



PHIL R. LUCERO
COMMISSIONER

State of New Mexico



Commissioner of Public Lands

August 17, 1977

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

Northwest Pipeline Corporation
One Park Central, Suite 1487
Denver, Colorado 80202

Re: San Juan 32-7 Unit
San Juan County, New Mexico
Supplemental 1977 Drilling Program

ATTENTION: Ms. Betty Burnett

Gentlemen:

The Commissioner of Public Lands has this date approved your Supplemental 1977 Drilling Program for the San Juan 32-7 Unit, San Juan County, New Mexico. Your plan proposes the drilling of four non-unit Mesaverde wells by Palmer Oil and Gas Company on two nonstandard proration units involving unit lands. This approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Commission.

Enclosed is one approved copy for your files.

Your Three (\$3.00) Dollar filing fee has been received.

Very truly yours,

PHIL R. LUCERO
COMMISSIONER OF PUBLIC LANDS

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

PHL/BDG/s
encls.
cc:

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

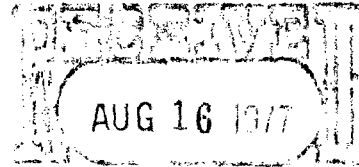


United States Department of the Interior

GEOLOGICAL SURVEY
Conservation Division
P. O. Box 26124
Albuquerque, New Mexico 87125

12 AUG 1977

Northwest Pipeline Corporation
Attention: Ms. Betty Burnett
One Park Central, Suite 1487
Denver, Colorado 80202



OIL CONSERVATION COMM.
Santa Fe

Gentlemen:

The approved copy of your Supplemental 1977 Plan of Development for the San Juan 32-7 unit agreement, San Juan County, New Mexico, is enclosed. Such plan proposing the drilling of four non-unit Mesaverde wells by Palmer Oil and Gas Company on two nonstandard proration units involving unit lands was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ORIG. SGD.) GENE F. DANIEL

ACTING Area Oil and Gas Supervisor

Enclosure

cc:
NMOCC, Santa Fe (ltr. only) ← This copy for
Com. Pub. Lands, Santa Fe (ltr. only)

United States Department of the Interior
Geological Survey



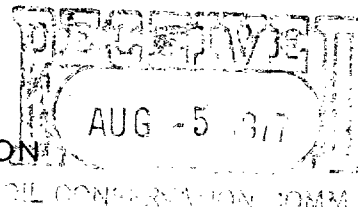
WATER RESOURCES
DIVISION
WASHINGTON, D. C.
20506

WATER RESOURCES
DIVISION
WASHINGTON, D. C.
20506

WATER RESOURCES
DIVISION
WASHINGTON, D. C.
20506

NORTHWEST PIPELINE CORPORATION

August 2, 1977



ONE PARK CENTRAL, SUITE 1487
DENVER, COLORADO 80202
303-623-9303

Mr. Carl C. Traywick
Assistant Oil and Gas Supervisor
United States Geological Survey
Post Office Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Attention: Mr. Ray D. Graham
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Attention: Mr. Joe Ramey
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: San Juan 32-7 Unit #14-08-001-441
~~San Juan County~~, New Mexico
Supplemental 1977 Drilling Program

Gentlemen:

By letter dated March 1, 1977, Northwest Pipeline Corporation, as Unit Operator, filed a drilling program for the San Juan 32-7 Unit for the calendar year 1977 providing for the drilling of one Pictured Cliffs well.

On February 8, 1977, the New Mexico Conservation Commission approved Palmer Oil & Gas Company's application for non-standard proration units in Township 31 North, Range 7 West, San Juan County, New Mexico. As a result, Palmer plans to drill four (4) Mesaverde wells on proration units which will include a portion of San Juan 32-7 Unit acreage. Pursuant to Section 10 of the San Juan 32-7 Unit Agreement, Northwest has contacted all of the working interest owners and has received the necessary concurrence to propose the drilling of the following additional wells during the calendar year 1977:

<u>Well Name and Number</u>	<u>Proration Unit</u>	<u>Unit Acreage and Percentage</u>	<u>Formation</u>
Yager #1	W/2 SE/4 & E/2 SW/4 Sec 3, NW/4 Sec 10 31N-7W	NW/4 SE/4 Sec 3 - 12.5%	Mesaverde

U.S. Geological Survey
Commissioner of Public Lands
Oil Conservation Commission
August 2, 1977
page two

<u>Well Name and Number</u>	<u>Proration Unit</u>	<u>Unit Acreage and Percentage</u>	<u>Formation</u>
Yager #1-A	W/2 SE/4 & E/2 SW/4 Sec 3, NW/4 Sec 10 31N-7W	NW/4 SE/4 Sec 3 - 12.5%	Mesaverde
Federal #2	W/2 SW/4 Sec 2, E/2 SE/4 Sec 3, NE/4 Sec 10-31N-7W	NE/4 SE/4 Sec 3 - 12.5%	Mesaverde
Yager - Federal #2-A	W/2 SW/4 Sec 2, E/2 SE/4 Sec 3, NE/4 Sec 10-31N-7W	NE/4 SE/4 Sec 3 - 12.5%	Mesaverde

All of these wells will be located on non-unit lands and operated by Palmer Oil & Gas Company. In the event the wells are capable of production in commercial quantities, the Mesaverde Participating Area will be expanded as to the unit lands within the proration units.

Northwest, as Unit Operator, will drill any offset wells that may be required to prevent drainage of unitized substances and any other wells deemed necessary or which are requested by the Unit Operator or the working interest owners.

If this supplemental 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 one approved copy to this office.

Copies of this supplemental drilling program are being sent to the working interest owners as shown on the attached.

