



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Box 26124
Albuquerque, New Mexico 87125

JUN 30 1978

El Paso Natural Gas Company
Attention: Mr. James R. Permenter
P. O. Box 1492
El Paso, Texas 79978

Gentlemen:

no. 159

The twenty-first revision of the Pictured Cliffs participating area for the Lindrith unit agreement, Rio Arriba County, New Mexico, was approved on this date by the Oil and Gas Supervisor, U. S. Geological Survey, effective January 1, 1977.

The twenty-first revision adds 320.00 acres described as the SE $\frac{1}{4}$ sec. 21, and the SE $\frac{1}{4}$ sec. 28, T. 24 N., R. 2 W., N.M.P.M. The addition of the SE $\frac{1}{4}$ sec. 21 is based on information obtained through the completion of unit well No. 89 as a paying well pursuant to the terms of the unit agreement. Such well was tested December 1, 1976, using the Pitot tube method with an after frac gauge of 203 MCF of gas per day from the Pictured Cliffs formation interval 3,071 to 3,156 feet. The SE $\frac{1}{4}$ sec. 28, is based on information obtained through the completion of unit well No. 90 as a paying well pursuant to the terms of the unit agreement. Such well was tested on December 29, 1976, using the Pitot tube method with an after frac gauge of 669 MCF of gas per day from the Pictured Cliffs formation interval 3,108 to 3,170 feet.

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

Sincerely yours,

(ORIG. SGD.) GENE F. DANIEL

ACTING Oil and Gas Supervisor, SPCA

Enclosures (3)

cc:
BLM, Santa Fe (ltr. only)
Com. Pub. Lands, Santa Fe (ltr. only)
NMOCC, Santa Fe (ltr. only) - Copy for

January 31, 1978

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

no. 157

Re: Lindrith Unit
Rio Arriba County, New Mexico
1978 DRILLING PROGRAM

Gentlemen:

The 1978 Drilling Program for the referenced unit was approved by the regulatory bodies on the following dates:

United States Geological Survey	January 26, 1978
Commissioner of Public Lands	January 19, 1978
Oil Conservation Commission	January 19, 1978

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

Yours very truly,



Derold Maney
Landman
Land Department
Energy Resource Development

DM/sf

Lindrith Unit 3.0

LINDRITH UNIT
WORKING INTEREST OWNERS

Continental Oil Company

Mobil Oil Corporation (3)

Tenneco Oil Company



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Box 26124
Albuquerque, New Mexico 87125

January 26, 1973

20. 159

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

Gentlemen:

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 State officials.

Three approved copies are enclosed.

Sincerely yours,

Orig. Signed - JAMES W. SUTHERLAND

JAMES W. SUTHERLAND
Area Oil and Gas Supervisor

Enclosures

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

← This Copy for

State of New Mexico



Commissioner of Public Lands

PHIL R. LUCERO
COMMISSIONER

January 19, 1978

P. O. BOX 1148
SANTA FE, NEW MEXICO 87501

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

No. 159

Re: Lindrith Unit
Rio Arriba County, New Mexico
1978 DRILLING PROGRAM

ATTENTION: Mr. D. W. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1978 Drilling Program for the Lindrith Unit, Rio Arriba County, New Mexico. Your plan calls for the drilling of 4 Pictured Cliff wells during 1978.

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

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

Enclosed is one approved copy for your files.

Very truly yours,

PHIL R. LUCERO
COMMISSIONER OF PUBLIC LANDS

BY:
RAY D. GRAHAM, Director
Oil and Gas Division

PHL/RDG/s
encls.
cc:

OCC-Santa Fe, New Mexico ✓
USGS-Reswell, New Mexico
USGS-Albuquerque, New Mexico

RECEIVED
JAN 20 1978
Oil Conservation Commission

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 18, 1978

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

Attention: D. N. Canfield

Re: Case No. 159
Lindrith Unit
1978 Drilling Program

Gentlemen:

We hereby approve the 1978 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.

One approved copy of the Drilling Program is returned herewith.

