# El Paso Natural Gas Company El Paso, Texas

October 9, 1956

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

Commissioner of Public Lands of the State of New Mexico Capitol Annex Building Santa Fe, New Mexico

Oil Conservation Commission of the State of New Mexico Capitol Annex Building Santa Fe, New Mexico

> Re: Lindrith Unit Area, I Sec. No. 713 Rio Arriba County, New Mexico DRILLING PROGRAM FOR 1956

#### Gentlemen:

We wish to advise that the 1956 Drilling Program for the captioned unit was approved by the Federal and State regulatory bodies as follows:

- 1. Regional Oil and Gas Supervisor, United States Geological Survey; Approved August 9, 1956.
- 2. Commissioner of Public Lands of the State of New Mexico; Approved July 20, 1956.
- 3. Oil Conservation Commission of the State of New Mexico; Approved October 1, 1956.

Very truly yours,

Joe w. Cherry Area Landman

Lease Department

JWC:pb

cc: Delhi-Taylor Oil Corporation

Magnolia Petroleum Company

OIL CONSERVATION COMM. 3SION

P. O. BOX 871

SANTA FE, NEW MEXICO

Case # 159

October 1, 1956

El Paso Natural Gas Company

Attention: Mr. R. L. Hamblin

Re: (Lindrith Unit Area Rio Arriba County, New Mexico 1956 Drilling Program

#### Gentlemen:

El Paso, Temas

This is to advise that the 1956 Drilling Program for the subject unit area has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. Porter, Jr. Secretary-Director

ALP:DSN:jb

BCC USGS Ror Comm Pub Luds SF



## UNITED STATES OF OFFICE OF DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

P. O. Box 6721 Roswell, New Mexico

August 9, 1956

El Paso Hatural Gas Company Box 1492 El Paso, Texas

Contlemen:

The plem of development dated July 18, 1956, for the Lindrith unit area, New Mexico, I-Sec. No. 713, has been approved on this date, subject to like approval by the appropriate State officials.

Two approved copies of said plan are returned berewith.

JOHN A. ANDERSON

Regional Cil and Gas Supervisor

Copy to: Come. Div., Nach (w/1 copy of plan)
Farmington (w/1 copy of plan)
#8005, Sente Fe (ltr only)

CS:8 M 6:29

July 20, 1956

In reply refer to: Unit Division

El Paso Natural Gas Co.

El Paso, Texas

Re: Lindrith Unit Agreement -Rio Arriba County, n. Mex., Drilling Program for 1956

Attention: Mr. R. L. Hamblin, Manager Lease Department

Gentlemen:

We are enclosing one copy of the Drilling Program for 1956 for the Lindreth Unit Agreement, which was approved by the Commissioner of Public Lands July 17, 1956.

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

Very truly yours,

E. S. WALKER Commissioner of Public Lands

MMR/m enc: 1

cc: USGS-Roswell OCC-Santa Fe

Matural Gas Company

El Paso, Texas

September 19, 1956

Oil Conservation Commission of the State of New Mexico Post Office Box 371 Santa Fe, New Mexico

> Re: Lindrith Unit Area I Sec. No. 713 Rio Arriba County, New Mexico Drilling Program for 1956

#### Gentlemen:

Under date of July 18, 1956, El Paso Natural Gas Company as Unit Operator for the captioned unit submitted for your approval a Drilling Program for the calendar year 1956. At this writing, the proposed Drilling Program has been approved by the Commissioner of Public Lands of the State of New Mexico and by the Director of the United States Geological Survey. Our files, however, do not reveal that the Drilling Program has been approved by the Oil Conservation Commission of the State of New Mexico.

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

Very truly yours,

Joe W. Cherry Area Landman Lease Department

Juc: 5pp

El Paso Natural Gas Company

El Paso, Texas

August 14, 1956

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

Commissioner of Public Lands of the State of New Mexico Capitol Annex Building Santa Fe, New Mexico

Oil Conservation Commission of the State of New Mexico Capitol Annex Building Santa Fe, New Mexico

> Re: Lindrith Unit Area, I Sec. No. 713 Rio Arriba County, New Mexico DRILLING PROGRAM FOR 1956

#### Gentlemen:

Under date of July 18, 1956, we submitted for your approval a Drilling Program for the calendar year 1956 for the captioned unit. In our letter we described two wells which had been reworked and completed in 1955 upon lands committed to the unit. One of these wells was the Hammond-Federal #1 which was described as being located in the SE/4 of Section 22, Township 25 North, Range 2 West. We wish to advise that the description was in error and should have read the SE/4 of Section 22, Township 24 North, Range 3 West.

Very truly yours,

EL PASO NATURAL GAS COMPANY

James C. Vandiver

Area Landman Lease Department

RLH: JWC:eb

cc: Magnolia Petroleum Company
Delhi-Taylor Oil Corporation

## MAIN OFF Ed Paso Natural Gas Company

1307 El Paso, Texas

July 18, 1956

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

Commissioner of Public Lands of the State of New Mexico Capitol Annex Building Santa Fe, New Mexico

Oil Conservation Commission of the State of New Mexico Capitol Annex Building Santa Fe, New Mexico

Re: Lindrith Unit Area, I Sec. No. 713

Rio Arriba County, New Mexico DRILLING PROGRAM FOR 1956

#### Gentlemen:

During the calendar year 1955, El Paso Natural Gas Company, with the approval of the Unit Operator, Magnolia Petroleum Company, drilled four (4) wells to the Pictured Cliffs Formation in the captioned unit. The following wells were completed upon lands committed to this Unit:

Well Name	Drilling Tract	Initial Potential MCFGPD
Lindrith Unit #1	SE4 Sec. 20, T-24-N, R	3132
Lindrith Unit #2	$SW_4^1$ Sec. 13, T-24-N, R-3-W	2416
Lindrith Unit #3	$NW_{4}^{1}$ Sec. 16, T=24-N, R-3-W	1 <b>3</b> 60 <b>1</b>
Lindrith Unit #4	$NW_{4}^{1}$ Sec. 3, T-24-N, R-3-W	217

During the calendar year 1955, El Paso Natural Gas Company, with the permission of the Unit Operator, Magnolia Petroleum Company, completed the re-working of two (2) wells in the captioned unit. The wells re-worked and completed upon lands committed to this unit are as follows:

Well Name	Drilling Tract	Initial Potential MCFGPD
Marron-Federal #1	$NE_{4}^{1}$ Sec. 7, T-24-N, R-2-W	134
Hammond-Federal #1	SE4 Sec. 22, T-45-N, R-2-W	224

24 July

Seven (7) wells have been drilled to the Pictured Cliffs Formation upon lands committed to the Unit. This includes the Ingwerson-Federal #3 well located in the SE/4 of Section 21, Township 24 North, Range 2 West, which had been previously drilled by the Unit Operator and had an IP of 60 MCFGPD. None of these wells are producing into El Paso's gathering system.

