EI Paso Natural Gas Company
UNIT AREA EXPANSION SCHEDULE — SAN JUAN BASIN
Form 21.71 (2-72)

# SCHEDULE XXVI IWENTY-FIFTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION LINDRITH UNIT AREA

PRESENT ACTUAL	PARTICIPATION	2.952658%				12.669069%				17.481868%			
PERCENTAGE PR			12.500000%	74.218750 <b>%</b> 13.281250 <b>%</b>	100.00000%		12.500000%	74.218750% 13.281250%	100.00000%		12.500000%	74.218750% 13.281250%	100,00000%
<b>Y</b>	PERCENTAGE		12.500000%	74.218750% 13.281250%	100.00000%		12.500000%	74.218750% 13.281250%	100.00000%		12.500000%	74.218750% 13.281250%	100.00000%
DRILLING BLOCK	OWNERSHIP	TRACT 2	Royalty;	<pre>working Interest: El Paso Natural Gas Co.; ORRI;</pre>	TOTAL	TRACT 3	Royalty;	working incerest: El Paso Natural Gas Co.; ORRI;	TOTAL	TRACT 4		working interest: El Paso Natural Gas Co.; ORRI;	TOTAL
NUMBER	OF ACRES	00	301.00	, 2, 4, 14, 1/4		00 11991	4, E/2	SW/4, SE/4 All S/2 Lots 1, 2, E/2	NE./ 4 /4	500	22.90.53 SE/4,	N/2 NW/4 NE/4, W/2 SE/4 Lots 3, 4, E/2 SW/4, SE/4 Lots 1, 2, 3, 4,	2, É/2, W/2 W/2 SE/4
NO HOLO COSTO	טבאכאור ווטא		٤)	Sec. 18: Lots 1, 2, 4, E/2 NW/4, SE/4 SW/4		7 C G	Sec. 19: Lots 3, 4, E/2	Sec. 20: All Sec. 21: S/2 Sec. 30: Lots 1	NW/4, NE T-24-N, R-3-W Sec. 24: E/2 SE/4	: : :	Sec. 28: NE/4, SE/4,	Sec. 29: NE/4, 1 Sec. 30: Lots 3 SW/4, 3	∞.
	SERIAL NUMBER		SF 0/8908				or Uroyuy			6.00	SF 078910		

El Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE – SAN JUAN BASIN Form 21.71 (2-72)

		GHGMIN	NO B SNI I IING	, and the second	PERCENTAGE	DRESENT ACTILAL
SERIAL NUMBER	DESCRIPTION	OF ACRES	OWNERSHIP	PERCENT AGE	COMMITTED	PARTICIPATION
		00 00	TRACT 5			1.217968%
of 0/8911	Sec. 3: SW/4	00.00	Royalty;	12.500000%	12.500000%	
			working interest: El Paso Natural Gas Co.;	74.218750%	74.218750%	
			ONAL; TOTAL	100.00000%	100.000000%	ماده
2,000	: : :		TRACT 6			17.051544%
or 0/8913	-N	2240.00 E/4	• •	12.500000%	12.500000%	<b>~</b> 0
	Sec. 12: E/Z, E Sec. 12: SW/4, S/2 SW	E/C, E/C SW/4 SW/4, NW/4 NW/4, S/2 SW/4,	working interest: El Paso Natural Gas Co.; ORRI;	74.218750% 13.281250%	74.218750% 13.281250%	<b>60</b> 50
	NW/4 SE/4 Sec. 13: E/2 NW/4, N NW/4, S/2 S	.E/ú //4, NW/4 S/2 SW/4,				
	NE/4 Sec. 14: E/2, S	S/2 SW/4 SW/2 NF/4				
	h/3S	NE/4	TOTAL	100.000000%	100.000000%	<i>م</i> را
QF 078012	T_C_T N_11_C_T	00 080 0	TRACT 7			15.833577%
J. 0/0915	Sec. 15: All	0000	Royalty;	12.500000%	12.500000%	<b>~</b>
	27:	E/4	El Paso Natural Gas Co.;	74.218750%	74.218750%	<b>50</b> 50
			TOTAL	100.00000%	100.000000	9 hao
1,000	;; ; ;		TRACT 8			4.871870%
Sr 0/8914	Sec. 25: All	040.00	Royalty;	12.500000%	12.500000%	<b>~</b>
			El Paso Natural Gas Co.;	74.218750%	74.218750%	no no
			TOTAL	100.00000%	100.00000%	- <b> </b> -0
Fffertive 11-1-70	-70		C 0700			

EI Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE -- SAN JUAN BASIN Form 24-71 (2-72)

O HOUSE	NOTEGIGO	NUMBER	DRILLING BLOCK		PERCENTAGE	PRESENT ACTUAL
SERIAL NUMBER		OF ACRES	OWNERSHIP	PERCENTAGE	COMMITTED	PARTICIPATION
710010	Ti C a N IIC E	1	TRACT 9			7.307805%
S1 68 15	Sec. 23: NW/4	00.006	Royalty;	12.500000%	12.500000%	<b>~</b> 0
	Sec. 36: E/2, N	M/4	Working interest: El Paso Natural Gas Co.;	74.218750%	74.218750%	<b>50</b> 50
			OAA1; TOTAL	100.00000%	100.00000%	
	: : :	6 6 8	TRACT 13			1.826951%
Patented	Sec. 29: NW/4, SW/4	\$2.0.00 SW/4		9.375000%	6.250000%	<b>D</b> 0
	*Undivided 240.0 acres committed	O net	<pre>working interest: El Paso Natural Gas Co.; Felmont Oil Co.;</pre>	56.250000% 25.000000%	56.250000%	<b>60 60</b>
			ORRI; TOTAL	9.375000% 100.000000%	9.375000%	<b>20   50</b>
1		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	TRACT 13-B			1.217967%
ratented	Sec. 28: S/2 NW/4, SW/4	7,4, SW/4		6.250000%	6.250000%	24
	Sec. 29: E/2 SE *Undivided 160.0	74 0 net	working interest: El Paso Natural Gas Co.;	37.500000%	37.500000%	94
	acres committed		0il Co.;	12.500000%	%000000°	<b>~</b> 21
			Jane P. Guild;	.625000%	%000000°	d 94
			M. Dodge; Wilb & Co.:	.312000%	%000000°	24 Q
				6.250000%	%000000°	# Q#
			James S. Gardner;	4.088000%	*000000 *000000	~ »
			r. Loi tiik,	6.250000	6.25000%	9 <b>7-9</b>
			TOTAL	100.00000%	20°000000%	2

EI Paso Natural Gas Company
UNIT AREA EXPANSION SCHEDULE — SAN JUAN BASIN
Form 21-71 (2-72)

PRESENT ACTUAL	PARTICIPATION	1.796198%	4.871870%			2.374884%	
PERCENTAGE P	COMMITTED	12.50000% 74.218750%	100.00000%	12.500000%	74.218750% 13.281250% 100.000000%	6.250000%	74.218750% 13.281250% 93.750000%
×	PERCENT AGE	12.500000% 74.218750%	100.00000%	12.500000%	74.218750% 13.281250% 100.000000%	12.50000%	74.218750% 13.281250% 100.000000%
DRILLING BLOCK	OWNERSHIP	Royalty; Working Interest: El Paso Natural Gas Co.;	TOTAL TOTAL .	Royalty;	working interest: El Paso Natural Gas Co.; ORRI; TOTAL	Royalty;	Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL
NUMBER	OF ACRES	235.96 ;, NE/4 NE/4		00.049		311.98 1, 2, E/2	NE/4
MOITEIGOSE	טוויין אין	T-24-N, R-2-W 235.96 Sec. 18: Lots 3, NE/4 SW/4, NE/4		T-24-N, R-3-W Sec. 9: All		T-24-N, R-2-W 311.98 Sec. 19: Lots 1, 2, E/2	NW/4,
	SERIAL NUMBER	Patented		Patented		Patented	

EI Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE — SAN JUAN BASIN Form 21-71 (2-72)

DESCRIPTION   OF ACRES   OWNERSHIP   DRILLLING BLOCK

T-24-N, R-3-W 160.00 Sec. 12: NE/4 SE/4, S/2 NW/4, NE/4 NW/4
다 <u>기</u>

PRESENT ACTUAL	PAK LICIPA LION																								13,130.64
PERCENTAGE	CCIMMITED																							•	pating Area:
DRILLING BLOCK	OWNERSHIP  RECAPITULATION	Description of Lands in Participating Area: Township 24 North, Range 2 West, N.M.P.M.	8: NE/4 9: NW/4	Section 18: Lots 1, 2, 3, E/2 W/2 (W/2), NE/4 Section 19: All	20: All	21:	Section 28: All Section 29: All	30:	31:		2	 M	9: ALL	_	11: E/2,	12: SE/4,	13:	Section 14: All	21:	22: N/2	23:	24:	25: All	E/2,	Total Number of Acres in Farticipating Area:
NUMBER																									
DESCRIPTION																									
SERIAL NUMBER																									

EI Paso Natural Gas Company UNIT AREÁ EXPANSION SCHEDULE – SAN JUAN BASIN Form 21-71 (2-72)

