

CASE 6442: CAULKINS OIL COMPANY FOR  
DOWNHOLE COMMINGLING, RIO ARriba COUNTY,  
NEW MEXICO

**Amberg**

5923 T3

CASE NO.

6442

APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,

ETC.

# Memo

From

A. R. KENDRICK  
Supervisor

To Enril; <sup>644/2</sup> # 109

one copy for your  
Case file:

R-5647-A

one copy for the  
well file.

al



BRUCE KING  
GOVERNOR

LARRY KEHOE  
SECRETARY

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

1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-8178

July 24, 1979

Mr. Charles E. Verquer  
Caulkins Oil Company  
P. O. Box 780  
Farmington, New Mexico 87401

Re: Downhole Commingled Production  
Caulkins Oil Company  
Breach E #109  
M-3-26N-6W

Dear Mr. Verquer:

The production percentage breakdown for the various zones of  
the subject well shall be:

|                 |                                 |
|-----------------|---------------------------------|
| Pictured Cliffs | 42% of all gas                  |
| Chacra          | 18% of all gas                  |
| Mesaverde       | 40% of all gas, 100% of all oil |

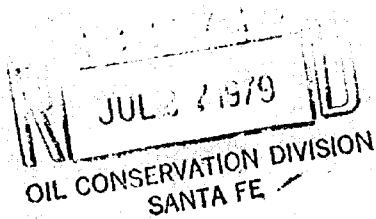
Transporters are being notified by copies of this letter.

Yours very truly,

*A. R. Kendrick*  
A. R. Kendrick  
District Supervisor

xc: Oil Conservation Division, Santa Fe  
Gas Transporter: Gas Company of New Mexico  
Oil Transporter: Shell Pipeline

ARK:no



# CAULKINS OIL CO.

Post Office Box 780  
Farmington, New Mexico 87401  
July 17, 1979

Mr. A. R. Kendrick  
Supervisor # 3  
New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

Dear Al:

As per our discussion in your office July 13, 1979, following is recommended production breakdown for our Well No. 109, Unit M - Section 3 - 26 North - 6 West, Rio Arriba County, New Mexico.

Pictured Cliffs Zone

Chacra Zone

Mesa Verde Zone

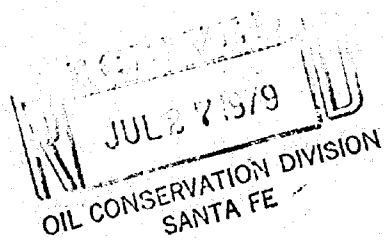
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40% of all Gas and 100% of all Oil

Sincerely

*Charlie E. Verquer*  
Charlie E. Verquer, Supt.  
Caulkins Oil Company





BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

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**ENERGY AND MINERALS DEPARTMENT**  
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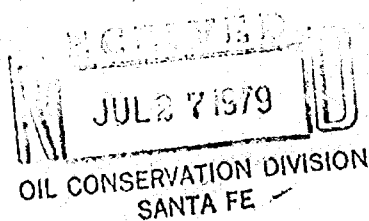
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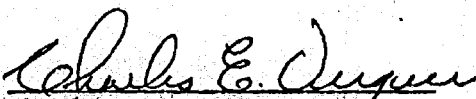
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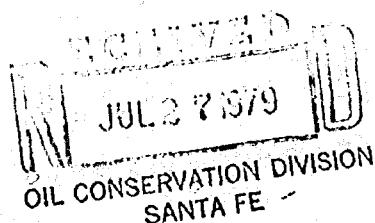
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Caulkins Oil Company



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
State Land Office Building  
Santa Fe, New Mexico  
31 January 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Caulkins Oil Company for  
downhole commingling, Rio Arriba County  
New Mexico.

CASE  
6442

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 Bldg.  
Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq.  
KELLAHIN & KELLAHIN  
500 Don Gaspar  
Santa Fe, New Mexico 87501

**Nye Reporting Service, Inc.**  
Certified Shorthand Reporters  
621 Old Santa Fe Trail - Suite 7  
Santa Fe, New Mexico 87501



## I N D E X

PAGE

## CHARLES VERQUER

Direct Examination by Mr. Kellahin

3

Examination by Mr. Stamets

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## E X H I B I T S

Exhibit Number One, Map of Well No. 109

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Exhibit Number Three, Initial Shut-in Pressure

7

Exhibit Number Four, Proposed Production Split &  
Mechanics

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1 MR. STAMETS: Call the next case, 6442.

2 MS. TESCHENDORF: Case 6442, Application of  
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4 County, New Mexico.

5 MR. KELLAHIN: Tom Kellahin of Santa Fe, New  
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7 record to reflect that Mr. Verquer has been previously quali-  
8 fied, is now still under oath and is tendered as our expert.