Under date of May 5, 1956, the Commissioner of Public Lands of the State of New Mexico approved the Designation of Successor Unit Operator for the Lindrith Unit Area, and subsequent thereto on June 28, 1956, the Acting Director of the United States Geological Survey approved the Designation of Successor Unit Operator for the Lindrith Unit Area, naming El Paso Natural Gas Company as the Unit Operator.

El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a drilling program for the calendar year 1956 consisting of four (4) wells to be drilled to the Pictured Cliffs Formation, such drilling program to constitute all of our drilling obligations for such year. These proposed drilling sites are listed below as follows:

Well Name	Drilling Tract	Formation
Lindrith Unit #5	$SE_{\frac{1}{4}}$ Sec. 19, T-24-N, R-2-W	Pictured Cliffs
Lindrith Unit #6	NE1 Sec. 14, T-24-N, R-3-W	Pictured Cliffs
Lindrith Unit #7	$SW_{\frac{1}{2}}^{\frac{1}{2}}$ Sec. 21, T-24-N, R-2-W	Pictured Cliffs
Lindrith Unit #8	NW Sec. 15, T-24-N, R-3-W	Pictured Cliffs

El Paso Natural Gas Company, as Unit Operator, intends to drill all of the above listed Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary and cable tools. Surface casing of 9-5/8" will be set to approximately 100° from the surface and then a production string of 5-1/2" casing will be set through the Pictured Cliffs Formation. Mud will be used in drilling through the Pictured Cliffs Formation and cable tools will be used for perforating and completing in the Pictured Cliffs Formation. The entire Pictured Cliffs Formation will be selectively perforated and subjected to a sand-water fracturing process. Due care will be taken to protect all horizons.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their requests for additional drilling.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

R. L. Hamblin, Manager

Lease Department

RLH: JWC:pb

cc: Magnolia Petroleum Company

Delhi-Taylor Oil Corporation

APPROVED:		Date:	
	Supervisor, United States Geological Survey		
	Subject to like approval by the appropriate State	Officials.	
A PPROVED	· •	Date:	
	Commissioner of Public Lands		
	Subject to like approval by the U.S.G.S. and Oil	Conservation Commission.	
A PPROVED		Date: 10-1-56	
	Oil Conservation Commission \ \		

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands.

## OIL CONSERVATION COMMISSION P. O. BOX 871

SANTA FE. NEW MEXICO

#159

June 26, 1955

die

Magnolia Petroleum Company Roswell, New Mexico

Attention: Mr. S. P. Hannisin

Rec Lindrith Unit Area
Rio Afriba County, N.M.
Plan of Development

#### Gentlemen:

This is to advise that your request for extension of time in which to commence drilling four Pictured Cliffs wells in the above-captioned unit area has been approved this date.

Subject to like approval by the U. S. Geological Survey and by the Commissioner of Public Lands of the State of New Mexico, you are hereby authorised to delay drilling the first of the four wells until August 1, 1955, with the understanding that all four of the wells proposed in your March 11, 1955 Supplemental Plan of Development are to be completed by December 31, 1955.

One approved copy of your request for extension of time is herewith returned.

Very truly yours,

W. B. MACEY, Secretary-Director

WBM/ir

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

Enclosure (1)

### MAGNORIA PETROLEUM COMPANY

Born Ca A SOCONY-VACUUM COMPANY

Roswell, New Mexico May 20, 1955

file

mue 20

The Oil and Gas Supervisor United States Geological Survey Roswell, New Mexico

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

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

Res Lindrith Unit
RIO ARRIBA COUNTY, N. M.

Gentlemen:

Please refer to our Plan of Development for the Lindrith Unit which was filed with your office under date of January 1, 1955 in which Plan of Development we proposed to drill two Pictured Cliff wells; the first to be commenced on or before April 1, 1955 and the second well within 30 days after the completion of the first well and that, after these wells were drilled, we would file an additional Plan of Development for the balance of the year 1955.

Then under date of March 11 we asked you for a 30 day extension of the time in which to start the first well and we stated we would agree to drill or cause to be drilled four Pictured Cliff wells before the end of the year 1955.

The El Paso Natural Gas Company have taken over the obligation of drilling the above described four wells and have requested us to ask your approval of the extension of time in which to start the first well to August 1, 1955 and state that they will drill the four wells agreed upon before the end of the year 1955.

Asu

We respectfully ask your approval of the extension of time in which to start the first well under the Plan of Development of the Lindrith Unit filed January 1, 1955 to August 1, 1955.

Very truly yours,

MAGNOLIA PETROLEUM COMPANY

By S. P. Hannifin

SPH:ga

cc: Mr. P. E. Haralson Mr. G. W. Stell Magnolia Petroleum Company Dallas, Texas

cc: Mr. J. Glenn Turner 1711 Mercantile Bank Building Dallas, Texas

cc: El Paso Natural Gas Company El Paso Natural Gas Company Building El Paso, Texas

Approved 6/20 195

Secretary-Director

NEW MEXICO OIL CONSERVATION COMMISSIO

THIS APPROVAL GRANTED SUBJECT TO LIKE APPROVAL BHING GRANTED BY THE UNITED STATES GEOLOGICAL SURVEY AND BY THE COMMISSIONER OF PUBLIC LANDS OF THE STATE OF NEW MEXICO.

Magnelia Petroleum Company P.O. Box 662 Resvell, New Munico

Rev Lindrith Unit Rio Arriba County, N. Max.

Gentlemen:

The supplemental plan of development dated May 20, 1955 for the Lindrith Unit Area, has been approved on this date, subject to approval by the New Mexico Oil Conservation Commission, as the United States Geographical Survey approved said plan on May 24, 1955.

The supplemental plan amends a prior plan only as to extension of time in which to start the first of the four wells to be drilledtes August 1, 1955.

Very truly yours,

in a single of

E. S. WALKER Commissioner of Public Lands

cc: USGS OCC

Milim



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

P. C. Box 6721 Regwell, New Mexico

May 24, 1955

Hagnolia Petreleum Company P. O. Box 648 Rogrell, New Mexico file

Gentlement

The supplemental plan of development dated May 20, 1955, for the Lindrith unit area, Now Mexico, I-Sec. No. 713 has been approved on this date, subject to like approval by the appropriate State efficials.

The supplemental plan amends a prior plan only as to the commencement date of the first of the four wells to be drilled during the calcular year.

Three approved series of said plan are returned herewith.

Very truly yours,

JOHN A. ANDERSON

Regional Oil and Gas Supervisor

#### Enclosure

Copy to: Come.Div.-Washington (w/l copy of plan)
Farmington (w/l copy of plan)
MOCC, Santa Fe (ltr. only)

den

March 23, 1955

Mr. S. P. Hannifin Magnelia Petroleum Company Roswell, New Mexico

> Lindrith Unit Agreement Rie Arriba County, New Mexico

Plan of Development 1955

Dear Sir:

Your letter of March 11, 1955 requesting an extension of time to May 1, 1955 in which to start the first well for the Plan of Development for the Lindrith Area is hereby approved, subject to like approval by the Oil Conservation Commission and the United States Geological Survey.