Sincerely,



Betty R. Burnett
Supervisor of Contracts and Units

BRB:me

Attachments

cc: Working Interest Owners

SAN JUAN 32-7 UNIT
Working Interest Owners

Mr. J. Glenn Turner, Jr.
Independent Co-Executor of the
Estate of J. Glenn Turner, Deceased
1700 Mercantile Bank Building
Dallas, Texas 75206

General American Oil Company of Texas
Attention: Mr. L. E. Dooley
Meadows Building
Dallas, Texas 75206

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

Phillips Petroleum Company
Attention: Mr. N. N. Beckner
1000 Security Life Building
Denver, Colorado 80202

Mrs. Iris Gerber Damson
25 Mamaroneck Road
Scarsdale, New York 10583

Amoco Production Company
Attention: Mr. T. M. Curtis
1000 Security Life Building
Denver, Colorado 80202

Mr. Edward Gerber
Post Office Box 234
Gracie Station
New York, New York 10028

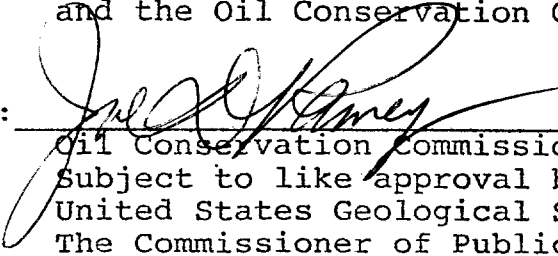
APPROVED: _____ DATE: _____

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

APPROVED: _____ DATE: _____

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

APPROVED: _____ DATE: 11/8/77


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

NORTHWEST PIPELINE CORPORATION

July 7, 1977

ONE PARK CENTRAL, SUITE 1487
DENVER, COLORADO 80202
303-623-9303

Mr. Carl C. Traywick
Assistant Oil and Gas Supervisor
United States Geological Survey
Post Office Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Attention: Mr. Ray D. Graham
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Attention: Mr. Joe Ramey
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: San Juan 32-7 Unit #14-08-001-441
NOTICE OF COMPLETION OF
ADDITIONAL MESAVERDE WELLS

Gentlemen:

Pursuant to Section 11(a) of the San Juan 32-7 Unit Agreement, Northwest Pipeline Corporation, as Unit Operator, has determined that the following wells capable of producing unitized substances in paying quantities have been completed upon acreage committed to the Unit:

The San Juan Unit No. 24 Com Well is located 1480 feet from the South Line and 960 feet from the West Line, Section 21, Township 32 North, Range 7 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on November 1, 1976 and completed on November 24, 1976 in the Mesaverde Formation at a plug back depth of 5690'. The Mesaverde Formation was perforated with one hole at each of the following depths: 5338', 5344', 5348', 5370', 5378', 5386', 5392', 5453', 5460', 5468', 5476', 5492', 5498', 5560', 5568', 5574', 5581', 5588', 5596', 5602', 5607', 5637', 5666'. These perforations were treated with 7½% HCL followed by a sand-water fracturing. The well was shut-in November 14, 1976 for 9 days with a SIPT of 891 psig and SIPC of 1177 psig. On November 24, 1976, the well was tested and after flowing for three (3) hours through a 3/4" variable choke on the 2-3/8" tubing, the well gauged 4433 MCFD with a calculated AOF of 5072 MCFD.


U.S. Geological Survey
Commissioner of Public Lands
Oil Conservation Commission
July 7, 1977
page two

The San Juan Unit No. 32 Well is located 880 feet from the South Line and 1460 feet from the West Line, Section 22, Township 32 North, Range 7 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on October 17, 1976 and completed on November 9, 1976 in the Mesaverde Formation at a plug back depth of 5898'. The Mesaverde Formation was perforated with one hole at each of the following depths: 5438', 5484', 5490', 5580', 5590', 5647', 5657', 5667', 5692', 5748', 5756', 5766', 5782', 5792', 5800', 5810'. These perforations were treated with 7½% HCL followed by a sand-water fracturing. The well was shut-in November 1, 1976 for 9 days with a SIPT of 1064 psig and SIPC of 1100 psig. On November 9, 1976, the well was tested and after flowing for three (3) hours through a 3/4" variable choke on the 2-3/8" tubing, the well gauged 4002 MCFD with a calculated AOF of 4522 MCFD.

Since these wells were drilled on intervening drilling blocks, the Mesaverde Participating Area is not enlarged and the percentage of participation remains the same.

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

Sincerely,


Betty R. Burnett
Supervisor of Contracts and Units

BRB:me

Attachment

cc: Working Interest Owners

SAN JUAN 32-7 UNIT
Working Interest Owners

Mr. J. Glenn Turner, Jr.
Independent Co-Executor of the
Estate of J. Glenn Turner, Deceased
1700 Mercantile Bank Building
Dallas, Texas 75206

General American Oil Company of Texas
Attention: Mr. L. E. Dooley
Meadows Building
Dallas, Texas 75206

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

Phillips Petroleum Company
Attention: Mr. N. N. Beckner
1000 Security Life Building
Denver, Colorado 80202

Mrs. Iris Gerber Damson
25 Mamaroneck Road
Scarsdale, New York 10583

Amoco Production Company
Attention: Mr. T. M. Curtis
1000 Security Life Building
Denver, Colorado 80202

Mr. Edward Gerber
Post Office Box 234
Gracie Station
New York, New York 10028

42

NORTHWEST PIPELINE CORPORATION

ONE PARK CENTRAL, SUITE 1487
DENVER, COLORADO 80202
(303) 623-9303

April 4, 1977

Mr. Carl C. Traywick
Assistant Oil and Gas Supervisor
United States Geological Survey
P.O. Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
Attention: Mr. Ray D. Graham
P.O. Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
Attention: Mr. Joe Ramey
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: San Juan 32-7 Unit #14-08-001-441
San Juan County, New Mexico
1977 Drilling Program

Gentlemen:

This is to advise you that the 1977 Drilling Program for the San Juan 32-7 Unit was approved by the regulatory agencies on the following dates:

Commissioner of Public Lands	March 4, 1977
U.S. Geological Survey	March 14, 1977
Oil Conservation Commission	March 30, 1977

Copies of this letter are being sent to all working interest owners in the San Juan 32-7 Unit.

Sincerely,



Betty R. Burnett
Supervisor of Contracts and Units

BRB:me

cc: Working Interest Owners

420

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

March 30, 1977

C
O
P
Y

Northwest Pipeline Corporation
One Park Central, Suite 1487
Denver, Colorado 80202

Attention: Mr. John W. Shepardson

Re: 1977 Drilling Program
San Juan 32-7 Unit
San Juan County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program for the calendar year 1977 providing for the drilling of one Pictured Cliffs well for the San Juan 32-7 Unit, San Juan 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.

Two approved copies of the program are returned herewith.

