

State of New Mexico



#417

JIM BACA
COMMISSIONER

Commissioner of Public Lands

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

September 30, 1986

Northwest Pipeline Corporation
ATTENTION: Mr. Darrell L. Gillen
P. O. Box 8900
Salt Lake City, Utah 84108

Re: San Juan 30-5 Unit
Notice of Completion of
Non-Commercial wells
Rio Arriba County, New Mexico

Gentlemen:

This office is in receipt of your letter of July 7, 1986, wherein Northwest Pipeline Corporation as unit operator of the San Juan 30-5 Unit, has determined that the Unit Well Nos. 96 and 100 are not capable of producing unitized substances in paying quantities from the Dakota Formation.

The Commissioner of Public Lands concurs with your determination and has this date approved your Notice of Completion of Non-Commercial Wells for the Dakota Formation. Our approval is subject to like approval by the Bureau of Land Management.

Very truly yours,

JIM BACA
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd O. Prando*
FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

JB: FOP/PM
encls.

cc: BLM-Albuquerque, New Mexico Attention: Fluids Branch
OCD-Santa Fe, New Mexico

ILLEGIBLE

NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT

627-86

P.O. BOX 8900
SALT LAKE CITY, UTAH 84108-0900
801-584-6669
801-584-7215

September 18, 1986

Assistant Area Oil and Gas Supervisor
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Floyd O. Prando
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: Mr. Richard L. Stamets
P. O. Box 2088
Santa Fe, NM 87501

Re: San Juan 30-5 Unit #14-08-001-346
Rio Arriba County, New Mexico
Notice of Completion of Non-Commercial Wells
Dakota Formation

Gentlemen:

The Notice of Completion of Non-Commercial Wells, which was filed July 7, 1986 for the San Juan 30-5 #96 and #100 wells, has been approved by the Bureau of Land Management on September 11, 1986.

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

Sincerely,

NORTHWEST PIPELINE CORPORATION

Darrell L. Gillen
Darrell L. Gillen
Land Coordinator

DLG:js

Attachments

cc: Working Interest Owners
K. J. Stracke
W. O. Curtis
K. Nielsen

SAN JUAN 30-5 (DK)
WORKING INTEREST OWNERS

Amoco Production Company
Attention: J. C. Burnside
1670 Broadway - Suite 1914
Amoco Building
Denver, CO 80202

Phillips Petroleum Company
Attention: Steve F. Beasley
8055 E. Tufts Avenue Parkway
Denver, CO 80237

Meridian Oil Production, Inc.
Land Department
P. O. Box 4289
Farmington, NM 87499-4289

Texaco Inc.
Attn: Mr. John A. Ramsey
Division Attorney
P. O. Box 2100
Denver, CO 80201

Larry H. Williams
Arapahoe Drilling Company
200 Lomas, NW - Suite 440
Albuquerque, NM 87102

Lt. Col. Langdon Dewey Harrison
Trustee for Mrs. Omega E. Quinn
7517 Tamarron Place, N.E.
Albuquerque, NM 87109



United States Department of the Interior

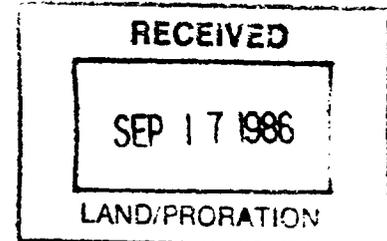
BUREAU OF LAND MANAGEMENT
ALBUQUERQUE DISTRICT OFFICE

435 Montano N.E.
Albuquerque, New Mexico 87107

IN REPLY REFER TO

SJ 30-5 Unit PA
3180 (015)

SEP 11 1986



Northwest Pipeline Corporation
ATTN: Darrell L. Gillen
P.O. Box 8900
Salt Lake City, UT 84108

Gentlemen:

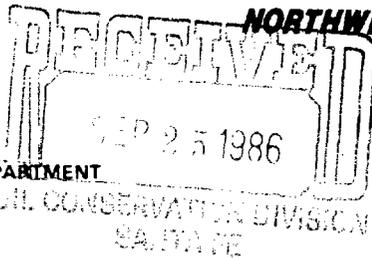
By letter dated July 7, 1986, we received a Notice of Completion of non-commercial wells, Dakota Formation, San Juan 30-5 Unit, Rio Arriba County, New Mexico. Northwest Pipeline Corporation, as unit operator, has determined that the San Juan 30-5 unit well No. 96 (located 1830 feet from the South line and 1140 feet from the west line of section 28, T. 30 N., R. 5 W.) and well No. 100 (located 1150 feet from the North line and 1150 feet from the East line of section 34, T. 30 N., R. 5 W.) are not capable of producing unitized substances in paying quantities from the Dakota Formation. This notice is hereby accepted for the record.

