

**ENSERCH
EXPLORATION** INC

EP Operating
Company

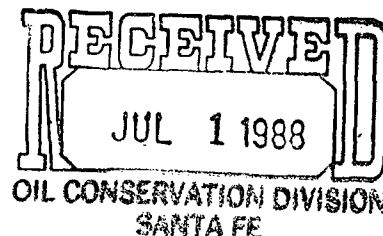
DHC-697

ClayDesta National Bank Bldg.
Suite 5250
6 Desta Drive
Midland, Texas 79705
915-682-9756

Leonard Kersh
District Production Manager
Dane Hendley
District Petroleum Engineer
Sammy Reed
Production Superintendent
West Texas District
Production Division

June 29, 1988

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



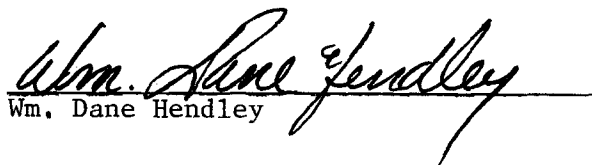
Re: Application for Down-Hole Commingling
Enserch Exploration, Inc.
Pearl Jordan No. 3
North Peterson Field
Roosevelt County, New Mexico

Gentlemen:

Enserch Exploration, Inc. requests authority for down-hole commingling of production from the Pennsylvanian and Mississippian formations in the above referenced well located in Roosevelt County, New Mexico.

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

Yours truly,


Wm. Dane Hendley

WDH:jd

Attachment

*Pennsylvanian - 8016 - 8056
Miss - 8160 - 8180
Penn - 34%
Miss - 66%*
Based on

1. Operator: Enserch Exploration, Inc.
ClayDesta National Bank Bldg.,
Suite 5250
6 Desta Drive
Midland, Texas 79705

2. Lease Name: Pearl Jordan
Well Number: 3
Well Location: Section 17, T-4-S, R-33-E
660' FSL, 660' FEL
Roosevelt County, New Mexico

Pools to be Commingled: North Peterson (Penn) Pool
Undesignated (Miss) Pool

Common Interval
3. A lease plat showing the acreage dedicated to the well and ownership of offsetting leases has been attached. Accordingly, Enserch Exploration, Inc. operates all surrounding leases having a 45% working interest in the acreage allocated to the subject well.

The Pennsylvanian and Mississippian formations have a common royalty interest within the acreage allocated to the subject well.

4. Attached is a production observation report showing the volumes of oil, gas, and water produced from the Penn formation during a 24 hour test.

Prior to completing the Penn, the Mississippian was perforated and swabbed for three days with a total recovery of 42 STB of oil and 192 bbl. of water. This zone was not potentialized.

5. The subject well was perforated in an interval of the Mississippian formation from 8160' to 8180' (Total: 37 holes) and acidized with 4000 gallons of 15% NEFE HCL acid. A three day swab test yielded 18 STB of oil and 70 bbls. of water. The Mississippian was re-acidized with 8000 gallons of MOD-202 acid with 500 SCF of nitrogen per barrel. Another three day swab test yielded 42 STB of oil and 192 bbls. of water. The well was temporarily abandoned and recompleted to the Penn (Cisco) interval. The perforations within this interval exist between 7830' and 7852' (Total: 46 holes). The Penn (Cisco) was acidized with 5000 gallons of NEFE HCL acid. A potential test was run on June 16, 1981 recovering 120 STB of oil, 170 MCF of gas, and 10 bbls. of water in a 24 hour test period. During August, 1987 the well was reworked by adding the Penn (Detrital) interval with perforations from 8016' to 8056' (Total: 46 holes).

This interval was acidized with 2300 gallons of 15% NEFE HCL acid. A potential test was run on August 18, 1987 including production from both zones completed in the Pennsylvanian formation. In a 24 hour test period the well produced 51 STB of oil, 91 MCF of gas, and 39 bbls. of water on pump. Currently, the well is producing approximately 14 BOPD, 14 MCFGPD and 7 BWPD on pump.

A decline curve showing the production history of the Pennsylvanian completion has been attached.