Very truly yours,

E. S. WALKER

COMPLISSIONER OF PURLIC LANDS

ec Cil Conservation Commission Santa Fe, New Mexico

United States Geological Survey Roswell, New Mexico

Ail

RTT/t



# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

P. O. Ben 6721 Resuell, New Mexico

March 22, 1955

Magnalia Patrolom Co. P. O. Ben 662 Rossell, Mar Mariao

Contlement

Neur letter dated March 11, 1955, relating to the Lindrith unit area, Her Maries, amounts the plan of development heretofore approved for the calcular year 1955.

The plan of development as amended is acceptable and has been approved on this date subject to like approved by the appropriate State officials.

One copy of the letter with our approval indicated thereon is returned hereoith.

Very truly pours,

JOH A. AMERSON
Regional Oil and Gas Supervisor

Copy to: Comm.Div., Whah., D.C. (w/l copy of smended plan)
Remaington (w/l copy of smended plan)

N.M.O.C.C., Santa Fe (ltr. only)

### OIL CONSERVATION COMMISSION P. O. BOX 871

#### SANTA FE, NEW MEXICO

March 22, 1955

Magnolia Petroleum Company Roswell, New Mexico

Attention: Mr. S. P. Hannisin

file 15-9

Re: 1955 Plan of Development

Lindrith Unit Area

Rio Arriba County, New Mexico

Gentlemen:

Reference is made to your letter of March 11, 1955. This is to advise that the New Mexico Oil Conservation Commission has this date approved the requested extension of time in which to commence the first well to be drilled under the 1955 Plan of Development for the subject area.

Said extension is being granted in order that the operator may avoid additional expense and hardship owing to the possibility of inclement weather in the Lindrith Unit Area around the first of April.

Under the terms of the time extension it is understood that the first well will be commenced on or before May 1, 1955, and that unit operator will drill or cause to be drilled four Pictured Cliffs wells in the Lindrith Unit Area during 1955.

One approved copy of the application for extension is herewith returned.

Very truly yours,

W. B. Macey Secretary-Director

WBM:jh

cc: USGS -- Roswell

Commissioner of Public Lands, Santa Fe

### MAGNOLIA PETROLEUM COMPAN

A SOCONY-VACUUM COMPANY Reswell, New Mexico March 11, 1955

The Oil and Gas Supervisor United States Geological Survey Roswell, New Mexico

Commissioner of Public Lands State of New Mexico Santa Fe. New Mexico

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

Re: Lindrith Unit RIO ARRIBA COUNTY. N. M.

Gentlemen:

Please refer to our Plan of Development for the Lindrith Unit which was filed with your office under date of January 1, 1955.

In this Plan of Development for the Pictured Cliff Zone we proposed to drill two Pictured Cliff wells; the first to be commenced on or before April 1, 1955 and the second within 30 days after the completion of the first and that within 30 days after the completion of the second well we would file a Plan of Development for the balance of the year 1955.

We now find ourselves in the position of not being able to start the first well by the first of April without causing a great deal of additional expense and hardship owing to the possibility of inclement weather around the first of April.

We ask for a 30 day extension of time in which to start the first well making it on or before May 1, and we will agree to drill or cause to be drilled four Pictured Cliff wells before the end of the year 1955.

We respectfully ask your approval of this 30 day extension in time.

Approved Man 22 1055

Very truly yours.

MAGNOLIA PETROLEUM COMPANY

YEW MEXICO OIL CONSERVATION COMMISSION

SPH: ga

BEING GRANTED BY THE UNITED STATES GEOLOGICAL OF THE STATE OF NEW MEXICO.



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

P. O. Box 6721 Remrell, New Mexico

Pobruary 3, 1955

file proper 15%

Magnalia Petralsum Co. Bex 662 Rossell, Mar Mexico

Centlement

The plan of development dated Jamery 1, 1955, for the Lindrith unit area, Mar Mexico, I-Sec. No. 713, for the calendar year 1955 has been approved on this date, subject to like approval by the appropriate State officials.

One approved copy of said plan of development is returned berewith.

Yery truly yours,

Regional Oil and Gas Supervisor

Copy to: Cons.Div., Wash., D.C. (w/l copy of plan)

Revalegton (w/l copy of plan)

N.M.O.C.C., Santa Fe (ltr. only)

Shu

January 24th, 1955

Magnolia Petroleum Company Roswell, New Mexico

Attention Mr. S. P. Hannifin

Res Lindrith Unit Ric Arriba County, New Mexico 1955 Plan of Development

file 159

Gentlemen:

This is to advise that the Plan of Development for the Lindrith Unit for the calendar year 1955, dated January 1, 1955 has this day been approved gubject to like approval by the United States Geological Survey, Oil and Gas Supervisor and by the Oil Conservation Commission.

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

Very truly yours,

E. S. WALKER

COMMISSIONER OF PUBLIC LANDS

co - U. S. Geological Survey Roswell, New Mexico

Oil Conservation Commission Santa Fe, New Mexico

dun

#### OIL CONSERVATION COMMISSIC

P. O. BOX 871

#### SANTA FE, NEW MEXICO

January 14, 1955

file 159

Magnolia Petroleum Company Roswell, New Mexico

Attention: Mr. S. P. Hannisin

Re: Lindrith Unit

Rio Arriba County, New Mexico

1955 Plan of Development

#### Gentlemen:

This is to advise that the Plan of Development for the Lindrith Unit for the calendar year 1955, dated January 1, 1955, has this date been approved by the New Mexico Oil Conservation Commission subject to the following conditions:

- 1. That the two proposed Pictured Cliffs wells be drilled on locations approved by appropriate Federal and State officials, pursuant to Paragraph 9 of the Unit Agreement.
- 2. That this Plan of Development for the calendar year 1955, receive like approval by the Oil and Gas Supervisor, United States Geological Survey, and by the Commissioner of Public Lands of the State of New Mexico.

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

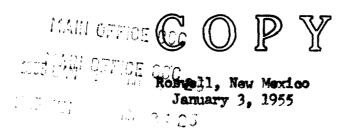
Very truly yours.

W. B. Macey Secretary - Director

WBM:jh

cc: U. S. Geolgocial Survey, Roswell

Commissioner of Public Lands, Santa Fe



The Oil and Gas Supervisor United States Geological Survey Roswell, New Mexico

Dear Sir:

We are enclosing Plan of Development for the Period Commencing Jamuary 1, 1955 on our Lindrith Unit in Rio Arribe County, New Mexico, as follows:

> Four copies - Oil and Gas Supervisor United States Geological Survey

Two copies each - Commissioner of Public Lands and the Oil Convervation Commission, State of New Mexico

We respectfully submit this Plan of Development for your approval.

Very truly yours.

MAGNOLIA PETROLEIM COMPANY

Original Signed By S. P. HANNIFIN S. P. Hannifin

SPH: ga Encls.