If you have any questions, please contact Gail Keller at the above address or telephone (505) 766-2841.

Sincerely,

For District Manager

Enclosure



NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT

627-86

P.O. BOX 8900
SALT LAKE CITY, UTAH 84108-0900
801-584-6669
801-584-7215

September 18, 1986

Assistant Area Oil and Gas Supervisor
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Floyd O. Prando
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: Mr. Richard L. Stamets
P. O. Box 2088
Santa Fe, NM 87501

Re: San Juan 30-5 Unit #14-08-001-346
Rio Arriba County, New Mexico
Notice of Completion of Non-Commercial Wells
Dakota Formation

Gentlemen:

The Notice of Completion of Non-Commercial Wells, which was filed August 26, 1985 for the San Juan 30-5 #85 well, has been approved by the Bureau of Land Management on December 12, 1985.

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

Sincerely,

NORTHWEST PIPELINE CORPORATION

Darrell L. Gillen
Darrell L. Gillen
Land Coordinator

DLG:js

Attachments

cc: Working Interest Owners
K. J. Stracke
W. O. Curtis
K. Nielsen

SAN JUAN 30-5 (DK)
WORKING INTEREST OWNERS

Amoco Production Company
Attention: J. C. Burnside
1670 Broadway - Suite 1914
Amoco Building
Denver, CO 80202

Phillips Petroleum Company
Attention: Steve F. Beasley
8055 E. Tufts Avenue Parkway
Denver, CO 80237

Meridian Oil Production, Inc.
Land Department
P. O. Box 4289
Farmington, NM 87499-4289

Texaco Inc.
Attn: Mr. John A. Ramsey
Division Attorney
P. O. Box 2100
Denver, CO 80201

Larry H. Williams
Arapahoe Drilling Company
200 Lomas, NW - Suite 440
Albuquerque, NM 87102

Lt. Col. Langdon Dewey Harrison
Trustee for Mrs. Omega E. Quinn
7517 Tamarron Place, N.E.
Albuquerque, NM 87109



United States Department of the Interior

San Juan 30-5 Unit

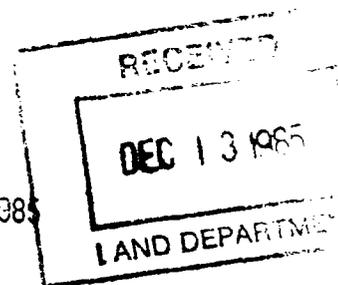
BUREAU OF LAND MANAGEMENT ALBUQUERQUE DISTRICT OFFICE

505 Marquette, N.W.

P.O. Box 6770

Albuquerque, New Mexico 87197-6770

DEC 09 1985



Northwest Pipeline Corporation
ATTN: Darrell L. Gillen
295 Chipeta Way
Salt Lake City, UT 84108

Gentlemen:

By letter dated August 26, 1985, we received a Notice of Completion of a Non-Commercial Well, Dakota Formation, San Juan 30-5 Unit, Rio Arriba County, New Mexico. Northwest Pipeline Corp., as unit operator, has determined that the San Juan 30-5 Unit Well No. 85, located 790 feet from the South line and 850 feet from the West line, section 36, T. 30 N., R. 5 W., NMPM; and Well No. 91, located 1950 feet from the South line and 835 feet from the West line of section 25, T. 30 N., R. 5 W., NMPM are not capable of producing unitized substances in paying quantities from the Dakota Formation. This notice is hereby accepted for the record.

If you have any questions, please contact Gail R. Keller at the above address or telephone (505) 766-2841.