# SCHEDULE XXVII TWENTY-SIXTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION LINDRITH UNIT AREA

SFRIA! NIMBER	NORTH NUMBER	DRILLING BLOCK		PERCENTAGE	PRESENT ACTUAL
	OF ACRES	OWNERSHIP		COMMITTED	PARTICIPATION
SF 078907	7L-24-N R-3-W 160 00	TRACT 1			1,1455868
	Sec. 6: SE/4	Royalty;	12,500000%	12.500000%	<b>8</b> €
		working interest: El Paso Natural Gas Co.; 74.2 ORRI;	74.218750% 13.281250%	74.218750% 13.281250%	90 940 1
		TOTAL 100.0	100.000008	100.0000008	180
		TRACT 2			3.922776%
SF U/8908	Sec. 8: NE/4	Royalty;	12.500000%	12,500000%	80
	Sec. 1/: N/2 NW/4, S/2 SW/4, Sec. 18: Lots 1, 2, 4,	working interest: El Paso Natural Gas Co.; 74.2 ORRI; 13.2	74.218750% 13.281250%	74.218750% 13.281250%	88 89
	E/2 NW/4, SE/4 SW/4	TOTAL 100.0	100,000008	100.000000	<u>  %</u>
070000	0C N321 N C G N NC-W	TRACT 3			11,916180%
	Sec. 19: Lots 3, 4, E/2	Royalty;	12.500000%	12.500000%	%(
	Sec. 20: All Sec. 21: S/2	working interest: El Paso Natural Gas Co.; ORRI;	7 <b>4.</b> 218750% 13.281250%	74.218750% 13.281250%	& &(
	T-24-N, R-3-W Sec. 24: E/2 SE/4	TOTAL	100.000000%	100.0000008	% 

## EI Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE -- SAN JUAN BASIN Form 21-71 (2-72)

PRESENT ACTUAL	PARTICIPATION	16.4429678					2.2911748				17.183804%				
PERCENTAGE PRES			12.500000%	74.218750% 13.281250%		100.0000008		12,500000%	74.218750%	100.000008		12.50000%	74.218750% 13.281250%		100.000008
¥	PERCENTAGE		12.500000%	74.218750% 13.281250%		100.000008		12,500000%	74.218750%	100.000008		12.500000%	74.218750% 13.281250%	·	100.00000%
DRILLING BLOCK	OWNERSHIP	TRACT 4	Royalty; Working Interest:		-	TOTAL	TRACT 5	Royalty;		TOTAL	TRACT 6	Royalty;	El Paso Natural Gas Co.; ORRI;		TOTAL
NUMBER	OF ACRES	2296,53		NE/4, W/2 SE/4 Lots 3, 4, E/2 SW/4, SE/4	1, 2, 3, 4, /2, E/2 W/2	W/2 SE/4	320 00	320.00			2400.00	NE/4	E/ 2 SW/ 3, 19W/ NW/ 4 NW/ 4, EF/A	E/2 NW/4, NW/4 NW/4, S/2 SW/4,	NE/4 E/2, S/2 SW/4 NW/4 SW/2 NE/4, SE/4 NE/4
	DESCRIPTION	7-24-N - R-2-W	Sec. 28: NE/4, SE	Sec. 29: NE/4, Sec. 30: Lots Sw/4,	Sec. 31: Lots 1, 2 E/2 W/2, 1 Sec. 32: SE/4, W/2 T-24-N, R-3-W	Sec. 24: SW/4, W/2 SE/4	W C d N 7C m	Sec. 3: S/2			T-24-N.R-3-W	Sec. 10: 5/2,		Sec. 13: E/2 N NW/4,	Sec. 14: E/2, Sec. 24: NW/4 SE/4
0.1.00000000000000000000000000000000000	SERIAL NUMBER	SF 078910					110050 33	SF 0/0911			SF 078913				

EI Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE – SAN JUAN BASIN Form 21-71 (2-72)

PRESENT ACTUAL	PAKIICIPA IION	16.03821/8	8	ο <sub>ν</sub> ο ο <sub>ν</sub>	o lovo	4.582348%	8(	ovo <u>o</u> v	38	6.873521%	%(	<i>∞</i>	&P	1,718380%	8(	)% %	80 00	2
PERCENTAGE	COMMITTED		12.500008	74.218750%	100.0000008		12.500000%	74.218750%	100.000000		12.500000%	74.218750% 13.281250%	100.000000%		6.250000%	56.250000%	9.375000%	
1	PERCENTAGE		12.500000%	74.218750%	100.000008		12.500000%	74.2187508	100.00000%		12,500000%	74.2187508 13.2812508	100.00000%		9.375000%	56.250000% 25.000000%	9.375000%	20000
DRILLING BLOCK	OWNERSHIP	TRACT 7	Royalty;	Working interest: El Paso Natural Gas Co.;	TOTAL	TRACT 8	••	Working Interest: El Paso Natural Gas Co.;	OKKL; TOTAL	TRACT 9	••	working interest: El Paso Natural Gas Co.; ORRI;	TOTAL	TRACT 13	• •	Working inceresc: El Paso Natural Gas Co.; Felmont Oil Co.;		
NUMBER	OF ACRES	2240.00				9	040.00			00		NW/4		*320_00	SW/4	oo nec d	•	
DESCRIPTION		T-24-N. R-3-W	15:	Sec. 16: All Sec. 21: All		; ;	Sec. 25: All			2 C C C C C C C C C C C C C C C C C C C	Sec. 23: NW/4	Sec. 30: E/2,		W-2-4-N B-2-W	Sec. 29: NW/4,	formitted		
SERIAL NUMBER		SF 078913					SF 0/8914			מניס מס	SF 0/8915			Datented				

EI Paso Natural Gas Company UNIT AREÄ EXPANSION SCHEDULE – SAN JUAN BASIN Form 21-71 (2-72)

PRESENT ACTUAL	PARTICIPATION	.2147988		1.1455878		1.689454%
Ш	COMMITTED	1.171875%	6.958008% .000000% 1.245117% 9.375000%	6.250000%	37.5000008 .0000008 .0000008 .0000008 .0000008 .0000008 .0000008 .50.000008	12.500000% 74.218750% 13.281250% 100.000000%
	PERCENT AGE.	1,171875\$	6.9580088 90.6250008 1.2451178 100.0000008	6.250000%	37.500000% 12.500000% .625000% 25.000000% 6.250000% 6.250000% 6.250000%	12.500000% 74.218750% 13.281250% 100.000000%
DRILLING BLOCK	OWNERSHIP	••	Working Interest: El Paso Natural Gas Co. Felmont Oil Co., et al ORRI;	•	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	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;
NUMBER	OF ACRES	*320.00	· net	*320.00 /4, SW/4 /4	0 net	235.96 , NE/4 NE/4
NOITEGO	DESCRIPTION OF STREET	T-24-N, R-2-W *Sec. 33: N/2	*Undivided 30.00 acres committed	T-24-N, R-2-W *320.00 Sec. 28: S/2 NW/4, SW/4 Sec. 29: E/2 SE/4	*Undivided 160.0 acres committed	T-24-N, R-2-W 235.96 Sec. 18: Lots 3, NE/4 SW/4, NE/4
O D O WILLIAM	SEKIAL NUMBER	Patented		Patented		Patented

EI Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE — SAN JUAN BASIN Form 21-71 (2-72)

12.500000% 74.218750% 13.281250% 100.000000% 6.250000%
,
,
74.218750% 13.281250% 93.750000%
2.2911748
12.500000%
/4.218/50% 13.281250% 100.000000%
1.1455878
12,500000%
74.218750% 13.281250%
100.000008

EI Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE -- SAN JUAN BASIN Form 21-71 (2-72)

PRESENT ACTUAL	PARTICIPATION	2.2911748				1,1455878				9709381 1	1.1433078		
PERCENTAGE P	COMMITTED		*000000*	74.2187508	87.5000008		12.500000%	74.2187508	100.0000008		12,500000%	74.2187508	13.281250%
\ \ \	PERCENTAGE		12.500000%	74.218750%	100.000008		12.500000%	74.2187508	100.000008		12, 5000008	74.2187508	13.281250%
DRILLING BLOCK	OWNERSHIP	TRACT 24	*Royalty; Working Interest:	El Paso Natural Gas Co.;	ONAL; TOTAL	TRACT 25	Royalty;	WOLKLING LINCELESC: El Paso Natural Gas Co.;	TOTAL	. TO BOX SAIL	Roya] tv.	Working Interest: El Paso Natural Gas Co.;	ORRI; TOTAL
NUMBER	OF ACRES	320.00	/4 V/> SW/4	t not	ומר ז כוו	160 00	00.001				160.00	NE/4 NW/4	
NOITGIADSEO		T-24-N. R-3-W	Sec. 11: W/2 SW/4	*Royalty Interes	Unit.	W_2_4_N D_2_4	Sec. 21: NW/4				T-24-N, R-3-W 160.00	NW/4,	
SERIAI NIMBER	SENIAL NOMBER	Patented				Datontod	racelled				Patented		

[	NUMBER	DRILLING BLOCK	PERCENTAGE	PRESENT ACTUAL
	OF ACRES OWNE	P PERCENTAGE	COMMITTED	PARTICIPATION

## N O I RECA

of Lands in Participating Area: North, Range 2 West, N.M.P.M.				, 2, 3, 4, E/2 W/2 (W/2), NE/4		π/2					n/2		Range 3 West, N.M.P.M.			<b>π/</b> 2	E/2 SW/4, NW/4	N/2						1/1			1	iotal Number of Acres in Participating Area:	_ a	
of Lands in North, Rang	SE/4 NF/4	h/MN	<u>×</u>	Lots 1, 2,		W/2, SE/4	A11	A11	A11	A11	SE/4, W/2	N/2	North, Rang			S/2, NE/4	E/2, E/2 S	SE/4, W/2	A11	A11	A11	A11	A11	N/2, SE/4	A11	A11	E/2, NW/4	Iocal N	Page 7	
Description of Township 24 1	Section 6:		_	•					Section 30:	Section 31:	Section 32:	Section 33:	Township 24	3:	Section 9:	Section 10:	Section 11:	Section 12:	•						Section 24:	Section 25:	Section 36:			