Commissioner of Public Lands cci State of New Mexico Santa Fe, New Mexico

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

down

onc 2 pc ween in '55 fill 159

# PLAN OF DEVELOPMENT FOR THE PERIOD COMMENCING January 1, 1955 LINDRITH UNIT RIO ARRIBA COUNTY, NEW MEXICO

The Oil and Gas Supervisor United States Geological Survey Roswell, New Mexico

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

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



Magnelia Petroleum Company as Operator in compliance with Section 9 of the "Unit Agreement and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico", dated December 9, 1948, approved by the Acting Director, United States Geological Survey, April 3, 1950, I Sec. No. 713, hereby submits our plan of development for said Unit as follows:

#### I - Past Development History - Dakota Zone

Four wells have been drilled, viz:

- 1. Ingwersen-Federal No. 1 (formerly Delhi Oil Corp. No. 1 Ingwersen) in the Center of the SE\(\frac{1}{4}\)SE\(\frac{1}{4}\) Section 20 24N-2W, commenced June 7, 1949, initially completed December 31, 1949, pumped 112 barrels 41.5 Gravity (A.P.I.) oil per day. Began deviated hole operating September 19, 1950, completed April 24, 1951, pumped 68.97 barrels of 43.3 Gravity (A.P.I.) oil and 13.32 barrels of fresh water in 24 hours from the Dakota Zone. Now producing approximately 11 barrels of oil and 45 barrels of water per day.
- 2. Delhi-Nolting-Federal No. 1 (formerly Delhi Oil Corp. No. 1 Nolting-Federal) in the Center of the SE\(\frac{1}{4}\)NE\(\frac{1}{2}\) Section 29-24N-2W, commenced May 14, 1950, completed September 22, 1950 as a dry hole from the depth of 7661 feet in the Morrison Zone. Re-work operations attempted from March 30, 1954 to April 6, 1954. Unable to get tools back into 7" casing. Well re-plugged and abandoned April 6, 1954.
- 3. Ingwersen-Federal No. 2 (formerly Ingwersen-Federal "B" No. 1) in the Center of the  $SV_{4}^{1}$  of  $SV_{4}^{1}$  Section 21-24N-2W, commenced January 6, 1952, completed May 20, 1952, total depth 7365 feet, dry and abandoned.
- 4. Ingwersen-Federal No. 4 in the Center of the SW $_4^1$  SE $_4^1$  Section 20-24N-2W, commenced December 7, 1953, completed March 15, 1954, total depth 8464 feet, dry and abandoned.

#### II - Past Development History Pictured Cliff Zone

Four wells have been drilled, viz:

- 1. Hammond-Federal No. 1 in the Center of the SE<sup>1</sup>/<sub>4</sub>
  Section 22-24N-3W, commenced January 1, 1952, completed
  March 3, 1952, total depth 3290 feet, initial potential
  44 MCF gas, now shut-in for lack of market.
  - 2. Marron-Federal No. 1 in the Center of the NE \( \frac{1}{4} \)
    of Section 7-24N-2W, commenced January 4, 1952, completed
    May 27, 1952, total depth 3475 feet, initial potential
    26 MCF gas, shut-in for lack of market.
    - 3. Ingwersen-Federal No. 3 (formerly Ingwersen-Federal "B" No. 2) in the Center of SW\(\frac{1}{4}\)NE\(\frac{1}{4}\)SE\(\frac{1}{4}\) Section 21-24N-2W, commenced September 25, 1952, completed November 17, 1952, total depth 3190 feet, initial potential 60 MCF gas, now shut-in, studying for abandonment.
    - 4. Owen-Federal No. 1 in the Center of  $NW_{\frac{1}{4}}SE_{\frac{1}{4}}S$

#### III - Plan of Development for the Dakota Zone

No development planned at this time due to past disappointing results. Geological study will be continued.

IV - Plan of Development for the Pictured Cliff Zone

We plan to drill two Pictured Cliff wells; the first to be commenced on or before April 1, 1955; the second to be commenced within 30 days after completion of the first. Within 30 days after completion of the second well, we plan to file a Plan of Development for the balance of the year 1955. The reason we propose to wait until April 1st to commence the first well is due to the prevailing inclement weather conditions in that part of the state.

#### V - Spacing of Wells

160-Acre spacing.

#### VI - Well Casing Program

10-3/4" casing at approximately 250 feet. 7" casing at approximately 3200 feet.

#### VII - Offset Obligations

The Unit operator, on behalf of itself and other owners of working interests will take appropriate and adequate measures to prevent drainage from lands subject to the Lindrith Unit Agreement by wells on lands not subject to said agreement, or pursuant to applicable regulations, pay a fair and reasonable compensatory royalty as determined by the Federal Oil and Gas Supervisor as to Federal lands, or the Commissioner of Public Lands as to State lands.

#### VIII - Further Development

The plan of development as outlined herein shall constitute the future drilling obligations of said Unit Agreement from January 1, 1955 until 30 days after completion of the aforementioned two Pictured Cliff wells. It is further agreed that within 30 days after completion of the second of these two wells, another Plan of Development shall be submitted for approval for future development of the Unit.

#### IX - Effective Date

This plan of development shall be effective January 1, 1955.

#### X - Modifications

This plan of development may be modified, with necessary approval to meet changing conditions.

MAGNOLIA PETROLEUM COMPANY UNIT OPERATOR

 $\mathcal{L}$ 

Approved subject to certain conditions as outlined in attached letter of transmitted.

Interest the property of the property o



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICALCSURVEY

1954 SEP 192 On Box 6721 Reswell, New Maxico

September 24, 1954

Magnolia Petroleum Company Box 662 Roswell, New Mexico

Gentlemen:

The plan of development dated September 22, 195h, for the remainder of the calendar year 195h for the Lindrith unit area, New Mexico, I-Sec. No. 713, has been approved on this date subject to like approval by the Commissioner of Public Lands, State of New Mexico and the New Mexico Oil Conservation Commission.

One approved copy of said plan is beturned herewith.

Very truly yours,

Regional Oil and Gas Supervisor

Copy to: Cons.Div., Wash., D.C. (w/l copy of Plan)
N.M.O.C.C., Santa Fe

.-- 159 Won

### MAGNOLIA PETROLEUM GOMPANY

Roswell, New Mexico 1:22 September 22, 1954

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

Attention: Mr. W. B. Macey

Re: Lindrith Unit

RIO ARRIBA COUNTY, New Mexico

Gentlemen:

We are enclosing two copies of a Plan of Development for the period ending December 31, 1954, on our Lindrith Unit in Rio Arriba County, New Mexico.

Very truly yours,

MAGNOLIA PETROLEUM COMPANY

S. P. Hannifin

SPH/aw Encls. 2

## PLAN OF DEVELOPMENT FOR THE PERIOD ENDING DECEMBER 31, 1954 LINDRITH UNIT RIO ARRIBA COUNTY, NEW MEXICO

The Oil and Gas Supervisor United States Geological Survey Roswell, New Mexico

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

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

Magnolia Petroleum Company as Operator in compliance with Section 9 of the "Unit Agreement and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico", dated December 9, 1948, approved by the Acting Director, United States Geological Survey, April 3, 1950, I Sec. No. 713, hereby submits our plan of development for said Unit as follows:

#### I - Description of Participating Area

SEA Section 20
War of SWA Section 21
NWA of NWA Section 28
Na of NEA Section 29, all in
Township 24 North, Range 2 West, N.M.P.M.

