STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE 10-27-83

RE: Proposed MC _____
Proposed DHC X
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated 10-25-83

for the El Paso Nat. Gas Co (Operator) San Juan #20 (Lease and Well No.) K-35-29N-9W (Unit, S-T-R)

and my recommendations are as follows:

Approve

Yours truly,

Brad Chung

O.C

El Paso
Exploration Company

P. O. BOX 4289
FARMINGTON, NEW MEXICO 87499-4289
PHONE: 505-325-2841

October 14, 1983

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

Subject: San Juan #20
Unit K, Section 35, T-29-N, R-9-W
San Juan County, New Mexico

Dear Mr. Ramey:

El Paso Natural Gas Company request administrative approval to downhole commingle the production from its San Juan #20 gas well located in Unit K, Section 35, T-29-N, R-9-W, San Juan County, New Mexico. This well is producing from both the Blanco Pictured Cliffs Pool and the Blanco Mesa Verde Pool. El Paso Natural Gas Company owns 100% working interest in both producing intervals and feels downhold commingling is the most efficient means to produce the well.

Currently, the packer leakage test shows communication between the Pictured Cliffs and Mesa Verde formation. It is intended to pull the packer and tubing, and downhole commingle and produce the well through one string of tubing. Due to the communication, the current producing rate and bottom hole pressures for the Blanco Pictured Cliffs and Blanco Mesa Verde must be estimated from the 1981 and 1982 production history and 1980 deliverability test data.

The attached production decline curves show both formations have established a steady rate of decline. Fluctuation in producing rates for the year 1982 is a result of the packer failure. It is estimated the Blanco Pictured Cliffs formation will produce at an approximate average rate of 128 Mcf/d after commingling. Furthermore, the Pictured Cliffs produces no condensate and a trace of water. It is estimated that the Blanco Mesa Verde will produce at an approximate average rate of 218 Mcf/d and $\frac{1}{4}$ barrels of condensate per day with a trace of water. Since both formations produce relatively no water, no formation damage should occur as a result of downhole commingling. The minimum combined producing rate after commingling should be 346 Mcf/d of gas and $\frac{1}{4}$ barrels of condensate per day.

The 1980 deliverability test showed the Pictured Cliffs and Mesa Verde formations to have a shut in pressures of 254.6 psia and 403.6 psia respectfully. The corresponding bottom hole pressure is calculated to be 279.3 psia and 444.1 psia. The ratio of bottom hole pressures is 1.59/1.00. Therefore, due

to the pressure differential between the two formations, it is not expected that any migration of gas or liquids will occur, particularly if the well is continuously produced.

It is proposed that the future production be allocated based on calculated remaining reserves. It is estimated that the Pictured Cliffs has approximately 216 MMcf of remaining gas reserves and the Mesa Verde has approximately 874 MMcf of remaining gas reserves, for a total of 1,090 MMcf. Thus, based on remaining reserves, 20% of the wells gas production would be attributed to the Blanco Pictured Cliffs Pool and 80% to the Blanco Mesa Verde Pool. All condensate produced would be attributed to the Blanco Mesa Verde Pool.

All offset operators of the proposed commingling application, including the Bureau of Land Management, have been notified by certified mail.

A well location plat, offset ownership plat, production decline curves, and productivity test, are attached.

Sincerely,

Leonard J. Biemer

Leonard J. Biemer
Production Engineer

LJB:te

att

State Copy

Form C-128
Revised 5/1/57

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

Date June 10, 1958

Operator Ted M. White Lease Ted M. White S. J. 29-9
Well No. 1 Unit Letter K Section 35 Township 29N Range 9W NMPM
Located 1800 Feet From South Line, 1800 Feet From West Line
County San Juan G. L. Elevation 5751 Dedicated Acreage 306 .1 MV ~~153.05~~ DK
Name of Producing Formation Mesaverde-Pictured Cliffs Pool Blanco Mesaverde

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below? Yes X No ____.
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes ____ No ____ If answer is "yes," Type of Consolidation ____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

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OIL CON. DIV.
DIST. 3

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JUN 12 1958
U. S. GEOLOGICAL
FARMINGTON, NEW

Section B

Please refer to Northwest Production Co. survevey plat D ated January 17, 1958 and approved January 20, 1958.

