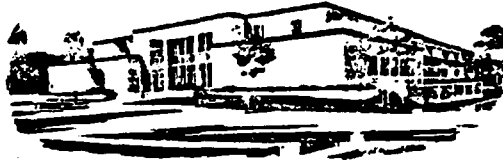


State of New Mexico

#140



Commissioner of Public Lands

JIM BACA
COMMISSIONER

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

January 14, 1991

Meridian Oil Inc.,
21 Desta Drive
Midland, TX 79705

Attn: Robert L. Bradshaw

Re: Rhodes Storage Unit
1990 Plan of Development

Dear Mr. Bradshaw:

The Commissioner of Public Lands this date approved the 1990 Plan of Development for the Rhodes Storage Unit. Our approval is subject to like approval by all other appropriate agencies.

The possibility of drainage by wells outside of the Unit Area and the need for further development may exist. You will be contacted at a later date regarding these possibilities.

If we may be of further help, please do not hesitate to contact Clyde Langdale at (505) 827-5791.

Sincerely,

JIM BACA
COMMISSIONER OF PUBLIC LANDS

Floyd O. Prando
BY:
Floyd O. Prando, Director
Oil, Gas & Minerals Division

cc: OCD
Unit Corresp.
Unit POD

fin

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 4, 1974

140

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

Attention: Mr. D. N. Canfield

Re: Rhodes State Unit,
Supplemental Drilling Program,
Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Supplemental Drilling Program providing for the drilling of four wells in the Rhodes Gas Storage Unit, Lea County, New Mexico, subject to like approval by the Commissioner of Public Lands of the State of New Mexico.

Three approved copies of the program are returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

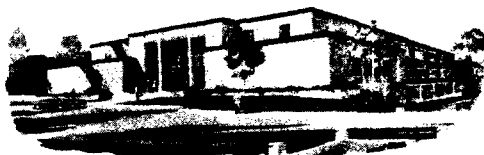
cc: Commissioner of Public Lands - Santa Fe

C
O
P
Y

State of New Mexico

TELEPHONE

505-827-2748



Commissioner of Public Lands

ALEX J. ARMIJO
COMMISSIONER

August 28, 1973

P. O. BOX 1148
SANTA FE, NEW MEXICO

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

Re: Rhodes State Unit (Rhodes State
Gas Storage Area)
1973 SUPPLEMENTAL DRILLING PROGRAM
Lea County, New Mexico

ATTENTION: Mr. D. W. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1973 Supplemental Drilling Program for the Rhodes State Unit, Lea County, New Mexico. This plan provides for the drilling of four (4) additional wells in Section 16, Township 26 South, Range 37 East which are State of New Mexico lands.

We have also received copies of the supplemental drilling program for the Rhodes Federal Unit providing for the drilling of sixteen (16) additional wells. We are retaining one copy for information purposes and returning one copy to you surplus to our need. Also enclosed are two approved copies for the State lands.

Please remit a Four (\$4.00) Dollar filing fee.

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas Department

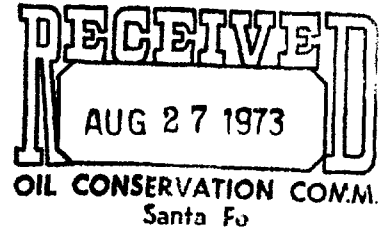
AJA/RDG/s
encs.

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

El Paso Natural Gas Company

El Paso, Texas 79978

August 17, 1973



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: Rhodes State Unit (Rhodes State
Gas Storage Area) All of Section
16, Township 26 South, Range 37
East, N.M.P.M., Lea County,
New Mexico

Gentlemen:

El Paso Natural Gas Company as the Group I Unit Operator of the referenced Unit, and pursuant to the provisions of Paragraph 10 of the Unit Agreement dated January 1, 1948, and effective June 1, 1951, plans to drill four (4) additional wells in the Unit for the injecting and withdrawal of Group I substances at the following described locations:

Well

Location

Township 26 South, Range 37, East, N.M.P.M.

Rhodes Gas Storage Unit #18	Section 16: NW/4 NW/4
Rhodes Gas Storage Unit #19	Section 16: SE/4 NW/4
Rhodes Gas Storage Unit #20	Section 16: NE/4 SW/4
Rhodes Gas Storage Unit #21	Section 16: SW/4 SW/4

Each of the wells is proposed to be completed in the Yates Formation above a depth of 4000 feet below the surface of the earth and is intended to be used for the injecting and withdrawal of Group I substances in accordance with the applicable provisions of the Rhodes State Unit Agreement. The proposed drilling operations will not change the way the Storage Unit has been operated in the past and are planned to result in better and more efficient operations.

Commissioner of Public Lands
Oil Conservation Commission
Page Two

August 17, 1973

Approval is hereby respectfully requested for the drilling of said wells.

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.

Yours very truly,

A handwritten signature in cursive script, reading "D. N. Canfield".

D. N. Canfield
Manager
Land Department
Energy Resource Development

DNC:ALT:lj
Rhodes State Unit

APPROVED: _____ DATE: _____
Commissioner of Public Lands
Subject to like approval by the
Oil Conservation Commission

APPROVED: A. L. Porter, Jr. DATE: January 4, 1974
Oil Conservation Commission
Subject to like approval by
The Commissioner of Public Lands

The foregoing approvals are for the 1973 Supplemental Drilling Program for the Rhodes State Unit (Rhodes State Gas Storage Area) Lea County, New Mexico.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

140

July 20, 1973

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

Attention: Mr. D. N. Canfield

Re: Drilling Program
Rhodes State Unit,
Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program dated May 30, 1973, providing for the drilling of two wells in the Rhodes State Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands
Santa Fe, New Mexico

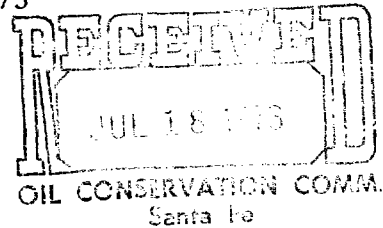
United States Geological Survey
Roswell, New Mexico

El Paso Natural Gas Company

El Paso, Texas 79978

May 30, 1973

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: Rhodes State Unit
(Rhodes State Gas Storage Area)
All of Section 16, Township 26 South,
Range 37 East, N.M.P.M.
Lea County, New Mexico

Gentlemen:

El Paso Natural Gas Company as the Group I Unit Operator of the referenced Unit, and pursuant to the provisions of Paragraph 10 of the Unit Agreement dated January 1, 1948, and effective June 1, 1951, plans to drill two (2) additional wells in the Unit for the injecting and withdrawal of Group I substances at the following described locations:

<u>WELL</u>	<u>LOCATION</u>
	Township 26 South, Range 37 East, N.M.P.M.
Rhodes Gas Storage Unit #3	Section 16: NE/4 NE/4
Rhodes Gas Storage Unit #4	Section 16: NW/4 SE/4

Each of the wells is proposed to be completed in the Yates Formation above a depth of 4000 feet below the surface of the earth and is intended to be used for the injecting and withdrawal of Group I substances in accordance with the applicable provisions of the Rhodes State Unit Agreement. The proposed drilling operations will not change the way the Storage Unit has been operated in the past and are planned to result in better and more efficient operations.

Approval is hereby respectfully requested for the drilling of said wells.

In accordance with the plan for continued orderly development of the Storage Unit El Paso Natural Gas Company also has under study tentative plans to drill similar storage wells at four (4) additional locations in the Rhodes State Unit, but a final decision on the exact locations to

Commissioner of Public Lands
State of New Mexico

Oil Conservation Commission
State of New Mexico
Page Two

be requested for approval of the four (4) additional locations and wells is expected to be made after the results of drilling two (2) locations as described are known.

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.

Yours very truly,

A handwritten signature in cursive script, reading "D. N. Canfield".

D. N. Canfield
Manager,
Land Department

DNC:mm
Rhodes State Unit

APPROVED: _____ DATE: _____

Commissioner of Public Lands
Subject to like approval by the
Oil Conservation Commission

APPROVED: _____



Oil Conservation Commission
Subject to like approval by
The Commission of Public Lands

DATE: _____

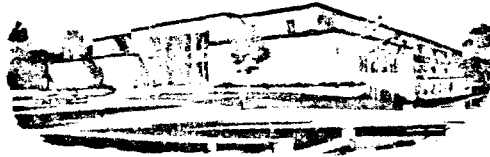
July 20, 1973

The foregoing approvals are for the 1973 Drilling Program for the Rhodes State Unit (Rhodes State Gas Storage Area) Lea County, New Mexico.



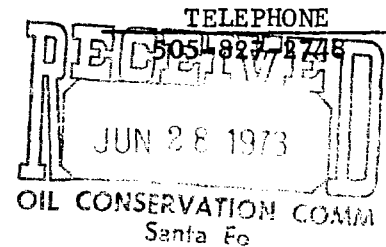
ALEX J. ARMIJO
COMMISSIONER

State of New Mexico



Commissioner of Public Lands

June 26, 1973



P. O. Box 1148
SANTA FE, NEW MEXICO

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

Re: Rhodes State Unit
(Rhodes State Gas Storage Area)
All of Section 16, Township 26 South,
Range 37 East, N.M.P.M.
Lea County, New Mexico

ATTENTION: Mr. D. N. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your Plan of Development for the Rhodes State and Federal Unit, Lea County, New Mexico. This plan provides for the drilling of the No. 3 and No. 4 Wells in Section 16, Township 26 South, Range 37 East which is State of New Mexico lands.

We have received the Plan of Development for the Federal Lands in the Rhodes State Unit, providing for the drilling of Wells No. 1, No. 2, and No. 5. We are retaining one copy for information purposes and returning two copies to you surplus to our need. Also enclosed is one approved copy for the State lands.

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

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas Department

AJA/RDG/s
encls.

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

C - CONSEL

P. O. BOX 871

SANTA FE, NEW MEXICO

May 18, 1954

C
O
P
Y

Mr. Larry C. Zink, Division Geologist
El Paso Natural Gas Company
Box 1384
Jal, New Mexico

Dear Sir:

Reference is made to your letter and enclosures of April 30 to Mr. Stanley pertaining to your Rhodes Unit Area in Township 26 South, Range 27 East.

Inasmuch as this Commission has never formally approved the Rhodes Unit Area as such but has only approved the Rhodes State Unit Area, we feel that it is not within the scope of this office to approve development plans on units not subject to our approval.

We have examined your proposal and have no objection whatsoever to the plan provided, however, that you receive like approval from the U. S. Geological Survey.

It is my understanding that your company is planning to present all the available information pertaining to the Rhodes Unit Area and the storage project connected therewith, to the Commission at an early date.

Very truly yours,

R. R. SPURRIER
Secretary and Director

RRS:vc

CERTIFICATE OF APPROVAL BY THE COMMISSIONER
OF PUBLIC LANDS OF THE STATE OF NEW MEXICO
OF THE RHODES (STATE) UNIT AGREEMENT

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico, for examination, a unit agreement for the development and operation of the Rhodes (State) Unit Area, Lea County, New Mexico, bearing the date of January 1, 1948, in which the El Paso Natural Gas Company, a corporation, is designated as operator of Group 1 substances as indicated in said agreement, and which according to testimony adduced at the hearing some of the various parties holding oil and gas leases embracing state lands within the unit area have agreed, and upon examination of said agreement, the Commissioner finds:

(a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said field;

(b) That under the operation proposed the State of New Mexico will receive its fair share of the recoverable gas and oil in place under its lands in the area affected;

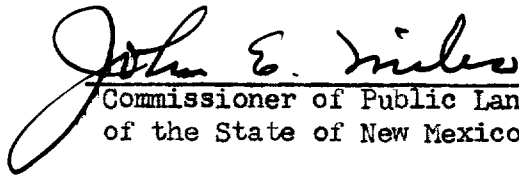
(c) The agreement is in other respects in the best interests of the State;

(d) That the agreement provides for the unit operation of the area and the sharing of proceeds from a part of the area covered by the agreement on an acreage basis, as specified in the agreement.

NOW, THEREFORE, by virtue of the authority conferred upon me by Chapter 88 of the New Mexico Session Laws of 1943, approved April 14, 1943, I, the undersigned Commissioner of Public Lands of the State of New Mexico for the purpose of more properly conserving the oil and gas resources of the State do hereby consent to and approve the unit agreement above referred to for

the development and operation of the RHODES (STATE) UNIT area, Lea County, New Mexico, subject, however, to all of the provisions of the aforesaid legislative act.

EXECUTED this 24th day of June, 1948.



Commissioner of Public Lands
of the State of New Mexico

(SUBMIT IN TRIPLICATE)

Land Office **Las Cruces**
HOBBBS OFFICE OCC
Lease No. **090174-(a)**

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Unit **4** AM **10:33**

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 30, 19 **34**

Well No. **2** is located **1490** ft. from **21** line and **1670** ft. from **E** line of sec. **22**
33 1/4 Section 22 **26 S** **37 E** **N.M.P.M.**
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Rhodes **Lee** **New Mexico**
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is **2995** ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Permission is requested to use the El Paso Natural Gas Company's Rhodes A-2 well for an injection well under the terms of the Rhodes Unit Area agreement.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **El Paso Natural Gas Company**

Address **Box 1384**

Jal., New Mexico

By **Larry C. Zink**
Larry C. Zink
Title **Division Geologist**

(SUBMIT IN TRIPLICATE)

Land Office **Las Cruces**

UNITED STATES OFFICE OF THE GEOLOGICAL SURVEY
DEPARTMENT OF THE INTERIOR
Case No. **030177-B**
Unit _____
AM 10:33

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 30, 19 **54**

Well No. **4** is located **1320** ft. from **[S]** line and **1320** ft. from **[E]** line of sec. **5**

SE 1/4 Section 5 (1/4 Sec. and Sec. No.) **26 N** (Twp.) **37 E** (Range) **R.M.P.M.** (Meridian)
Rhodes (Field) **Leon** (County or Subdivision) **New Mexico** (State or Territory)

The elevation of the derrick floor above sea level is **2200** ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Permission is requested to use the El Paso Natural Gas Company's Shepherd 2-4 well for an injection well under the terms of the Rhodes Unit Area agreement.

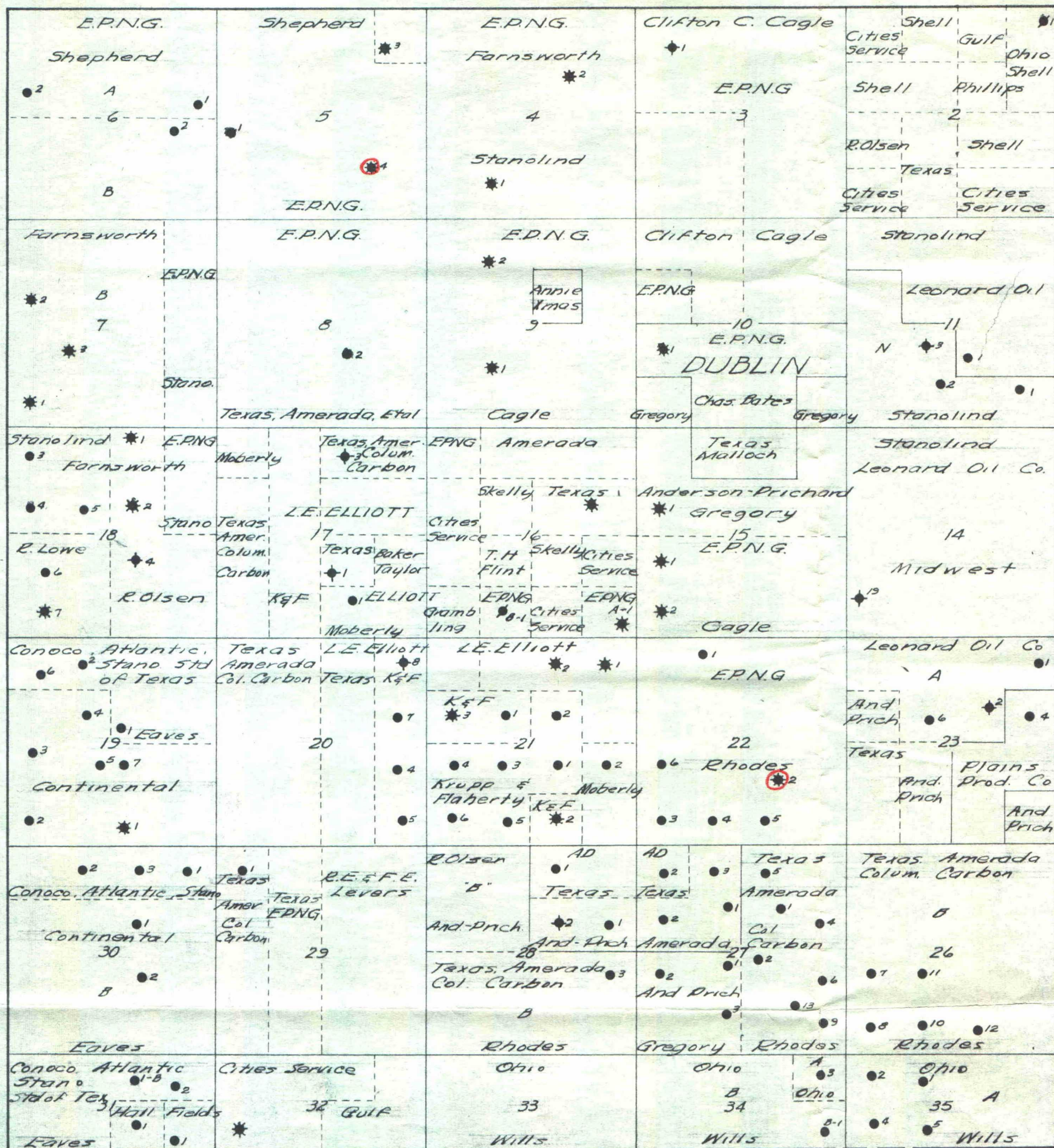
I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **El Paso Natural Gas Company**

Address **Box 1344**

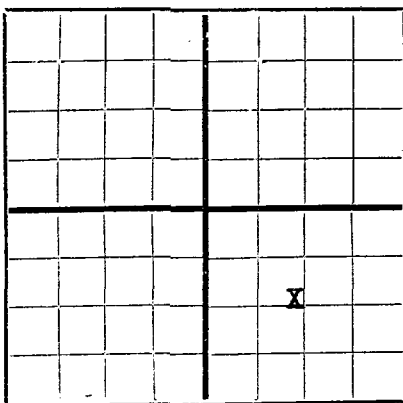
Del., New Mexico

By **Larry C. Zink**
Title **Division Geologist**



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NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New MexicoAREA 640 ACRES
LOCATE WELL CORRECTLY

WELL RECORD

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPLICATE. FORM C-110 WILL NOT BE APPROVED UNTIL FORM C-105 IS PROPERLY FILLED OUT.

El Paso Natural Gas Company Box 1384, Jal, New Mexico
C. W. Shepherd "B" Well No. 4 in SE/4 of Sec. 5 T. 26 S
Lease R. 37 E N. M. P. M. N.M. PM Rhodes Field, Lea County.
Well is 1320 feet north of the North line and 1320 feet west of the East line of Section 5
If State land the oil and gas lease is No. Assignment No.
If patented land the owner is Address
If Government land the permittee is C. W. Shepherd Address
The Lessee is El Paso Natural Gas Company Address Box 1384, Jal, New Mexico
Drilling commenced April 25 19 37 Drilling was completed June 25 19 37
Name of drilling contractor Address
Elevation above sea level at top of casing 2989 feet.
The information given is to be kept confidential until 19

OIL SANDS OR ZONES

No. 1, from 2825 to 2860 G No. 4, from 3195 to 3200
No. 2, from 3075 to 3090 G No. 5, from to
No. 3, from 3135 to 3150 G No. 6, from to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet.
No. 2, from to feet.
No. 3, from to feet.
No. 4, from to feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED		PURPOSE
							FROM	TO	
10-3/4	45	8	L.W.	236	Tex. Pat.				
7-5/8	26.4	8	Smls.	2695	Guide				
5-1/2	17	10	"	3012	"				

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHODS USED	MUD GRAVITY	AMOUNT OF MUD USED
	10-3/4	250	100	Halliburton		
	7-5/8	2684	500	"		
	5-1/2	2990	25	"		

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth Set
Adapters -- Material Size

RECORD OF SHOOTING OR CHEMICAL TREATMENT

SIZE	SHELL USED	EXPLOSIVE OR CHEMICAL USED	QUANTITY	DATE	DEPTH SHOT OR TREATED	DEPTH CLEANED OUT

Results of shooting or chemical treatment

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

TOOLS USED

Rotary tools were used from 0 feet to 3200 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

PRODUCTION

Put to producing July 6 19 37
The production of the first 24 hours was barrels of fluid of which % was oil; % emulsion; % water; and % sediment. Gravity, Be
If gas well, cu. ft. per 24 hours 8,000,000 Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in. 1240

EMPLOYEES

D. C. Fuller Driller E. S. Moore Driller
Clyde Wangeman Driller

FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Subscribed and sworn to before me this 30th

day of April 19 54

John W. Blocker
Notary Public

My Commission expires April 8, 1954

Jal, New Mexico April 30, 1954

Name Harry C. Zink

Position Division Geologist

Representing El Paso Natural Gas Company

Address Box 1384, Jal, New Mexico

FORMATION RECORD

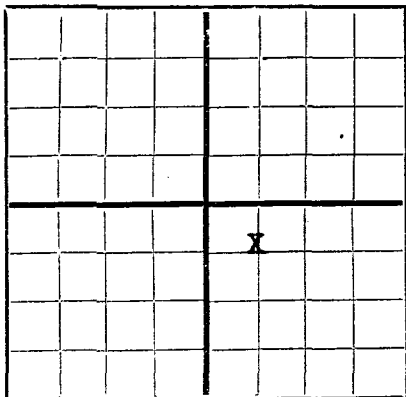
FROM	TO	THICKNESS IN FEET	FORMATION
0	20	20	Caliche
20	234	214	Red Rock and sand
234	260	26	Sand and shells
260	569	309	Red Rock, sand and shells
569	1000	431	Red Rock and red beds
1000	1131	131	Anhydrite
1131	1628	497	Salt and anhydrite
1628	1660	32	Anhydrite
1660	1935	275	Salt and anyhdrite
1935	2010	75	Salt
2010	2140	130	Salt and anhydrite
2140	2213	73	Anhydrite
2213	2420	207	Salt and anhydrite
2420	2526	106	Sand
2526	2630	104	Salt and anhydrite
2630	2680	50	Anhydrite
2680	2825	245	Brown lime
2825	2860	35	Brown sandy lime
2860	3075	215	Hard white lime
3075	3090	15	Sandy lime
3090	3135	45	Grey lime
3135	3150	15	Sandy lime
3150	3195	45	Hard grey lime
3195	3200	5	Sandy lime

HISTORY OF WELL

At a total depth of 3200 the well produced an average of 23 barrels of fluid per day, 40% water and 250,00 cu. ft. of gas. Due to water encroachment in this area making it uneconomical to produce under these conditions, the well was plugged back to 2960 with cement. Having secured a complete water shut-off, 8,500,000 cu. ft. of gas successfully recovered and the 5-1/2" OD casing cut and recovered to a total depth of 2800. This leaves the well completed at a total depth of 2960' with a 5-1/2" liner from 2800' to 2990'.