Sincerely,

For District Manager

NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES

WESTERN NATIONAL BANK

LAND DEPARTMENT

464-86

P. O. BOX 8900
SALT LAKE CITY, UTAH 84108-0900
801-584-6669
801-584-7215

July 7, 1986

Assistant District Manager, Minerals
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Floyd O. Prando
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Division
Attn: Mr. Richard L. Stamets
P. O. Box 2088
Santa Fe, NM 87501

Re: San Juan 30-5 Unit #14-08-001-346
Rio Arriba County, New Mexico
NOTICE OF COMPLETION OF
NON-COMMERCIAL WELLS
Dakota Formation

Gentlemen:

Pursuant to the provisions of Section 11(a) of the San Juan 30-5 Unit Agreement, Northwest Pipeline, as Unit Operator, has determined that the following described wells are not capable of producing unitized substances in paying quantities from the Dakota Formation.

The well data is as follows:

The San Juan 30-5 Unit #96 well is located 1830 feet from the South line and 1140 feet from the West line of section 28, Township 30 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on January 17, 1984 and completed in the Dakota formation on February 3, 1984. The plug back depth is 8200'. The Dakota formation was perforated with a total of 24 holes at the following depths:

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Commissioner of Public Lands
Oil Conservation Commission
July 7, 1986
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8100', 8101', 8102', 8103', 8104', 8105', 8106', 8107',
8108', 8109', 8110', 8132', 8134', 8136', 8138', 8140',
8142', 8144', 8146', 8148', 8150', 8152', 8154', and 8156'.

These perforations were broken down and the formation was sand water fractured using a total of 1958 bbls of treated fluid and 42,216 lbs of 40/60 sand. On February 21, 1984 this well was tested for three hours on a positive choke. A total of 242 Mcf of gas was vented with a flowing tubing pressure of 106 psig and a casing pressure of 425 psig. Both the SITP and the SICP were 2690 psig. The resulting AOF was 1520 Mcfd.

The San Juan 30-5 Unit #100 well is located 1150 feet from the North line and 1150 feet from the East line of section 34, Township 30 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on June 20, 1984 and completed in the Dakota formation on August 29, 1984. The plug back depth is 8350'. The Dakota formation was perforated with a total of 23 holes at the following depths:

8220', 8221', 8222', 8223', 8224', 8225', 8226', 8227', 8228',
8229', 8230', 8231', 8232', 8258', 8260', 8261', 8262', 8267',
8268', 8269', 8270', and 8278'.

These perforations were broken down with 1000 gallons of 7.5% hydrochloric acid. The Dakota formation was sand water fractured using a 10,000 gallon pad of slick water followed by 30,000 lbs of 40/60 sand and 30,000 lbs of 20/40 sand. Total fluid in the formation was reported as 1751 bbls. On September 14, 1984 this well was tested for three hours using a positive choke. During the test, 199 mcf of gas were vented, which resulted in a calculated AOF of 1016 Mcfd. Both SICP and SITP were 2595 psig, while flowing tubing and casing pressures were 67 and 481 psig, respectively. It was reported that a light to medium mist was produced throughout the test.

If these determinations meet with your approval, please so indicate such approval in the space provided and return unapproved copy for our files. Copies of this letter are being sent to the Working Interest Owners shown on the attached sheet.

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Commission
July 7, 1986
Page -3-

Sincerely,

NORTHWEST PIPELINE CORPORATION


Darrell L. Gillen
Land Coordinator

DLG:js

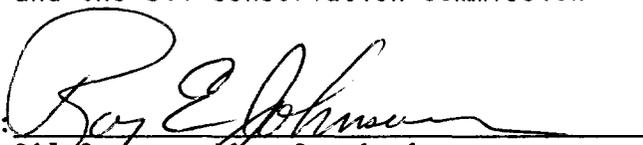
cc: Working Interest Owners
K. J. Stracke
W. O. Curtis
K. Nielsen

APPROVED: _____
Area Oil and Gas Supervisor
Bureau of Land Management
Subject to like approval by the
Commissioner of Public Lands
and the Oil Conservation Commission

DATE _____

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

DATE _____

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

DATE 7-10-86

The foregoing is for the approval of Notice of Completion of Non-Commercial
Wells S.J. 30-5 Well Nos. 96 and 100 Dakota.