NM-029146

1800'

1800'

Schultz Com

White Allen

San Juan 30-

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JUN 16 1958
OIL CON. COM.
DIST. 3

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

(See instructions for completing

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

TED M. WHITE
(Operator)

C. Ernest Stewart
(Representative)

115 Seventh N. W.
ALBUQUERQUE, NEW MEXICO
Address

This is to certify that the well location shown on the plat in Section B was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed Jan. 10, 19

Ernest V. Echohawk
Registered Professional Engineer and/or Land Surveyor

Certificate No. 1545

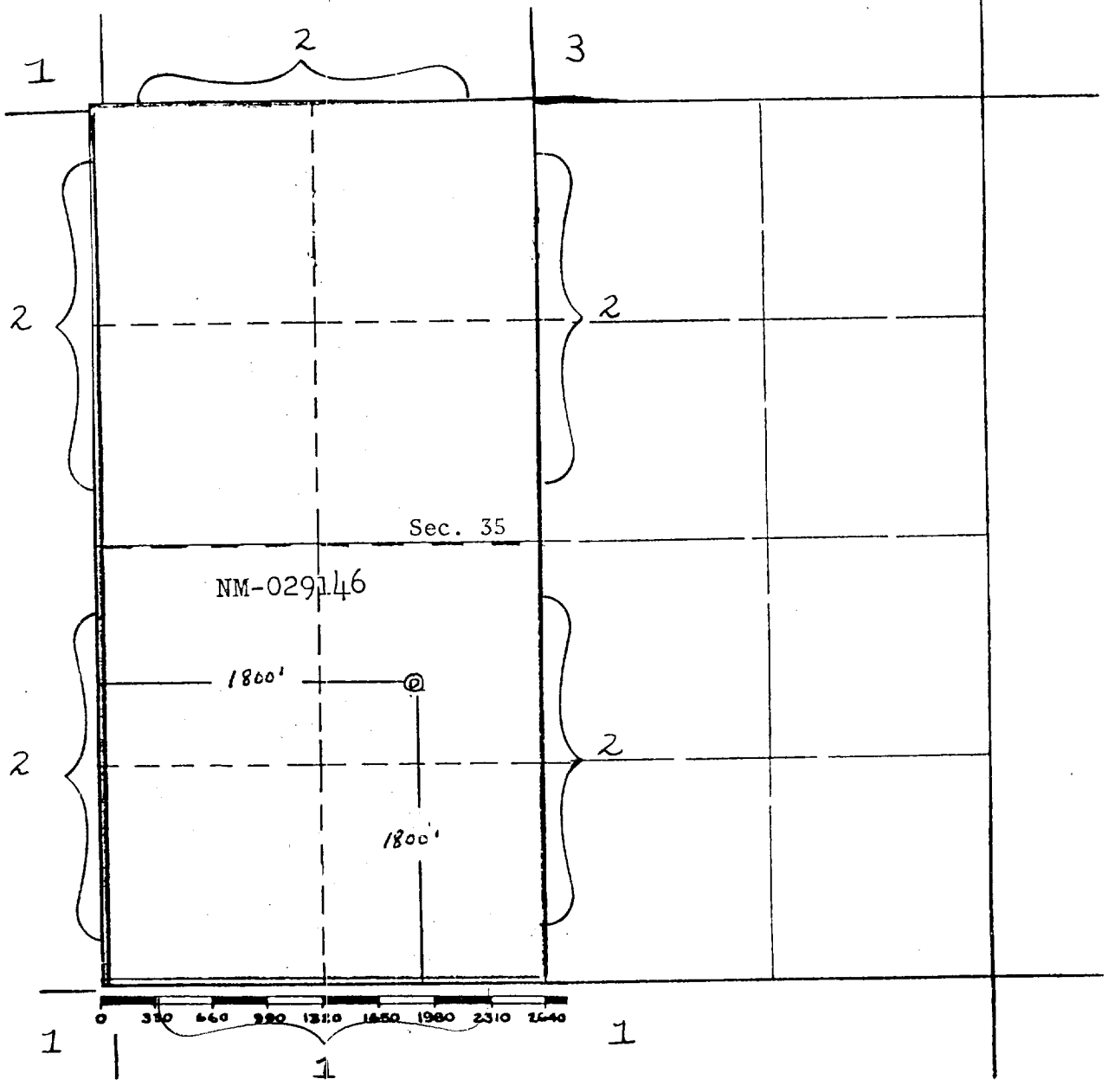
EL PASO NATURAL GAS COMPANY

Well Name San Juan #20 Pictured Cliffs/Mesaverde

Footage---- 1800' FSL, 1800' FWL

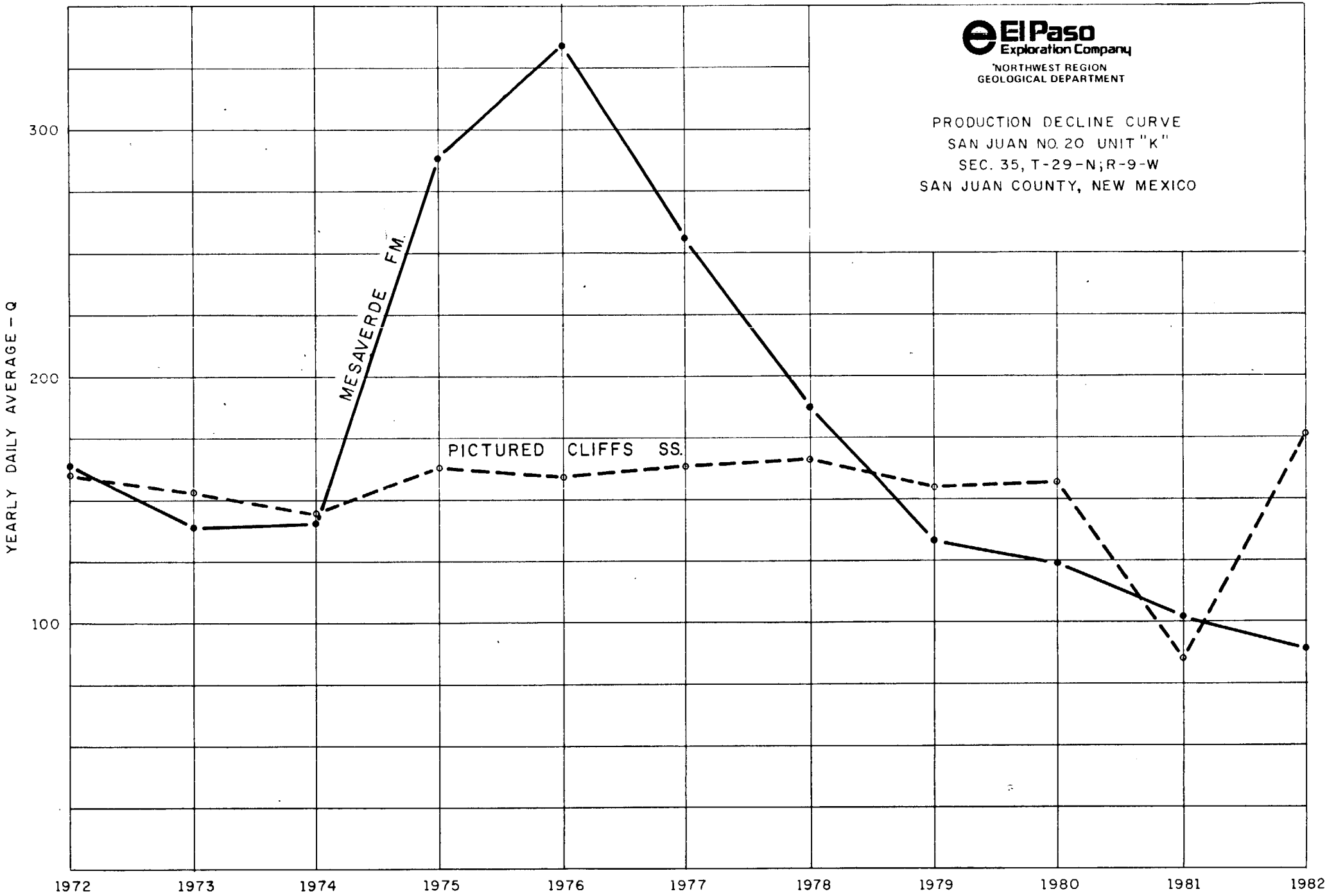
APPLICATION TO COMMINGLE

County San Juan State New Mexico Section 35 Township 29N Range 9W



REMARKS:

(1) El Paso Natural Gas Company
(2) Tenneco Oil Company
(3) D. J. Simmons


El Paso
Exploration Company
NORTHWEST REGION
GEOLOGICAL DEPARTMENT
PRODUCTION DECLINE CURVE
SAN JUAN NO. 20 UNIT "K"
SEC. 35, T-29-N; R-9-W
SAN JUAN COUNTY, NEW MEXICO
YEARLY DAILY AVERAGE - Q
300
200
100
MESAVERDE FM.
PICTURED CLIFFS SS.
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS – OIL RATIO TESTS

Operator	Pool	County
El Paso Natural Gas Company	Blanco Pictured Cliffs/Blanco Mesa Verde	San Juan

Address: P.O. Box 4289, Farmington, N.M. 87499

TYPE OF TEST – (X): Scheduled [ ] Completion [ ] Special [X]

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS – OIL RATIO CU.FT/BBL
San Juan	20 (PC)	K	35	29	9	Average production rate 12 months prior to packer failure					24				128	
San Juan	20 (MV)	K	35	29	9						24			1/4	218	872,000

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OCT 25 1983
OIL CON. DIV.
DIST. 3

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encourged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Leonard J. Bremer Jr.
(Signature)

Production Engineer
(Title)

October 24, 1983