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

1954 MAY 4 AM 10:33



AREA 640 ACRES
LOCATE WELL CORRECTLY

WELL RECORD

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPLICATE. FORM C-110 WILL NOT BE APPROVED UNTIL FORM C-105 IS PROPERLY FILLED OUT.

El Paso Natural Gas Company
Company or Operator
W. H. Rhodes "A" Well No. 2 in SE/4 of Sec. 22 T. 26 S
Lease
R. 37 E, N. M. P. M., Rhodes Field, Lea County.
Well is 1650 feet North of the South line and 1650 feet west of the East line of 22
If State land the oil and gas lease is No. Assignment No.
If patented land the owner is Address
If Government land the permittee is W. H. Rhodes Address
The Lessee is El Paso Natural Gas Company Address Box 1384, Jal, New Mexico
Drilling commenced May 19 19 37 Drilling was completed June 21 19 37
Name of drilling contractor Address
Elevation above sea level at top of casing 2995 feet.
The information given is to be kept confidential until 19

OIL SANDS OR ZONES

No. 1, from 3050 to 3055 G No. 4, from to
No. 2, from 3122 to 3140 G No. 5, from to
No. 3, from 3170 to 3200 No. 6, from to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.
No. 1, from to feet.
No. 2, from to feet.
No. 3, from to feet.
No. 4, from to feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED FROM	TO	PURPOSE
15-1/2	70	8		237	Texas Pattern				
10-3/4	40.5	8	Smls.	1154	Baker Guide				
7-5/8	26.4	8	"	3109	" "				

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHODS USED	MUD GRAVITY	AMOUNT OF MUD USED
	15-1/2	255	200	Halliburton		
	10-3/4	1150	500	"		
	7-5/8	3100	125	"		

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth Set
Adapters — Material Size

RECORD OF SHOOTING OR CHEMICAL TREATMENT

SIZE	SHELL USED	EXPLOSIVE OR CHEMICAL USED	QUANTITY	DATE	DEPTH SHOT OR TREATED	DEPTH CLEANED OUT
		Nitroglycerine 230 Q.	6-18-37; 3130-3206			

Results of shooting or chemical treatment.

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

TOOLS USED

Rotary tools were used from 0 feet to 3280 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

PRODUCTION

Put to producing July 1 19 37
The production of the first 24 hours was barrels of fluid of which % was oil; % emulsion; % water; and % sediment. Gravity, Be.
If gas well, cu. ft. per 24 hours 25,000,000 Gallons gasoline per 1,000 cu. ft. of gas.
Rock pressure, lbs. per sq. in. 920

EMPLOYEES

R. W. Rickei Driller Roy Rodgers Driller
Dick Branson Driller H. E. Kemnits Driller

FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Subscribed and sworn to before me this 30th day of April 19 54
Notary Public
My Commission expires April 8, 1956
Jal, New Mexico April 30, 1954
Name Larry C. Zink
Position Division Geologist
Representing El Paso Natural Gas Company
Company or Operator
Address Box 1384, Jal, New Mexico

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
0	96	96	Sand & surface rock
96	395	299	Red bed and red rock
395	610	215	Red rock and shells
610	710	100	Red rock and gyp.
710	1055	345	Red rock and red bed
1055	1196	141	Anhydrite
1196	1520	324	Salt and anhydrite
1520	1565	45	Anhydrite
1565	1801	236	Salt and anhydrite
1801	1982	181	Salt
1982	2163	181	Salt and anhydrite
2163	2265	102	Salt and shells
2265	2495	230	Salt and anhydrite
2495	2649	154	broken salt
2649	2710	61	Anhydrite, salt and shale
2710	2750	40	Anhydrite and gyp.
2750	2849	99	Brown lime and anhydrite
2849	2979	130	Gray lime
2979	3010	31	Lime and anhydrite
3010	3122	112	White lime
3122	3140	18	Sand and gray lime
3140	3160	20	Medium gray lime
3160	3170	10	Sandy gray lime
3170	3200	30	Sand
3200	3280	80	Hard gray & buff lime

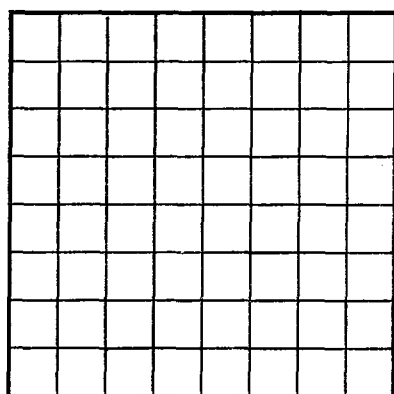
HISTORY OF WELL

Drill Stem Test on 6-5-37 showed small amount of gas from 3000' to 3103'.

On 6-6-37 Drill Stem Test showed 3,500,000 cu. ft. of gas from 3000' to 3160'

On 6-18-37 after drilling to total depth of 3280', the well was shot with 230 quarts of nitroglycerine from 3130' to 3206'. Before shooting, the well tested 3,000,000 cu. ft. of gas and approximately 19 barrels of oil per day. After shooting and cleaning out to bottom, well tested 25,000,000 cu. ft. of gas and no oil with 250# pressure on casing.

Form 9-3880



LOCATE WELL CORRECTLY

U. S. LAND OFFICE
SERIAL NUMBER
LEASE OR PERMIT TO PROSPECTUNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company The Texas Company Address Box 1270, Midland, Texas
Lessor or Tract St. N.M. "Y" Field Rhodes State New Mexico
Well No. 1 Sec. 16 T. 26S R. 37E Meridian Lea County Lea
Location 1980 ft. S. of N. Line and 1270 ft. W. of E. Line of SE 1/4 NE 1/4 Sec. 16 Elevation 2994
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed _____

Date February 1940 Title Ass't. Dist. Supert.

The summary on this page is for the condition of the well at above date.

Commenced drilling 1-6, 1940 Finished drilling 2-5, 1940

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 2970 to 3140 No. 4, from _____ to _____
No. 2, from _____ to _____ No. 5, from _____ to _____
No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
13"	40	8	W	2031	Texas	Bottom			
9-5/8"	28	11	W	1001	Waco	Bottom			
7"	20	10	W	5936	Baker	Bottom			
HISLOKA OIL OR GAS WELL									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13"	218'	180	Halliburton		
9-5/8"	1111'	450	"		
7"	2953'	125	"		

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 3140 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

_____, 19____ Put to producing _____, 19____

The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ % emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours 13,700,000 Gallons gasoline per 1,000 cu. ft. of gas _____Rock pressure, lbs. per sq. in. 900

EMPLOYEES

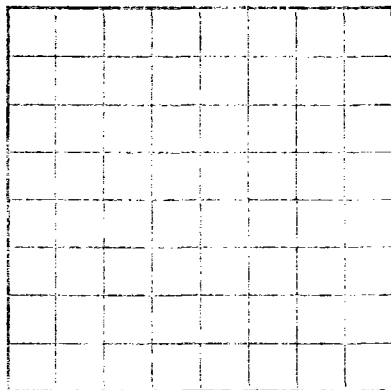
L. J. Upton, Driller Sam Cunningham, Driller
R. L. Lenderman, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	141	141	Caliche & Sand
141	200	59	Sand & Red Beds
200	270	70	Red Beds
270	518	248	Sand, Shale, & Red Beds
518	1005	487	Red Rock, Hard Sand, Shells, Shale
1005	1030	25	Shale & Red Rock
1030	1145	115	Anhydrite
1145	1695	550	Salt & Anhydrite
1695	1932	237	Salt, Potash, Anhydrite, & Gyp
1932	2425	493	Salt & Anhydrite
2425	2470	45	Anhydrite
2470	2640	170	Salt & Anhydrite
2640	2705	65	Anhydrite & Lime
2705	2780	75	Brown Lime
2780	2850	70	Anhydrite, Lime & Sand
2850	2970	120	Lime
2970	3050	80	Sandy Lime
3050	3080	30	Broken Lime
3080	3140	60	Sandy Lime
T. D. 3140'			230'

(OVER)

16-43094-2



LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

GEOLOGICAL SURVEY

DEPARTMENT OF THE INTERIOR

UNITED STATES

Company The Texas Company
Lessor or Trust
Well No. 1
Location of Line and 1/2 Sec. 10, T. 33N. R. 32E. Meridian
The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.
Signed
Date February 1940
Title Assistant Engineer

OIL OR GAS SANDS OR ZONES

No. 1 from 3270 to 3140
No. 2 from 3140 to 3050
No. 3 from 3050 to 2950

IMPORTANT WATER SANDS

No. 1 from 2950 to 2850
No. 2 from 2850 to 2750

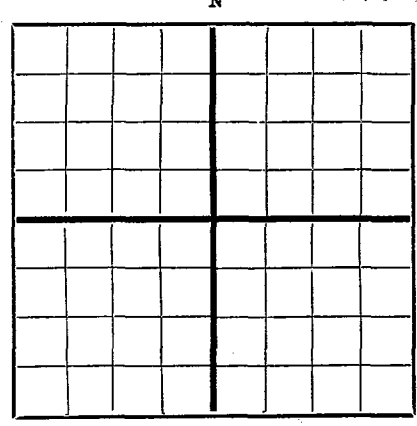
It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "kinked" or left in the well, give its size and location. If the well has been dynamited, give date, position, and number of shots. If plugs or bridges were put in to test for water, state depth of material used, position, and results of pumping or bailing.

HISTORY OF OIL OR GAS WELL

FROM	TO	TOTAL FEET	FORMATION
3000	3270	270	Shale & Red Rock
2950	3050	100	Shale & Red Rock
2900	3100	200	Shale & Red Rock
2850	3150	300	Shale & Red Rock
2800	3200	400	Shale & Red Rock
2750	3250	500	Shale & Red Rock
2700	3300	600	Shale & Red Rock
2650	3350	700	Shale & Red Rock
2600	3400	800	Shale & Red Rock
2550	3450	900	Shale & Red Rock
2500	3500	1000	Shale & Red Rock
2450	3550	1100	Shale & Red Rock
2400	3600	1200	Shale & Red Rock
2350	3650	1300	Shale & Red Rock
2300	3700	1400	Shale & Red Rock
2250	3750	1500	Shale & Red Rock
2200	3800	1600	Shale & Red Rock
2150	3850	1700	Shale & Red Rock
2100	3900	1800	Shale & Red Rock
2050	3950	1900	Shale & Red Rock
2000	4000	2000	Shale & Red Rock
1950	4050	2100	Shale & Red Rock
1900	4100	2200	Shale & Red Rock
1850	4150	2300	Shale & Red Rock
1800	4200	2400	Shale & Red Rock
1750	4250	2500	Shale & Red Rock
1700	4300	2600	Shale & Red Rock
1650	4350	2700	Shale & Red Rock
1600	4400	2800	Shale & Red Rock
1550	4450	2900	Shale & Red Rock
1500	4500	3000	Shale & Red Rock
1450	4550	3100	Shale & Red Rock
1400	4600	3200	Shale & Red Rock
1350	4650	3300	Shale & Red Rock
1300	4700	3400	Shale & Red Rock
1250	4750	3500	Shale & Red Rock
1200	4800	3600	Shale & Red Rock
1150	4850	3700	Shale & Red Rock
1100	4900	3800	Shale & Red Rock
1050	4950	3900	Shale & Red Rock
1000	5000	4000	Shale & Red Rock
950	5050	4100	Shale & Red Rock
900	5100	4200	Shale & Red Rock
850	5150	4300	Shale & Red Rock
800	5200	4400	Shale & Red Rock
750	5250	4500	Shale & Red Rock
700	5300	4600	Shale & Red Rock
650	5350	4700	Shale & Red Rock
600	5400	4800	Shale & Red Rock
550	5450	4900	Shale & Red Rock
500	5500	5000	Shale & Red Rock
450	5550	5100	Shale & Red Rock
400	5600	5200	Shale & Red Rock
350	5650	5300	Shale & Red Rock
300	5700	5400	Shale & Red Rock
250	5750	5500	Shale & Red Rock
200	5800	5600	Shale & Red Rock
150	5850	5700	Shale & Red Rock
100	5900	5800	Shale & Red Rock
50	5950	5900	Shale & Red Rock
0	6000	6000	Shale & Red Rock

Deviation Tests as Follows:
SANTA FE, N. M.
RECEIVED
STATE LAND OFFICE
SEP 12 11 48 AM '49

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico



AREA 640 ACRES
LOCATE WELL CORRECTLY

WELL RECORD

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPPLICATE. FORM C-110 WILL NOT BE APPROVED UNTIL FORM C-105 IS PROPERLY FILLED OUT.

GREAT WESTERN PRODUCERS INC. **KERRIT, TEXAS**
Company or Operator Address
State **A** Well No. **1** in **SE 1/4 34** of Sec. **16**, T. **26S**
Lease
R. **37E**, N. M. P. M., **Madison** Field, **Lee** County.
Well is **1620** feet south of the North line and **660** feet west of the East line of **Section 16**
If State land the oil and gas lease is No. **2-1498** Assignment No. **2**
If patented land the owner is _____ Address _____
If Government land the permittee is _____ Address _____
The Lessee is _____ Address _____
Drilling commenced **October 1,** 19 **37** Drilling was completed **November 5** 19 **37**
Name of drilling contractor **George P. Livemore, Inc.** Address **Kerrit, Texas**
Elevation above sea level at top of casing **2985** feet.
The information given is to be kept confidential until _____ 19 _____

OIL SANDS OR ZONES

No. 1, from _____ to _____ No. 4, from _____ to _____
No. 2, from **3209** to **3217** No. 5, from _____ to _____
No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.
No. 1, from _____ to _____ feet.
No. 2, from _____ to _____ feet.
No. 3, from _____ to _____ feet.
No. 4, from _____ to _____ feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	PERFORATED		PURPOSE
							FROM	TO	
13"	40	8	Hotchkiss	144	None				Water Shut Off
9 5/8"	40	8	Hotchkiss	1090	Behr				" " "
7	24	8	Hotchkiss	2980	"				Oil String
2	4.7	10	Hotchkiss	3246					

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHODS USED	MUD GRAVITY	AMOUNT OF MUD USED
17 1/2	13	160	135	Halliburton		
12	9 5/8	1205	800	Halliburton		
8 3/4	7	2995	250	Halliburton		

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth Set _____
Adapters — Material _____ Size _____

RECORD OF SHOOTING OR CHEMICAL TREATMENT

SIZE	SHELL USED	EXPLOSIVE OR CHEMICAL USED	QUANTITY	DATE	DEPTH SHOT OR TREATED	DEPTH CLEANED OUT

Results of shooting or chemical treatment _____

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

TOOLS USED

_____ from _____ feet to _____ feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

PRODUCTION

Put to producing _____, 19 _____.
The production of the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment. Gravity, Be. _____.
If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. _____

EMPLOYEES

L. B. Stevenson, Driller **John Sisk**, Driller
T. H. Marshall, Driller _____, Driller

FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Subscribed and sworn to before me this **15** _____
day of **November**, 19 **37** _____
Notary Public _____
My Commission expires **5-12-39** _____
Place _____ Date _____
Name _____
Position **President**
Representing **GREAT WESTERN PRODUCERS, INC.**
Company or Operator
Address **Box 334, Kerrit, Texas**

FORMATION RECORD

FROM	TO	THICKNESS IN FEET	FORMATION
0	10	10	Surface Soil
10	25	15	Caliche
25	65	40	Sand and Caliche
65	165	100	Sand and Red Bed
165	305	140	Red Bed, sand
305	660	355	Red Bed
660	1035	375	Sand and red bed
1035	1090	15	Red bed and Shale
1090	1335	245	Anhydrite
1335	1375	40	Salt and streaks of Redbed
1375	2308	933	Salt streaked with anhydrite and polyhalite
2308	2366	58	Anhydrite
2366	2557	191	Salt and streaks of anhydrite
2557	2685	128	Anhydrite and Shale streaks
2685	2714	29	Anhydrite
2714	2860	144	Brown sandy lime
2860	2990	130	Sandy lime and shale
2990	3000	10	White lime stringer in Yates
3000	3022	22	Broken lime showing gas
3022	3027	5	Shale break
3027	3041	14	Sandy white lime
3041	3045	4	Light colored sand with odor of gas
3045	3060	15	Light colored sand with dark streaks
3060	3070	10	Sandy lime with gas odor
3070	3080	10	Sand and some lime. Gas odor
3080	3089	9	Dark colored sand. Base of Yates
3089	3105	16	Hard, white dense lime
3105	3110	5	Red bed and some sandy lime
3110	3130	20	Hard, flinty, sandy lime and some gray shale
3130	3130	20	Gray sand with gas odor and shale streaks
3130	3160	30	White, sandy lime with pyrite and shale streaks
3160	3169	9	Light colored sand with dark streaks, gas odor
3169	3180	11	Light colored sandy lime
3180	3182	2	Dark, sandy shale
3182	3191	9	White crystalline lime with shale breaks
3191	3209	12	Hard, crystalline, pinkish white lime with calcite crystals
3209	3211	2	White sandy lime, gas odor
3211	3218	7	Sandy lime with shale breaks. Some oil
3218	3235	17	Hard white, broken sandy lime; breaks of dark shale about 1" thick.
3235	3245	10	Hard white crystalline lime with calcite crystal
3245	3260	15	Hard white sandy lime. Shale breaks more frequent
3260	3277	17	White sandy lime and gray lime
3277	3285	8	Brown sandy lime
3285	3295	10	Light gray lime
3295	3310	15	Brown sandy lime. Breaks carry shale
3310	3315	5	Light colored lime and anhydrite

CERTIFICATE OF APPROVAL BY THE COMMISSIONER
OF PUBLIC LANDS OF THE STATE OF NEW MEXICO
OF THE RHODES (STATE) UNIT AGREEMENT

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico, for examination, a unit agreement for the development and operation of the Rhodes (State) Unit Area, Lea County, New Mexico, bearing the date of January 1, 1948, in which the El Paso Natural Gas Company, a corporation, is designated as operator of Group 1 substances as indicated in said agreement, and which according to testimony adduced at the hearing some of the various parties holding oil and gas leases embracing state lands within the unit area have agreed, and upon examination of said agreement, the Commissioner finds:

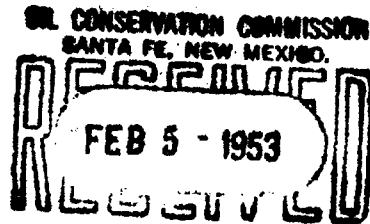
- (a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said field;
- (b) That under the operation proposed the State of New Mexico will receive its fair share of the recoverable gas and oil in place under its lands in the area affected;
- (c) The agreement is in other respects in the best interests of the State;
- (d) That the agreement provides for the unit operation of the area and the sharing of proceeds from a part of the area covered by the agreement on an acreage basis, as specified in the agreement.

NOW, THEREFORE, by virtue of the authority conferred upon me by Chapter 88 of the New Mexico Session Laws of 1943, approved April 14, 1943, I, the undersigned Commissioner of Public Lands of the State of New Mexico for the purpose of more properly conserving the oil and gas resources of the State do hereby consent to and approve the unit agreement above referred to for the development and operation of the RHODES (STATE) UNIT area, Lea County, New Mexico, subject, however, to all of the provisions of the aforesaid legislative act.

EXECUTED this 24th day of June, 1948.

/s/ JOHNE. MILES
Commissioner of Public Lands
Of the State of New Mexico

LEA COUNTY OPERATORS COMMITTEE
HOBBS, NEW MEXICO
March 14, 1949



February 4, 1953

Mr. R. A. Scala Inc, Division geologist
El Paso Natural Gas Company
Box 1384
Jal, New Mexico

Re: Drillers Unit Agreement
Lea County, New Mexico

Case 140

Dear Sir:

We are in receipt of your letter dated January 30, 1953 requesting approval from this office to use your State 2, well No. 1 and State 1, well No. 1, both in Section 16, Township 26 South, Range 37 East, T16S, R37E, Lea County, New Mexico as injection wells.

In accordance with the provisions of the State 2, well No. 1 and State 1, well No. 1, both in Section 16, Township 26 South, Range 37 East, T16S, R37E, Lea County, New Mexico as injection wells.

Very truly yours,

E. S. HALL
Commissioner of the U. S. Conservation Commission

U. S. Geological Survey

ot

ILLEGIBLE

Oil CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

January 30, 1953

Mr. R. A. Scalapino, Division Geologist
El Paso Natural Gas Company
Box 1384
Jal, New Mexico

File: Rhodes Unit Agree-
ment - Case 140.

Dear Sir:

Reference is made to your letter of January 19, 1953
pertaining to the use of your State A, Well No. 1 and State Y,
Well No. 1, both in Section 16, Township 26 South, Range 37
East, NMPM, Lea County, New Mexico as injection wells.

Inasmuch as the wells fall within the boundaries of the
Rhodes (State) Unit area, we interpret your request as a form of
development program for the unit under paragraph ten (10) of the
Unit Agreement, and not as a request under Rule 701 which would
require a hearing.

Your application is approved subject to like approval of
the Commissioner of Public Lands.

Very truly yours,

R. R. Spurrier
Secretary - Director

RRS:WBM:lh

cc:

Land Commissioner E. S. Walker



Agreement dated as of Dec. 1, 1950

between

EL PASO NATURAL GAS COMPANY
Buyer

and

SKELLY OIL COMPANY
Seller

covering purchase of gas (in place)
Rhodes (State) Unit

THIS AGREEMENT, made and entered into as of the 1st day of December, 1950, by and between EL PASO NATURAL GAS COMPANY a Delaware corporation with offices at El Paso, Texas, hereinafter called "Buyer", and SKELLY OIL COMPANY, a Delaware corporation with principal offices at Tulsa, Oklahoma, hereinafter called "Seller",

WITNESSETH:

For and in consideration of the sum of One Dollar (\$1.00) cash in hand paid to Seller by Buyer, the receipt of which is hereby acknowledged, and of the covenants and agreements hereinafter set out, Buyer and Seller do hereby contract, covenant and agree with each other as follows:

ARTICLE I

COMMITMENT OF LANDS. Seller covenants and represents that it is the owner of valid and subsisting oil and gas mining lease or leases covering the following described lands in Lea County, State of New Mexico, to wit:

Southeast quarter of Northwest quarter $\left\{ \text{SE}/\frac{1}{4} \text{ NW}/\frac{1}{4} \right\}$ and
Northwest quarter of Southeast quarter $\left\{ \text{NW}/\frac{1}{4} \text{ SE}/\frac{1}{4} \right\}$,
all in Section 16, Township 26 South,
Range 37 East, N.M.P.M., a total of 80 acres.

ARTICLE II

Seller agrees that simultaneously with the execution of this agreement it will execute the Rhodes (State) Unit Agreement dated as of January 1, 1948, and will commit the above described lands to said Agreement.