6. A bottomhole pressure survey was not run on the subject well. However, a pressure buildup test was run on two offsetting Penn wells (i.e. Amoco State No. 2: 2633 psi; and, Pearl Jordan No. 2: 2350 psi). The bottomhole pressure from the Mississippian has been estimated to be 2752 psi based on the drill stem test results from the Collier "A" No. 1, which is located approximately 2 miles south of the subject well.
 7. The fluid characteristics of oil samples taken from the Pennsylvanian indicated an oil gravity of 45.3° API. The gravity of the oil recovered while swabbing the Mississippian completion was not determined; however, Mississippian oil recovered from the Collier "A" No. 1 has a gravity of 43.0° API.
 8. Estimated production from the Penn formation: 14 BOPD
Estimated production from the Miss formation: 14 BOPD
Sum of Individual Flow Streams: 28 BOPD
- According to Order No. R-6882 (Dated February 1, 1982), commingled production from zones, with the lowermost pool existing between 8,000' and 8,999', may not exceed 60 BOPD.
9. The Pearl Jordan No. 3 is currently producing 14 BOPD from the Penn formation. Any production over 14 BOPD will be allocated to the production from the Mississippian formation.
 10. Enserch Exploration, Inc. is operator of all offsetting production, and operates the subject well with a 45% working interest.

AMERADA
LIEB
TD 4250



7

8

9

PETERSON, N (PENN)

18

17

16

DESALA
PETERSON
TC 8700



ENSERCH
JORDAN

ENSERCH
AMOCO-ST

TRI-STATE
ENSERCH ST

Pearl Jordan No. 3



OWHO

TD 0248

19

20

21

ENSERCH
SCOTT-FED

WD 2

TD 8820

ENSERCH
JORDAN

TD 8300

GETTY
TAYLOR "30" FC

GETTY
TAYLOR "30" FC

30

29

ENSERCH

ENSERCH
LAGUNA

**ENSERCH
EXPLORATION INC**

WEST TEXAS AREA

Peterson, N. Field
Roosevelt County,
New Mexico

SCALE
Feet/Meter Interval

DATE
GEOLOGIC

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OPERATOR'S MONTHLY REPORT

EP OPERATING COMPANY 1817 Wood Street 460EC Dallas, Texas 75201 May, 1988 Page 2 of 6

WELL NAME (Underline)					INJECTION		TOTAL LIQUIDS PRODUCED			GAS PRODUCED (MCF)	DAYS PROD.	DISPOSITION OF GAS			DISPOSITION OF OIL					
*Lease Name	WELL NO	UNIT	SEC	TWP	RNG	VOLUME	PRESS.	MONTHLY OIL ALLOWABLE	ACTUAL BARRELS PRODUCED			BARRELS OF WATER PRODUCED	SOLD	TRANS-PORTER	OTHER	C O D E	OIL ON HAND AT BEG. OF MONTH	BARRELS TO TRANS-PORTER	OTHER	C O D E
LEASE NAME - Include State Land (Lease Number or Federal Lease Number)																				
PETERSON																				
PENNSYLVANIA, NORTH																				
Amoco State																				
	16	4S	33E					TA	0	0	0	0	TWP	0			PP			
	2M	16	4S	33E				341	243	61	153	31	TWP	95	U		PP			
	3E	16	4S	33E				124	94	60	75	31	TWP	95	U		PP			132
	Lease Total							465	337	121	228			190		154	359			
Amoco State																				
	40	16	4S	33E				124	73	207	0	31	NC	120	U	64	0	PP		137
Pearl Jordan																				
	1C	21	4S	33E				TA	0	0	0	0	TWP	0			PP			
	2I	17	4S	33E				2,046	649	64	485	31	TWP	95	U		PP			
	3P	17	4S	33E				837	433	203	415	31	TWP	95	U		PP			202
	Lease Total							2,883	1,082	267	900			190		343	1,223			
INSECH EXPL., INC., MANAGING GENERAL PARTNER																				

DISPOSITION
ORIGINAL TO OCC SANTA FE
ONE COPY TO OCC DIST. OFFICE
ONE COPY TO TRANSPORTER(S)