SAN JUAN 30-5
WORKING INTEREST OWNERS

Amoco Production Company
Western Division, Production Manager
1670 Broadway
Amoco Building
Denver, CO 80202

Phillips Oil Company
Attention: Steve F. Beasley
8055 E. Tufts Avenue Parkway
Denver, CO 80237

Meridan Oil
Land Department
P. O. Box 4289
Farmington, NM 87499

Arapahoe Drilling Company
Larry H. Williams
200 Lomas, NW - Suite 440
P. O. Box 26687
Albuquerque, NM 87102

Lt. Col. Langdon Dewey Harrison,
Trustee for Mrs. Omega E. Quinn
7517 Tamarron Place, N.E.
Albuquerque, NM 87109

Texaco, Inc.
Mgr., Petroleum Engineering
P. O. Box 2100
Denver, CO 80201

0043t

#417

NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT

P O BOX 8900
SALT LAKE CITY UTAH 84108-0900
801-584-6669
801-584-7215

February 26, 1986

135-85
0609t

Assistant District Manager, Minerals
Bureau of Land Management
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
P. O. Box 1148
Santa Fe, New Mexico 87501

State of New Mexico
Oil Conservation Division
Attention: Mr. Richard L. Stamets
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: San Juan 30-5 Unit #14-08-001-346
Rio Arriba County, New Mexico

APPLICATION FOR APPROVAL OF THE NINTH EXPANDED PARTICIPATING AREA

Dakota Formation
Effective April 1, 1983

APPLICATION FOR APPROVAL OF THE TENTH EXPANDED PARTICIPATING AREA

Dakota Formation
Effective June 1, 1983

APPLICATION FOR APPROVAL OF THE INITIAL DAKOTA "B" PARTICIPATING AREA

Dakota Formation
Effective October 23, 1981

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 30-5 Unit
Agreement #14-08-001-346, approved November 7, 1952, NORTHWEST PIPELINE

Minerals Management Service
Commissioner of Public Lands
Oil Conservation Commission
February 26, 1986
Page 2

CORPORATION, as Unit Operator, hereby respectfully requests approval of the Ninth and Tenth Expanded and the Initial Dakota "B" Participating Areas for the Dakota Formation.

These proposed revisions of the participating area for the Dakota Formation are predicated upon the determination by Northwest Pipeline Corporation, as Unit Operator, that the following San Juan 30-5 Unit Dakota wells, which were completed outside the limits of the existing Dakota Participating Area, are capable of producing unitized substances in paying quantities from the Dakota Formation.

NINTH EXPANDED PARTICIPATING AREA - Effective April 1, 1983

<u>Description of Land</u>	<u>No. of Acres</u>
<u>Township 30 North, Range 5 West, N.M.P.M.</u> Section 6: Lots 8, 9, 10, 11, S/2N/2	319.12

The well data is as follows:

The San Juan 30-5 Unit well #80 is located 800 feet from the north line and 800 feet from the east line, Section 6, Township 30 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on January 15, 1983. The Dakota Formation was completed on March 21, 1983. The Dakota Formation was perforated with 21 holes between the following depths:

7884', 7886', 7888', 7890', 7892', 7894', 7896', 7898', 7900', 7902',
7904', 7931', 7933', 7935', 7937', 7939', 7941', 7943', 7945', 7947',
7949'.

These perforations were treated with 121,400 gallons of pad water followed by 60,000 pounds of 40/60 sand. The well was tested on April 8, 1983 using a positive choke in a three hour test. The well was tested at a 2429 Mcf/d flow rate with a calculated AOF of 2518 Mcf/d. The ISIP was measured at 2695 psig.

TENTH EXPANDED PARTICIPATING AREA - Effective June 1, 1983

<u>Description of Land</u>	<u>No. of Acres</u>
<u>Township 30 North, Range 5 West, N.M.P.M.</u> Section 26: N/2	320.00

The well data is as follows:

The San Juan 30-5 Unit well #93 is located 790 feet from the north line and 890 feet from the east line, Section 26, Township 30 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on April 19,

Minerals Management Service
Commissioner of Public Lands
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February 26, 1986
Page 3

1983. The Dakota Formation was completed on May 26, 1983. The Dakota Formation was perforated with 16 holes between the following depths:

8411', 8412', 8413', 8414', 8415', 8416', 8417', 8418', 8419', 8420',
8421', 8422', 8423', 8447', 8448', 8449'.