9 MR. STAMETS: The record will so show.

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11 CHARLES VERQUER

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

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15 DIRECT EXAMINATION

16 BY MR. KELLAHIN:

17 Q Mr. Verquer, would you refer to Exhibit Number  
18 One and identify the subject well?

19 A It's a map of Caulkins property with Well No.  
20 109 in Section 3-26-6, identified by a red arrow. The PCM  
21 indicates it's Pictured Cliffs-Chacra-Mesaverde. It is now  
22 producing as a Pictured Cliffs-Chacra commingled and a packer  
23 set between the Chacra and the Mesaverde for a dual well.

24 Q Let me get that again. You have got --

25 A A Pictured Cliffs-Chacra.

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1 Q Are currently commingled?

2 A Are currently commingled.

3 Q And you have the Chacra and the Mesaverde  
4 commingled?

5 A No, sir. I could. I have an order that says  
6 it was authorized.

7 Q Tell me again how you have got this well set  
8 up?

9 A How it is?

10 Q Yes.

11 A It is now producing as a Pictured Cliffs-Chacra  
12 commingled and there is a Packer set then to dual it in the  
13 Dakota -- excuse me, the Mesaverde. The Mesaverde is pro-  
14 ducing from below the packer through tubing to the surface.

15 Q All right. What do you now propose to do with  
16 the well?

17 A Commingle the three zones in the wellbore.  
18 The reason for this, this well was recompleted. It was plug-  
19 ged back and recompleted in 1978. I ended up having to run  
20 inch-and-a-quarter tubing through the Mesaverde zone, and I  
21 am having problems keeping the Mesaverde flowing that way.  
22 If we could be authorized to commingle the three zones, I'd  
23 have more gas to help carry the fluid to the surface from the  
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25 MS. TESCHENDORF: Do you have that Order

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MR. KELLAHIN: For the dual completion?

MS. TESCHENDORF: Yes.

MR. VERQUER: 5648.

MS. TESCHENDORF: Thank you.

MR. VERQUER: Then the dual completion was

AMC-2463.

BY MR. KELLAHIN:

Q Let's look at Exhibit Three, Mr. Verquer, and have you tell me what's on that information there?

A Exhibit Number Three?

Q Yes, let's go to Three.

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Q Is the ownership and working interest common in all three of these formations as well?

A They are.

Q Let's look at Exhibit Three and explain that information.

A Exhibit Three shows the initial shut-in pressure

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5 month of October, November and December from the commingled  
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7 Q The Mesaverde is the only formation that pro-  
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11 any oil.

12 Q In your opinion, the fluids produced in the  
13 Mesaverde have no impairment effect upon the Pictured Cliffs  
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15 A I don't think so.

16 Q Is there any significant differential between  
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19 very surprising to me, 570 and 640. I expected higher  
20 pressure than that from the Pictured Cliffs-Chacra and also  
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5 this application prevent waste and protect correlative  
6 rights?

7 A It will.

8 Q In your opinion, is this the most effective  
9 and efficient method of recompleting this well?

10 A Yes, it is.

11 Q Were Exhibits One through Four prepared by  
12 you?

13 A They were.

14 MR. KELLAHIN: We move the introduction of  
15 Exhibits One through Four.

16 MR. STAMETS: These Exhibits will be admitted.  
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20 Q Mr. Verquer, is your 35% -- 15% split in the  
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23 A Yes, sir.

24 MR. STAMETS: Any other questions of the  
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2 (Hearing Concluded.)

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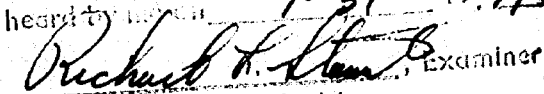
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1 REPORTER'S CERTIFICATE

2  
3 I, STEFANIE XANTHULL, a court reporter, DO HEREBY  
4 CERTIFY that the foregoing and attached Transcript of  
5 Hearing before the Oil Conservation Division was reported  
6 by me; that the said transcript is a full, true, and correct  
7 record of the hearing, prepared by me to the best of my  
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10

11   
12 STEFANIE XANTHULL, C.S.R.  
13

14  
15  
16  
17 I do hereby certify that the foregoing is  
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20 heard by me on 1-31-79.

21   
22 Richard H. Starn, Examiner  
23 Oil Conservation Division  
24  
25

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REPORTER'S CERTIFICATE

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STEFANIE XANTHULL, C.S.R.

I do hereby certify that the foregoing is  
a complete record of the hearing in  
the Examiner hearing of 6442  
heard by me on 10-27-77.