OTHER OIL DISPOSITION CODE
C.....CIRCULATING OIL
L.....LIFT
S.....SEDIMENTATION (BSEW)
E.....EXPLANATION ATTACHED

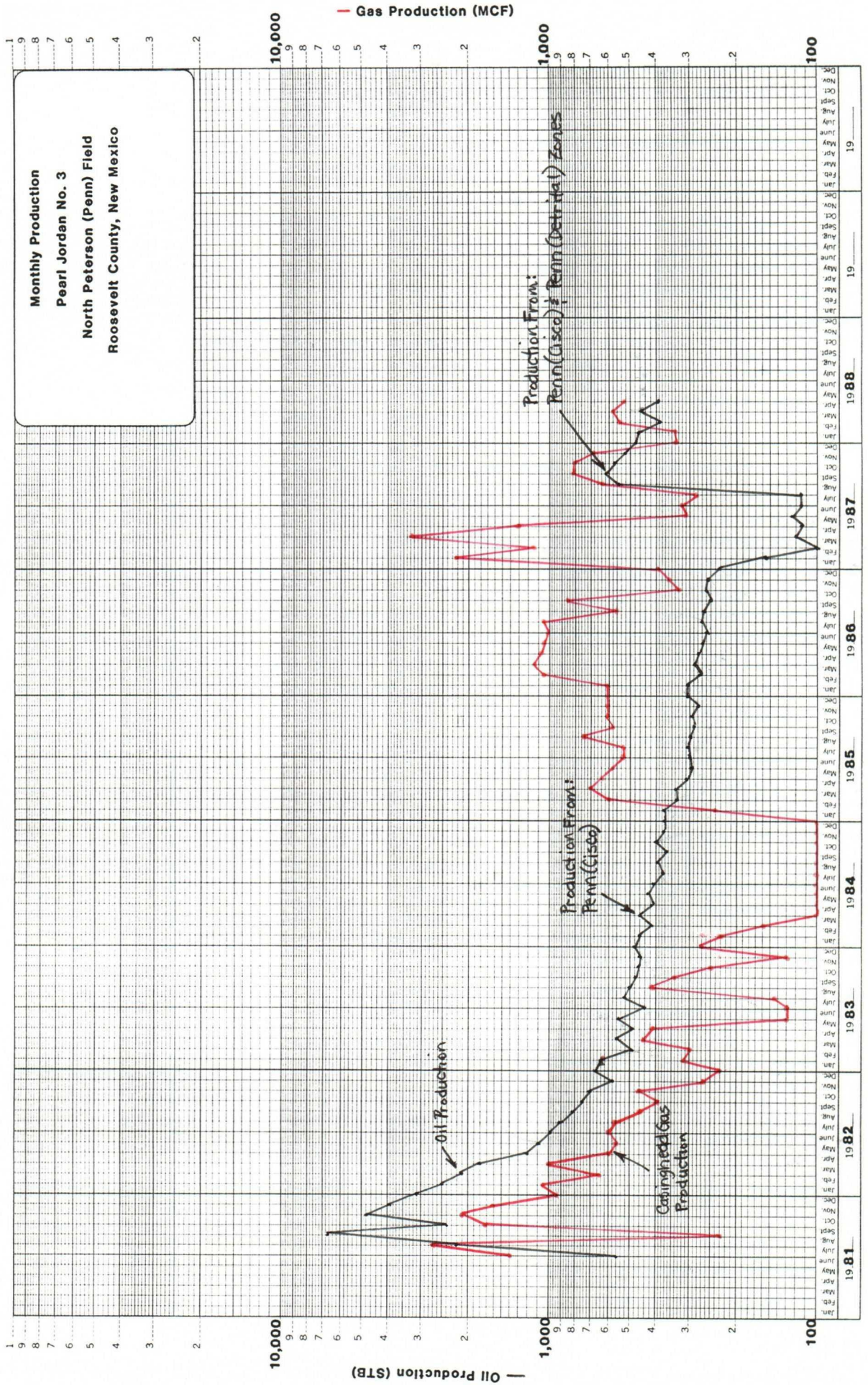
OTHER GAS DISPOSITION CODE
X.....USED OFF LEASE
D.....USED FOR DRILLING/REIN
C.....GAS LIFT
L.....LIFT (MCF ESTIMATED)
E.....EXPLANATION ATTACHED
R.....PRESSURING OR
V.....VENTED
U.....USED ON LEASE

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE

C.J. HAGEN 214-670-2820 06/21/88

Manager Production Records

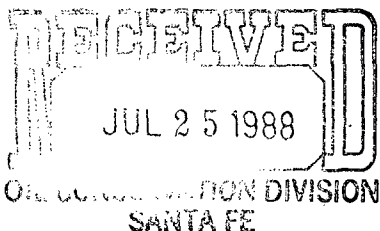
Monthly Production
 Pearl Jordan No. 3
 North Peterson (Penn) Field
 Roosevelt County, New Mexico





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

GARREY CARRUTHERS
GOVERNOR



7-21-88

POST OFFICE BOX 1980
HOBBBS, NEW MEXICO 88241-1980
(505) 393-6161

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

RE: Proposed:

MC	_____
DHC	<u>X</u> _____
NSL	_____
NSP	_____
SWD	_____
WFX	_____
PMX	_____

Gentlemen:

I have examined the application for the:

EP operating Co. Pearl Jordan #3 - P 17-4-33
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OKJS

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed

P.S. David please note operator name
is EP operating — not Emerch Expl.
Early