



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR

July 21, 1982

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

Northwest Pipeline Corp.  
P. O. Box 5800  
Terminal Annex  
Denver, Colorado 80217

420

Attention: Kathy Michael

Re: San Juan 32-7 Unit  
#14-08-001-441, San Juan  
County, New Mexico  
Notice of Completion of  
Non-Commercial Wells in  
the Dakota Formation

Dear Ms. Michael:

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

Sincerely,

W. PERRY PEARCE  
General Counsel

WPP/dr

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

NORTHWEST PIPELINE CORPORATION

1125 Seventeenth Street, Suite 2100  
(303) 620-3500

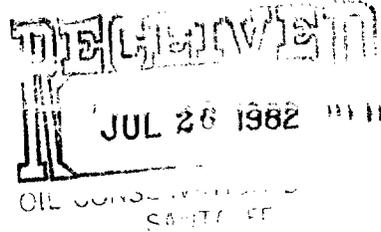
Mailing Address  
P.O. Box 5800, Terminal Annex  
Denver, Colorado 80217

July 21, 1982

Assistant Area Oil & Gas Supervisor  
United States Geological Survey  
Western National Bank Building  
505 Marquette NW, Suite 815  
Albuquerque, New Mexico 87102

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

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



420

Re: San Juan 32-7 Unit #14-08-001-441  
San Juan County, New Mexico  
NOTICE OF COMPLETION OF NON-COMMERCIAL  
WELLS IN THE DAKOTA FORMATION

Gentlemen:

Pursuant to the provisions of Section 11(a) of the San Juan 32-7 Unit Agreement, Northwest Pipeline Corporation, as Unit Operator, has determined that the following described well is not capable of producing unitized substances in paying quantities from the Dakota Formation:

The San Juan 32-7 Unit #67 Well is located 1710 feet from the South Line and 910 feet from the West Line, Section 36, Township 32 North, Range 7 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on January 23, 1981 and completed on May 26, 1981. The Dakota Formation was perforated with eleven holes between the following depths:

8216' and 8276'

These perforations were sand/water fractured. The well was shut-in with a SIP of 2576 psig. On May 26, 1981 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 594 MCFD with a calculated AOF of 598.

United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission  
Page 2  
July 21, 1982

If these determinations meet with your approval, please so indicate such approval in the space provided and return an approved copy hereof for our files. Copies of this letter are being sent to the working interest owners shown on the attached sheet.

Very truly yours,



Kathy Michael  
Supervisor/Land Department

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

SAN JUAN 32-7 UNIT  
WORKING INTEREST OWNERS

Mr. J. Glenn Turner, Jr.  
1700 Mercantile National Bank Bldg.  
Dallas, TX 75201

Mr. Fred E. Turner  
One Energy Square, Suite 852  
4925 Greenville Avenue  
Dallas, Texas 75206

Elizabeth T. Calloway  
4801 St. Johns Drive  
Dallas, Texas 75205

Mr. John L. Turner  
800 Diamond Shamrock Tower  
Dallas, Texas 75201

Mercantile National Bank  
at Dallas, Trustee  
Mary Frances Turner, Jr.  
Personal Trust Department  
Post Office Box 225415  
Dallas, Texas 75265

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  
P. O. Box 1492  
El Paso, Texas 79978

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

Amoco Production Company  
Attention: Mr. A. M. Roney  
1670 Broadway, Suite 750  
Amoco Building  
Denver, Colorado 80202

Phillips Petroleum Company  
Attention: M. K. Study  
Woodside II  
7800 East Dorado Place  
Englewood, CO 80111



IN REPLY  
REFER TO

United States Department of the Interior

MINERALS MANAGEMENT SERVICE  
SOUTH CENTRAL REGION  
505 MARQUETTE AVENUE, N.W., SUITE 815  
ALBUQUERQUE, NEW MEXICO 87102

7775  
JUL 19 1982

JUL 16 1982

Northwest Pipeline Corporation  
Attention: Kathy Michael  
P. O. Box 5800, Terminal Annex  
Denver, Colorado 80217

420

Gentlemen:

Enclosed is a copy of the fifth revision to the Pictured Cliffs participating area, San Juan 32-7 Unit, San Juan County, New Mexico. The fifth revision is hereby accepted for record on this date and is effective as of June 1, 1980.

