EXHIBIT "B" - CASE NO. 11353, ORDER NO. R-10470-A

O.S. 1980, Hobbs, NM 88240 "ICT II """ """ """ """ """ """ """	State of New Mexico Energy, Minerals and Natural Resources Department OIL CONSERVATION DIVISION 2040 S. Pacheco Santa Fe, New Mexico 87505-6429 EXISTING WE APPLICATION FOR DOWNHOLE COMMINGLING APPLICATION FOR DOWNHOLE COMMINGLING APPLICATION FOR DOWNHOLE COMMINGLING EXISTING WE				
Caulkins Oil Company	P	.O. Box 340, Bloomfiel	d, NM 87413		
Breech "B"		- Sec. 14-26N-7W	Rio Arriba		
GRID NO. 003824 Property Co		s	county spacing Unit Lesse Types: (check 1 or more) X , State, (and/or) Fee		
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone		
1. Pool Name and Pool Code	Blanco Mesa Verde	Ice Canyon; Gallup	Basin Dakota		
Top and Bottom of Pay Section (Perforations)	Approximately 4600' to 4740'	Approximately 5730' to 6000'	Approximately 6620' to 6765'		
3. Type of production (Oil or Gas)	Gas and Condensate	Gas and Condensate	Gas and Condensate		
4. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing .	Flowing		
5. Bottomhole Pressure 'ones - Artificial Lift: Estimated Current & Oil - Flowing:	a. (Current) Not completed	a. Not completed	a. Not completed		
Estimated Current & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	b. ^(Original) 1087 psia (estimated)	b. 1388 psia (estimated)	b. 2680 psia (estimated)		
5. Oil Gravity (*API) or Gas BTU Content	1187 BTU (estimated)	1196 BTU (estimated)	1148 BTU (estimated)		
7. Producing or Shut-In?	Not completed	Not completed	Not completed		
Production Marginal? (yes or no)	Anticipated to be	Anticipated to be	Anticipated to be		
If Shut-In, give date and oil/gas/, water rates of last production	Date: See R-10964	Date: See attached	Date: See R-10964		
Note: For new zones with no production wistory, applicant shall be required to attach production estimates and supporting data	75 MCFD + 0.5 BCPD	100 MCFD + 1.0 BCPD	Rates: 240 MCFD + 5.0 BCPD		
If Producing, give date andoil/gas/ water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: Rates:		
3. Fixed Percentage Allocation Formula -% for each zone	Oii: Gas: 18 %	Oil: Gas: 24 %	Oil: Gas: 76 % 58 %		
. If allocation formula is based a submit attachments with sup	upon something other than cur porting data and/or explaining	rent or past production, or is to method and providing rate pro	pased upon some other method, pjections or other required data.		
. Are all working, overriding, ar If not, have all working, overr Have all offset operators been	d royalty interests identical in iding, and royalty interests bee given written notice of the pro	all commingled zones? on notified by certified mail?	X Yes No X Yes No X Yes No		
اتر cross-flow occur? X Y flowed production be recovered	es No If yes, are fluids o ed, and will the allocation form	compatible, will the formations ula be reliable. X Yes	not be damaged, will any cross- No (If No, attach explanation		
. Are all produced fluids from a	I commingled zones compatible	e with each other? X	Yes No		
Will the value of production be If this well is on, or communit United States Bureau of Land	izad with atota or forest local	Yes X No (If You is, either the Commissioner of in writing of this application.			
. NMOCD Reference Cases for	management has been notified	in whiting of this application.	<u>X</u> Yes <u>No</u> , R-10963, R-10964, R-10		
• ATTACHMENTS: • C-102 for each zon • Production curve for • For zones with no p • Data to support allo • Notification list of a	e to be commingled showing in reach zone for at least one year reach in the property of the pr	ts spacing unit and acreage de ear. (If not available, attach ex roduction rates and supporting interests for uncommon interquired to support commingling	edication. kplaination.) g data.		

