

**ENSERCH
EXPLORATION** INC.

P. O. Box 4815
Midland, Texas 79704
915-682-9756

Leonard Kersh
District Production Manager
West Texas District
Production Division

December 3, 1981

New Mexico Department of
Energy & Minerals
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Application for Down-hole
Commingling of the Collier No. 1

Gentlemen:

Enserch Exploration, Inc. hereby requests authority for down-hole commingling of the Pennsylvanian and Mississippian formations in the Collier Well No. 1 located in Roosevelt County, New Mexico.

The subject well was TD'd July 16, 1981, and completed in the Mississippian from 8074'-8096'. The final results indicated a marginal oil producer since recovery after 8.5 hours of swabbing was 16 bbls of oil and 41 bbls of spent acid. After setting a cast iron bridge plug, the zone was temporarily abandoned and the Penn formation was tested from 7999'-8008'. This interval initially potentialized for 58 bopd; however, production has declined to a rate of approximately 10 bopd.

24 hrs / 8.5 hrs (16 bbls)

*for 24 hr.
period = 45.18
BOPD*

In accordance with Rule 303-C of the OCD Rules and Regulations, information requested upon application of a permit for down-hole commingling of two oil zones is attached.

Very truly yours,



Leonard Kersh
District Production Manager

LK/NAL/mh
Attachments



Operator - Enserch Exploration, Inc.
P.O. Box 4815
Midland, Texas 79704-4815

Lease - Edwin Collier

Well - No. 1

Location - Sec. 29, T4S, R33E
1980' FSL, 660' FEL
Roosevelt County, New Mexico

Pools to be Commingled - Peterson (Miss) Pool
Undesignated (Penn) Pool

Attached is a copy of Form C-116 showing the amount of oil, water, and gas produced from the Penn formation during the 24-hour test.

Before completing the Penn, the Mississippian formation was perforated and swabbed for 8.5 hours; 16 bbls of oil were recovered, along with a good show of gas. This zone, however, was not potentialled.

Current Status -

The subject well was perforated from 7999'-8008' (total shot=10') through the Penn formation and treated with 2000 gallons of 15% MCA acid. A potential test was run on September 1, 1981, recovering 58 BOPD, 61 MCFPD, and 7 BWPD. Currently, the well is pumping approximately 10 BOPD. The Mississippian was perforated from 8074'-8096' (total shot=28'), and was acidized with 5500 gallons of MOD-101.

A bottom hole pressure survey was not run on the subject well. However, a pressure build-up test was run on two offsetting wells, the Collier "A" No. 1 on the Mississippian, and the Taylor No. 1 testing the Penn formation. From these, estimated reservoir pressures are:

Mississippian - 2826 psi
Penn Formation - 2793 psi

Fluid Description - Oil recovered during the potential test on the subject well indicated a gravity of 44.3° API. The gravity of the oil recovered during swabbing of the Mississippian was not determined. However, Mississippian oil produced from the offset Collier "A" No. 1 has a gravity of 43.0° API.

The subject well was completed in July 1981, therefore, oil production from both zones is considered newly discovered and will receive a price of \$35.00/bbl.

The Collier No. 1 is currently producing 10 BOPD from the Penn formation.
Therefore, production of over 10 BOPD will be allocated to the
production from the Mississippian formation. → 45 BOPD

Enserch Exploration, Inc. is the operator of all offsetting production and
has 100 percent Working Interest in the subject well.

The Mississippian and Pennsylvanian formations have a common royalty
interest.

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

2-116
Revised 1-1-75

Operator: Enserch Exploration, Inc. Pool: Undesignated (Penn) Group 4 County: Roosevelt
Address: P. O. Box 4815, Midland, Texas 79704-4815

LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	TYPE OF TEST - (X)	CHOKE SIZE	T.B.G. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT. BBL.	
		U	S	T							R	WATER BBL.S.	GRAV. OIL		OIL BBL.S.
Collier	1	I	29	4S	33E	10-23-81	P --	20	58	24	2	43.8	10	57	5700/1

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 Commission in accordance with Rule 301 and appropriate pool rules.