Richard L. Hunt, Examiner  
Oil Conservation Division

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STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

JERRY APODACA  
GOVERNOR

NICK FRANKLIN  
SECRETARY

February 21, 1979

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

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

Re: CASE NO. 6442  
ORDER NO. R-5647-A

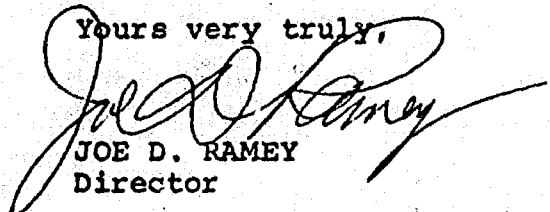
Applicant:

Caulkins Oil Company

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. 6442  
Order No. R-5647-A

APPLICATION OF CAULKINS OIL COMPANY  
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 January 31, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 20th day of February, 1979, 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, Caulkins Oil Company, is the owner and operator of the Breech E Well No. 109, located in Unit M of Section 3, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Pictured Cliffs, Chacra and Mesaverde production within the wellbore of the above-described well.
- (4) That from the Pictured Cliffs zone, the subject well is capable of low marginal production only.
- (5) That from the Chacra zone, the subject well is capable of low marginal production only.
- (6) That from the Mesaverde zone, the subject well is capable of low marginal production only.

-2-

Case No. 6442  
Order No. R-5647-A

(7) 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.

(8) 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.

(9) 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 the subject well is shut-in for 7 consecutive days.

(10) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

(11) That Division Administrative Order No. MC-2463, which authorized the multiple completion of the subject well, should be superseded.

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, is hereby authorized to commingle Pictured Cliffs, Chacra and Mesaverde production within the wellbore of the Breech E Well No. 109, located in Unit M of Section 3, Township 26 North, Range 6 West, NMPM, 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 the subject well.

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

(4) That Division Administrative Order No. MC-2463 is hereby superseded.

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

-3-  
Case No. 6442  
Order No. R-5647-A

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



*Joe D. Ramey*  
JOE D. RAMEY  
Director

fd/

Breech E 109

Case No. <sup>U442</sup>

Proposal

Commingle Pictured Cliffs, Chacra and Mesa Verde Zones.

Well now producing Pictured Cliffs and Chacra Commingled (Order No. R-5648), with Packer Set between Chacra and Mesa Verde Zones. Mesa Verde producing thru 1 $\frac{1}{4}$ " tubing, MC 2463 authorized above completion.

Previous to completing well in above manner, order No. R-5647 authorized Commingling Chacra and Mesa Verde Zones.

Ownership and all working interests are common for this well.

Exhibit # 1

Section map showing well and all offset wells.

Exhibit # 2

Plat showing well location and direct offset wells in Section 34 and east half, Section 33 27N 6W, Sections 3 and 10 and east half Sections 4 and 9 26N 6W all in Rio Arriba County, New Mexico.

Exhibit # 3

Initial shut in pressures, and monthly production records for Commingled and Mesa Verde Zones October and November 1978.

Exhibit # 4

Proposed production split and Mechanics of completion.

Breech E 109  
Case No.

Proposal

Commingle Pictured Cliffs, Chacra and Mesa Verde Zones.  
Well now producing Pictured Cliffs and Chacra Commingled (Order No. R-5648), with Packer Set between Chacra and Mesa Verde Zones. Mesa Verde producing thru 1 $\frac{1}{4}$ " tubing, MC 2463 authorized above completion.  
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Plat showing well location and direct offset wells in Section 34 and east half, Section 33 27N 6W, Sections 3 and 10 and east half Sections 4 and 9 26N 6W all in Rio Arriba County, New Mexico.