SIGNATURE Robert 1 Verque TITLE Superintendent DATE June 26, 1998

TYPE OR PRINT NAME Robert L. Verquer TELEPHONE NO. (505) 632-1544

District I

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102 Revised October 18, 1994

PO Box 1980, Hobbs, NM 88241-1980 District II

Instructions on back

811 South First, Artesia, NM 88210 District III

OIL CONSERVATION DIVISION 2040 South Pacheco Submit to Appropriate District Office

1000 Rio Brazos Rd., Aztec, NM 87410 District IV 2040 South Pacheco Santa Fe. NM 87505 State Lease - 4 Copies Fee Lease - 3 Copies

2040 South Pacheco, Santa Fe, NM 87505

93 JUN 30 PM 12: 26

RECEIVE

070 Francis C.1. N.J. AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Numbe			² Pool Code ³ Pool Name				³ Pool Name			-
30	-039-258	39		71599	•	BASIN DAKOTA					
4 Property	⁴ Property Code		5 Pr			y Name			Well Number		
2450	5 .			BREECH "B" 781					781		
⁷ OGRID	No.				⁸ Operator Name ⁹ Elevation						
00382	24				Caulkins Oi	ins Oil Company 6124 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		
L	14	26N	7W		1800'	South	1150'	West	Rio Arriba		

11 Bottom Hole Location If Different From Surface

Dottom 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	13 Joint o	r Infili 1	⁴ Consolidation	n Code 15 C	Order No.		1			
160										

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

	NON-STANI	DARD UNIT HAS BEE	NAPPROVEDBY IH	E DIVISION
16				¹⁷ OPERATOR CERTIFICATION
				I hereby certify that the information contained herein is true
				and complete to the best of my knowledge and belief
				D1+74/
				Robert I Verguer
				Signature
				Printed Name Robert L. Verquer
				Title Superintendent
,				Date June 26, 1998
				18 SURVEYOR CERTIFICATION
				I hereby certify that the well location shown on this plat was
				plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the
1150' ©				best of my knowledge and belief.
				Date of Survey
				Signature and Seal of Professional Surveyor:
1000				
1800'				
				,
				Certificate Number

District I			
DO Dor 1090	Lichhe	NM 99241.	1 0 8

State of New Mexico Energy, Minerals & Natural Resources Department

	For	m (C-102
Revised Octo	ber	18,	1994

PO Box 1980, Hobbs, NM 88241-1980 District II

RECEIVE Instructions on back

811 South First, Artesia, NM 88210 District III OIL CONSERVATION DIVISION 2040 South Pacheco

State Lease - 4 Copies

1000 Rio Brazos Rd., Aztec, NM 87410 District IV

2040 South Pacheco, Santa Fe, NM 87505

Santa Fe. NM 87505 98 JULI 30 PH 12: 26

Fee Lease - 3 Copies

O70 FALLLAGUOU AGI

³ Pool Name ¹ API Number ² Pool Code ICE CANYON; GALLUP 30-039-25839 93235 Well Number ⁴ Property Code ⁵ Property Name **BREECH "B"** 781 2456 8 Operator Name Elevation ⁷OGRID No. Caulkins Oil Company 6124 GR 003824 ¹⁰ Surface Location North/South line Feet from the Feet from the East/West line County Lot Idn UL or lot no. Section Township Range West Rio Arriba 1150' 1800' South L 14 26N 7W Bottom Hole Location If Different From Surface North/South line East/West line County Feet from the Feet from the UL or lot no. Township Range Lot Idn Section 12 Dedicated Acres 13 Joint or Infill ¹⁴ Consolidation Code 15 Order No. 160

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

		 ATTAIRCTED BY III	17
16			17 OPERATOR CERTIFICATION
			I hereby certify that the information contained herein is true
			and complete to the best of my knowledge and belief
		 	Robert I Vergran
			Signature
			Printed Name Robert L. Verquer
			Title Superintendent
	*		THE SUPERINGENE
			Date June 26, 1998
			¹⁸ SURVEYOR CERTIFICATION
			I hereby certify that the well location shown on this plat was
			plotted from field notes of actual surveys made by me or under
14501			my supervision, and that the same is true and correct to the
1150'			best of my knowledge and belief. Date of Survey
			Date of Survey
		 	Signature and Seal of Professional Surveyor:
1800'			
			Certificate Number