#### II - Past Development History - Dakota Zone

Four wells have been drilled, viz:

- 1. Ingwersen-Federal No. 1 (formerly Delhi Oil Corp. No. 1 Ingwersen) in the Center of the SE SE Section 20 24N-2W, commenced June 7, 1949, initially completed December 31, 1949, pumped 112 barrels 41.5 Gravity (A.P.I.) oil per day. Began deviated hole operating September 19, 1950, completed April 24, 1951, pumped 68.97 barrels of 43.3 Gravity (A.P.I.) oil and 13.32 barrels of fresh water in 24 hours from the Dakota Zone. Now producing approximately 11 barrels of oil and 11 barrels of water per day.
- 2. Delhi-Nolting-Federal No. 1 (formerly Delhi Oil Corp. No. 1 Nolting-Federal) in the Center of the SEANEA Section 29-24N-2W, commenced May 14, 1950, completed September 22, 1950 as a dry hole from the depth of 7661 feet in the Morrison Zone. Re-work operations attempted from March 30, 1954 to April 6, 1954. Unable to get tools back into 7th casing. Well re-plugged and abandoned April 6, 1954.

- 3. Ingwersen-Federal No. 2 (former\_\_/ Ingwersen-Federal "B" No. 1) in the Center of the SW4 of SW4 Section 21-24N-2W, commenced January 6, 1952, completed May 20, 1952, total depth 7865 feet, dry and abandoned.
- 4. Ingwersen-Federal No. 4 in the Center of the SW1

  SE1 Section 20-24N-2W, commenced December 7, 1953, completed March 15, 1954, total depth 8464 feet, dry and abandoned.

#### III - Past Development History Pictured Cliff Zone

Four wells have been drilled, viz:

- 1. Hammond-Federal No. 1 in the Center of the SE2
  Section 22-24N-3W, commenced January 1, 1952, completed
  March 3, 1952, total depth 3290 feet, initial potential
  44 MCF gas, now shut-in for lack of market.
- 2. Marron-Federal No. 1 in the Center of the NET of Section 7-24N-2W, commenced January 4, 1952, completed May 27, 1952, total depth 3475 feet, initial potential 26 MCF gas, shut-in for lack of market.
  - 3. Ingwersen-Federal No. 3 (formerly Ingwersen-Federal "B" No. 2) in the Center of SWANEASEA Section 21-24N-2W, commenced September 25, 1952, completed November 17, 1952, total depth 3190 feet, initial potential 60 MCF gas, now shut-in, studying for abandonment.
  - 4. Owen-Federal No. 1 in the Center of NW1SE1SE1 Section 9-24N-2W, commenced May 12, 1953, completed July 6, 1953, total depth 3450 feet, dry and abandoned.

#### IV - Plan of Development for the Dakota Zone

No development planned prior to January 1, 1955 due to past disappointing results. Geological study will be continued.

#### V - Plan of Development for the Pictured Cliffs Zone

No development planned prior to January 1, 1955 due to past disappointing results and lack of outlet for gas.

#### VI - Spacing of Wells

None planned during this period.

#### VII - Well Casing Program

No wells planned during this period.

#### VIII - Offset Obligations

The Unit operator, on behalf of itself and other owners of working interests will take appropriate and adequate measures to prevent drainage from lands subject to the Lindrith Unit Agreement by wells on lands not subject to said agreement, or pursuant to applicable regulations, pay a fair and reasonable compensatory royalty as determined by the Federal Oil and Gas Supervisor as to Federal lands, or the Commissioner of Public Lands as to State lands.

#### IX - Further Development

The plan of development as outlined herein shall constitute the future drilling obligations of said Unit Agreement for the period ending December 31, 1954.

It is further agreed that prior to the expiration of this plan of development another plan of development shall be submitted for approval for further development of the Unit.

#### X - Effective Date

This plan of development shall be effective September 20, 1954.

#### XI - Modifications

This plan of development may be modified, with necessary approval to meet changing conditions.

MAGNOLIA PETROLEUM COMPANY UNIT OPERATOR

By M. r. C. Bradley

#### OIL CONSERVATION COMMISSION

P. O. BOX 871

#### SANTA FE. NEW MEXICO

August 2, 1954

Magnolia Petroleum Company Producing Division P. O. Box 900 Dallas, Texas

Subject:

Lindrith Unit, Rio

Arriba County, New Mexico.

#### Gentlemen:

A review of our file on the above captioned unit shows that the New Mexico Oil Conservation Commission has received no communication from your company regarding operations in the Lindrith Unit Area since December 10, 1951. A check of the file of the New Mexico State Land Office shows a similar situation to exist.

Under the terms of the Lindrith Unit Agreement, the director of the United States Geological Survey, the New Mexico State Land Office and the New Mexico Oil Conservation Commission are to be kept fully advised of various activities concerning the unit. I refer particularly to section eight and nine of the unit agreement.

Please see that this agency is supplied with such documents and letters as may be necessary to bring our Lindrith Unit file up to date.

Very truly yours,

W. B. Macey Secretary - Director

WBM:jh

cc: State Land Office Santa Fe, New Mexico

## OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

January 2, 1952

MAL

Mr. A. P. Avant Lindrith, New Mexico

Dear Mr. A vant:

P

Enclosed please find copy of a letter from Magnolia Petroleum Company, which is self-explanatory.

I had hoped to attend the meeting which Mr. Ruerkhaus had invited me to at Lindrith last month. However, unforeseen events prevented me from attending at the last minute.

If you feel there is any way in which we may be of assistance to you, please let us know.

Very truly yours,

RRS: W

Secretary and Director



## STATE OF NEW MEXICO OFFICE OF STATE GEOLOGIST SANTA FE, NEW MEXICO

December 17, 1951

 $\mathbb{C}$ 

Mr. A. E. Chester Vice President and Manager Magnolia Petroleum Company Dallas, Texas

P

Re: Plan of Development - Lindrith Unit Agreement

RIO ARRIBA COUNTY, New Mexico

Dear Sir:



After duly weighing the matters relating to the development of the Lindrith Unit Agreement and taking cognizance of your letter of December 10, 1951 to Mr. Foster Morrell of the United States Geological Survey, the Oil Conservation Commission does not believe it will be feasible to grant the extension of time that you request.

Very truly yours,

bpw

Secretary and Director



#### OIL CONSERVATION COMMISSION UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

P. O. Box 997 Roswell, New Mexico A THAT IS, WIN MEXICO. TET MALE

December 12, 1951

Mr. A. E. Chester Vice President and Manager Magnolia Petroleum Company Dallas 1, Temas

> Subject: Plan of Development - Lindrith Unit Agreement, Rio Arriba County. New Mexico.

Dear Mr. Chester:

Reference is made to your legter of December 10 requesting a delay until the spring of 1952 as weather and road conditions permit for semmencement of three wells on the Lindrith Unit area as provided in the Plan of Development for the year 1951, approved November 8.

