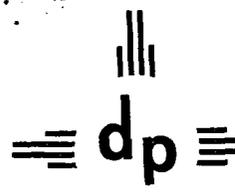


REGISTRATION DIVISION
RECEIVED

91 JAN 30 AM 9 28



dugan production corp.



January 28, 1991

New Mexico Oil Conservation
P.O. Box 2088
Santa Fe, N.M. 87504-2088

Re: Application to Down Hole Commingle Basin Dakota and Otero
Gallup at Jicarilla Otero No. 1, K-21-24N-5W

Gentlemen:

Dugan Production Corporation, P.O. Box 420, Farmington, N.M. 87499, asks for administrative approval to down hole commingle the Otero Gallup and Basin Dakota intervals in the following well:

Jicarilla Otero No. 1
1760' FSL & 1750' FWL
Section 21-Township 24N-Range 5W
Rio Arriba County
Lease No. Jicarilla Contract 12

*Gallup - 5400 - 5860
Dakota - 6718 - 6805*

A plat showing acreage dedicated to the well and ownership of offsetting leases is attached.

The Dakota interval was plugged in 1986 because the previous operator felt it was uneconomical. Production at the time of abandonment was approximately 434 mcfm with a small amount of condensate. Since the interval is shut in, no C-116 can be presented. A production curve for Dakota production prior to shut-in is attached. It is felt that opening this interval again would result in 1,000 MCF/mo. additional gas production.

The Gallup interval was completed in 1986, after the Dakota had been plugged back. During 1990, the Gallup was produced at an average of 91 bopm and 334 mcfm. The most recent C-116 and a production curve are attached.

Bottom hole pressure for the Dakota is 609 psi and the Gallup is 514 psi. The Dakota pressure was measured from the surface pressure at last shut-in and projected to mid-perforation using gas with no liquids in the well bore. The Gallup pressure was projected to mid-perforation using shut-in surface pressure and fluid level measurement.

Liquids from both zones are compatible. Oil gravity from the Dakota is measured at 45.6° API and from the Gallup 40.5° API. Water samples from both zones show similar characteristics. The Commission has approved down hole commingling of these zones in Conoco's N.E Haynes No.4, E-21-24N-5W, case 5775, order no. R-5205-A..

Opening the Dakota will allow additional production. The value of the combined stream will then be greater than the Gallup alone.

Allocation of production is recommended as follow:

Formation:	Oil:	Gas:
Gallup.....	95%	25%
Dakota.....	5%	75%

Allocation is based on monthly production from the Dakota of 1,000 mcf gas and 5 bbls. condensate, and from the Gallup of 340 mcf gas and 90 bbls. oil.

All offset operators have been notified of this application by certified mail.

Sincerely,


John Alexander
Operations Manager

TOWNSHIP PLAT
Scale: 1 inch = 1 mile
Printed in U.S.A.