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

I ADT Number

State of New Mexico Energy, Minerals & Natural Resources Department

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

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe. NM 87505 RECESubmit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies 1112:26 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Numbe	er .	i	- Pool Co	ie	Pool Name			
30-	-039-258	39		72319	•	BLANCO MESA VERDE			
4 Property	Code		•		⁵ Property	Name			Well Number
2456					BREEC	H "B"			781
OGRID	No.				8 Operator	Name			* Elevation
00382	4	,			Caulkins Oil	Company			6124 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
L	14	26N	7W		1800'	South	1150'	West	Rio Arriba
		•	11 B	ottom H	ole Location	If Different Fro	m 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	s 13 Joint o	or Infill 14 (Consolidation	Code 15 C	Order No.	<u> L</u>	<u> </u>		
160									

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

		1		17
16				¹⁷ OPERATOR CERTIFICATION
				I hereby certify that the information contained herein is true
				and complete to the best of my knowledge and belief
		,		Robert I Verguer
				Signature
			,	
	1			Printed Name Robert L. Verquer
				Title Superintendent
				Date June 26, 1998
				¹⁸ SURVEYOR CERTIFICATION
			-	I hereby certify that the well location shown on this plat was
				plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the
1150'				best of my knowledge and belief.
Ĭ				Date of Survey
				Signature and Seal of Professional Surveyor:
1800'				
		_		Certificate Number

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

93 JUN 30 FIADMINISTRATIVE ORDER DHC-1920

070 FAREGRAPION, NM

Dugan Production Corporation P.O. Box 420 Farmington, New Mexico 87499-0420

Attention: Mr. John Alexander

RECEIVED MAY 1 9 1999

OIL CON. DIV.

Mona Lisa No. 2
API No. 30-039-25745
Unit J, Section 14, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.
Ice Canyon-Gallup (Gas - 93235),
Basin-Dakota (Prorated Gas - 71599) and,
Blanco-Mesaverde (Prorated Gas - 72319)

Dear Mr. Alexander:

Reference is made to your request for an amendment to Division Order No. R-10963, which authorized the downhole commingling of Basin-Dakota and Blanco-Mesaverde Gas Pool production within the subject well, to add the Ice Canyon-Gallup Gas Pool as a third commingled zone in the wellbore.

It appearing that the subject well qualifies for approval for such amendment pursuant to the provisions of Rule 303.C., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the zones is hereby placed in abeyance.

The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Blanco-Mesaverde Gas Pool	Oil 30%	Gas 30%
Basin-Dakota Gas Pool	Oil 45%	Gas 45%
Ice Canyon-Gallup Gas Pool	Oil 25%	Gas 25%

Administrative Order No. DHC-1920 Dugan Production Corporation May 11, 1998 Page 2

The allocation method established herein may be altered at some time subsequent to initiating downhole commingling operations upon request by the operator and for good cause shown.

REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

Pursuant to Rule 303.H., the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 11th day of May, 1998.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

ORI WROTENBERY

Director

SEAL

LW/DRC

cc: Oil Conservation Division - Aztec

Bureau of Land Management-Farmington

Case File-11897

ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT 070 Francis Cold Film

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

> **CASE NO. 11920** Order No. R-10964

APPLICATION OF CAULKINS OIL COMPANY FOR COMPULSORY POOLING AND DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 5, 1998, at Santa Fe, New Mexico, before Examiner David R. Catanach,

NOW, on this 2nd day of March, 1998, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised.

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- Division Case Nos. 11897, 11899 and 11920 were consolidated at the time of the January 8th hearing for the purpose of testimony. No additional appearances were entered in this case at the February 5th hearing.
- The applicant, Caulkins Oil Company, seeks an order pooling all mineral interests in the Blanco-Mesaverde and Basin-Dakota Gas Pools underlying the S/2 of Section 14. Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico, thereby forming a standard 320-acre gas spacing and proration unit for said pools. This unit is to be dedicated to its proposed Breech "B" 781 well to be drilled at a standard gas well location 1800 feet from the South line and 1150 feet from the West line (Unit L) of Section 14.
- The applicant further seeks authority to downhole commingle Blanco-Mesaverde and Basin-Dakota Gas Pool production within the subject well.