Very truly yours,

JOE D. RAMEY
Secretary-Director

JDR/JEK/og

cc: Commissioner of Public Lands
Land Office Building
Santa Fe, New Mexico

U. S. Geological Survey
Roswell, New Mexico

OIL CONSERVATION COMMISSION

Box 2028

SANTA FE, NEW MEXICO 87501

March 20, 1977

Montgomery Pipeline Corporation
1000 Central, Suite 241
Denver, Colorado 80202

Attention: Mr. John W. Robertson

Re: 1977 Drilling Program
San Juan County, New Mexico

Dear Sir:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the drilling program for the calendar year 1977 providing for the drilling of one "test" well for the year 1977 in San Juan County, New Mexico, subject to the approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Two approved copies of the program are returned herewith.

Very truly yours,

JOHN D. HANLEY
Secretary-Director

cc: 1977

Commissioner of Public Lands
Land Office Building
Santa Fe, New Mexico

U.S. Geological Survey
Bowling, New Mexico



United States Department of the Interior

GEOLOGICAL SURVEY
Conservation Division
Western Bank Building
505 Marquette, NW, Room 815
Albuquerque, New Mexico 87102

March 14, 1977

Northwest Pipeline Corporation
Attention: Mr. John W. Shepardson
One Park Central
Suite 1487
Denver, Colorado 80202

Gentlemen:

One approved copy of your 1976 Report of Past Operations and 1977 Plan of Development for the San Juan 32-7 unit area, San Juan County, New Mexico, is enclosed. Such plan, proposing the drilling of one Pictured Cliffs well on lands not currently in a Pictured Cliffs participating area was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

Orig. Signed - JAMES W. SUTHERLAND

JAMES W. SUTHERLAND
Area Oil and Gas Supervisor

Enclosure

CC:
NMOCC, Santa Fe (1tr. only)
Com. Pub. Lands, Santa Fe (1tr. only)

UNITED STATES DEPARTMENT OF JUSTICE



Division of
Investigation
Federal Bureau of
Investigation
Washington, D. C.
20535

Page 1 of 1

Enclosed for the
Director of the
Federal Bureau of
Investigation
is one copy of the
report of the
Special Agent in
Charge, New York
Office, dated
10/10/68.

Very truly yours,

John Edgar Hoover
Director

Enclosed for the
Director of the
Federal Bureau of
Investigation
is one copy of the
report of the
Special Agent in
Charge, New York
Office, dated
10/10/68.

Very truly yours,

John Edgar Hoover
Director

10/10/68
J. Edgar Hoover
Director

Page 1 of 1

NORTHWEST PIPELINE CORPORATION

ONE PARK CENTRAL, SUITE 1487
DENVER, COLORADO 80202
(303) 623-9303

March 1, 1977

Mr. Carl C. Traywick
Assistant Oil and Gas Supervisor
United States Geological Survey
Post Office Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Attention: Mr. Ray D. Graham
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Attention: Mr. Joe Ramey
Post Office Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Re: San Juan 32-7 Unit #14-08-001-441
San Juan County, New Mexico
1977 Drilling Program

By letter dated August 19, 1976, Northwest Pipeline Corporation, Unit Operator, filed a drilling program for the captioned unit for the calendar year 1976 providing for the drilling of two Mesaverde wells. San Juan 32-7 Unit Well No. 32 and Com Well No. 24 were timely drilled and completed.

As of this date, the total number of wells drilled in the San Juan 32-7 Unit on acreage committed to the unit is as follows:

Fruitland, Commercial	2
Pictured Cliffs, Plugged and Abandoned	1
Mesaverde, Commercial	21
Mesaverde, Non-Commercial	1
Mesaverde, Plugged and Abandoned	2
Mesaverde-Dakota Dual:	
Commercial	1
Plugged Back to Mesaverde	1
Non-Commercial in Dakota	2
Dakota, Commercial	4
TOTAL	35

Assistant Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
March 1, 1977
Page 2

Pursuant to Section 10 of the San Juan 32-7 Unit Agreement, Northwest Pipeline Corporation, as Unit Operator, has contacted all of the working interest owners and has received the necessary concurrence to propose the drilling of the following well during the calendar year 1977:


<u>Well No.</u>	<u>Drilling Block</u>	<u>Formation</u>
45	W/2 Sec. 35, T32N-R7W	Pictured Cliffs

Northwest Pipeline Corporation, as Unit Operator, will drill any offset wells that may be required to prevent drainage of unitized substances and any other wells deemed necessary or which are requested by the Unit Operator or the working interest owners.

If this drilling program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to Northwest Pipeline Corporation.

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

Very truly yours,


John W. Shepardson
Land Manager

JWS:BRB:cak
Enclosures
cc: Working Interest Owners

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

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

APPROVED: _____ DATE: March 30, 1977
Oil Conservation Commission
Subject to like approval by the
United States Geological Survey and
the Commissioner of Public Lands

The foregoing approvals are for the San Juan 32-7 Unit
#14-08-001-441, San Juan County, New Mexico, 1977 Drilling
Program.

SAN JUAN 32-7 UNIT
Working Interest Owners

Mr. J. Glenn Turner, Jr.
Independent Co-Executor of the
Estate of J. Glenn Turner, Deceased
1700 Mercantile Bank Building
Dallas, Texas 75206

General American Oil Company of Texas
Attention: Mr. L. E. Dooley
Meadows Building
Dallas, Texas 75206

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

Phillips Petroleum Company
Attention: Mr. N. N. Beckner
1000 Security Life Building
Denver, Colorado 80202

Mrs. Iris Gerber Damson
25 Mamaroneck Road
Scarsdale, New York 10583

Amoco Production Company
Attention: Mr. T. M. Curtis
1000 Security Life Building
Denver, Colorado 80202

Mr. Edward Gerber
Post Office Box 234
Gracie Station
New York, New York 10028

NORTHWEST PIPELINE CORPORATION

ONE PARK CENTRAL, SUITE 1487
DENVER, COLORADO 80202
(303) 623-9303

November 15, 1976

Mr. Carl C. Traywick
Assistant Oil and Gas Supervisor
United States Geological Survey
Post Office Box 1357
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Attention: Mr. Ray D. Graham
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Attention: Mr. Joe Ramey
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: San Juan 32-7 Unit #14-08-001-441
San Juan County, New Mexico
1976 Drilling Program


Gentlemen:

This is to advise that the 1976 Drilling Program for the San Juan 32-7 Unit was approved by the regulatory agencies on the following dates:

Commissioner of Public Lands	-- August 24, 1976
Oil Conservation Commission	-- September 8, 1976
United States Geological Survey	-- November 12, 1976