These perforations were treated with 156,000 gallons of pad water followed by 40,000 pounds of 40/60 sand and 32,860 pounds of 20/40 sand. This well was tested on June 28, 1983 using a positive choke in a three-hour test. A flow rate of 1065 Mcf/d was measured with a calculated AOF of 1082 Mcf/d. This ISIP was measured at 2734 psig.

INITIAL DAKOTA "B" PARTICIPATING AREA - Effective October 23, 1981

Description of Land:	<u>No. of Acres</u>
Township 30 North, Range 5 West, N.M.P.M. Section 36: Lots 1, 2, 3, 4, W/2E/2	220.76

The well data is as follows:

The San Juan 30-5 Unit well #77 is located 1640 feet from the north line and 870 feet from the east line, Section 36, Township 30 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on May 14, 1981. The Dakota Formation was completed on October 23, 1981. This formation was perforated with 17 holes between the following depths:

8618' to 8634'

These perforations were treated with 20,000 gallons of pad water followed by 40,000 pounds of 40/60 sand and 20,000 pounds of 20/40 sand in fracturing fluid. This well was initially tested on October 23, 1981 using a positive choke in a three hour test. The SITP was 2791 psig with a flowing tubing pressure of 143 psig producing at a rate of 1927 Mcf/d. The calculated AOF was 2019 Mcf/d.

In support of these applications, the following listed Exhibits are made a part thereof:

Exhibit "A"

Ownership maps reflecting the boundaries of the Unit and the Proposed Ninth and Tenth Expansions and the Initial Dakota "B" of the Participating Area of the Dakota Formation within the San Juan 30-5 Unit.

Minerals Management Service
Commissioner of Public Lands
Oil Conservation Commission
February 26, 1986
Page 4

Exhibit "B"

Geological Reports on the above cited Participating Areas of the Dakota Formation within the San Juan 30-5 Unit.

Exhibit "C"

- Figure No. 1: San Juan 30-5 Dakota Structure Map
- Figure No. 2: San Juan 30-5 Dakota Isopach Map
- Figure No. 3: San Juan 30-5 Dakota Sand Thickness Map
- Figure No. 4: San Juan 30-5 Dakota Stratigraphic Cross Section Map

Exhibit "D"

Table No. I: Schedule of San Juan 30-5 Unit Dakota Production

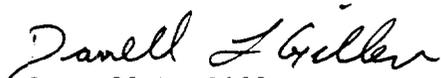
Attached are the Schedules showing the proposed cited above for the Dakota Formation in the San Juan 30-5 Unit Area. These Schedules describe the participating area, show the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in the tracts.

If these applications referenced above meet with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy for our files.

Minerals Management Service
Commissioner of Public Lands
Oil Conservation Commission
February 26, 1986
Page 5

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

Sincerely,


Darrell L. Gillan
Land Coordinator

DLG:lm:js

Attachments

cc: Working Interest Owners
K. J. Stracke
W. O. Curtis
K. Nielsen

Minerals Management Service
Commissioner of Public Lands
Oil Conservation Commission
February 26, 1986
Page 6

APPROVED _____
Assistant District Manager, Minerals
Subject to like approval by the
Commissioner of Public Lands and the
Oil Conservation Division

DATE _____

APPROVED _____
Commissioner of Public Lands
Subject to like approval by the
Assistant District Manager, Minerals
and the Oil Conservation Division

DATE _____

APPROVED _____
Oil Conservation Division
Subject to like approval by the
Assistant District Manager, Minerals
and the Commissioner of Public Lands

DATE _____

The foregoing are approvals for the NINTH AND TENTH EXPANDED PA'S and the
Initial Dakota "B" PA, Dakota Formation, in the San Juan 30-5 Unit.