Sincerely yours,

(ORIG. SGD.) JAMES

Gene F. Daniel  
Deputy Minerals Manager  
Oil and Gas

Enclosure

cc:  
Comm. of Public Lands  
NMOCD

NORTHWEST PIPELINE CORPORATION

1125 Seventeenth Street, Suite 2100  
(303) 620-3500

JUN 25 1982

June 22, 1982

Mailing Address  
P.O. Box 5800, Terminal Annex  
Denver, Colorado 80217

Assistant Area Oil and Gas Supervisor  
United States Geological Survey  
Western National Bank Building  
505 Marquette NW, Suite 815  
Albuquerque, New Mexico 87102

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

State of New Mexico  
Oil Conservation Commission  
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  
NOTICE OF COMPLETION OF ADDITIONAL WELL  
PICTURED CLIFFS FORMATION

Gentlemen:

Pursuant to Section 11(a) of the San Juan 32-7 Unit Agreement, Northwest Pipeline Corporation, as Unit Operator, has determined that an additional well capable of producing unitized substances in paying quantities from the Mesaverde Formation has been completed upon acreage committed to this unit.

The well data is as follows:

- The San Juan 32-7 Unit #72 Well is located 1480 feet from the North Line and 880 feet from the East Line, Section 33, Township 32 North, Range 7 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on November 24, 1980 and completed on April 2, 1981 in the Pictured Cliffs formation at a plug back depth of 3694'. The Pictured Cliffs Formation was perforated with eleven holes from 3866' to 3947'.

These perforations were treated with 500 gallons of 7 1/2% HCL followed by a sand water fracturing. The well was shut-in March 24, 1981 for nine (9) days with a SIPC of 1491 psig. On April 2, 1981 the well was tested and after flowing for three (3) hours through a 3/4 inch variable choke on the 2 7/8 inch casing (tubing less completion) the well gauged 8470 MCFD with a calculated AOF of 12,568 MCFD.

The committed drilling block upon which this well is located is described as the N/2 of Section 33, T32N-R7W, San Juan County, New Mexico containing 320.00 acres.

This drilling block was included in the San Juan 32-7 Unit Fifth Expanded Participating Area effective June 1, 1980, as an Intervening Drilling Block.

Since this well was drilled within the existing Pictured Cliffs Participating Area, the Participating Area is not enlarged by virtue of this intervening drilling block well, and the percentage of participation remains the same.

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

Very truly yours,



Kathy Michael  
Supervisor, Land Department

KM:bs

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

# State of New Mexico



## Commissioner of Public Lands

ALEX J. ARMIJO  
COMMISSIONER

June 11, 1982

P. O. BOX 1148  
SANTA FE, NEW MEXICO 87501x  
87504-1148

Northwest Pipeline Corporation  
P. O. Box 5800, Terminal Annex  
Denver, Colorado 80217

Re: San Juan 32-7 Unit  
1982 Drilling Program  
San Juan County, New Mexico

ATTENTION: Kathy Michael

Gentlemen:

The Commissioner Of Public Lands Has this date approved your 1982 Drilling Program for the San Juan 32-7 Unit Agreement, San Juan County, New Mexico. Such program proposes to drill one Pictured Cliffs/ Mesaverde dual completion and one each Pictured Cliffs and Mesaverde single completions. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the United States Minerals Management Service.

Enclosed is one approved copy for your files.

Your filing fee in the amount of Three (\$3.00) Dollars has been received.

Very truly yours,

ALEX J. ARMIJO  
COMMISSIONER OF PUBLIC LANDS

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

AJA/FOP/pm  
encls.