CASE NO. 11920 Order No. R-10964 Page -2-

- (5) By Order No. R-10961 issued in companion Case No. 11899 on February 18, 1998, the Division, upon application of Dugan Production Corporation, established vo 160-acre non-standard gas spacing and proration units in the Blanco-Mesaverde a: Basin-Dakota Gas Pools comprising the SE/4 and SW/4 of Section 14, Township 26 North, Range 7 West, NMPM.
- (6) As a result of the issuance of Order No. R-10961, the portion of the immediate case seeking to compulsory pool the interests within the S/2 of Section 14, thereby forming a standard 320-acre gas spacing and proration unit for the Blanco-Mesaverde and Basin-Dakota Gas Pools, is unnecessary and should therefore be dismissed.
 - (7) The evidence and testimony presented in this case indicates that:
 - a) Caulkins proposes to commingle the Blanco-Mesaverde and Basin-Dakota Gas Pools and dually complete these commingled zones with the Chacra formation within the subject Breech "B" 781 well;
 - b) a well drilled within the S/2 of Section 14 should encounter marginal gas production only from the Blanco-Mesaverde and Basin-Dakota Gas Pools;
 - C) the estimated bottomhole pressures within the Mesaverde and Dakota formations are expected to exceed the requirements set forth in Division Rule No. 303.C., which states that the Division may grant administrative approval for downhole commingling provided that the bottomhole pressure of the highest pressured commingled zone does not exceed the original reservoir pressure of any other commingled zone in the wellbore, adjusted to a common datum. Administrative notice was taken in this case of the engineering evidence and testimony presented in Case No. 11815, in which case Conoco Inc. demonstrated that even though the bottomhole pressure of the Dakota formation exceeds the original bottomhole pressure of the Mesaverde formation, there is no possibility of damage to the Mesaverde formation, nor will there be any loss of reserves, waste, or violation of correlative rights. Conoco presented this evidence in support of a downhole commingling request for its San Juan 28-7 Unit which is located approximately four miles northwest of the proposed Breech "B" 781 well.

CASE NO. 11920 Order No. R-10964 Page -3-

- (8) At this time, the applicant seeks only an exception to the pressure requirements contained within Division Rule No. 303.C., as described above. The applicant testified that it will file a Division Form No. C-107-A subsequent to the entry of this order.
- (9) The evidence and testimony in this case is sufficient to grant an exception to the pressure requirements for administrative approval for downhole commingling within the proposed Breech "B" 781 well.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Caulkins Oil Company for an order pooling all mineral interests in the Blanco-Mesaverde and Basin-Dakota Gas Pools underlying the S/2 of Section 14, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico, thereby forming a standard 320-acre gas spacing and proration unit for said pools, said unit to be dedicated to its proposed Breech "B" 781 well to be drilled at a standard gas well location 1800 feet from the South line and 1150 feet from the West line (Unit L) of Section 14, is hereby dismissed.
- (2) The applicant, Caulkins Oil Company, is hereby granted an exception to the pressure requirements for administrative approval for downhole commingling as contained within Division Rule No. 303.C., for its proposed Breech "B' 781 well, which is to be drilled at a standard gas well location 1800 feet from the South line and 1150 feet from the West line (Unit L) of Section 14, and which is proposed to be downhole commingled in the Blanco-Mesaverde and Basin-Dakota Gas Pools.
- (3) In order to obtain administrative approval to downhole commingle Blanco-Mesaverde and Basin-Dakota Gas Pool production within the aforesaid Breech "B" 781 well, the applicant shall file a Division Form No. C-107-A complete with all attachments.
- (4) 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.

S E A L

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LOKI WROTENBERY

Director

CAULKINS OIL COMPANY

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

June 26, 1998

The following list is all the offset operators that Caulkins Oil Company has notified by certified mail of the application to downhole commingle of Breech "B" 781, section 14, township 26N, range 7W.