ARTICLE III

PURCHASE. Buyer agrees that it will purchase from Seller and/or pay for four hundred seventy-four million, two hundred forty thousand (474,240,000) cubic feet of natural gas at a pressure base of 16.4 pounds per square inch absolute and at a temperature of 60° Fahrenheit, which is the amount of natural gas reserves agreed to be contained under the above described lands to a depth of 4,000 feet from the surface as of January 1, 1944.

Buyer agrees to produce the above amount of gas from its own wells without expense to Seller, and Buyer will pay Seller for such gas four and one-tenth cents (\$0.041) per thousand (1,000) cubic feet at the aforesaid pressure base and temperature.

Buyer agrees that it will produce, take and/or pay for during the period ending September 1, 1953, the full four hundred seventy-four million, two hundred forty thousand (474,240,000) cubic feet of gas above mentioned, paying Seller on or before September 1st of each year beginning 1951 and ending September 1, 1953, the sum of \$6,481.28 or a total of \$19,443.84 for the three year period.

Buyer will pay all royalties and taxes due the State of New Mexico.

ARTICLE IV

LIMITATION OF PAYMENTS. Seller agrees that Buyer will not be required to pay Seller any further sums of money beyond the said \$19,433.84 regardless of the amount of gas Buyer may produce from said Rhodes (State) Unit in excess of said four hundred seventy-four million, two hundred forty thousand (474,240,000) cubic feet.

ARTICLE V

OWNERSHIP OF INJECTED GAS. Seller agrees that all gas injected by Buyer into the said Rhodes (State) Unit, limited to a depth of 4,000 feet below the surface of the said lease, shall be the property of Buyer and Seller shall not produce such gas above the said depth of 4,000 feet.

ARTICLE VI

Nothing in this agreement shall entitle Buyer to any interest in Group 2 unitized substances or in Group 3 unitized substances as described in said Rhodes (State) Unit Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed by their respective officers as of the day and year first above written.

Attest:

V. M. Summers
Asst. Secretary

EL PASO NATURAL GAS COMPANY

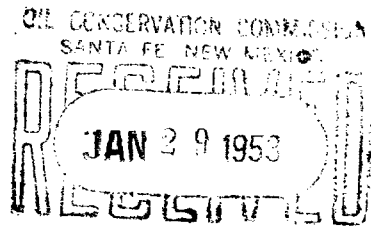
By *[Signature]*
Vice President

Attest:

[Signature]
Secretary

SKELLY OIL COMPANY

By *[Signature]* c.R.
Exec. Vice President



Agreement dated as of Dec. 21, 1948

between

EL PASO NATURAL GAS COMPANY
Buyer

and

CITIES SERVICE OIL COMPANY
Seller

covering purchase of gas (in place)
RHODES (State) Unit

THIS AGREEMENT made and entered into as of the 21st day of December, 1948, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation with offices at El Paso, Texas, hereinafter called "Buyer", and CITILS SERVICE OIL COMPANY, a Delaware corporation with principal offices at Bartlesville, Oklahoma, hereinafter called "Seller",

WITNESSETH:

For and in consideration of the sum of One Dollar (\$1.00) cash in hand paid to Seller by Buyer, the receipt of which is hereby acknowledged, and of the covenants and agreements hereinafter set out, Buyer and Seller do hereby contract, covenant and agree with each other as follows:

ARTICLE I:

Commitment of Lands. Seller covenants and represents that it is the owner of valid and subsisting oil and gas mining lease or leases covering the following described lands in Lea County, State of New Mexico, to wit:

Southwest quarter of Northwest quarter (SW $\frac{1}{4}$ NW $\frac{1}{4}$),
Northwest quarter of Southwest quarter (NW $\frac{1}{4}$ SW $\frac{1}{4}$),
Southwest quarter of Southeast quarter (SW $\frac{1}{4}$ SE $\frac{1}{4}$), and
Northeast quarter of Southeast quarter (NE $\frac{1}{4}$ SE $\frac{1}{4}$),
all in Section 16, Township 26 South,
Range 37 East, N.M.P.M., a total of 160 acres.

ARTICLE II:

Seller agrees that simultaneously with the execution of this agreement it will execute the Rhodes (State) Unit Agreement dated as of January 1, 1948, and will commit the above described lands to said Agreement.

ARTICLE III:

PURCHASE. Buyer agrees that it will purchase from Seller and/or pay for six hundred sixty three million, seven hundred ninety two thousand (663,792,000) cubic feet of natural gas at a pressure base of 16.4 lbs. per

square inch absolute and at a temperature of 60°F., which is the amount of natural gas reserves agreed to be contained under the above described lands to a depth of 4,000 feet from the surface as of January 1, 1944, on which date Buyer acquired a well located on the South one-half of the Northeast Quarter ($S\frac{1}{2}$ NE $\frac{1}{4}$) of said Section 16, Township 26 South, Range 37 East, and seven other wells in areas adjoining said Section 16.

Buyer agrees to produce the above amount of gas from its own wells without expense to Seller, and Buyer will pay Seller for such gas four and one-tenth cents (\$.041) per thousand (1000) cubic feet at the aforesaid pressure base and temperature.

Buyer agrees that it will produce, take and/or pay for during the five year period ending September 1, 1953, the full six hundred sixty three million, seven hundred ninety two thousand (663,792,000) cubic feet of gas above mentioned, paying Seller on or before September 1st of each year beginning 1949 and ending September 1, 1953, the sum of \$5,443.09 or a total of \$27,215.45 for the five year period.

Buyer agrees it will report, pay and bear all royalties and taxes due the State of New Mexico.

ARTICLE IV:

LIMITATION OF PAYMENTS. Seller agrees that Buyer will not be required to pay Seller any further sums of money beyond the said \$27,215.45 regardless of the amount of gas Buyer may produce from said Rhodes (State) Unit in excess of said six hundred sixty three million, seven hundred ninety two thousand (663,792,000) cubic feet.

ARTICLE V:

OWNERSHIP OF INJECTED GAS. Seller agrees that all gas injected by Buyer into the said Rhodes (State) Unit, limited to a depth of 4,000 feet below the surface of the said lease, shall be the property of Buyer and Seller shall

not produce such gas above the said depth of 4,000 feet.

ARTICLE VI

Nothing in this agreement shall entitle Buyer to any interest in Group 2 unitized substances or in Group 3 unitized substances as described in said Rhodes (State) Unit Agreement.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed by their respective officers as of the day and year first above written.

Attest:

A.C. Martch
Asst. Secretary

EL PASO NATURAL GAS COMPANY

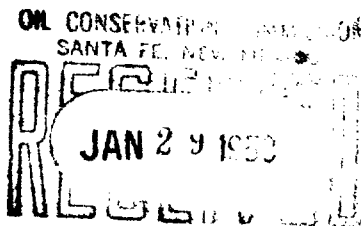
BY [Signature]
Vice President

Attest:

M.A. Hilson
Asst. Secretary

CITIES SERVICE OIL COMPANY

BY Sam Harlan
Vice President



RHODES (State) UNIT AGREEMENT
Lea County, New Mexico

dated as of January 1, 1948
(executed 5-18-51)

between

EL PASO NATURAL GAS COMPANY

and

BEN R. HOWELL,
JOHN A. GRAMBLING

RHODES UNIT AGREEMENT
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1948, by and between the parties subscribing or consenting hereto;

WITNESSETH:

WHEREAS, the parties subscribing hereto are the owners of operating, royalty, or other oil or gas interests in the Unit Area subject to this agreement; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent avoidable waste and secure other benefits obtainable through development and operating of the Unit Area subject to this agreement under the terms, conditions and limitations hereinafter set forth; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chapter 88, Laws 1943) to consent to or approve this agreement on behalf of the State of New Mexico, in so far as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature (Chapter 72, Laws 1935) to approve this agreement and the conservation provisions hereof;

NOW, THEREFORE, for and in consideration of the premises and the promises hereinafter contained, the parties subscribing hereto and the parties consenting hereto agree as follows:

1. LAWS AND REGULATIONS: The Acts of the Legislature of the State of New Mexico (Chapter 72, Laws of 1935, and Chapter 88, Laws of 1943) and all pertinent regulations issued thereunder, including operating and unit plan regulations, are accepted and made a part of this agreement.

2. DEFINITIONS: For all purposes of this agreement, certain terms used herein are defined as follows:

(a) "Commissioner" shall mean the Commissioner of Public Lands of the State of New Mexico.

(b) "Commission" shall mean the Oil Conservation Commission of the State of New Mexico and those persons duly authorized to act for and in its behalf.

(c) "Working Interest Owner" shall mean a party hereto whose interest in the unitized substances under existing contracts and under this agreement is subject to a charge for, or an obligation to pay a portion of the costs and expenses of, operations hereunder.

(d) "Royalty Owner" shall mean a party hereto or consenting hereto whose interest in the unitized substances is free from any obligation, liability, or charge for and on account of the costs and expenses of operations hereunder.

(e) "Paying Quantities" shall mean a quantity of the unitized substances sufficient to repay the cost of drilling, equipping, and operating the well and a profit in addition thereto.

3. UNIT AREA: The following described land is hereby designated and recognized as constituting the State Rhodes Unit Area:

All of Section 16, Township 26 South,
Range 37 East, Lea County, New Mexico,
embracing 640 acres.

The Operator, with the consent of a majority in interest of the Working Interest, and subject to the approval of the Commissioner and the Commission, may enlarge the Unit Area to include other lands believed to be productive of the unitized substances, or may with like consent and approval, diminish the Unit Area to exclude lands now in any participating area hereunder which shall be demonstrated to be barren of the unitized substances.

Exhibit "A" attached hereto is a map on which is outlined the herein-established Unit Area, together with the ownership of the lands and leases in said Area. Exhibit "B" attached hereto is a schedule showing the nature and extent of ownership of oil and gas rights in all land in the Unit Area to which this unit agreement will become applicable by signature hereto, or to a counterpart hereof, by the owners of such rights, and hereinafter referred to as "unitized lands". Said schedule shall be revised by the Unit Operator whenever any change in the Unit Area or ownership of rights renders such change necessary, and the revised schedule shall be filed with the record of this agreement.

4. UNITIZED SUBSTANCES: All gas, including natural gasoline, propane, butane, and other contents of the gas producible from land subject to this agreement, in any and all sands or

horizons at or above a depth of 4,000 feet from the ground surface, are unitized under the terms of this agreement and herein are called "Unitized Substances".

5. UNIT OPERATOR: El Paso Natural Gas Company is hereby designated as Unit Operator, and by signature hereof commits to this agreement all interests vested in it in land within the Unit Area and agrees to accept the duties and obligations of such Unit Operator to conduct and manage the operation of the lands subject to this agreement for the development, storage and production of unitized substances as herein provided.

6. SUCCESSOR UNIT OPERATOR: Whenever the Unit Operator under this agreement shall be removed or shall relinquish his rights as Unit Operator under this agreement, the owners of the majority of operating rights in the lands subject to this agreement shall select a new unit operator. Such selection shall not become effective until (a) the unit operator so selected shall accept the duties and responsibilities of such unit operator and (b) the selection shall have been approved by the Commission and Commissioner. Any unit operator shall be subject to removal for failure to perform effectively his duties and obligations as Unit Operator hereunder on notice by the Commission and Commissioner, such notice to be given only after reasonable opportunity has been given to correct any specified default in performance.

The right to relinquish all rights as a Unit Operator may be exercised whenever said Operator is not in default under this agreement, but no Unit Operator shall be relieved from his duties and obligations as Unit Operator for a period of six months after notice of intention to relinquish such duties and obligations has been served by him on all other parties hereto holding operating rights in respect to the unitized substances involved and the Commission and Commissioner, unless a new operator shall have been selected and shall have taken over and assumed the duties and obligations of such Unit Operator prior to the expiration of said period. At any time prior to the date on which relinquishment by or removal of a Unit Operator becomes effective, the owners of operating rights as to the unitized substances involved or a duly qualified new Unit Operator may elect to purchase on reasonable terms all or any part of the preceding Unit Operator's equipment, material, and appurtenances in or upon the lands subject to this agreement, provided that no such equipment, material, or appurtenances so selected for purchase shall be removed pending determination of reasonable terms of purchase. Any equipment, material, and appurtenances not so purchased and not so necessary for the preservation of

wells may be removed by the retiring Unit Operator at any time within six months after the relinquishment or removal becomes effective, but if not so removed shall become the joint property of the owners of the operating rights as to the unitized substances involved.

Acquisition or assignment of operating rights pertaining to State lands subject to this agreement and the consideration therefor shall be subject to approval by the Commission and Commissioner.

7. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: The exclusive right, privilege, and duty of exercising any and all rights of the parties signatory hereto which are necessary or convenient for prospecting for, producing, storing and disposing of the unitized substances are hereby vested in the Unit Operator and shall be exercised by said Unit Operator as provided in this agreement. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and, together with this agreement, shall constitute and define said Unit Operator's rights, privileges, and obligations in the premises; provided, that nothing herein shall be construed to transfer title to any lands, leases, or operating agreements, it being understood that the Unit Operator shall have rights of possession and use merely for the purposes herein specified, and for any and all other purposes all existing agreements in respect to unitized substances remain in force and effect.

The Unit Operator shall pay all costs and expenses of operations with respect to the development, storage and recovery of unitized substances.

8. PLAN OF OPERATION AS TO UNITIZED SUBSTANCES: The Unit Operator is authorized to shut-in or produce the unitized substances or supplement such substances by injection of gas, according to a plan of development and/or operations which shall be submitted by said Unit Operator for approval by the Commission and Commissioner within 30 days after approval of this agreement, and when so approved shall constitute the obligations of said Unit Operator for development and operation of such unitized substances; provided that said plan shall be subject to modification from time to time at the option of said Unit Operator subject to like approval; and provided further that the Commission and Commissioner may require that a new plan of development and/or operations shall be submitted when, in his opinion, such action is necessary and advisable in the public interest.

9. ALLOCATION OF UNITIZED SUBSTANCES: Unitized substances, as and when produced, will be deemed to be produced equally on an acreage basis from all the lands subject to this

agreement, and will be allocated to the several tracts in the ratio that the total acreage of each bears to the total acreage subject to this agreement.

10. PAYMENTS OF ROYALTIES ON UNITIZED SUBSTANCES: Unit Operator, on behalf of the respective lessees, shall pay all royalties due the State of New Mexico, and others entitled thereto, on account of unitized substances; provided, that if said Unit Operator defaults in any such payment and no bond has been posted by said Unit Operator which is adequate to cover such default, or when there is no Unit Operator, the obligation to pay royalties on Unitized Substances shall rest upon the respective lessees.

11. ROYALTIES AND RENTALS: (a) Royalties on unitized substances payable to the State of New Mexico shall be:

(1) A royalty of 3.39% on the value of the gas as to production thereof allocated to State lands for a period of twenty-five (25) years from the effective date of this agreement, subject to the provisions of the following paragraphs of this Section 11, regardless of whether the production was originally in place or was injected by Unit Operator, and thereafter the lease rates shall prevail unless a modification is agreed upon by the Commission and the Commissioner and Unit Operator.

(2) Royalties on gasoline or other liquid hydrocarbons allocated to State lands shall be paid at the lease rates.

(3) If for any reason Unit Operator does not inject into sands or horizons containing Unitized Substances a total of 15,328,630 M.c.f. of gas within fifteen (15) years from the effective date of this agreement, or if, upon the permanent discontinuance of the injection of gas, Unit Operator has failed to inject 15,328,630 M.c.f., the rate of royalty due the State of New Mexico on the gas recovered from the production of unitized substances shall be 3.39% plus that percentage of 9.11% which the difference between 15,328,630 M.c.f. and the amount of such gas injected bears to 15,328,630 M.c.f. Quantities of gas as above stated shall be on a pressure base of 16.4# absolute per square inch and 60° Fahrenheit temperature.

(4) The royalties to be paid the State of New Mexico under paragraphs (1) and (3) hereof are on the basis of five cents (5¢) per thousand (1,000) cubic feet at 15.025# psia or the market value, whichever is the greater.

(5) If the total volume of gas produced per acre equals the amount injected per acre plus 4,413 M.c.f.

per acre at 16.4# pressure base and temperature of 60° Fahrenheit, the rate of State royalty on all subsequent production shall be at the lease rates.

11. (b) Rental for lands of the State of New Mexico subject to this agreement shall be paid at the rates specified in the leases. The leases shall be deemed to be in a status of operating leases while being used for storage of unitized substances.

11. (c) Unit Operator agrees that in any one calendar year it will withdraw from the lands covered by this agreement an amount of gas per acre of the acres committed to this agreement equal to the gas withdrawn per acre from the acres committed to the Federal Rhodes Unit Area. In the event that a lesser amount of gas is withdrawn from lands committed to this agreement than the foregoing in any calendar year, the difference is hereby agreed to be admitted drainage of State lands and Unit Operator shall pay the State of New Mexico royalties on the full amount agreed to be withdrawn in the first sentence of this paragraph.

12. CONSERVATION: All operations shall be conducted so as to provide for the most economical and efficient recovery of unitized substances to the end that maximum ultimate yield may be obtained without waste, and for the purpose of more properly conserving the natural resources, the production of unitized substances at all times shall be without waste as defined by State Law; and production from gas wells shall be limited to such quantity as can be put to beneficial use with adequate realization of fuel values; and, in the discretion of the Commission and Commissioner, production of unitized substances shall be limited by the beneficial demand as determined by said Commission and Commissioner.

13. DRAINAGE: Any Unit Operator shall take appropriate and adequate measures to prevent drainage of the unitized substances as to which he is Unit Operator from the unitized lands by wells not on the lands subject to this agreement, or, with approval of the Commission and Commissioner, pay a fair and reasonable compensatory royalty as determined by the Commission and Commissioner.

14. LEASES AND CONTRACTS CONFORMED TO AGREEMENT: The parties hereto or consenting hereto holding State of New Mexico leases subject to this agreement consent that the Commission and Commissioner shall, and said Commission and Commissioner by their approval of this agreement do, establish, alter, change or revoke the drilling, producing, royalty and rental requirements of such leases, and the regulations in respect thereof, to conform said requirements to the provisions of this agreement.

The Commission and Commissioner further agree, consent and determine that during the effective life of this agreement, the prospecting, drilling, and producing operations performed upon any lands subject hereto will be accepted and deemed to be operations under and for the benefit of all such leases; that suspension of operations or production on any such lease shall be deemed not to have occurred if there be operations or production on any part of the lands subject hereto; and that suspension of all operations and production on said lands pursuant to any approved plan of development and/or operation or to the direction or consent of said Commission and Commissioner shall be deemed to constitute such suspension with respect to each such lease; and no such lease shall be deemed to expire by reason of such approved suspension.

All agreements by and between the parties hereto or consenting hereto are hereby modified or amended to the extent that such agreements are not consistent herewith, and in case of any conflict the terms of this unit agreement shall prevail.

15. COVENANTS RUN WITH LAND: The covenants herein run with the land until this agreement terminates, and any grant, transfer, or lease of interest in lands or leases subject hereto shall be conditioned on the assumption of all privileges and obligations hereunder by the grantee, transferee, lessee, or other successor in interest, and as to State land shall be subject to approval by the Commission and Commissioner.

16. EFFECTIVE DATE AND TERM: This agreement upon approval by the Commission and Commissioner shall be deemed to have become effective as of January 1, 1948, and shall terminate two (2) years after said effective date unless gas has been or is being injected into the horizons containing unitized substances, as herein provided, provided that this agreement may be terminated by the Commission and Commissioner upon request of Unit Operator, or if there be no Unit Operator then the owners of the operating interests after notice of intention to request such termination has been served on all parties in interest who are not parties to the request for such termination.

17. REGULATION OF DEVELOPMENT AND PRODUCTION: All production and the disposal thereof shall be in conformity with allocations, allotments, and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute; provided that the Commissioner is vested with authority to alter or modify from time to time, in his discretion, the rate of prospecting and development and the quantity and rate of production under this agreement, such authority being

hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification.

18. DETERMINATIONS BY UNIT OPERATOR AND REVIEW THEREOF: Unit Operator shall determine all matters involved in this agreement for which a different method of determination is not herein established; provided that Operator shall give timely notice of all such determination to all interested parties, including the Commissioner; provided, further, that all such determinations may be reviewed by the Commissioner on his own initiative or on written request of any interested party, notice of any such review to be given to all interested parties, including Unit Operator, within 60 days after receipt of notice of Unit Operator's determination; and provided, further, that any matters so reviewed, on request or consent of Unit Operator, may be submitted to a committee of three competent persons appointed by said Commissioner, one on nomination of Unit Operator, one on nomination of the other interested parties, and the third on nomination of the first two, the cost of such committee to be a cost of operation, and its report (which shall be binding on the committee when concurred in by any two of its members) shall be submitted to said Commissioner, the Unit Operator, and other interested parties; and provided, further, that opportunity shall be given in said review for all interested parties to present their contentions and supporting evidence by written or oral communication to said committee or said Commissioner, and that after consideration of all credible evidence, said Commissioner shall render a reasonable decision based thereon and in conformity therewith, which decision, so made and rendered, shall be final and binding on all parties hereto or consenting hereto.

19. BOND: Any Unit Operator shall furnish within 30 days after approval hereof by the Commission and Commissioner or after his selection and maintain at all times thereafter a bond in the penal sum of \$5,000.00 with approved corporate surety, or with deposit of United States Bonds as surety therefor, conditioned upon compliance with the terms of this agreement applicable to him, provided that additional bond may be required at any time deemed necessary by the Commission and Commissioner.

20. COUNTERPARTS: This agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and set opposite their respective names the date of execution and a list of the lands or interests made subject to this agreement.