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

427



United States Department of the Interior

OFFICE OF THE SECRETARY

Minerals Management Service  
South Central Region

505 Marquette Avenue, N.W., Suite 815  
Albuquerque, New Mexico 87102

10-832

Northwest Pipeline Corporation  
Attention: Kathy Michael  
P. O. Box 5800, Terminal Annex  
Denver, Colorado 80217

420

Gentlemen:

An approved copy of your 1982 plan of development for the San Juan 32-7 unit area, San Juan County, New Mexico, is enclosed. Such plan, proposing to drill one Pictured Cliffs/Mesaverde dual completion and one each Pictured Cliffs and Mesaverde single completions, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

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

Sincerely yours,

Gene F. Daniel  
Deputy Minerals Manager  
Oil and Gas

Enclosure

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



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

April 19, 1982

BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

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

Northwest Pipeline Corp.  
P. O. Box 5800, Terminal Annex  
Denver, Colorado 80217

420

Attention: Kathy Michael

Re: 1982 Plan of Development for  
San Juan 32-7 Unit, San Juan  
County, New Mexico

Dear Ms. Michael:

The New Mexico Oil Conservation Division has this date approved your 1982 Plan of Development for the San Juan 32-7 Unit, San Juan County, New Mexico. Our approval is subject to like approval by the Minerals Management Service and the Commissioner of Public Lands of the State of New Mexico.

Sincerely,

W. PERRY PEARCE  
General Counsel

WPP/dr

cc: Minerals Management Service - Albuquerque  
Commissioner of Public Lands

NORTHWEST PIPELINE CORPORATION

1125 Seventeenth Street, Suite 2100  
(303) 620-3500

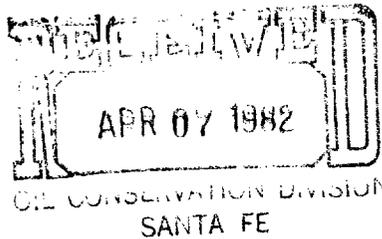
March 29, 1982

Mailing Address  
P.O. Box 5800, Terminal Annex  
Denver, Colorado 80217

Assistant Area Oil  
and Gas Supervisor  
United States Geological Survey  
Western National Bank Building  
505 Marquette NW, Suite 815  
Albuquerque, New Mexico 87102

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

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



Gentlemen:

Re: San Juan 32-7 Unit  
No. 14-08-001-441  
San Juan County, NM  
1982 Drilling Program

By letter dated March 4, 1981, Northwest Pipeline Corporation, as Unit Operator, filed a Drilling Program for the captioned unit providing for the drilling of one (1) Mesaverde Well, two (2) Dakota Wells, and four (4) Mesaverde/Pictured Cliffs Wells. On August 26, 1981, Northwest Pipeline Corporation filed a Supplemental Drilling Program providing for the drilling of one (1) Mesaverde Well. All wells were timely drilled except the Dakota wells, which were dropped from the program.

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
Dual Fruitland-Pictured Cliffs, commercial	1
Pictured Cliffs, commercial	6
Pictured Cliffs, commerciality undetermined	5
Pictured Cliffs, plugged and abandoned	1
Pictured Cliffs-Mesaverde commerciality undetermined	4
Mesaverde, commercial	26
Mesaverde, commerciality undetermined	3

Regulatory Agencies  
March 29, 1982  
Page Two

San Juan 32-7 Unit  
1982 Drilling Program

Mesaverde, plugged and abandoned	2
Dual Mesaverde-Dakota:	
Commercial	1
Plugged back to Mesaverde	1
Noncommercial in Dakota	2
Dakota, commercial	4
Dakota, commerciality undetermined	12
Dakota, noncommercial	<u>2</u>
	72

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 additional wells during the calendar year 1982:

<u>Well Number</u>	<u>Location</u>	<u>Formation</u>
#46	E/2 Sec. 34-32N-7W	PC/MV
#80	W/2 SW/4 Sec. 3-31N-7W	
	Lots 5, 6, 7 & 8	PC
#81	E/2 Sec. 33-32N-7W	MV

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,



Kathy Michael  
Associate Landman

KM:bjt

Enclosure

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 *M. J. [Signature]* DATE 9/9/82  
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, No.  
14-08-001-441, Rio Arriba County, New Mexico, 1982 Drilling Program.

