

CASE 6280: ENERGY RESERVES GROUP, INC.  
FOR DOWNHOLE COMMINGLING, RIO ARRIBA  
COUNTY, NEW MEXICO

CASE NO.

6280

APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
State Land Office Building  
Santa Fe, New Mexico  
19 July 1973

EXAMINER HEARING

IN THE MATTER OF:

Application of Energy Reserves Group, ) CASE  
Inc., for downhole commingling, Rio ) 6280  
Arriba County, New Mexico. )

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Lynn Teschendorf, Esq.  
Legal Counsel for the Division  
State Land Office Building  
Santa Fe, New Mexico 87501

For the Applicant: Jason Kellahin, Esq.  
KELLAHIN & FOX  
500 Don Gaspar  
Santa Fe, New Mexico 87501

SALLY WALTON BOYD  
CERTIFIED SHORTHAND REPORTER  
730 Bishop's Lodge Road • Phone (505) 988-3404  
Santa Fe, New Mexico 87501

I N D E X

NICK CAVALERI

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1 MR. STAMETS: Call now Case 6280.

2 MS. TESCHENDORF: Case 6280. Application of  
3 Energy Reserves Group, Inc., for downhole commingling, Rio  
4 Arriba County, New Mexico.

5 MR. STAMETS: Call for appearances in this  
6 case.

7 MR. KELLAHIN: Jason Kellahin, Kellahin and  
8 Fox, Santa Fe, appearing for the Applicant. We have one  
9 witness to be sworn.

10 (Witness sworn.)

11  
12 NICK CAVALERI  
13 being called as a witness and having been duly sworn upon  
14 his oath, testified as follows, to-wit:

15  
16 DIRECT EXAMINATION

17 BY MR. KELLAHIN:

18 Q Would you state your name, please?

19 A Nick Cavaleri.

20 Q How do you spell that, please?

21 A C-A-V-A-L-E-R-I.

22 Q By whom are you employed and in what position,  
23 Mr. Cavaleri?

24 A Employed by Energy Reserves Group, as District  
25 Reservoir Engineer.

1 Q And where are you located?

2 A Casper, Wyoming.

3 Q In connection with your work with Energy  
4 Reserves Group, does the area involved in this application  
5 come under your supervision?

6 A Yes, sir, it does.

7 Q Have you ever testified before the Oil Con-  
8 servation Division?

9 A No, I have not.

10 Q For the benefit of the Examiner, would you  
11 briefly outline your education and experience?

12 A Yes, sir. I have a professional degree in  
13 petroleum engineering from the Colorado School of Mines.

14 Q When did you get that?

15 A In 1971. I spent a year and a half in sales  
16 and service engineering for a wellhead company. I've  
17 worked two years for Mobil Oil Company as technical com-  
18 puter programmer. I worked two years for Energy Reserves --  
19 or Fuelco (sic) in Denver, Colorado, as a production en-  
20 gineer and reservoir engineer, and two years in Bakersfield,  
21 California, as a production engineer and I am now District  
22 Reservoir Engineer.

23 Q And how long have you been in your present  
24 job?

25 A Approximately ten months.

1 MR. KELLAHIN: Are the witness' qualifications  
2 acceptable?

3 MR. STAMETS: They are.

4 Q (Mr. Kellahin continuing.) Mr. Cavaleri, are  
5 you familiar with the application of Energy Reserves Group  
6 in Case 6280?

7 A. Yes, sir.

8 Q What does the applicant propose in this case?

9 A. We propose to downhole commingle three of  
10 our wells on the Jicarilla Indian Reservation.

11 Q Now, referring to what has been marked as  
12 Exhibit One, Two, and Three, would you identify those ex-  
13 hibits, please?

14 A. This is a copy of the letter of application  
15 to commingle three of the -- the three wells I mentioned,  
16 Wells Nos. 4, 6, and 5 on the Jicarilla #35 Lease.

17 Q Now attached to those applications are what  
18 appear to be pressure decline curves, is that correct?

19 A. No, sir, those are production decline curves.

20 Q Oh, I'm sorry, production decline curves, and  
21 are those the production decline curves on each individual  
22 well?

23 A. Yes, they are. And there's one curve for  
24 each of the two zones which we want to commingle.

25 Q Now, are these wells reaching a fairly ad-

1 vanced stage of depletion?

2 A. Yes, they are.

3 Q. Now referring to what has been marked as Ex-  
4 hibit Number Four, would you identify that exhibit, please?

5 A. That's a Form C-16, the production testing  
6 form.

7 Q. For what wells and what zones?

8 A. It's for wells, includes Wells 3, 4, 5, and 6  
9 in the Pictured Cliffs zone.

10 Q. And then Exhibit Number Five, would you  
11 identify that exhibit?

12 A. That is the production test for 3, 4, 5, and 6  
13 in the Chacra, Otero-Chacra zone.

14 Q. Now, you have the information on Wells 3, 4,  
15 5, and 6, but the case is advertised for Wells 4, 5, and 6.  
16 What about No. 3?

17 A. An application was to be submitted for Well  
18 No. 3 but somehow it didn't get on the docket, so --

19 Q. So you will seek approval of that at a later  
20 time, then?

21 A. Yes, sir.

22 Q. Now, Exhibit Number Six, would you identify  
23 that exhibit, please?

24 A. That's a plat of the lease.

25 Q. And is this area outlined in black the lease



1 held by Energy Reserves Group?

2 A. That's right.

3 Q. And where are the subject wells located on  
4 that tract?

5 A. In the designated sections. You want me to  
6 go well by well or just generally?

7 Q. Yes, just generally on the map where would  
8 they be located?

9 A. They're in the northern -- the northern third  
10 of the lease.

11 Q. And are they each one numbered by the well  
12 location?

13 A. Yes, they are.

14 Q. Now, Mr. Cavaleri, what information do you  
15 have on the pressures in these two zones?

16 A. Well, we have the bottom hole pressures listed  
17 on each of the application letters for each of the wells.

18 Q. You have an estimated bottom hole pressure  
19 for Pictured Cliffs, for example, of 339 psig and the  
20 Chacra, 404. Those were extrapolated from surface pressures?

21 A. Yes, they are.

22 Q. And do you feel they reasonably reflect the  
23 bottom hole pressure of each of these zones?

24 A. Yes, I do.

25 Q. Is that true for each one of the three appli-

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1 oations involved here?

2 A. Yes, sir, it is.

3 Q. In your opinion, is the pressure differnce  
4 between those two zones of such magnitude that there would  
5 be migration of hydrocarbons from one zone to the other?

6 A. No, I don't feel there would be any.

7 Q. With the well on production would there be any  
8 chance at all for any kind of migration?

9 A. No.

10 Q. Now in your opinion will the approval of this  
11 application to commingle result in production of oil and  
12 gas that would not otherwise be recovered?

13 A. Yes, I feel that.

14 Q. Do these produce any water at all, these  
15 wells? Or any fluids?

16 A. No, I don't believe they do.

17 Q. No fluids at all?

18 A. They do produce water.

19 Q. Do produce water. So we're really just talking  
20 about commingling gas, is this correct?

21 A. Right.

22 Q. Now, is the ownership in the two zones common  
23 throughout?

24 A. Yes.

25 Q. Under each well?

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1 A. Yes.

2 Q. And that is Energy Reserves Group is the  
3 operator of each well?

4 A. Right.

5 Q. Were Exhibits One through Six prepared by you  
6 or under your supervision?

7 A. No, they were prepared by the production  
8 engineer under the District Production Engineer's super-  
9 vision.

10 Q. Have you examined them and in your opinion do  
11 they correctly reflect the information they purport to  
12 show?