13,966.64

EI Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE — SAN JUAN BASIN Form 21-71 (2-72)

# SCHEDULE XXVIII

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

PRESENT ACTUAL	PARTICIPATION	1.1199278				4.394876%				11.649276%			
-			12.500000%	74.218750%	100.0000008		12.500000%	74.218750% 13.281250%	100.000000%		12,500000%	74.218750% 13.281250%	100.00000%
PERCENTAGE	COMMITTED		80		•		80	% % 0 %			*0	·	80
	PERCENT AGE		12,500000%	74.2187508	100.0000008		12,500000%	74.218750% 13.281250%	100.000000%		12.500000%	74.218750% 13.281250%	100.000000
DRILLING BLOCK	OWNERSHIP	TRACT 1	• •	Working interest: El Paso Natural Gas Co.;	ORKI; TOTAL	TRACT 2	Royal ty;	working incerest: El Paso Natural Gas Co.; ORRI;	TOTAL	TRACT 3	Royalty	WOIKING INCELESC: El Paso Natural Gas Co.; ORRI;	TOTAL
NUMBER	OF ACRES	00 091	) • • • •			60	98./20	NW/4, SW/4 1, 2, 4,	NW/4, SW/4, SE/4	00 100 1	1004.29 3, 4, E/2	, 3E/4 1, 2, E/2	NE/4 SE/4
	UESCRIPTION	Т-24-N R-3-W	Sec. 6: SE/4				Sec. 8: NE/4	Sec. 1/: N/2 NW/4, S/2 SW/4 Sec. 18: Lots 1, 2,	E/2 SE/4 S/2	; ;	Sec. 19: Lots	Sec. 20: All Sec. 21: S/2 Sec. 30: Tots 1: 2, E/2	T-24-N, R-3-W Sec. 24: E/2 SE/4
	SEKIAL NUMBER	SE 078907					SF 078908				SF. 078909		

EI P. o Natural Gas Company UNIT AREA EXPANSION SCHEDULE — SAN JUAN BASIN Form 21-71 (2-72)

PRESENT ACTUAL	PARTICIPATION	16.074669%				2,239855%				16.7989118				
PERCENTAGE PRE	<u></u>		12,500000%	74.218750% 13.281250%	100.000008		12.500000%	74.218750%	100.000008		12.500000%	74.218750% 13.281250%		100.000000%
CK	PERCENTAGE		12,500000%	74.218750% 13.281250%	100,000008		12,500000%	74.218750%	100.00000%		12,500000%	74.218750% 13.281250%		100.000000%
DRILLING BLOCK	OWNERSHIP	TRACT 4	Royal ty;	Working Interest: El Paso Natural Gas Co.; ORRI;	TOTAL	TRACT 5	•	Working interest: El Paso Natural Gas Co.; ORRI.	TOTAL	TRACT 6	Royalty;	<pre>4 Working Interest:     El Paso Natural Gas Co.; ORRI;</pre>		TOTAL
NUMBER	OF ACRES	2206	SE/4,	N/2 NW/4 NE/4, W/2 SE/4 Lots 3, 4, E/2	SW/4, SE/4 Lots 1, 2, 3, 4, E/2 W/2, E/2 SE/4, W/2 -3-W SW/4, W/2 SE/4		320.00			2400 00	NE/4	E/2, E/2 SW/4, NW/4 WOLKING I SW/4, NW/4 NW/4, El Paso N S/2 SW/4, ORRI;	N/4, NW/4 S/2 SW/4,	E/2, S/2 SW/4 NW/4 SW/2 NE/4, SE/4 NE/4
	DESCRIPTION	2 C C	Sec. 28: NE/4, SE/4,	N/2 NW/4 Sec. 29: NE/4, W/ Sec. 30: Lots 3,	Sec. 31: Lots 1, 2, 3, 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	;	T-24-N, K-3-W Sec. 3: S/2			W−2A−N В−3−W	90;	Sec. 11: E/2, 1 Sec. 12: SW/4, Sec. 12: SW/4,	Sec. 13: E/2 M NW/4,	Sec. 14: E/2, Sec. 24: NW/4 SE/4 1
	SERIAL NOMBER	0.0000	SF 0/8910				SF 0/8911			CF 078013	SF 010713			

E) Piso Natural Gas Company
UNIT AREA EXPANSION SCHEDULE -- SAN JUAN BASIN
Form 21-71 (2-72)

PRESENT ACTUAL	PARTICIPATION	16.7989118		4.4797108	6.719565%	1.6798918
ш	COMMITTED	12,500008	74.2187508 $13.2812508$ $100.0000008$	12.500000% 74.218750% 13.281250%	12.500000% 74.218750% 13.281250%	6.250000% 56.250000% .000000% 9.375000%
	PERCENTAGE	12,50000%	74.2187508 $13.2812508$ $100.000008$	12.500000% 74.218750% 13.281250%	100.000000% 12.500000% 74.218750% 13.281250% 100.0000000%	9.375000% 56.250000% 25.000000% 9.375000% 100.000000%
DRILLING BLOCK	OWNERSHIP	•	Working Interest: El Paso Natural Gas Co.; ORRI; TOTAL	Royalty; Working Interest: El Paso Natural Gas Co.; ORRI;	TOTAL  Royalty;  Working Interest: El Paso Natural Gas Co.; ORRI;  TOTAL	Royalty; Working Interest: El Paso Natural Gas Co.; Felmont Oil Co.; ORRI;
NUMBER	OF ACRES	2400.00	SW/4	640.00	960.00 NW/4	*320.00 SW/4 00 net
DESCRIPTION		-N, R	Sec. 16: All Sec. 21: All Sec. 22: N/2, SW/4	T-24-N, R-3-W Sec. 25: All	T-24-N, R-3-W Sec. 23: NW/4 Sec. 36: E/2, NW/4	T-24-N, R-2-W *3. Sec. 29: NW/4, SW/4 *Undivided 240.00 net acres committed
SERIAL NUMBER		SF 078913		SF 078914	SF 078915	Patented

EI PESO Natural Gas Company UNIT AREA EXPANSION SCHEDULE -- SAN JUAN BASIN Form 21-71 (2-72)

PRESENT ACTUAL	<b>PARTICIPATION</b>	.2099868					1 1199278	9/2/2710											2.2115778				
PERCENTAGE PRE			1.171875%	6.958008%	1.245117%	9.375000%			6.250000%	37.500000%	%000000°	*000000*	<b>*000000</b>	\$000000°	\$000000.	\$000000°	50 00000	•		12.500000%	74.218750%	13.281250%	
	PERCENT AGE		1.171875%	6.9580088 90.6250008	1.2451178	100.00000%			6.250000%	37,500000%	12.500000% .625000%	.312000%	25.000000%	6.250000%	4.688000%	*625000	\$00000	***************************************		12,50000%	74.218750%	12.281250%	
DRILLING BLOCK	OWNERSHIP	TRACT 13A	••	Working Interest: El Paso Natural Gas Co.; Felmont Oil Co. et al	22 / 22 22	TOTAL	ת כו שלאמשה	TRACT 13-B	Royalty;		Felmont Oil Co.; Jane P. Guild:	M. Dodge;	Wilb & Co.;	C. W. Gillette;		Augustus P. Loring, III	UKK1;	TOTAL	TRACT 16	••	Working interest: El Paso Natural Gas Co.;	ORRI;	
NUMBER	OF ACRES	00 0000	320.00					*320.00	/4, SW/4	/ 0 net									315 96	NE/4	NE/4,		
NOIL	טויי דייייטייי	# 40 H	T-24-N, R-2-W *: Sec. 33: N/2 *Undivided 30.00 net acres committed.					T-24-N R-2-W	Sec. 28: S/2 NW/4, SW/4	*Undivided 160.0	acres committed								12 C - G N N C m	Sec. 18: Lots 3, NE/4	SW/4, NE/4, N/2 SE/4		
	SERIAL NUMBER	-	Patented					Datented	Latericea										7.00	Facelled			

El Paso Natural Gas Company UNIT AREA EXPANSION SCHEDULE ~ SAN JUAN BASIN Form 21-71 (2-72)

SEDIAL NIIMOED	NOTEGIA	NUMBER	DRILLING BLOCK		PERCENTAGE	PRESENT ACTUAL
SENIAL NUMBER	DESCRIPTION	OF ACRES	OWNERSHIP	PERCENTAGE		PARTICIPATION
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2 to 25 to 2	040 043	TRACT 17		As a second seco	4.479710%
Farented	Sec. 9: All	040.00		12.500000%	12.500000%	
			Interest: Natural Gas Co.;	74.2187508	74.2187508	
			TOTAL	100.000008	100.000008	
Patented	7-24-N. R-2-W	311.98	TRACT 18			2.183718%
	Sec. 19: Lots 1, 2, E/2	1, 2, E/2	Royalty;	12.500000%	6.250000%	
	14 / WN	NE/ 4	nnterest: Natural Gas Co.;	74.218750%	74.2187508	
			OKKL; TOTAL 1	100.000008	93.750000%	
-	; ;		TRACT 19			2.239855%
Patented	Sec. 13: SW/4 NW/4, N/2	320.00 W/4, N/2		12.500000%	12,500000%	
	Sec. 24: NE/4 N	5/2 SE/4 压/4	WOLKING INCELEST: El Paso Natural Gas Co.; ODDI.	74.2817508	72.2817508	
			TOTAL	100.000008	100.000008	
Patented	T-24-N, R-2-W	160.00	TRACT 22			1.1199278
	Sec. 9: NW/4		Royalty;	12.500000%	12,500000%	
			Natural Gas Co.;	74.2817508	74.2817508	
			TOTAL	100.000008	100.000000%	