Very truly yours,

JOE D. RAMEY
Secretary-Director

JDR/LT/fd
enc.

cc: U.S.G.S. - Roswell
Commissioner of Public Lands

C
O
P
Y

El Paso NATURAL GAS
COMPANY

JAN 13 1978
P.O. BOX 1482
EL PASO, TEXAS 79978
PHONE: 915-543-2900

January 9, 1978

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

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

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

No. 159
Appendix

Re: Lindrith Unit I Section No. 713
Rio Arriba County, New Mexico
1978 DRILLING PROGRAM

Gentlemen:

By letter dated February 25, 1977, El Paso Natural Gas Company, as Unit Operator of the Lindrith Unit, filed a Drilling Program covering the subject Unit for the calendar year 1977 providing for the drilling of four (4) Pictured Cliffs wells. All four wells were timely drilled. Wells Nos. 87 & 88 were drilled within the boundaries of the Pictured Cliffs Participating Area and did not cause expansions. Wells Nos. 91 & 92 have been evaluated and determined commercial. Applications are being prepared for submittal to the Regulatory agencies proposing the expansions.

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

Pictured Cliffs (Gas)	76
Pictured Cliffs (Non-commercial)	5
Dakota	1
Gallup	1
Plugged and Abandoned	12
	<u>95</u>

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, is submitting this Drilling Program providing for the drilling of the following wells during the calendar year 1978.

<u>Well No.</u>	<u>Drilling Block</u>	<u>Formation</u>
84	SE/4 Section 36, T-24-N, R-3-W	Pictured Cliffs
93	SE/4 Section 29, T-24-N, R-2-W	Pictured Cliffs
94	NE/4 Section 18, T-24-N, R-2-W	Pictured Cliffs
95	NE/4 Section 10, T-24-N, R-3-W	Pictured Cliffs

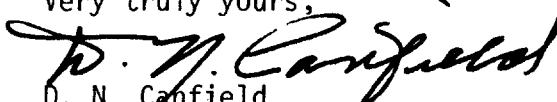
All working interest owners have been contacted, and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

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

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

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

Very truly yours,


D. N. Canfield
Director of Land
Energy Resource Development

DNC/DM/sf
Attachments
Lindrith Unit, 3.0

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

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


Tenneco Oil Company
Attention: Mr. A. D. Rial
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: 1/19/78

The foregoing approvals are for the 1978 Drilling Program for the
Lindrith Unit, I Sec. No. 713, 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

NOV 23 1977

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

November 18, 1977

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 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 Pictured Cliffs wells have been completed upon acreage committed to this Unit. These wells are as follows:

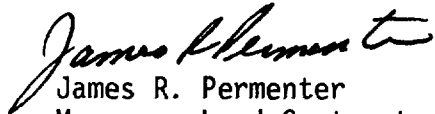
The Lindrith Unit #87 Well, located 1000' from the North line and 1730' from the West line of Section 28, Township 24 North, Range 2 West, N.M.P.M., was spudded on June 25, 1977, and completed on July 27, 1977, at a total depth of 3161'. The Pictured Cliffs Formation at the intervals of 3036', 3046', 3054', 3060', 3082', 3090', 3098', and 3106', was treated with a sand-water fracturing process on July 8, 1977. The well was shut-in on July 20, 1977, and after being shut-in for seven (7) days, the Pictured Cliffs Formation was tested on July 27, 1977, using the Pitot tube method with an after frac gauge of 1065 MCF/D, with an SIPC of 478 psia. The spacing unit for this well is described as the NW/4 of Section 28, Township 24 North, Range 2 West, N.M.P.M., containing 160.00 acres.

The Lindrith Unit #88 Well, located 810' from the North line and 850' from the West line of Section 29, Township 24 North, Range 2 West, N.M.P.M., was spudded on June 8, 1977 and completed on July 27, 1977, at a total depth of 3088'. The Pictured Cliffs Formation at the intervals of 2952', 3007', 3012', 3017', 3022', 3025', and 3036', was treated with a sand-water fracturing process on June 27, 1977. The well was shut-in on July 20, 1977, and after being shut-in for seven (7) days, the Pictured Cliffs Formation was tested on July 27, 1977, using the Pitot tube method with an after frac guage of 393 MCF/D, with an SIPC of 928 psia. The spacing unit for this well is described as the NW/4 of Section 29, Township 24 North, Range 2 West, N.M.P.M., containing 160.00 acres.

The spacing unit for both of these wells was included in the Lindrith Unit, Second Expanded Pictured Cliffs Participating Area effective August 1, 1956, and the completion of these wells does not warrant any further expansion of the Pictured Cliffs Participating Area.

A Copy of this letter is being sent to the working interest owners shown on the attached sheet.