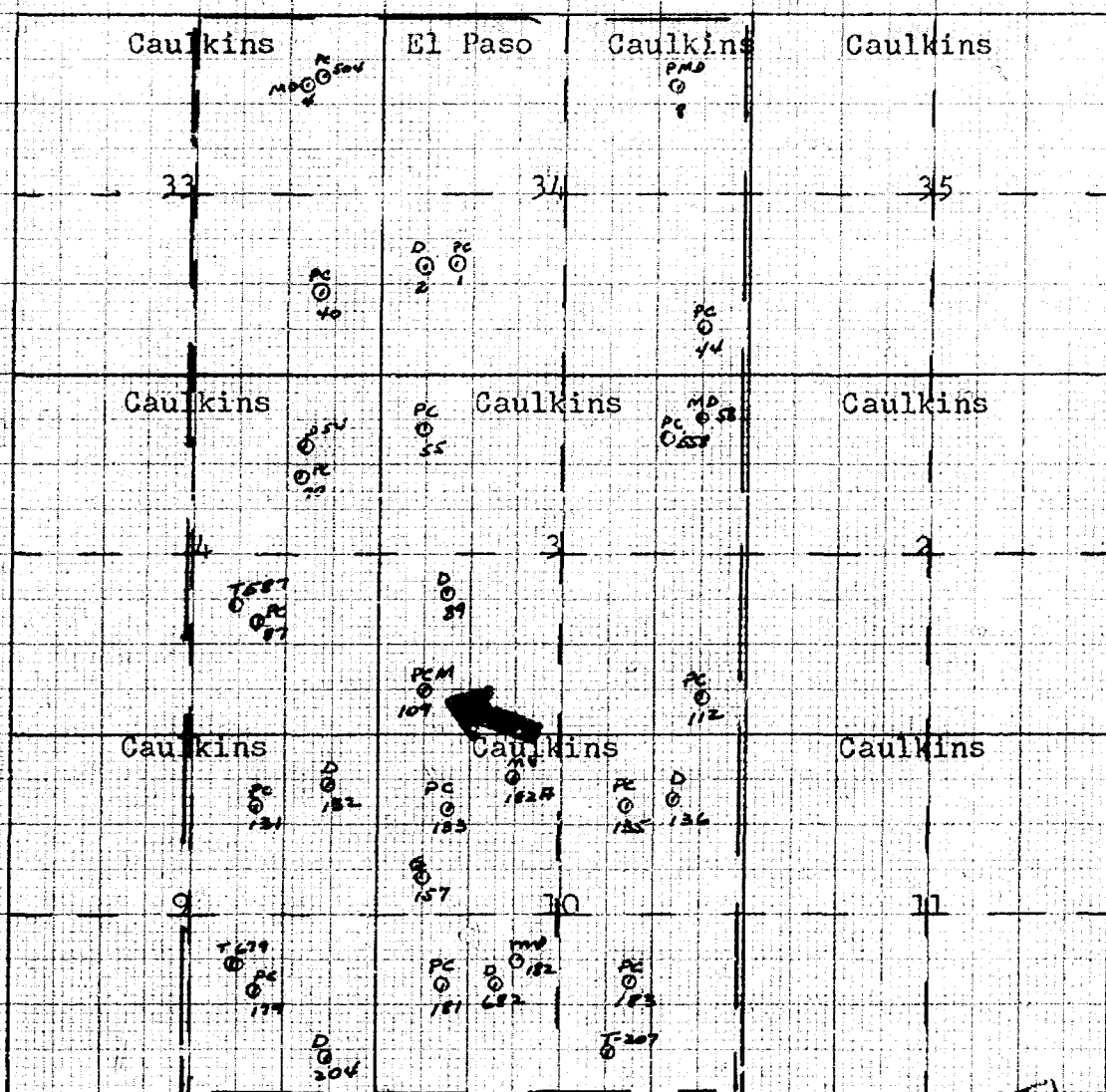
Exhibit # 3

Initial shut in pressures, and monthly production records for Commingled and Mesa Verde Zones October and November 1978.

Exhibit # 4

Proposed production split and Mechanics of completion.

CAULKINS OIL COMPANY  
Breach E 109  
Unit M Section 3 26N 6W  
Rio Arriba County, New Mexico



|     |                                       |
|-----|---------------------------------------|
| pc  | Pictured Cliffs                       |
| md  | Mesa Verde - Dakota                   |
| pmd | Pictured Cliffs - Mesa Verde - Dakota |
| D   | Dakota                                |
| T   | Tocito                                |
| pcm | Pictured Cliffs - Chacra - Mesa Verde |
| mv  | Mesa Verde                            |

6442  
1-31-78

46 1473

10 X 10 TO 1 INCH • 7.5 X 10 INCHES  
KEUFFEL & ESSER CO. MADE IN U.S.A.



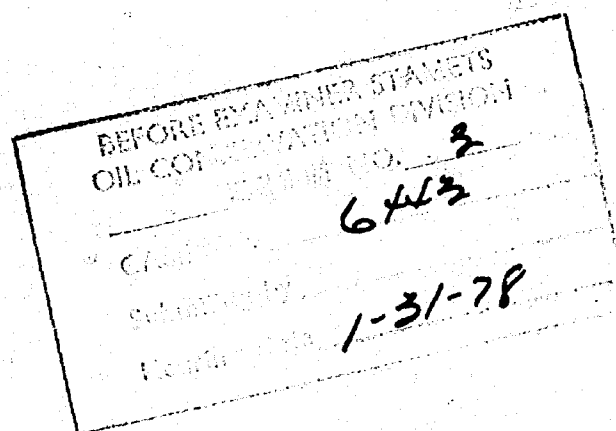
CAULKINS OIL COMPANY

BREECH E 109

Unit M Sec. 26N 6W

Exhibit # 3

|                              |                     |                   |                   |
|------------------------------|---------------------|-------------------|-------------------|
| 8-9-78                       | Initial Pressure    | PC.-Chacra<br>570 | Mesa Verde<br>640 |
| 8-9-78                       | Initial Potential   | 1754              | 806               |
| Connected to Pipeline        |                     | 9-26-78           | 10-25-78          |
| 1978                         | Deliverability Test | 161               | 112 MCFPD.        |
| Rate of Flow During Test     |                     | 239               | 213 MCFPD.        |
| 7 Day SI Pressure after Test |                     | 530               | 535               |
| October                      | 1978 Production     | 8437              | 0                 |
| November                     | 1978 Production     | 3620              | 3659              |
| December                     | 1978 Production "   | 4156              | 4266              |



CAULKINS OIL COMPANY

Breech E 109

Unit M Sec. 26N 6W

Exhibit # 4

Proposed production split:

Pictured Cliffs 35% gas production.