13 A. Yes.

14 MR. KELLAHIN: At this time I'd like to offer  
15 in evidence Exhibits One through Six.

16 MR. STAMETS: These exhibits will be admitted.  
17 Are there questions for the witness?

18

19 CROSS EXAMINATION

20 BY MR. STAMETS:

21 Q. Mr. Cavaleri, looking at the exhibits which  
22 show the production decline on these wells, it would appear  
23 to me that all of the wells were completed in September of  
24 1977? Or mid -- the latter part of 1977?

25 A. Yes, that's correct.

Q. Okay. Also, it would appear as though there was rather a precipitous decline in production for the first few months and then an indication that perhaps they stabilized.

A. Yes. That's my interpretation.

Q. Is that the typical way that these wells act in this area?

A. I'm not familiar enough with them to say if that's a typical response.

Q. Now what method would you use in determining the gas to be allocated to each of the zones?

A. We recommend that the allocation be based on actual production in the first four months of 1978.

Q. And that would be that period of relatively stable production.

A. Yes, sir.

Q. Do you have those figures to present?

A. Yes, they're on the application under Item Number Eight.

Q. Is that the letters?

A. Yes.

Q. Item Number Eight.

MR. KELLAHIN: Second page of the application.

Q. Are there any liquids produced by these wells?

A. I understand there is some water produced.

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1 I don't have any figures on that. But I suppose condensate;  
2 I'm not sure.

3 Q And you don't know the volume of water, whether  
4 it's an insignificant amount or whether it could be signi-  
5 ficant, or which formation it comes from?

6 A No, sir, I don't, other than we feel that the --  
7 we're having difficulty producing up the casing, which  
8 would mean the Pictured Cliffs zone is essentially tending  
9 to load up with water.

10 Q I would like to have that information submitted  
11 after the hearing.

12 A All right.

13 Q Are the Chacra sands water sensitive at all?  
14 Could the Pictured Cliffs water cause some producing prob-  
15 lems in the Chacra?

16 A We haven't analyzed the difference in the  
17 waters. There is a trace of water, I guess, produced in  
18 both zones. I would have to say, just from my general  
19 knowledge, that they shouldn't be sensitive to the produced  
20 water.

21 Q How will the wells be completed?

22 A It hasn't been decided yet. We have a permanent  
23 packer in the hole now separating the zones. We'll either  
24 millout the packer or else we'll just -- probably the first  
25 attempt, we'll just attempt to pull up out of the packer

1 and produce both zones up the tubing.

2 MR. STAMETS: Any other questions of the  
3 witness?

4  
5 REDIRECT EXAMINATION

6 BY MR. KELLAHIN:

7 Q In discussing our exhibits Four and Five,  
8 which are the two C-116 forms, is there a correction to be  
9 made on the two exhibits?

10 A Yes.

11 Q Would you tell the Examiner?

12 A The exhibit on the Otero-Chacra zone under  
13 tubing pressure, it's been crossed out and casing pressure  
14 written over. That should be tubing pressure. It is the  
15 lower zone, so it should be tubing pressure, and on the  
16 Blanco-Pictured Cliffs form, it should be -- tubing should  
17 be crossed out in that case and changed to casing pressure.  
18 It's producing up the casing.

19 This is true for all four of the wells.

20 MR. STAMETS: If there is nothing further the  
21 witness may be excused.

22 MR. KELLAHIN: If the Examiner please, the  
23 application for Well No. 3 for some reason didn't get here.  
24 We would like for an administrative procedure for approval  
25 for commingling for that well, also, if that would be pos-

1 sible.

2 MR. STAMETS: We will bear that in mind.  
3 The case will be taken under advisement.

4 MR. KELLAHIN: Thank you.

5 (Hearing concluded.)  
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SALLY WALTON BOYD  
CERTIFIED SHORTHAND REPORTER  
730 Bishop's Lodge Road • Phone (505) 938-3404  
Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY  
 CERTIFY that the foregoing and attached Transcript of  
 Hearing before the Oil Conservation Division was reported  
 by me; that the said transcript is a full, true, and correct  
 record of the hearing, prepared by me to the best of my  
 ability, knowledge, and skill from my notes taken at the  
 time of the hearing.

Sally Walton Boyd CSR  
 Sally Walton Boyd, C.S.R.

I do hereby certify that the foregoing is  
 a complete record of the proceedings in  
 the Examiner hearing of Case No. 6280,  
 heard by me on 7-19, 1928.  
Richard L. Blum Examiner  
 New Mexico Oil Conservation Commission

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 CERTIFIED SHORTHAND REPORTER  
 730 Bishop's Lodge Road • Phone (505) 988-3404  
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JERRY APODACA  
GOVERNOR

NICK FRANKLIN  
SECRETARY

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

August 2, 1978

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

Mr. Jason Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: CASE NO. 6280  
ORDER NO. R-5775

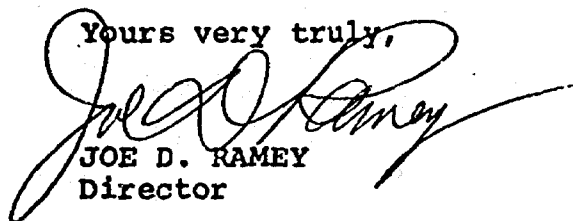
Applicant:

Energy Reserves Group, Inc.

Dear Sir:

Enclosed herewith are two copies of the above-referenced  
Division order recently entered in the subject case.

Yours very truly,

  
JOE D. RAMEY  
Director

JDR/fd

Copy of order also sent to:

Hobbs OCC X  
Artesia OCC X  
Aztec OCC X

Other \_\_\_\_\_  
\_\_\_\_\_

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 6280  
Order No. R-5775

APPLICATION OF ENERGY RESERVES  
GROUP, INC. FOR DOWNHOLE COMMINGLING,  
RIO ARriba COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 19, 1978,  
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 1st day of August, 1978, the Division  
Director, having considered the testimony, the record, and  
the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required  
by law, the Division has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, Energy Reserves Group, Inc., is  
the owner and operator of the Jicarilla 35 Well No. 6 located  
in Unit H of Section 1, Township 24 North, Range 5 West, and  
its Jicarilla 35 Wells Nos. 4 and 5, located in Unit M of  
Section 35 and Unit J of Section 36, respectively, both in  
Township 25 North, Range 5 West, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle  
South Blanco-Pictured Cliffs and Otero-Chacra production  
within the wellbores of the above-described wells.

(4) That from the South Blanco-Pictured Cliffs zone, the  
subject wells are capable of low rates of production only.

(5) That from the Otero-Chacra zone, the subject wells  
are capable of low rates of production only.

-2-

Case No. 6280

Order No. R-5775

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time any of the subject wells are shut-in for 7 consecutive days.

(9) That the production to each of the commingled zones should be allocated based upon the production from each of said zones in each of said wells for the first four months of 1978.

IT IS THEREFORE ORDERED:

(1) That the applicant, Energy Reserves Group, Inc., is hereby authorized to commingle South Blanco-Pictured Cliffs and Otero-Chacra production within the wellbores of the Jicarilla 35 Well No. 6 located in Unit H of Section 1, Township 24 North, Range 5 West, and its Jicarilla 35 Wells Nos. 4 and 5, located in Unit M of Section 35 and Unit J of Section 36, respectively, both in Township 25 North, Range 5 West, Rio Arriba County, New Mexico.