Date: 5-18-51

ATTEST:

A. C. Murdock
Assistant Secretary

EL PASO NATURAL GAS COMPANY

By

[Signature]
Vice President

Date:

WITNESS:

ATTEST:

[Signature]

BEN R. HOWELL

By

B. R. Howell

WITNESS:

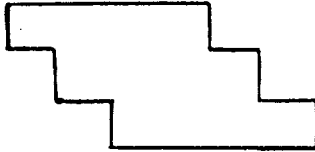
[Signature]

JOHN A. GRANELING

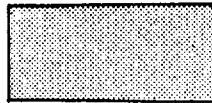
By

[Signature]

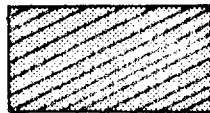
EXHIBIT "A"



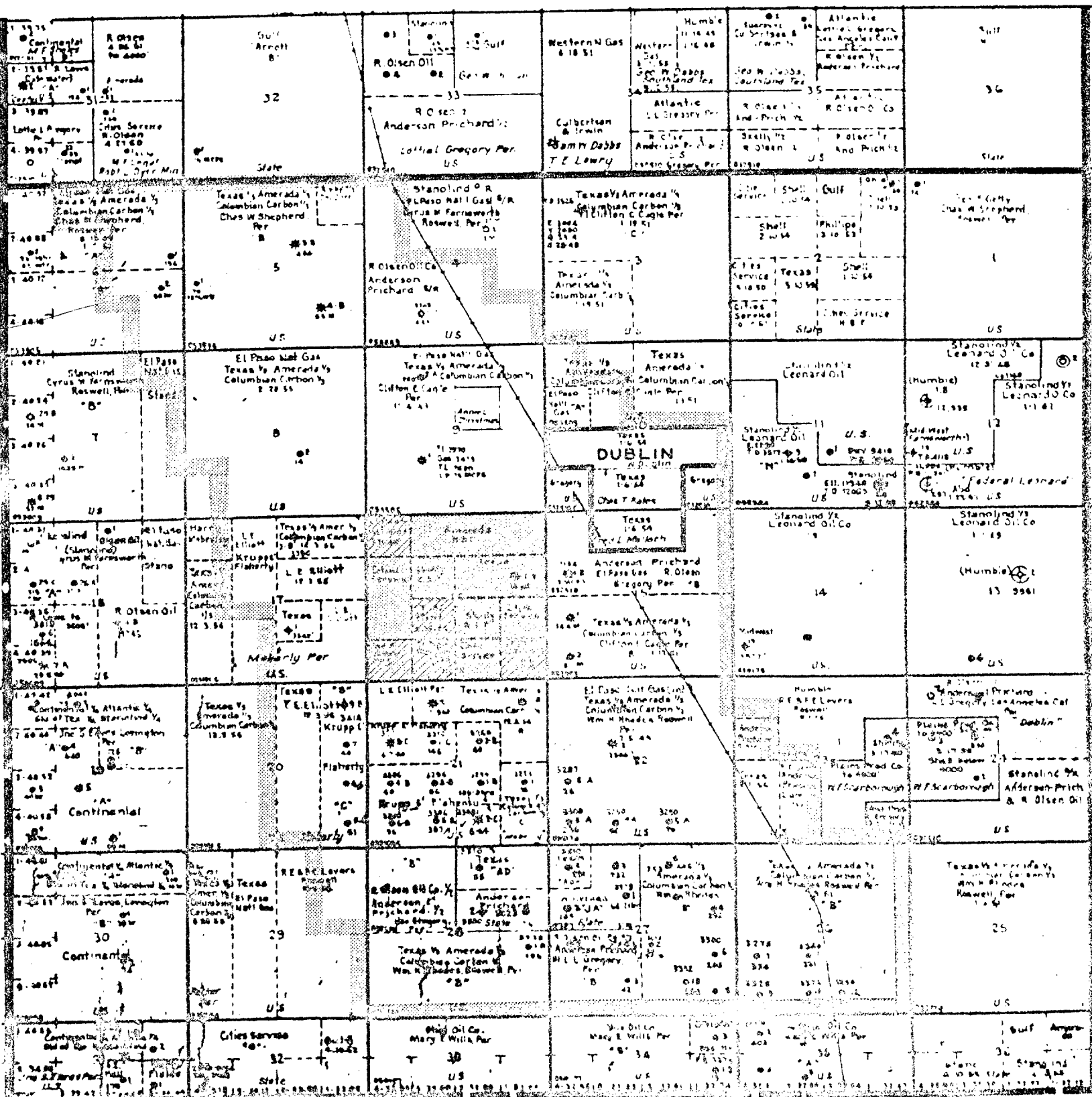
Total Acreage in Area	<u>8520</u>
Committed to Federal Unit	<u>5480</u>
Committed herewith	<u>200</u>
Percent committed including this application	<u>66.7</u>



State Lands to be authorized to be
included in area.



State Lands committed to this
agreement.



R T E X A S R37E C O U N W

EXHIBIT "B"

EL PASO NATURAL GAS COMPANY lease owner:

NW/ $\frac{1}{4}$ NW/ $\frac{1}{4}$; SE/ $\frac{1}{4}$ SW/ $\frac{1}{4}$ and SE/ $\frac{1}{4}$ SE/ $\frac{1}{4}$ of Sec. 16,
Twp. 26 South, Rge. 37 East, Lea County, New
Mexico.

BEN R. HOWELL lease owner:

NE/ $\frac{1}{4}$ SW/ $\frac{1}{4}$ of Sec. 16, Twp 26 South, Rge. 37 East,
Lea County, New Mexico.

JOHN A. GRAMBLING lease owner:

SW/ $\frac{1}{4}$ SW/ $\frac{1}{4}$ of Sec. 16, Twp 26 South, Rge. 37 East,
Lea County, New Mexico.

RHODES (State) UNIT AGREEMENT
Lea County, New Mexico

dated as of January 1, 1948
(executed 5-18-51)

between

EL PASO NATURAL GAS COMPANY

and

SKELLY OIL COMPANY

RHODES UNIT AGREEMENT
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1948, by and between the parties subscribing or consenting hereto;

WITNESSETH:

WHEREAS, the parties subscribing hereto are the owners of operating, royalty, or other oil or gas interests in the Unit Area subject to this agreement; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent avoidable waste and secure other benefits obtainable through development and operating of the Unit Area subject to this agreement under the terms, conditions and limitations hereinafter set forth; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chapter 88, Laws 1943) to consent to or approve this agreement on behalf of the State of New Mexico, in so far as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature (Chapter 72, Laws 1935) to approve this agreement and the conservation provisions hereof;

NOW, THEREFORE, for and in consideration of the premises and the promises hereinafter contained, the parties subscribing hereto and the parties consenting hereto agree as follows:

1. LAWS AND REGULATIONS: The Acts of the Legislature of the State of New Mexico (Chapter 72, Laws of 1935, and Chapter 88, Laws of 1943) and all pertinent regulations issued thereunder, including operating and unit plan regulations, are accepted and made a part of this agreement.

2. DEFINITIONS: For all purposes of this agreement, certain terms used herein are defined as follows:

(a) "Commissioner" shall mean the Commissioner of Public Lands of the State of New Mexico.

(b) "Commission" shall mean the Oil Conservation Commission of the State of New Mexico and those persons duly authorized to act for and in its behalf.

(c) "Working Interest Owner" shall mean a party hereto whose interest in the unitized substances under existing contracts and under this agreement is subject to a charge for, or an obligation to pay a portion of the costs and expenses of, operations hereunder.

(d) "Royalty Owner" shall mean a party hereto or consenting hereto whose interest in the unitized substances is free from any obligation, liability, or charge for and on account of the costs and expenses of operations hereunder.

(e) "Paying Quantities" shall mean a quantity of the unitized substances sufficient to repay the cost of drilling, equipping, and operating the well and a profit in addition thereto.

3. UNIT AREA: The following described land is hereby designated and recognized as constituting the State Rhodes Unit Area:

All of Section 16, Township 26 South,
Range 37 East, Lea County, New Mexico,
embracing 640 acres.

The Operator, with the consent of a majority in interest of the Working Interest, and subject to the approval of the Commissioner and the Commission, may enlarge the Unit Area to include other lands believed to be productive of the unitized substances, or may with like consent and approval, diminish the Unit Area to exclude lands now in any participating area hereunder which shall be demonstrated to be barren of the unitized substances.

Exhibit "A" attached hereto is a map on which is outlined the herein-established Unit Area, together with the ownership of the lands and leases in said Area. Exhibit "B" attached hereto is a schedule showing the nature and extent of ownership of oil and gas rights in all land in the Unit Area to which this unit agreement will become applicable by signature hereto, or to a counterpart hereof, by the owners of such rights, and hereinafter referred to as "unitized lands". Said schedule shall be revised by the Unit Operator whenever any change in the Unit Area or ownership of rights renders such change necessary, and the revised schedule shall be filed with the record of this agreement.

4. UNITIZED SUBSTANCES: All gas, including natural gasoline, propane, butane, and other contents of the gas producible from land subject to this agreement, in any and all sands or

horizons at or above a depth of 4,000 feet from the ground surface, are unitized under the terms of this agreement and herein are called "Unitized Substances".

5. UNIT OPERATOR: El Paso Natural Gas Company is hereby designated as Unit Operator, and by signature hereof commits to this agreement all interests vested in it in land within the Unit Area and agrees to accept the duties and obligations of such Unit Operator to conduct and manage the operation of the lands subject to this agreement for the development, storage and production of unitized substances as herein provided.

6. SUCCESSOR UNIT OPERATOR: Whenever the Unit Operator under this agreement shall be removed or shall relinquish his rights as Unit Operator under this agreement, the owners of the majority of operating rights in the lands subject to this agreement shall select a new unit operator. Such selection shall not become effective until (a) the unit operator so selected shall accept the duties and responsibilities of such unit operator and (b) the selection shall have been approved by the Commission and Commissioner. Any unit operator shall be subject to removal for failure to perform effectively his duties and obligations as Unit Operator hereunder on notice by the Commission and Commissioner, such notice to be given only after reasonable opportunity has been given to correct any specified default in performance.

The right to relinquish all rights as a Unit Operator may be exercised whenever said Operator is not in default under this agreement, but no Unit Operator shall be relieved from his duties and obligations as Unit Operator for a period of six months after notice of intention to relinquish such duties and obligations has been served by him on all other parties hereto holding operating rights in respect to the unitized substances involved and the Commission and Commissioner, unless a new operator shall have been selected and shall have taken over and assumed the duties and obligations of such Unit Operator prior to the expiration of said period. At any time prior to the date on which relinquishment by or removal of a Unit Operator becomes effective, the owners of operating rights as to the unitized substances involved or a duly qualified new Unit Operator may elect to purchase on reasonable terms all or any part of the preceding Unit Operator's equipment, material, and appurtenances in or upon the lands subject to this agreement, provided that no such equipment, material, or appurtenances so selected for purchase shall be removed pending determination of reasonable terms of purchase. Any equipment, material, and appurtenances not so purchased and not so necessary for the preservation of

wells may be removed by the retiring Unit Operator at any time within six months after the relinquishment or removal becomes effective, but if not so removed shall become the joint property of the owners of the operating rights as to the unitized substances involved.

Acquisition or assignment of operating rights pertaining to State lands subject to this agreement and the consideration therefor shall be subject to approval by the Commission and Commissioner.

7. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: The exclusive right, privilege, and duty of exercising any and all rights of the parties signatory hereto which are necessary or convenient for prospecting for, producing, storing and disposing of the unitized substances are hereby vested in the Unit Operator and shall be exercised by said Unit Operator as provided in this agreement. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and, together with this agreement, shall constitute and define said Unit Operator's rights, privileges, and obligations in the premises; provided, that nothing herein shall be construed to transfer title to any lands, leases, or operating agreements, it being understood that the Unit Operator shall have rights of possession and use merely for the purposes herein specified, and for any and all other purposes all existing agreements in respect to unitized substances remain in force and effect.

The Unit Operator shall pay all costs and expenses of operations with respect to the development, storage and recovery of unitized substances.

8. PLAN OF OPERATION AS TO UNITIZED SUBSTANCES: The Unit Operator is authorized to shut-in or produce the unitized substances or supplement such substances by injection of gas, according to a plan of development and/or operations which shall be submitted by said Unit Operator for approval by the Commission and Commissioner within 30 days after approval of this agreement, and when so approved shall constitute the obligations of said Unit Operator for development and operation of such unitized substances; provided that said plan shall be subject to modification from time to time at the option of said Unit Operator subject to like approval; and provided further that the Commission and Commissioner may require that a new plan of development and/or operations shall be submitted when, in his opinion, such action is necessary and advisable in the public interest.

9. ALLOCATION OF UNITIZED SUBSTANCES: Unitized substances, as and when produced, will be deemed to be produced equally on an acreage basis from all the lands subject to this

agreement, and will be allocated to the several tracts in the ratio that the total acreage of each bears to the total acreage subject to this agreement.

10. PAYMENTS OF ROYALTIES ON UNITIZED SUBSTANCES: Unit Operator, on behalf of the respective lessees, shall pay all royalties due the State of New Mexico, and others entitled thereto, on account of unitized substances; provided, that if said Unit Operator defaults in any such payment and no bond has been posted by said Unit Operator which is adequate to cover such default, or when there is no Unit Operator, the obligation to pay royalties on Unitized Substances shall rest upon the respective lessees.

11. ROYALTIES AND RENTALS: (a) Royalties on unitized substances payable to the State of New Mexico shall be:

(1) A royalty of 3.39% on the value of the gas as to production thereof allocated to State lands for a period of twenty-five (25) years from the effective date of this agreement, subject to the provisions of the following paragraphs of this Section 11, regardless of whether the production was originally in place or was injected by Unit Operator, and thereafter the lease rates shall prevail unless a modification is agreed upon by the Commission and the Commissioner and Unit Operator.

(2) Royalties on gasoline or other liquid hydrocarbons allocated to State lands shall be paid at the lease rates.

(3) If for any reason Unit Operator does not inject into sands or horizons containing Unitized Substances a total of 15,328,630 M.c.f. of gas within fifteen (15) years from the effective date of this agreement, or if, upon the permanent discontinuance of the injection of gas, Unit Operator has failed to inject 15,328,630 M.c.f., the rate of royalty due the State of New Mexico on the gas recovered from the production of unitized substances shall be 3.39% plus that percentage of 9.11% which the difference between 15,328,630 M.c.f. and the amount of such gas injected bears to 15,328,630 M.c.f. Quantities of gas as above stated shall be on a pressure base of 16.4# absolute per square inch and 60° Fahrenheit temperature.

(4) The royalties to be paid the State of New Mexico under paragraphs (1) and (3) hereof are on the basis of five cents (5¢) per thousand (1,000) cubic feet at 15.025# psia or the market value, whichever is the greater.

(5) If the total volume of gas produced per acre equals the amount injected per acre plus 4,413 M.c.f.

per acre at 16.4# pressure base and temperature of 60° Fahrenheit, the rate of State royalty on all subsequent production shall be at the lease rates.

11. (b) Rental for lands of the State of New Mexico subject to this agreement shall be paid at the rates specified in the leases. The leases shall be deemed to be in a status of operating leases while being used for storage of unitized substances.

11. (c) Unit Operator agrees that in any one calendar year it will withdraw from the lands covered by this agreement an amount of gas per acre of the acres committed to this agreement equal to the gas withdrawn per acre from the acres committed to the Federal Rhodes Unit Area. In the event that a lesser amount of gas is withdrawn from lands committed to this agreement than the foregoing in any calendar year, the difference is hereby agreed to be admitted drainage of State lands and Unit Operator shall pay the State of New Mexico royalties on the full amount agreed to be withdrawn in the first sentence of this paragraph.

12. CONSERVATION: All operations shall be conducted so as to provide for the most economical and efficient recovery of unitized substances to the end that maximum ultimate yield may be obtained without waste, and for the purpose of more properly conserving the natural resources, the production of unitized substances at all times shall be without waste as defined by State Law; and production from gas wells shall be limited to such quantity as can be put to beneficial use with adequate realization of fuel values; and, in the discretion of the Commission and Commissioner, production of unitized substances shall be limited by the beneficial demand as determined by said Commission and Commissioner.

13. DRAINAGE: Any Unit Operator shall take appropriate and adequate measures to prevent drainage of the unitized substances as to which he is Unit Operator from the unitized lands by wells not on the lands subject to this agreement, or, with approval of the Commission and Commissioner, pay a fair and reasonable compensatory royalty as determined by the Commission and Commissioner.

14. LEASES AND CONTRACTS CONFORMED TO AGREEMENT: The parties hereto or consenting hereto holding State of New Mexico leases subject to this agreement consent that the Commission and Commissioner shall, and said Commission and Commissioner by their approval of this agreement do, establish, alter, change or revoke the drilling, producing, royalty and rental requirements of such leases, and the regulations in respect thereof, to conform said requirements to the provisions of this agreement.

The Commission and Commissioner further agree, consent and determine that during the effective life of this agreement, the prospecting, drilling, and producing operations performed upon any lands subject hereto will be accepted and deemed to be operations under and for the benefit of all such leases; that suspension of operations or production on any such lease shall be deemed not to have occurred if there be operations or production on any part of the lands subject hereto; and that suspension of all operations and production on said lands pursuant to any approved plan of development and/or operation or to the direction or consent of said Commission and Commissioner shall be deemed to constitute such suspension with respect to each such lease; and no such lease shall be deemed to expire by reason of such approved suspension.

All agreements by and between the parties hereto or consenting hereto are hereby modified or amended to the extent that such agreements are not consistent herewith, and in case of any conflict the terms of this unit agreement shall prevail.

15. COVENANTS RUN WITH LAND: The covenants herein run with the land until this agreement terminates, and any grant, transfer, or lease of interest in lands or leases subject hereto shall be conditioned on the assumption of all privileges and obligations hereunder by the grantee, transferee, lessee, or other successor in interest, and as to State land shall be subject to approval by the Commission and Commissioner.

16. EFFECTIVE DATE AND TERM: This agreement upon approval by the Commission and Commissioner shall be deemed to have become effective as of January 1, 1948, and shall terminate two (2) years after said effective date unless gas has been or is being injected into the horizons containing unitized substances, as herein provided, provided that this agreement may be terminated by the Commission and Commissioner upon request of Unit Operator, or if there be no Unit Operator then the owners of the operating interests after notice of intention to request such termination has been served on all parties in interest who are not parties to the request for such termination.

17. REGULATION OF DEVELOPMENT AND PRODUCTION: All production and the disposal thereof shall be in conformity with allocations, allotments, and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute; provided that the Commissioner is vested with authority to alter or modify from time to time, in his discretion, the rate of prospecting and development and the quantity and rate of production under this agreement, such authority being

hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification.

18. DETERMINATIONS BY UNIT OPERATOR AND REVIEW

THEREOF: Unit Operator shall determine all matters involved in this agreement for which a different method of determination is not herein established; provided that Operator shall give timely notice of all such determination to all interested parties, including the Commissioner; provided, further, that all such determinations may be reviewed by the Commissioner on his own initiative or on written request of any interested party, notice of any such review to be given to all interested parties, including Unit Operator, within 60 days after receipt of notice of Unit Operator's determination; and provided, further, that any matters so reviewed, on request or consent of Unit Operator, may be submitted to a committee of three competent persons appointed by said Commissioner, one on nomination of Unit Operator, one on nomination of the other interested parties, and the third on nomination of the first two, the cost of such committee to be a cost of operation, and its report (which shall be binding on the committee when concurred in by any two of its members) shall be submitted to said Commissioner, the Unit Operator, and other interested parties; and provided, further, that opportunity shall be given in said review for all interested parties to present their contentions and supporting evidence by written or oral communication to said committee or said Commissioner, and that after consideration of all credible evidence, said Commissioner shall render a reasonable decision based thereon and in conformity therewith, which decision, so made and rendered, shall be final and binding on all parties hereto or consenting hereto.

19. BOND: Any Unit Operator shall furnish within 30 days after approval hereof by the Commission and Commissioner or after his selection and maintain at all times thereafter a bond in the penal sum of \$5,000.00 with approved corporate surety, or with deposit of United States Bonds as surety therefor, conditioned upon compliance with the terms of this agreement applicable to him, provided that additional bond may be required at any time deemed necessary by the Commission and Commissioner.

20. COUNTERPARTS: This agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and set opposite their respective names the date of execution and a list of the lands or interests made subject to this agreement.

Date: 5-18-51

ATTEST:

A. C. Mottel
Assistant Secretary

EL PASO NATURAL GAS COMPANY

By [Signature]
Vice President

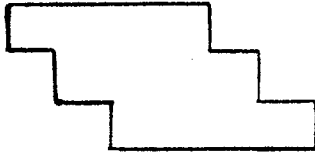
Date:

ATTEST:

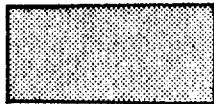
[Signature]
Asst Secretary

[Signature] SKELLY OIL COMPANY
By Arch H. Hyden
Vice President

EXHIBIT "A"



Total Acreage in Area	<u>8520</u>
Committed to Federal Unit	<u>5680</u>
Committed herewith	<u>80</u>
Percent committed including this application	<u>67.7</u>



State Lands to be authorized to be
included in area.



State Lands committed to this
agreement.

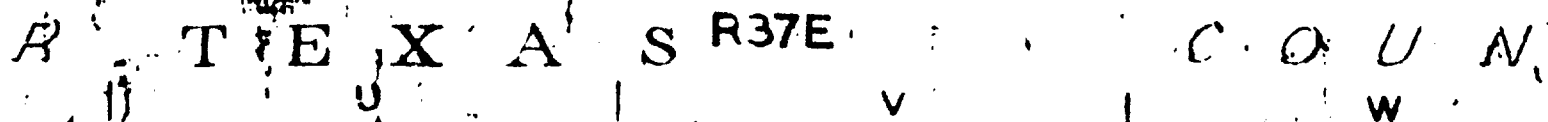


EXHIBIT "B"

SKELLY OIL COMPANY lease owner:

SE/ $\frac{1}{4}$ NW/ $\frac{1}{4}$ and NW/ $\frac{1}{4}$ SE/ $\frac{1}{4}$ of Sec. 16, Twp 26
South, Rge. 37 East, Lea County, New Mexico.



RHODES (State) UNIT AGREEMENT
Lea County, New Mexico

dated as of January 1, 1948
(executed Mar 1951)

between

EL PASO NATURAL GAS COMPANY

and

THE TEXAS COMPANY

RHODES UNIT AGREEMENT
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1948, by and between the parties subscribing or consenting hereto;

WITNESSETH:

WHEREAS, the parties subscribing hereto are the owners of operating, royalty, or other oil or gas interests in the Unit Area subject to this agreement; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent avoidable waste and secure other benefits obtainable through development and operating of the Unit Area subject to this agreement under the terms, conditions and limitations hereinafter set forth; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chapter 88, Laws 1943) to consent to or approve this agreement on behalf of the State of New Mexico, in so far as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature (Chapter 72, Laws 1935) to approve this agreement and the conservation provisions hereof;

NOW, THEREFORE, for and in consideration of the premises and the promises hereinafter contained, the parties subscribing hereto and the parties consenting hereto agree as follows:

1. LAWS AND REGULATIONS: The Acts of the Legislature of the State of New Mexico (Chapter 72, Laws of 1935, and Chapter 88, Laws of 1943) and all pertinent regulations issued thereunder, including operating and unit plan regulations, are accepted and made a part of this agreement.

2. DEFINITIONS: For all purposes of this agreement, certain terms used herein are defined as follows:

(a) "Commissioner" shall mean the Commissioner of Public Lands of the State of New Mexico.

(b) "Commission" shall mean the Oil Conservation Commission of the State of New Mexico and those persons duly authorized to act for and in its behalf.

(c) "Working Interest Owner" shall mean a party hereto whose interest in the unitized substances under existing contracts and under this agreement is subject to a charge for, or an obligation to pay a portion of the costs and expenses of operations hereunder.

(d) "Royalty Owner" shall mean a party hereto or consenting hereto whose interest in the unitized substances is free from any obligation, liability, or charge for and on account of the costs and expenses of operations hereunder.

(e) "Paying Quantities" shall mean a quantity of the unitized substances sufficient to repay the cost of drilling, equipping and operating the well and a profit in addition thereto.

3. UNIT AREA: The following described land is hereby designated and recognized as constituting the State Rhodes Unit Area:

All of Section 16, Township 26 South,
Range 37 East, Lea County, New Mexico,
embracing 640 acres.