SAN JUAN 32-7 UNIT

WORKING INTEREST OWNERS

Mr. J. Glenn Turner, Jr.  
1700 Mercantile National Bank Building  
Dallas, Texas 75201

Mr. Fred E. Turner  
One Energy Square, Suite 852  
4925 Greenville Avenue  
Dallas, Texas 75206

Elizabeth T. Calloway  
4801 St. Johns Drive  
Dallas, Texas 75205

Mr. John L. Turner  
800 Diamond Shamrock Tower  
Dallas, Texas 75201

Mercantile National Bank  
at Dallas, Trustee,  
Mary Frances Turner, Jr.  
Personal Trust Department  
Post Office Box 225415  
Dallas, TX 75265  
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  
P. O. Box 1492  
El Paso, Texas 79978

Phillips Petroleum Company  
Attention: Paul Wieman  
7800 East Dorado Place  
Englewood, Colorado 80111

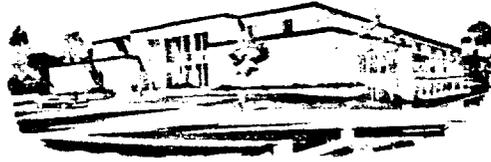
Mrs. Iris Gerber Damson  
25 Mamaroneck Road  
Scarsdale, New York 10583

Amoco Production Company  
Attention: Mr. A. M. Roney  
1670 Broadway, Suite 750  
Amoco Building  
Denver, Colorado 80202

Phillips Petroleum Company  
Attention: Mr. Gordon Buckman  
7800 East Dorado Place  
Englewood, Colorado 80111

Phillips Petroleum Company  
Attention: M. K. Study  
Woodside II  
7800 East Dorado Place  
Englewood, Colorado 80111

# State of New Mexico



## Commissioner of Public Lands

ALEX J. ARMIJO  
COMMISSIONER

January 8, 1982

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

Northwest Pipeline Corporation  
P. O. Box 5800, Terminal Annex  
Denver, Colorado 80217

Re: San Juan 32-7  
San Juan County, New Mexico  
FIFTH EXPANDED PARTICIPATING AREA  
PICTURED CLIFFS FORMATION  
Effective June 1, 1980

ATTENTION: Ms. Kathy Michael

Gentlemen:

We are in receipt of three copies each of the Fifth Expanded Participating Area, Pictured Cliffs Formation, for the San Juan 32-7 Unit, San Juan County, New Mexico.

Since this needs no official approval, we have this date filed one copy in our unit file. Enclosed is one copy for your files reflecting the date it was received in this office.

Very truly yours,

ALEX J. ARMIJO  
COMMISSIONER OF PUBLIC LANDS

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

AJA/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
USGS-Albuquerque, New Mexico

NORTHWEST PIPELINE CORPORATION

1125 Seventeenth Street, Suite 2100  
(303) 620-3500

December 24, 1981

Mailing Address  
P.O. Box 5800, Terminal Annex  
Denver, Colorado 80217

Mr. Joe Lara  
Assistant Area Oil  
and Gas Supervisor  
United States Geological Survey  
Western National Bank Building  
505 Marquette NW, Suite 815  
Albuquerque, New Mexico 87102

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

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

420

Re: San Juan 32-7 Unit  
No. 14-08-001-441  
San Juan County, New Mexico  
FIFTH EXPANDED PARTICIPATING AREA  
PICTURED CLIFFS FORMATION  
Effective June 1, 1980

Gentlemen:

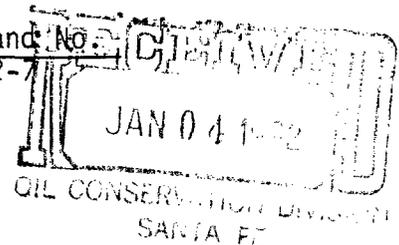
Pursuant to Section 11(a) of the San Juan 32-7 Unit Agreement NORTHWEST PIPELINE CORPORATION, as Unit Operator, determined on the dates indicated below that wells capable of producing unitized substances in paying quantities from the Pictured Cliffs formation were completed on acreage committed to this Unit and that the Participating Area for the Pictured Cliffs formation should be expanded as follows:

FIFTH EXPANDED PARTICIPATING AREA - Effective June 1, 1980

Drilling Block  
T32N-R7W  
Section 34: W/2

Acres  
320.00

Well Name and No.  
San Juan 32-7  
Unit #51



T32N-R7W Section 32: E/2	320.00	San Juan 32-7 Unit #53
T32N-R7W Section 33: N/2	320.00	Intervening Drilling Block
T31N-R7W Section 3: Lots 5, 6, 7, 8, W/2 SW/4	175.76	Intervening Drilling Block

The pertinent data is as follows:

The San Juan 32-7 Unit #51 Well is located 820 feet from the South Line and 980 feet from the West line, Section 34, Township 32 North, Range 7 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on March 20, 1980, and completed on May 27, 1980, in the Pictured Cliffs Formation at a plug back depth of 3848'. The Pictured Cliffs Formation was perforated with one hole at each of the following depths:

.3540', 3544', 3548', 3552', 3566', 3570',  
3574', 3664', 3676', 3684', 3692', 3700',  
3722', 3726', and 3720'

These perforations were treated with 750 gallons of 7 1/2% HCL followed by a sand-water fracturing. The well was shut-in May 14, 1980, for 13 days with a SIPC of 1438 psig. On May 27, 1980, the well was tested and after flowing for three (3) hours through a 3/4 inch variable choke on the 2-7/8 inch casing (this is a tubingless completion), the well gauged 7642 MCFD with a calculated AOF of 10543 MCFD.

The San Juan 32-7 Unit #52 Well is located 800 feet from the South line and 920 feet from the East line, Section 32, Township 32 North, Range 7 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on March 29, 1980, and completed on May 30, 1980, in the Pictured Cliffs formation at a plug back depth of 3730'. The Pictured Cliffs formation was perforated with one hole at each of the following depths:

3420', 3421', 3422', 3423', 3424', 3425', 3426',  
3427', 3428', 3429', 3430', 3431', and 3432'.

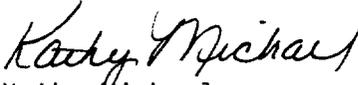
Regulatory Agencies  
Page Three  
December 24, 1981

These perforations were treated with 500 gallons of 7-1/2% HCL followed by a sand-water fracturing. The well was shut-in May 20, 1980, for 10 days with a SIPC of 1426 psig. On May 30, 1980, the well was tested and after flowing for three (3) hours through a 3/4 inch variable choke on the 2-7/8 inch casing (this is a tubingless completion), the well gauged 1932 MCFD with a calculated AOF of 1968 MCFD.

Attached is Schedule VI and ownership maps showing the Fifth Expanded Participating Area for the Pictured Cliffs formation of the San Juan 32-7 Unit. The Schedule describes the Fifth 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 captioned Fifth Expanded Participating Area will become effective as set forth herein.