SCHEDULE IX
NINTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 3</u>						
SF-078738	T-30-N, R-5-W Sec. 23: W/2	320.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	4.000440%
<u>TRACT 4</u>						
SF-078739	T-30-N, R-5-W Sec. 21: E/2, SW/4 Sec. 22: E/2	1120.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	14.001540%
SF-078739	T-30-N, R-5-W Sec. 22: W/2		Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	
<u>TRACT 5</u>						
SF-078740	T-30-N, R-5-W Sec. 20: E/2	320.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	4.000440%
<u>TRACT 6</u>						
SF-078994	T-30-N, R-5-W Sec. 15: SW/4, SW/4NW/4 Sec. 17: SW/4, S/2NW/4 Sec. 18: E/2	760.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	9.501045%

Effective April 1, 1983

SCHEDULE IX
NINTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 7</u>						
SF-078997	<u>T-30-N, R-5-W</u> Sec. 6: S/2SE/4, SE/4SW/4 Sec. 7: N/2, NW/4SW/4, N/2 SE/4, SE/4SE/4 Sec. 8: NW/4, N/2SW/4 Sec. 9: A11 Sec. 10: A11 Sec. 15: E/2, E/2NW/4, NW/4NW/4	2,560.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	32.003520%
<u>TRACT 11</u>						
SF-080066	<u>T-30-N, R-5-W</u> Sec. 5: A11 Sec. 6: Lots 8, 9, 10, 11, S/2N/2, N/2S/2, SW/4SW/4	1159.12	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	14.490594%
<u>TRACT 17</u>						
E-347-41	<u>T-30-N, R-5-W</u> Sec. 16: NE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	2.000220%
<u>TRACT 17-A</u>						
E-347-40	<u>T-30-N, R-5-W</u> Sec. 16: N/2 NW/4	80.00	Royalty Working Interest Texaco ORRI Total	12.500000% 82.750000% 4.750000% <u>100.000000%</u>	12.500000% 82.750000% 4.750000% <u>100.000000%</u>	1.000110%

SCHEDULE IX
NINTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 17-D</u>						
E-347-41	<u>T-30-N, R-5-W</u> Sec. 16: S/2 NW/4	80.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	1.000110%
<u>TRACT 17-F</u>						
E-347-39	<u>T-30-N, R-5-W</u> Sec. 16: S/2	320.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	4.000440%
<u>TRACT 18</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 8: E/2	320.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	4.000440%
<u>TRACT 19</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 7: S/2SW/4, NE/4SW/4, SW/4SE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	2.000220%

SCHEDULE IX
NINTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 20</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 17: NE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	2.000220%
<u>TRACT 21</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 17: SE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	2.000220%
<u>TRACT 22</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 21: NW/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	2.000220%
<u>TRACT 25</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 8: S/2SW/4 Sec. 17: N/2 NW/4 (less the 4 acres in NW/4NW/4)	156.00	Royalty Working Interest Amoco Production Co. Phillips Petroleum Co. ORRI Total	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	1.950215%
<u>TRACT 25-A</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 17: a tract of land 1200' long by 450' wide in NW/4NW/4	4.00	Royalty Working Interest Amoco Production Co. Phillips Petroleum Co. ORRI Total	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	0.050006%

SCHEDULE IX
NINTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

RECAPITULATION

Township 30 North, Range 5 West, N.M.P.M.

Sections 5, 6, 7, 8, 9, 10, 15, 16, 17, 21, 22: All

Sections 18, 20: E/2

Section 23: W/2

Total Number of Acres in Participating Area: 7,999.12

Total Number of Acres Committed in Participating Area: 7,999.12

SCHEDULE X
TENTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 3</u>						
SF-078738	T-30-N, R-5-W Sec. 23: W/2 Sec. 26: NE/4	640.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	7.693121%
SF-078738	T-30-N, R-5-W Sec. 26: NW/4		Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 84.000000% 3.500000% <u>100.000000%</u>	12.500000% 84.000000% 3.500000% <u>100.000000%</u>	
<u>TRACT 4</u>						
SF-078739	T-30-N, R-5-W Sec. 21: E/2, SW/4 Sec. 22: E/2	1120.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	13.462963%
SF-078739	T-30-N, R-5-W Sec. 22: W/2		Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	
<u>TRACT 5</u>						
SF-078740	T-30-N, R-5-W Sec. 20: E/2	320.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	3.846561%
<u>TRACT 6</u>						
SF-078994	T-30-N, R-5-W Sec. 15: SW/4, SW/4NW/4 Sec. 17: SW/4, S/2NW/4 Sec. 18: E/2	760.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	9.135583%