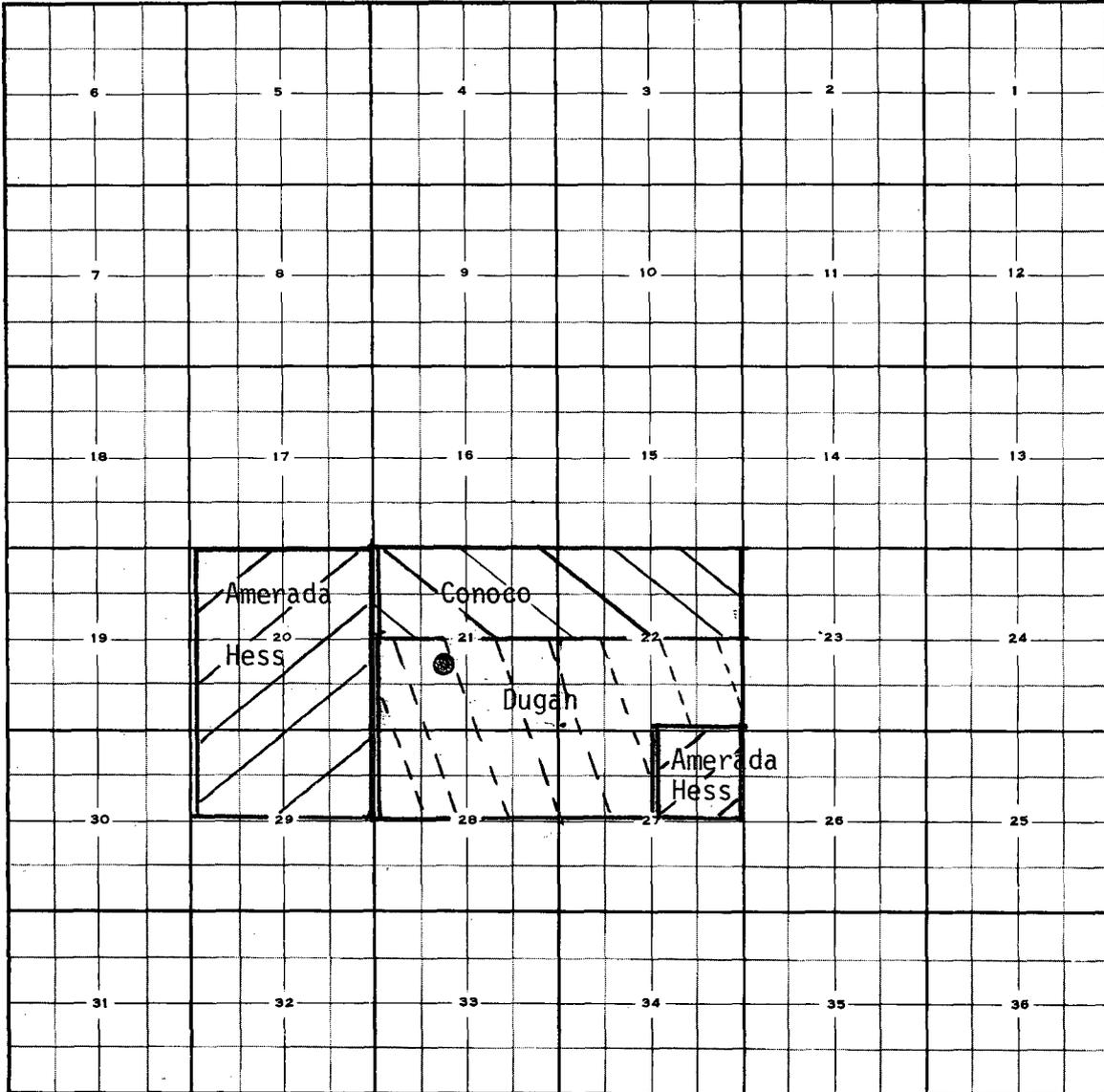
TOWNSHIP 24N RANGE 5W COUNTY Rio Arriba STATE N.M

Jicarilla Otero No. 1
1760' FSL & 1750' FWL
21-24N-5W

COMPANY
Offset Operators
Application to Down Hole Commingle
Otero Gallup and Basin Dakota

