

AMEND DHC-659 5/22/01

11303 7470

CAULKINS OIL COMPANY

P. O. BOX 340
BLOOMFIELD, NEW MEXICO 87413
PHONE: 505-632-1544
FAX 505-632-1471

RECEIVED
MAY - 2 2001

April 30, 2001

State of New Mexico
Oil Conservation Division
ATTN: Mr. David Catanach
1220 S. St. Francis Drive
Santa Fe, NM 87504

Re: Administrative Approval to Downhole Commingle
Breech "F" 45-M, Sec. 35-27N-6W Unit Letter D
Basin Dakota, Blanco Mesa Verde and Otero Chacra Formations

Dear Mr. Catanach:

Caulkins Oil Company requests approval to downhole commingle this well. Well is currently temporarily abandoned in Dakota – Mesa Verde formations with the Chacra producing above retrievable bridge plug. Well was previously commingled in the Dakota – Mesa Verde formations, order # DHC-659.

Please find the enclosed documents for your approval:

- A. Form C-107-A
- B. Form C-102 for each zone
- C. Production data for Dakota, Mesa Verde and Chacra zones
- D. Bottom hole pressure test for Otero Chacra
- E. Sundry notice notifying BLM of intention to commingle

If you have any questions or need more information, please contact Robert L. Verquer at (505) 632-1544.

Sincerely,



Robert L. Verquer,
Superintendent

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

Form C-102
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-23638	² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 2460	⁵ Property Name BREECH "F"	
⁷ OGRID No. 003824	⁸ Operator Name Caulkins Oil Company	
		⁶ Well Number 45-M
		⁹ Elevation 6577 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	35	27N	6W		990'	North	990'	West	Rio Arriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 360	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>6</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and</i></p> <p><i>Robert L. Verquer</i></p> <p>Signature</p> <p>Printed Name Robert L. Verquer</p> <p>Title Superintendent</p> <p>Date April 30, 2001</p>	
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by my supervision, and that the same is true and correct to the best of my knowledge and belief.</i></p> <p>Date of Survey</p>	
	<p>Signature and Seal of Professional Surveyor:</p>	
	<p>Certificate Number</p>	

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

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State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A

New 3-12-96

APPROVAL PROCESS:

Administrative Hearing

EXISTING WELLBORE

YES NO

CAULKINS OIL COMPANY

P.O. BOX 340, BLOOMFIELD, NM 87413

OPERATOR

ADDRESS

BREECH "F"

45-M

D - SEC. 35-27N-6W

RIO ARRIBA

LEASE

WELL NO.

UNIT LTR - SEC. - TWP. - RGE.

COUNTY

Spacing Unit Lease types: (check 1 or more)

OGRID NO. 003824

Property Code 2460

API NO. 30-039-23638

Federal , State , (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	OTERO CHACRA	MESA VERDE	BASIN DAKOTA
2. Top and Bottom of Pay Section (Perforations)	4787' - 4258'	4849' - 5481'	7368' - 7582'
3. Type of production (Oil or Gas)	Gas	Gas and Condensate	Gas and Condensate
4. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing	Flowing
5. Bottomhole Pressure Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	a. (Current) 578 psia Test date: 11-7-00	a.	a.
	b. (Original)	b. 418 surface shut-in	b. 418 surface shut-in
Oil Gravity (° API) or Gas BTU Content	1204 BTU	1138 BTU	1138 BTU
7. Producing or Shut-In	Producing	Temporarily Abandoned	Temporarily Abandoned
Production Marginal? (yes or no)	Yes	Yes	Yes
* If Shut-In, give date and oil/gas/water rates of last production <small>Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data</small>	Date: Rates: Gas Oil Water MCF/D Bbl Bbl	Date: July, 2000 Rates: 24 .20 1.3 MCF/D Bbl Bbl	Date: July, 2000 Rates: 159 .23 .76 MCF/D Bbl Bbl
	Date: March, 2001 Rates: 80 0.0 0.0 MCF/D Bbl Bbl	Date: Rates: Gas Oil Water MCF/D Bbl Bbl	Date: Rates: Gas Oil Water MCF/D Bbl Bbl
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates: Gas Oil Water MCF/D Bbl Bbl	Date: Rates: Gas Oil Water MCF/D Bbl Bbl	Date: Rates: Gas Oil Water MCF/D Bbl Bbl
8. Fixed Percentage Allocation Formula - % for each zone	Oil 0 % Gas 31 %	Oil 46 % Gas 10 %	Oil 54 % Gas 59 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? Yes No