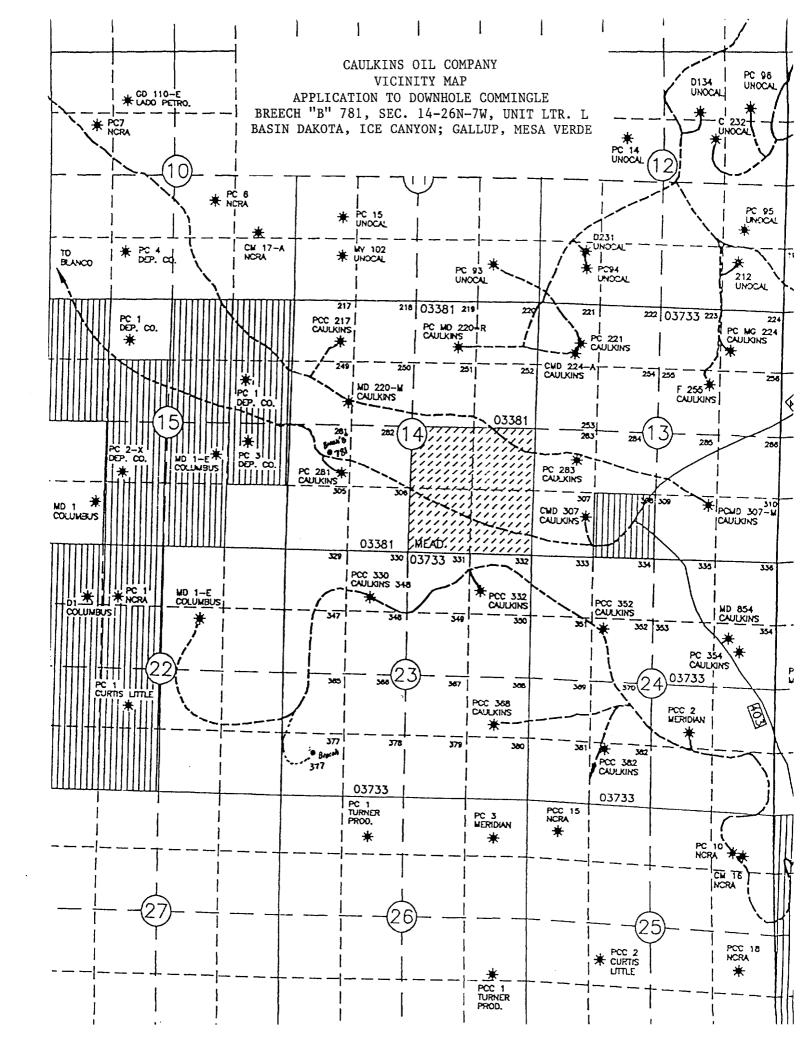
Central Resources, Inc. 1776 Lincoln St. Suite 1010 Denver, CO 80202

Chateau Oil & Gas 5802 U.S. Hwy 64 Farmington, NM 87402

Dugan Production Corporation 709 E. Murray Dr. Box 420 Farmington, NM 87401

Louis Dreyfus Natural Gas Co. 1400 Quail Springs Corporate Park Suite 600 Oklahoma City, OK 73134

Union Oil & Gas of CA 1004 Big Spring Midland, TX 79702



Conditions of Approval

Caulkins Oil Company Breech "B" No. 781 1800 FSL and 1150' FWL Sec 14-26N-07W

After a review of a representative set of Mesaverde and Dakota production histories in the vicinity of this well and the recent well performance data from the Breech 377 well (SWSW 23-26N-7W), we have established the following allocation procedures since these formations have been extensively developed in this area. In addition, since the Ice Canyon Gallup pool has not been as extensively developed as the Dakota or Mesaverde, we cannot concur with your proposed method of allocation for this zone at this time. The following is the authorized allocation procedure for the Dakota, Gallup, and Mesaverde producing horizons:

Formation	<u>Gas</u>	<u>Oil</u>
Dakota	240 MCFD	5.0 BCPD
Mesaverde	75 MCFD	0.5 BCPD
Gallup	*	*

^{*} The balance of the remaining production

Commingled production from each zone must be reported in accordance to the allocation factors presented above. Once **stabilized** production is exhibited from these combined intervals, file your final allocation factors with this office. Please notify this office when these final allocation factors are established

2) Within 30 days of the well's completion, file Well Completion Report, form # 3160-4. In addition, within 30 days of completing down hole commingling operations, file a subsequent report of all operations conducted.

