 1955, August 1, 1956, and September 1, 1956, respectively, were approved as follows:

1. Director, United States Geological Survey, December 6, 1956.
2. Commissioner of Public Lands of the State of New Mexico, November 1, 1956.
3. Oil Conservation Commission of the State of New Mexico, November 1, 1956.

Copies of this letter are being sent to the Working Interest Owners indicated below.

Very truly yours,


**Joe W. Cherry
Area Landman
Lease Department**

**JWC:ES:cr
cc: Magnolia Petroleum Company P Y
Delhi-Taylor Oil Corporation**

159

El Paso Natural Gas Company

El Paso, Texas

December 4, 1956

file

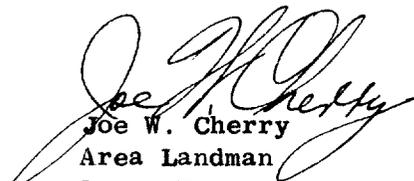
Oil Conservation Commission
of the State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Re: Lindrith Unit

Gentlemen:

Please find enclosed one (1) copy of Ratification and Joinder executed by Fanny J. Hill. We respectfully request that you process this Ratification and Joinder in the usual manner to effectively commit Fanny J. Hill's 3.125% royalty interest under Tract 13 and 6.250% royalty interest under Tract 14 to the Lindrith Unit.

Very truly yours,


Joe W. Cherry
Area Landman
Lease Department

JWC:HG:cr
Enclosures

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Lindrith 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

920 Silver S.E.
510 State Ave. N.W.

Albuquerque, New Mexico

Date: 11-6-56

Date: _____

SIGNATURE

Fanny J. Hill

Fanny J. Hill

APPROVED AND CONSENTED TO:
MAGNOLIA PETROLEUM COMPANY

By L. A. Thompson
Vice President
WORKING INTEREST OWNER

APPROVED AND CONSENTED TO:
DELHI-TAYLOR OIL CORPORATION

By Cecil D. Robinson
Vice President
WORKING INTEREST OWNER

APPROVED AND CONSENTED TO:
EL PASO NATURAL GAS COMPANY

By H. J. Hill
Vice President
UNIT OPERATOR & WORKING INTEREST OWNER

JAP
L.A.T.

KRW

[Handwritten mark]

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARriba COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

L. D. Dalton

Elvina Dalton

Address Lindrith, New Mexico

Date March 13, 1950

Address _____

Date _____

Address _____

Date _____

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

TRACT NO. 19 (E $\frac{1}{2}$ Sec. 33-24N-3W)

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) SS

On this 13th day of March, 19 50, before me personally appeared Lee D. Dalton and wife, Alvona Dalton, to me known to be the person, described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires
My commission expires March 29, 1953

Mildred K. Ryding
Notary Public

STATE OF _____)
COUNTY OF _____) SS

On this _____ day of _____, 19____, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires _____

Notary Public

STATE OF _____)
COUNTY OF _____) SS

On this _____ day of _____, 19____, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires _____

Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

E. W. Horn
Beola Stephens
Address 847 W. Los Griegos Rd,
Albuquerque, N. M.
Date January 7, 1950

TRACT #23

Tenney McDowell
Olive Johnson
Address 1004 E. Gold (Presbyter-
ian Son.), Albuquerque, N. M.
Date January 7, 1950

TRACT #23

Albert P. Grant
Jessie Grant
Address Lindrith, New Mexico
Date January 7, 1950

TRACT #20 and TRACT #21

STATE OF NEW MEXICO } SS
COUNTY OF BERNALILLO

On this 7th day of January, 19 50, before me personally appeared R. B. Horn; and Beola Stephens, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires
Aug 19, 1952

[Signature]
Notary Public

STATE OF NEW MEXICO } SS
COUNTY OF BERNALILLO

On this 7th day of January, 19 50, before me personally appeared Tenney McDowell; and Olive Johnson, 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.

My Commission Expires
Aug 19, 1952

[Signature]
Notary Public

STATE OF NEW MEXICO } SS
COUNTY OF BERNALILLO

On this 7th day of January, 19 50, before me personally appeared Albert P. Avant and Jessie Avant, 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.

My Commission Expires
Aug 19, 1952

[Signature]
Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARriba COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

Manie Singleton

TRACT #23

Address Indianoma, Oklahoma

Date January 24, 1950

Edmond L. Singleton

Bessie M. Singleton

TRACT #23

Address route #2, Indianoma, Okla.