Chacra 15% gas production.

Mesa Verde 50% gas production and 100% oil production.

Mechanic's

Pull 1" tubing now being used for Pictured Cliffs-Chacra  
Commingled production and salvage.

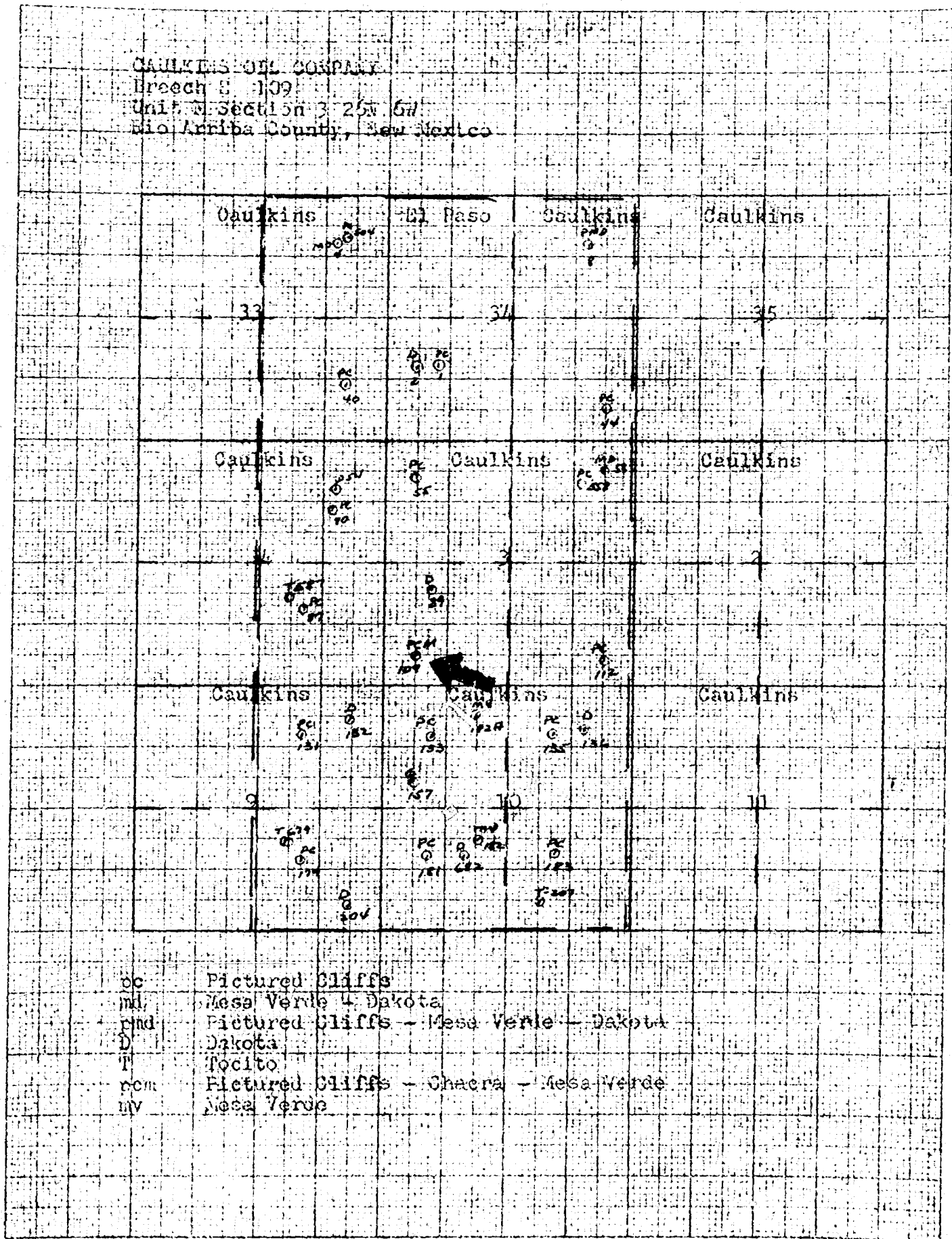
Pull 1 $\frac{1}{4}$ " tubing and Seal assy now being used for Mesa Verde  
production then run 2 3/8" tubing to Mesa Verde Perfs. for  
Commingled Prod.