Very truly yours,



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

JRP:DM:is

Attachment

Lindrith Unit, 4.1.1

LINDRITH UNIT
WORKING INTEREST OWNERS

Continental Oil Company

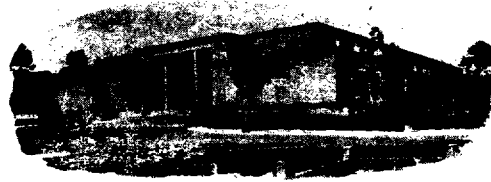
Mobil Oil Corporation (3)

Tenneco Oil Company

State of New Mexico



PHIL R. LUCERO
COMMISSIONER



Commissioner of Public Lands

November 18, 1977

P. O. BOX 1148
SANTA FE, NEW MEXICO 87501

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

Re: Lindrith Unit
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE
TWENTY-FIRST EXPANDED PARTICIPATING
AREA, Pictured Cliffs Formation
Effective January 1, 1977

ATTENTION: Mr. James R. Permenter

Gentlemen:

The Commissioner of Public Lands has this date approved the Twenty-First Expanded Participating Area, Pictured Cliffs Formation, for the Lindrith Unit, Rio Arriba County, New Mexico. Such expansion increased the Pictured Cliffs Participating area by 320 acres. Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Commission.

Enclosed is one approved copy for your files.

Very truly yours,

PHIL R. LUCERO
COMMISSIONER OF PUBLIC LANDS

BY:
RAY D. GRAHAM, Director
Oil and Gas Division

PRL/RDG/s
encls.
cc:

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

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

November 15, 1977

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

Attention: James R. Permenter

Re: Case No. 159
Lindrith Unit
Twenty-First Expanded
Participating Area for the
Pictured Cliffs Formation

Gentlemen:

We hereby approve the Twenty-First Expanded Participating Area for the 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.

One approved copy of the Expanded Participating Area is returned herewith.

Very truly yours,

JOE D. RAMEY
Secretary-Director

JDR/LT/fd
enc.

cc: U.S.G.S. - Roswell
Commissioner of Public Lands

November 10, 1977

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

11-1977

No. 159

Re: Lindrith Unit Agreement,
1 Section No. 713
Rio Arriba County, New Mexico
REQUEST FOR APPROVAL OF THE
TWENTY-FIRST EXPANDED PARTICIPATING
AREA, Pictured Cliffs Formation
Effective January 1, 1977

Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, ~~submits for your approval~~ the Twenty-First 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:

Twenty-First Expanded Participating Area - Effective January 1, 1977

<u>Description of Lands</u>	<u>Acres</u>
Township 24 North, Range 2 West, N.M.P.M.	
Section 21: SE/4	160.00
Section 28: SE/4	160.00
TOTAL:	<u>320.00</u>

The lands described above are proven productive by the following:

The Lindrith Unit #89 Well, located 890' from the South line and 1750' from the East line of Section 21, Township 24 North, Range 2 West, N.M.P.M., was spudded on October 4, 1976, and completed on December 1, 1976, at a total depth of 3222'. The Pictured Cliffs Formation at the intervals of 3071', 3077', 3093', 3106', 3118', 3134', 3141', and 3156' was treated with a sand-water fracturing process on October 29, 1976. The well was shut-in on November 24, 1976, and after being shut-in for seven (7) days, the Pictured Cliffs Formation was tested on December 1, 1976, using the Pitot tube method with an after frac guage of 203 MCF/D, with an SIPC of 800 psia. The spacing unit for this well is described as the SE/4 of Section 21, Township 24 North, Range 2 West, N.M.P.M., containing 160.00 acres; and

The Lindrith Unit #90 Well, located 1850' from the South line and 1480' from the East line of Section 28, Township 24 North, Range 2 West, N.M.P.M., was spudded on October 5, 1976, and completed on December 29, 1976, at a total depth of 3208'. The Pictured Cliffs Formation at the intervals of 3108', 3115', 3130', 3134', 3147', 3159', 3163', and 3170' was treated with a sand-water fracturing process on December 6, 1976. The well was shut-in on December 22, 1976, and after being shut-in for seven (7) days, the Pictured Cliffs Formation was tested on December 29, 1976, using the Pitot tube method with an after frac guage of 669 MCF/D, with an SIPC of 880 psia. The spacing unit for this well is described as the SE/4 of Section 28, Township 24 North, Range 2 West, N.M.P.M., containing 160.00 acres.


The effective date for the Twenty-First Expanded Participating Area is determined as January 1, 1977, the first day of the month following the testing of the Lindrith Unit #89 and #90 Wells.