If not, have all working, overriding, and royalty interests been notified by certified mail? Yes No

Have all offset operators been given written notice of the proposed downhole commingling? Yes No

11. Will cross-flow occur? Yes No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. Yes No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? Yes No

13. Will the value of production be decreased by commingling? Yes No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. Yes No

15. NMOCD Reference Cases of Rule 303© Exceptions: ORDER NO(S). DHC-660, R-7981

16. ATTACHMENTS:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of all offset operators.
- Notification list of working, overriding, and royalty interests for uncommon interest cases.
- Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Robert L. Verquer TITLE SUPERINTENDENT DATE April 30, 2001

TYPE OR PRINT NAME ROBERT L. VERQUER

TELEPHONE NO. (505) 632-1544

District I
 PO Box 1980, Hobbs, NM 88241-1980
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State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
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 Santa Fe, NM 87505

Form C-102
 Revised October 18, 1994
 Instructions on back
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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-23638	² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 2460	⁵ Property Name BREECH "F"	
⁷ OGRID No. 003824	⁸ Operator Name Caulkins Oil Company	
		⁶ Well Number 45-M
		⁹ Elevation 6577 GR

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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 360	¹³ Joint or Infill	¹⁴ Consolidation Code		¹⁵ Order No.					

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⁶ 				¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and</i>		
				Signature Robert L. Verquer Printed Name Robert L. Verquer Title Superintendent Date April 30, 2001		
				¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by my supervision, and that the same is true and correct to the best of my knowledge and belief.</i>		
			Date of Survey			
			Signature and Seal of Professional Surveyor:			
			Certificate Number			

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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-23638	² Pool Code 72319	³ Pool Name MESA VERDE
⁴ Property Code 2460	⁵ Property Name BREECH "F"	
⁷ OGRID No. 003824	⁸ Operator Name Caulkins Oil Company	⁶ Well Number 45-M
		⁹ Elevation 6577 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	35	27N	6W		990'	North	990'	West	Rio Arriba

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UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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	<p>Printed Name Robert L. Verquer</p> <p>Title Superintendent</p> <p>Date April 30, 2001</p>	
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State of New Mexico
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 Santa Fe, NM 87505

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AMENDED REPOR

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-23638	² Pool Code 82329	³ Pool Name OTERO CHACRA
⁴ Property Code 2460	⁵ Property Name BREECH "F"	⁶ Well Number 45-M
⁷ OGRID No. 003824	⁸ Operator Name Caulkins Oil Company	⁹ Elevation 6577 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
D	35	27N	6W		990'	North	990'	West	Rio Arriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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				<i>Robert L. Verquer</i> Signature
				Printed Name <u>Robert L. Verquer</u>
				Title <u>Superintendent</u>
				Date <u>November 13, 2000</u>
				¹⁸ SURVEYOR CERTIFICATION
				<i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by my supervision, and that the same is true and correct to the best of my knowledge and belief.</i>
				Date of Survey _____
				Signature and Seal of Professional Surveyor: _____
				Certificate Number _____

**LAST 12-MONTHS PRODUCTION
FOR
BREECH F 45-M**

DAKOTA

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
08/99	3,123	4	1	18	174	0.222
09/99	2,299	2	0	14	164	0.143
10/99	5,302	1	0	31	171	0.032
11/99	5,160	12	2	30	172	0.400
12/99	4,674	10	2	31	151	0.323
01/00	4,447	12	2	30	148	0.400
02/00	4,388	7	1	29	151	0.241
03/00	4,664	8	1	30	155	0.267
04/00	4,442	10	2	30	148	0.333
05/00	4,030	6	1	31	130	0.194
06/00	3,936	3	0	29	136	0.103
07/00	3,940	4	1	31	127	0.129
	50,405	79	13		152	0.232

