



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

1-9-89

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1900
HOBBS, NEW MEXICO 88241-1900
(505) 393-6161

DHC - 718

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

RE: Proposed:

MC _____
DHC ☒ _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX _____

Gentlemen:

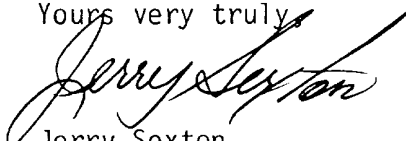
I have examined the application for the:

Ensearch Expl. + Prod Co. N.M. 55 Fed #1-F 27-8-36
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,


Jerry Sexton
Supervisor, District 1

/ed

**ENSERCH
EXPLORATION INC.**

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

January 5, 1989

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

Re: Application for Downhole Commingling
Enserch Exploration, Inc.
N.M. (55) Federal No. 1
Vada (Penn) Pool
Prairie, S. (Wolfcamp) Pool
Roosevelt County, New Mexico

Gentlemen:

Enserch Exploration, Inc., managing general partner of EP Operating Co. requests authority for downhole commingling of production from the Vada (Penn) Pool and the Prairie, S. (Wolfcamp) Pool 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 necessary upon application of a permit for downhole commingling of two oil zones is hereby submitted.

Sincerely,


Wm. Dane Hendley

TDB/bd

Attachments

cc: New Mexico Department of
Energy & Minerals
Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88241-1980

U. S. Department of the Interior
Bureau of Land Management
P. O. Box 1397
Roosevelt, New Mexico 88201-1397

Managing General Partner of EP Operating Company, a limited partnership

1. Operator: EP Operating Company
ClayDesta National Bank Bldg.
Suite 5250
6 Desta Drive
Midland, Texas 79705
2. Lease Name: N.M. (55) Federal
Well Number: 1
Well Location: Unit Letter - F
Section 27, T-8-S, R-36-E
1980' FNL, 1980' FNL
Roosevelt County, New Mexico
Polls to be Commingled: Vada (Penn) Pool
Prairie, S. (Wolfcamp) Pool
3. Plat Attached
4. Form C-116 is attached for the Prairie, S. (Wolfcamp) Pool.

Prior to abandonment, the Vada (Penn) Pool completion was producing 3 STB of oil, 40 MCF of gas, and 5 barrels of water per day.

5. Production decline curves for each pool are attached. Following is a brief synopsis of the well history:

The N.M. (55) Federal No. 1 was originally drilled by Lone Star Producing Company in early 1970 to a total depth of 9820 feet. Drilled as a development well in the Vada (Penn) Field, the well was completed through perforations in the 5½ inch casing from 9745 to 9763 feet. Following stimulation with 750 gallons of 15% HCl acid, a hydraulic casing pump was installed due to the high fluid volume and the well potentialized pumping on February 21, 1970 for 273 STB of oil + 386 MCF of gas + 514 barrels of water per day. The hydraulic casing pump operated efficiently for the first twelve months with the well producing 68,333 STB of oil and 65,653 barrels of water; however, during that first year the GOR continually increased with fluid volume decreasing and the hydraulic casing pump failed. At that time, the casing pump was pulled and, due to the high GOR, the well flowed for approximately 1½ years before dying. The well was then placed on rod pump and produced continuously until July 23, 1988 with cumulative production of 164,986 STB oil and 849,717 MCF of gas. At that time, the Penn completion was producing 3 STB of oil and 40 MCF of gas per day and was uneconomical; consequently, the decision was made to test the Wolfcamp formation. A cast iron bridge plug (CIBP) was set at 9651 feet and the Wolfcamp formation perforated from 9040 to 9092 feet. Following stimulation with 12,000 gallons of 15% HCl acid, the Wolfcamp completion potentialized pumping on August 7, 1988 for 8 STB of oil, 35 barrels of water, and 50 MCF of gas per day. Currently, the Wolfcamp completion produces 7 STB of oil, 60 barrels of water, and 13 MCF of gas per day.

6. Bottomhole pressure for the Wolfcamp formation is estimated to be 3300 psig based on a drill stem test conducted in the offset N.M. (55) Federal No. 2 well. Bottomhole pressure for the Penn formation is estimated to be 3000 psig. Both zones require artificial lift.