The Operator, with the consent of a majority in interest of the Working Interest, and subject to the approval of the Commissioner and the Commission, may enlarge the Unit Area to include other lands believed to be productive of the unitized substances, or may with like consent and approval, diminish the Unit Area to exclude lands now in any participating area hereunder which shall be demonstrated to be barren of the unitized substances.

Exhibit "A" attached hereto is a map on which is outlined the herein-established Unit Area, together with the ownership of the lands and leases in said Area. Exhibit "B" attached hereto is a schedule showing the nature and extent of ownership of oil and gas rights in all land in the Unit Area to which this unit agreement will become applicable by signature hereto, or to a counterpart hereof, by the owners of such rights, and hereinafter referred to as "unitized lands". Said schedule shall be revised by the Unit Operator whenever any change in the Unit Area or ownership of rights renders such change necessary, and the revised schedule shall be filed with the record of this agreement.

4. UNITIZED SUBSTANCES: All gas, including natural gasoline, propane, butane, and other contents of the gas producible from land subject to this agreement, in any and all sands or horizons at or above a depth of 4,000 feet from the ground surface are unitized under the terms of this agreement and herein are called "Unitized Substances".

5. UNIT OPERATOR: El Paso Natural Gas Company is hereby designated as Unit Operator, and by signature hereof commits to this agreement all interests vested in it in land

within the unit area and agrees to accept the duties and obligations of such Unit Operator to conduct and manage the operation of the lands subject to this agreement for the development, storage and production of unitized substances as herein provided.

6. SUCCESSOR UNIT OPERATOR: Whenever the Unit Operator under this agreement shall be removed or shall relinquish his rights as Unit Operator under this agreement, the owners of the majority of operating rights in the lands subject to this agreement shall select a new unit operator. Such selection shall not become effective until (a) the unit operator so selected shall accept the duties and responsibilities of such unit operator and (b) the selection shall have been approved by the Commission and Commissioner. Any unit operator shall be subject to removal for failure to perform effectively his duties and obligations as Unit Operator hereunder on notice by the Commission and Commissioner, such notice to be given only after reasonable opportunity has been given to correct any specified default in performance.

The right to relinquish all rights as a Unit Operator may be exercised whenever said Operator is not in default under this agreement, but no Unit Operator shall be relieved from his duties and obligations as Unit Operator for a period of six months after notice of intention to relinquish such duties and obligations has been served by him on all other parties hereto holding operating rights in respect to the unitized substances involved and the Commission and Commissioner, unless a new operator shall have been selected and shall have taken over and assumed the duties and obligations of such Unit Operator prior to the expiration of said period. At any time prior to the date on which relinquishment by or removal of a Unit Operator becomes effective, the owners of operating rights as to the unitized substances involved or a duly qualified new Unit Operator may elect to purchase on reasonable terms all or any part of the preceding Unit Operator's equipment, material, and appurtenances in or upon the lands subject to this agreement, provided that no such equipment, material, or appurtenances so selected for purchase shall be removed pending determination of reasonable terms of purchase. Any equipment, material, and appurtenances not so purchased and not so necessary for the preservation of wells may be removed by the retiring Unit Operator at any time within six months after the relinquishment or removal becomes effective, but if not so removed shall become the joint property of the owners of the operating rights as to the unitized substances involved.

Acquisition or assignment of operating rights pertaining to State lands subject to this agreement and the consideration therefor shall be subject to approval by the Commission and Commissioner.

7. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: The exclusive right, privilege, and duty of exercising any and all rights of the parties signatory hereto which are necessary or convenient for prospecting for, producing, storing and disposing of the unitized substances are hereby vested in the Unit Operator and shall be exercised by said Unit Operator as provided in this agreement. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and, together with this agreement, shall constitute and define said Unit Operator's rights, privileges, and obligations in the premises; provided, that nothing herein shall be construed to transfer title to any lands, leases, or operating agreements, it being understood that the Unit Operator shall have rights of possession and use merely for the purposes herein specified, and for any and all other purposes all existing agreements in respect to unitized substances remain in force and effect.

The Unit Operator shall pay all costs and expenses of operations with respect to the development, storage and recovery of unitized substances.

8. PLAN OF OPERATION AS TO UNITIZED SUBSTANCES: The Unit Operator is authorized to shut-in or produce the unitized substances or supplement such substances by injection of gas, according to a plan of development and/or operations which shall be submitted by said Unit Operator for approval by the Commission and Commissioner within 30 days after approval of this agreement, and when so approved shall constitute the obligations of said Unit Operator for development and operation of such unitized substances; provided that said plan shall be subject to modification from time to time at the option of said Unit Operator subject to like approval; and provided further that the Commission and Commissioner may require that a new plan of development and/or operations shall be submitted when, in his opinion, such action is necessary and advisable in the public interest.

9. ALLOCATION OF UNITIZED SUBSTANCES: Unitized substances, as and when produced, will be deemed to be produced equally on an acreage basis from all the lands subject to this agreement, and will be allocated to the several tracts in the ratio that the total acreage of each bears to the total acreage subject to this agreement.

10. PAYMENTS OF ROYALTIES ON UNITIZED SUBSTANCES: Unit Operator, on behalf of the respective lessees, shall pay all royalties due the State of New Mexico, and others entitled thereto, on account of unitized substances; provided, that if said Unit Operator defaults in any such payment and no bond has been posted by said Unit Operator which is adequate to cover such default, or when there is no Unit Operator, the obligation to pay royalties on Unitized Substances shall rest upon the respective lessees.

11. ROYALTIES AND RENTALS: (a) Royalties on unitized substances payable to the State of New Mexico shall be:

(1) A royalty of 3.39% on the value of the gas as to production thereof allocated to State lands for a period of twenty-five (25) years from the effective date of this agreement, subject to the provisions of the following paragraphs of this Section 11, regardless of whether the production was originally in place or was injected by Unit Operator, and thereafter the lease rates shall prevail unless a modification is agreed upon by the Commission and the Commissioner and Unit Operator.

(2) Royalties on gasoline or other liquid hydrocarbons allocated to State lands shall be paid at the lease rates.

(3) If for any reason Unit Operator does not inject into sands or horizons containing Unitized Substances a total of 15,328,630 M.c.f. of gas within fifteen (15) years from the effective date of this agreement, or if, upon the permanent discontinuance of the injection of gas, Unit Operator has failed to inject 15,328,630 M.c.f., the rate of royalty due the State of New Mexico on the gas recovered from the production of unitized substances shall be 3.39% plus that percentage of 9.11% which the difference between 15,328,630 M.c.f. and the amount of such gas injected bears to 15,328,630 M.c.f. Quantities of gas as above stated shall be on a pressure base of 16.4# absolute per square inch and 60° Fahrenheit temperature.

(4) The royalties to be paid the State of New Mexico under paragraphs (1) and (3) hereof are on the basis of five cents (5¢) per thousand (1000) cubic feet at 15.025# psia or the market value, whichever is the greater.

(5) If the total volume of gas produced per acre equals the amount injected per acre plus 4,413 M.c.f. per acre at 16.4# pressure base and temperature of 60° Fahrenheit, the rate of State royalty on all subsequent production shall be at the lease rates.

11. (b) Rental for lands of the State of New Mexico subject to this agreement shall be paid at the rates specified in the leases. The leases shall be deemed to be in a status of operating leases while being used for storage of unitized substances.

11. (c) Unit Operator agrees that in any one calendar year it will withdraw from the lands covered by this agreement an amount of gas per acre of the acres committed to this agreement equal to the gas withdrawn per acre from the acres committed to the Federal Rhodes Unit Area. In the event that a lesser amount of gas is withdrawn from lands committed to this agreement than

the foregoing in any calendar year, the difference is hereby agreed to be admitted drainage of State lands and Unit Operator shall pay the State of New Mexico royalties on the full amount agreed to be withdrawn in the first sentence of this paragraph.

12. CONSERVATION: All operations shall be conducted so as to provide for the most economical and efficient recovery of unitized substances to the end that maximum ultimate yield may be obtained without waste, and for the purpose of more properly conserving the natural resources, the production of unitized substances at all times shall be without waste as defined by State Law; and production from gas wells shall be limited to such quantity as can be put to beneficial use with adequate realization of fuel values; and, in the discretion of the Commission and Commissioner, production of unitized substances shall be limited by the beneficial demand as determined by said Commission and Commissioner.

13. DRAINAGE: Any Unit Operator shall take appropriate and adequate measures to prevent drainage of the unitized substances as to which he is Unit Operator from the unitized lands by wells not on the lands subject to this agreement, or, with approval of the Commission and Commissioner, pay a fair and reasonable compensatory royalty as determined by the Commission and Commissioner.

14. LEASES AND CONTRACTS CONFORMED TO AGREEMENT: The parties hereto or consenting hereto holding State of New Mexico leases subject to this agreement consent that the Commission and Commissioner shall, and said Commission and Commissioner by their approval of this agreement do, establish, alter, change or revoke the drilling, producing, royalty and rental requirements of such leases, and the regulations in respect thereof, to conform said requirements to the provisions of this agreement.

The Commission and Commissioner further agree, consent and determine that during the effective life of this agreement, the prospecting, drilling, and producing operations performed upon any lands subject hereto will be accepted and deemed to be operations under and for the benefit of all such leases; that suspension of operations or production on any such lease shall be deemed not to have occurred if there be operations or production on any part of the lands subject hereto; and that suspension of all operations and production on said lands pursuant to any approved plan of development and/or operation or to the direction or consent of said Commission and Commissioner shall be deemed to constitute such suspension with respect to each such lease; and no such lease shall be deemed to expire by reason of such approved suspension.

All agreements by and between the parties hereto or consenting hereto are hereby modified or amended to the extent that such agreements are not consistent herewith, and in case of any conflict the terms of this unit agreement shall prevail.

15. COVENANTS RUN WITH LAND: The covenants herein run with the land until this agreement terminates, and any grant, transfer, or lease of interest in lands or leases subject hereto shall be conditioned on the assumption of all privileges and obligations hereunder by the grantee, transferee, lessee, or other successor in interest, and as to State land shall be subject to approval by the Commission and Commissioner.

16. EFFECTIVE DATE AND TERM: This agreement upon approval by the Commission and Commissioner shall be deemed to have become effective as of January 1, 1948, and shall terminate two (2) years after said effective date unless gas has been or is being injected into the horizons containing unitized substances, as herein provided, provided that this agreement may be terminated by the Commission and Commissioner upon request of Unit Operator, or if there be no Unit Operator then the owners of the operating interests after notice of intention to request such termination has been served on all parties in interest who are not parties to the request for such termination.

17. REGULATION OF DEVELOPMENT AND PRODUCTION: All production and the disposal thereof shall be in conformity with allocations, allotments, and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute; provided that the Commissioner is vested with authority to alter or modify from time to time, in his discretion, the rate of prospecting and development and the quantity and rate of production under this agreement, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification.

18. DETERMINATIONS BY UNIT OPERATOR AND REVIEW THEREOF: Unit Operator shall determine all matters involved in this agreement for which a different method of determination is not herein established; provided that Operator shall give timely notice of all such determination to all interested parties, including the Commissioner; provided, further, that all such determinations may be reviewed by the Commissioner on his own initiative or on written request of any interested party, notice of any such review to be given to all interested parties, including Unit Operator, within 60 days after receipt of notice of Unit Operator's determination; and provided, further, that any matters so reviewed, on request or consent of Unit Operator, may be submitted to a committee of three competent persons appointed by said Commissioner, one on nomination of Unit Operator, one on nomination of the other interested parties, and the third on nomination of the first two, the cost of such committee to be a cost of operation, and its report (which shall be binding on the committee when concurred in by any two of its members) shall be submitted to said Commissioner, the Unit Operator, and other interested parties; and provided, further, that opportunity shall be given in said review for all interested parties to

present their contentions and supporting evidence by written or oral communication to said committee or said Commissioner, and that after consideration of all credible evidence, said Commissioner shall render a reasonable decision based thereon and in conformity therewith, which decision, so made and rendered, shall be final and binding on all parties hereto or consenting hereto.

19. BOND: Any Unit Operator shall furnish within 30 days after approval hereof by the Commission and Commissioner or after his selection and maintain at all times thereafter a bond in the penal sum of \$5,000.00 with approved corporate surety, or with deposit of United States Bonds as surety therefor, conditioned upon compliance with the terms of this agreement applicable to him, provided that additional bond may be required at any time deemed necessary by the Commission and Commissioner.

20. COUNTERPARTS: This agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and set opposite their respective names the date of execution and a list of the lands or interests made subject to this agreement.

ATTEST:

A.C. Martel
Assistant Secretary

EL PASO NATURAL GAS COMPANY

By [Signature]
Vice President

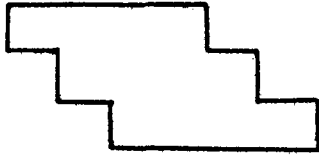
THE TEXAS COMPANY

By [Signature]
Attorney-In-Fact

E.F.H. 3/22

WMS 3/23/51

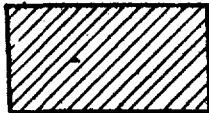
EXHIBIT "A"



Total Acreage in Area	8520
Committed to Federal Unit	5680
Committed herewith	80
Percent committed including this application	67.7



State Lands to be authorized to be
included in area.



State Lands committed to this
agreement.

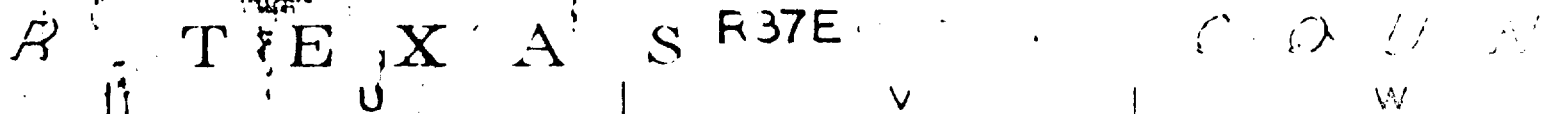


EXHIBIT "B"

THE TEXAS COMPANY lease owner:

S/ $\frac{1}{2}$ NE/ $\frac{1}{4}$ of Section 16, Twp. 26 South,
Rge. 37 East, Lea County, New Mexico.



RHODES (State) UNIT AGREEMENT
Lea County, New Mexico

dated as of January 1, 1948
(executed 12-21-48)

between

EL PASO NATURAL GAS COMPANY

and

CITIES SERVICE OIL COMPANY

UNIT AREA AGREEMENT
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 19 48, by and between the parties subscribing or consenting hereto;

WITNESSETH:

WHEREAS, the parties subscribing hereto are the owners of operating, royalty, or other oil or gas interests in the Unit Area subject to this agreement; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent avoidable waste and secure other benefits obtainable through development and operating of the Unit Area subject to this agreement under the terms, conditions and limitations hereinafter set forth; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chap. 88, Laws 1943) to consent to or approve this agreement on behalf of the State of New Mexico, in so far as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature (Chap. 72, Laws 1935) to approve this agreement and the conservation provisions hereof;

HON, THEREFORE, for and in consideration of the premises and the promises hereinafter contained, the parties subscribing hereto and the parties consenting hereto agree as follows:

1. **LAW AND REGULATIONS:** The Acts of the Legislature of the State of New Mexico (Chap. 72, Laws of 1935 and Chapter 88, Laws 1943) and all pertinent regulations issued thereunder, including operating and unit plan regulations, are accepted and made a part of this agreement.

2. **DEFINITIONS:** For all purposes of this agreement, certain terms used herein are defined as follows:

(a) "Commissioner" shall mean the Commissioner of Public Lands of the State of New Mexico.

(b) "Commission" shall mean the Oil Conservation Commission of the State of New Mexico and those persons duly authorized to act for and in its behalf.

(c) "Working Interest Owner" shall mean a party hereto whose interest in the unitized substances under existing contracts and under this agreement is subject to a charge for, or an obligation to pay a portion of the costs and expenses of operations hereunder.

(d) "Royalty Owner" shall mean a party hereto or consenting hereto whose interest in the unitized substances is free from any obligation, liability, or charge for and on account of the costs and expenses of operations hereunder.

(e) "Paying Quantities" shall mean a quantity of the unitized substances sufficient to repay the cost of drilling, equipping and operating the well and a profit in addition thereto.

3. UNIT AREA: The following described lands are hereby designated and recognized as constituting the State Rhodus Unit Area:

In Township 26 South, Range 37 East:

All of Section 16

Section 27: ~~NONE~~

Section 28: ~~NONE~~

Embracing 800 acres.

The Operator, with the consent of a majority in interest of the Working Interest, and subject to the approval of the Commissioner and the Commission, may enlarge the unit area to include other lands believed to be productive of the unitized substances, or may with like consent and approval, diminish the unit area to exclude lands not in any participating area hereunder which shall be demonstrated to be barren of the unitized substances.

Exhibit "A" attached hereto is a map on which is outlined the herein-established Unit Area, together with the ownership of the lands and leases in said Area. Exhibit "B" attached hereto is a schedule showing the nature and extent of ownership of oil and gas rights in all land in the Unit Area to which this unit agreement will become applicable by signature hereto, or to a counterpart hereof, by the owners of such rights, and hereinafter referred to as "unitized lands". Said schedule shall

be revised by the Unit Operator whenever any change in the Unit Area or ownership of rights renders such change necessary, and the revised schedule shall be filed with the record of this agreement.

4. UNITIZED SUBSTANCES: All oil, gas, natural gasoline and associated fluid hydrocarbons producible from land subject to this agreement, in any and all sands or horizons, are unitized under the terms of this agreement and hereinafter are called "unitized substances".

5. SEGREGATION OF UNITIZED SUBSTANCES: It is the intent and purpose of the parties to this agreement that the unitized substances shall be subject to development and operation in separate groups as follows:

Group 1 - Gas (including casinghead gas) in any and all sands at or above a depth of 4,000 feet from the ground surface, whether such gas is now in place or is hereafter injected.

Group 2 - Oil in any and all sands at or above a depth of 4,000 feet from the ground surface.

Group 3 - All unitized substances below a depth of 4,000 feet from the ground surface.

6. GROUP 2 AND/OR GROUP 3 UNIT OPERATOR OR OPERATORS: No Unit Operator has been appointed for the unitized substances in Group 2 and/or Group 3, nor need be unless the appointment of such a Unit Operator be demanded by the Commission.

The terms and conditions for the development and operation of unitized substances in Group 2 and/or Group 3 shall (unless and until a plan for their development be established as below provided) be deemed to be the terms and conditions of the leases, contracts, and other agreements under which said unitized substances are now being developed and operated, except in so far as said leases, contracts or other agreements may require adjustment or modification to conform with the herein provided terms and conditions.

The holders of the operating rights as to the unitized substances in Group 2 and Group 3, or either, may at

any time select, and they agree upon demand of the Commission and Commissioner promptly to select, a Unit Operator for the unitized substances in Group 2 and Group 3, or either, and in either such case they shall also submit a schedule showing a method of allocation of benefits and costs of operations as to said unitized substances and the ratio of apportionment thereof among the parties entitled to such benefits or chargeable with such costs. After approval by the Commission and Commissioner of the Unit Operator so selected, and of the schedule so submitted, and within 30 days after demand by the Commission and Commissioner, said Unit Operator shall submit for the approval of the Commission and Commissioner a plan of development and/or operation for the unitized substances in Groups 2 and/or 3, which plan or plans, when so approved, shall constitute the further drilling and operating obligations of said Unit Operator for the unitized substances involved. Said plan or plans shall be as nearly complete and adequate as the Commission and Commissioner may determine to be necessary and advisable to conserve properly the unitized substances covered by such plan or plans. Said plan or plans may be modified from time to time upon approval of said Commission and Commissioner, or at the direction of said Commission and Commissioner, to meet changed conditions, and the further obligations of the Unit Operator or Operators involved shall be conformed thereto.

7. GROUP 1 UNIT OPERATOR: El Paso Natural Gas Company is hereby designated as unit operator for Group 1 unitized substances, hereinafter designated as Group 1 Unit Operator, and by signature hereof commits to this agreement all interests vested in it in land within the unit area and agrees to accept the duties and obligations of such unit operator to conduct and manage the operation of the lands subject to this agreement for the development, storage and production of Group 1 unitized substances as herein provided.

8. SUCCESSOR UNIT OPERATOR. Whenever a Unit Operator for a Group or groups of unitized substances designated under this agreement shall be removed or shall relinquish his rights as Unit Operator under this agreement, the owners of the majority of operating rights as to such group or groups of unitized substances according to their total acreage interests in the lands subject to this agreement as to such group or groups shall select a new unit operator for such group or groups of unitized substances. Such selection shall not become effective until (a) the unit operator so selected shall accept the duties and responsibilities of such unit operator and (b) the selection shall have been approved by the Commission and Commissioner. Any unit operator shall be subject to removal for failure to

perform effectively his duties and obligations as Unit Operator hereunder on notice by the Commission and Commissioner, such notice to be given only after reasonable opportunity has been given to correct any specified default in performance.

The right to relinquish all rights as a unit operator may be exercised whenever said Operator is not in default under this agreement but no Unit Operator shall be relieved from his duties and obligations as Unit Operator for a period of six months after notice of intention to relinquish such duties and obligations has been served by him on all other parties hereto holding operating rights in respect to the unitized substances involved and the Commission and Commissioner, unless a new operator shall have been selected and shall have taken over and assumed the duties and obligations of such Unit Operator prior to the expiration of said period. At any time prior to the date on which relinquishment by or removal of a Unit Operator becomes effective, the owners of operating rights as to the unitized substances involved or a duly qualified new Unit Operator may elect to purchase on reasonable terms all or any part of the preceding Unit Operator's equipment, material, and appurtenances in or upon the lands subject to this agreement, provided that, no such equipment, material, or appurtenances so selected for purchase shall be removed pending determination of reasonable terms of purchase. Any equipment, material, and appurtenances not so purchased and not so necessary for the preservation of wells may be removed by the retiring Unit Operator at any time within six (6) months after the relinquishment or removal becomes effective, but if not so removed shall become the joint property of the owners of the operating rights as to the unitized substances involved.

Acquisition or assignment of operating rights pertaining to State lands subject to this agreement and the consideration therefor shall be subject to approval by the Commission and Commissioner.

9. RIGHTS AND OBLIGATIONS OF GROUP 1 UNIT OPERATOR:
The exclusive right, privilege, and duty of exercising any and all rights of the parties signatory hereto which are necessary or convenient for prospecting for, producing, storing and disposing of the Group 1 unitized substances is hereby vested in the Group 1 Unit Operator and shall be exercised by said unit Operator as provided in this agreement. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and, together with this agreement, shall constitute and define said Unit Operator's rights, privileges, and obligations in the premises; provided, that nothing herein shall be construed to transfer title to any lands, leases, or operating

agreements, it being understood that the Group 1 Unit Operator shall have rights of possession and use merely for the purposes herein specified, and for any and all other purposes all existing agreements in respect to Group 1 unitized substances remain in force and effect. Like provisions shall be applicable to Group 2 and/or Group 3 unitized substances if and when a unit operator or operators for these substances are selected as herein provided.