MESA VERDE

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
08/99	497	3	0	18	28	0.167
09/99	367	2	0	14	26	0.143
10/99	844	0	0	31	27	0.000
11/99	821	11	2	30	27	0.367
12/99	750	8	1	31	24	0.258
01/00	714	10	2	30	24	0.333
02/00	704	7	1	29	24	0.241
03/00	747	6	1	30	25	0.200
04/00	714	9	1	30	24	0.300
05/00	654	5	1	31	21	0.161
06/00	636	3	0	29	22	0.103
07/00	640	3	0	31	21	0.097
	8,088	67	9		24	0.198

CHACRA						
MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
11/00	159	0	0	2	80	0.000
12/00	3,106	0	0	30	104	0.000
01/01	1,467	0	0	31	47	0.000
02/01	2,438	0	0	27	90	0.000
	7,170	0	0		80	0.000

Company: Caulkins Oil Company
Well: Breech No. F-45-1
Field:
Engineer: Neil Tefteller
Gauge Type: Amerada
Gauge Range: 0-2700
Gauge Depth: 4720 ft
Serial No.: 55170

County: Rio Arriba
State: New Mexico
Date: 11/7/2000
Well Type:
Test Type: Static Gradient
Status: Shut in
File Name: 50535

Tubing: 2 3/8 TO
Tubing: TO
Casing: TO
Perfs.:
Shut-in Time 168 hrs

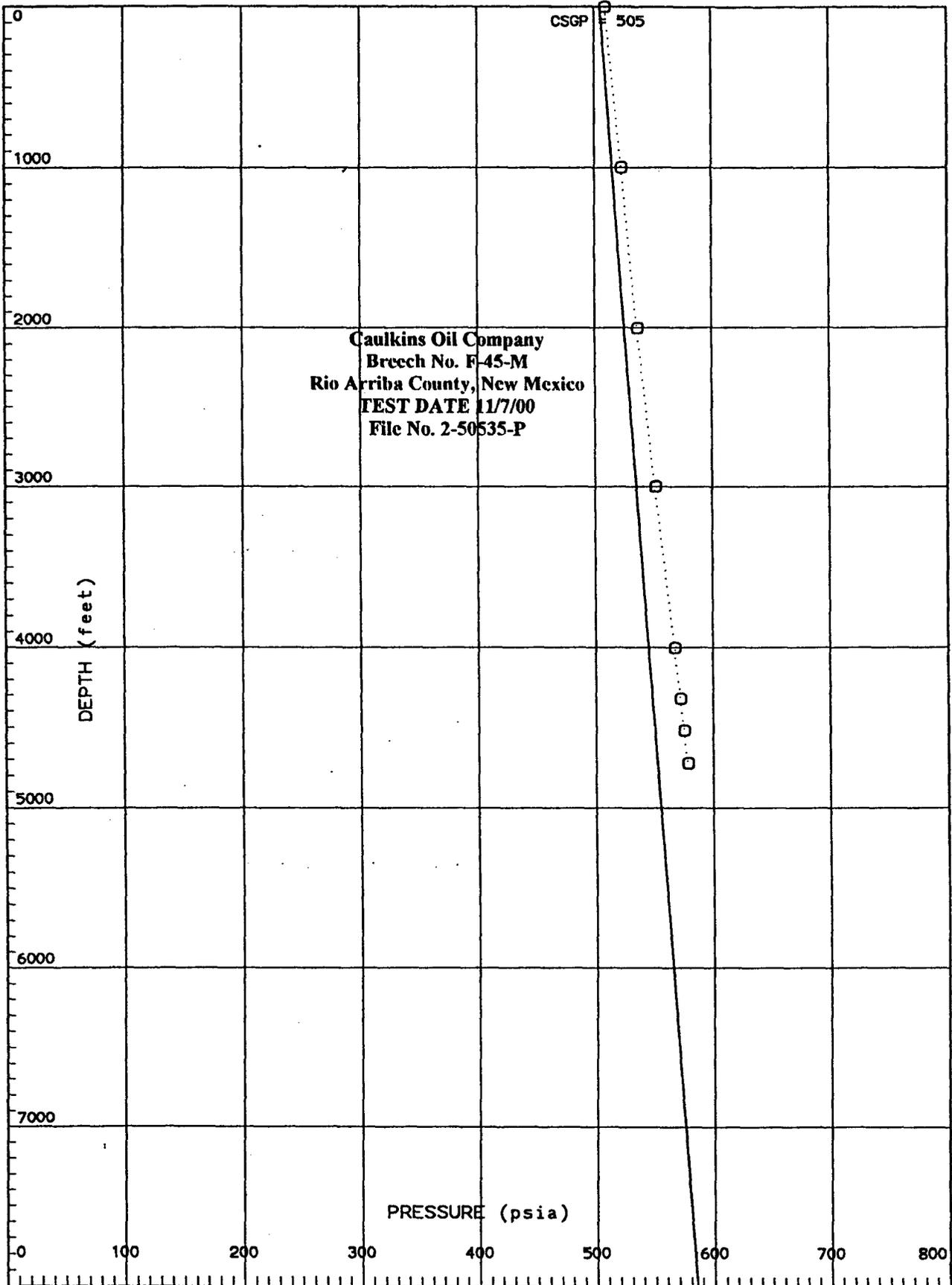
Oil Level
H2O Level

Shut-in BHP 578 @ 4720 ft Shut-in BHT 135 F @ 4720 ft
Shut-in WHP 509 Shut-in WHT 0 F
Casing CSGP 505

[Tefteller Incorporated]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	509.00	
2	1000	1000	523.00	0.014
3	2000	2000	536.00	0.013
4	3000	3000	551.00	0.015
5	4000	4000	567.00	0.016
6	4320	4320	572.00	0.016
7	4520	4520	575.00	0.015
8	4720	4720	578.00	0.015

SN @ 4720'



**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

NMNM-03547

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals)

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

1. Oil Well Gas Well Other
GAS WELL

8. Well Name and No.

BREECH "F" 45-M

2. Name of Operator:

Caulkins Oil Company

9. API Well No.

30-039-23638-00C1

3. Address of Operator:

(505) 632-1544

P.O. Box 340, Bloomfield, NM 87413