		I ST.
UNITED ST DEPARTMENT OF T		5. Lease NMNM-03381
BUREAU OF LAND N	MANAGEMENT RUDGE	$\sqrt{\epsilon}$:
	PI :	6. If Indian, Allottee or Tribe Name
SUNDRY NOTICES AND R		7. Unit Agreement Name
(Do not use this form for proposals to drill or to de Use "APPLICATION FOR PERN		PM 12: 2 7
1. Oil Well [] Gas Well [] Other []	III— Tor such proposalsy	8. Well Name and No.
GAS WELL	070 Francis	HOI, MM BREECH "B" 781
2. Name of Operator:		9. API Well No.
Caulkins Oil Company		30-039-25839-00-X1
3. Address of Operator: (505) 632-1544		10. Field and Pool, Exploratory Area
P.O. Box 340, Bloomfield, NM 87413		BASIN DAKOTA, ICE CANYON; GALLUP, MESA VERDE
4. Location of Well (Footage, Sec., Twp., Rge.)		11. Country or Parish, State
	-26N-7W	Rio Arriba Co., New Mexico
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NO	OTICE, REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[] Abandonment	[] Change of Plans
	[]Recompletion	[] New Construction
[] Subsequent Report	[] Plugging Back	[] Non-Routine Fracturing
C 1 77' 1 41 1 4 4 7 4 4'	[] Casing Repair	[] Water Shut-Off
[] Final Abandonment Notice	[] Altering Casing	[] Conversion to Injection [] Dispose Water
17. Describe Proposed or Completed Operations:	[X] Other <u>Commingle well</u>	[] Dispose water
	requested approval from NMOCD to d	lownhole commingle this well.
Application and documents	attached.	~
If there are any questions, posteriors, posteriors in the second of the	S. BLM Form 3160-5 G IS TRUE AND CORRECT	OIL GOM. DIV.
SIGNED: Robert Z Vergus	TITLE: Superintendent	DATE: <u>June 26, 1998</u>
ROBERT L. VERQUER		
APPROVED BY: /S/ Duane W. Spenc CONDITIONS OF APPROVAL, IF ANY	erTITLE:	DATE: JUL 28 1998

CAULKINS OIL COMPANY

P. O. BOX 340 BLOOMFIELD, NEW MEXICO 87413

PHONE: 505-632-1544 FAX 505-632-1471

June 26, 1998

SECTIVE SECULTSO FM12: 27 070 PAGE STON, NA

State of New Mexico Oil Conservation Division ATTN: Mr. David Catanach 2040 S. Pacheco Santa Fe, NM 87505

Re:

Administrative Approval to Commingle

Breech "B" 781, Section 14, Township 26N, Range 7W, Unit Letter L Basin Dakota, Ice Canyon Gallup, and Blanco Mesa Verde Formations

Dear Mr. Catanach:

This well was originally proposed to be completed as a dual completion with Dakota - Mesa Verde commingled below a packer and Chacra above. NMOCD order R-10964 approved the commingling of Dakota - Mesa Verde with a completed C-107-A (order attached).

Caulkins Oil Company now plans to complete well in the Ice Canyon; Gallup formation and requests administrative approval to dual complete well as a commingled Dakota - Gallup - Mesa Verde below a packer and Chacra above.

Dugan Production Corporation recently received approval to commingle these three pools in their Mona Lisa #2 well located in section 14-26N-7W, unit letter J, by NMOCD order DHC-1920. This well has been completed and is currently producing approximately 600 MCF/D from the commingled zones.

Allocation percentages and volumes were calculated using the average production from the April and May monthly volume statements for the Dakota and Gallup zones in our Breech 377 well. Allocation for the Mesa Verde zone was calculated using 1997 production history from Mesa Verde wells operated by Caulkins Oil Company in sections 13 and 14 of township 26N, range 7W.

Please find the enclosed documents:

- A. Form C-107-A
- B. Form C-102 for each zone
- C. Copy of order # DHC-1920
- D. Copy of order # R-10964
- E. Notification list of offset operators

Robert I Vergreen

- F. Vicinity map
- G. Sundry notice notifying BLM of intentions 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

P.O. Box 1980, Hobbs, NM 88240

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-107-A New 3-12-96

'ICT II

781 Well No.

wouth First St., Artesia, NM 88210 DISTRICT III

1000 Rio Brazos Rd, Aztac, NM 87410

Breech "B"

Caulkins Oil Company

TYPE OR PRINT NAME Robert L. Verquer

OIL CONSERVATION DIVISION JUN 30 PH 12: APPROVAL FROGLOS.