## EI PGO NATURAI GAS COMPANY UNIT AREA EXPANSION SCHEDULE -- SAN JUAN BASIN Form 21-71 (2-72)

SEBIAI NIMBED	NOITGIGOSEG	NUMBER	DRILLING BLOCK	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	PERCENTAGE	PRESENT ACTUAL
SENAL NOMBER		OF ACRES	OWNERSHIP	PERCENTAGE	COMMITTED	PARTICIPATION
		000	TRACT 24			2.2398558
Patented	Sec. 11: W/2 SW/4	320.00 1/4	*Royalty;	12,500008	\$000000°	al O
	Sec. 14: NW/4,	N/2 SW/4	Working Interest:			
	*Royalty Interes	it not	El Paso Natural Gas Co.;	75.0000008	75.0000008	م کد
	committed to Li	ndrith	ORRL;	12.5000008	12.500000%	uo las
	Onit:		TOTAT	100.0000	0000000	6
4	E 25 A 20 E	90	TRACT 25			1.1199278
Fatented	Sec. 21: NW/4	700°00T	Royal ty;	12,500000%	3,125000%	40
			Working Interest:			
			El Paso Natural Gas Co.;	75,0000008	75,0000008	
			TOTAL	100.00000%	90.625000%	o laso
Datontod	W-24-N D-3-W	160 00	TRACT 27			1.1199278
	Sec. 12: NE/4 S	E/4, S/2	Royalty;	12,500000%	<b>*000000</b>	<b>~</b>
	*Royalty Interest Not	NE/4 NW/4 St Not	Wolking increase: El Paso Natural Gas Co.;	75,0000008	75.000008	no ni
	Unit.	וומד דכון	TOTAL	100.000008	87.500008	o taxo

SFRIAL NIMBER	NOITGLESCE	NUMBER		DRILLING BLOCK .	PERCENTAGE	PRESENT ACTUAL
		OF ACRES	OWNERSHIP	PERCENTAGE	COMMITTED	PARTICIPATION

## N | O | H | A <u>ا ب</u> D t <u>a</u> | RECA

Area:															. W.									
Description of Lands in Participating Area:				N/2 NW/4, S/2 SW/4				SE/4					, W/2		North, Range 3 West, N.M.P.M.			S/2, NE/4	E/2 SW/4, NW/4	, W/2				
of Land North.	SE/4	NE/4	NW/4	N/2 1	A11	A11	All	W/2,	Al1	A11	A11	A11	SE/4,	N/2	North	8/2	All	S/2,	E/2,	SE/4,	All	All	A11	Al1
Description Township 24	Section 6:	Section 8:	Section 9:	Section 17:	Section 18:	Section 19:	Section 20:	Section 21:	Section 28:	Section 29:	Section 30:	Section 31:	Section 32:	Section 33:	Township 24	Section 3:	Section 9:	Section 10:	Section 11:	Section 12:	Section 13:	Section 14:	Section 15:	Section 16:

14,816.64 14,286.64



## STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR July 21, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

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

Attention: T. W. Britten

159

Re: 1982 Plan of Development

Lindrith "B" Unit

Chacon-Dakota Formation

Rio Arriba County

OCD Case 159

Dear Mr. Britten:

Enclosed please find an approved copy of the material referenced above. Such approval is contingent upon like approval by the Commissioner of Public Lands and the U. S. Minerals Management Service.

Sincerely,

W. PERRY PEARCE General Counsel

WPP/dr

cc: Commissioner of Public Lands - Santa Fe Minerals Management Service - Albuquerque OCD District Office

14



United States Department of the Interior JUL 14 1982 MINERALS MANAGEMENT SERVICE SOUTH CENTRAL PEGIS

505 MARQUETTE AVENUE, N.W., SUITE 815. ALBUQUERQUE, NEW MEXICO 87102

JUL 1 3 1982

El Paso Natural Gas Company Attention: T. W. Bittick P. O. Box 1492 El Paso, Texas 79978

Gentlemen:

Four approved copies of your 1982 plan of development for the Lindrith "B" unit area, Rio Arriba County, New Mexico, are enclosed. Such plan, proposing to drill two Chacon-Dakota wells, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ORIG. SGL.) IAMES W. SHELTON

FOR Gene F. Daniel Deputy Minerals Manager Oil and Gas

Enclosures

Comm. of Public Lands NMOCD

## State of New Mexico



ALEX J. ARMIJO COMMISSIONER



Commissioner of Public Lands

June 16, 1982

P. O. BOX 1148 SANTA FE, NEW MEXICO 87591\* 87504-1148

El Paso Natural Gas Company P. O. Box 1492

El Paso, Texas 79978

Re: 1982 Plan of Development Lindrith "B" Unit Chacon-Dakota Formation Rio Arriba County, New Mexico

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1982 Plan of Development for the Lindrith "B" Unit Chacon-Dakota formation, Rio Arriba County, New Mexico. Such plan proposes the drilling of two Chacon/Dakota wells being the Well Nos. 22 and 23 during 1982. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the United States Minerals Management Service.

Enclosed is one approved copy for your files.

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

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

BY: FLOYD O. PRANDO, Assistant Director Oil and Gas Division AC 505/827-2748

AJA/FOP/pm encls.

cc:

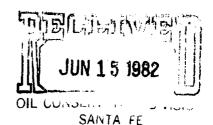
OCD-Santa Fe, New Mexico USMMS-Albuquerque, New Mexico Administration 139

## E Paso NATURAL GAS COMPANY

P. O. BOX 1492 EL PASO, TEXAS 79978

PHONE: 915-543-2600

May 25, 1982



Area Oil and Gas Supervisor United States Geological Survey Post Office Box 26124 Albuquerque, New Mexico 87125

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

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

> 1982 Plan of Development Lindrith "B" Unit Chacon-Dakota Formation

Rio Arriba County, New Mexico

## Gentlemen:

By Designation of Sub-Operator dated May 7, 1979, El Paso Natural Gas Company et al designated Mobil Oil Corporation as operator of the Lindrith Unit for all formations below the base of the Pictured Cliffs formation (except as to the Dakota Formation in the W/2 of Section 34, Township 24 North, Range 3 West).

By letter dated January 27, 1981 El Paso Natural Gas Company, as operator of the Lindrith Unit on behalf and at the request of Mobil Producing Texas & New Mexico, Inc., successor to Mobil Oil Corporation as sub-operator of the Lindrith Unit, filed a Drilling Program covering the captioned Unit for the Calendar year 1981 providing for the drilling of eleven (11) Chacon/Dakota formation wells.

All of the originally proposed eleven (11) Chacon/Dakota wells have been completed and are currently being evaluated to determine whether they are capable of producing unitized substances so as to cause an expansion of the Participating Area for the Chacon/Dakota Formation.

Regulatory Agencies Page 2

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

Chacon/Dakota, Being Evaluated 11 20

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as operator of the Lindrith Unit on behalf of and at the request of Mobil Producing Texas & New Mexico, Inc. successor to Mobil Oil Corporation as sub-operator of the Lindrith Unit, respectfully submits for your approval the 1981 Plan of Development for the Chacon-Dakota Formation, designated as the Lindrith "B" Unit providing for the drilling of the following wells during calendar year 1981.

<u>Well</u>	Drilling Block	Formation
#23	NE/4 Section 16-24N-3W	Chacon/Dakota
#22	NW/4 Section 15-24N-3W	Chacon/Dakota

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.

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

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

Attorney-in-Fact Burner

TWB:RJH:ljg
Attachments

Lindrith "B" Unit, 3.0

APPROVED:		DATED:
	Area Oil and Gas Supervisor United States Geological Survey (Subject to like approval by the Commissioner of Public Lands and the Oil Conservation Division)	
APPROVED:	Commissioner of Public Lands (Subject to like approval by the United States Geological Survey & the Oil Conservation Division)	DATED:
APPROVED:	Oil Conservation Division (Subject to like approval by the United States Geological Survey & the Commissioner of Public Lands)	DATED: 7/20/82

The foregoing approvals are for the 1982 Plan of Development for the Lindrith "B" Unit, Rio Arriba County, New Mexico.

## LINDRITH UNIT WORKING INTEREST OWNERS

Conoco, Inc.

Mobil Oil Corporation (3)

Tenneco Oil Company

MAY 1 4 1982

S- .

MAY 1 2 1982

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

### Gentlemen:

Three approved copies of your 1982 plan of development for the Lindrith unit area, Rio Arriba County, New Mexico, are enclosed. Such plan, proposing to drill four Pictured Cliffs wells, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

The possibility might exist of drainage by wells outside of the unit boundary. You will be contacted by our Development Unit about this possibility.

Sincerely yours,

(ORIG. SGD.) JOE G. LARA

FOR Gene F. Daniel
Deputy Minerals Manager
Oil and Gas

### Enclosure

cc: Comm of Public Lands, Santa Fe NMOCD, Santa Fe DS, Farmington (w/encl)



### STATE OF NEW MEXICO

## ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

April 19, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

El Paso Natural Gas Company

P. O. Box 1492

El Paso, Texas 79978

Attention: Mr. D. N. Canfield

1982 Plan of Development for Re:

Lindrith Unit, Rio Arriba

County, New Mexico

Dear Mr. Canfield:

The New Mexico Oil Conservation Division has this date approved your 1982 Plan of Development for the Lindrith Unit, Rio Arriba County, New Mexico. Our approval is subject to like approval by the Minerals Management Service and the Commissioner of Public Lands of the State of New Mexico.