We recognise that unusually heavy smowfalls during the past week in the area of the Lindrith unit may cause some delay in normal well operations at this time. However, weather conditions in New Mexico are subject to such variance that you may find that drilling can be commenced and continued without unusual delay or expense at a later date.

A unit operator has the responsibility for operations in the entire unit area and must recognize and perfora its duties to the best interests of all parties and not the preference of the operating company alone. Furthermore, unjustified delays in development usually are reflected in the hesitancy of others to comperate in joining other subsequent units proposed by that unit operator.

The possibility of seme temporary delay in drilling due to adverse weather conditions was considered by this office when your Plan of Development for the year 1951 was submitted providing for the commencement of two Pictured Cliff some wells and one Dakota-Morrison some well prior to December 31, 1951, but your representatives indicated it could and would be dene, so no official question was raised. If other operators can centinue operations in the same general area there would appear to be no reason to exempt Magnolia slone

With these thoughts in mind, ac action will be taken until December 31, 1951 on your application of December 10 for extension of time to commence the drilling of wells provided in the above mentioned At that time, consideration will be given to your application based on weather and road conditions then existing. In any event, it appears to this effice that every effort should be made to commence as many of the scheduled wells as possible in order to show evidence of good faith.

Very truly yours,

Copy (net that Signed) Sester Garrell

FOSTER MORRELL Oll and Gas Supervisor Southwestern Region

oo: Commissioner of Public Lands Santa Fe, New Mexico

> Oil Conservation Commission / Santa Pe, New Mexico

Magnolia Petroleum Company Rossell, New Mexico

### MAGNOLIA PETROLEUM COMPANY

A SOCONY-VACUUM COMPANY

#### PRODUCING DIVISION

DALLAS 1, TEXAS

December 10, 1951

Cu Conservation Commission

Fig. 12 1251

Mr. Foster Morrell Regional Oil and Gas Supervisor U. S. Department of the Interior Geological Survey P.O. Box 997 Roswell, New Mexice

Re: Plan of Development - Lindrith Unit Agreement RIO ARRIRA COUNTY. New Mexico

Dear Mr. Morrell:

A. E. CHESTER
VICE PRESIDENT AND MANAGER
M. V. C. BRADLEY
ASSISTANT MANAGER

E. L. DOWNING
GENERAL SUPERINTENDENT

S. C. McFARLANE

By letter of Nevember 6, 1951 you approved a plan of development of the above noted Unit for the year 1951.

The aferementioned plan of development of this Unit provided that prior to December 31, 1951 we commence the drilling of a well to test the Dakota Zone in the Genter of the SW/4 SW/4 of Section 21-24N-2W. Location for this well has been made and it is known as our Ingwersen-Federal "B" No. 1. The plan further provided that prior to December 31, 1951 we shall commence the drilling of two wells to test the Pietured Cliff Zone; said wells to be located (1) NE/4 Section 7-24N-2W, and (2) SE/4 Section 22-24N-3W. Locations for these wells have been made and they are known as our Marron-Federal No. 1 and Hasmond-Federal No. 1, respectively.

all preliminary arrangements have been made for the commencing of these three wells as scheduled. At this time, however, severe winter weather prevails in the area and several inches of snow covers the ground. If we proceed with the drilling of these wells now it will be necessary to pull drilling equipment into the location with caterpillar tractors, and it will also be necessary that we maintain esterpillars at the rigs during the entire time the wells are being drilled for towing in supplies and repair items. Since the roads will be impassable, it will also be necessary that we establish a samp and provide board and ledging for the crows at the locations. In addition to inconveniences which would be imposed on the drilling crows, we estimate the drilling of these wells at this time would cost from \$75,000 to \$100,000 more than if they were drilled under normal conditions.

In view of the above, we respectfully request that you approve our delaying the commencing of the three aforementioned wells until such time in the

Spring of 1952 as weather and road conditions will permit us to carry on drilling operations normally.

Very truly yours,
Original signed by
A. E. CHESTER

SCH:ed

co: Commissioner of Public Lands Santa Fo, New Nextce

Oil Conservation Commission
Santa Fe, New Mexico

## MAGNOLIA PETROLEUM COMPANY

A SOCONY-VACUUM COMPANY

Roswell, New Mexico

November 19, 1951

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

Attention: Mr. R. R. Spurrier

RE: Lindrith Unit Area

Rio Arriba County, New Mexico

Gentlemen:

Thank you for your recent telephone call giving approval to our Plan of Development on the above area, which we mailed to your office on November 8.

I assume that written approval will reach us in due course.

Yours very truly,

MAGNOLIA PETROLEUM COMPANY

Brantley Jackson

BJ:vh

NOV 2 0 1951

## STATE OF NEW MEXICO OFFICE OF STATE GEOLOGIST SANTA FE, NEW MEXICO

#### Nevember 19, 1951

Mr. Brantley Jackson
Magnolia Petroleum Company
Roswell, New Mexico

RE: Lindrith Unit Area, RIO ARRIBA COUNTY, New Mexico, Case 159, Order No. 794

Dear Sir:

This will acknowledge receipt of your letter of November 8 with which you enclose plan of development for the Lindrith Unit Area and application for designation of initial participating area.

According to our telephone conversation, the plan and the application have been approved by the Commission effective November 15, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

GUY SHEPARD, Member

R. R. SPURRIER, Secretary



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

P. O. Box 997 Roswell, New Mexico

November 8, 1951

Mr. M. V. C. Bradley, Assistant Manager Producing Division Hagnolia Petroleum Company Pallas 1. Texas

> Subject: Plan of Development-Lindrith Unit Agreement Rio Arriba County, New Mexico

Dear Tri

Reforence is made to the plea of levelopment for the celender year 1951 filed in the Roswell office Nevember 8, by you as unit operator, pursuant to Section 9 of the Lindrith unit agreement, I-Sec. No. 713, approved April 3, 1950.

The plan of development sets forth that a participating area has been proposed by you, nation on which is now pending in the Department, and that you propose to someonee the drilling of one sell to test the Dakota zone and two mells to test the Dictured Cliffs zone on the unit area, said drilling to be commoned prior to receive of 1, 1751. The plan of development also sets forth a proposal for spacing of wells and a sell casing and compacting program, together with the other appropriate provisions concerning offset obligations and further development. It is further provided that the plan of development shall be effective November 1, 1951.

The above mentioned plan of development for the calendar year 1951 is hereby approved as an acceptable plan of development and operation for the unitised land, subject to like approval by the Conservation Commission of the State of New Mexico and the Cil Conservation Commission of the State of New Mexico.

YOUTHR LOTHILL

degional Oil & Gas Supervisor

co: Commissioner of Public Lands Santa Pe. New Mexico

Oil Conservation Commission Cants Ps. New Mexico

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.

NOV 13 1951

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## MAGNOLIA PETROLEUM COMPANY

A SOCONY-VACUUM COMPANY Roswell, New Mexico Nobember 8, 1951

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

RE: Lindrith Unit Area,
RIO ARRIBA COUNTY, New Mexico,
Case 159, Order 794.