(2) That the commingled production shall be allocated to each of said zones in each of said wells as follows:

WELL	SOUTH BLANCO-PICTURED	OTERO-CHACRA
	CLIFFS	
Jicarilla 35 Well No. 6	27 percent	73 percent
Jicarilla 35 Well No. 4	11 percent	89 percent
Jicarilla 35 Well No. 5	74 percent	26 percent

(3) That the operator of the subject wells shall immediately notify the Division's Aztec district office any time any of the wells has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

-3-

Case No. 6280  
Order No. R-5775

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



*Joe D. Ramey*  
JOE D. RAMEY,  
Director

dr/

Energy Reserves Group, Inc.  
P.O. Box 3280  
Casper, Wyoming 82601  
Phone 307 265 7331



June 21, 1978

State of New Mexico  
Oil Conservation Commission  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Energy Reserves Group, Inc. for  
Downhole Commingling, Rio Arriba County, New Mexico

Gentlemen:

Energy Reserves Group, Inc., submits this application requesting approval to commingle downhole the production from the South Blanco Pictured Cliffs and Otero Chacra in the wellbore of the Jicarilla 35 Well No. 4 which is located in Unit Letter M, Section 35, T25N-R5W. The following is supplied as supporting data:

1. The well is owned and operated by Energy Reserves Group, Inc.
2. Form C-116 showing the production of the subject well from the Pictured Cliffs and Chacra for the month of April, 1978.
3. Production decline curves for both zones.
4. The estimated bottomhole pressure of the Pictured Cliffs is 339 psig and the Chacra is 404 psig. Pressures are extrapolated from surface pressures.
5. Both zones produce gas with a trace of water. The Pictured Cliffs gas gravity is .692 and the Chacra gas gravity is .668.
6. The contracted price is the same for the gas from both zones; therefore, the combined price will be the same as the individual prices.
7. All offset operators, by copy of this application, have been notified.

BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION  
*Energy Res.* EXHIBIT NO. 1  
CASE NO. 6280  
Submitted by Cavalieri  
Hearing Date 7-19-78

Page 2



8. It is requested that allocation be based on the average daily production for the first four months of 1978. The Pictured Cliffs has averaged 16.3 MCFPD and the Chacra 127 MCFPD; therefore the allocation as suggested would be 11% Pictured Cliffs and 89% Chacra.

Very truly yours,

ENERGY RESERVES GROUP, INC.

*Terry J. Cox*

Terry J. Cox  
Production Engineer  
Rocky Mountain District

TJC/dp

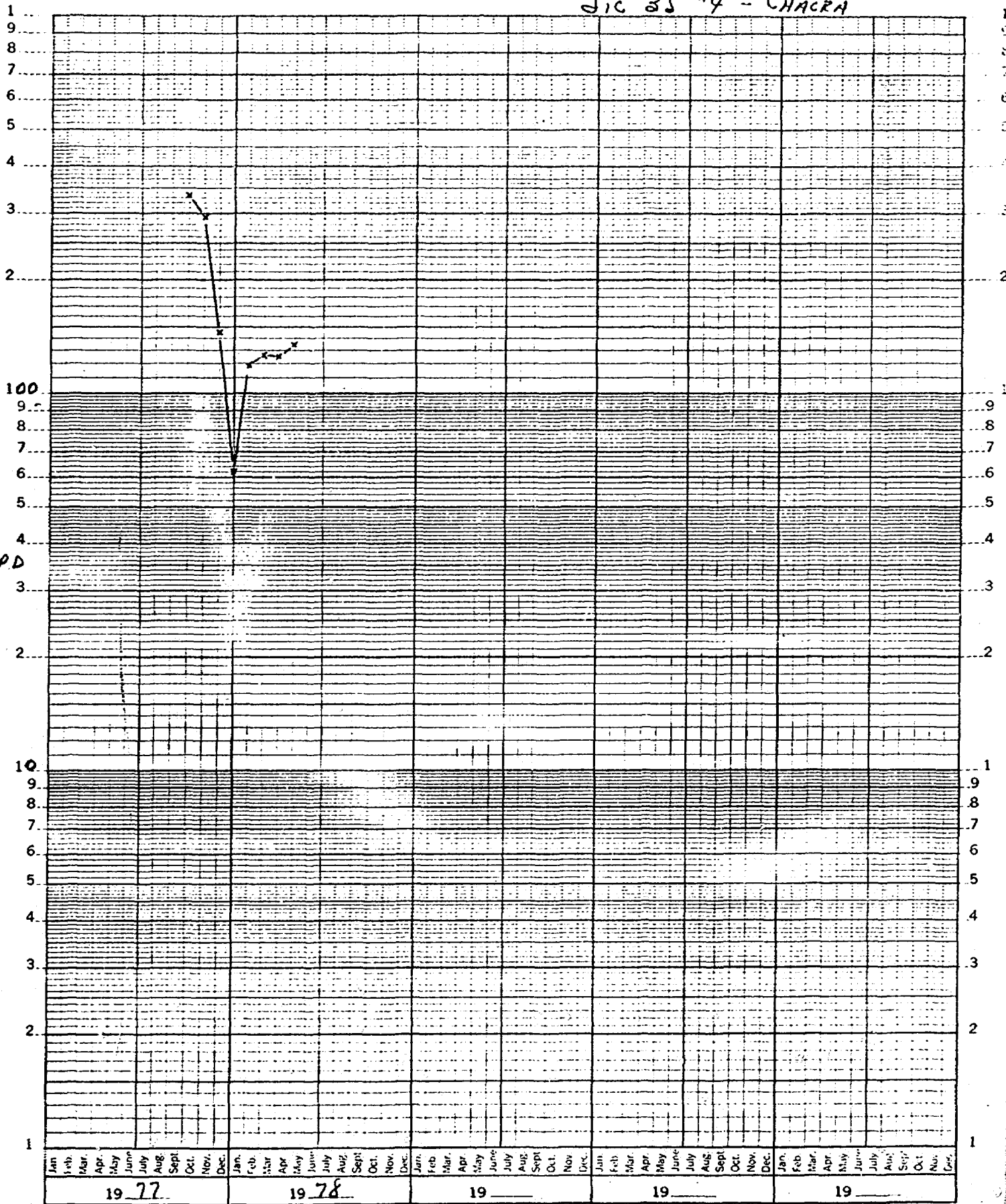
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JIC 35 \*4 - CHACRA

46 6690

MCFPD

K-E 5 YEARS BY MONTHS x 3 LOG CYCLES  
KEUFFEL & ESSER CO. MADE IN U.S.A.









Energy Reserves Group, Inc.  
P.O. Box 3280  
Casper, Wyoming 82601  
Phone 307 265 7331



June 21, 1978

State of New Mexico  
Oil Conservation Commission  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Energy Reserves Group, Inc. for  
Downhole Commingling, Rio Arriba County, New Mexico

Gentlemen:

Energy Reserves Group, Inc. submits this application requesting approval to commingle downhole the production from the South Blanco Pictured Cliffs and Otero Chacra in the wellbore of the Jicarilla 35 Well No. 5 which is located in Unit Letter J, Section 36, T25N-R5W. The following is supplied as supporting data:

1. The well is owned and operated by Energy Reserves Group, Inc.
2. Form C-116 showing the production of the subject well from the Pictured Cliffs and Chacra for the month of April, 1978.
3. Production decline curves for both zones.
4. The estimated bottomhole pressure of the Pictured Cliffs is 268 psig and the Chacra is 389 psig. Pressures are extrapolated from surface pressures.
5. Both zones produce gas with a trace of water. The Pictured Cliffs gas gravity is .694 and the Chacra gas gravity is .692.
6. The contracted price is the same for the gas from both zones; therefore, the combined price will be the same as the individual prices.
7. All offset operators, by copy of this application, have been notified.

BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION <i>Energy Reserves</i> EXHIBIT NO. <u>2</u> CASE NO. <u>6280</u> Submitted by <u>Mike Cavalieri</u> Hearing Date <u>7.19.78</u>
--


Page 2



8. It is requested that allocation be based on the average daily production for the first four months of 1978. The Pictured Cliffs has averaged 124.3 MCFPD and the Chacra 44.8 MCFPD; therefore, the allocation as suggested would be 74% Pictured Cliffs and 26% Chacra.

Very truly yours,

ENERGY RESERVES GROUP, INC.

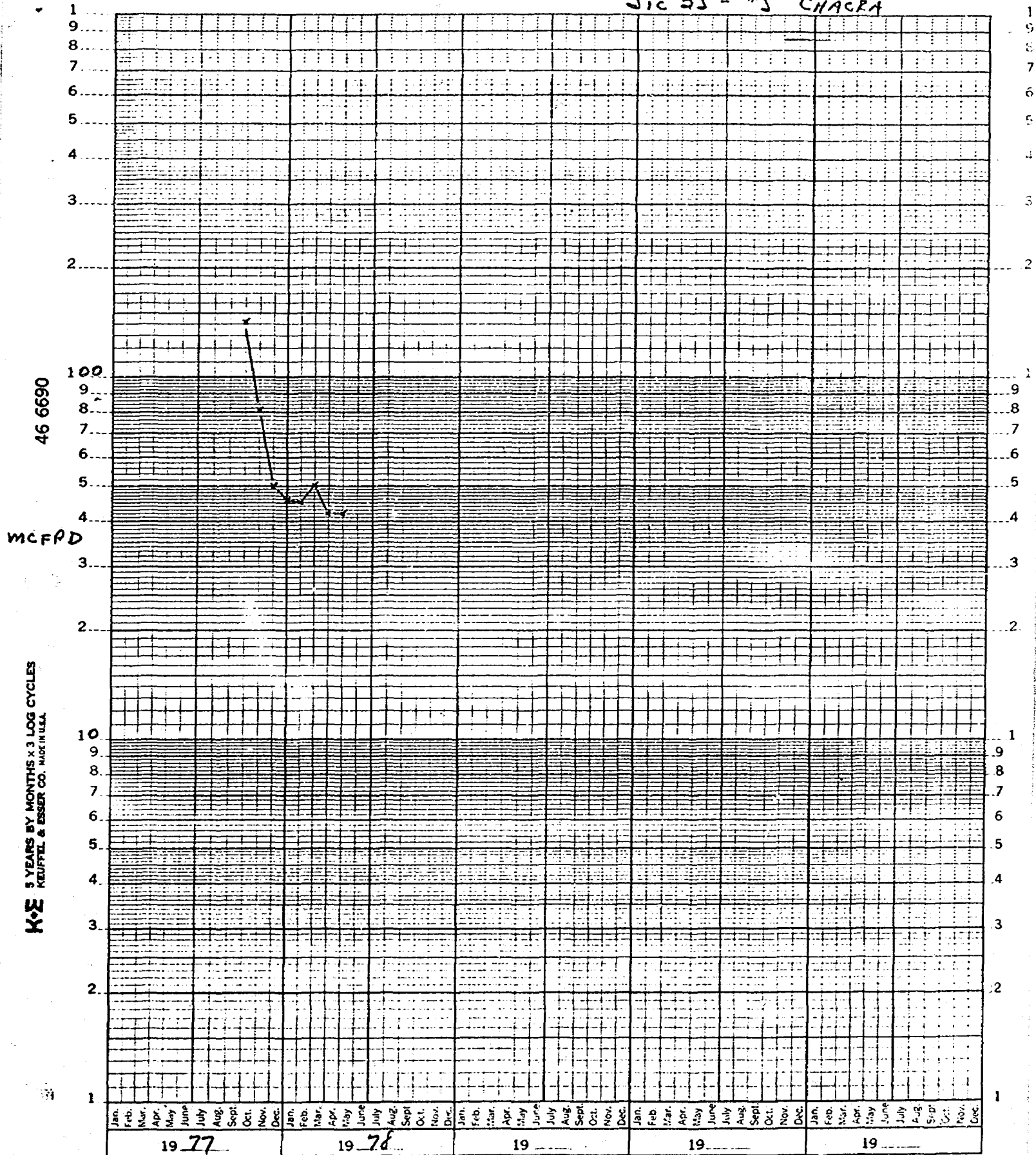


Terry J. Cox  
Production Engineer  
Rocky Mountain District

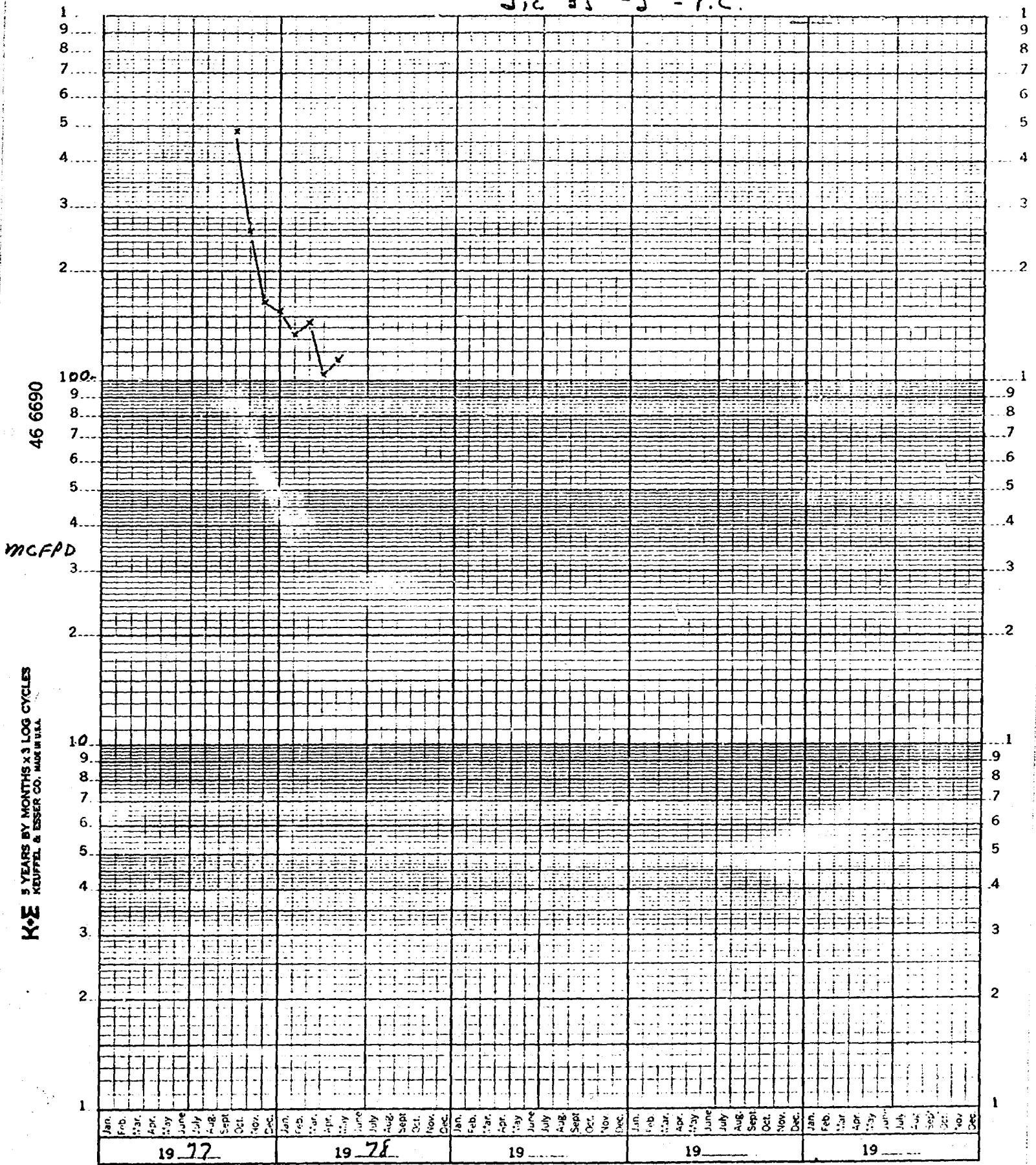
TJC/dp

enc.