Attached hereto is Schedule XXII showing the Twenty-First 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 Twenty-First 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,



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

JRP:DM:is
Enclosures
Lindrith Unit 4.1

c: Continental Oil Company
Post Office Box 460
Hobbs, New Mexico 88240
Attention: Mr. L. P. Thompson

Mobil Oil Company (3)
Post Office Box 633
Midland, Texas 79701
Attention: Mr. J. D. Howard

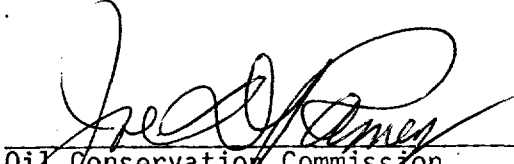
Tenneco Oil Company
Suite 1200, Lincoln Tower Building
1860 Lincoln Street
Denver, Colorado
Attention: Mr. D. D. Meyers

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: 11/15/77

SCHEDULE XXII

TWENTY-FIRST EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
LINDRITH UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT AC- TICIPAT
			OWNERSHIP	PERCENTAGE		
SF 078908	T-24-N, R-2-W	227.88	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL	12.50%	12.50%	<u>1.921961%</u>
	Sec. 18: Lots 1,2,4, E/2 NW/4, SE/4 SW/4			75.00%	75.00%	
				12.50%	12.50%	
				<u>100.00%</u>	<u>100.00%</u>	
SF 078909	T-24-N, R-2-W	1664.29	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL	12.50%	12.50%	<u>14.036776%</u>
	Sec. 19: Lots 3,4, E/2 SW/4, SE/4			75.00%	75.00%	
	Sec. 20: A11			12.50%	12.50%	
	Sec. 21: S/2			<u>100.00%</u>	<u>100.00%</u>	
	Sec. 30: Lots 1,2, E/2 NW/4, NE/4					
	T-24-N, R-3-W					
	Sec. 24: E/2 SE/4					
SF 078910	T-24-N, R-2-W	2216.53	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL	12.50%	12.50%	<u>18.694419%</u>
	Sec. 28: NE/4, SE/4, N/2 NW/4			75.00%	75.00%	
	Sec. 29: NE/4			12.50%	12.50%	
	Sec. 30: Lots 3,4, E/2 SW/4, SE/4			<u>100.00%</u>	<u>100.00%</u>	
	Sec. 31: Lots 1,2,3,4, E/2 W/2, E/2					
	Sec. 32: SE/4, W/2					
	T-24-N, R-3-W					
	Sec. 24: SW/4, W/2 SE/4					

SCHEDULE XX11

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT AC- PARTICIPAT
			OWNERSHIP	PERCENTAGE		
<u>TRACT 6</u>						
078912	T-24-N, R-3-W	2080.00	Royalty;	12.50%	12.50%	17.542913%
	Sec. 10: S/2		Working Interest;			
	Sec. 11: E/2, E/2 SW/4		E1 Paso Natural Gas Co.;	75.00%	75.00%	
	Sec. 12: SW/4, NW/4 NW/4,		ORRI;	12.50%	12.50%	
	S/2 SE/4, NW/4 SE/4			<u>100.00%</u>	<u>100.00%</u>	
	Sec. 13: E/2 NW/4, NW/4		TOTAL			
	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 7</u>						
078913	T-24-N, R-3-W	2080.00	Royalty;	12.50%	12.50%	17.542913%
	Sec. 15: All		Working Interest;			
	Sec. 16: All		E1 Paso Natural Gas Co.;	75.00%	75.00%	
	Sec. 21: W/2, NE/4		ORRI;	12.50%	12.50%	
	Sec. 22: N/2			<u>100.00%</u>	<u>100.00%</u>	
			TOTAL			
<u>TRACT 8</u>						
078914	T-24-N, R-3-W	640.00	Royalty;	12.50%	12.50%	5.397819%
	Sec. 25: All		Working Interest;			
			E1 Paso Natural Gas Co.;	75.00%	75.00%	
			ORRI;	12.50%	12.50%	
				<u>100.00%</u>	<u>100.00%</u>	
			TOTAL			

SCHEDULE XX11

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT AC- TICIPAT
			OWNERSHIP	PERCENTAGE		
078915	T-24-N, R-3-W	640.00	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI; TOTAL	12.50%	12.50%	5.397819%
	Sec. 23: NW/4, E/2			75.00%	75.00%	
	Sec. 36: NE/4			12.50%	12.50%	
				100.00%	100.00%	
Patented	T-24-N, R-2-W	*160.00	Royalty; Working Interest; El Paso Natural Gas Co.; Felmont Oil Co.; ORRI; TOTAL	9.375%	6.250%	1.012091%
	Sec. 29: NW/4			56.250%	56.250%	
	*Undivided 120.00			25.000%	.000%	
	net acres committed			9.375%	9.375%	
				100.000%	71.875%	
Patented	T-24-N, R-2-W	*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; TOTAL	6.250%	6.250%	.337364%
	Sec. 28: S/2 NW/4			37.500%	37.500%	
	*Undivided 40.00			12.500%	.000%	
	net acres committed			.625%	.000%	
				.312%	.000%	

