

EXHIBIT "B"

SAN JUAN 28-5 UNIT

RIO ARriba COUNTY, NEW MEXICO

GEOLOGIC REPORT

DAKOTA PRODUCING INTERVAL

PROPOSED NINETEENTH EXPANSION

OF THE DAKOTA PARTICIPATING AREA

EL PASO NATURAL GAS COMPANY

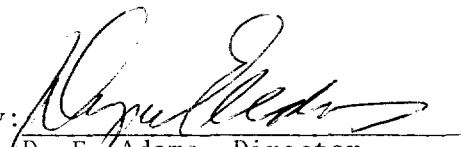
By: 
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Reservoir Engineering Dept.

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INTRODUCTION

The San Juan 28-5 Unit is located in the east central portion of the San Juan Basin and consists of all Township 28 North, Range 5 West. The unit area is comprised of 17,399.68 acres.

Within the San Juan 28-5 Unit the "Dakota Producing Interval" has been tested by 49 wells, one of which is non-commercial. The "Dakota Producing Interval" as defined by the New Mexico Oil Conservation Commission in Rule 25, Order No. R-167-C, is "...from the base of the Greenhorn limestone to a point 400 feet below the base of the said formation and consisting of the Graneros formation, the Dakota formation, and the productive upper portion of the Morrison formation."

Included as a part of this report are two maps entitled Exhibit "C". Exhibit "C", Figure No. 1 shows the subsurface structure of the "Dakota Producing Interval" as reflected by using the top of the Graneros formation as the mapping horizon and mean sea level as the datum plane. The overall picture presented by this map is primarily that of gentle, regional northeast dip toward the axis of the San Juan Basin. Exhibit "C", Figure No. 2 is an isopachous map showing the number of feet of net reservoir sandstone which is interpreted to be present within the "Dakota Producing Interval." Detailed discussions of the lithology and stratigraphy of the "Dakota Producing Interval" in the general area of the San Juan 28-5 Unit may be found in geologic reports which have been previously submitted.

Also included with this report as Exhibit "D", Table No. 1 is a tabulation of the San Juan 28-5 Unit Dakota gas production. This tabulation shows by well the absolute open flow potential, date of first delivery into the gathering system, cumulative gas production to January 1, 1978, production by months for 1978 from January through December, 1978, annual production to January 1, 1979, and cumulative production to January 1, 1979. Wells within the Dakota Participating Area have produced a cumulative total of 67,404,299 Mcf as of January 1, 1979.

PROPOSED NINETEENTH EXPANSION
OF THE DAKOTA PARTICIPATING AREA

Effective Date: January 1, 1979

The proposed Nineteenth Expansion of the Dakota Participating Area is based upon the completions of the San Juan 28-5 Unit well numbers 98 and 101 by El Paso Natural Gas Company, the Unit operator. These wells are located, respectively, 1555 feet from the north line and 790 feet from the east line, Section 24; 1470 feet from the south line and 1840 feet from the west line, Section 13, Township 28 North, Range 5 West, Rio Arriba County, New Mexico. On January 4, 1979, the San Juan Unit 28-5 No. 98 well, on after frac gauge, flowed at the rate of 253 Mcf/d. After 32 days shut-in, the pressures were measured at 2652 psia casing and at 462 psia tubing. On January 2, 1979, the San Juan 28-5 No. 101 well, on after frac gauge, flowed at the rate of 869 Mcf/D. After 10 days shut-in, the pressures were measured at 2122 psia casing and at 2074 psia tubing.

Proposed Expanded Acreage

Township 28 North, Range 5 West

Section 13: West half and
Southeast quarter

Section 24: East half

The subject wells produce from the Dakota "A" and "B" zones which are the upper and middle sandstone members of the Dakota formation. To a lesser extent, they also produce from the sandstone development within the Graneros shale. These producing sands correlate between the subject wells and other wells in the unit. The proposed expanded acreage is inferred to be capable of producing unitized substances in commercial quantities from the above mentioned sandstone. The well No. 98 was first delivered into the gathering system on July 26, 1979, and after 71 days on production had an average production rate of 271 Mcf/D. The well No. 101 was first delivered on June 1, 1979, and after 94 days on production had an average production rate of 542 Mcf/D. Utilizing stabilized deliverabilities both wells have been determined to be commercial for unit purposes. Exhibit "C", Figure No. 2 illustrates the net reservoir sand which is interpreted to be present under the acreage proposed for admission to the Dakota Participating Area by the Nineteenth Expansion.