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

Very truly yours,

  
Kathy Michael  
Associate Landman

KM:bt  
Attachments

cc: Working Interest Owners

SAN JUAN 32-7 UNIT WORKING INTEREST OWNERS

Mr. J. Glenn Turner, Jr.  
1700 Mercantile Nat'l Bank Bldg.  
Dallas, Texas 75201

Mr. Fred E. Turner  
One Energy Square, Suite 852  
4925 Greenville Avenue  
Dallas, TX 75206

Elizabeth T. Calloway  
4801 St. Johns Drive  
Dallas, TX 75201

Mercantile National Bank  
at Dallas, Trustee  
Mary Frances Turner, Jr.  
Personal Trust Department  
Post Office Box 225415  
Dallas, TX 75265

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

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

Phillips Petroleum Company  
Attention: Paul Wieman  
7800 East Dorado Place  
Englewood, CO 80111

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

Amoco Production Company  
Attention: Mr. A. M. Roney  
1670 Broadway, Suite 750  
Amoco Building  
Denver, CO 80202

Phillips Petroleum Company  
Attention: Mr. Gordon Buckman  
7800 East Dorado Place  
Englewood, CO 80111

SCHEDULE VI.

FIFTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
SAN JUAN 32-7 UNIT

USA SF-078542

T-32-N, R-7-W  
Sec. 34: N/2  
Sec. 35: S/2

640.00

Royalty;  
Working Interest:  
Northwest Pipeline Corp.;  
Gen. Am. Oil of Texas;  
ORRI;

12.500%  
61.875%  
20.625%  
5.000%  
100.000%

12.500%  
61.875%  
20.625%  
5.000%  
100.000%

28.371813

TRACT 5

USA SF-078543

T-32-N, R-7-W  
Sec. 35: N/2  
Sec. 33: N/2

640.00

Royalty;  
Working Interest:  
Northwest Pipeline Corp.  
ORRI;

12.500%  
82.500%  
5.000%  
100.000%

12.500%  
82.500%  
5.000%  
100.000%

28.371813

TRACT 6

USA SF-078996

T-31-N, R-7-W  
Sec. 3: Lots 5,  
6, 7, 8, N/2 SE/4,  
W/2 SW/4

255.76

Royalty;  
Working Interest:  
Northwest Pipeline Corp.;  
ORRI;

12.500%  
82.500%  
5.000%  
100.000%

12.500%  
82.500%  
5.000%  
100.000%

11.338086

TRACT 10

SCHEDULE VI.  
 FIFTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
 SAN JUAN 32-7 UNIT

USA SF-078998

T-32-N, R-7-W 400.00  
 Sec. 33: E/2SE/4  
 Sec. 34: S/2

Royalty;  
 Working Interest:  
 Northwest Pipeline Corp.  
 ORRI;

12.500%  
 82.500%  
 5.000%  
100.000%

12.500%  
 82.500%  
 5.000%  
100.000%

17.732383

TRACT 11

State of NM  
 E-503-9

T-32-N, R-7-W 320.00  
 Sec. 32: E/2

Royalty;  
 Working Interest:  
 Northwest Pipeline Corp.;  
 ORRI;

12.500%  
 82.500%  
 5.000%  
100.000%

12.500%  
 82.500%  
 5.000%  
100.000%

14.185905

TRACT 17-A

Fee  
T-31-N, R-7-W 160.00  
 Sec. 3: E/2SW/4,  
 S/2SE/4

Royalty;  
 Working Interest:  
 Palmer Oil and Gas  
 ORRI;

20.000%  
 80.000%  
 0.000%  
100.000%

00.000%  
 00.000%  
 0.000%  
100.000%

0.00000

TRACT 26

SCHEDULE VI.

FIFTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION  
SAN JUAN 32-7 UNIT

R E C A P I T U L A T I O N

Township 31 North, Range 7 West  
Sec. 3: Lots 5, 6, 7, 8, S/2

Township 32 North, Range 7 West  
Sec. 32: E/2  
Sec. 33: E/2SE/4, N/2  
Sec. 34: A11  
Sec. 35: A11

Total Number of Acres in Participating Area	2,415.76
Total Number of Acres Committed in Participating Area	2,255.76
Total Number of Acres Not Committed to Participating Area	160.00