SCHEDULE X
TENTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 7</u>						
SF-078997	T-30-N, R-5-W Sec. 6: S/2SE/4, SE/4SW/4 Sec. 7: N/2, NW/4SW/4, N/2 SE/4, SE/4SE/4 Sec. 8: NW/4, N/2SW/4 Sec. 9: All Sec. 10: All Sec. 15: E/2, E/2 NW/4, NW/4NW/4	2,560.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	30.772486%
<u>TRACT 11</u>						
SF-080066	T-30-N, R-5-W Sec. 5: All Sec. 6: Lots 8, 9, 10, 11, S/2N/2, N/2S/2, SW/4SW/4	1159.12	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	13.933204%
<u>TRACT 17</u>						
E-347-41	T-30-N, R-5-W Sec. 16: NE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	1.923280%
<u>TRACT 17-A</u>						
E-347-40	T-30-N, R-5-W Sec. 16: N/2 NW/4	80.00	Royalty Working Interest Texaco ORRI Total	12.500000% 82.750000% 4.750000% <u>100.000000%</u>	12.500000% 82.750000% 4.750000% <u>100.000000%</u>	0.961640%

UNIT AREA EXPANSION SCHEDULE

SCHEDULE X
TENTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 17-D</u>						
E-347-41	<u>T-30-N, R-5-W</u> Sec. 16: S/2 NW/4	80.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	0.961640%
<u>TRACT 17-F</u>						
E-347-39	<u>T-30-N, R-5-W</u> Sec. 16: S/2	320.00	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	3.846561%
<u>TRACT 18</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 8: E/2	320.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	3.846561%
<u>TRACT 19</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 7: S/2SW/4, NE/4SW/4, SW/4SE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	1.923280%
<u>TRACT 20</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 17: NE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	1.923280%

Effective June 1, 1983

SCHEDULE X
TENTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 21</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 17: SE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	1.923280%
<u>TRACT 22</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 21: NW/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	1.923280%
<u>TRACT 25</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 8: S/2SW/4 Sec. 17: N/2 NW/4 (less the 4 acres in NW/4NW/4)	156.00	Royalty Working Interest Amoco Production Co. Phillips Petroleum Co. ORRI Total	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	1.875198%
<u>TRACT 25-A</u>						
Fee	<u>T-30-N, R-5-W</u> Sec. 17: a tract of land 1200' long by 450' wide in NW/4NW/4	4.00	Royalty Working Interest Amoco Production Co. Phillips Petroleum Co. ORRI Total	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	0.048082%

SCHEDULE X
TENTH EXPANDED PARTICIPATING AREA FOR THE DAKOTA FORMATION
SAN JUAN 30-5 UNIT AREA

RECAPITULATION

Township 30 North, Range 5 West, N.M.P.M.

Sections 5, 6, 7, 8, 9, 10, 15, 16, 17, 21, 22: All

Sections 18, 20: E/2

Section 23: W/2

Section 26: N/2

Total Number of Acres in Participating Area:	8,319.12
Total Number of Acres Committed in Participating Area:	8,319.12

UNIT AREA EXPANSION SCHEDULE

SCHEDULE
 INITIAL DAKOTA "B" PARTICIPATING AREA DAKOTA FORMATION
 SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 17-F</u>						
E-347-39	<u>T-30-N, R-5-W</u> Sec. 36: Lots 1, 2, 3, 4, W/2E/2	220.76	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	100.000000%

Effective October 23, 1981

UNIT AREA EXPANSION SCHEDULE

SCHEDULE
 INITIAL DAKOTA "B" PARTICIPATING AREA DAKOTA FORMATION
 SAN JUAN 30-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
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RECAPITULATION

Township 30 North, Range 5 West, N.M.P.M.
Section 36: E/2

Total Number of Acres in Participating Area:	220.76
Total Number of Acres Committed in Participating Area:	220.76