7. Wolfcamp Oil - 47.1°API
Penn Oil - 47.1°API

8. Estimated production from the Penn formation: 3 BOPD
Estimated production from the Wolfcamp formation: 7 BOPD
Sum of Individual Flow Streams: 10 BOPD

According to Order No. R-6882 dated February 1, 1982, commingled production from zones with the lowermost pool existing between 9000' and 9999' may not exceed 70 BOPD.

9. Penn production	-	3 BOPD		40 MCFPD
Wolfcamp production	-	<u>7 BOPD</u>		<u>13 MCFPD</u>
		10 BOPD	+	53 MCFPD

Oil production - 30% Penn & 70% Wolfcamp
Gas production - 75% Penn & 25% Wolfcamp

10. All offset operators have been notified and waiver letters are attached.

Acceage Dedication Plat

EP Operating Company

N.M. (55) Federal No. 1

ada (Penn) Field

Prairie, S. (Wolfcamp) Field

Roosevelt County, New Mexico

Lila Wright, etal
Rep. Nat'l.
Bnk. Dallas,
Tr. 1/2 M.I.
J.C. Maxwell
Minnie Bow

C.C. Grynberg
11.1.95
63771

I.M.C. Co
R.N.Ains

Liber
B.1
532

S.P. Yates
HBP
060521

LeMay Ener.
Celsius Fed.
TD5105
O/A12.2.82

55979

Judy
Jones
11.1.91
145161

I.M.C. Corp. etal

U.S. Mary Hays(S)

U.S.
R.N. Ainsworth, (S)

Liberty Pet.
8.1.92
53251

S.P. Yates
HBP
060521
Roswell-LaSalle

G.D. Williamson
1.11.88

Yates
9.1.87
30895

Oxy Cities Serv. NGL Inc. (S)

H. Beebe, etal

Gos Prod
Ent.
E 8875

Coastal
States
(Skelly)
TO 9705
O/A10.29.62
(Max Pray)

Celsius Ener.
3.1.88
55160
791
KGS

A.R. Co. Coastal Sys
HBP
SA Disc.
ate Plg 1.4.63

Thomas S. Massey, etal

For Oil, etal 1/4 M.I.
Lignum Oil 3/4
F.T. Fleet Inc.

U.S.

C.E. Boyd III
7.1.87
53386

Breck Oper.
(BBI Ltd. 1/2)
058677
"A"
Breck Oper.
Bate Fed.

American
Petrofina
Fed

EP Oper.
HBP
0328425

KGS C.R. Reed
Bates Fed
TO 9734

Solar
Louise Fed.

22 BRECK OPERATING CO.
P.O. Box 911
BRECKENRIDGE, TX. 76024

MWJ
5.1.91
65984
3815
KGS

Celsius
Ener.
3.1.88
55161
KGS
791

21 Yates
Pet.
7698
FINA OIL
HBP
10.B.
Boxter
Cit. Serv.
Fed.
2958
U.S.
058677
HBP
HG DESTA DR
STE. 3200
MIDLAND, TX
78705

"Dedicated Acreage"
"Bate Fed"
U.S.

American
Petrofina
Fed.
T/A
NWS PRODUCING
100 W. ILLINOIS
SUITE 1100
MIDLAND, TX 79701
U.S.
O.W. Davis, (S)

K.G. Flatt

Yates A.T.
3.81 2-28-93
AB 9053
105 S. 4TH
ARTESIA, NM
88210

EP Oper.
ML 455
0328425

2 (II) Tom Boyd
F330. (W.O.) 2.1.73
0328589
(C.B. Read)
(Stone Fed)
09120

MWJ
12.1.88
57708
221
KGS
F368
Tom Brown
Aztec Fed.

