

#### STATE OF NEW MEXICO

# ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

TONEY ANAYA

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-5800

October 4, 1984

Administrative Order No. DHC-526

El Paso Exploration Company P.O. Box 4289 Farmington, NM 87499-4289

Attention: Doug Mussett

Re: Jicarilla 119 N Well No. 8 (MD)
Unit M, Sec. 8, T-26N, R-4W,
Blanco Mesaverde and Basin Dakota
Pools, Rio Arriba County, NM

#### Gentlemen:

Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations for the subject dually completed well to permit the removal of the down-hole separation equipment and to commingle the production from both pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Administrative Division Order which may have authorized the dual completion and required separation of the two zones, is hereby placed in abeyance.

In accordance with the provisions of Rule 303.C.4., total commingled oil production from the subject well shall not

exceed 50 barrels per day, and total water production from the well shall not exceed 100 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allocations for each respective prorated gas pool as printed in the Cil Conservation Division's San Juan Basin Gas Proration Schedule.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Blanco Mesaverde Pool: Oil 50 %, Gas 68 % Basin Dakota Pool: Oil 50 %, Gas 32 %

Pursuant to Rule 303-C 5, the commingled authority granted by this order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

R. L. STAMETS, Acting Director



P. O. BOX 4289 FARMINGTON, NEW MEXICO 87499-4289

PHONE: 505-325-2841

August 27, 1984

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

Subject: Downhole Commingle

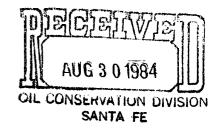
Jicarilla 119 N #8 (MD)

Unit M, Section 8, T26N, R4W Rio Arriba County, New Mexico

Dear Mr. Ramey:

El Paso Exploration Company requests administrative approval to downhole commingle the production from the Jicarilla 119 N #8 gas well located in Unit M, Section 8, T26N, R4W, Rio Arriba County, New Mexico. This well produces from the Blanco Mesa Verde and Basin Dakota pools. El Paso Exploration owns 100% working interest in both producing intervals and feels that downhole commingling is the most efficient way to produce the well. Additionally, the well has been found to have a packer leak and the current tubing configuration is non-conducive for effective gas flow to the surface. These items will be addressed in the following two paragraphs.

In May 1983, the annual packer leakage test indicated communication between the zones. We have confirmed the leakage from in-house testing conducted in June 1984. As can be seen from the enclosed well schematic, there are two locations where a leak can exist; at the Otis packoff (5782') within the 2-3/8" tubing string, or at the Baker packer (7178'). Shut-in pressures for the Mesa Verde and Dakota zones taken during the May 1983 packer leakage test are 637 psig and 629 psig, respectively. The corresponding bottom hole pressures are calculated to be 701 psig and 692 psig, respectively. The ratio of the bottom hole pressures is 1.01/1.00, therefore, no migration of gas or liquids will occur since neither zone is pressured over 50% of the other.



Mr. Joe Ramey August 27, 1984 Page 2

In addition to the communication between zones, it is felt that a 25% increase in production will be realized if the well is commingled due to the present tubing configuration. The Dakota production has to flow through a choke located above the packer at 7178' and then enters 1" tubing at 5784'. The Mesa Verde production enters the 2-3/8" tubing and must flow through the 1" by 2-3/8" annulus to the surface. These restrictions greatly increase the friction in the well and impede smooth fluid flow to the surface. To illustrate this effect, a similar situation can be cited on the Jicarilla 119 N #4. This well was also a Mesa Verde-Dakota dual that was commingled in February 1977. It lies in Section 6, just to the northwest of the subject well. It, too, had the same tubing configuration as the No. 8 well. After the workover, the commingled gas production was 231 MCFPD (averaged over 10 months) versus a combined gas production prior to the workover of 194 MCFPD (averaged over 12 months). The No. 8 well can be expected to perform in the same fashion, given the similarities between the two.