Sincerely,

W. PERRY PEARCE General Counsel

WPP/dr

Minerals Management Service - Albuquerque Commissioner of Public Lands - Santa Fe

## State of New Mexico



ALEX J. ARMIJO COMMISSIONER



## commissioner of Public Lands

April 2, 1982

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

El Paso Natural Gas Company P. O. Box 1492

El Paso, Texas 79978

Re: 1982 Plan of Development

Lindrith Unit Pictured Cliffs Formation Rio Arriba County, New Mexico

ATTENTION: Mr. D. N. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1982 Plan of Development for the Lindrith Unit Pictured Cliffs Formation Rio Arriba County, New Mexico. Such plan proposes the drilling of four Pictured Cliffs Wells during 1982. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the United States Minerals Management Service.

Enclosed is one approved Copy for your files.

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

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

BY:

FLOYD O. PRANDO, Assistant Director Oil and Gas Division AC 505/827-2748

AJA/FOP/pm encls.

cc:

OCD-Santa Fe, New Mexico USMMS-Albuquerque, New Mexico

## EIPaso NATURAL GAS COMPANY

P. O. BOX 1492 EL PASO, TEXAS 79978

March 31 1982 APR 01 1982
OIL CONSLINATION DIVISION SANTA FE

Area Oil and Gas Supervisor United States Geological Survey Post Office Box 26124 Albuquerque, New Mexico 87125

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

157

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

> Re: Lindrith Unit I Section No. 713 Rio Arriba County, New Mexico 1982 Drilling Program

## Gentlemen:

By letter dated November 7, 1980, El Paso Natural Gas Company, as Unit Operator of the Lindrith Unit, filed a Drilling Program covering the subject Unit for the calendar year 1981 providing for the drilling of four (4) Pictured Cliffs wells (#104, #105, #106, #107). The #104 and #107 wells were drilled. Four (4) wells (Jo Ann's Jewel #2, Jo Ann's Jewel #3, Di's Delight #1, Di's Delight #2) were drilled by outside operators on drilling blocks which were fifty percent (50%) unit acreage. All wells were drilled outside the Pictured Cliffs Participating Area and are currently being tested to determine whether each will be commercial thereby causing an expansion.

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

Pictured Cliffs (Gas)	88
Pictured Cliffs (Non-commercial)	5
Pictured Cliffs, Being Evaluated	6
Dakota	1
Gallup	1
Plugged and Abandoned	12
	113

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 1982.

<u>Well</u>	Drilling Block	Formation
#105	SW/4 Section 2-24N-3W	Pictured Cliffs
#109	SW/4 Section 7-24N-2W	Pictured Cliffs
#110	SE/4 Section 2-24N-3W	Pictured Cliffs
#111	SE/4 Section 28-24N-3W	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 10 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

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

Very truly yours,

D. N. Canfield Attorney-In-Fact

DNC/RJH/gs Attachments Lindrith Unit, 3.0

Approvea		DATE	
	Area Oil & Gas Supervisor United States Geological Survey Subject to like approval by the Commissioner of Public Lands and the Oil Conservation Division		
Approved	•	DATE:	
	Commissioner of Public Lands	_	
	Subject to like approval by the United States Geological Survey		
	and the Oil Conservation Division		
Approved		DATE:_	4/9/8
	Oil Conservation Division		
	Subject to like approval by the		•
	United States Geological Survey		
	and the Commissioner of Public Lan	ds	

The foregoing approvals for the 1982 Drilling Program for the Lindrith Unit I, Section No. 713, Rio Arriba County, New Mexico.

## LINDRITH UNIT WORKING INTEREST OWNERS

Conoco, Inc.

Mobil Oil Corporation (3)

Tenneco Oil Company



## UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY South Central Region P. O. Box 26124 Albuquerque, New Mexico 87125

1 7 MAR 1981

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

### Gentlemen:

Three approved copies of your 1981 amended plan of development for the Lindrith unit area, San Juan County, New Mexico, are enclosed. Such plan, proposing to drill 11 Chacon/Dakota wells, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

ORIGINAL SIGNED BY:

Gene F. Daniel Deputy Conservation Manager Oll and Gas

Enclosures 3

cc: NMOCD, Santa Fe Comm. Public Lands. Santa Fe

# State of New Mexico







# Commissioner of Public Lands

March 6, 1981

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

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

Re: 1981 Plan of Development
Lindrith "B" Unit
Chacon-Dakota Formation
Rio Arriba County, New Mexico

ATTENTION: Mr. D. N. Canfield

### Gentlemen:

The Commissioner of Public Lands has this date approved your 1981 Plan of Development for the Lindrith "B" Unit Chacon-Dakota formation, Rio Arriba County, New Mexico. Such plan proposes the drilling of ten Chacon/Dakota wells during 1981. Well No. 16 was drilled in December, 1980 under emergency permit. Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Division.

Enclosed is one approved copy for your files.

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

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

BY:

RAY D. GRAHAM, Director Oil and Gas Division AC 505-827-2748

AJA/RDG/s encls.

cc:

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

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

# February 20, 1981

El Paso Natural Gas Company

P. O. Box 1492

El Paso, Texas 79978

Attention: D. N. Canfield

Re: Case No. 159

Lindrith "B" Unit

1981 Plan of Development

## Gentlemen:

We hereby approve the 1981 Plan of Development for the Lindrith "B" 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 Plan of Development is returned herewith.

Yours very cruly,

JOE D. RAMEY Director

JDR/EP/fd enc.

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

# E Paso NATURAL GAS COMPANY



January 27, 1981

159

Area Oil and Gas Supervisor United States Geological Survey Post Office Box 26124 Albuquerque, New Mexico 87125

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

Oil Conservation Division State of New Mexico Post Office Box 2088 Santa Fe, New Mexico 87501 A 5/18/61

Re: 1981 Plan of Development

Lindrith "B" Unit

Chacon-Dakota Formation

Rio Arriba County, New Mexico

### Gentlemen:

By Designation of Sub-Operator dated May 7, 1979, El Paso Natural Gas Company et al designated Mobil Oil Corporation as operator of the Lindrith Unit for all formations below the base of the Pictured Cliffs formation (except as to the Dakota Formation in the W/2 of Section 34, Township 24 North, Range 3 West).

By letter dated February 20, 1980 El Paso Natural Gas Company, as operator of the Lindrith Unit on behalf and at the request of Mobil Producing Texas & New Mexico, Inc., successor to Mobil Oil Corporation as sub-operator of the Lindrith Unit, filed a Drilling Program covering the captioned Unit for the Calendar year 1980 providing for the drilling of eight (8) Chacon/Dakota formation wells. Subsequent to the 1980 Drilling Program being approved, El Paso at the request of Mobil filed a Revised Drilling Program for 1980 by letter dated November 6, 1980. Said Revised Drilling Program requested approval of the drilling of two (2) additional Chacon/Dakota formation wells.

All of the originally proposed eight (8) Chacon/Dakota wells have been completed and are currently being evaluated to determine whether they are capable of reproducing unitized substances so as to cause an expansion of the Participating Area for the Chacon/Dakota Formation. Pending approval of the Revised Drilling Program the two (2) additional Chacon/Dakota wells will be drilled in 1980.

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

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

Chacon/Dakota			2
Chacon/Dakota,	Being	Evaluated	9
	_		$\overline{11}$

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as operator of the Lindrith Unit on behalf of and at the request of Mobil Producing Texas & New Mexico, Inc. successor to Mobil Oil Corporation as sub-operator of the Lindrith Unit, respectfully submits for your approval the 1981 Plan of Development for the Chacon-Dakota Formation, designated as the Lindrith "B" Unit providing for the drilling of the following wells during calendar year 1981.

Well	Drilling Block	Formation
#12	SW/4 Section 22-24N-3W	Chacon/Dakota
#13	NW/4 Section 27-24N-3W	Chacon/Dakota
#14	NW/4 Section 16-24N-3W	Chacon/Dakota
#16*	NE/4 Section 21-24N-3W	Chacon/Dakota
#17	SE/4 Section 16-24N-3W	Chacon/Dakota
#18	NW/4 Section 22-24N-3W	Chacon/Dakota
#19	NE/4 Section 27-24N-3W	Chacon/Dakota
#20	NW/4 Section 26-24N-3W	Chacon/Dakota
#21	SW/4 Section 15-24N-3W	Chacon/Dakota
#22	SE/4 Section 22-24N-3W	Chacon/Dakota
#23	SW/4 Section 23-24N-3W	Chacon/Dakota

<sup>\*</sup> Drilled under emergency permit in December, 1980

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.

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

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

Very truly yours,

D. N. Canfield

Attorney-in-Fact

DNC/RJH/en Attachments Lindrith Unit, 3.0

# LINDRITH UNIT WORKING INTEREST OWNERS

Conoco, Inc.

Mobil Oil Corporation (3)

Tenneco Oil Company

Discator
Oil Conservation Division
Energy and Minorals Department

CHECORPROVAL CRANTED GHB SECT TO LINE APPROVAL PONDER CHARGO STATES SECTIONAL SECTION OF PUBLIC LANDS OF THE STATE OF THE MEXICO.

# OIL CONSERVATION DIVISION P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

# February 17, 1981

El Paso Natural Gas Company

P. 0. Box 1492

El Paso, Texas 79978

Attention: James R. Permenter

Re: Case No. 159

Lindrith "8" Unit

1980 Revised Drilling Program

## Gentlemen:

We hereby approve the 1980 Revised Drilling Program for the Lindrith "B" Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

Four approved copies of the Revised Drilling Program are returned herewith.