H.C. Walker
6.23.85
B.N.Ainsworth
Sabine
7.27.88
12.3.88

28 FINA OIL & CHEM.
mer. Petroj HBP
1.1.E #6 DESTA
251845 P392 Dr. STE. 3200
To D. Dudley's R
(Amer. Petroj)
HBP
U.S. 058677

27 EP Oper.
(C.B. Read)
0272901
"N.M. (54) Fed."
U.S. K.G. Flatt

"MWJ Fed"
STA
Knox 69/Ltd
TD 9815

26 Sabine
7.27.88
8.3.88
9.12.88
9.26.88

U.C. Ainsworth
U.S. G. Beebe 1/4
K.G. Flatt H.M. Ray 1/2

R.R. Morrison
Fed
P333

C.C. Kennedy
6.1.88
56273
A44

Skelly, etal
HBP
03271

Lillie Yates
03283

APR 1 1940
JAN 9 1939
OLD
HOBBS OFFICE

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator EP Operating Company		Pool Prairie, S. (Wolfcamp) Field		County Roosevelt									
Address 6 Desta Dr., Suite 5250, Midland, Texas 79705		TYPE OF TEST - (X) <input checked="" type="checkbox"/> TEST - (X)		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>									
LEASE NAME	WELL NO.	LOCATION U S T R		DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	WATER BBLs.	PROD. DURING TEST GRAV. OIL BBLs.	GAS M.C.F.	GAS - OIL RATIO CU. FT./BBL.	
N.M. (55) Federal	1	F 27 8S 36E		12/16/88	P ---	---	8	24	60	47.1	7	13	1625/1

No well will be assigned an allowable greater than the amount of oil produced on the official test.
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.
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.
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.

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

Jim Anne Jandrey
(Signature)
District Petroleum Engineer

January 4, 1989
(Date)