The attached production decline curve shows a substantial jump in the Mesa Verde production, corresponding at about the same time that the packer leak was detected. It is anticipated that when the restrictions are removed from the wellbore the Mesa Verde will continue producing at present levels or greater and the Dakota will increase in production. The expected commingled rate should be at least 250 MCFPD. Present oil rates are ½ BOPD for each reservoir. These rates should increase to 2-3 BOPD. Both zones also produce a trace of water, but not enough to cause any formation damage due to commingling.

It is proposed that future production be allocated based on estimated remaining reserves. Mesa Verde reserves are 890 MMcfg and Dakota reserves are 410 MMcfg. Neither reservoir has oil reserves assigned to them. Therefore, based on these reserves, 68% of the gas production would be allocated to the Mesa Verde pool and 32% would be allocated to the Dakota pool. All oil produced should be split (50% Mesa Verde-50% Dakota) since each zone produces roughly the same small amounts.

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

A well location plat, offset ownership plat, production decline curves, and productivity tests are also attached to this proposal.

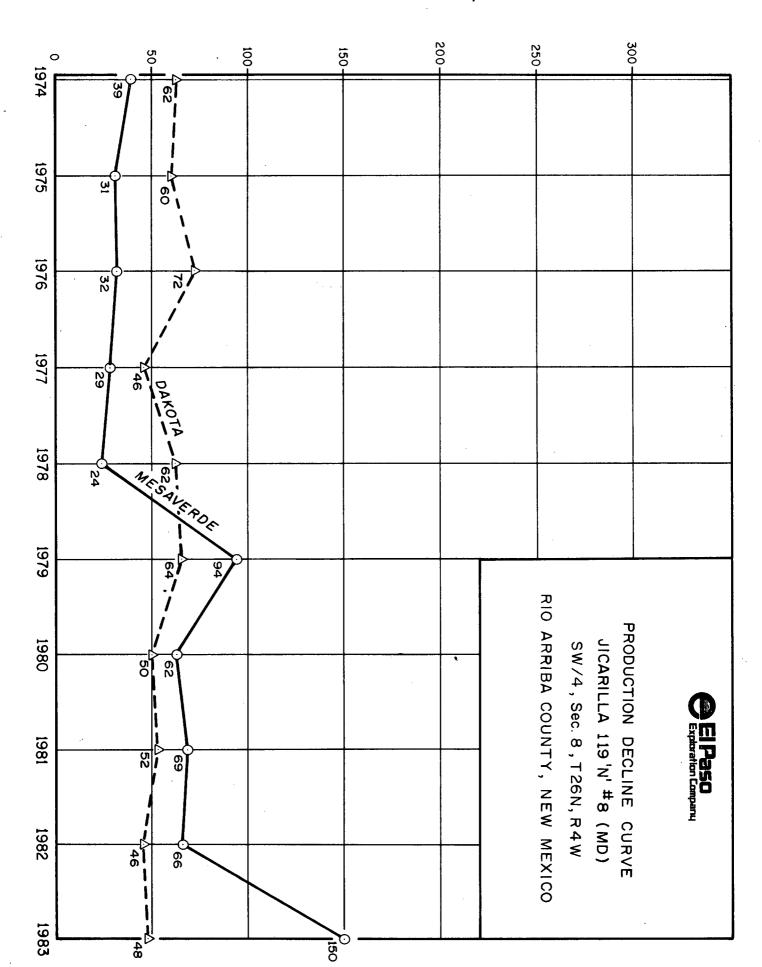
Sincerely,

Doug Mussett

Production Engineer

Song Musell

DM:as Enclosures



T # CHP

RUN DATE 84-01-26 ENG CODE: CP

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PRODUCTION DEPARTMENT

WELL DELIVERABILITY SYSTEM

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# NEW MEXICO OIL CONSERVATION COMMISSION

#### REVISED

## Well Location and Acreage Dedication Plat

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# INSTRUCTIONS FOR COMPLETION:

- 1. Operator shall furnish and certify to the information called for in Section A.
- 2. Operator shall outline the dedicated acreage for both oil and gas wells on the plat in Section B.
- 3. A registered professional engineer or land surveyor registered in the State of New Mexico or approved by the Commission shall show on the plate the location of the well and certify this information in the space provided.
- 4. All distances shown on the plat must be from the outer boundaries of
  - 5. If additional space is needed for listing owners and their respective interests as required in question 3, Section A, please use space below