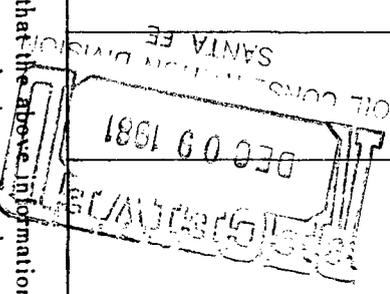
Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

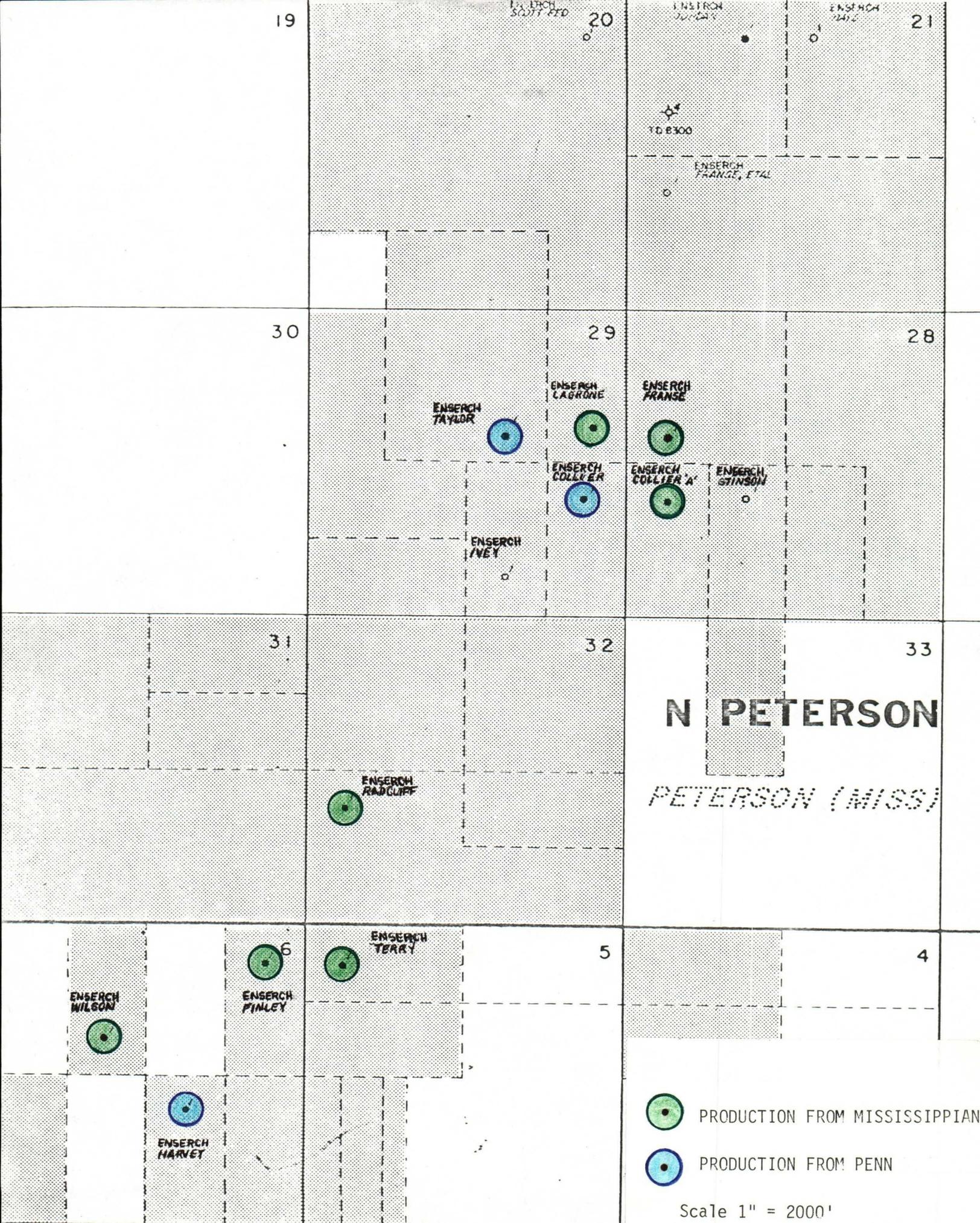
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized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

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

H. F. Burnett
(Signature) H. F. Burnett
Production Superintendent
(Title)

November 17, 1981
(Date)





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N PETERSON

PETERSON (MISS)



PRODUCTION FROM MISSISSIPPIAN



PRODUCTION FROM PENN

Scale 1" = 2000'

ENSERCH TAYLOR

ENSERCH LAGRONE

ENSERCH FRANSE

ENSERCH COLLYER

ENSERCH COLLYER 'A'

ENSERCH STINSON

ENSERCH INEY

ENSERCH RADCLIFF

ENSERCH WILSON

ENSERCH PINLEY

ENSERCH TERRY

ENSERCH HARVEY

PRODUCTION FROM MISSISSIPPIAN

PRODUCTION FROM PENN

Scale 1" = 2000'

Mife

OIL CONSERVATION DIVISION
DISTRICT I

DEC 14 1981
OIL CONSERVATION DIVISION
SANTA FE

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

DATE 12/9/81

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

Gentlemen:

I have examined the application for the:

Enserch Exploration, Inc. Collier No. 1-I 29-4-33
Operator Lease and Well No. Unit, S - T - R

and my recommendations are as follows:

O.K.----J.S.

Yours very truly,

/mc