JIC 35 - \*S CHACKA



Jic 35 #5 - P.C.



K-E 5 YEARS BY MONTHS x 3 LOG CYCLES  
KEUFFEL & ESSER CO. MADE IN U.S.A.

Energy Reserves Group, Inc.  
P.O. Box 3280  
Casper, Wyoming 82601  
Phone 307 265 7331



June 21, 1978

State of New Mexico  
Oil & Gas Conservation Commission  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Energy Reserves Group, Inc. for  
Downhole Commingling, Rio Arriba County, New Mexico

Gentlemen:

Energy Reserves Group, Inc., submits this application requesting approval to commingle downhole the production from the South Blanco Pictured Cliffs and Otero Chacra in the wellbore of the Jicarilla 35 Well No. 6 which is located in Unit Letter H, Section 1, T24N-R5W. The following is supplied as supporting data:

1. The well is owned and operated by Energy Reserves Group, Inc.
2. Form C-116 showing the production of the subject well from the Pictured Cliffs and Chacra for the month of April, 1978.
3. Production decline curves for both zones.
4. The estimated bottomhole pressure of the Pictured Cliffs is 175 psig and the Chacra is 308 psig. Pressures are extrapolated from surface pressures.
5. Both zones produce gas with a trace of water. The Pictured Cliffs gas gravity is .696 and the Chacra gas gravity is .648.
6. The contracted price is the same for the gas from both zones; therefore, the combined price will be the same as the individual prices.
7. All offset operators, by copy of this application, have been notified.

BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION  
*Egy Rian* EXHIBIT NO. 3  
CASE NO. 6280  
Submitted by Wick Cavalieri  
Hearing Date 7-14-78

Page 2

 Energy Reserves Group .

8. It is requested that allocation be based on the average daily production for the first four months of 1978. The Pictured Cliffs has averaged 25.3 MCFPD and the Chacra 67.8 MCFPD; therefore the allocation as suggested would be 27% Pictured Cliffs and 73% Chacra.

Very truly yours,

ENERGY RESERVES GROUP, INC.