The Group 1 Unit Operator shall pay all costs and expenses of operations with respect to the development, storage and recovery of Group 1 unitized substances.

10. PLAN OF OPERATION AS TO GROUP 1 UNITIZED SUBSTANCES:

The Group 1 Unit Operator is authorized to shut-in or produce the unitized substances in Group 1, or supplement such substances by injection of gas, according to a plan of development and/or operations which shall be submitted by said Unit Operator for approval by the Commission and Commissioner within 30 days after approval of this agreement and when so approved shall constitute the obligations of said Unit Operator for development and operation of such unitized substances; provided that said plan shall be subject to modification from time to time at the option of said Unit Operator subject to like approval; and provided further that the Commission and Commissioner may require that a new plan of development and/or operations shall be submitted when, in his opinion, such action is necessary and advisable in the public interest.

11. ALLOCATION OF GROUP 1 UNITIZED SUBSTANCES:

Group 1 unitized substances, as and when produced, will be deemed to be produced equally on an acreage basis from all the lands subject to this agreement and will be allocated to the several tracts in the ratio that the total acreage of each bears to the total acreage subject to this agreement.

12. PAYMENTS OF ROYALTIES ON GROUP 1 UNITIZED SUBSTANCES: Group 1 Unit Operator, on behalf of the respective lessees, shall pay all royalties due the State of New Mexico, and others entitled thereto, on account of Group 1 unitized substances; provided, that if said Unit Operator defaults in any such payments and no bond has been posted by said Unit Operator which is adequate to cover such default, or when there is no Group 1 Unit Operator, the obligation to pay royalties on Group 1 Unitized Substances shall rest upon the respective lessees.

13. ROYALTIES AND RENTALS: (a) Royalties on Group 1 unitized substances payable to the State of New Mexico shall be:

(1) A royalty of 3.39% on the value of the gas as to production thereof allocated to State lands for a period of twenty-five (25) years from the effective date of this agreement, subject to the provisions of the following paragraphs of this Section 13, regardless of whether the production was originally in place or was injected by Group 1 Unit Operator, and thereafter the lease rates shall prevail unless a modification is agreed upon by the Commission and the Commissioner and Group 1 Unit Operator.

(2) Royalties on gasoline or other liquid hydrocarbons allocated to State lands shall be paid at the lease rates.

(3) If for any reason Group 1 Unit Operator does not inject into sands or horizons containing Group 1 Unitized substances a total of 15,328,630 M.c.f. of gas within 15 years from the effective date of this agreement or if, upon the permanent discontinuance of the injection of gas, Group 1 Unit Operator has failed to inject 15,328,630 M.c.f., the rate of royalty due the State of New Mexico on the gas recovered from the production of Group 1 unitized substances shall be 3.39% plus that percentage of 9.11% which the difference between 15,328,630 M.c.f. and the amount of such gas injected bears to 15,328,630 M.c.f. quantities of gas as above stated shall be on a pressure base of 16.4# absolute per square inch and 60° Fahrenheit temperature.

(4) The royalties to be paid the State of New Mexico under paragraphs (1) and (3) hereof are on the basis of five cents (5¢) per thousand (1000) cubic feet at 15.025# psia or the market value whichever is the greater.

(5) If the total volume of gas produced per acre equals the amount injected per acre plus 4,413 M.c.f. per acre at 16.4 lbs. pressure base and temperature of 60° Fahrenheit, the rate of State royalty on all subsequent production shall be at the lease rates.

13. (b) Royalties for Groups 2 and/or 3 unitized substances payable to the State of New Mexico shall be paid at the rates specified in the respective leases subject to this agreement. If and when such substances are produced under a plan of development and/or operation approved pursuant to this agreement, said royalties shall be computed on the basis of the amount or value of production allocated to said leases.

13. (c) Rental for lands of the state of New Mexico subject to this agreement shall be paid at the rates specified in the leases. The leases shall be deemed to be in a status of operating leases while being used for storage of Group 1 unitized substances.

13 (d). Group 1 Unit Operator agrees that in any one calendar year it will withdraw from the lands covered by this agreement an amount of gas per acre of the acres committed to this agreement equal to the gas withdrawn per acre from the acres committed to the Federal Rhodes Unit Area. In the event that a lesser amount of gas is withdrawn from lands committed to this agreement than the foregoing in any calendar year, the difference is hereby agreed to be admitted drainage of State Lands and Group 1 Unit Operator shall pay the State of New Mexico royalties on the full amount agreed to be withdrawn in the first sentence of this paragraph.

14. CONSERVATION: All operations shall be conducted so as to provide for the most economical and efficient recovery of unitized substances to the end that maximum ultimate yield may be obtained without waste, and for the purpose of more properly conserving the natural resources, the production of unitized substances at all times shall be without waste as defined by State law; and production from gas wells shall be limited to such quantity as can be put to beneficial use with adequate realization of fuel values; and, in the discretion of the Commission and Commissioner, production of unitized substances shall be limited by the beneficial demand as determined by said Commission and Commissioner.

15. DRAINAGE: Any Unit Operator shall take appropriate and adequate measures to prevent drainage of the unitized substances as to which he is Unit Operator from the unitized lands by wells not on the lands subject to this agreement, or, with approval of the Commission and Commissioner, pay a fair and reasonable compensatory royalty as determined by the Commission and Commissioner.

16. LEASES AND CONTRACTS CONSISTENT TO AGREEMENT: The parties hereto or consenting hereto holding State of New Mexico leases subject to this agreement, consent that the Commission and Commissioner shall, and said Commission and Commissioner by their approval of this agreement do, establish, alter, change or revoke the drilling, producing, royalty and rental requirements of such leases and the regulations in respect thereof, to conform said requirements to the provisions of this agreement.

The Commission and Commissioner further agree, consent and determine that during the effective life of this agreement, the prospecting, drilling, and producing operations

performed upon any lands subject hereto will be accepted and deemed to be operations under and for the benefit of all such leases; that suspension of operations or production on any such lease shall be deemed not to have occurred if there be operations or production on any part of the lands subject hereto; and that suspension of all operations and production on said lands pursuant to any approved plan of development and/or operation or to the direction or consent of said Commission and Commissioner shall be deemed to constitute such suspension with respect to each such lease; and no such lease shall be deemed to expire by reason of such approved suspension.

All agreements by and between the parties hereto or consenting hereto are hereby modified or amended to the extent that such agreements are not consistent herewith and in case of any conflict the terms of this unit agreement shall prevail.

17. COVENANTS RUN WITH LAND: The covenants herein run with the land until this agreement terminates, and any grant, transfer, or lease of interest in lands or leases subject hereto shall be conditioned on the assumption of all privileges and obligations hereunder by the grantee, transferee, lessee, or other successor in interest and as to State land shall be subject to approval by the Commission and Commissioner.

18. EFFECTIVE DATE AND TERM: This agreement upon approval by the Commission and Commissioner shall be deemed to have become effective as of January 1, 1948, and shall terminate two (2) years after said effective date unless (1) gas has been or is being injected into the horizons containing Group 1 unitized substances, as herein provided, or (2) a plan for the development and operation of Group 2 or Group 3 unitized substances has been established, pursuant to section (6) hereof, provided that this agreement may be terminated by the Commission and Commissioner upon request of Group 1 Unit Operator and the unit operator or operators for unitized substances in Groups 2 and 3, or, if there be no unit operator for unitized substances in said Groups or either of them, then the owners of the operating interests as to unitized substances as to which there is no unit operator upon the majority of the lands then subject to this agreement, after notice of intention to request such termination has been served on all parties in interest who are not parties to the request for such termination.

19. REGULATION OF DEVELOPMENT AND PROSPECTING:

All production and the disposal thereof shall be in conformity with allocations, allotments, and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute; provided that the Commissioner is vested with authority, to alter or modify from time to time in his discretion, the rate of prospecting and development and the quantity and rate of production under this agreement, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification.

20. DETERMINATIONS BY OPERATOR AND REVIEW THEREOF:

Operator shall determine all matters involved in this agreement for which a different method of determination is not herein established; provided that Operator shall give timely notice of all such determination to all interested parties, including the Commissioner; provided further, that all such determinations may be reviewed by the Commissioner on his own initiative or on written request of any interested party, notice of any such review to be given to all interested parties, including Operator, within 60 days after receipt of notice of Operator's determination; and provided further, that any matters so reviewed, on request or consent of Operator, may be submitted to a committee of three competent persons appointed by said Commissioner, one on nomination of Operator, one on nomination of the other interested parties, and the third on nomination of the first two, the cost of such committee to be a cost of operation and its report (which shall be binding on the committee when concurred in by any two of its members) shall be submitted to said Commissioner, the Operator, and other interested parties; and provided further, that opportunity shall be given in said review for all interested parties to present their contentions and supporting evidence by written or oral communication to said committee or said Commissioner, and that after consideration of all credible evidence, said Commissioner shall render a reasonable decision based thereon and in conformity therewith, which decision, so made and rendered, shall be final and binding on all parties hereto or consenting hereto.

"Operator", as used in this Section 20, means

(a) where unitized substances in Group 1 are concerned, the Group 1 Unit Operator; (b) where unitized substances in Groups 2 and 3 are involved; the unit operator or operators for such substances, or, if there be no unit operator for the unitized substances in both or either of said groups, then the owners of the operating interests as to the unitized substances for which there is no unit operator upon the majority of the lands then subject to this agreement; and (c) where unitized substances in Groups 1, 2 and 3 are involved, the Group 1 Unit Operator and the unit operator or operators for unitized substances in Groups 2 and 3, or if there be no such unit operator for the unitized substances in Groups 2 and 3 or either of them, the

owners of the operating interests as to the unitized substances in said groups or group upon the majority of the lands then subject to this agreement.

21. BOND: Any Unit Operator shall furnish within 30 days after approval hereof by the Commission and Commissioner or after his selection and maintain at all times thereafter a bond in the penal sum of \$5,000.00 with approved corporate surety, or with deposit of United States bonds as surety therefor, conditioned upon compliance with the terms of this agreement applicable to him provided that additional bond may be required at any time deemed necessary by the Commission and Commissioner.

22. COUNTERPARTS: This agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and set opposite their respective names the date of execution and a list of the lands or interests made subject to this agreement.

Date: Dec 21, 1948

ATTEST:

C. R. Marten
Asst. Secretary

EL PASO NATURAL GAS COMPANY

By J. D. Quinn

Vice President

Date:

ATTEST:

Secretary

AMERADA PETROLEUM CORPORATION

By

Vice President

Date:

ATTEST:

Secretary

SKELLY OIL COMPANY

By

Vice President

Date:

ATTEST:

R. A. Wilson
Secretary

CITIES SERVICE OIL COMPANY

By Sam Houston

Vice President

Date:

ATTEST:

Secretary

THE TEXAS COMPANY

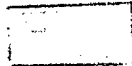
By

Vice President

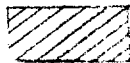
EXHIBIT A



Total Acreage in Area	6,500
Committed to Federal Unit	5,000
Committed herewith	100
Percent committed including this application	66.2



State lands to be authorized to be
included in area.



State lands committed to this
agreement.

EXHIBIT "B"

EL PASO NATURAL GAS COMPANY lease owner:

**NE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{4}$ SW $\frac{1}{4}$, and SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Sec. 16, Twp. 26 South,
Rge. 37 East, Lea County, N. M.,**

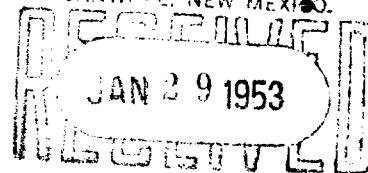
— a total of 160 acres

CITIES SERVICE OIL COMPANY lease owner:

**SW $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Sec. 16, Twp. 26
South, Rge. 37 East, Lea County,
N.M.,**

— a total of 160 acres

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.



RHODES (State) UNIT AGREEMENT
Lea County, New Mexico

dated as of January 1, 1948
(executed 5-18-51)

between

EL PASO NATURAL GAS COMPANY

and

AMERADA PETROLEUM CORPORATION

August 17 1951

El Paso Natural Gas Company
National Standard Building
Houston 2 Texas

Attention Mr. V. M. Plummer

Gentlemen:

We herewith deliver to you two executed copies of Rhodes Unit Agreement, Lea County, New Mexico, covering gas rights only to a depth of 4000 feet in Section 16-26S-37E. We have executed this instrument with the following understanding and conditions:

1. It is understood that we have executed this unit agreement for the reason that although we have heretofore granted to you all of our gas rights down to 4000 feet as to the acreage committed to this agreement, we still retain record title to the oil and gas lease from the State of New Mexico covering said land, and it is agreed that the Unit Agreement shall in no way alter or affect any of the rights or obligations of any party to the various contracts effecting the conveyance of said gas rights to you.

2. Notwithstanding any ambiguity or conflict in the provisions of the Unit Agreement and the exhibits attached thereto with respect to the acreage to be included in said unit, it is understood that this Unit Agreement pertains to, and affects, gas rights above 4000 feet only as to Section 16, Township 26-South, Range 37-East, Lea County, New Mexico.

3. It is agreed that this unit will not be extended or enlarged to include any acreage in which Amerada owns gas rights above 4000 feet without our consent.

p-2
El Paso Natural Gas Co
8-17-51

If you are willing to accept our execution and delivery of this instrument with the above understanding and conditions, please signify below, as indicated, and return.

Very truly yours,

AMERADA PETROLEUM CORPORATION

By *E. H. McCollough* *H*
E. H. McCollough

EHM:MGH
K
encl

ACCEPTED this 27 day
of August, 1951:

EL PASO NATURAL GAS COMPANY

By *D. H. [Signature]*
Vice President



RHODES UNIT AGREEMENT
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1948, by and between the parties subscribing or consenting hereto;

WITNESSETH:

WHEREAS, the parties subscribing hereto are the ^{record} owners of operating, royalty, or other oil or gas interests in the Unit Area subject to this agreement; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent avoidable waste and secure other benefits obtainable through development and operating of the Unit Area subject to this agreement under the terms, conditions and limitations hereinafter set forth; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chapter 88, Laws 1943) to consent to or approve this agreement on behalf of the State of New Mexico, in so far as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature (Chapter 72, Laws 1935) to approve this agreement and the conservation provisions hereof;

NOW, THEREFORE, for and in consideration of the premises and the promises hereinafter contained, the parties subscribing hereto and the parties consenting hereto agree as follows:

1. LAWS AND REGULATIONS: The Acts of the Legislature of the State of New Mexico (Chapter 72, Laws of 1935, and Chapter 88, Laws of 1943) and all pertinent regulations issued thereunder, including operating and unit plan regulations, are accepted and made a part of this agreement.

2. DEFINITIONS: For all purposes of this agreement, certain terms used herein are defined as follows:

(a) "Commissioner" shall mean the Commissioner of Public Lands of the State of New Mexico.

(b) "Commission" shall mean the Oil Conservation Commission of the State of New Mexico and those persons duly authorized to act for and in its behalf.

(c) "Working Interest Owner" shall mean a party hereto whose interest in the unitized substances under existing contracts and under this agreement is subject to a charge for, or an obligation to pay a portion of the costs and expenses of, operations hereunder.

(d) "Royalty Owner" shall mean a party hereto or consenting hereto whose interest in the unitized substances is free from any obligation, liability, or charge for and on account of the costs and expenses of operations hereunder.

(e) "Paying Quantities" shall mean a quantity of the unitized substances sufficient to repay the cost of drilling, equipping, and operating the well and a profit in addition thereto.

3. UNIT AREA: The following described land is hereby designated and recognized as constituting the State Rhodes Unit Area:

All of Section 16, Township 26 South,
Range 37 East, Lea County, New Mexico,
embracing 640 acres.

The Operator, with the consent of a majority in interest of the Working Interest, and subject to the approval of the Commissioner and the Commission, may enlarge the Unit Area to include other lands believed to be productive of the unitized substances, or may with like consent and approval, diminish the Unit Area to exclude lands now in any participating area hereunder which shall be demonstrated to be barren of the unitized substances.

Exhibit "A" attached hereto is a map on which is outlined the herein-established Unit Area, together with the ownership of the lands and leases in said Area. Exhibit "B" attached hereto is a schedule showing the nature and extent of ownership of oil and gas rights in all land in the Unit Area to which this unit agreement will become applicable by signature hereto, or to a counterpart hereof, by the owners of such rights, and hereinafter referred to as "unitized lands". Said schedule shall be revised by the Unit Operator whenever any change in the Unit Area or ownership of rights renders such change necessary, and the revised schedule shall be filed with the record of this agreement.

4. UNITIZED SUBSTANCES: All gas, including natural gasoline, propane, butane, and other contents of the gas producible from land subject to this agreement, in any and all sands or

horizons at or above a depth of 4,000 feet from the ground surface, are unitized under the terms of this agreement and herein are called "Unitized Substances".

5. UNIT OPERATOR: El Paso Natural Gas Company is hereby designated as Unit Operator, and by signature hereof commits to this agreement all interests vested in it in land within the Unit Area and agrees to accept the duties and obligations of such Unit Operator to conduct and manage the operation of the lands subject to this agreement for the development, storage and production of unitized substances as herein provided.

6. SUCCESSOR UNIT OPERATOR: Whenever the Unit Operator under this agreement shall be removed or shall relinquish his rights as Unit Operator under this agreement, the owners of the majority of operating rights in the lands subject to this agreement shall select a new unit operator. Such selection shall not become effective until (a) the unit operator so selected shall accept the duties and responsibilities of such unit operator and (b) the selection shall have been approved by the Commission and Commissioner. Any unit operator shall be subject to removal for failure to perform effectively his duties and obligations as Unit Operator hereunder on notice by the Commission and Commissioner, such notice to be given only after reasonable opportunity has been given to correct any specified default in performance.

The right to relinquish all rights as a Unit Operator may be exercised whenever said Operator is not in default under this agreement, but no Unit Operator shall be relieved from his duties and obligations as Unit Operator for a period of six months after notice of intention to relinquish such duties and obligations has been served by him on all other parties hereto holding operating rights in respect to the unitized substances involved and the Commission and Commissioner, unless a new operator shall have been selected and shall have taken over and assumed the duties and obligations of such Unit Operator prior to the expiration of said period. At any time prior to the date on which relinquishment by or removal of a Unit Operator becomes effective, the owners of operating rights as to the unitized substances involved or a duly qualified new Unit Operator may elect to purchase on reasonable terms all or any part of the preceding Unit Operator's equipment, material, and appurtenances in or upon the lands subject to this agreement, provided that no such equipment, material, or appurtenances so selected for purchase shall be removed pending determination of reasonable terms of purchase. Any equipment, material, and appurtenances not so purchased and not so necessary for the preservation of

wells may be removed by the retiring Unit Operator at any time within six months after the relinquishment or removal becomes effective, but if not so removed shall become the joint property of the owners of the operating rights as to the unitized substances involved.

Acquisition or assignment of operating rights pertaining to State lands subject to this agreement and the consideration therefor shall be subject to approval by the Commission and Commissioner.

7. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: The exclusive right, privilege, and duty of exercising any and all rights of the parties signatory hereto which are necessary or convenient for prospecting for, producing, storing and disposing of the unitized substances are hereby vested in the Unit Operator and shall be exercised by said Unit Operator as provided in this agreement. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and, together with this agreement, shall constitute and define said Unit Operator's rights, privileges, and obligations in the premises; provided, that nothing herein shall be construed to transfer title to any lands, leases, or operating agreements, it being understood that the Unit Operator shall have rights of possession and use merely for the purposes herein specified, and for any and all other purposes all existing agreements in respect to unitized substances remain in force and effect.

The Unit Operator shall pay all costs and expenses of operations with respect to the development, storage and recovery of unitized substances.

8. PLAN OF OPERATION AS TO UNITIZED SUBSTANCES: The Unit Operator is authorized to shut-in or produce the unitized substances or supplement such substances by injection of gas, according to a plan of development and/or operations which shall be submitted by said Unit Operator for approval by the Commission and Commissioner within 30 days after approval of this agreement, and when so approved shall constitute the obligations of said Unit Operator for development and operation of such unitized substances; provided that said plan shall be subject to modification from time to time at the option of said Unit Operator subject to like approval; and provided further that the Commission and Commissioner may require that a new plan of development and/or operations shall be submitted when, in his opinion, such action is necessary and advisable in the public interest.

9. ALLOCATION OF UNITIZED SUBSTANCES: Unitized substances, as and when produced, will be deemed to be produced equally on an acreage basis from all the lands subject to this

agreement, and will be allocated to the several tracts in the ratio that the total acreage of each bears to the total acreage subject to this agreement.

10. PAYMENTS OF ROYALTIES ON UNITIZED SUBSTANCES: Unit Operator, on behalf of the respective lessees, shall pay all royalties due the State of New Mexico, and others entitled thereto, on account of unitized substances; provided, that if said Unit Operator defaults in any such payment and no bond has been posted by said Unit Operator which is adequate to cover such default, or when there is no Unit Operator, the obligation to pay royalties on Unitized Substances shall rest upon the respective lessees.

11. ROYALTIES AND RENTALS: (a) Royalties on unitized substances payable to the State of New Mexico shall be:

(1) A royalty of 3.39% on the value of the gas as to production thereof allocated to State lands for a period of twenty-five (25) years from the effective date of this agreement, subject to the provisions of the following paragraphs of this Section 11, regardless of whether the production was originally in place or was injected by Unit Operator, and thereafter the lease rates shall prevail unless a modification is agreed upon by the Commission and the Commissioner and Unit Operator.

(2) Royalties on gasoline or other liquid hydrocarbons allocated to State lands shall be paid at the lease rates.

(3) If for any reason Unit Operator does not inject into sands or horizons containing Unitized Substances a total of 15,328,630 M.c.f. of gas within fifteen (15) years from the effective date of this agreement, or if, upon the permanent discontinuance of the injection of gas, Unit Operator has failed to inject 15,328,630 M.c.f., the rate of royalty due the State of New Mexico on the gas recovered from the production of unitized substances shall be 3.39% plus that percentage of 9.11% which the difference between 15,328,630 M.c.f. and the amount of such gas injected bears to 15,328,630 M.c.f. Quantities of gas as above stated shall be on a pressure base of 16.4# absolute per square inch and 60° Fahrenheit temperature.

(4) The royalties to be paid the State of New Mexico under paragraphs (1) and (3) hereof are on the basis of five cents (5¢) per thousand (1,000) cubic feet at 15.025# psia or the market value, whichever is the greater.

(5) If the total volume of gas produced per acre equals the amount injected per acre plus 4,413 M.c.f.

per acre at 16.4# pressure base and temperature of 60° Fahrenheit, the rate of State royalty on all subsequent production shall be at the lease rates.

11. (b) Rental for lands of the State of New Mexico subject to this agreement shall be paid at the rates specified in the leases. The leases shall be deemed to be in a status of operating leases while being used for storage of unitized substances.