|                           |         |
|---------------------------|---------|
| BEFORE EXAMINER STAMPS    |         |
| OIL CONSERVATION DIVISION |         |
| FILE NO.                  | 4       |
| CASE NO.                  | 6443    |
| DATE                      | 1-31-72 |
| REMARKS                   |         |

4442  
Ex 2

46 1473

K&E  
16 X 10 TO 1/2 INCH • 1/2 X 1/2 INCH  
KUPPEL & ESSER CO. NEW YORK



Ex 3

CAULKINS OIL COMPANY

BREECH E 109

Unit M Sec. 26N 6W

Exhibit # 3

|                              |                     |                   |                   |
|------------------------------|---------------------|-------------------|-------------------|
| 8-9-78                       | Initial Pressure    | PC.-Chacra<br>570 | Mesa Verde<br>640 |
| 8-9-78                       | Initial Potential   | 1754              | 806               |
| Connected to Pipeline        |                     | 9-26-78           | 10-25-78          |
| 1978                         | Deliverability Test | 161               | 112 MCFPD.        |
| Rate of Flow During Test     |                     | 239               | 213 MCFPD.        |
| 7 Day SI Pressure after Test |                     | 530               | 535               |
| October                      | 1978 Production     | 8437              | 0                 |
| November                     | 1978 Production     | 3620              | 3659              |
| December                     | 1978 Production     | 4156              | 4266              |

207

CAULKINS OIL COMPANY

Breech E 109

Unit M Sec. 26N 6W

Exhibit # 4

Proposed production split:

Pictured Cliffs 35% gas production.

Chacra 15% gas production.

Mesa Verde 50% gas production and 100% oil production.

Mechanic's

Pull 1" tubing now being used for Pictured Cliffs-Chacra  
Commingled production and salvage.

Pull 1 1/4" tubing and Seal assy now being used for Mesa Verde  
production then run 2 3/8" tubing to Mesa Verde Perfs. for  
Commingled Prod.

Dockets Nos. 5-79 and 6-79 are tentatively set for hearing on February 14 and 28, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 31, 1979

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:

CASE 6422: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Helton Engineering & Geological Services, Inc., Travelers Indemnity Company, and all other interested parties to appear and show cause why the Brent Well No. 1 located in Unit H of Section 29 and the Brent Well No. 3 located in Unit G of Section 19, both in Township 13 North, Range 6 East, Sandoval County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6415: (Continued from January 17, 1979, Examiner Hearing)

Application of Yates Petroleum Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Devonian formations underlying the W/2 of Section 20, Township 14 South, Range 36 East, Lea 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 6419: (Continued from January 17, 1979, Examiner Hearing)

Application of Yates Petroleum Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Lanning JC Well No. 1 located in Unit B of Section 7, Township 18 South, Range 26 East, Eagle Creek Field, Eddy County, New Mexico, to produce gas from the Strawn formation through the casing-tubing annulus and from the Morrow formation through tubing.

CASE 6423: Application of Yates Petroleum Corporation for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jackson AT Well No. 9 located 660 feet from the South and West lines of Section 13, Township 17 South, Range 25 East, Eddy County, New Mexico, to test the Wolfcamp, Pennsylvanian, and Mississippian formations, the S/2 of said Section 13 to be dedicated to the well.

CASE 6424: Application of Yates Petroleum Corporation for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Superior Fed. KJ Well No. 1 located 990 feet from the North and West lines of Section 7, Township 20 South, Range 29 East, Eddy County, New Mexico, to test the Wolfcamp and Pennsylvanian formations, the N/2 of said Section 7 to be dedicated to the well.

CASE 6425: Application of T. B. Knox Estate for exception to Order No. R-111-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the casing/cementing rules for the Oil-Potash Area as promulgated by Order No. R-111-A to permit its Lucia Brookes Well No. 2 located in Unit K of Section 14, Township 18 South, Range 30 East, Eddy County, New Mexico, to be completed in the following manner: set surface casing and circulate cement; eliminate salt protection string; and do not circulate cement on production casing.

CASE 6426: Application of C. W. Trainer for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be located 660 feet from the North and West lines of Section 24, Township 20 South, Range 32 East, South Salt Lake-Morrow Pool, Lea County, New Mexico, the N/2 of said Section 24 to be dedicated to the well.

CASE 6427: Application of Caribou Four Corners, Inc., for an unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Caribou/Kirtland Well No. 1 to be located 1214 feet from the North line and 650 feet from the East line of Section 13, Township 29 North, Range 15 West, Cha Cha-Gallup Pool, San Juan County, New Mexico, the E/2 NE/4 to be dedicated to the well.