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

Very truly yours,


Betty R. Burnett
Supervisor of Contracts and Units

BRB:cak
Attachment
cc: Working Interest Owners



United States Department of the Interior

GEOLOGICAL SURVEY
Conservation Division
Western National Bank Building
505 Marquette, NW, Suite 815
Albuquerque, New Mexico 87102

NOV 12 1976

Northwest Pipeline Corporation
Attention: Ms. Betty R. Burnett
Suite 1487, One Park Central
Denver, Colorado 80202

Gentlemen:

One approved copy of your 1976 plan of development for the San Juan 32-7 unit area, San Juan County, New Mexico, is enclosed. Such plan, proposing the drilling of two Mesaverde wells on intervening drilling blocks was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ORIG. SFD.) JAMES W. SUTHERLAND

Area Oil and Gas Supervisor

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

JAGillham:dlk:11/11/76

[illegible][illegible]

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

100

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

1. *What is the purpose of the study?*
 2. *What are the research questions or hypotheses?*
 3. *What is the study design?*
 4. *What is the sample size and how was it selected?*
 5. *What are the variables being measured?*
 6. *What are the data collection methods?*
 7. *What are the results of the study?*
 8. *What are the conclusions of the study?*
 9. *What are the limitations of the study?*
 10. *What are the implications of the study?*

1. *Phragmites australis* (Cav.) Trin. ex Steud.

— *Journal of the American Medical Association*, 1934, 102, 1000.



DIRECTOR
JOE D. RAMEY

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

LAND COMMISSIONER
PHIL R. LUCERO



STATE GEOLOGIST
EMERY C. ARNOLD

September 8, 1976

Northwest Pipeline Corporation
One Park Central, Suite 1487
Denver, Colorado 80202

Attention: Betty R. Burnett

Re: 1976 Drilling Program
San Juan 32-7 Unit,
San Juan County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program for the calendar year 1976 providing for the drilling of two Mesaverde wells for the San Juan 32-7 Unit, San Juan 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.

Two approved copies of the program are returned herewith.

Very truly yours,


JOE D. RAMEY
Secretary-Director

JDR/JEK/og

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

NORTHWEST PIPELINE CORPORATION

ONE PARK CENTRAL, SUITE 1487
DENVER, COLORADO 80202
(303) 623-9303

August 19, 1976

Mr. Carl C. Traywick
Assistant Oil and Gas Supervisor
United States Geological Survey
Post Office Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Attention: Mr. Ray D. Graham
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Attention: Mr. Joe Ramey
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: San Juan 32-7 Unit #14-08-001-441
San Juan County, New Mexico
1976 Drilling Program

Gentlemen:

By letter dated February 10, 1975, Northwest Pipeline Corporation, as Unit Operator, filed a drilling program for the calendar year 1975 providing for the drilling of one well, San Juan 32-7 Unit well No. 42. On August 26, 1975, Northwest Pipeline Corporation, as Unit Operator, filed a supplemental drilling program providing for the drilling of two additional wells during the calendar year 1975; namely, San Juan 32-7 Unit wells No. 29 and 30. Well No. 42 was not drilled during 1975, and Phillips Petroleum Company has advised us that they do not wish to carry this well over into the 1976 Drilling Program. Wells No. 29 and 30 were timely drilled and completed on acreage located outside of the then existing Mesaverde Participating Area and, therefore, created the Seventeenth Expansion of the Mesaverde Participating Area.

With the completion of the above-described wells, the total number of wells drilled in the San Juan 32-7 Unit is as follows:

Assistant Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
August 19, 1975
Page 2

Fruitland, Commercial	2
Pictured Cliffs, Plugged and Abandoned	1
Mesaverde, Commercial	19
Mesaverde, Non-Commercial	1
Mesaverde, Plugged and Abandoned	2
Mesaverde-Dakota Dual:	
Commercial	1
Plugged Back to Mesaverde	1
Non-Commercial in Dakota	2
Dakota, Commercial	4
TOTAL	33

Northwest Pipeline Corporation, pursuant to Section 10 of the San Juan 32-7 Unit Agreement, has contacted all of the working interest owners and has received the necessary concurrence to propose the drilling of the following wells during the calendar year 1976:

<u>Well No.</u>	<u>Drilling Block</u>	<u>Formation</u>
#24 Com	W/2 Sec. 21-T32N-R7W	Mesaverde
#32	W/2 Sec. 22-T32N-R7W	Mesaverde

These wells will be drilled on intervening drilling blocks recently brought into the Mesaverde Participating Area by the Seventeenth Expansion of the Mesaverde formation.

In addition to these wells, Northwest Pipeline Corporation, as Unit Operator, will drill any offset wells that may be required to prevent drainage of the unitized substances and any other wells deemed necessary or desirable by the Unit Operator and the working interest owners.

If this drilling program is acceptable, please signify your approval, as required under Section 10 of the Unit Agreement, in the space provided on the attached sheet and return an approved copy to this office.

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

Very truly yours,

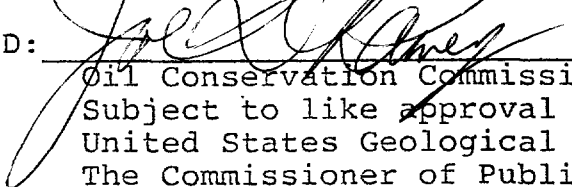


Betty R. Burnett
Supervisor of Contracts and Units

BRB:cak
Attachments
cc: Working Interest Owners

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

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

APPROVED:  DATE: Sept 8, 1976
Oil Conservation Commission
Subject to like approval by the
United States Geological Survey and
The Commissioner of Public Lands

The foregoing approvals are for the San Juan 32-7 Unit
#14-08-001-441, San Juan County, New Mexico, 1976
Drilling Program.