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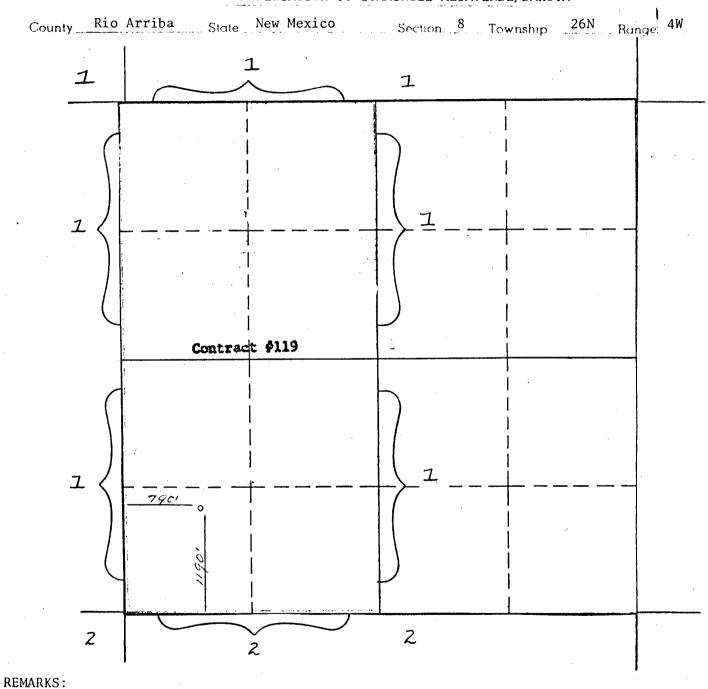
\* "Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1953 Comp.)

#### EL PASO NATURAL GAS COMPANY

Well Name Jicarilla 119 N #8

Footage--- 1190' FSL, 790' FWL

#### APPLICATION TO COMMINGLE MESAVERDE/DAKOTA



	El Pas Union	o Expl	n Comp	any					
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MESAVERDE DATA: TOP OF MESAVERDE: 5153 BOTTOM OF MESAVERDE: 5810' PEFORATIONS: 5156-5162', 5170-5174', 5202-5206', 5218-5226', 5232-5236', 5244-5250', 5266-5284', 5344-5348', Bansa Ross Hangar ar 3654' 5384-5388', 5434-5446', 5484-5490', 7 % a" Casing at 3760' 5554-5560', 5592-5596', 5604-5608', 5668-5704', 5718'-5722', 5726-5730', 5734-5738', 5750-5770', GRANEROS DATA: TOP OF GRANEROS : 7670 BOTTOM OF GRANEROS: 7826' PERFORATIONS: 7696-7734', 7744-7758', 7774-7782, 7798-7804, @ 5757'-DAKOTA DATA: TOP OF DAKOTA: 7826 £782.45 BOTTOM OF DAKOTA: 7910' THEMS AT 5783.80 7828-7858', 7864-7870', 7874-7880', DIAGRAMATIC SKETCH OF DUAL GAS Dis Side-Door Choke COMPLETION FOR "N" WELL 8-8 ut 7177' Baker "EEJ" Packer at 7178.1 NORTHWEST PRODUCTION CORPORATION NEW MEXICO ALBUQUERQUE, 2 3/a" Tubing at 7676.3 APPLICATION FOR DUAL GAS COMPLETION OF "N" WELL 8-8 IN MESAVERDE AND GRANEROS-DAKOTA FORMATION 5 1/2" Liner RIO ARRIBA COUNTY at 7909.96' CONTRACT # 119 NEW MEXICO Approved : Ray Phillips



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

August 27, 1984

Union Texas Petroleum Corporation 4001 Bloomfield Highway Farmington, New Mexico 87401

Re: Jicarilla 119 N #8 (MD)
Unit M, Section 8, T26N, R4W
Rio Arriba County, New Mexico

Gentlemen:

El Paso Exploration Company has requested administrative approval to downhole commingle the production from the Blanco Mesa Verde and Basin Dakota pools in its Jicarilla 119 N #8 well. El Paso feels that commingling production is the most efficient manner to produce this well.