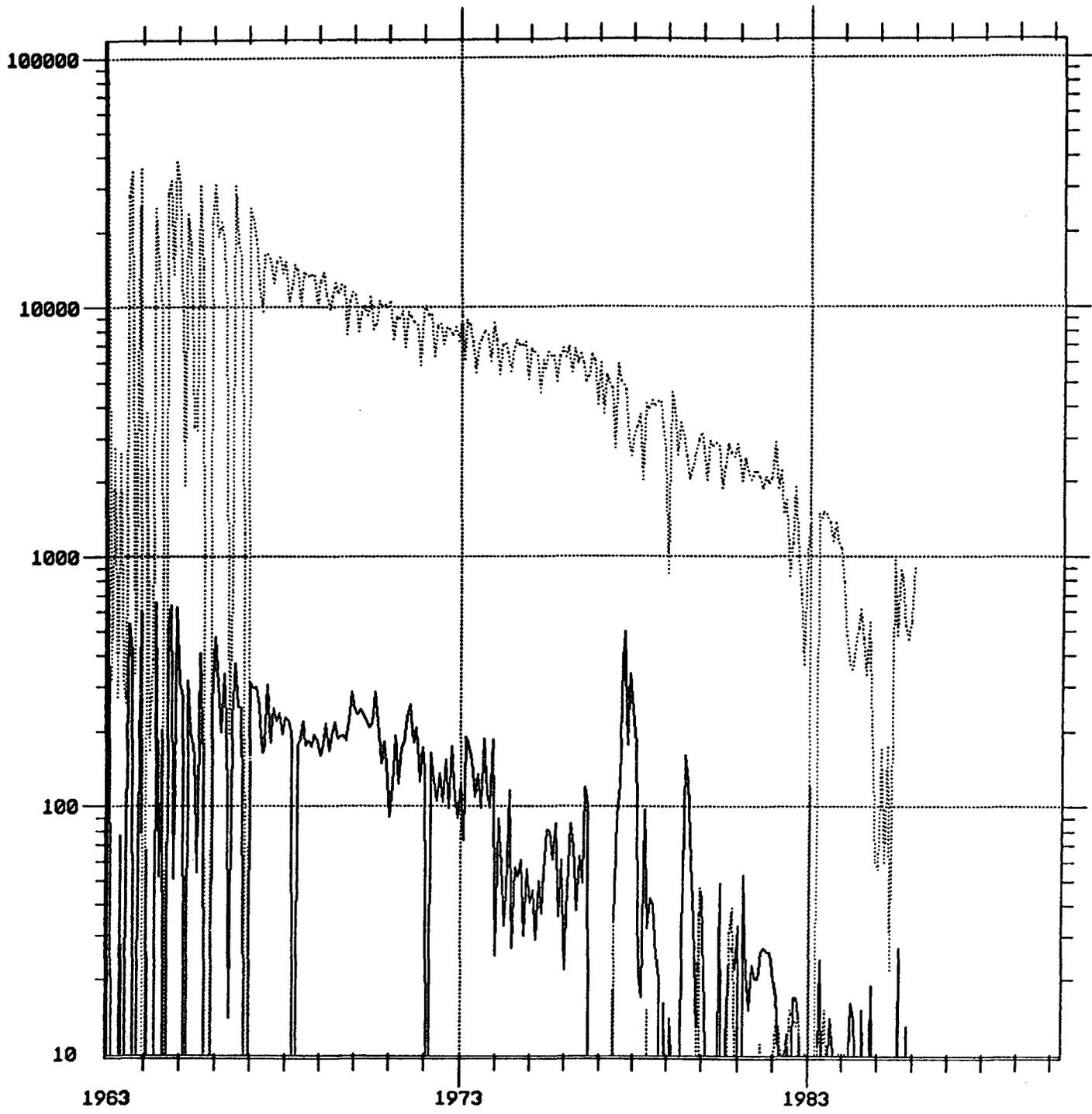
Acreeage dedicated to well: S/2 Sec. 21 - Dakota
NESW Sec. 21 - Gallup

DUGAN PRODUCTION CORPORATION



Jicarilla Otero Lease Evaluation
 Production Rate vs Time
 BBl/Mo or Mcf/Mo vs Months
 Jicarilla Otero #1 Basin Dakota
 For the Period 01/1963 to 12/1987