Date January 26, 1950

Mayme Belle Pepper

TRACT #23

Address 1816 - 11th St.,
Wichita Falls, Texas

Date January 28, 1950

Lahoma Allen

B. J. Allen
2201 Ave. I, Okla.
Oklahoma City 10, Okla.

TRACT #23

Address _____

Date January 30, 1950

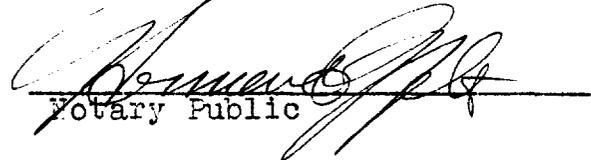
Date _____

STATE OF OKLAHOMA }
COUNTY OF COMANCHE } SS

On this 20th day of January, 19 50, before me personally appeared Marie Singleton, a widow, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that she executed the same as her 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
July 7, 1955

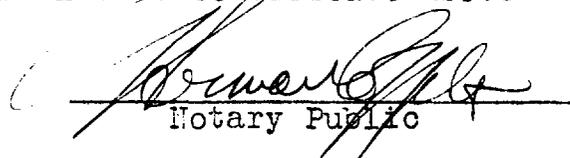

Notary Public

STATE OF OKLAHOMA }
COUNTY OF COMANCHE } SS

On this 20th day of January, 19 50, before me personally appeared Edward E. Singleton and wife, Bessie M. Singleton, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires
July 7, 1955


Notary Public

STATE OF TEXAS }
COUNTY OF WHEELER } SS

On this 20th day of January, 19 50, before me personally appeared Marie Belle Pappas, a widow, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that she executed the same as her 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
June 1st 1951

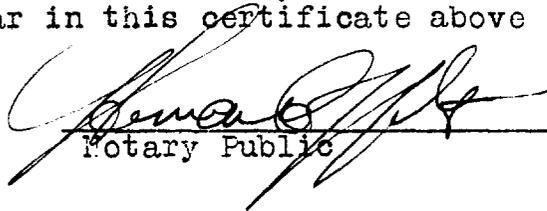

Notary Public

STATE OF OKLAHOMA)
COUNTY OF COMBEE) SS

On this ~~20th~~ day of January, 1950, before me personally appeared Lebora Allen and husband, D. J. Allen, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that ~~he~~ executed the same as their free act and deed.

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

My Commission Expires
7-2-53


Notary Public

STATE OF _____)
COUNTY OF _____) SS

On this ____ day of _____, 19____, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires

Notary Public

STATE OF _____)
COUNTY OF _____) SS

On this ____ day of _____, 19____, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires

Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

J. Vinson Dornell

TRACT #12 (NE 33-24N-27) and
TRACT #14 (SW 35-25N-37) ✓

Address 605 Fitzgerald Road,
Albuquerque, New Mexico
Date January 7, 1950

Ira C. Myers
Juanita H. Myers

TRACT #14 (SE 35-25N-37) and
TRACT #23 (SE 34 & NE 34 & N 34
34-25N-37) ✓

Address Rural route, Albuquerque,
N. M.
Date January 7, 1950

Address _____

Date _____

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS

On this 7th day of January, 1950, before me personally appeared J. Vinson Daniell, unmarried, 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.

My Commission Expires

Aug 19, 1953

Walter D. Rice
Notary Public

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS

On this 7th day of January, 1950, before me personally appeared Ira A. Myers and Juanita H. Myers, 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.

My Commission Expires

Aug 19, 1952

Walter D. Rice
Notary Public

STATE OF _____ }
COUNTY OF _____ } SS

On this _____ day of _____, 19____, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires

Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE
LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

L. A. Nordan

Mrs. L. A. Nordan

Address 711 Milam Building
San Antonio, Texas

Date February 27, 1950

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY RE-
FERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

TRACT NO. 11 (S $\frac{1}{2}$ N $\frac{1}{2}$, N $\frac{1}{2}$ E $\frac{1}{2}$ Sec. 17-
24N-2W)

TRACT NO. 20 (E $\frac{1}{2}$ Sec. 5-24N-2W)

TRACT NO. 21 (W $\frac{1}{2}$ Sec. 9-24N-2W)

STATE OF TEXAS |
 | SS.
COUNTY OF BEXAR |

On this 27th day of February, 1950, before me personally appeared L. A. Nordan and Mrs. L. A. Nordan, 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.