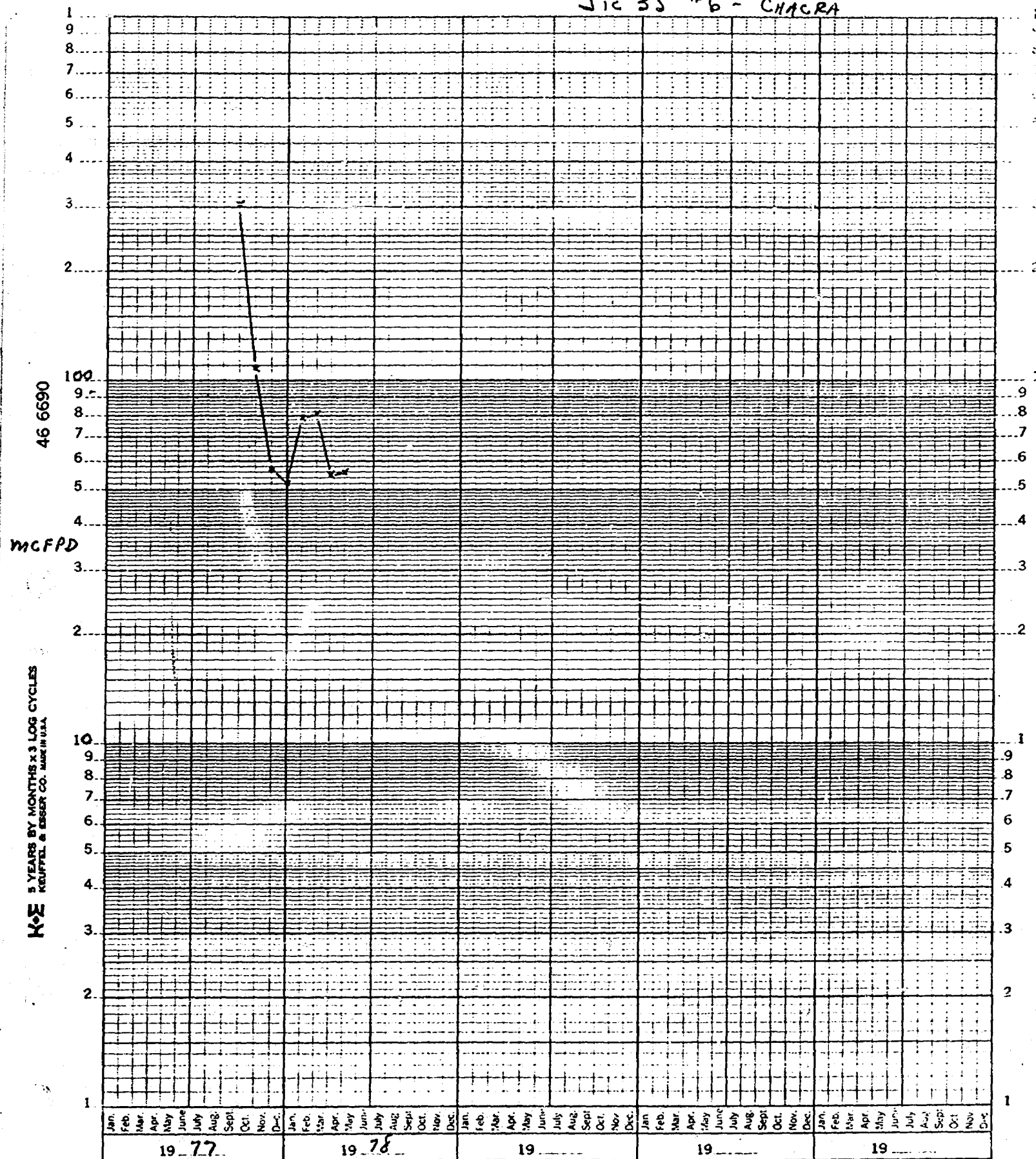
*Terry J. Cox*

Terry J. Cox  
Production Engineer  
Rocky Mountain District

TJC/dp

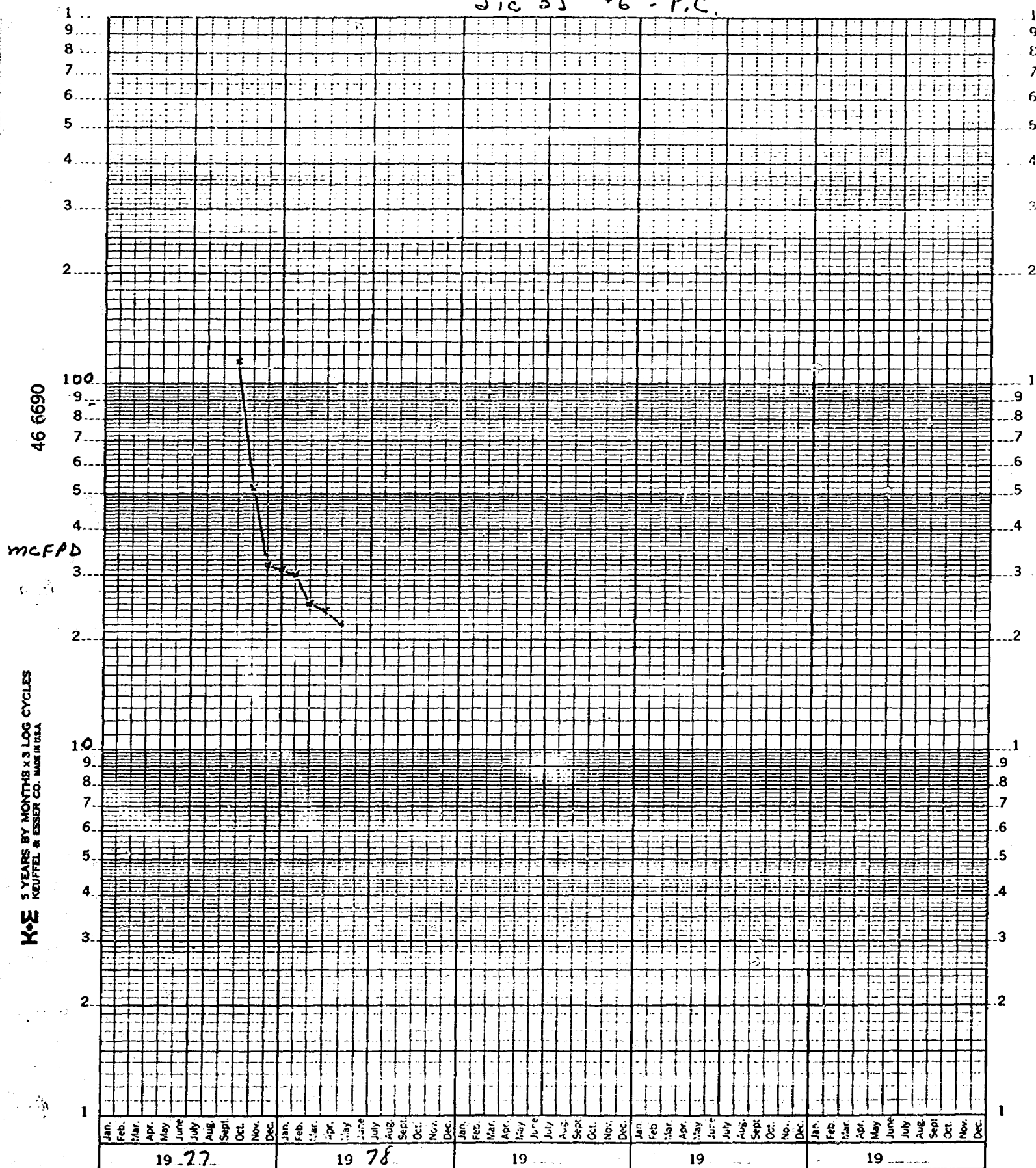
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Jic 35 #6 - CHACRA





Jic 35 46 - P.C.





**NEW MEXICO OIL CONSERVATION COMMISSION  
GAS-OIL RATIO TESTS**

C-116  
Revised 1-1-65

Operator <b>Energy Reserves Group, Inc.</b>		Pool <b>South Blanco - Pictured Cliffs</b>				County <b>Rio Arriba</b>										
Address <b>P. O. Box 3280 Casper, Wyoming 82602</b>						TYPE OF TEST - (X) <input checked="" type="checkbox"/> <b>Casing</b>		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Special <input type="checkbox"/>				
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BBL.
		U	S	T	R							WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	
<b>Jicarilla 35</b>	<b>3</b>	<b>B</b>	<b>2</b>	<b>24N</b>	<b>5W</b>	<b>4-1-78</b>			<b>110</b>			<b>0</b>		<b>0</b>	<b>1,100</b>	
	<b>4</b>	<b>M</b>	<b>35</b>	<b>25N</b>	<b>5W</b>	<b>4-30-78</b>			<b>110</b>			<b>0</b>		<b>0</b>	<b>470</b>	
	<b>5</b>	<b>J</b>	<b>36</b>	<b>25N</b>	<b>5W</b>	<b>4-30-78</b>			<b>110</b>			<b>0</b>		<b>0</b>	<b>3,461</b>	
	<b>6</b>	<b>H</b>	<b>1</b>	<b>24N</b>	<b>5W</b>	<b>4-30-78</b>			<b>110</b>			<b>0</b>		<b>0</b>	<b>660</b>	

BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION  
*Engy Rm* EXHIBIT NO. 4  
CASE NO. 6280  
Submitted by Nick Cavalieri  
Hearing Date 7-19-78

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.

\_\_\_\_\_  
(Signature)  
**Production Engineer**  
\_\_\_\_\_  
(Title)  
\_\_\_\_\_  
(Date)

NEW MEXICO OIL CONSERVATION COMMISSION  
GAS-OIL RATIO TESTS

C-116  
Revised 1-1-65

Operator Energy Reserves Group, Inc.		Pool Otero - Chacra		County Rio Arriba	
Address P. O. Box 3280 Casper, Wyoming 82602		TYPE OF TEST - (X) <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/> Completion <input type="checkbox"/> Special <input type="checkbox"/>			

LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	CHOKE SIZE	PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BBL.
		U	S	T	R						WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	
Jicarilla 35	3	B	2	24N	5W	4-1-78		220			0		0	2,059	
	4	M	35	25N	5W	4-30-78		220			0		0	4,059	
	5	J	36	25N	5W	4-30-78		220			0		0	1,245	
	6	H	1	24N	5W	4-30-78		220			0		0	1,669	

BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION

Exhibit NO. 5

CASE NO. 6280

Submitted by Nick Cavalera

Hearing Date 7-19-78

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.