Gentlemen:

As per the terms of Agreement covering the above referred to area we are attaching in duplicate the following papers:

- 1. Plan of Development for the Calender Year 1951
- 2. Application for Designation of Initial Participating Area

If the attached meets with your approval we will thank you to return an accepted copy to us.

Yours very truly,

MAGNOLIA PETROLEUM COMPANY

OIL CONSERVATION COMMISSION SANTA FOLLHEN MEXICO.

NOV 13 1951

BJ:aw

Committee of the state of LAW OFFICES J. M. HERVEY HERVEY, DOW & HINKLE HIRAM M. DOW CLARENCE E. HINKLE ROSWELL, NEW MEXICO W. E. BONDURANT, JR. GEORGE H. HUNKER, JR. ROSS MADOLE August 28, 1951 WILLIAM C. SCHAUER R. R. Spurrier, Executive Secretary New Mexico Oil Conservation Commission Santa Fe, New Mexico

Case 159

OIL CONSERVATION COME

Dear Dick:

We enclose herewith an approved copy of the Designation of Successor Unit Operator in connection with the Lindrith Unit Agreement, and under the terms of which the Magnolia Petroleum Company is designated as the successor unit operator to the Delhi Oil Corporation. You will note that this instrument has been approved both by the Commissioner of Public Lands and by the acting director of the U.S.G.S.

Yours very truly,

HERVEY, DOW & HINKEL

CLH: vb

Inc.

Magnolia Petroleum Co:

Roswell, New Mexico

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY Washington 25, D.C.



Aug. 24 1951

Magnolia Petroleum Company

Roswell, New Mexico

Gentlemen:

On August 21, 1951, Acting Director of the United States Geological Survey, Julian D. Sears, approved the instrument dated May 29, 1951, whereby you became the successor unit apentor under the Lindrith Unit Agreement, Rio Arriba County, New Mexico, I-Sec. No. 713, approved April 3, 1950.

Enclosed are five approved copies of the instrument for your record. It is assumed that you will furnish the State of New Mexico or any other interested principal with whatever evidence of this approval is deemed appropriate.

The consent of surety, dated July 27, 1951, signed by the United States Fidelity and Guaranty Company, accepted by Magnolia, for continued obligation under the \$10,000 Collective Corporate Surety Bond filed in connection with operations under this unit agreement and a certified copy of General Power of Attorney No. 63703 of August 4, 1949, for the surety's attorney-infact are being transmitted to the Bureau of Land Management, Santa Fe, New Mexico, with its copy of this letter.

Very truly yours.

/s/ H. J. Duncan H. J. Duncan For the Director

Enclosures 5

# UNITED STATES OF AMERICA DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY WASHINGTON, D.C.

JON 29 3 177 AM '51

Designation of Successor Unit Operator
Lindrith Unit Area
County of Rio Arriba
State of New Mexico
I-Sec. No. 713

JUL 2

JUL 25 增殖

This indenture dated as of the 27 day of 2000 May 1951, by and between Magnolia Petroleum Company, a corporation with offices at Dallas, Texas, hereinafter designated as "First Party", and the 13 1951 Delhi Oil Corporation, a Delaware corporation with offices at Dallas, Texas, and the Magnolia Petroleum Company (the Magnolia Petroleum Company joining as both first and second parties on account of owning with the Delhi Oil Corporation all unitized working interests), hereinafter designated as "Second Parties",

#### WITNESSETH:

WHEREAS, under the provisions of the act of February 25, 1920, 41 Stat. 437, 30 U.S. C. secs. 181, et. seq., as amended by the act of August 8, 1946, 60 Stat. 950, the Secretary did on the third day of April, 1950, approve a unit agreement for the development and operation of the Lindrith Unit Area, and

WHEREAS, under the provisions of Chapter 88 of the New Mexico Session Laws of 1933, said Unit Agreement was also approved by the Commissioner of Public Lands of the State of New Mexico, and

WHEREAS, thereafter on May 26, 1950, the Delhi Oil Corporation was designated as the successor Unit Operator to the Magnolia Petroleum Company which was originally designated as the Unit Operator in said Unit Agreement, and

WHEREAS, the said Delhi Oil Corporation is desirous of resigning as such Operator, and the parties

hereto, being the owners of all of the unitized working interests, are desirous of designating the Party of the First Part as the successor Unit Operator, and

WHEREAS, the First Party has been and hereby is designated by Second Parties as Unit Operator, and said First Party desires to assume all of the rights, duties and obligations of Unit Operator under the said Unit Agreement.

NOW THEREFORE, in consideration of the premises hereinbefore set forth, and the promises hereinafter stated, the First Party hereby covenants and agrees to fulfill the duties and obligations of Unit Operator under and pursuant to all of the terms of the Lindrith Unit Agreement, and the Second Parties covenant and agree that, effective upon approval of this indenture by the Commissioner of Public Lands of the State of New Mexico, and by the Director of the Geological Survey, First Party shall be granted the exclusive right and privilege of exercising any and all rights and privileges as Unit Operator pursuant to the terms and conditions of said Unit Agreement; said Unit Agreement being hereby incorporated herein by reference and made a part hereof as fully and effectively as though said Unit Agreement were expressly set forth in this instrument.

IN WITNESS WHEREOF, the parties hereto have executed this instrument as of the date hereinabove set forth.

ATTEST:	MAGNONIA PETROLEUM COMPANY
-808-50	By M. E. Chester
Beere tary	Vice-President First Party
ATTEST!	DELHI OIL CORPORATION  By Trank G. Schulf up
Secretary	Vice - President
ATTEST	MAGNOLIA PETROLEUM COMPANY
The state of the s	APPROVE
Servisor Secretary	Vice-President Second Parties

nating the MAGNOLIA PRINCLEUM COMPANY as Unit Operator	
under the Unit Agreement for the development and operation	
of the Lindrith Unit Area this, the lott day of	
July 1951. Tuytherard	
Commissioner of Public Lands of State of New Mexico	the
I hereby approve the foregoing indenture/designating the MAGNOLIA PETROLEUM COMPANY as Unit Operator under the Unit Agreement for the development and operation of the Lindrith Unit Area this, the	
Acting Director of United States Geolog	

I hereby approve the foregoing indenture desig-

# UNDER UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE LINDRITH UNIT AREA, COUNTY OF RIO ARRIBA, STATE OF NEW MEXICO I--Sec. No. 713

1

To:

Commissioner of Public Lands in the State of New Mexico Santa Fe, New Mexico

Director United States Geological Survey Washington, D. C.

The undersigned, the Delhi Oil Gorporation,
a Delaware Corporation with offices at Dallas, Texas,
being the duly designated, qualified and acting Unit
Operator for the development and operation of the Lindrith
Unit Area, Rio Arriba County, New Mexico, does hereby
resign as such Operator, and requests that the Magnolia
Petroleum Company be approved as the successor Unit Operator.

Dated this the 12 day of June, 1951.