11. (c) Unit Operator agrees that in any one calendar year it will withdraw from the lands covered by this agreement an amount of gas per acre of the acres committed to this agreement equal to the gas withdrawn per acre from the acres committed to the Federal Rhodes Unit Area. In the event that a lesser amount of gas is withdrawn from lands committed to this agreement than the foregoing in any calendar year, the difference is hereby agreed to be admitted drainage of State lands and Unit Operator shall pay the State of New Mexico royalties on the full amount agreed to be withdrawn in the first sentence of this paragraph.

12. CONSERVATION: All operations shall be conducted so as to provide for the most economical and efficient recovery of unitized substances to the end that maximum ultimate yield may be obtained without waste, and for the purpose of more properly conserving the natural resources, the production of unitized substances at all times shall be without waste as defined by State Law; and production from gas wells shall be limited to such quantity as can be put to beneficial use with adequate realization of fuel values; and, in the discretion of the Commission and Commissioner, production of unitized substances shall be limited by the beneficial demand as determined by said Commission and Commissioner.

13. DRAINAGE: Any Unit Operator shall take appropriate and adequate measures to prevent drainage of the unitized substances as to which he is Unit Operator from the unitized lands by wells not on the lands subject to this agreement, or, with approval of the Commission and Commissioner, pay a fair and reasonable compensatory royalty as determined by the Commission and Commissioner.

14. LEASES AND CONTRACTS CONFORMED TO AGREEMENT: The parties hereto or consenting hereto holding State of New Mexico leases subject to this agreement consent that the Commission and Commissioner shall, and said Commission and Commissioner by their approval of this agreement do, establish, alter, change or revoke the drilling, producing, royalty and rental requirements of such leases, and the regulations in respect thereof, to conform said requirements to the provisions of this agreement.

The Commission and Commissioner further agree, consent and determine that during the effective life of this agreement, the prospecting, drilling, and producing operations performed upon any lands subject hereto will be accepted and deemed to be operations under and for the benefit of all such leases; that suspension of operations or production on any such lease shall be deemed not to have occurred if there be operations or production on any part of the lands subject hereto; and that suspension of all operations and production on said lands pursuant to any approved plan of development and/or operation or to the direction or consent of said Commission and Commissioner shall be deemed to constitute such suspension with respect to each such lease; and no such lease shall be deemed to expire by reason of such approved suspension.

All agreements by and between the parties hereto or consenting hereto are hereby modified or amended to the extent that such agreements are not consistent herewith, and in case of any conflict the terms of this unit agreement shall prevail.

15. COVENANTS RUN WITH LAND: The covenants herein run with the land until this agreement terminates, and any grant, transfer, or lease of interest in lands or leases subject hereto shall be conditioned on the assumption of all privileges and obligations hereunder by the grantee, transferee, lessee, or other successor in interest, and as to State land shall be subject to approval by the Commission and Commissioner.

16. EFFECTIVE DATE AND TERM: This agreement upon approval by the Commission and Commissioner shall be deemed to have become effective as of January 1, 1948, ~~and shall terminate two (2) years after said effective date unless gas has been or is being injected into the formations containing unitized substances, as herein provided~~, provided that this agreement may be terminated by the Commission and Commissioner upon request of Unit Operator, or if there be no Unit Operator then the owners of the operating interests after notice of intention to request such termination has been served on all parties in interest who are not parties to the request for such termination.

17. REGULATION OF DEVELOPMENT AND PRODUCTION: All production and the disposal thereof shall be in conformity with allocations, allotments, and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute; provided that the Commissioner is vested with authority to alter or modify from time to time, in his discretion, the rate of prospecting and development and the quantity and rate of production under this agreement, such authority being

hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification.

18. DETERMINATIONS BY UNIT OPERATOR AND REVIEW

THEREOF: Unit Operator shall determine all matters involved in this agreement for which a different method of determination is not herein established; provided that Operator shall give timely notice of all such determination to all interested parties, including the Commissioner; provided, further, that all such determinations may be reviewed by the Commissioner on his own initiative or on written request of any interested party, notice of any such review to be given to all interested parties, including Unit Operator, within 60 days after receipt of notice of Unit Operator's determination; and provided, further, that any matters so reviewed, on request or consent of Unit Operator, may be submitted to a committee of three competent persons appointed by said Commissioner, one on nomination of Unit Operator, one on nomination of the other interested parties, and the third on nomination of the first two, the cost of such committee to be a cost of operation, and its report (which shall be binding on the committee when concurred in by any two of its members) shall be submitted to said Commissioner, the Unit Operator, and other interested parties; and provided, further, that opportunity shall be given in said review for all interested parties to present their contentions and supporting evidence by written or oral communication to said committee or said Commissioner, and that after consideration of all credible evidence, said Commissioner shall render a reasonable decision based thereon and in conformity therewith, which decision, so made and rendered, shall be final and binding on all parties hereto or consenting hereto.

19. BOND: Any Unit Operator shall furnish within 30 days after approval hereof by the Commission and Commissioner or after his selection and maintain at all times thereafter a bond in the penal sum of \$5,000.00 with approved corporate surety, or with deposit of United States Bonds as surety therefor, conditioned upon compliance with the terms of this agreement applicable to him, provided that additional bond may be required at any time deemed necessary by the Commission and Commissioner.

20. COUNTERPARTS: This agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and set opposite their respective names the date of execution and a list of the lands or interests made subject to this agreement.

Date: 5-18-57

ATTEST:

J. C. Martel
Assistant Secretary

EL PASO NATURAL GAS COMPANY

By [Signature]
Vice President

Date:

ATTEST:

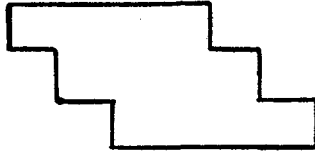
[Signature]
Assistant Secretary

AMERADA PETROLEUM CORPORATION

By [Signature]
Vice President

APPROVED
B.K.
[Signature]
A

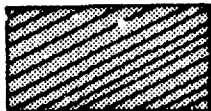
EXHIBIT "A"



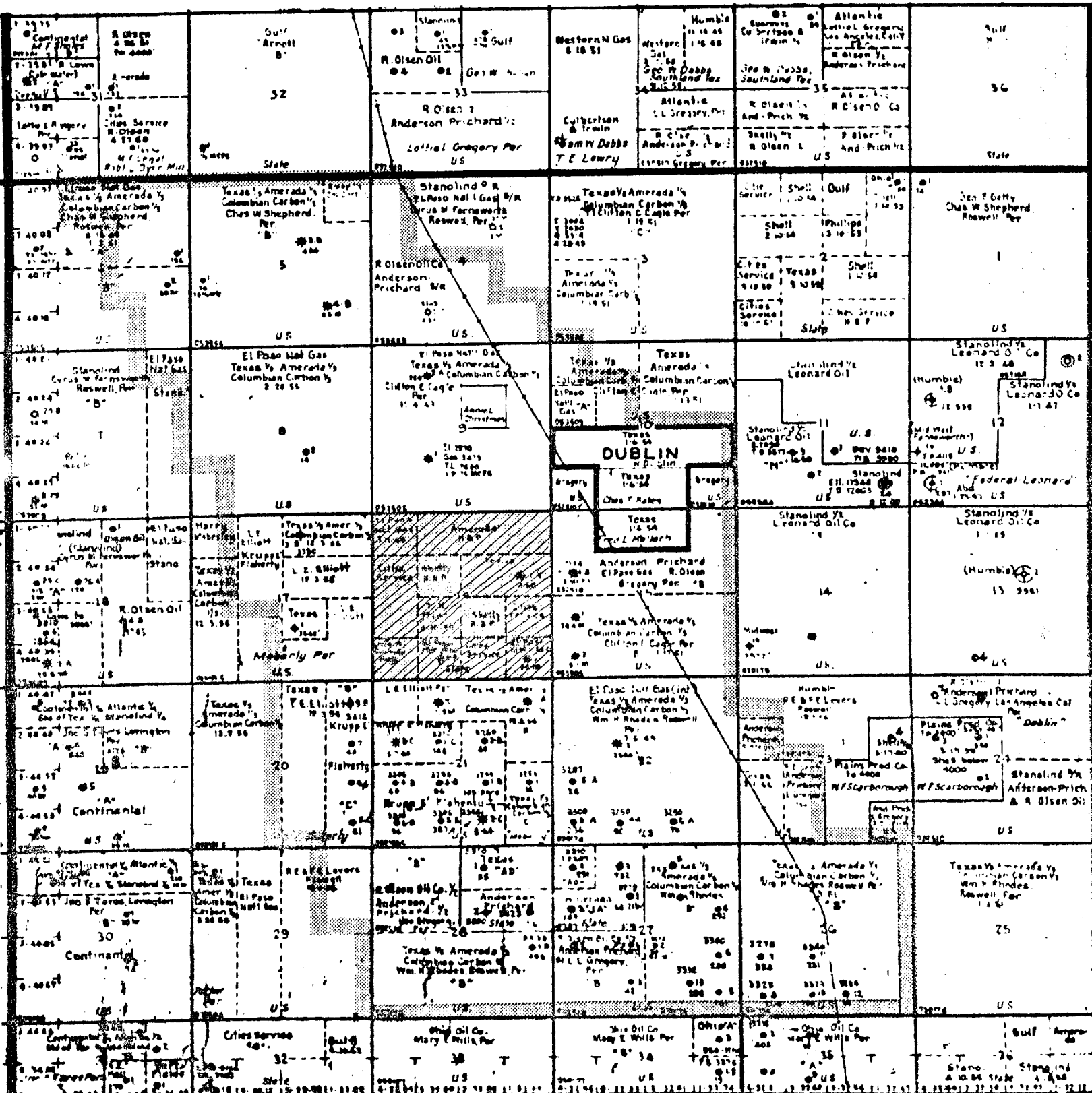
Total Acreage in Area	8520
Committed to Federal Unit	5680
Committed herewith	120
Percent committed including this application	68.1



State Lands to be authorized to be
included in area.



State Lands committed to this
agreement.



R T E X A S R37E C O U N T Y

EXHIBIT "B"

AMERADA PETROLEUM CORPORATION lease owner:

N/ $\frac{1}{2}$ NE/ $\frac{1}{4}$ and NE/ $\frac{1}{4}$ NW/ $\frac{1}{4}$ of Sec. 16, Twp. 26 South,
Rge. 37 East, Lea County, New Mexico.

EL PASO NATURAL GAS COMPANY

January 19, 1953

Box 1384

Jal, New Mexico

*Rhodes Unit File
Case 140*

New Mexico Oil Conservation Commission
Mr. Roy O. Yarborough
P. O. Box 2045
Hobbs, New Mexico

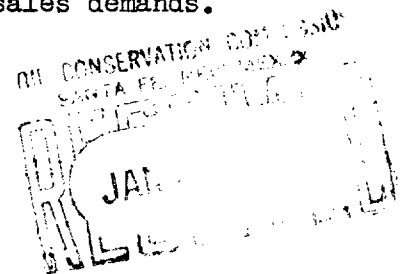
Dear Mr. Yarborough:

Pursuant to Rule 701 (b), Rules and Regulations of the New Mexico Oil Conservation Commission, effective January 1, 1950, permission is hereby requested to use the El Paso Natural Gas Company's State A-1 and State Y-1 wells, located in Sec. 16, Twp. 26S, Rge. 37E, NMPM, Lea County, New Mexico, for injection wells.

The following information is respectfully submitted as outlined in Rule 701 (b):

- (1.) Plat enclosed
- (2.) Yates formation of the Permian system
- (3.) The Yates sand is the formation to be affected by injection in both wells.
State A-1, producing interval 2980 to 3310 feet
State Y-1, producing interval 2970 to 3140 feet
- (4. & 5.) Enclosed on Form C-105
- (6.) Residue gas and gas from gas wells is to be injected at a rate of approximately 4,166 MCFPD. However, this figure will vary widely, depending on sales demands.
- (7.) El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas

El Paso Natural Gas Company
P. O. Box 1384
Jal, New Mexico.



Very truly yours,

EL PASO NATURAL GAS COMPANY

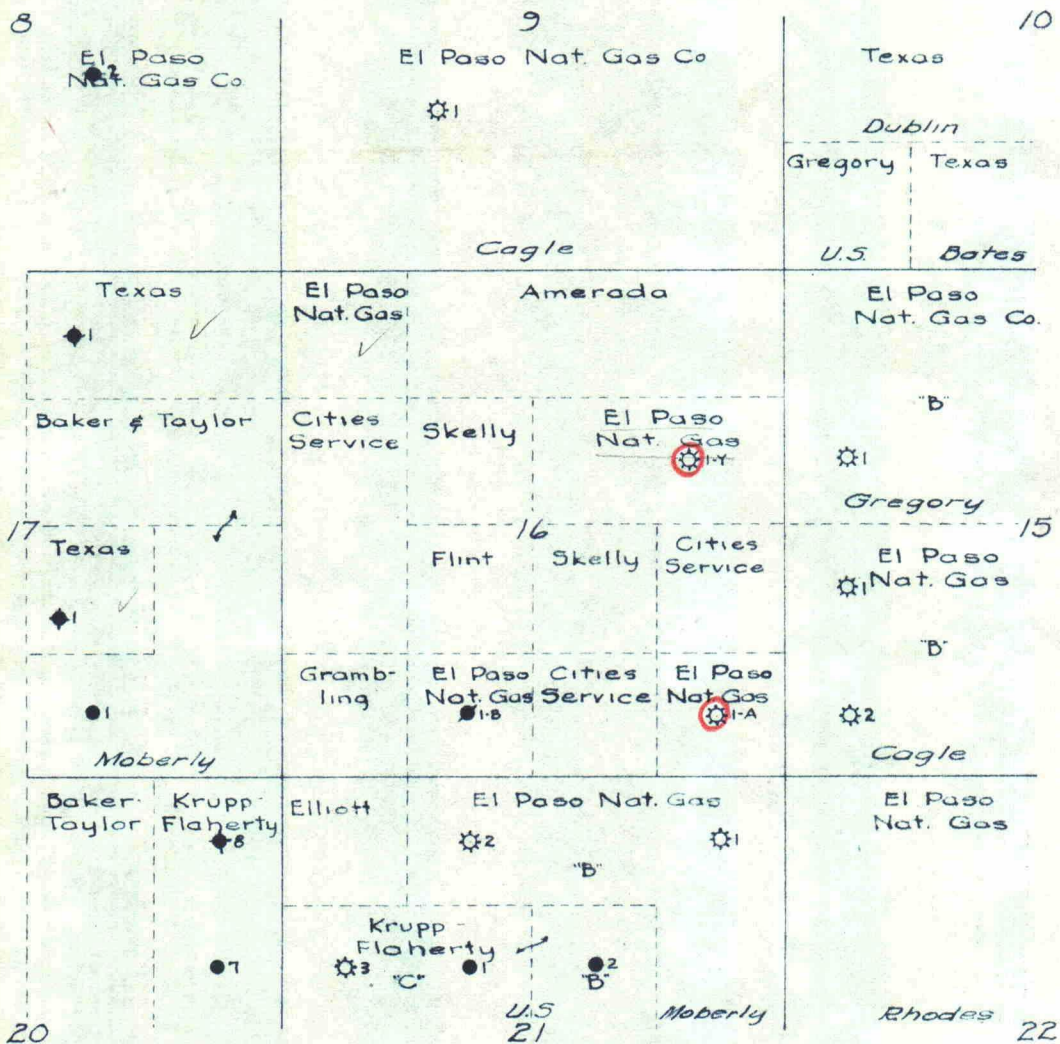
R. A. Scalapino

R. A. Scalapino
Division Geologist

RAS:ds

Enc.

2



EL PASO NATURAL GAS COMPANY		
EL PASO, TEXAS		
Plat of		
RHODES STATE UNIT ACREAGE		
SCALE 1" = 2000'	DATE Jan 16, 1953	No.
DRAWN BY E.M.	CHECKED BY F.G.B.	

AREA 640 ACRES
LOCATE WELL CORRECTLY

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD

C
O
P
Y

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE.

Great Western Producers Inc.

(Company or Operator)

State A

(Lease)

Well No. 1, in SE ¼ of SE ¼, of Sec. 16, T. 26S, R. 37E, NMPM.

Rhodes

Pool,

Lea

County.

Well is 4620 feet from North line and 660 feet from East line

of Section 16. If State Land the Oil and Gas Lease No. is B-1498

Drilling Commenced October 1, 1937. Drilling was Completed November 5, 1937.

Name of Drilling Contractor George P. Livermore, Inc.

Address Kermit, Texas

Elevation above sea level at Top of Tubing Head 2985. The information given is to be kept confidential until

, 19

OIL SANDS OR ZONES

No. 1, from to No. 4, from to

No. 2, from 3209 to 3217 No. 5, from to

No. 3, from to No. 6, from to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet.

No. 2, from to feet.

No. 3, from to feet.

No. 4, from to feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
13"	40		144	None			Water Shut Off
9-5/8"	40		1090	Baker			Water Shut Off
7"	24		2980	Baker			Oil String
2	4.7		3246				

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
17½	13	160	135	Halliburton		
12	9-5/8	1105	500	Halliburton		
8-3/4	7	2995	250	Halliburton		

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Result of Production Stimulation

Depth Cleaned Out

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 0 feet to 3315 feet, and from feet to feet.
Cable tools were used from feet to feet, and from feet to feet.

PRODUCTION

Put to Producing, 19
OIL WELL: The production during the first 24 hours was none barrels of liquid of which % was
was oil; % was emulsion; % water; and % was sediment. A.P.I.
Gravity.
GAS WELL: The production during the first 24 hours was 50,000 M.C.F. plus barrels of
liquid Hydrocarbon. Shut in Pressure 1200 lbs.
Length of Time Shut in

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico			Northwestern New Mexico		
T. Anhy.	1050		T. Devonian		T. Ojo Alamo
T. Salt	1335		T. Silurian		T. Kirtland-Fruitland
B. Salt	2557		T. Montoya		T. Farmington
T. Yates	2835		T. Simpson		T. Pictured Cliffs
T. 7 Rivers			T. McKee		T. Menefee
T. Queen			T. Ellenburger		T. Point Lookout
T. Grayburg			T. Gr. Wash		T. Mancos
T. San Andres			T. Granite		T. Dakota
T. Glorieta			T.		T. Morrison
T. Drinkard			T.		T. Penn.
T. Tubbs			T.		T.
T. Abo			T.		T.
T. Penn.			T.		T.
T. Miss.			T.		T.

FORMATION RECORD

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	10	10	Surface Soil	3070	3080	10	Sand and some lime. GAS odor
10	25	15	Caliche	3080	3089	9	Dark colored sand. Base of Ya
25	65	40	Sand and Caliche	3089	3105	16	Hard, white dense lime
65	165	100	Sand and Red Bed	3105	3110	5	Red bed and some sandy lime
165	305	140	Red Bed, sand	3110	3130	20	Hard, flinty, sandy lime and
305	660	355	Red Bed				some gray shale
660	1035	375	Sand and Red bed	3130	3150	20	Gray sand with gas odor and
1035	1050	15	Red bed and Shells				shale streaks
1050	1335	285	Anhydrite	3150	3160	10	White, sandy lime with pyrite
1335	1375	40	Salt and streaks of Redbed				and shale streaks
1375	2308	933	Salt streaked with anyh. and polyhalite	3160	3169	9	Light colored sand with dark
							streaks, gas odor
2308	2366	58	Anhydrite	3169	3180	11	Light colored sandy lime
2366	2557	191	Salt and streaks of any.	3180	3182	2	Dark, sandy shale
2557	2685	128	Anhy. and Shale Streaks	3182	3191	9	White crystalline lime, shale
2685	2714	29	Anhydrite	3191	3203	12	Hard, crystalline, pink-white
2714	2860	144	Brown sandy lime				shale with calcite crystals
2860	2980	120	Sandy lime and shale	3203	3211	8	White sandy lime, gas odor
2980	3000	20	White lime stringer in Yates	3211	3218	7	Sandy lime/ shale breaks. Oil
3000	3022	22	Broken lime showing gas	3218	3235	17	Hard white, broken sandy lime
3022	3027	5	Shale break				breaks of dark shale/ 1" thic
3027	3041	14	Sandy white lime	3235	3245	10	Hard white crystalline lime
3041	3045	4	Light sand with odor of gas				with calcite crystal
3045	3060	15	Light sand with dark streaks	3245	3260	15	Hard white sandy lime. Shale
3060	3070	10	Sandy lime with gas odor				breaks more frequent.

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far
as can be determined from available records.

Company or Operator Address
Name Position or Title
(Date)

WELL RECORD⁰
P
Y

AREA 840 ACRES
LOCATE WELL CORRECTLY

The Texas Company

St. N.M. "Y"

(Company or Operator)

(Lease)

Well No. 1, in SE $\frac{1}{4}$ of NE $\frac{1}{4}$, of Sec. 16, T. 26S, R. 37E, NMPM.

Rhodes

Lea

County.

Well is 1980 feet from North line and 1270 feet from East line

of Section 16 If State Land the Oil and Gas Lease No. is _____

Drilling Commenced 1-6, 19 40. Drilling was Completed 2-5, 19 40.

Name of Drilling Contractor.....

Address.....

Elevation above sea level at Top of Tubing Head.....2994..... The information given is to be kept confidential until
....., 19.....

No. 1, from 2970 to 3140 No. 4, from _____ to _____

No. 2, from _____ to _____ No. 5, from _____ to _____

No. 3, from.....to..... No. 6, from.....to.....

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from _____ to _____ feet.

No. 2, from _____ to _____ feet.

No. 3, from _____ to _____ feet.

No. 4, from _____ to _____ feet. _____

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
13"	40		203'	Texas	Pattern		
9-5/8"	36		1098'	Baker			
7"	24		2973'	Baker			

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
	13"	218'	180	Halliburton		
	9-5/8"	1111'	450	Halliburton		
	7"	2953'	125	Halliburton		

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Result of Production Stimulation.....

...Depth Cleaned Out.....

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 0 feet to 3140 feet, and from feet to feet.
Cable tools were used from feet to feet, and from feet to feet.

PRODUCTION

Put to Producing, 19
OIL WELL: The production during the first 24 hours was barrels of liquid of which % was
was oil; % was emulsion; % water; and % was sediment. A.P.I.
Gravity
GAS WELL: The production during the first 24 hours was 13,700 M.C.F. plus barrels of
liquid Hydrocarbon. Shut in Pressure 900 lbs.
Length of Time Shut in

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy. 1030	T. Devonian	T. Ojo Alamo	
T. Salt. 1145	T. Silurian	T. Kirtland-Fruitland	
B. Salt. 2640	T. Montoya	T. Farmington	
T. Yates. 2795	T. Simpson	T. Pictured Cliffs	
T. 7 Rivers	T. McKee	T. Menefee	
T. Queen	T. Ellenburger	T. Point Lookout	
T. Grayburg	T. Gr. Wash	T. Mancos	
T. San Andres	T. Granite	T. Dakota	
T. Glorieta	T.	T. Morrison	
T. Drinkard	T.	T. Penn	
T. Tubbs	T.	T.	
T. Abo	T.	T.	
T. Penn	T.	T.	
T. Miss	T.	T.	