My Commission Expires:

June 1, 1951

Elizabeth Scroggin
Notary Public

Notary Public
Rio Arriba County, Texas

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE
LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

SAFEMOUNT OIL COMPANY

By

Harold W. ...
President

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY RE-
FERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

TRACT NO. 11 (S $\frac{1}{2}$ N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$ Sec. 17-
24N-2W)

TRACT NO. 20 (E $\frac{1}{2}$ Sec. 5-24N-2W)

TRACT NO. 21 (W $\frac{1}{2}$ Sec. 9-24N-2W)

ATTEST:

Bert M. ...
asst. Secretary

Address 916 Milan Building,
San Antonio, Texas

Date February 25th, 1950

THE STATE OF TEXAS

SS

COUNTY OF BEXAR

On this 25th day of February, A.D., 1950 before
me appeared Harold D. Herndon, to me personally known,

who, being by me duly sworn, did say that he is the _____ President of
SALTMOUNT OIL COMPANY, and that the seal affixed to said instrument is
the corporate seal of said corporation and that said instrument was
signed and sealed in behalf of said corporation by authority of its board
of directors, and said Harold D. Herndon
acknowledged said instrument to be the free act and deed of said corpora-
tion.

In witness whereof, I have hereunto set my hand and official seal
on the day and year in this certificate first above written.

My Commission Expires:

5/31/51


Notary Public

LUCIAN L. MORRISON

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

SIGNATURES AND ADDRESSES

Re L. Chickenshead
Maud N. Chickenshead

Address 3020 N. W. 21st Street,
Oklahoma City, Oklahoma.

Date March 17, 1950

TRACT NO. 26 (NE $\frac{1}{4}$ Section 12-24N-3W)

J. J. Lunsford
Katherine J. Chickenshead

Address 633 S. Hadden Street,
El Reno, Oklahoma

Date _____

TRACT NO. 26 (NE $\frac{1}{4}$ Sec. 12-24N-3W)

Rosalie Rinista
Harold G. Rinista

Address Route #1, Pratt, Kansas

Date March 18, 1950

TRACT NO. 26 (NE $\frac{1}{4}$ Sec. 12-24N-3W)

STATE OF Oklahoma }
COUNTY OF Oklahoma } SS

On this 17 day of March, 19 50, before me personally appeared Ray L. Clinkenbeard and wife, Haud N. Clinkenbeard, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires

9-3-52

Bill P. Lanier
Notary Public

STATE OF OKLAHOMA }
COUNTY OF CANADIAN } SS

On this 17th day of March, 19 50, before me personally appeared T. J. Clinkenbeard and wife, Kathryn T. Clinkenbeard, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires

11-17-57

Sallie Jean Cash
Notary Public

STATE OF KANSAS }
COUNTY OF FRATT } SS

On this 18th day of March, 19 50, before me personally appeared Rosalie Rieniets and husband, Harold G. Rieniets, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires

My Commission Expires Feb. 23, 1955

[Signature]
Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

Eva Blanche Austin
Ernest T. Austin

Address 703 N 6th St., Perry, Okla. TRACT NO. 26 (NE $\frac{1}{4}$ Sec. 12-24N-3W)

Date March 18, 1950

Clifford W. Chickenshead
Julianne Chickenshead

Address 527 E. Seneca Street, TRACT NO. 26 (NE $\frac{1}{4}$ Sec. 12-24N-3W)
McAlester, Oklahoma

Date March 20, 1950

Spald H. Chickenshead
Leatrice E. Chickenshead

Address 1035 Seneca Street TRACT NO. 26 (NE $\frac{1}{4}$ Sec. 12-24N-3W)
Memphis, Tennessee

Date March 21, 1950

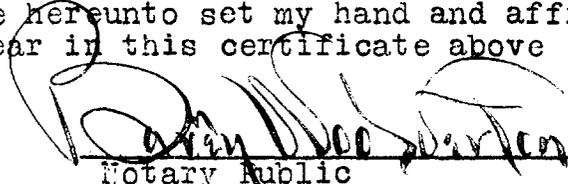
STATE OF OKLAHOMA }
COUNTY OF NOBLE } SS

On this 18th day of March, 1950, before me personally appeared Eva Blanche Austin and husband, Ernest T. Austin, 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.

My Commission Expires

11-17-1952


Notary Public

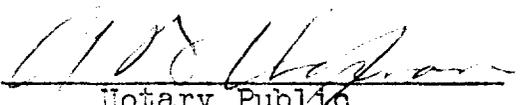
STATE OF OKLAHOMA }
COUNTY OF PITTSBURG } SS

On this 20th day of March 1950, before me personally appeared Clifford I. Clinkenbeard and wife, Julianna Clinkenbeard, 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.