SAN JUAN 32-7 UNIT

Working Interest Owners

J. Glenn Turner, Jr., Independent
Co-Executor of Estate of J. Glenn Turner,
Deceased
1700 Mercantile Bank Building
Dallas, TX 75206

General American Oil Company of Texas
Attention: Mr. L. E. Dooley
Meadows Building
Dallas, TX 75206

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

Phillips Petroleum Company
Attention: N. N. Beckner
1000 Security Life Building
Denver, CO 80202

Mrs. Iris Gerber Damson
25 Mamaroneck Road
Scarsdale, NY 10583

Amoco Production Company
Attention: Mr. T. M. Curtis
1000 Security Life Building
Denver, CO 80202

Mr. Edward Gerber
P. O. Box 234, Gracie Station
New York, NY 10028



PHIL R. LUCERO
COMMISSIONER

State of New Mexico

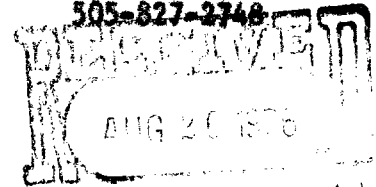


Commissioner of Public Lands

August 24, 1976

420
TELEPHONE

505-827-2748



OIL CONSTRUCTION DIVISION

Santa Fe

P. O. BOX 1148

SANTA FE, NEW MEXICO 87501

Northwest Pipeline Corporation
One Park Central, Suite 1487
Denver, Colorado 80202

Re: San Juan 32-7 Unit
San Juan County, New Mexico
1976 DRILLING PROGRAM

ATTENTION: Betty Burnett

Gentlemen:

The Commissioner of Public Lands has this date approved your Drilling Program for the year 1976, for the San Juan 32-y Unit, San Juan County, New Mexico. Your plan proposes the drilling of well No 24 Com and No. 32, Mesaverde Formation.

Enclosed is one approved copy for your files. Please remit a Three (\$3.00) Dollar filing fee.

Very truly yours,

PHIL R. LUCERO
COMMISSIONER OF PUBLIC LANDS

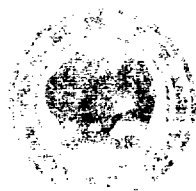
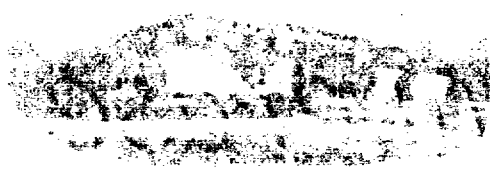
BY:
RAY D. GRAHAM, Director
Oil and Gas Division

PRL/RDG/s

encl.

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

1942-1943



1944-1945

1946-1947

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

June 7, 1976

Atlantic Richfield Company
1860 Lincoln St. - Suite 501
Denver, Colorado 80203

Attention: Mr. W. A. Walther,

Re: Supplemental 1976 Plan of
Development, Horseshoe Gallup
Unit, San Juan County,
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the supplemental plan of development for 1976 providing for the drilling of seven Lower Gallup wells for the Horseshoe-Gallup Unit, San Juan 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.

Three approved copies of the plan are returned herewith.

Very truly yours,

JOF D. RAMEY
Secretary-Director

JDR/JEK/og

cc: Commissioner of Public Lands
Santa Fe, New Mexico

U. S. Geological Survey
Roswell, New Mexico

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Dear Sir:

Enclosed for the Commission are two copies of the report of the Santa Fe Oil Conservation Committee, dated and captioned as above.

Very truly yours,

W. A. RICHARDS, Chairman
Santa Fe Oil Conservation Committee
P. O. Box 2088
Santa Fe, New Mexico 87501

W. A. Richards

Enclosed for the Commission are two copies of the report of the Santa Fe Oil Conservation Committee, dated and captioned as above. The report contains a detailed description of the oil conservation measures being taken by the Santa Fe Oil Conservation Committee, and a list of the members of the committee. The report also contains a list of the oil conservation measures being taken by the Santa Fe Oil Conservation Committee, and a list of the members of the committee.

Very truly yours,

W. A. Richards

W. A. Richards
Chairman, Santa Fe Oil Conservation Committee

W. A. Richards

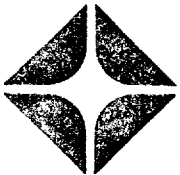
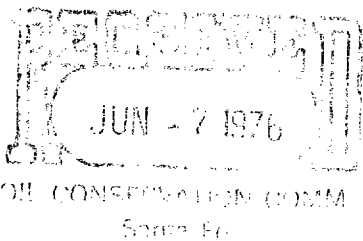
W. A. Richards
Chairman, Santa Fe Oil Conservation Committee

W. A. Richards
Chairman, Santa Fe Oil Conservation Committee

AtlanticRichfieldCompany

North American Producing Division
Rocky Mountain District
1860 Lincoln St. — Suite 501
Denver, Colorado 80203
Telephone 303 573-4049

W. A. Walther, Jr.
Operations Manager



June 4, 1976

Mr. N. O. Frederick (4)
Area Oil and Gas Supervisor
United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico 88201

Oil Conservation Commission (4)
of the State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Commissioner of Public Lands (3) All Working Interest Owners
The State of New Mexico (See Attached List)
State Land Office Building
Santa Fe, New Mexico 87501

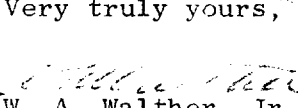
Re: Supplemental Plan of Development
for 1976
Horseshoe - Gallup Unit
San Juan County, New Mexico

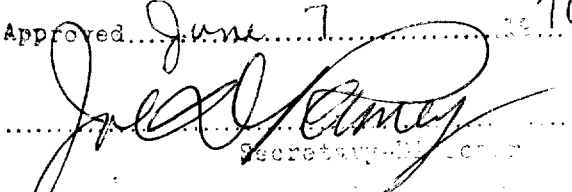
Gentlemen:

We previously submitted by letter of February 13, 1976, a Plan of Development for 1976 calling for no additional drilling wells that year. At this time we wish to amend that Plan to reflect the proposal to drill seven wells (HGU 291, 292, 293, 294, 295, 296 and 297) to the Lower Gallup zone. Locations of the proposed wells are listed below:

- HGU 291: 50' FNL and 50' FEL of NE/4,
Section 23-T31N-R17W
- HGU 292: 2474' FSL and 2463' FEL of SE/4,
Section 24-T31N-R17W
- HGU 293: 1260' FNL and 1470' FWL of NW/4,
Section 30-T31N-R16W
- HGU 294: 1375' FSL and 1325' FEL of SE/4,
Section 30-T31N-R16W
- HGU 295: 50' FNL and 50' FEL of NE/4,
Section 31-T31N-R16W
- HGU 296: 1350' FSL and 1250' FEL of SE/4,
Section 32-T31N-R16W
- HGU 297: 1550' FSL and 1250' FEL of SE/4,
Section 4-T30N-R16W

We respectfully request approval of the Supplemental Plan of Development for 1976.