10. Field and Pool, Exploratory Area

DAKOTA, MESA VERDE, CHACRA

4. Location of Well (Footage, Sec., Twp., Rge.)

990' F/N 990' F/W

SEC. 35-27N-6W

11. Country or Parish, State

Rio Arriba Co., New Mexico

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other <u>Commingle Well</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

17. Describe Proposed or Completed Operations:

3-23-01

We request approval to downhole commingle this well by the following procedure.

T.I.H. and latch onto retrievable bridge plug set at 4815'.

T.O.H. with 2 3/8" Otero Chacra production tubing from 4720' with retrievable bridge plug.

T.I.H. with 2 3/8" production tubing, clean out to PBTD with air package.

Land tubing on doughnut at approximately 7560'.

Oil Conservation Division Order #R-11363.

Basin Dakota (71599), Mesa Verde (72319) and Otero Chacra (82329)

Perforations: Dakota (7368' - 7582'), Mesa Verde (4849' - 5481') and Otero Chacra (4258' - 4787')

<u>Allocations</u>	<u>Dakota</u>	<u>Mesa Verde</u>	<u>Chacra</u>
Oil	54%	46%	0%
Gas	59%	10%	31%

(continued on page 2)

NOTE: The format is issued in lieu of U.S. BLM Form 3160-5

18. I HEREBY CERTIFY THE FOREGOING IS TRUE AND CORRECT

SIGNED: Robert L. Verquer TITLE: Superintendent DATE: March 23, 2001
ROBERT L. VERQUER

APPROVED BY: _____ TITLE: _____ DATE: _____
CONDITIONS OF APPROVAL, IF ANY

Caulkins Oil Company
BLM Sundry Notice
Breech "F" 45-M
March 23, 2001
Page 2

Please see attached 12 month production history.

Commingling will not reduce the production value in this well.

No new surface will be disturbed, location area will be cleaned up when workover operations are completed.

Estimated starting date, as soon as rig is available.

New Mexico Oil Conservation Division has been notified of this commingling procedure.