My Commission Expires

Sept 26, 1950


Notary Public

STATE OF Tennessee }
COUNTY OF Shelby } SS

On this 21st day of March 1950, before me personally appeared Hal H. Clinkenbeard and wife, Harriett E. Clinkenbeard, 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.

My Commission Expires

My Commission Expires Jan. 9, 1954


Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

Vera C. Wood
W. O. Bond

Address 7801 Valerye St., Houston, Tex. TRACT NO. (NE 1/4 Sec. 12-24N-3W)

Date March 25, 1959

Address _____

Date _____

Address _____

Date _____

STATE OF TEXAS }
COUNTY OF HARRIS } SS

On this 28th day of March, 19 50, before me personally appeared Vera G. Dowd and husband, W. G. Dowd, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires

June 1, 1951

Sarah Shannon
Notary Public

SARAH SHANNON
Notary Public, in and for Harris County, Texas

STATE OF _____ }
COUNTY OF _____ } SS

On this ____ day of _____, 19____, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires

Notary Public

STATE OF _____ }
COUNTY OF _____ } SS

On this ____ day of _____, 19____, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires

Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARriba COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

Clester Singleton
Leora May Singleton
Address route #3, Linton, Okla.
Date January 26, 1950

TRACT #23

Ruby Mae Marcum
D. J. Marcum
Address route #1, Indianhom, Okla.
Date January 26, 1950

TRACT #23

Robbie Joe Singleton
Irene Singleton
Address box 10, Indianhom, Okla.
Date January 26, 1950

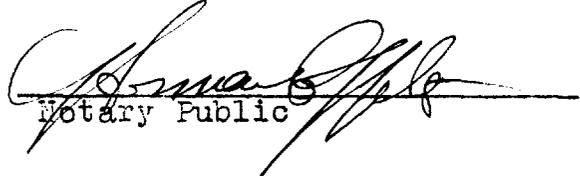
TRACT #23

STATE OF OKLAHOMA }
COUNTY OF COMANCHE } SS

On this 26th day of JANUARY, 19 50, before me personally appeared Chester Singleton and wife, Laura May Singleton, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires
July 7, 1953

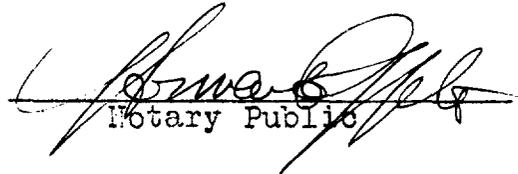

Notary Public

STATE OF OKLAHOMA }
COUNTY OF COMANCHE } SS

On this 26th day of January, 19 50, before me personally appeared Mary Mae Marcum and husband, D. J. Marcum, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires
July 7, 1953


Notary Public

STATE OF OKLAHOMA }
COUNTY OF COMANCHE } SS

On this 26th day of January, 19 50, before me personally appeared Bobbie Joe Singleton and wife, Irene Singleton, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires
July 7, 1953


Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

SIGNATURES AND ADDRESSES

Ernest Willis Mehar
Klossie Nell Mehar

TRACTS NOS. 17 & 18

Address 2816 Porter Ave.
El Paso, Texas
Date December 27, 1949

W. B. Hughes
Agatha B. Hughes

TRACT NO. 16

Address 620 Charles St., Hot
Springs, N. M.
Date January 31, 1950

Address _____

Date _____

STATE OF TEXAS }
COUNTY OF EL PASO } SS

On this 27th day of December, 19 49, before me personally appeared ERNEST WILLIS MEHARG and KLOSSIE NELL MEHARG, 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.

My Commission Expires _____

[Signature]
Notary Public

STATE OF NEW MEXICO }
COUNTY OF RIO ARriba } SS

S. B. HUNT, Notary Public
In and for El Paso County, Texas
My commission expires June 1, 1951

On this 31st day of January 19 50, before me personally appeared W. O. Hughes and Agatha B. Hughes, 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.