Production
 Oil ———
 Gas
 Water - - - -



1963

1973

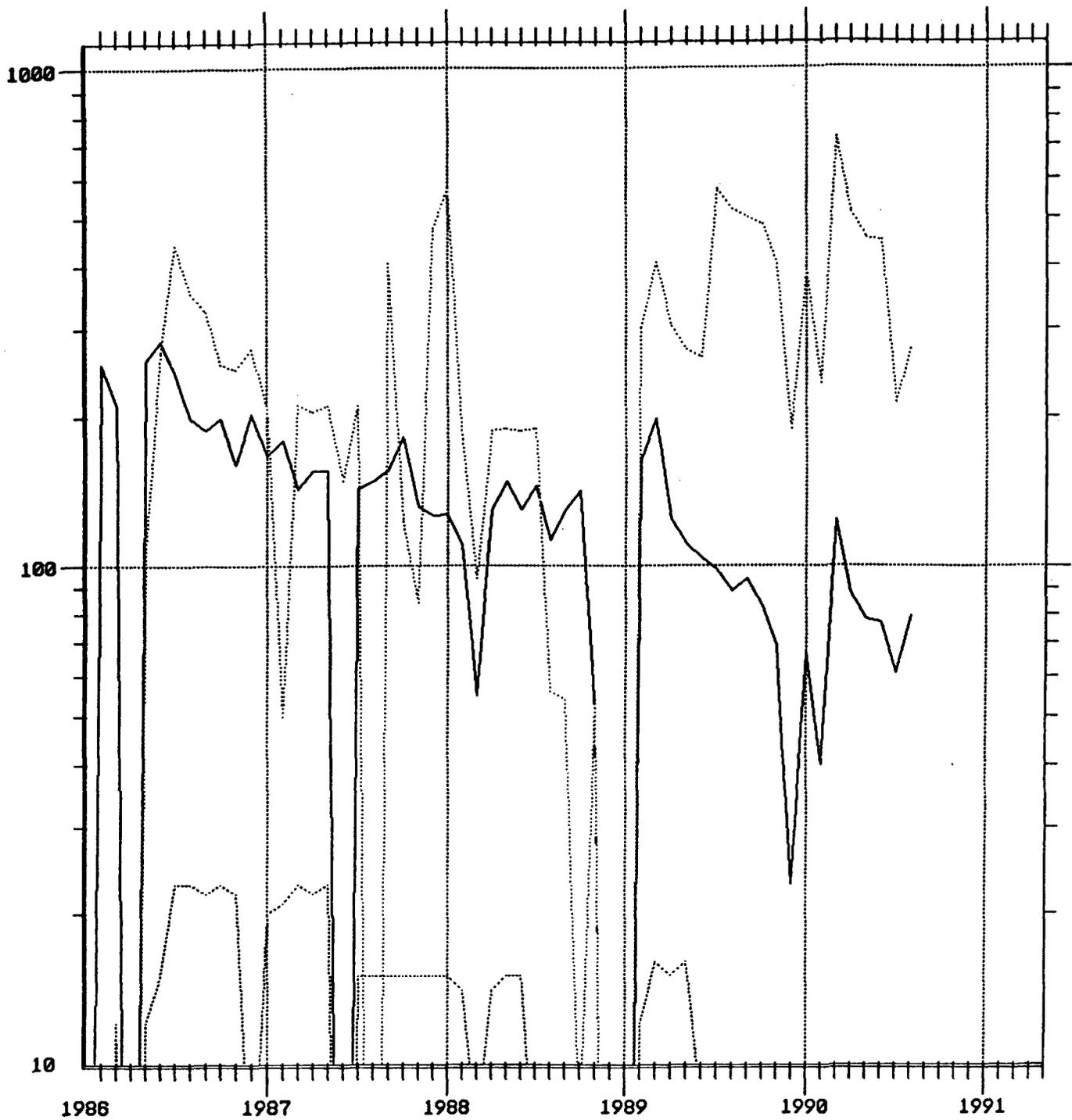
1983

K Sec. 21, T24N, R5W
 Rio Arriba County
 New Mexico

Operated by Dugan Production Corp.

Jicarilla Otero Lease Evaluation
Production Rate vs Time
BBl/Mo or Mcf/Mo vs Months
Jicarilla Otero No. 1 Otero Gallup
For the Period 01/1988 to 12/1990

Production	
Oil	—
Gas
Water



K Sec. 21, T24N, R5W
 Rio Arriba County
 New Mexico

Operated by Dugan Production Corp.

Submit 2 copies to:
 DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

1-C-116 File

1-Well File

State of New Mexico
 Energy, Minerals and Natural Resources Department
 OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-116
 Revised 1/1/89

GAS - OIL RATIO TEST

Operator		Pool		County												
Dugan Production Corp.		Otero Gallup		Rio Arriba												
Address		LEASE NAME		WELL NO.	LOCATION	DATE OF TEST	TYPE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY FLOW-ABLE	LENGTH OF TEST HOURS	WATER BBL.	PROD. DURING TEST	SPECIAL	GAS-OIL RATIO CU./FT/BBL.	
P.O. Box 420, Farmington, NM 87499		Otero			U S T R		S T A T									
		Licarilla Otero		1	K	21 24N 5W	06-25-90				24	0.25	40.5	3.36	11.74	3494
						28										

Instructions:

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 encouraged 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 gas will be 0.60.
 Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

Leanna Farley
 Signature

Leanna Farley--Production Report Supervisor

Printed name and title

07-09-90

Date

(505) 325-1821

Telephone No.



STATE OF NEW MEXICO
 ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
 OIL CONSERVATION DIVISION
 AZTEC DISTRICT OFFICE

OIL CONSERVATION DIVISION
 RECEIVED
 91 MAR 28 AM 9 05

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

Date: 3/26/91

[Handwritten signature]

Oil Conservation Division
 P.O. Box 2088
 Santa Fe, NM 87504-2088

RE: Proposed MC _____
 Proposed NSL _____
 Proposed WFX _____
 Proposed NSP _____

Proposed DHC X _____
 Proposed SWD _____
 Proposed PMX _____
 Proposed DD _____

Gentlemen:

I have examined the application received on 3/26/91
 for the D. Ryan OPERATOR Jacinto Otero #1 LEASE & WELL NO.

1C-21-24N-5W and my recommendations are as follows:
 UL-S-T-R

Approve

Yours truly,

J. J. G.