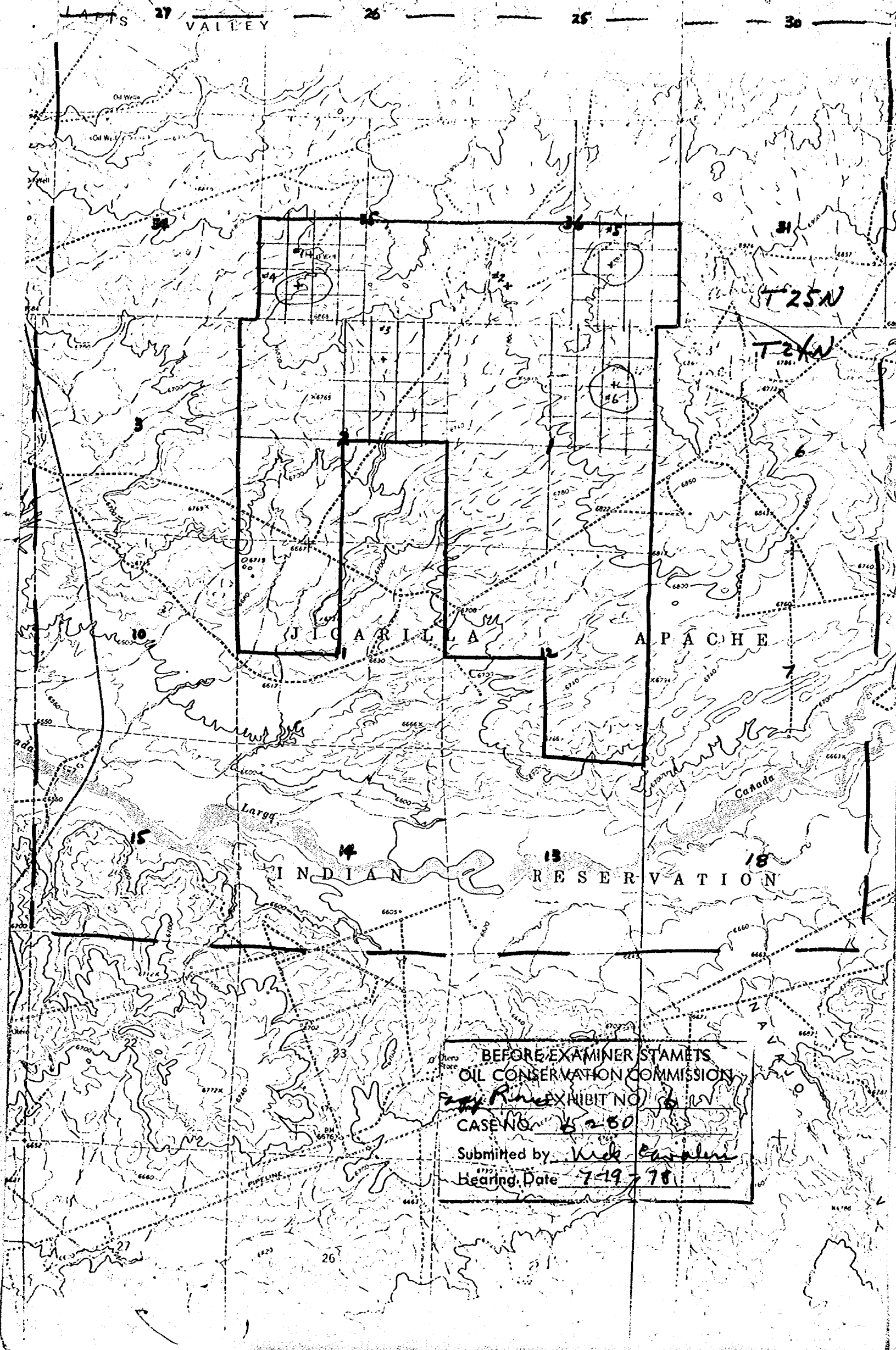
(Signature)

Production Engineer

(Title)

(Date)

RSW Rfw



Dockets Nos. 24-78 and 25-78 are tentatively set for hearing on August 2 and 16, 1978. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 19, 1978

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for August, 1978, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for August, 1978, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 6274: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Shar-Alan Oil Company, The Travelers Indemnity Co., and all other interested parties to appear and show cause why the Lillian State Well No. 2-X located in Unit P of Section 2 and the Emma McDaniel Well No. 2 located in Unit G of Section 22, both in Township 24 North, Range 1 West, Rio Arriba County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6241: (Continued from June 7, 1978, Examiner Hearing)

Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Eagle Creek Permo-Penn and West Atoka-Morrow gas production in the wellbore of its Powell DG Well No. 1 located in Unit O of Section 35, Township 17 South, Range 25 East, Eddy County, New Mexico.

CASE 6275: Application of Delta Drilling Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location of its Donaldson "A" Com. Well No. 1 located 1930 feet from the North line and 2303 feet from the West line of Section 23, Township 23 South, Range 28 East, Strawn formation, Eddy County, New Mexico, the W/2 of said Section 23 to be dedicated to the well.

CASE 6276: Application of Jerome P. McHugh for an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of his Chris Well No. 4 to be drilled 1902 feet from the South line and 1650 feet from the East line of Section 9, Township 27 North, Range 3 West, Blanco Mesaverde Pool, Rio Arriba County, New Mexico, the S/2 of said Section 9 to be dedicated to the well.

Applicant further seeks authority to commingle Blanco Mesaverde and Gavilan-Pictured Cliffs production in the wellbore of said well.

CASE 6277: Application of Jerome P. McHugh for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Gavilan Pictured Cliffs and Blanco Mesaverde production in the wellbores of his Chris Wells Nos. 3 and 3A, located in Units H and I of Section 21, Township 27 North, Range 3 West, Rio Arriba County, New Mexico.

CASE 6253: (Continued and Readvertised)

Application of Merrion & Bayless for a non-standard proration unit and unorthodox location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 366.44-acre non-standard gas proration unit comprising the W/2 of Sections 30 and 31, Township 26 North, Range 2 West, Blanco Mesaverde Pool, Rio Arriba County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 1650 feet from the North line and 750 feet from the East line of said Section 30.

CASE 6278: Application of Consolidated Oil & Gas, Inc., for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Jenney Well No. 1-A located in Unit P of Section 13, Township 26 North, Range 4 West, Rio Arriba County, New Mexico, to produce gas from the Blanco Mesaverde Pool and the Basin-Dakota Pool and to commingle Greenhorn gas production with the aforesaid Dakota production in said well.

CASE 6279: Application of Hanagan Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the N/2 of Section 28, Township 21 South, Range 26 East, Avalon Hills-Morrow Pool, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6280: Application of Energy Reserves Group, Inc., for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle South Blanco-Pictured Cliffs and Otero-Chacra production in the wellbores of its Jicarilla 35 Well No. 6 located in Unit H of Section 1, Township 24 North, Range 5 West, and its Jicarilla 35 Wells Nos. 4 and 5, located in Unit M of Section 35 and Unit J of Section 36, respectively, both in Township 25 North, Range 5 West, Rio Arriba County, New Mexico.

CASE 6281: Application of Southern Union Exploration Co. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation through the perforated interval from 4300 feet to 4346 feet in its Susco State Well No. 3 located in Unit N of Section 19, Township 9 South, Range 33 East, Flying "M" San Andres Pool, Lea County, New Mexico.

CASE 6282: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order abolishing, contracting, extending vertical and horizontal limits, and redesignating certain pools in McKinley, Rio Arriba, Sandoval, and San Juan Counties, New Mexico:

(a) ABOLISH the Ojito-Gallup Oil Pool in Rio Arriba County, New Mexico, described as:

TOWNSHIP 25 NORTH, RANGE 3 WEST, NMPM  
Section 17: SW/4

(b) EXTEND the vertical limits of the Ojito-Dakota Oil Pool in Rio Arriba County, New Mexico, described as:

TOWNSHIP 25 NORTH, RANGE 3 WEST, NMPM  
Section 17: SW/4  
Section 18: SE/4  
Section 19: NE/4

to include the Gallup formation and redesignate said pool the Ojito Gallup-Dakota Oil Pool and extend said pool to include therein:

TOWNSHIP 25 NORTH, RANGE 3 WEST, NMPM  
Section 17: NW/4

(c) ABOLISH the Nipp-Pictured Cliffs Pool in San Juan County, New Mexico.