My Commission Expires
May 16 - 1951

[Signature]
Notary Public

STATE OF _____ }
COUNTY OF _____ } SS

On this _____ day of _____ 19____, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires _____

Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARriba COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

SIGNATURES AND ADDRESSES

John A.
Anderson:

John A. Anderson

Georgia Fay
Anderson:

Georgia Fay Anderson

TRACT NO. 20 and TRACT NO. 21

Address Aztec, New Mexico

Date _____

Address _____

Date _____

Address _____

Date _____

STATE OF NEW MEXICO }
COUNTY OF SAN JUAN } SS

On this 12 day of January, 1950, before me personally appeared John R. Anderson and Georgia Fay Anderson, his wife, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as their free act and deed.

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

My Commission Expires
Oct 31, 1951

Mary K Taylor
Notary Public

STATE OF NEW MEXICO }
COUNTY OF SAN JUAN } SS

On this ___ day of January 1950, before me personally appeared J _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires

Notary Public

STATE OF _____ }
COUNTY OF _____ } SS

On this ___ day of _____ 19___, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires

Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

G. B. Boring
Erema S. Boring
Address 3044 Barcelona Rd,
Albuquerque, N. M.
Date January 6, 1950

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT
N² 29-24N-2W (Tr #12); S^{1/2} & S^{1/4}NW^{1/4}
10-24N-2W (Tr #13); S^{1/2} 35-25N-3W
(Tr #14); S^{1/2} & S^{1/4}NW^{1/4} 28 & E^{1/2}SE^{1/4} 29,
24N-2W (Tr #18); N^{1/2} 33-24N-2W (Tr
#12); W^{1/2} 9-24N-2W (Tr #21).

W. C. Prick
Jane Prick
Address 124 Willow Road,
Albuquerque, N. M.
Date January 6, 1950

S^{1/2} & S^{1/4}NW^{1/4} 28 & E^{1/2}SE^{1/4} 29-24N-2W
(Tract #12)

A. G. Johnson
Elveda Johnson
Address 3030 Taleta Road,
Albuquerque, N. M.
Date January 6, 1950

S^{1/2} & S^{1/4}NW^{1/4} 10-24N-2W (Tract #13)
N^{1/2} 33-24N-2W (Tract #12)

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS

On this 14 day of January, 19 50, before me personally appeared G. E. Boring and Erema S. Boring, 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.

My Commission Expires

Dec 19, 1952

Melvin D. Ruediger
Notary Public

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS

On this 14 day of January 19 50, before me personally appeared M. C. Price and June Price, 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.

My Commission Expires

Dec 19, 1952

Melvin D. Ruediger
Notary Public

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS

On this 14 day of January 19 50, before me personally appeared A. G. Johnson and Elveda Johnson, his wife, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

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

My Commission Expires

Dec 19, 1952

Melvin D. Ruediger
Notary Public

VALIDATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE
LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this validation is executed by the undersigned "Parties hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
HERE ATTACHED TO UNIT AGREEMENT

Jerry Curtis

TRACT NO. 11

Conita D. Curtis

Address: Artesia, New Mexico

Date: 3-13-50

Estelle D. Yates

TRACT NO. 11

Address: Artesia, New Mexico

Date: 3-13-50

Martin Yates III

TRACT NO. 11

Lillie M. Yates

Address: Artesia, New Mexico

Date: 3-13-50

STATE OF NEW MEXICO)
) ss
COUNTY OF BUDY)

On this 13th day of March, 1950, before me personally appeared JERRY CURTIS and LONETA S. CURTIS, 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.

My commission expires:
March 6, 1951


Notary Public

STATE OF NEW MEXICO)
) ss
COUNTY OF BUDY)

On this 13th day of March, 1950, before me personally appeared S. P. YATES and ESTELLE H. YATES, his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that t he y executed the same as their free act and deed.

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

My commission expires:
March 6, 1951

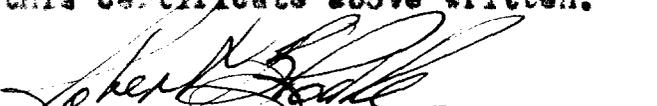

Notary Public

STATE OF NEW MEXICO)
) ss
COUNTY OF BUDY)

On this 13th day of March, 1950, before me personally appeared MARTIN YATES III and LILLIE M. YATES, 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.

My commission expires:
March 6, 1951


Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY
REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

John Ehlers
Dorothy Ehlers
Address 452 Navilon Drive,
Albuquerque, N. M.
Date January 6, 1950

TRACT NO. 14

Harold F. McRay
Clayton H. McRay
Address 621 S. Aliso Av.,
Albuquerque, N. M.
Date January 12, 1950

TRACT NO. 24 and TRACT NO. 27

Address _____
Date _____

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS

On this 10th day of January, 1950, before me personally appeared John Ehlen and Dorothy Ehlen, 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.