Very truly yours,

W. A. Walther, Jr.
Operations Manager

Approved June 7 1976

Secretary
NEW MEXICO OIL CONSERVATION COMMISSION

LJG/WAW:lh

WORKING INTEREST OWNERS

HORSESHOE - GALLUP UNIT

Amax Petroleum
900 Town & Country Lane, Suite 400
Houston, Texas 77024

J. Douglas Collister
4203 Avenida LaResolana NE
Albuquerque, New Mexico 87110

Continental Oil Company
L. P. Thompson
Box 460
Hobbs, New Mexico 88240

Richard W. Dammann
380 Madison Avenue
New York, New York 10017

EPROC Associates
Box 776
Durango, Colorado 81301
ATTN.: Robert E. Lauth

Helbing & Podpechan
Box 549
Claremore, Oklahoma 74017

J. Felix Hickman
Box 12307
El Paso, Texas 79912

Mobil Oil Corp. (3)
Box 633
Midland, Texas 79701
ATTN.: John D. Howard

Odessa Natural Corp.
Box 3908
Odessa, Texas 79760
ATTN.: John Strojek

V. J. Deaton
Reynolds Metals Company
Oil and Gas Division
P.O. Box 9177
Corpus Christi, Texas 78408

Robert D. Snow
2000 National Bank of Tulsa Bldg.
Tulsa, Oklahoma 74103

Sohio Petroleum Company
1100 Penn Tower
Oklahoma City, Oklahoma 73118
ATTN.: H. P. Dreher

Mrs. Eleanor F. Spiegel
Box 1042
Albuquerque, New Mexico 87103

Tenneco Oil Company
1200 Lincoln Tower Bldg.
1860 Lincoln Street
Denver, Colorado 80203
ATTN.: D. D. Myers

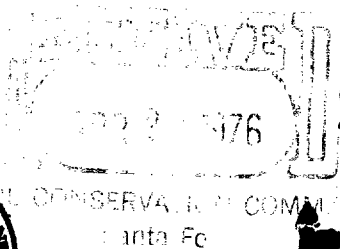
Texaco, Inc.
Box 2100
Denver, Colorado 80201
ATTN.: B. J. Willard

Vack Ventures
% Cottle & Cottle
120 South LaSalle Street
Chicago, Illinois 60603

J. R. Abraham
5517 Willow Lane
Dallas, Texas 75230



PHIL R. LUCERO
COMMISSIONER



State of New Mexico



Commissioner of Public Lands
April 21, 1976

TELEPHONE
505-827-2748

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

Northwest Pipeline Corporation
One Park Central-Suite 1487
Denver, Colorado 80202

Re: San Juan 32-7 Unit
San Juan County, New Mexico
SEVENTEENTH EXPANDED PARTICIPATING
AREA
Mesaverde Formation
Effective January 1, 1976

ATTENTION: Mr. John W. Shepardson

Gentlemen:

This will acknowledge receipt of your letter dated April 6, 1976, together with the Seventeenth Expanded Participating Area, Mesa Formation for the San Juan 32-7 Unit.

Since this needs no official approval we have this date filed it for record purposes.

We are retaining two copies for our files.

Very truly yours,

PHIL R. LUCERO
COMMISSIONER OF PUBLIC LANDS

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

PRL/RDG/s
encls.
cc:

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

10/10/1944

10/10/1944



10/10/1944

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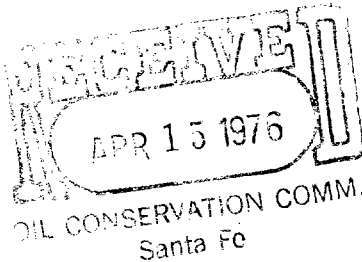
10/10/1944

10/10/1944

10/10/1944

10/10/1944

Northwest Pipeline Corporation



ONE PARK CENTRAL
SUITE 1487
DENVER, COLORADO 80202
303-623-9303

April 6, 1976

Mr. Carl C. Traywick
Acting Area Oil and Gas Supervisor
United States Geological Survey
Post Office Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Attention: Mr. Ray D. Graham
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Attention: Mr. Joe Ramey
Post Office Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Re: San Juan 32-7 Unit #14-08-001-441
San Juan County, New Mexico
SEVENTEENTH EXPANDED
PARTICIPATING AREA
Mesaverde Formation
Effective January 1, 1976

Pursuant to Section 11 (a) of the San Juan 32-7 Unit Agreement, Northwest Pipeline Corporation, as Unit Operator, determined on the date indicated below that the following wells which are capable of producing unitized substances in paying quantities from the Mesaverde formation have been completed upon a drilling block containing a portion of acreage committed to the unit and that the Participating Area for the Mesaverde should be expanded as follows:

SEVENTEENTH EXPANDED PARTICIPATING AREA -- Effective January 1, 1976

<u>Drilling Block</u>	<u>Acres</u>	<u>Well Name and No.</u>
Section 18: E/2 T-32-N, R-7-W	320.00	San Juan 32-7 #29
Section 21: E/2 T-32-N, R-7-W	320.00	San Juan 32-7 #30

Acting Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
April 6, 1976
Page 2

Pertinent well data on these wells is as follows:

The San Juan 32-7 Unit No. 30 Well is located 810 feet from the North Line and 1560 feet from the East Line, Section 21, Township 32 North, Range 7 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on November 25, 1975, and completed on December 12, 1975, in the Mesaverde Formation at a plug back depth of 5782'. The Mesaverde Formation was perforated with one hole at each of the following depths: 5254', 5304', 5360', 5436', 5442', 5482', 5488', 5502', 5508', 5514', 5582', 5588', 5594', 5600', 5606', 5612', 5632', 5638', 5650', 5656', 5662', 5668', 5674', 5686', 5700', 5706', and 5726'. These perforations were treated with 7 1/2% hydrochloric acid, followed by a sand-water fracturing. The well was shut-in December 12, 1975, for seven (7) days with a SIPT of 1058 psig and a SIPC of 1108 psig. On December 19, 1975, the well was tested and after flowing for three (3) hours through a 3/4 inch variable choke on the 2 3/8 inch tubing, the well gauged 2476 MCFD with a calculated AOF of 2805 MCFD.