SCHEDULE XX11

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT AC PARTICIPA
			OWNERSHIP	PERCENTAGE		
Patented	T-24-N, R-2-W	75.96	Royalty;	12.50%	12.50%	<u>.640653</u>
	Sec. 18: Lot 3,		Working Interest;			
	NE/4 SW/4		El Paso Natural Gas Co.;	75.00%	75.00%	
			ORRI;	12.50%	12.50%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
Patented	T-24-N, R-3-W	640.00	Royalty;	12.50%	12.50%	<u>5.397819</u>
	Sec. 9: All		Working Interest;			
			El Paso Natural Gas Co.;	75.00%	75.00%	
			ORRI;	12.50%	12.50%	
	TOTAL			<u>100.00%</u>	<u>100.00%</u>	
Patented	T-24-N, R-2-W	311.98	Royalty;	12.50%	6.25%	<u>2.631268</u>
	Sec. 19: Lots 1,2,		Working Interest;			
	E/2 NW/4, NE/4		El Paso Natural Gas Co.;	75.00%	75.00%	
			ORRI;	12.50%	12.50%	
	TOTAL			<u>100.00%</u>	<u>93.75%</u>	
Patented	T-24-N, R-3-W	320.00	Royalty;	12.50%	12.50%	<u>2.698910</u>
	Sec. 13: SW/4 NW/4,		Working Interest;			
	N/2 S/2,		El Paso Natural Gas Co.;	75.00%	75.00%	
	S/2 SE/4		ORRI;	12.50%	12.50%	
	Sec. 24: NE/4 NE/4			<u>100.00%</u>	<u>100.00%</u>	

SCHEDULE XX11

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT AC- PARTICIPAT
			OWNERSHIP	PERCENTAGE		
Patented	T-24-N, R-2-W Sec. 9: NW/4	160.00	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL	12.50%	12.50%	1.349455%
				81.25%	81.25%	
				6.25%	6.25%	
				100.00%	100.00%	
				TRACT 22		
Patented	T-24-N, R-3-W Sec. 14: NW/4, N/2 SW/4 Sec. 11: W/2 SW/4	320.00	*Royalty; Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL	12.50%	00.00%	2.698910%
				75.00%	75.00%	
				12.50%	12.00%	
				100.00%	87.00%	
				TRACT 24		
Patented	T-24-N, R-2-W Sec. 21: NW/4	160.00	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL	12.50%	3.125%	1.349455%
				75.00%	75.000%	
				12.50%	12.500%	
				100.00%	90.625%	
				TRACT 25		
Patented	T-24-N, R-3-W Sec. 12: NE/4 SE/4, S/2 NW/4, NE/4 NW/4	160.00	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL	12.50%	12.50%	1.349455%
				75.00%	75.00%	
				12.50%	12.50%	
				100.00%	100.00%	
				TRACT 27		

*Royalty interest not committed to Lindrith Unit

SCHEDULE XX11
 TWENTY-FIRST EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
 LINDRITH UNIT AREA

RECAPITULATION

Description of Lands in Participating Area;

<u>Township 24 North, Range 2 West, N.M.P.M.</u>	
Section 9: NW/4	
Section 18: Lots 1,2,3,4, E/2 W/2 (W/2)	
Section 19: Lots 1,2,3,4, E/2 W/2, E/2 (A11)	
Section 20: A11	
Section 21: W/2, SE/4	
Section 28: N/2, SE/4	
Section 29: N/2	
Section 30: Lots 1,2,3,4, E/2 W/2, E/2 (A11)	
Section 31: Lots 1,2,3,4, E/2 W/2, E/2 (A11)	
Section 32: SE/4, W/2	
<u>Township 24 North, Range 3 West, N.M.P.M.</u>	
Section 9: A11	
Section 10: S/2	
Section 11: E/2, SW/4	
Section 12: SE/4, W/2	
Section 13: A11	
Section 14: A11	
Section 15: A11	
Section 16: A11	
Section 21: W/2, NE/4	
Section 22: N/2	
Section 23: N/2, SE/4	
Section 24: A11	
Section 25: A11	
Section 36: NE/4	
Total Number of Acres in Participating Area:	11,936.64
Total Number of Acres Participating:	11,856.64