Yours very truly,

JOE D. RAMEY Director

JDR/EP/fd enc.

cc: U.S.G.S. - Albuquerque

Commissioner of Public Lands



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

November 6, 1980

Area Oil and Gas Supervisor United States Geological Survey P. O. Box 26124 Albuquerque, New Mexico 87125

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

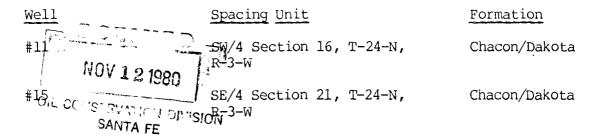
Oil Conservation Division State of New Mexico Post Office Box 2088 Santa Fe, New Mexico 87501 59 6/8/ 3/6/8/

Re: Revised Plan of Development Lindrith "B" Unit Chacon-Dakota Formation Ric Arriba County, New Mexico

### Gentlemen:

By letter dated February 20, 1980 El Paso Natural Gas Company, as operator of the Lindrith Unit on behalf of and at the request of Mobil Producing Texas & New Mexico, Inc. (successor to Mobil Oil Corporation as sub-operator of the Lindrith Unit), filed a Drilling Program regarding the captioned unit for the calendar year 1980. Said program provided for the drilling of eight (8) Chacon-Dakota Formation wells.

Pursuant to Section 9 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Revised Drilling Program for the calendar year 1980 providing for the drilling of the original eight (8) wells and the addition of the following two (2) wells:



Both the #11 and #15 are outside the current participating area and, if commercial, will cause an expansion. All of the working interest owners have been contacted regarding these additional wells and this Revised Drilling Program reflects their desires.

This Revised Drilling Program is also a supplement to the 1980 Drilling Program filed by El Paso Natural Gas Company on Janaury 7, 1980 which has heretofore been approved by the Regulatory Agencies.

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

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

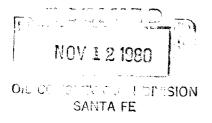
Very truly yours,

James R. Permenter gR

Director, Land Administration

JRP:JL:en
Lindrith Unit, 3.0

cc: Mr. Jim F. Simes
P. O. Box 959
Farmington, NM 87401



APPROVED:	Area Oil and Gas Supervisor	DATED:
	United States Geological Survey (Subject to like approval by the Commissioner of Public Lands and the Oil Conservation Division)	·
APPROVED:		DATED:
	Commissioner of Public Lands (Subject to like approval by the United States Geological Survey & the Oil Conservation Division)	
APPROVED:	Jole Of amos	DATED: 2/17/81
	Oid Conservation Division (Subject to like approval by the United States Geological Survey	

& the Commissioner of Public Lands)

NOV 12 1980 CHE CO SANTA FE

The foregoing approvals are for the 1980 Drilling Program for the Lindrith Unit 1, Section No. 713, Rio Arriba County, New Mexico.

# LINDRITH UNIT WORKING INTEREST OWNERS

Conoco, Inc.

Mobil Oil Corporation (3)

Tenneco Oil Company





# United States Department of the Interior

GEOLOGICAL SURVEY
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125

buquerque, New Mexico 0/12

FEB 0 9 1981

= FE3 1981 L

OIL CONS PVATION DIVISION SANTA FE

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



Gentlemen:

Three approved copies of your 1981 plan of development for the Lindrith unit area, Rio Arriba County, New Mexico, proposing to drill 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,

ORIGINAL STONED BY:

Gene F. Daniel
Deputy Conservation Manager
Oil and Gas

Enclosures

cc: NMOCD, Santa Fe (ltr only)

# State of New Mexico







159

Commissioner of Public Lands

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

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

> Re: Initial Participating Area for the Dakota Formation under the Lindrith "B" Unit Lindrith Unit Agreement Rio Arriba County, New Mexico

ATTENTION: Mr. James R. Permenter

Gentlemen:

The Commissioner of Public Lands has this date approved the Initial Chacon Dakota Formation Participating Area for the Lindrith "B" Unit, Lindrith Unit Agreement, Rio Arriba County, New Mexico. Our approval is subject to like approval by the United States Geological Survey.

Enclosed is one approved copy for your files.

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

BY:

FLOYD O. PRANDO, Assistant Director Oil and Gas Division AC 505-827-2748

AJA/FOP/s encls.

cc;

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

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

# December 8, 1980

El Paso Natural Gas Company

P. 0. Box 1492

El Paso, Texas 39978

Attention: D. N. Canfield

Re: Case No. 159 Lindrith Unit 1981 Drilling Program

Gentlemen:

We hereby approve the 1981 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.

Yours very truly,

JOE D. RAMEY Director

JDR/EP/fd

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



P. O. BOX 1492 EL PASO, TEXAS 79978

PHONE: 915-543-2600

November 7, 1980

159

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 Division State of New Mexico Post Office Box 2088 Santa Fe, New Mexico 87501 0K 12/1/80

Re: Lindrith Unit I Section No. 713 Rio Arriba County, New Mexico 1981 Drilling Program

### Gentlemen:

By letter dated January 7, 1980, El Paso Natural Gas Company, as Unit Operator of the Lindrith Unit, filed a Drilling Program covering the subject Unit for the calendar year 1980 providing for the drilling of four (4) Pictured Cliffs wells (#100, #101, #102, #103). All four (4) wells were timely drilled. All four (4) wells were drilled outside the Pictured Cliffs Participating Area and are currently being tested to determine whether each will be commercial, thereby causing an expansion.

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

Pictured Cliffs (Gas)

Pictured Cliffs (Non-commercial)

Pictured Cliffs, Being Evaluated

DEC 0 1 1980

1

Plugged and Abandoned

OIL COLSTANTA FE

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 1981.

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

Well	Drilling Block	Formation
#104	SE/4 Section 18-24N-2W	Pictured Cliffs
#105	SW/4 Section 2-24N-3W	Pictured Cliffs
#106	NE/4 Section 3-24N-3W	Pictured Cliffs
#107	SW/4 Section 22-24N-3W	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 10 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

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

Very truly yours

D. N. Wanfield of Attorney-In-Fact

DNC/JL/ee Attachments Lindrith Unit, 3.0

# LINDRITH UNIT WORKING INTEREST OWNERS

Conoco, Inc.

Mobil Oil Corporation (3)

Tenneco Oil Company

Approved:		DATE:
	Regional Oil & Gas Supervisor	
	United States Geological Survey	
	Subject to like approval by the	
	Commissioner of Public Lands and	
	the Oil Conservation Division	
_		
Approved:		DATE:
	Commissioner of Public Lands	
	Subject to like approval by the	
	United States Geological Survey	
	and the Oil Conservation Division	
	La A La	
Approved:		DATE: /2/8/80
	Oil/Conservation Division	
	Subject to like approval by the	
	Whited States Geological Survey	
	and the Commissioner of Public Lan	ds

The foregoing approvals for the 1981 Drilling Program for the Lindrith Unit I, Section No. 713, Rio Arriba County, New Mexico.

# State of New Mexico







Commissioner of Public Lands
December 2, 1980

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

1981 Drilling Program

ATTENTION: Mr. D. N. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1981 Drilling Program for the Lindrith Unit, Rio Arriba County, New Mexico. Such program proposes the drilling of wells No. 104, 105, 106, and 107. Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Division.

Enclosed is one approved copy for your files.

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

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

BY:

FLOYD O. PRANDO, Assistant Director Oil and Gas Division AC 505-827-2748

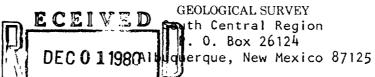
AJA/FOP/s encls.

cc:

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



# United States Department of the Interior



OIL CONSERVATION DIVISION SANTA FE

404 2 8 1980

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

### Gentlemen:

On this date, your revised 1980 plan of development and operation for the Lindrith unit area, Rio Arriba County, New Mexico, wherein you proposed drilling wells No. 11 and 15 to test the Chacon and Dakota formations was approved. Such approval is subject to like approval by the appropriate State officials. One approved copy is enclosed.

Sincerely yours,

CARL U.C., MOR WILLUCK

FOR

Gene F. Daniel
Acting Deputy Conservation
Manager, Oil and Gas

Enclosure

NMOCD, Santa Fe (ltr only)

# State of New Mexico



ALEX J. ARMIJO COMMISSIONER



ommissioner of li November 17, 1980

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

El Paso Natural Gas Company P. O. Box 1492

El Paso, Texas 79978

Re: Revised Plan of Development LINDRITH UNIT AREA

Chacon-Dakota Formation

Rio Arriba County, New Mexico

ATTENTION: Mr. James R. Permenter

### Gentlemen:

The Commissioner of Public Lands has this date approved the Revised Plan of Development for the Lindrith unit area, Rio Arriba County, New Mexico, proposing the drilling of the original eight (8) wells plus two additional wells. Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Division.

Enclosed is one approved copy for your files.

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

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

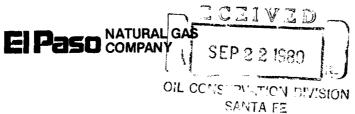
BY:

FLOYD O. PRANDO, Assistant Director-Oil & Gas Division AC 505-827-2748

AJA/FOP/s encls.

cc:

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



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

MAFE

September 15, 1980

Area Oil and Gas Supervisor United States Geological Survey P. O. Box 26124 Albuquerque, New Mexico 87125

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

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

> Re: Lindrith Unit I Section No. 713 Rio Arriba County, New Mexico

> > 1980 Drilling Program

## Gentlemen:

The 1980 Drilling Program for the referenced unit was approved by the regulatory agencies on the following dates:

United States Geological Survey

February 4, 1980

Commissioner of Public Lands

January 14, 1980

Oil Conservation Division

February 20, 1980

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

Very truly yours,

Din Leon

Jim Leon Landman

Land Department

JL/en Lindrith Unit, 3.0

# LINDRITH UNIT WORKING INTEREST OWNERS

Conoco, Inc.