The San Juan 32-7 Unit No. 29 Well is located 620 feet from the East Line and 720 feet from the North Line, Section 18, Township 32 North, Range 7 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on November 8, 1975, and completed on November 25, 1975, in the Mesaverde Formation at a plug back depth of 5689'. The Mesaverde Formation was perforated with one hole at each of the following depths: 5166', 5174', 5178', 5230', 5236', 5242', 5248', 5284', 5292', 5304', 5376', 5386', 5446', 5452', 5458', 5472', 5476', 5480', 5484', 5488', 5496', 5514', 5534', 5540', 5560', 5566', and 5590'. These perforations were treated with 7 1/2% hydrochloric acid, followed by a sand-water fracturing. The well was shut in November 25, 1975, for seven (7) days with a SIPT of 1185 psig and a SIPC of 1184 psig. On December 2, 1975, the well was tested and after flowing for three (3) hours through a 3/4 inch variable choke on the 2 3/8 inch tubing, the well gauged 2879 MCFD with a calculated AOF of 3574 MCFD.

Acting Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
April 6, 1976
Page 3

The completion of the San Juan 32-7 Unit No. 30 Well, located in the E/2 of Section 21, Township 32 North, Range 7 West, created two intervening drilling blocks; namely the W/2 of Section 22, Township 32 North, Range 7 West, and the W/2 of Section 21 (excluding the W/2 NW/4 which is automatically eliminated from the unit), Township 32 North, Range 7 West.

Attached are Schedule XIX and ownership map showing the Seventeenth Expanded Participating Area for the Mesaverde Formation of the San Juan 32-7 Unit Area. This Schedule describes the Expanded Participating Area and shows the percentage of unitized substances allocated to each tract. Inasmuch as this needs no official approval, no provision is made therefor; and in the absence of disapproval, the subject expansion will become effective January 1, 1976.

Copies of this letter, Schedule, and map are being sent to the Working Interest Owners shown on the attached sheet.

Very truly yours,


John W. Shepardson
Land Manager

BRB:cak
Attachments

SAN JUAN 32-7 UNIT

Working Interest Owners

J. Glenn Turner, Jr., Independent
Co-Executor of Estate of J. Glenn Turner,
Deceased
1700 Mercantile Bank Building
Dallas, TX 75206

General American Oil Company of Texas
Attention: Mr. L. E. Dooley
Meadows Building
Dallas, TX 75206

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

Phillips Petroleum Company
Attention: N. N. Beckner
1000 Security Life Building
Denver, CO 80202

Mrs. Iris Gerber Damson
25 Mamaroneck Road
Scarsdale, NY 10583

Amoco Production Company
Attention: Mr. T. M. Curtis
1000 Security Life Building
Denver, CO 80202

Mr. Edward Gerber
P. O. Box 234, Gracie Station
New York, NY 10028

UNIT AREA EXPANSION SCHEDULE

SCHEDULE XIX

SEVENTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
SAN JUAN 32-7 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTU- PARTICIPATI
			OWNERSHIP	PERCENTAGE		
<u>TRACT 1</u>						
SF 078459	T-32-N, R-7-W Sec. 22: All	640.00	Royalty; Working Interest: Northwest Pipeline Corp.; ORRI;	12.50% 82.50% 5.00% <u>100.00%</u>	12.50% 82.50% 5.00% <u>100.00%</u>	7.678805%
<u>TRACT 2</u>						
SF 078460	T-32-N, R-7-W Sec. 7: Lots 4, 5, 6 & SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 8: SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec.17: All Sec.20: N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$, SE $\frac{1}{4}$ Sec.21: SE $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$	1573.10	Royalty; Working Interest: Northwest Pipeline Corp.; ORRI;	12.50% 82.50% 5.00% <u>100.00%</u>	12.50% 82.50% 5.00% <u>100.00%</u>	18.874264%
<u>TRACT 3</u>						
SF 078472	T-32-N, R-7-W Sec.23: SW $\frac{1}{4}$ Sec.27: NW $\frac{1}{4}$ Sec.28: NE $\frac{1}{4}$ Sec.29: NE $\frac{1}{4}$ NW $\frac{1}{4}$ & SE $\frac{1}{4}$ SW $\frac{1}{4}$	560.00	Royalty; Working Interest: Northwest Pipeline Corp.; ORRI;	12.50% 82.50% 5.00% <u>100.00%</u>	12.50% 82.50% 5.00% <u>100.00%</u>	6.718955%
<u>TRACT 5</u>						
SF 078542	T-32-N, R-7-W Sec.28: SE $\frac{1}{4}$ Sec.35: S $\frac{1}{2}$	480.00	Royalty; Working Interest: Northwest Pipeline Corp.; ORRI;	12.50% 80.00% 7.50% <u>100.00%</u>	12.50% 80.00% 7.50% <u>100.00%</u>	5.759104%

Effective January 1, 1976

UNIT AREA EXPANSION SCHEDULE

SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 078543	T-32-N, R-7-W Sec. 27: SW $\frac{1}{4}$ Sec. 35: N $\frac{1}{2}$	480.00	<u>TRACT 6</u>			
			Royalty;	12.50%	12.50%	5.759104%
			Working Interest:			
			Northwest Pipeline Corp.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	
SF 078669	T-32-N, R-7-W Sec. 21: W $\frac{1}{2}$ NW $\frac{1}{4}$	80.00	<u>TRACT 7</u>			
			Royalty;	12.50%	0.00%	0.000000%
			Working Interest:			
			Aztec Oil & Gas;	87.50%	0.00%	
			ORRI;	0.00%	0.00%	
			TOTAL	100.00%	0.00%	
SF 078996	T-31-N, R-7-W Sec. 4: Lots 6,7,8 & SW $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 5: Lots 5,6,7,8 & SE $\frac{1}{4}$ & E $\frac{1}{2}$ SW $\frac{1}{4}$ Sec. 8: E $\frac{1}{2}$	964.81	<u>TRACT 10</u>			
			Royalty;	12.50%	12.50%	11.575920%
			Working Interest:			
			Northwest Pipeline Corp.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	
SF 078998	T-31-N, R-7-W Sec. 17: All	640.00	<u>TRACT 11</u>			
			Royalty;	12.50%	12.50%	7.678805%
			Working Interest:			
			Northwest Pipeline Corp.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	