L - Sec. 14-26N-7W

Rio Arriba

APPLICATION FOR DOWNHOLE COMMINGLING ON NO X YES NO

P.O. Box 340, Bloomfield, NM 87413

TELEPHONE NO. (505) 632-1544

OGRID NO. 003824 Property Cod	de <u>2456</u> API NO. <u>30</u>		pacing Unit Lease Types: (check 1 or more) X , State, (and/or) Fee
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone
Pool Name and Pool Code	Blanco Mesa Verde	Ice Canyon; Gallup	Basin Dakota
Top and Bottom of Pay Section (Perforations)	Approximately 4600' to 4740'	Approximately 5730' to 6000'	Approximately 6620' to 6765'
3. Type of production (Oil or Gas)	Gas and Condensate	Gas and Condensate	Gas and Condensate
Method of Production (Flowing or Artificial Lift)	Flowing	Flowing	Flowing
5. Bottomhole Pressure 'ones - Artificial Lift: Estimated Current & Oil - Flowing:	a. (Current) Not completed	a. Not completed	a. Not completed
Measured Current All Gas Zones: Estimated Or Measured Original	b. (Original) 1087 psia (estimated)	b. 1388 psia (estimated)	b. 2680 psia (estimated)
6. Oil Gravity (*API) or Gas BTU Content	1187 BTU (estimated)	1196 BTU (estimated)	1148 BTU (estimated)
7. Producing or Shut-In?	Not completed	Not completed	Not completed
Production Marginal? (yes or no)	Anticipated to be	Anticipated to be	Anticipated to be
 If Shut-In, give date and oil/gas/, water rates of last production 	Date: See R-10964	Date: See attached	pate: See R-10964
Note: For new zones with no production history, applicant shall be required to attach	Rates: 75 MCFD + 0.5 BCPD	Rates: 100 MCFD + 1.0 BCPD	Rates: 240 MCFD + 5.0 BCPD
If Producing, give date andoil/gas/ water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: Rates:
8. Fixed Percentage Allocation Formula -% for each zone	Oil: Ges: 8 %	On: Gas: 24 %	Oil: Gas: 76 % 58 %
O. Are all working, overriding, ar If not, have all working, overr Have all offset operators been	porting data and/or explaining nd royalty interests identical in iding, and royalty interests be given written notice of the pro	method and providing rate pro all commingled zones? en notified by certified mail? posed downhole commingling?	ojections or other required data.
2. Are all produced fluids from a			
3. Will the value of production b			
4. If this well is on, or community	tized with state or federal land		Public Landa or the
5. NMOCD Reference Cases for			, <u>R-10963, R-10964</u> , R-102
* For zones with no Data to support all	or each zone for at least one yiproduction history, estimated pocation method or formula.	its spacing unit and acreage de ear. (If not available, attach e production rates and supporting y interests for uncommon inte equired to support commingling	edication. xplaination.) g data.
hereby certify that the information	on above is true and complete	to the best of my knowledge	and belief.
SIGNATURE Robert I Very	quer	TITLE Superintenden	t DATE June 26, 1998

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

2040 South Pacheco, Santa Fe, NM 87505

Section

14

Township

26N

District IV

UL or lot no.

L

State of New Mexico Energy, Minerals & Natural Resources Department

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

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDIC

¹ API Number 30-039-25839	² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 2456	⁵ Property Name BREECH "B"	* Well Number
⁷ OGRID No. 003824	⁸ Operator Name Caulkins Oil Comp	y Elevation 6124 GR
	¹⁰ Surface Loca	tion

East/West line Feet from the North/South line Range Lot Idn Feet from the Rio Arriba West 1800' South 1150' 7W

11 Pottom Hole Location If Different From Surface

			L	sottom i	Hole Location	II Different Lie	Jili Sullace			
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	Joint o	or Infill	* Consolidation	n Code 15	Order No.					
160	-			l						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON CTANDADD UNIT HAS BEEN APPROVED BY THE DIVISION