(d) EXTEND the horizontal limits of the WAW Fruitland-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM  
Section 2: W/2  
Section 3: All  
Section 10: N/2  
Section 11: W/2 and SE/4  
Section 14: NE/4

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM  
Section 5: E/2  
Section 7: W/2 and SE/4  
Section 8: E/2 and SW/4  
Section 16: SW/4  
Sections 17 and 18: All  
Section 19: NE/4  
Section 20: All  
Section 21: W/2 and SE/4  
Section 22: S/2  
Section 26: SW/4  
Sections 27 and 28: All  
Section 29: N/2  
Sections 33, 34 and 35: All

TOWNSHIP 26 NORTH, RANGE 13 WEST, NMPM  
Section 1: N/2 and SE/4  
Section 2: NE/4  
Section 4: NE/4  
Section 12: E/2

TOWNSHIP 27 NORTH, RANGE 12 WEST, NMPM  
Section 30: SW/4

TOWNSHIP 27 NORTH, RANGE 13 WEST, NMPM

Section 18: W/2  
Section 19: N/2  
Section 25: SE/4  
Section 27: NW/4  
Section 30: W/2  
Section 34: SE/4  
Sections 35 and 36: All

which includes, among other lands, the lands formerly contained in the Nipp-Pictured Cliffs Pool.

(e) CONTRACT the South Gallegos-Fruitland Pool in San Juan County, New Mexico, by deleting:

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM

Section 8: N/2  
Section 9: N/2  
Section 10: N/2

(f) EXTEND the Ballard-Pictured Cliffs Pool in Rio Arriba, San Juan, and Sandoval Counties, New Mexico, to include therein:

TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM

Section 7: S/2  
Section 8: SW/4

(g) EXTEND the Blanco Mesaverde Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 4 WEST, NMPM

Section 5: SW/4

(h) EXTEND the Blanco-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 8 WEST, NMPM

Section 9: SE/4

TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM

Section 22: NW/4

(i) EXTEND the South Blanco-Pictured Cliffs Pool in Rio Arriba, San Juan, and Sandoval Counties, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 8 WEST, NMPM

Section 10: All

(j) EXTEND the Bloomfield-Chacra Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 11 WEST, NMPM

Section 9: SW/4

(k) EXTEND the BS Mesa-Gallup Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 4 WEST, NMPM

Section 3: SE/4

(l) The advertised extension of the Chacon-Dakota Associated Pool in Rio Arriba and Sandoval Counties, New Mexico, will be deferred to a later date because of an error in advertising.

(m) EXTEND the Dufers Point Gallup Dakota Oil Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 8 WEST, NMPM

Section 18: W/2

TOWNSHIP 25 NORTH, RANGE 9 WEST, NMPM

Section 12: W/2  
Section 13: NE/4

(n) EXTEND the Fulcher Kutz-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 11 WEST, NMPM

Section 5: SW/4

(o) EXTEND the South Hospah-Lower Sand Oil Pool in McKinley County, New Mexico, to include therein:

TOWNSHIP 17 NORTH, RANGE 8 WEST, NMPM  
Section 6: NW/4 SE/4

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM  
Section 12: NW/4 NW/4

(p) EXTEND the South Hospah-Upper Sand Oil Pool in McKinley County, New Mexico, to include therein:

TOWNSHIP 17 NORTH, RANGE 8 WEST, NMPM  
Section 5: W/2 SW/4  
Section 6: S/2 SE/4  
Section 7: N/2 NE/4  
Section 8: NW/4 NW/4

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM  
Section 12: NW/4 NW/4

(q) EXTEND the Kutz-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM  
Section 33: NW/4

(r) EXTEND the South Los Pinos Fruitland-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 7 WEST, NMPM  
Section 2: NE/4  
Section 10: NE/4

(s) EXTEND the Lybrook-Gallup Oil Pool in Rio Arriba and Sandoval Counties, New Mexico, to include therein:

TOWNSHIP 23 NORTH, RANGE 7 WEST, NMPM  
Section 8: NW/4

(t) EXTEND the Papers Wash-Entrada Oil Pool in McKinley County, New Mexico, to include therein:

TOWNSHIP 19 NORTH, RANGE 5 WEST, NMPM  
Section 15: SE/4 SW/4  
Section 16: NE/4 SE/4  
Section 22: NE/4 NW/4

(u) The advertised extension of the Rusty-Chacra Pool in Sandoval County, New Mexico, will be deferred to a later date because of an error in advertising.

(v) EXTEND the Ute Dome-Dakota Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 32 NORTH, RANGE 14 WEST, NMPM  
Section 24: S/2

71  
Set for hearing  
(3 wells involved)

on 7/19

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Letter coming



Energy Reserves Group, Inc.  
P.O. Box 3280  
Casper, Wyoming 82601  
Phone 307 265 7331



JUL 5 1978

June 29, 1978

State of New Mexico  
Oil Conservation Commission  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Energy Reserves Group, Inc.  
for Downhole Commingling  
Rio Arriba County, New Mexico

Gentlemen:

Energy Reserves Group, Inc., requests that the above mentioned applications be included on the docket for the July 19, 1978 hearing.

Very truly yours,

ENERGY RESERVES GROUP, INC.

*Terry J. Cox*

Terry J. Cox  
Production Engineer  
Rocky Mountain District

TJC/dp

ROUGH

dr/

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 6280

Order No. R-5775

APPLICATION OF ENERGY RESERVES GROUP, INC.  
FOR DOWNHOLE COMMINGLING, RIO ARRIBA  
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 19  
19 78, at Santa Fe, New Mexico, before Examiner Richard L. Stamey

NOW, on this July August day of 19 78, the  
Division Director, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required  
by law, the Division has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, Energy Reserves Group, Inc., is  
the owner and operator of the Jicarilla 35 Well No. 6 located in  
Unit H of Section 1, Township 24 North, Range 5 West, and its  
Jicarilla 35 Wells Nos. 4 and 5, located in Unit M of Section 35  
and Unit J of Section 36, respectively, both in Township 25 North,  
Range 5 West, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle South Blanco-Pictured Cliffs and Otero-Chacra production within the wellbores of the above-described wells.

(4) That from the South Blanco-Pictured Cliffs zone, the subject wells are capable of low <sup>rates of</sup> marginal production only.

(5) That from the Otero-Chacra zone, the subject wells are capable of low <sup>rates of production</sup> marginal production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time any of the subject wells are shut-in for 7 consecutive days.

(9) That ~~in order to allocate the commingled production~~ to each of the commingled zones in the subject wells, \_\_\_\_\_

~~percent of the commingled production should be allocated~~  
~~on the basis based upon the production from~~  
~~to the South Blanco-Pictured Cliffs zone, and \_\_\_\_\_ percent of~~  
~~the commingled production to the Otero-Chacra zone.~~

*each of said zones is each of said wells for the first four months of 1976.*

IT IS THEREFORE ORDERED:

(1) That the applicant, Energy Reserves Group, Inc., is hereby authorized to commingle South Blanco-Pictured Cliffs and Otero-Chacra production within the wellbores of the Jicarilla 35 Well No. 6 located in Unit H of Section 1, Township 24 North, Range 5 West, and its Jicarilla 35 Wells Nos. 4 and 5, located in Unit M of Section 35 and Unit J of Section 36, respectively, both in Township 25 North, Range 5 West, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.

(2) That ~~percent of the commingled~~ each of said zones production shall be allocated to ~~the South Blanco Pictured Cliffs~~ in each of said wells as follows: zone and ~~percent of the commingled~~ production shall be allocated to the Otero-Chacara zone.

(3) That the operator of the subject wells shall immediately notify the Division's Aztec district office any time any of the wells has been shut-in for 7 consecutive days and shall concurrently present, to the <sup>Division</sup> ~~Commission~~, a plan for remedial action.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

<u>WELL</u>	<u>South Blanco Pictured Cliffs</u>	<u>Otero-Chacara</u>
Jicarilla 35 Well No 6	27 percent	73 percent
Jicarilla 35 Well No 4	11 percent	89 Percent
Jicarilla 35 Well No 5	74 percent	26 percent