

EXHIBIT "B"

SAN JUAN 29-5 UNIT
Rio Arriba County, New Mexico

Geologic Report
Dakota Formation

PROPOSED EIGHTH, NINTH, TENTH & ELEVENTH EXPANSIONS
OF THE DAKOTA PARTICIPATING AREA

NORTHWEST PIPELINE CORPORATION

BY:


R. W. Keener, Director
Production Division

EXHIBIT "B"

SAN JUAN 29-5 UNIT Rio Arriba County, New Mexico

Geologic Report Dakota Formation

PROPOSED EIGHTH, NINTH, TENTH & ELEVENTH EXPANSIONS OF THE DAKOTA PARTICIPATING AREA

GENERAL INFORMATION

The San Juan 29-5 Unit is located in the east central portion of the San Juan Basin, Rio Arriba County, New Mexico. The original unit area consisted of all of Township 29 North, Range 5 West, which contains 22,521.54 acres. All or parts of Sections 1, 2, 3, 4, 10, 11, 12, 13, 14, 15, 23 and 24, totaling 5,168.62 acres have been eliminated from the unit. The present area of the San Juan 29-5 Unit is comprised of 17,352.92 acres.

Within the non-eliminated portion of Township 29 North, Range 5 West, the "Dakota Producing Interval" has been tested in twenty-seven (27) locations, resulting in three (3) plugged and abandoned wells, three (3) non-commercial wells; two of which have never produced, seventeen (17) wells are currently producing and twenty-one (21) are currently considered commercial.

Included in this report are: Drilling block data for each newly drilled well, the geological maps entitled Exhibit "C", (Figure No. 1: Structural Map, Figure No. 2: Isopachous Map), and production data for all wells as Exhibit "D". Structural contour map shows the possible subsurface structure of the "Dakota Interval" using mean sea level as the datum plane, the top of the Graneros as the mapping horizon and contour interval of 50 feet. Present structural control indicates that "Dakota Interval" to be

dipping gently to the northeast. It is believed that the stratigraphic condition controls the occurrence of hydrocarbon within the San Juan 29-5 Unit "Dakota Producing Interval".

The isopachous map is drawn with a contour interval of ten (10) feet, showing the number of feet of net reservoir sand of Dakota formation in the unit area and adjacent areas.

Exhibit "D" is the production data for all 29-5 Unit Dakota wells. This table shows by wells the Absolute Open Flow potential, date of the first delivery into the gathering system, cumulative gas production to 1/1/75, production by months for 11 months in 1975, and cumulative production to 12/1/75. Wells within the Dakota Participating Area have produced a cumulative total of 7,578,167 MCF as of 12/1/75.

PROPOSED EXPANSIONS OF THE
DAKOTA PARTICIPATING AREA

Proposed Eighth Expansion

Effective Date: April 1, 1975

Proposed Expanded Acreage: Committed acreage in the E/2
of Section 28, T29N, R5W,
Rio Arriba County, New Mexico.

Proposed Ninth Expansion

Effective Date: May 1, 1975

Proposed Expanded Acreage: Committed acreage in the E/2
of Section 21, T29N, R5W,
Rio Arriba County, New Mexico.

Proposed Tenth Expansion

Effective Date: June 1, 1975

Proposed Expanded Acreage: Committed acreage in the W/2
of Section 22, T29N, R5W,
Rio Arriba County, New Mexico.

Proposed Eleventh Expansion

Effective Date: July 1, 1975

Proposed Expanded Acreage: Committed acreage in the W/2
Section 26 and all of Section 27,
T29N, R5W, Rio Arriba County,
New Mexico.

All pertinent data is attached hereto as a part of
this report.

The proposed expansions of the Dakota Participating Area are based upon electrical log interpretation, initial well test results and ten to eleven months of actual production from the San Juan 29-5 Unit wells. From this data, it is inferred that the proposed expanded acreage is capable of producing unitized substances in commercial quantities from the Dakota formation and the committed acreage should be admitted to the participating area.

PERTINENT DATA

SAN JUAN 29-5 UNIT
WELL NO. 69

Drilling Block

T29N, R5W,
Sec 21: E/2

The San Juan 29-5 Unit No. 69 Well is located 1475' from the South Line and 790' from the East Line, Section 21, Township 29 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on 4/8/75 and completed on 4/25/75 in the Dakota Formation at a plug back total depth of 8089'. The Dakota Formation was perforated at 7992'-8084'. These perforations were treated with 7 1/2% hydrochloric acid followed by a sand-water fracturing. The well was shut-in for seven (7) days with a SIPT of 2631 psig and a SIPC of 2631 psig. On 5/2/75 the well was tested and after flowing for three (3) hours through a 3/4 inch variable choke on the 2 3/8" tubing, the well gauged 3801 MCFD with a calculated AOF of 4348 MCFD.

PERTINENT DATA

SAN JUAN 29-5 UNIT
WELL NO. 70

Drilling Block

T28N, R5W,
Section 28: E/2

The San Juan 29-5 Unit No. 70 Well is located 1760' from the North Line and 960' from the East Line, Section 28, Township 29 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on 3/19/75 and completed on 4/6/75 in the Dakota Formation at a plug back total depth of 8043. The Dakota Formation was perforated at 7912'-8008'. These perforations were treated with 7 1/2% hydrochloric acid, followed by a sand-water fracturing. The well was shut-in for seven (7) days with a SIPT of 2508 psig and a SIPC of 2501 psig. On 4/14/75 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 2941 MCFD with a calculated AOF of 3226 MCFD.

PERTINENT DATA

SAN JUAN 29-5 UNIT
WELL NO. 75

Drilling Block
T29N, R5W,
Section 22: W/2

The San Juan 29-5 Unit No. 75 Well is located 955' from the South Line and 870' from the West Line, Section 22, Township 29 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on 5/9/75 and completed on 5/24/75 in the Dakota Formation at a plug back total depth of 8060'. The Dakota Formation was perforated at 7970'-8050'. These perforations were treated with 7 1/2% hydrochloric acid, followed by a sand-water fracturing. The well was shut-in for seven (7) days with a SIPT of 2712 psig and a SIPC 2711 psig. On 6/3/75 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 4191 MCFD with a calculated AOF of 4741 MCFD.

PERTINENT DATA

SAN JUAN 29-5 UNIT
WELL NO. 77

Drilling Block

T29N, R5W,
Section 26: W/2

The San Juan 29-5 Unit No. 77 Well is located 1450' from the South Line and 1100' from the West Line, Section 26, Township 29 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on 6/15/75 and completed on 7/2/75 in the Dakota Formation at a plug back total depth of 8535'. The Dakota Formation was perforated at 8448'-8514'. These perforations were treated with 7 1/2% hydrochloric acid, followed by a sand-water fracturing. The well was shut-in for seven (7) days with a SIPT of 2017 psig and a SIPC of 2591 psig. On 7/18/75 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 3652 MCFD with a calculated AOF of 4857 MCFD.