Effective January 1, 1976

SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
NM 05540	T-32-N, R-7-W Sec. 9: SW $\frac{1}{4}$ SW $\frac{1}{4}$	40.00	<u>TRACT 15</u>			
			Royalty;	12.50%	12.50%	0.479925%
			Working Interest:			
			Northwest Pipeline Corp.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	
E-178-4	T-32-N, R-7-W Sec. 16: W $\frac{1}{2}$ W $\frac{1}{2}$	160.00	<u>TRACT 16</u>			
			Royalty;	12.50%	12.50%	1.919701%
			Working Interest:			
			N.B. & B.R. Gerber;	87.50%	87.50%	
			ORRI;	0.00%	0.00%	
			TOTAL	100.00%	100.00%	
E-503-3	T-32-N, R-7-W Sec. 16: E $\frac{1}{2}$ W $\frac{1}{2}$	160.00	<u>TRACT 17</u>			
			Royalty;	12.500%	12.500%	1.919701%
			Working Interest:			
			El Paso Natural Gas Co.;	65.625%	65.625%	
			ORRI;	21.875%	21.875%	
			TOTAL	100.000%	100.000%	
E-503-12	T-32-N, R-7-W Sec. 32: E $\frac{1}{2}$ W $\frac{1}{2}$ Sec. 36: All	800.00	<u>TRACT 17-A</u>			
			Royalty;	12.50%	12.50%	9.598506%
			Working Interest:			
			Northwest Pipeline Corp.;	82.50%	82.50%	
			ORRI;	5.00%	5.00%	
			TOTAL	100.00%	100.00%	

SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTU PARTICIPATI
			OWNERSHIP	PERCENTAGE		
Fee	T-32-N, R-7-W	732.58				
	Sec. 7: Lots 1,2,3, SE $\frac{1}{4}$ & NE $\frac{1}{4}$ SW $\frac{1}{4}$		Royalty; Working Interest:	12.50%	12.50%	8.789592%
	Sec. 8: Lots 1,2,3, E $\frac{1}{2}$ SW $\frac{1}{4}$ & W $\frac{1}{2}$ SE $\frac{1}{4}$ & NE $\frac{1}{4}$ SE $\frac{1}{4}$		Northwest Pipeline Corp.;	87.50%	87.50%	
	Sec. 9: Lot 4 & NW $\frac{1}{4}$ SW $\frac{1}{4}$		ORRI;	0.00%	0.00%	
	Sec.18: 13.36 acre tract in NE $\frac{1}{4}$ NE $\frac{1}{4}$		TOTAL	100.00%	100.00%	
	Sec.21: W $\frac{1}{2}$ NE $\frac{1}{4}$ & E $\frac{1}{2}$ NW $\frac{1}{4}$					
	TRACT 21					
Fee	T-32-N, R-7-W	1.00				
	Sec. 7: 1 acre out of SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$		Royalty; Working Interest:	12.50%	12.50%	0.011998%
			Northwest Pipeline Corp.	87.50%	87.50%	
			ORRI;	0.00%	0.00%	
			TOTAL	100.00%	100.00%	
			TRACT 21-A			
Fee	T-32-N, R-7-W	603.73				
	Sec. 7: 17.09 acres out of E $\frac{1}{2}$ SE $\frac{1}{4}$		Royalty; Working Interest:	12.50%	12.50%	7.243633%
	Sec.18: W $\frac{1}{2}$ NE $\frac{1}{4}$ & SE $\frac{1}{4}$ NE $\frac{1}{4}$ & SE $\frac{1}{4}$ & 26.64 acre tract in NE $\frac{1}{4}$ NE $\frac{1}{4}$		Northwest Pipeline Corp.;	84.50%	84.50%	
	Sec.20: SW $\frac{1}{4}$ SW $\frac{1}{4}$		ORRI;	3.00%	3.00%	
	Sec.29: NW $\frac{1}{4}$ NW $\frac{1}{4}$ & S $\frac{1}{2}$ NW $\frac{1}{4}$ & N $\frac{1}{2}$ SW $\frac{1}{4}$ & SW $\frac{1}{4}$ SW $\frac{1}{4}$		TOTAL	100.00%	100.00%	

SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTU PARTICIPATI
			OWNERSHIP	PERCENTAGE		
Fee	T-32-N, R-7-W Sec. 20: E $\frac{1}{2}$ SE $\frac{1}{4}$ Sec. 21: SW $\frac{1}{4}$	240.00	<u>TRACT 23</u>			
			Royalty;	12.50%	12.50%	2.879552%
			Working Interest;			
			Northwest Pipeline Corp.;	87.50%	87.50%	
			ORRI;	0.00%	0.00%	
			TOTAL	100.00%	100.00%	
Fee	T-32-N, R-7-W Sec. 32: W $\frac{1}{2}$ W $\frac{1}{2}$	160.00	<u>TRACT 24</u>			
			Royalty;	12.50%	12.50%	1.919701%
			Working Interest;			
			Northwest Pipeline Corp.;	87.50%	87.50%	
			ORRI;	0.00%	0.00%	
			TOTAL	100.00%	100.00%	
Fee	T-32-N, R-7-W Sec. 8: Lot 4, W $\frac{1}{2}$ SW $\frac{1}{4}$	99.41	<u>TRACT 25</u>			
			Royalty;	12.50%	12.50%	1.192734%
			Working Interest;			
			Northwest Pipeline Corp.;	87.50%	87.50%	
			ORRI;	0.00%	0.00%	
			TOTAL	100.00%	100.00%	

SCHEDULE XIX

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTU PARTICIPATI
			OWNERSHIP	PERCENTAGE		

RECAPITULATION

Township 31 North, Range 7 West, N.M.P.M.
Section 4: Lots 6, 7, 8, SW $\frac{1}{4}$ & NW $\frac{1}{4}$ SE $\frac{1}{4}$
Section 5: Lots 5, 6, 7, 8, SE $\frac{1}{4}$ & E $\frac{1}{2}$ SW $\frac{1}{4}$
Section 8: E $\frac{1}{2}$
Section 17: All

Township 32 North, Range 7 West, N.M.P.M.
Section 7: (Frac.) All
Section 8: (Frac.) All
Section 9: (Frac.) W $\frac{1}{2}$ W $\frac{1}{2}$
Sections 17, 20, 21, 22, 35, 36: All
Sections 16, 27, 29, 32: W $\frac{1}{2}$
Section 23: SW $\frac{1}{4}$
Sections 18, 28: E $\frac{1}{2}$

Total Number of Acres in Participating Area: 8,414.63
Total Number of Acres Committed to Participating Area: 8,334.63
Total Number of Acres Not Committed to Participating Area: 80.00

Effective January 1, 1976