My Commission Expires

Aug 19, 1952

McKay D. Russell
Notary Public

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } SS

On this 12th day of January 1950, before me personally appeared Horace F. McKay, Jr. and Elmira K. McKay, 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.

My Commission Expires

Aug. 9, 1951

James Albert Stevenson
Notary Public

STATE OF _____ }
COUNTY OF _____ } SS

On this _____ day of _____ 19____, before me personally appeared _____, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

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

My Commission Expires

Notary Public

RATIFICATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION
OF THE LINDRITH UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

The undersigned "Parties Hereto" (whether one or more) do hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, dated December 9, 1948, and approved by the New Mexico Oil Conservation Commission on October 20, 1948, and by the Commissioner of Public Lands of the State of New Mexico on December 10, 1948, and having read said Unit Agreement and being familiar with all the terms and conditions thereof, and being desirous of committing the oil and gas leasehold interests of the undersigned, whether royalty, working interest, or otherwise, in and to the lands embraced in said Unit Area as described in said Unit Agreement, do hereby join in said Unit Agreement and ratify the same exactly as if the undersigned had executed the original of said Unit Agreement, and do hereby commit to said Unit Agreement the interests described opposite the respective signatures of the undersigned.

IN WITNESS WHEREOF, this Ratification is executed by the undersigned "Parties Hereto" as of the date set opposite their respective signatures.

SIGNATURES AND ADDRESSES

DESCRIPTION OF INTERESTS COMMITTED
TO LINDRITH UNIT AGREEMENT BY REFERENCE TO TRACT NUMBERS EXHIBIT
"B" ATTACHED TO UNIT AGREEMENT

CASE-POMEROY OIL CORPORATION

By

Jack Richard
Vice President

TRACT 12 (W $\frac{1}{2}$ 29-24N-2W; SW $\frac{1}{4}$ &
SE $\frac{1}{4}$ NW $\frac{1}{4}$ 28 & E $\frac{1}{2}$ SE $\frac{1}{4}$ 29-24N-2W; N $\frac{1}{2}$ 33-
24N-2W);
TRACT 25 (N $\frac{1}{2}$ 21-24N-2W)

ATTEST:

Georg Jaller
Secretary

Address: Box 2047, Okmulgee, Okla.

Date: February 8, 1950

MONTOYA OIL COMPANY, INC.

By

A. B. Sewer
Vice President

TRACT 12 (W $\frac{1}{2}$ 29-24N-2W; SW $\frac{1}{4}$ &
SE $\frac{1}{4}$ NW $\frac{1}{4}$ 28 & E $\frac{1}{2}$ SE $\frac{1}{4}$ 29-24N-2W; N $\frac{1}{2}$ 33-
24N-2W);
TRACT 25 (N $\frac{1}{2}$ 21-24N-2W)

ATTEST:

Georg Jaller
Secretary

Address: Box 2047, Okmulgee, Okla.

Date: February 10 - 1950

THE STATE OF ~~OKLAHOMA~~ ^{NEW YORK})
) ss
COUNTY OF NEW YORK)

On this 8th day of February, A.D., 1950, before me appeared H. A. Richards, to me personally known, who, being by me duly sworn, did say that he is the Vice President of CASE-POMEROY OIL CORPORATION, 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. A. Richards acknowledged said instrument to be the free act and deed of said corporation.

In witness whereof, I have hereunto set my hand and official seal on the day and year in this certificate first above written.

My commission expires:

Esther A. Johnson
Notary Public

ESTHER A. JOHNSON
Notary Public, State of New York
Qualified in Kings Co. No. 24-1077750
Cert. Filed in Kings Co. Clk's No. 136
N. Y. Co. Clk's & Reg's Offices
Commission Expires March 20, 1951

THE STATE OF ~~OKLAHOMA~~ ^{NEW YORK})
) ss
COUNTY OF OKMULGEE)

On this 10th day of February, A.D., 1950, before me appeared A. B. Settle, to me personally known, who, being by me duly sworn, did say that he is the Vice President of MONTOLA OIL COMPANY, INC., a corporation, and that the seal affixed to said instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said A. B. Settle acknowledged said instrument to be the free act and deed of said corporation.

In witness whereof, I have hereunto set my hand and official seal on the day and year in this certificate first above written.

My commission expires:

E. L. Davis
Notary Public

My Commission Expires Mar. 14, 1951