FORMATION RECORD

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	141	141	Caliche & Sand				
141	200	59	Sand & Red Beds				
200	270	70	Red Beds				
270	518	248	Sand, Shale, and Red Beds				
518	1005	487	Red Rock, Hard Sand, Shells, Shale				
1005	1030	25	Shale & Red Rock				
1030	1145	115	Anhydrite				
1145	1695	550	Salt & Anhydrite				
1695	1932	237	Salt, Potash, Anhydrite, & Gyp.				
1932	2425	493	Salt & Anhydrite				
2425	2470	45	Anhydrite				
2470	2640	170	Salt & Anhydrite				
2640	2705	65	Anhydrite & Lime				
2705	2780	75	Brown Lime				
2780	2850	70	Anhydrite, Lime and Sand				
2850	2970	120	Lime				
2970	3050	80	Sandy Lime				
3050	3080	30	Broken Lime				
3080	3140	60	Sandy Lime				
T. D. 3140'							

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Company or Operator Address
Name Position or Title
(Date)

(Cont'd.)

FORMATION RECORD

<u>From</u>	<u>To</u>	<u>Thickness</u> <u>in Feet</u>	<u>Formation</u>
3260	3277	17	White sandy lime and gray lime
3277	3285	8	Brown sandy lime
3285	3295	10	Light gray lime
3295	3310	15	Broken sandy lime. Breaks carry shale
3310	3315	5	Light colored lime and anhydrite

Case
140

December 1, 1950

Mr. Warren L. Taylor
El Paso Natural Gas Company
P. O. Box 1384
Jal, New Mexico

Dear Mr. Taylor:

This is in reply to your letter of November 24, in which you refer to the Rhodes Unit Agreement.

Under Section 18, of the Agreement, you will note the terms under which it becomes effective or terminates. We interpret the requirements to the effect that another hearing will not be necessary, but that the signatures on the various leaseholders must be secured before all the requirements are met.

To summarize, a hearing will not be necessary, the unit is not in full effect without signatures, and the unit cannot be terminated.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RFS:bw

EL PASO NATURAL GAS COMPANY

P.O. Box 1384

Jal, New Mexico

November 24, 1950

Mr. R. R. Spurrier
Secretary - Director, Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Spurrier:

While in your office some six months ago, we reviewed the present status of El Paso Natural Gas Company's application for an order of approval of Rhodes (State) Unit Agreement covering all of Section 16; N1/2 W1/4 of Section 27; N1/2 NE1/4 of Section 28, all in Township 26S, Range 37E, Lea County, New Mexico. This embraces approximately 800 acres which are an integral part of the present Rhodes Unit Area, but which is not included in the original Unit Agreement.

While talking with you about this matter, it was my understanding that the unitization of the above described lands could be effected by acquiring the signatures of a majority of the lessees concerned. Also, if memory serves me correctly, the Agreement bore two (2) signatures, namely El Paso Natural Gas Company and Cities Service Oil Company, thus requiring the signatures of two (2) more lessees to meet the required majority.


I would appreciate your confirmation of the above, or if incorrect, your correct suggestions. Your last order on the subject, order No. 772, dated June 23, 1948, stated that El Paso Natural Gas Company should file with the Commission a copy of the Rhodes (State) Unit Agreement by August 1, 1948. Will a new hearing be required since the required signatures were not obtained by the designated time? *yes*

Mr. Cragin's testimony regarding some of the indicated practices is on record, as well as a letter from Mr. L. F. Shiplet, representing The Texas Company, asking for time to study the matter.

Your consideration of the above will be greatly appreciated.

Yours very truly,

EL PASO NATURAL GAS COMPANY


Warren L. Taylor
Division Geologist

WLT:jr

September 15, 1949

Mr. Warren L. Taylor, Geologist
P. O. Box 1384
El Paso Natural Gas Company
Jal, New Mexico

Dear Mr. Taylor:

As per Mr. Graham's letter to you of September 13, your letter of September 9 to Mr. Shepard has been referred to this office.

In the first paragraph of your letter, you ask permission to use El Paso Natural Gas Company's State A-1 and State Y-1 wells for injection, according to Rule 601 (b).

Apparently you have a copy of our proposed rules and regulations which are at this time under revision and upon which another open hearing will be held on November 1st. Rule 601 (b) is therefore not in effect.

We also note that the Texas Company has not yet signed the Rhodes Unit Agreement and they are the lessees in the State land involved. We believe it is necessary that the Texas Company join in this unit agreement before we may grant the permission which you request.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. E. Spurrier
Secretary-Director

RRS:bw

September 13, 1949

Warren L. Taylor, Geologist
Post Office Box 1384
El Paso Natural Gas Company
Jal, New Mexico

Dear Mr. Taylor:

This acknowledges receipt of your letter of September 9 in the matter of the El Paso Natural Gas Company's State A-1 and State Y-1 wells for injection wells.

This is to advise that I have handed this correspondence in the matter to the Oil Conservation Commission for reply.

Very truly yours,

GEORGE A. GRAHAM
Attorney, State Land Office

GAG/mih
cc. Oil Conservation Commission
Santa Fe, New Mexico

C O P Y

EL PASO NATURAL GAS COMPANY

P. O. Box 1384
Jal, New Mexico

September 9, 1949

RECEIVED
STATE LAND OFFICE

SEP 12 11 48 AM '49

SANTA FE, N. M.

Mr. Guy Shepherd
Commissioner of Public Lands
State Land Office
Santa Fe, New Mexico

Dear Sir:

Permission is hereby requested to use the El Paso Natural Gas Company's State A-1 and State Y-1 wells for injection wells, according to Rule 601(b), General Rules and Regulations for the Conservation of Oil and Gas in the State of New Mexico. This request will supersede my letter of July 12, 1949.

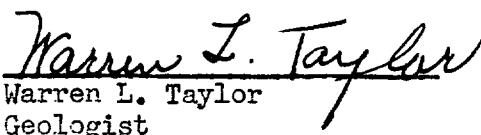
The following information is respectfully submitted according to Rule 601(b):

- (1) Map enclosed.
- (2) Yates formation of the Permian system.
- (3) The Yates sand is the formation to be affected by injection in both wells.
State A-1, 2" upset tubing set at a depth of 3246'.
State Y-1, 2" upset tubing set at a depth of 3072'.
- (4) & (5) Logs enclosed.
- (6) Residue gas and gas from gas wells is to be injected at a rate of approximately 50,000 MCF monthly. However, this figure will vary widely, depending on sales demands.
- (7) El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas

El Paso Natural Gas Company
P. O. Box 1384
Jal, New Mexico

Very truly yours,

EL PASO NATURAL GAS COMPANY


Warren L. Taylor
Geologist

Encl. (3)
cc: H. F. Steen
File

Case 140
August 3, 1949



El Paso Natural Gas Company
Post Office Box 1384
Jal, New Mexico

Attention of Mr. Warren L. Taylor
Geologist

Gentlemen:

This acknowledges receipt of your letter of July 12 and July 28, 1949 concerning the Commissioner of Public Lands granting permission to convert two state wells to "input" wells.

The records of this office for the past two years show that return from these two wells in the matter of royalties have been in the neighborhood of \$200 per year each.

With reference to the Rhodes federal unit agreement, the State's lands are within its exterior boundaries, but the only obligation this office has in that unit would be by reason of the so-called recently created Rhodes (state) Unit Agreement, January 1, 1948. By this latter unit agreement and by reference to the records of the State Land Office, it appears that the Texas Company, holder of the lease upon which one well is located, is not a signer of the unit agreement. Therefore, I hope you will take this up with the El Paso office in order that they may advise this office as to the lessee's interest in the uncommitted acreage.

About a year and a half ago, Mr. Cragin discussed some of the indicated practices, but this office understood that The Texas Company was about to commit their acreage.

COPY
Very truly yours,

GUY SHEPARD
Commissioner of Public Lands

GS/GAG/mih

EL PASO NATURAL GAS COMPANY

Box 1384
Jal, New Mexico

STATE LAND OFFICE

JUL 1 2 43 PM '49

July 28, 1949

Mr. Guy Sheppherd
State Land Commissioner
Santa Fe, New Mexico

Dear Sir:

Kindly advise on my letter of July 12, 1949, by which we requested your permission to use El Paso Natural Gas Company's State A-1 and State Y-1 wells for injection wells under the Rhodes Unit Agreement, approved by the Secretary of Interior on June 29, 1944.

If the previous letter did not reach you, I will be glad to submit the information again.

Yours very truly,

EL PASO NATURAL GAS COMPANY

Warren L. Taylor
Warren L. Taylor
Geologist

WLT:pd

EL PASO NATURAL GAS COMPANY

Box 1384

Jal, New Mexico

July 12, 1949

RECEIVED
STATE LAND
JUL 14 2 44 PM '49

Mr. Guy Sheppherd
State Land Commissioner
Santa Fe, New Mexico

Dear Sir:

The purpose of this letter is to request your permission to use the El Paso Natural Gas Company's State A-1 and State Y-1 wells for injection wells under the Rhodes Unit Agreement, approved by the Secretary of Interior on June 29, 1944. The following information is submitted for your consideration:

State A-1 is located 660' from the S line and 660' from the E line of Sec. 16, T26S, R37E, Rhodes Field, SE Lea County, New Mexico. The elevation of the derrick floor above sea level is 2992 feet. The average production is 3,000 MCF per month and 1948 is produced four days per month.

Case B-1498
(Sec 16)
212.37

State Y-1 is located 990' from the E line and 1980' from the N line of Sec 16, T26S, R37E, Rhodes Field, SE Lea County, New Mexico. The elevation of the derrick floor above sea level is 2994 feet. The average production is 3,000 - 5,000 MCF per month and is produced seven days per month.

B-4014
(Sec 16)
1948 262.36

The gas being injected is metered prior to the injection process and is being stored in the Rhodes Pool located in southeast Lea County on which there is no limiting Gas Oil Ratio.

A copy of this letter is being sent to Mr. R. R. Spurrier, State Geologist, Santa Fe, New Mexico.

Very truly yours,

EL PASO NATURAL GAS COMPANY

Warren L. Taylor
Warren L. Taylor
Geologist

cc: Mr. R. R. Spurrier
File

EL PASO NATURAL GAS COMPANY

Box 1384

Jal, New Mexico

July 11, 1949



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

Gentlemen:

This is to inform you that the El Paso Natural Gas Company now has five new injection wells in its Rhodes Unit Area Repressuring Project. Requests for these changes in plans were submitted to the U. S. Geological Survey office in Roswell, New Mexico, and were duly approved by them. The gas being injected is metered prior to the injection process, and is being stored in the Rhodes Pool located in southeast Lea County on which there is no limiting Gas Oil Ratio. Injection was started in these wells the latter part of last month.

Submitted below are the well names and locations, none of which lie on State land.

Cagle A-1	1650' from S line and 1650' from W line, Sec. 9-T26S-R37E, Lea County, New Mexico.
Cagle A-2	990' from N line and 1650' from W line, Sec. 9-T26S-R37E, Lea County, New Mexico.
Farnsworth C-1	990' from S line and 1650' from W line, Sec. 4-T26S-R37E, Lea County, New Mexico.
Moberly B-1	660' from N line and 660' from E line, Sec. 21-T26S-R37E, Lea County, New Mexico.
Rhodes A-1	990' from N line and 2310' from W line, Sec. 22-T26-R37E, Lea County, New Mexico.

Yours very truly,

EL PASO NATURAL GAS COMPANY


R. T. Wright

cc: File

El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

El Paso, Texas

July 6, 1949

A. J. HARPER, JR.
SECRETARY AND
TREASURER

RECEIVED
STATE LAND OFFICE
JUL 13 3 11 AM '49
SANTA FE, N. M.

State of New Mexico
Oil Conservation Commission
Santa fe, New Mexico

Attention: Mr. Guy Shepherd

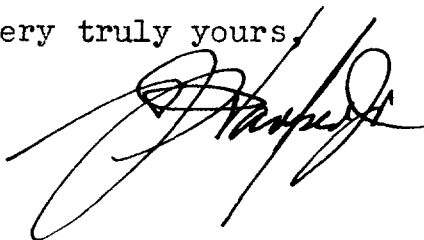
Re: Rhodes State Unit Agreement -
Case No. 140, Order No. 772

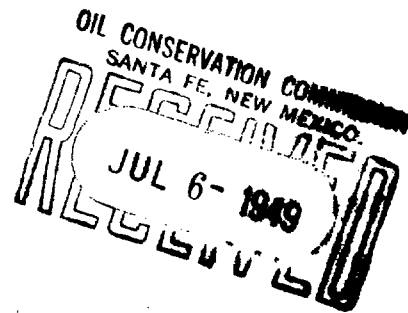
Gentlemen:

In compliance with provision of the Rhodes State Unit Agreement, we enclose herewith bond in the penal sum of \$5,000.00 conditioned upon compliance with the terms of such agreement.

Very truly yours,

AJH:ms
Encl





July 6, 1949

RECEIVED
STATE LAND OFFICE
JUL 13 9 11 AM '49
SANTA FE, N. M.

VIA AIR MAIL
SPECIAL DELIVERY
C. A. Bishop & Co.
Santa Fe, New Mexico

Gentlemen:

re: El Paso Natural Gas Co.
Rhodes State Unit Agreement
\$5,000 Bond USP&G

We are enclosing herewith bond of the El Paso Natural Gas Company, which we would like to have you countersign, and immediately deliver to the Oil Conservation Commission at Santa Fe. We would also appreciate very much if you would advise us by return air mail that this has been attended to.

Yours very truly,

COLES, SAUNDERS & McAFEE

Sam

CFS:lw

cc: Mr. A. J. Harper, Jr.
El Paso Natural Gas Co.
El Paso, Texas

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

January 19, 1949

Mr. E. E. Cragan
El Paso Natural Gas Company
Tenth Floor - Bassett Tower
El Paso, Texas

Dear Mr. Cragan:

Please find enclosed a signed copy of Extension of Time Order,
Case No. 140, Order No. 772B, for your records.

The order is effective as of October 25, 1948, granting an extension of 90 days time from that date.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary and Director

RRS:bw
encl.

BEFORE THE OIL CONSERVATION COMMISSION OF THE
STATE OF NEW MEXICO

IN THE MATTER OF APPLICATION OF EL
PASO NATURAL GAS COMPANY FOR AN EX-
TENSION OF TIME TO COMPLY WITH ORDER
772 HERETOFORE ISSUED IN CASE 140.

CASE NO. 140
ORDER NO. 772B

EXTENSION OF TIME

WHEREAS, by Section IV of Order 772, thirty days time was given applicant for filing an executed original of the Rhodes (State) Unit Agreement bearing signatures of a majority of the lessees and:

WHEREAS, the applicant, El Paso Natural Gas Company has been granted an additional 90 days by Order No. 772A but has applied for an additional ninety days, the original 120 days being insufficient to conclude negotiations in the matter of securing signatures to said Rhodes (State) Unit agreement and has made timely application for an extension of 90 days from and after October 25, 1948.

IT IS THEREFORE ORDERED by the Commission that El Paso Natural Gas Company is hereby granted 90 days time from the date hereof within which to comply with Section IV of Order 772 in Case 140.

DONE at Santa Fe, New Mexico, this 25th day of October 1948.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

CHAIRMAN

John E. Miles
MEMBER

L. L. Purrier
SECRETARY

El Paso Natural Gas Company

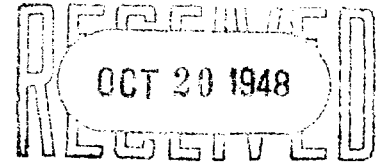
TENTH FLOOR BASSETT TOWER

El Paso, Texas

October 18, 1948

C. C. CRAGIN
VICE PRESIDENT AND
GENERAL MANAGER

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.



State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

Reference is made to your Order No. 772, case No. 140, dated June 23, 1948 and particularly to sections IV and VI thereof, and to order No. 772A dated July 28, 1948.

We find that the time extension of 90 days from and after July 27, 1948, in which to secure signatures to the Rhodes (State) Unit Agreement is not sufficient. As stated previously, the ownership of the leases concerned involved four major oil companies, an estate of a deceased person and a partnership of three major oil companies.

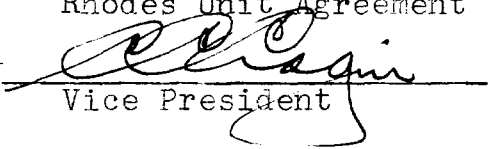
The interest owned by the estate has been sold and the parties purchasing such interest have executed the agreement. As to the major oil companies, it has been necessary to negotiate the contracts at several different levels of authority within the respective companies and the matter is now under consideration by a committee prior to submission to their executives for final approval and signature.

We, therefore, request that the time limit set forth in section IV of your Order No. 772 be further extended for a period of ninety days from October 25, 1948.

Yours very truly,

EL PASO NATURAL GAS COMPANY
Operator of Group 1
Unitized Substances of
Rhodes Unit Agreement

By


Vice President

CCC:m

BEFORE THE OIL CONSERVATION COMMISSION OF THE
STATE OF NEW MEXICO

IN THE MATTER OF APPLICATION OF EL
PASO NATURAL GAS COMPANY FOR AN EX-
TENSION OF TIME TO COMPLY WITH ORDER
772 HERETOFORE ISSUED IN CASE 140.

CASE NO. 140
ORDER NO. 772A

EXTENSION OF TIME

WHEREAS, by Section IV of Order 772, thirty days time was given applicant for filing an executed original of the Rhodes (State) Unit Agreement bearing signatures of a majority of the lessees and:

WHEREAS, the applicant El Paso Natural Gas Company has found that thirty days time is insufficient to conclude negotiations in the matter of securing signatures to said Rhodes (State) Unit Agreement, and has made timely application for an extension of 90 days from and after July 27, 1948.

IT IS THEREFORE ORDERED by the Commission that El Paso Natural Gas Company is hereby granted 90 days time from the date hereof within which to comply with Section IV of Order 772 in Case 140.

DONE at Santa Fe, New Mexico, this 28th day of July 1948.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

CHAIRMAN

MEMBER

SECRETARY

CLASS OF SERVICE DESIRED	
DOMESTIC	CABLE
TELEGRAM	ORDINARY
DAY LETTER	<input checked="" type="checkbox"/> URGENT RATE
SERIAL	DEFERRED
NIGHT LETTER	NIGHT LETTER

Patrons should check class of service desired; otherwise the message will be transmitted as a telegram or ordinary cablegram.

WESTERN UNION

1207

A. N. WILLIAMS
PRESIDENT

\$	CHECK
S	ACCOUNTING INFORMATION
F	TIME FILED

Send the following telegram, subject to the terms on back hereof, which are hereby agreed to

JULY 28 19 48

To **C. C. CRAGIN**

Care of or Apt. No. **EL PASO NATURAL GAS COMPANY**

Street and No.

Place **EL PASO, TEXAS**

ORDER OF TIME EXTENSION IN RHODES STATE UNIT MATTER FOR NINETY
DAYS FROM TODAY APPROVED BY OIL COMMISSION. COPY WILL BE MAILED
YOU TOMORROW.

GEORGE A. GRAHAM
OIL CONSERVATION COMMISSION

(CHARGE PHONE 2246)

Sender's name and address
(For reference only)

Sender's telephone
number

July 26, 1948

State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

Reference is made to case 140 order No. 772
dated the 23rd day of June 1948 and particularly to sections
IV and VI thereof.

We find that the time limit set forth in afore-
said section IV viz 30 days after the effective date of said
order No. 772 or not later than July 31, 1948 does not give us
time enough to comply with aforesaid section IV in that the
leases involved four major oil companies, an estate of a de-
ceased person and a partnership of three major oil companies.

We, therefore, request that the time limit set
forth in said Section IV be extended for a period of ninety
days.

Yours very truly

EL PASO NATURAL GAS COMPANY
Operator of Group 1
Unitized Substances of Rhodes
Unit Agreement

Per 
Vice President

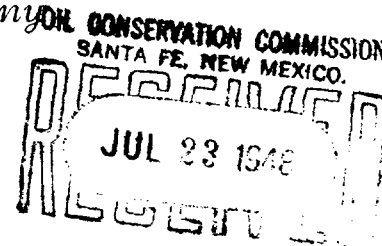
El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

El Paso, Texas

July 20, 1948

C. C. CRAGIN
VICE PRESIDENT AND
GENERAL MANAGER



100

Graham

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

Pursuant to Section 10 of the Rhodes
(State) Unit Agreement, we hand you herewith three
copies of Plan of Operation of the Rhodes (State)
Unit in Lea County, New Mexico.

Yours very truly,

C. C. Cragin

CCC:m
Encl.

PLAN OF OPERATION
of the
RHODES (STATE) UNIT in Lea County, New Mexico

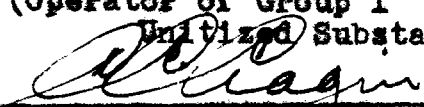
The operator of Group 1 Unitized Substances, (viz., EL PASO NATURAL GAS COMPANY) of the Rhodes (State) Unit Area, Lea County, New Mexico, under Rhodes Unit Agreement approved by the Oil Conservation Commission of the State of New Mexico on the 23rd day of June, 1948, proposes the following plan of operation for approval of said Commission:

- (1) Operator has contracted with Phillips Petroleum Company for 72,000,000 cubic feet of gas per day from Phillips' Eunice gasoline absorption plant and 35,000,000 cubic feet of gas per day from the Warren Petroleum Corporation's Monument plant for the life of the Eunice and Monument pools, respectively. These quantities are on a pressure base of 16.4 lbs. per square inch absolute.
- (2) Operator has installed pipe line connections from the aforesaid gasoline plants to its Eunice compressor station and installed sufficient compressor units to compress this gas from 45 lbs., in the case of the Phillips gas, and from 200 lbs., in the case of the Warren gas, to 550 lbs.
- (3) Operator has installed 31.5 miles of 16-inch pipe and 31.5 miles of 30-inch pipe, connecting the discharge

of its Eunice compressor plant with the suction of Operator's 3,600 horsepower Rhodes compressor station.

- (4) Operator's Rhodes compressor station as now constructed has a capacity to inject gas into the Rhodes area (Federal Rhodes Unit and Rhodes (State) Unit) up to 1400 lbs. pressure at the rate of 53,000,000 cubic feet per day.
- (5) Operator's existing gathering lines in the Rhodes area will be used to convey the gas to the various wells for injection.
- (6) Operator has purchased 16 wells in the Rhodes area and drilled one. Included among these wells are two wells in the Rhodes (State) Unit. These wells are to be used for injections and withdrawals.
- (7) By 1950, when steel pipe deliveries will bring our gathering facilities up to a capacity of 53,000,000 cubic feet in excess of our market requirements, Operator expects to inject in the Rhodes area approximately 12,000,000,000 cubic feet of gas during the summer months at the rate of 53,000,000 cubic feet per day and withdraw 6,000,000,000 cubic feet during the winter months at the rate of 70,000,000 cubic feet per day, leaving a net injection of approximately 6,000,000,000 cubic feet annually.

July 20, 1948

EL PASO NATURAL GAS COMPANY
(Operator of Group 1
Unutilized Substances)
By 
Vice President