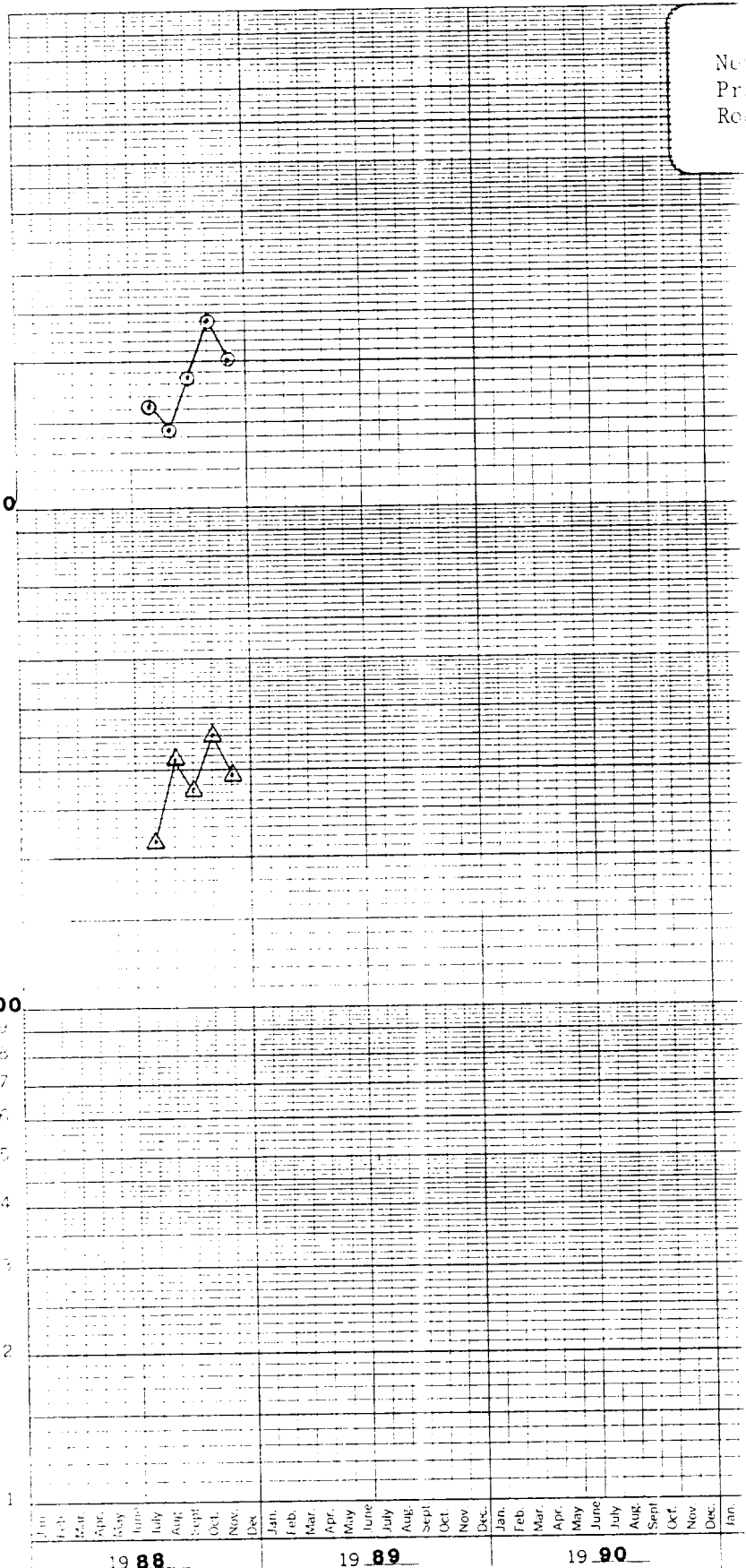
45 6690

5 YEARS BY MONTHS BY CYCLES
KUTLU A. ESSER CO. MARIETTA

EP Operating Company
New Mexico (55) Federal No. 1
Prairie, S. (Wolfcamp) Field
Roosevelt County, New Mexico