Mobil Oil Corporation (3)

Tenneco Oil Company



# United States Department of the Interior

GEOLOGICAL SURVEY
South Central Region
P. 0. Box 26124
Albuquerque, New Mexico 87125

JUN 05 1980

#159

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

Gentlemen:

Your application of February 19, 1980, requesting approval of the twenty-fourth revision of the Pictured Cliffs participating area for the Lindrith Unit Agreement, Rio Arriba County, New Mexico, was approved on this date, effective January 1, 1979.

The twenty-fourth revision adds 640 acres to the participating area, described as:  $SE_{4}$  section 36 and  $NE_{4}$  section 10, T. 24 N., R. 3 W., N.M.P.M.;  $NE_{4}$  section 18 and  $SE_{4}$  section 29, T. 24 N., R. 2 W., N.M.P.M. With these revisions, the Pictured Cliffs participating area is enlarged to 12,896 acres.

The revisions are based upon the information obtained by the completion of unit wells Nos. 84, 93, 94, and 95, located in the SE¼ section 36, T. 24 N., R. 3 W.; SE¼ section 29, T. 24 N., R. 2 W.; NE¼ section 18, T. 24 N., R. 2 W.; and the NE¼ section 10, T. 24 N., R. 3 W., respectively. Copies of the approved application are being distributed to the appropriate Federal offices and three approved copies are enclosed. You are requested to furnish the State of New Mexico and all other interested parties with appropriate evidence of this approval.

Sincerely yours,

(ONO, SOP.) CERE T. DANIEL

Gene F. Daniel
Acting Deputy Conservation Manager
Oil and Gas

Enclosures 3

cc: NMOCD, Santa Fe

# OIL CONSERVATION DIVISION

P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

April 2, 1980

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

Attention: D. N. Canfield

Re: Case No. 159
Lindrith "B" Unit
1980 Plan of Development

Gentlemen:

We hereby approve the 1980 Plan of Development for the Lindrith "B" Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

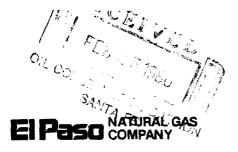
One approved copy of the Plan of Development is returned herewith.

Yours very truly,

JOE D. RAMEY Director

JDR/EP/fd enc.

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



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

February 20, 1980

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 Division State of New Mexico Post Office Box 2088 Santa Fe, New Mexico 87501 159

ck for all approval

Re:

1980 Plan of Development Lindrith "B" Unit Chacon-Dakota Formation Rio Arriba County, New Mexico

### Gentlemen:

By Designation of Sub-Operator dated May 7, 1979, El Paso Natural Gas Company et al designated Mobil Oil Corporation as operator of the Lindrith Unit for all formations below the base of the Pictured Cliffs formation (except as to the Dakota Formation in the W/2 of Section 34, Township 24 North, Range 3 West).

El Paso Natural Gas Company, as operator of the Lindrith Unit on behalf of and at the request of Mobil Producing Texas & New Mexico, Inc., successor to Mobil Oil Corporation as sub-operator of the Lindrith Unit, respectfully submits for your approval the 1980 Plan of Development for the Chacon-Dakota Formation, designated as the Lindrith "B" Unit.

As noted on the attached plat, a total of eight Chacon-Dakota wells are planned for 1980; two wells each being proposed for Sections 21, 27, 28 and 34. All working interest owners have been contacted and this Drilling Program reflects their desires.

This Plan of Development for the year 1980 may be modified or supplemented with the approval of the Supervisor and the Commissioner of Public Lands when necessary to meet changed conditions or to protect the interests of all parties to the Unit Agreement.

Regulatory Agencies February 20, 1980 Page two

Two wells were drilled to the Chacon-Dakota Formation during 1979. The Lindrith "B" Unit No. 1, located in the NW/4 of Section 28, Township 24 North, Range 3 West, is now being completed as an oil well, flowing some 76 BO and 60 BLW. The Lindrith "B" Unit No. 2 in the SW/4 of Section 28 has been drilled and will be completed soon.

This Drilling Program is a supplement to the 1980 Drilling Program filed by El Paso Natural Gas Company on January 7, 1980 which has heretofore been approved by the Regulatory Agencies.

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

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

Very truly yours,

D. N. Canfield Attorney-in-Fact

DNC: JRP: DW Attachments

Lindrith Unit, 3.0

R - 4 - W ., 25 N 7 N ;;; LINGRITH UNIT • - -7. • : 7 7, , 4 COUNTY COUNTY SANDOVAL N Mobil Producing Texas & New Mexico Inc. Completed Program LINDRITH UNIT Proposed Program

APPROVED:		DATE:	
	Regional Oil & Gas Surpervisor United States Geological Survey Subject to like approval by the Commissioner of Public Lands and the Oil Conservation Division	-	
APPROVED:	Commissioner of Public Lands Subject to like approval by the United States Geological Survey and the Oil Conservation Division	DATE: _	
APPROVED:	Oil Conservation Division Subject to like approval by the United States Geological Survey and the Commissioner of Public Lands	DATE: _	4/3/80

The foregoing approvals are for the 1980 Drilling Program for the Lindrith Unit 1, Section No. 713, Rio Arriba County, New Mexico.

# LINDRITH UNIT WORKING INTEREST OWNERS

Conoco, Inc.

Mobil Oil Corporation (3)

Tenneco Oil Company

# OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

# April 2, 1980

El Paso Natural Gas Company

P. O. Box 1492

El Paso, Texas 79978

Attention: James R. Permenter

Re: Case No. 159 Lindrith Unit

Twenty-Fourth Expanded Participating Area for the Pictured Cliffs

Formation

## Gentlemen:

We hereby approve the Twenty-Fourth 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.

Yours very truly,

JOE D. RAMEY Director

JDR/EP/fd enc.

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



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

February 19, 1980

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 Division State of New Mexico Post Office Box 2088 Santa Fe, New Mexico 87501

159 14/8+4/1/80 24/8+4/1/80

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

Effective January 1, 1979

# Gentlemen:

Pursuant to Section 10 of the Lindrith Unit Agreement, El Paso Natural Gas Company, as Unit Operator, submits for your approval the Twenty-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 lands reasonably estimated to be productive in paying quantities from the Pictured Cliffs Formation.

Twenty-Fourth Expanded Participating Area - Effective January 1, 1979

Description of Lands Township 24 North, Range Section 36: SE/4 Township 24 North, Range 2 ON SCONSERVATION DIVISION OF SECTION 18: NE/4 Section 29: SE/4 160.00

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

The lands described above are proven productive by the following:

The Lindrith Unit #84 Well, located 1610' from the South line and 810' from the East line of Section 36, Township 24 North, Range 3 West, N.M.P.M., was spudded on September 9, 1978, and completed on December 27, 1978, at a total depth of 3190'. The Pictured Cliffs Formation at the intervals of 3075', 3078', 3082', 3092', 3097', 3102', 3107', 3116', 3120', 3124' was treated with a sand-water fracturing process on November 8, 1978. The well was shut-in on December 20, 1978, and after being shut-in for seven (7) days, the Pictured Cliffs Formation was tested on December 27, 1978, using the Pitot tube method with an after frac guage of 393 MCF/D, with an SIPC of 994 psia. The spacing unit for this well is described as the SE/4 of Section 36, Township 24 North, Range 3 West, N.M.P.M., containing 160.00 acres.

The Lindrith Unit #95 Well, located 1700' from the North line and 1800' from the East line of Section 10, Township 24 North, Range 3 West, N.M.P.M., was spudded on October 5, 1978, and completed on December 14, 1978, at a total depth of 3270'. The Pictured Cliffs Formation at the intervals of 3165', 3172', 3176', 3204', 3208', 3212', 3222', 3226', 3230' was treated with a sand-water fracturing process on October 27, 1978. The well was shut-in on November 7, 1978, and after being shut-in for thirty seven (37) days, the Pictured Cliffs Formation was tested on December 14, 1978, using the Pitot tube method with an after frac guage of 2326 MCF/D, with an SIPC of 1017 psia. The spacing unit for this well is described as the NE/4 of Section 10, Township 24 North, Range 3 West, N.M.P.M., containing 160.00 acres.

The Lindrith Unit Com #93 Well, located 1460' from the South line and 1790' from the East line of Section 29, Township 24 North, Range 2 West, N.M.P.M., was spudded on October 27, 1978, and completed on December 27, 1978, at a total depth of 3081'. The Pictured Cliffs Formation at the intervals of 2954', 2961', 2965', 2978', 2981', 2987', 2996', 3002', 3018' was treated with a sand-water fracturing process on November 8, 1978. The well was shut-in on December 20, 1978 and after being shut-in for seven (7) days, the Pictured Cliffs Formation was tested on December 27, 1978, using the Pitot tube method with an after frac guage of 916 MCF/D, with an SIPC of 979 psia. The spacing unit for this well is described as the SE/4 of Section 29, Township 24 North, Range 2 West, N.M.P.M., containing 160.00 acres.

The Lindrith Unit #94 Well, located 1560' from the North line and 1780' from the East line of Section 18. Township 24 North, Range 2 West, N.M.P.M., was spudded on September 27, 1978, and completed on December 14, 1978, at a total depth of 3321'. The Pictured Cliffs Formation at the intervals of 3138', 3144', 3147', 3170', 3174', 3178', 3204', 3206', 3228', 3232', 3236', 3249', 3255' was treated with a sand-water fracturing process on October 27, 1978. The well

# TWENTY-FOURTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION LINDRITH UNIT AREA SCHEDULE XXV

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

18.144863	12.50% 75.00% 12.50%	12.50% 75.00% 12.50%	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI; TOTAL	T-24-N, R-2-W 2296.53 Sec. 28: NE/4, SE/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: SE/4, W/2 T-24-N, R-3-W Sec. 24: SW/4, W/2 SE/4	SF 078910
13.149540	12.50% 75.00% 12.50% 100.00%	12.50% 75.00% 12.50%	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI; TOTAL	T-24-N, R-2-W 1664.29 Sec. 19: Lots 3,4, Sec. 20: All Sec. 21: S/2 Sec. 30: Lots 1,2, E/2 NW/4, NE/4 T-24-N, R-3-W Sec. 24: E/2 SE/4	SF 078909
1.8004787	12.50% 75.00% 12.50%	12.50 % 75.00 % 12.50 %	RACT Co.	T-24-N, R-2-W 227.88 Sec. 18: Lots 1.2,4, E/2 NW/4, SE/4 SW/4	SF 078908 .