CASE 6428: Application of Mobil Oil Corporation for the amendment of Order No. R-5801, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-5801 to delete the requirements for lined tubing in injection wells in the North Vacuum Abo East Pressure Maintenance Project, Lea County, New Mexico.

- CASE 6429: Application of Zia Energy, Inc., for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of its Elliott State Well No. 2 to be located in Unit B of Section 34, Township 20 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well, and further seeks approval of a waiver of existing well-spacing requirements.
- CASE 6430: Application of Phoenix Resources Company for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for its Buckhorn Canyon Unit Area comprising 23,009 acres, more or less, of Federal and state lands in Township 19 South, Ranges 19 and 20 East, Chaves County, New Mexico.
- CASE 6431: Application of HNG Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the N/2 of Section 35, Township 23 South, Range 28 East, 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 6432: Application of John Yuronka for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Langlie Matrix Pool underlying the NE/4 NW/4 and the SE/4 NW/4 of Section 29, Township 24 South, Range 37 East, Lea County, New Mexico, to form two 40-acre units, each 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 wells 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 wells and a charge for risk involved in drilling said wells.
- CASE 6433: Application of Cities Service Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formations underlying the S/2 of Section 8, Township 23 South, Range 28 East, 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 6434: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of its State "O" Well No. 5 to be located in Unit H of Section 30, Township 19 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well, and further seeks approval of a waiver of existing well-spacing requirements.
- CASE 6435: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of its W. A. Weir "B" Well No. 3 located in Unit B of Section 26, Township 19 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well, and further seeks approval of a waiver of existing well-spacing requirements.
- CASE 6436: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of its State "U" Gas Com Well No. 2 to be located in Unit C of Section 32, Township 19 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well, and further seeks approval of a waiver of existing well-spacing requirements.
- CASE 6437: Application of Curtis Little for approval of infill drilling and a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of a well to be located 1085 feet from the South line and 285 feet from the West line of Section 12, Township 28 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well. Applicant further seeks rescission of Order No. R-4556 and approval of a 344.36-acre non-standard gas proration unit comprising all of Section 11, and Lot 4 and the SW/4 SW/4 of Section 12 for said well.
- CASE 6438: Application of Caulkins Oil Company for dual completions and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Breech Well No. 812 located in Unit N of Section 18, Township 26 North, Range 6 West, and its Breech Well No. 224-A located in Unit B of Section 13, Township 26 North, Range 7 West, Rio Arriba County, New Mexico, to produce gas from the Dakota formation through a separate string of tubing and to commingle Chacra and Mesaverde production in the wellbores of said wells.

- CASE 6439: Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Mesaverde and Dakota production in the wellbore of its Breech A Well No. 229 located in Unit D of Section 17, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6440: Application of Caulkins Oil Company 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 Breech F Well No. 8 located in Unit A of Section 34, Township 27 North, Range 6 West, Rio Arriba County, New Mexico, to produce gas from the Pictured Cliffs formation through a separate string of tubing and to commingle Mesaverde and Dakota production in the wellbore of said well.
- CASE 6441: Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs and Mesaverde production in the wellbore of its Breech F Well No. 12 located in Unit A of Section 35, Township 27 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6442: Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs, Chacra and Mesaverde production in the wellbore of its Breech E Well No. 109 located in Unit M of Section 3, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6443: Application of Caulkins Oil Company for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Breech B Well No. 220-R located in Unit B of Section 14, Township 26 North, Range 7 West, to produce gas from the Dakota formation through a separate string of tubing and to commingle Pictured Cliffs, Chacra and Mesaverde production in the wellbore of said well.
- CASE 6444: Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs, Mesaverde, Chacra and Greenhorn production in the wellbore of its Breech Well No. 224 located in Unit A of Section 13, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.



BEFORE THE  
NEW MEXICO ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION  
OF CAULKINS OIL COMPANY FOR  
APPROVAL OF DOWNHOLE COMMINGLING  
RIO ARRIBA COUNTY, NEW MEXICO

JAN 24 1979  
OIL CONSERVATION DIVISION  
NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

Case 6442

A P P L I C A T I O N

Comes now Caulkins Oil Company and applies to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of downhole commingling in its Well No. 109, located in Unit M, Section 3, Township 26 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico, and in support thereof would show the Division:

1. At the present time this well is completed with commingling of production from the Pictured Cliffs and Chacra formation, the commingled stream being dually completed with the Mesaverde formation. Applicant proposes to recomplete the well to commingling production from the three formations: Pictured Cliffs, Chacra and Mesaverde.

2. Approval of this application is in the interests of conservation and the prevention of waste, and will result in the production of gas and liquid hydrocarbons that would not otherwise be produced.