DELHI OIL CORPORATION

ATTEST:

Secretary

Maria Maria

## PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR - 1951 LINDRITH UNIT RIO ARRIBA COUNTY, NEW MEXICO

The Oil and Gas Supervisor United States Geological Survey Roswell, New Mexico

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

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

Magnolia Petroleum Company as Operator in compliance with Section 9 of the "Unit Agreement and Operation of the Lindrith Unit Area, Rio Arriba County, New Mexico", dated December 9, 1948, approved by the Acting Director, United States Geological Survey, April 3, 1950, I Sec. No. 713, hereby submits our plan of development for said Unit as follows:

#### I - Description of Participating Area

Application for Designation, filed November, 1951 to comprise 360,00 acres, more or less, described as follows:

SET Section 20

Who of SWH Section 21

NWT of NWT Section 28

Nt of NET Section 29, all in

Township 24 North, Range 2 West, N.M.P.M.

action on which is pending.

#### II - Past Development History - Dakota Zone

Two wells have been drilled, viz:

- 1. Delhi Oil Corp. No. 1 Ingwerson in the Center of the SEISEI Section 20-24N-2W, commenced June 7, 1949, initially completed December 31, 1949, pumped 112 barrels 41.5 Gravity(A.P.I.) oil per day. Began deviated hole operating September 19, 1950, completed April 24, 1951, pumped 68.97 barrels of 43.3 Gravity (A.P.I) oil and 13.32 barrels of fresh water in 24 hours from the Dakota Zone.
- 2. Delhi Oil Corp. Mo. 1 Nolting-Federal in the Center of the SEINEI Section 29-24N-2W commenced May 14, 1950, completed September 22, 1950 as a dry hole from the depth of 7661' feet in the Morrison Zone.

#### III - Past Development History Pictured Cliff Zone

None drilled.

#### IV - Plan of Development for the Dakota Zone

Commence operations for the drilling of a well, prior to December 31, 1951 to be located in the Center of the SWASWA Section 21-24N-2W.

#### V - Plan of Development for the Pictured Cliffs Zone

Commence operations for the drilling of two (2) wells, prior to December 31, 1951 to be located as follows:

- 1. NET Section 7-24N-2W
- 2. SEd Section 22-24N-3W

#### VI - Spacing of Wells

It is planned to develop the Pictured Cliffs Zone for gas production by drilling 160 acres units, wells to be located not less than 990 feet from the outside boundary lines thereof.

It is planned to develop the Dakota Zone for oil production, wells to be located in the Center of a legal 40 acre subdivision.

#### VII - Well Casing Program

The following pipe program is proposed:

- A. Pictured Cliff Wells Set surface pipe approximately 200-250 feet depending upon the location and cement to the surface. Set Production String on top of Producing Zone and cement with not less than 200 sks.
- B. Dakota Wells Set surface pipe approximately 200-250 feet depending upon the location and cement to surface.

  Set pipe for production string on top or through the producing zone and cement back to surface using staged cementing method according to good field practice.

#### VIII - Offset Obligations

The Unit operator, on behalf of itself and other owners of working interests will take appropriate and adequate measures to prevent drainage from lands subject to the Lindrith Unit Agreement by wells on lands not subject to said agreement, or pursuant to applicable regulations, pay a fair and reasonable compensatory royalty as determined by the Federal Oil and Gas Supervisor as to Federal lands, or the Commissioner of Public Lands as to State lands.

#### IX - Further Development

The plan of development as outlined herein shall constitute the future drilling obligations of said Unit Agreement for the period ending December, 1951.

It is further agreed that prior to the expiration of this plan of development another plan of development shall be submitted for approval for further development of the Unit.

#### X - Effective Date

This plan of development shall be effective November 1, 1951.

#### XI - Modifications

This plan of development may be modified, with necessary approval to meet changing conditions.

MAGNOLIA PETROLEUM COMPANY

By Brack

Roman

May 12, 1950

Magnolia Petroleum Company Producing Division Post Office Box 900 Dallas 1, Texas

Attention of Mr. H. W. Chark

#### Gentlemen:

This office meknowledges receipt of Magnolia Petroleum Company's resignation as unit operator of LINDRITH UNIT AREA, Rio Arriba County, New Mexico, together with designation of unit operator which is the Delhi Oil Corporation.

Finding no objection to this change in unit operator, I have today signed original and two copies of the Delhi designation, and have forward the same to Foster Merrell of the U. S. Geological Survey, Roswell, New Mexico, with the request that upon his approval, one copy of the designation be returned to this office for our files.

Very truly yours,

OHV Shape An

Commissioner of Public Lands

cc. Foster Morrell U.S. G. S., Roswell, R.M.

Steve Hannifin Roswell, New Mexico

Delhi Oil Corporation 1315 Pacific Avenue Dalk e 1, Texas LAW OFFICES
HERVEY, DOW & HINKLE
ROSWELL, NEW MEXICO

J. M. HERVEY
HIRAM M. DOW
CLARENCE E. HINKLE
W. E. BONDURANT, JR.
GEORGE H. HUNKER, JR.

WILLIAM C. SCHAUER

April 11, 1950

New Mexico Oil Conservation Commission Santa Fe, New Mexico

Attention: Mr. R. R. Spurrier

Re: Lindrith Unit Agreement

Gentlemen:

We hand you herewith an executed copy of the unit agreement for the development and operation of the Lindrith Area, Rio Arriba County, New Mexico.

You will note that this agreement was approved by the Acting Director of the U. S. Geological Survey on April 3, 1950.

Yours very truly,

HERVEY, DOW & HINKLE

CEH:rh Enc.

cc: Mr. S. P. Hannifin
Magnolia Petroleum Company
Roswell, New Mexico

#### APPLICATION FOR DESIGNATION OF INITIAL PARTICIPATING AREA LINDRITH UNIT RIO ARRIBA COUNTY, NEW MEXICO

I Sec. No. 713

The Oil and Gas Supervisor United States Geological Survey Roswell, New Mexico

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

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

In compliance with Sections 10 and 16 of Unit Agreement for the development and operation of the Lindrith Unit Area, Rio Arriba County, New Mexico, we submit herewith for your consideration request for Initial Participating Area.

Magnolia Petroleum Company and Delhi Oil Corporation No. 1 Ingwersen located in the SEISE Section 20-24N-2W is productive of unitized substances in paying quantities.

The area proved to be productive of unitized substances comprises 360 acres, more or less, described as follows:

> SEA Section 20, Wa SWA Section 21, NWA NWA Section 28 and  $N_{2}^{\frac{1}{2}}$  NE4 Section 29, all in Township 24 North, Range 2 West, N.M.P.M.

as evidenced by geologic plat attached hereto.

The percentage of unitized substances applicable to the participating area shall be allocated as follows:

> SF 078909 Timothy B. Ingwersen 66.67% SF 078910 Daniel P. Nolting 33.33%

> > PERATOR
> >
> > MYC Buddy
> >
> > Rmm
> >
> > Ung MAGNOLIA PETROLEUM COMPANY UNIT OPERATOR