RECEIVED

PETROLEUM PRODUCTION MANAGEMENT, INC.

P.O. BOX 957 CROSSROADS, NEW MEXICO

88114 PHONE 505/675-2478

AUG 1 4 1989
OIL CONSERVATION DIV.

August 10, 1989

State of New Mexico
Energy, Minerals and Natural Resources Dept.
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

Attn: David Catanach

Re: Downhole Commingling - State "8" No. 1

Dear Mr. Catanach:

In response to your letter of August 9, 1989, this is an attempt to comply with the highlighted portions of Division Rule No. 303 (C) (2).

As called for in sub-paragraph (d), a current 24 hour production test on Form C-116 is attached. This zone, the Abo, is continuing to show decline and it is because of this that we desire to commingle Abo and Penn zones in this well.

To comply with sub-paragraph (e) production decline curves are submitted for each of the two zones open in this well bore. Since the Abo zone was completed in April, 1989, the production history is of insufficient duration to establish a reliable decline rate. The production history for the Penn zone is erratic and of little use in establishing a reliable decline rate.

Since our acquisition of this lease from Champlin Petroleum Company in September, 1979, we have done no treating of the Penn zone. On initial completion in July, 1968, Champlin Petroleum Company reported on C-105 that they perforated the Penn in the interval 9908!-9916' with two 0.42" holes per foot and treated with 500 gallons of 15% HCl acid. Treatment of the Abo was submitted in detail on C-103 on May 16, 1989. Should you need more detail, please let me know.

With downhole commingling, it is anticipated that the well will have an economic life of five years or less. The Abo is declining rapidly. Normal decline for the Penn is 13% annually.

Operating bottom hole pressure as requested in sub-paragraph (f) will be approximately 25 to 50 psi for each zone as the well will be operated with 2 psi casing pressure and pumped off with beam pumping equipment.

Since production decline rates do not appear to be a reliable method of allocating production to the respective zones, it is beleived that other methods should be considered. As requested by sub-paragraph (i) we propose that production be allocated based on the combined oil gravity as measured at time of sales. Oil gravities for the two zones in this well are quite different, being 43.9 degrees API for the Abo and 59.8 degrees API for the Penn zone based on most recent data for the two zones. An equation for computing the amount of Abo production in total well production is as follows:

Abo production = $3.76 - \frac{^{\circ} API}{15.9} \times Total production$

Of course Penn production would then be the difference between total production and Abo production. Monthly production for each zone would be calculated using the average corrected gravity as measured for oil sales in a given month or the most recent measurement if no sale is made in a given month.

There are no active wells on any direct offsetting leases. Therefore, in answer to sub-paragraph (j), no letters have been mailed to offsetting operators.

Please advise if I can be of further assistance in providing information you need in processing our application to commingle Abo and Penn production in the referenced well bore.

Yours truly,

W.M. Groesbeck District Engineer

WMG/ts Enclosures

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

August 9, 1989

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

Petroleum Production Management, Inc. P.O. Box 957 Crossroads, New Mexico 88114

Attention: W.M. Groesbeck

Dear Mr. Groesbeck:

I have received and reviewed your recent application requesting approval to downhole commingle Abo and Penn production in the wellbore of the State "8" No. 1 located in Section 8, Township 10 South, Range 34 East, NMPM, Lea County, New Mexico, and have found that additional information is necessary in order to process said application. I am enclosing a copy of Division Rule No. 303(C)(2) which outlines the information needed to obtain authorization to downhole commingle, and I have also highlighted the additional information needed to approve your application.

If you should have any questions, please contact myself at (505) 827-5800.

Sincerely

David Catanach

Engineer

Revised 1/1/89 Form C-116

State of New Mexico Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088

1000 Rio Brazos Rd., Aztec, NM 87410 P.O. Drawer DD, Artesia, NM 88210 DISTRICT III DISTRICT

P.O. Box 1980, Hobbs, NM 88240

Submit 2 copies to Appropriate

District Office.

DISTRICT

GAS - OIL RATIO TEST

Operator						Pool			,			8	County			,
Petroleum Production Management, Inc.	Managem	ent	Inc.			Undes	igne	Undesignated Abo - Wildcat	o - Wil	ldcat	:		Ĺ	Lea		
Address Suite 200/Sutton Place	Bldq.	W	ichit	a, Kë	Wichita, Kansas	67202	TYPE OF TEST - (X)	⊬⊗ 	Scheduled		රි	Completion		i	Special X	
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State 8	· 	4	ω	108	34E	8-10-89	Δ.	-2	25	41	24	0	44	7	12	1091
Instructions:							-			ų l	I hereby certify that the above information is complete to the best of my knowledge and belief.	rtify that	t the ab	ove info	ormation and belief	is true and f.

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 voluntes 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.

relephone No.

675-2478

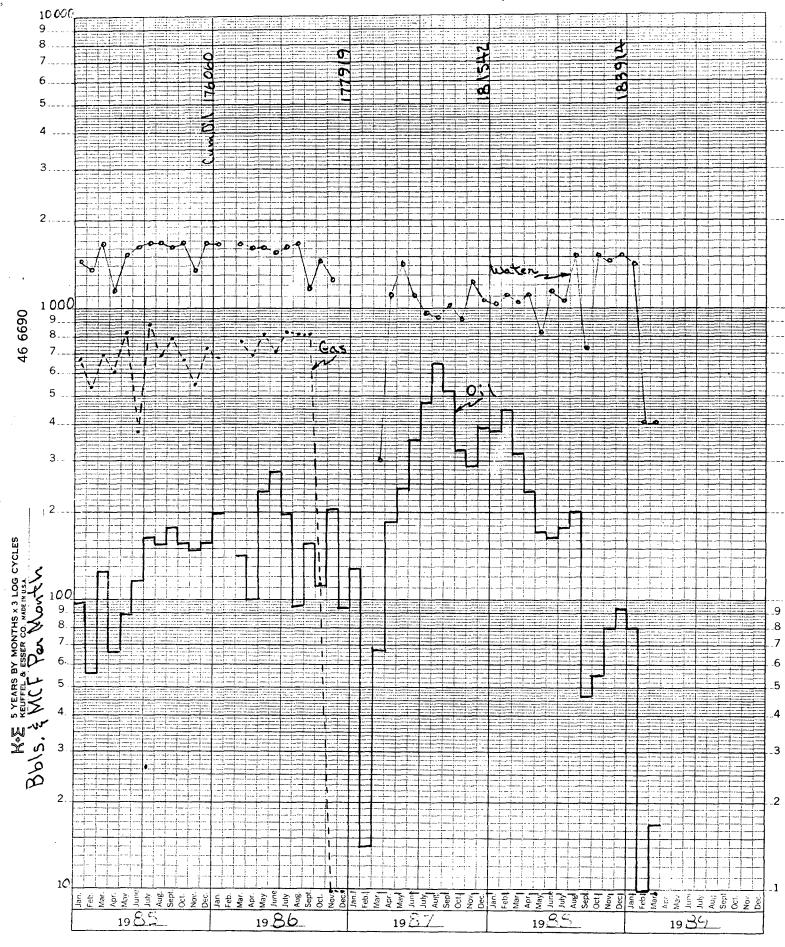
District Engineer

W.M. Groesbeck Printed name and title

Signature

8-10-89

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



Petroleum Production Mgt., Inc. State 8 No. 1 A 8 105 34 E Undesignated Abo Wildcat .9 8 <u>:</u>7 ..6 .5 .4 .2