WHEREFORE Applicant prays that this application be set for hearing at the last examiner hearing in January, 1979, and that after notice and hearing as required by law, the Division

enter its order granting approval of downhole commingling as requested.

Respectfully submitted,  
CAULKINS OIL COMPANY

By Jason Kellahin  
Kellahin & Kellahin  
P. O. Box 1769  
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

BEFORE THE  
NEW MEXICO ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

JAN - 8 1979

OIL CONSERVATION DIVISION  
SANTA FE

IN THE MATTER OF THE APPLICATION  
OF CAULKINS OIL COMPANY FOR  
APPROVAL OF DOWNHOLE COMMINGLING  
RIO ARriba COUNTY, NEW MEXICO

Case 6442

A P P L I C A T I O N

Comes now Caulkins Oil Company and applies to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of downhole commingling in its Well No. 109, located in Unit M, Section 3, Township 26 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico, and in support thereof would show the Division:

1. At the present time this well is completed with commingling of production from the Pictured Cliffs and Chacra formation, the commingled stream being dually completed with the Mesaverde formation. Applicant proposes to recomplete the well to commingling production from the three formations: Pictured Cliffs, Chacra and Mesaverde.

2. Approval of this application is in the interests of conservation and the prevention of waste, and will result in the production of gas and liquid hydrocarbons that would not otherwise be produced.

WHEREFORE Applicant prays that this application be set for hearing at the last examiner hearing in January, 1979, and that after notice and hearing as required by law, the Division

enter its order granting approval of downhole commingling as requested.

Respectfully submitted,  
CAULKINS OIL COMPANY

By Jason Kellahin  
Kellahin & Kellahin  
P. O. Box 1769  
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

BEFORE THE  
NEW MEXICO ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

JAN - 6 1979

OIL CONSERVATION DIVISION  
SANTA FE

IN THE MATTER OF THE APPLICATION  
OF CAULKINS OIL COMPANY FOR  
APPROVAL OF DOWNHOLE COMMINGLING  
RIO ARriba COUNTY, NEW MEXICO

Case 6442

A P P L I C A T I O N

Comes now Caulkins Oil Company and applies to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of downhole commingling in its Well No. 109, located in Unit M, Section 3, Township 26 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico, and in support thereof would show the Division:

1. At the present time this well is completed with commingling of production from the Pictured Cliffs and Chacra formation, the commingled stream being dually completed with the Mesaverde formation. Applicant proposes to recomplete the well to commingling production from the three formations: Pictured Cliffs, Chacra and Mesaverde.

2. Approval of this application is in the interests of conservation and the prevention of waste, and will result in the production of gas and liquid hydrocarbons that would not otherwise be produced.

WHEREFORE Applicant prays that this application be set for hearing at the last examiner hearing in January, 1979, and that after notice and hearing as required by law, the Division

enter its order granting approval of downhole commingling as requested.

Respectfully submitted,  
CAULKINS OIL COMPANY

By Jason Kellahin  
Kellahin & Kellahin  
P. O. Box 1769  
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

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. 6442

Order No. R-5647-A

APPLICATION OF CAULKINS OIL COMPANY  
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 January 31,  
19 79, at Santa Fe, New Mexico, before Examiner Richard L.  
Stamets.

NOW, on this        day of February, 1979, 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, Caulkins Oil Company, is  
the owner and operator of the Breech E Well No. 109,  
located in Unit M of Section 3, Township 26 North,  
Range 6 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle  
Pictured Cliffs, Chacra and Mesaverde production  
within the wellbore of the above-described well.

(4) That from the Pictured Cliffs zone, the subject well is capable of low marginal production only.

(5) That from the Chacra zone, the subject well is capable of low marginal production only.

(6) That from the Mesaverde zone, the subject well is capable of low marginal production only.

(7) 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.

(8) 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.

(9) 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 the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production should be allocated to the Pictured Cliffs zone, and \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production to the Chacra zone, and \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production should be allocated to the Mesaverde (ALTERNATE) zone.

10 (10) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

(11) That Division Administrative Order No MC 2463, ~~is hereby superseded~~ <sup>should be</sup> which authorized the multiple completion of the subject well, should be superseded.



IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, is hereby authorized to commingle Pictured Cliffs, Chacra and Mesaverde production within the wellbore of the Breech E Well No. 109, located in Unit M of Section 3, Township 26 North, Range 6 West, NMPM, 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.

~~(ALTERNATE)~~

(2) That \_\_\_\_\_ percent of the commingled production shall be allocated to the Pictured Cliffs zone, ~~and~~ \_\_\_\_\_ percent of the commingled production shall be allocated to the Chacra zone, and \_\_\_\_\_ percent of the commingled production shall be allocated to the Mesaverde zone.

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

*Administrative*  
(4) That Division Order No MC-2463 is hereby superseded.