1.264159%	50.000 % % % % % % % % % % % % % % % % %	6.2500 12.5000 12.5000 6.25000 4.6888 44.6888 100.0000	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;	N. R-2-W *320.00 28: S/2 NW/4, SW/4 29: E/2 SE/4 vided 160.00 cres committed	Sec. 2 Sec. 2 Sec. 2 net ac	Patented
			TRACT 13-B			
1.896238 %	56.250% 56.250% .000% 71.875%	9.375 % 56.250 % 25.000 % 100.000 %	Royalty; Working Interest; El Paso Natural Gas Co.; Felmont Oil Co.; ORRI;	-N, R-2-W *320.00 29: NW/4, SW/4 ivided 240.00 acres committed	T-24-N, R Sec. 29: *Undivide net acres	Patented
	·		TRACT 13			
	75.00% 12.50% 100.00%	75.00% 12.50% 100.00%	Working Interest; El Paso Natural Gas Co.; ORRI; TOTAL	<b>6:</b>	ec.	
6.320793%	12.50%	12.50%	alty;	R-3-W 800.00	T-24-N Sec. 2	SF 078915
			TRACT 9			
PRESENT ACTUAL PARTICIPATION	PERCENTAGE COMMITTED	ERCENTAGE	DRILLING BLOCK OWNERSHIP PER	DESCRIPTION NUMBER OF ACRES	R DESC	SERIAL NUMBER

2.528317%	12.50% 75.00% 12.50% 100.00%	12.50 % 75.00 % 12.50 %	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	3-W 320.00 SW/4 NW/4, N/2 S/2, S/2 SE/4 NE/4 NE/4	T-24-N, R-3-W Sec. 13: SW/ N/2 S/2 Sec. 24: NE/	Patented
			TRACT 19			
	75.00% 12.50% 93.75%	75.00% 12.50% 100.00%	working interest; El Paso Natural Gas Co.; ORRI; TOTAL	NE/4	ŗ	
2.464951%	6.25%	12.50%	**	311.	T-24-N, R-2-W Sec. 19: Lot	Patented
			TRACT 18			
	75.00% 12.50% 100.00%	75.00% 12.50% 100.00%	El Paso Natural Gas Co.; ORRI; TOTAL			
5.056634%	12.50%	12.50%	Royalty: Working Interest:	W 640.00	T-24-N, R-3-W Sec. 9: All	Patented
	75.00% 12.50% 100.00%	75.00% 12.50% 100.00%	working interest; El Paso Natural Gas Co.; ORRI; TOTAL	/H 2M/H,	NE/4	
1.864318%	12.50%	12.50%	**		T-24-N, R-2- Sec. 18: Lo	Patented
PRESENT ACTUAL PARTICIPATION	PERCENTAGE COMMITTED	PERCENT AGE	DRILLING BLOCK	OF ACRES	DESCRIPTION	SERIAL NUMBER

			Committeed to bringing	no yar by Theelest not	
1.264159%	12.50 % 75.00 % 12.50 %	12.50% 75.00% 12.50%	lty; ing aso	R-3-W 160.00 NE/4 SE/4, S/2 NW/4, NE/4 NW/4	Patented
	•		TRACT 27		
1.264159%	3.125 % 75.000 % 12.500 % 90.625 %	12.50% 75.00% 12.50%	Royalty; Working Interest; El Paso Natural Gas Co.; ORRI;	T-24-N, R-2-W 160.00 Sec. 21: NW/4	Patented
			TRACT 25		
	75.00% 00.00% 87.00%	75.00% 12.50% 100.00%	working interest; El Paso Natural Gas Co.; ORRI; TOTAL	Sec. 11: W/2 SW/4	
2.528317%	00.00%	12.50%	•••	=	Patented
			TRACT 24		
	81.25% 6.25% 100.00%	81.25 % 6.25 % 100.00 %	Natural		
1.264159%	12.50%	12.50%	Royalty:	T-24-N, R-2-W 160.00 Sec. 9: NW/4	Patented
			TRACT 22		
PARTICIPATION	COMMITTED	PERCENTAGE		DESCRIPTION OF ACRES	SERIAL NUMBER
DESENT ACTIO	_			NEWOOD	

COMMITTED	PERCENTAGE	OWNERSHIP	OF ACRES		
PERCENTAGE	DRILLING BLOCK		NUMBER	DESCRIPTION	SERIAL NUMBER
PERCENTAGE	S.	LLING BLO		NUMBER OF ACRES	NUMBER OF ACRES

# RECAPITULATION

# Description of Lands in Participating Area:

		.*			
ection 2 ection 3	ection 21 ection 22 ection 23	ction 13 ction 14 ction 15 ction 16	ection 1 ection 1 ection 1 ection 1	ection 21 ection 28 ection 29 ection 30 ection 31 ection 32	ownship ection 1 ection 1 ection 1
<u> </u>			1 2, NE/4 2, SW/4 /4, W/2	r Enner/	- 13 0 H
					NE/4

Total Number of Acres in Participating Area:

12,656.64

# EXHIBIT "B"

GEOLOGICAL REPORT CONCERNING

THE TWENTY-FOURTH EXPANSION

OF THE PICTURED CLIFFS FORMATION IN THE

EL PASO NATURAL GAS COMPANY

LINDRITH UNIT

EL PASO NATURAL GAS COMPANY

D. E. Adams, Director

Reservoir Engineering Dept.

### EXHIBIT "B"

# GEOLOGICAL SUMMARY PERTAINING TO THE TWENTY-FOURTH 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 predominantly 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 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.

# TWENTY-FOURTH EXPANSION

Effective Date: January 1, 1979

Participating Acreage:

NE/4	Section	10	T-24-N,	R-3-W	Lindrith	No.	95
NE/4	Section	18	T-24-N,	R-2-W	Lindrith	No.	94
SE/4	Section	29	T-24-N,	R-2-W	Lindrith	No.	93
SE/4	Section	36	T-24-N.	R-3-W	Lindrith	No.	84

The Lindrith No. 95 and No. 94 wells were both tested on December 14, 1978 for initial wellhead shut-in pressures of 1,017 psia and 1,027 psia, respectively, and after frac flow gauges of 2,326 Mcf/D and 1,374 Mcf/D, respectively. On the basis of these tests, the related acreages are proven commercial and should be admitted to the Participating Area.

The Lindrith No. 93 and No. 84 wells were both tested on December 27, 1978 for initial wellhead shut-in pressures of 979 psia and 994 psia, respectively, and after frac flow gauges of 916 Mcf/D and 393 Mcf/D, respectively. The Lindrith No. 93 well was first delivered into the gathering system on June 21, 1979 and after 149 days on production, had an average rate of 119 Mcf/D. The Lindrith No. 84 well was first delivered into the gathering system on March 14, 1979 and after 254 days on production, had an average rate of 59 Mcf/D. Utilizing stabilized deliverabilities, both wells have been determined to be commercial for unit purposes.

The proposed Unit Expansion is further substantiated by the Isopach map, Exhibit "C", Figure No. 2, which shows the above acreage to be located on the established trend of commercial production and to have average net pay of greater than or equal to 10 feet.

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was shut-in on November 7, 1978, and after being shut-in for thirty seven (37) days, the Pictured Cliffs Formation was tested on December 14, 1978, using the Pitot tube method with an after frac gauge of 1374 MCF/D, with an SIPC of 1027 psia. The spacing unit for this well is described as the NE/4 of Section 18, Township 24 North, Range 2 West, N.M.P.M., containing 160.00 acres.

The effective date for the Twenty-Fourth Expanded Participating Area is determined as January 1, 1979, the first day of the month following the testing of the above referenced wells.

Attached hereto is Schedule XXV showing the Twenty-Fourth 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 varied ownership in said tract.

Attached also in support of this Expansion are the following Exhibits which are made a part hereof.

### Exhibit "A"

Ownership map reflecting the boundaries of the Lindrith Unit and the proposed Twenty-Fourth Expanded Participating Area, Pictured Cliffs Formation

### Exhibit "B"

Geological Report on the Twenty-Fourth Expanded Participating Area, Pictured Cliffs Formation

### Exhibit "C"

Structural contour and Isopach map

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

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

Very truly yours,

James R. Permenter
Manager, Land Contracts
and Titles
Land Department

JRP/DCH/sfg Enclosures Lindrith Unit 4.1

cc: Tenneco Oil Company Conoco, Inc. Mobil Oil Company

APPROVED:	Regional Oil & Gas Supervisor United States Geological Survey (Subject to like approval by the	DATED:
	Commissioner of Public Lands and the Oil Conservation Division)	•
APPROVED:	Commissioner of Public Lands (Subject to like approval by the United States Geological Survey & the Oil Conservation Division)	DATED:
APPROVED:	Oil Conservation Division (Subject to like approval by the United States Geological Survey	DATED: 4/3/80

The foregoing approvals are for the Twenty-Fourth Expanded Participating Area for the Pictured Cliffs Formation, effective January 1, 1979, under the Lindrith Unit Area I, Section No. 713, Rio Arriba County, New Mexico.

& the Commissioner of Public Lands)