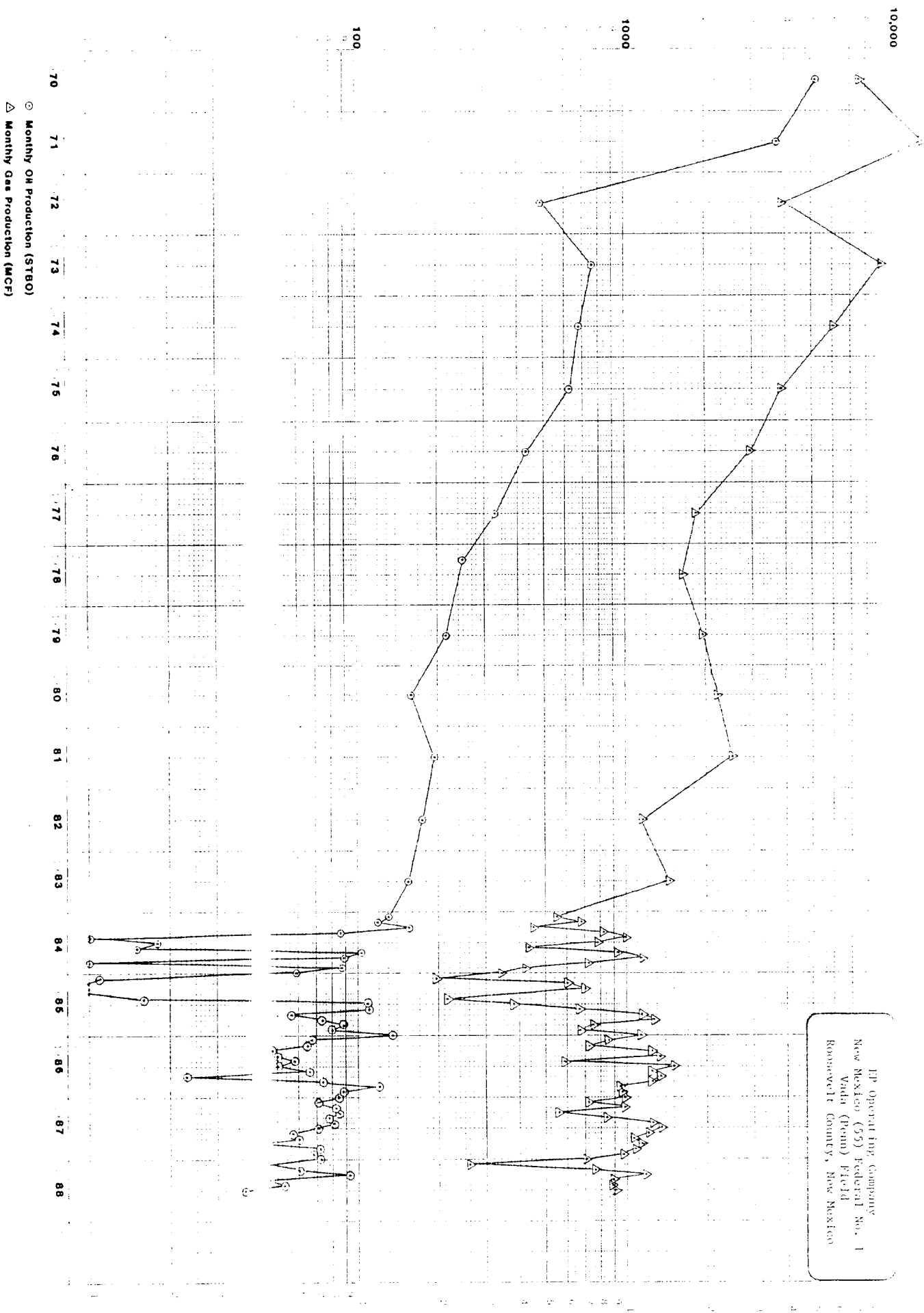
1000

100



○ Monthly Oil Production (STBO)
△ Monthly Gas Production (MCF)

19 91 19 92



**ENSERCH
EXPLORATION** INC

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

September 15, 1988

Breck Operating Company
P. O. Box 911
Breckenridge, Texas 76021

Re: Exception to New Mexico Rule 303-A
Downhole Commingling
EP Operating Company
N.M. (55) Federal No. 1
Prairie, S. (Wolfcamp) Field
Vada (Penn) Field
Roosevelt County, New Mexico

Gentlemen:

EP Operating Company proposes to commingle downhole within the wellbore of the N.M. (55) Federal Well No. 1 production from the Prairie, S. (Wolfcamp) Field and the Vada (Penn) Field. If, as an offset lease owner, you have no objection to the granting of this exception provided for under the provisions of New Mexico Rule 303-C and hereby waive objection and notice of hearing on this application, please execute two (2) copies of this waiver and return them to the above address.

Please advise if there are questions or additional information is required for this purpose.

Sincerely,


Leonard Kersh

TB/jd

Attachment

Name: 

Title: V.P. Pres

Date: 9-20-88

Managing General Partner of EP Operating Company, a limited partnership

**ENSERCH
EXPLORATION INC.**

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

RECEIVED

NOV 17 1988

Midland Production

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

September 15, 1988

Fina Oil & Chemical Company
#6 Desta Dr., Suite 3200
Midland, Texas 79705

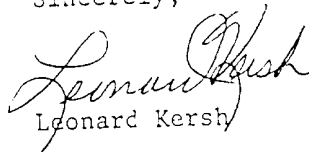
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Downhole Commingling
EP Operating Company
N.M. (55) Federal No. 1
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Vada (Penn) Field
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Sincerely,


Leonard Kersh

TB/jd

Attachment Fina Oil and Chemical Company

Name: Arnold E. Hendley

Title: District Production Manager

Date: 11-15-88

Managing General Partner of EP Operating Company, a limited partnership

ENSERCH
EXPLORATION INC

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

September 15, 1988

MWJ Producing Company
400 W. Illinois
Suite 1100
Midland, Texas 79701

Re: Exception to New Mexico Rule 303-A
Downhole Commingling
EP Operating Company
N.M. (55) Federal No. 1
Prairie, S. (Wolfcamp) Field
Vada (Penn) Field
Roosevelt County, New Mexico

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Sincerely,


Leonard Kersh

TB/jd

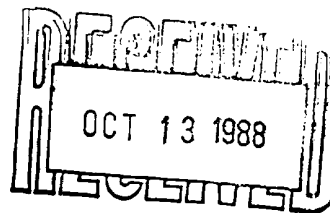
Attachment

Name: Edward H. Judson
Edward H. Judson
Title: Vice President/Treasurer & Assistant Secretary
Date: 9/21/88

Managing General Partner of EP Operating Company, a limited partnership

**ENSERCH
EXPLORATION** INC

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

September 15, 1988

SECOND REQUEST
DATED 10-11-88

Yates Petroleum
105 South 4th
Artesia, New Mexico 88210

Re: Exception to New Mexico Rule 303-A
Downhole Commingling
EP Operating Company
N.M. (55) Federal No. 1
Prairie, S. (Wolfcamp) Field
Vada (Penn) Field
Roosevelt County, New Mexico

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Sincerely,

Leonard Kersh

TB/jd

Attachment YATES PETROLEUM CORPORATION

Name:

Title: Attorney-in-Fact

Date: November 1, 1988

Managing General Partner of EP Operating Company, a limited partnership