In compliance with New Mexico Oil Conservation Division rules, we are notifying you, as operator of an offsetting proration unit, of our application for administrative approval to downhole commingle the Jicarilla 119 N #8. Enclosed are three copies of this letter. If there are no objections to this application, please sign and return one copy to the New Mexico Oil Conservation Division, Post Office Box 2088, Santa Fe, New Mexico 87501; one copy to El Paso Exploration Company at the above address; and keep the remaining copy for your records.

A well location and offset ownership plats are enclosed.

	Sincerely,  Songlas W. Mussett  Douglas W. Mussett
	Douglas W. Mussett
DWM:as	
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	hereby waives objection to El Paso
Exploration Company's appl Jicarilla 119 N #8 well as	ication for downhole commingling its proposed above.

Date: \_\_\_



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RECEIVED

P. O. BOX 4289 FARMINGTON, NEW MEXICO 87499-4289

PHONE: 505-325-2841

August 27, 1984

Union Texas Petroleum Corporation 4001 Bloomfield Highway Farmington, New Mexico 87401

Re: Jicarilla 119 N #8 (MD)
Unit M, Section 8, T26N, R4W
Rio Arriba County, New Mexico

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Sincerely,
Songlas W. Mussell
Douglas W. Mussett

DWM: as

MAIVER

| Into less letroleum | hereby waives objection to El Paso | Exploration Company's application for downhole commingling its | Jicarilla 119 N #8 well as proposed above.

Date: 9.5-14

#### NEW MEXICO OIL CONSERVATION COMMISSION

REVISED

## Well Location and Acreage Dedication Plat

Section A. Company of the Section A. Company		41 sa	Date 1-9-59
Operator Northwest Production	Costion B	e	26N Range 4W NMPM
Well No. 8-8 Unit Letter M Located 1190 Feet From 6	section		t From West Line
County Rio Arriba G. L.	Elevation 6954.	75 ungr Dedicated	d Acreage 320 Acres
Name of Producing Formation	Dakota	Pool	MIIdeac
I. Is the Operator the only own	ner* in the dedi	cated acreage ou	tlined on the plat below?
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			This is to certify that the
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THORRESON OF MANAGEMENT	A STAN	1	(Operator)
3017 0 TOP (C.S. 0.3)			M. B. Jones M. B. JONES Asst Mgr. Prod Operations
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Contract \$119	8		Address
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	1.03		Registered Professional Engineer and/or Land Surveyor

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#### EL PASO NATURAL GAS COMPANY

Well Name Jicarilla 119 N #8

Footage--- 1190' FSL, 790' FWL

#### APPLICATION TO COMMINGLE MESAVERDE/DAKOTA

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REMARKS:

(1) El Paso Exploration Company
(2) Union Texas Petroleum Corporation

#### Union Texas Petroleum

14001 E Hiff Avenue Suite 500 Aurora, Colorado 80014 (303) 695-8778



September 6, 1984

New Mexico Oil Conservation Division Post Office Box 1088 Santa Fe, NM 87501

RE: Jicarilla 119 N #8 (MD) Unit M, Section 8, T26N, R4W Rio Arriba County, NM

#### Gentlemen:

At El Paso Exploration Company's request, we have executed the attached waiver of objection for their request to downhole commingle the Jicarilla  $119\ N\ \#8$ .

Sincerely,

Donald B. Wells

Division Operations Manager

DBW:bea Enclosure



#### 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

BOX 2088 SANTA FE, NEW MEXICO 87501  DATE 26,1984	007-11984
RE: Proposed MC	OIL COME ENTRY TO THE PROPERTY OF THE PROPERTY
Gentlemen:	•
I have examined the application dated August 25, 1	989
for the Slaw Con ficaille 119/U#8  Operator Lease and Well No.	M-8.262-4W
and my recommendations are as follows:	• Unit, 3=1=K
Yours truly,	
Fris. Clan	