	NON-STANL	DARD UNIT HAS BEET	NAPPROVEDBITHE	
16				17 OPERATOR CERTIFICATION
			i i	hereby certify that the information contained herein is true
				and complete to the best of my knowledge and belief
				Robert I Verguer
				Signature
				Printed Name Robert L. Verquer
				Title Superintendent
				Date June 26, 1998
				¹⁸ SURVEYOR CERTIFICATION
			1	I hereby certify that the well location shown on this plat was
				plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the
1150'				best of my knowledge and belief.
ı Y				Date of Survey
				Signature and Seal of Professional Surveyor:
				Signature and Sear of Frotessional Surveyor.
1800'				
1800				
	1			
				Certificate Number

District I PO Box 1980, Hobbs, NM 88241-1980

811 South First, Artesia, NM 88210

District II

District III

State of New Mexico
Energy, Minerals & Natural Resources Department RECEIVE

Form C-102 Revised October 18, 1994

Instructions on back

OIL CONSERVATION DIVISION SUMMER Submit 2040 South Pacheco Santa Fe. NM 875053 JUN 30 PH 12: 27

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

☐ AMENDED REPORT

1000 Rio Brazos Rd., Aztec, NM 87410 District IV 2040 South Pacheco, Santa Fe, NM 87505

i	API Numb	er		² Pool Cod	e		CATION PL	····		
30	-039-258	339		93235 ICE CANYON; GALLUP						
⁴ Property	Code				Well Number					
2456	5				BREEC	Н "В"			781	
⁷ OGRID	No.				8 Operato	r Name			⁹ Elevation	
00382	24				Caulkins Oi	l Company			6124 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	
L	14	26N	7W		1800'	South	1150'	West	Rio Arriba	
	<u> </u>		¹¹ B	ottom He	ole Location	If Different Fro	om Surface	•		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
² Dedicated Acre	s ¹³ Joint	or Infill 14 (Consolidation	Code 15 O	rder No.					
160										

NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	11011 011111	DI LLOS OTATI IL IS DELL	IN APPROVED BY THE DIVISION
16			¹⁷ OPERATOR CERTIFICATION
			I hereby certify that the information contained herein is true
		:	and complete to the best of my knowledge and belief
			Robert I Vergran
			Signature
			Printed Name Robert L. Verquer
			Title Superintendent
			Date June 26, 1998
			¹⁸ SURVEYOR CERTIFICATION
			I hereby certify that the well location shown on this plat was
			plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the
1120. O	·		best of my knowledge and belief.
			Date of Survey
			Signature and Scal of Professional Surveyor:
1800'			
			Certificate Number

PO Box 1980, Hobbs, NM 88241-1980

1800'

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 18, 1994

Certificate Number

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							2040 S Santa F	Soutl Fe. N		93 . 070	Juneo p	Submit to A	Ir Appropi Stai Fe	nstructions on back riate District Office te Lease - 4 Copiese Lease - 3 Copiese ENDED REPORT
1,	API Numbe		WE	7177 TA		I Code		ACI	REAGE D	EDIC	ATION PL			
ł	039-258		² Pool Code ³ Pool Name 72319 BLANCO MESA VER								ЭE			
⁴ Property C	Code						⁵ Pr	operty	y Name					Well Number
2456									H "B"					781
OGRID N 003824							_		r Name l Company					'Elevation
00002									 -		-, .			6124 GR
UL or lot no.	Section	Townshi	n I	lange	Lot Idn		Sur.		Location North/South		Foot Successful	E-AGN AL		Та .
L	14	26N	-	7W	Lot Iui	'	1800		South	- 1	Feet from the 1150'	East/West ii We		County Rio Arriba
L		<u> </u>		11 R	ottor	Ho			If Different			1,10		1 Ido / Hiloa
UL or lot no.	Section	Township	R	ange	Lot Idn		Feet from th		North/South li		Feet from the	East/West li	ine	County
	1-2				<u> </u>									
¹² Dedicated Acres 160	13 Joint o	r Infill	¹⁴ Cons	solidation	Code	15 Ord	der No.							
1150'	•		NOI	N-STAI	NDAR	D UN	VIT HAS	BEE	N APPROVE	ED BY	THE DIVISI 17 OPH I hereby cert and complete Signature Printed Nam Title Date 18 SUR I hereby cert plotted from my supervision	ERATOR ify that the inform e to the best of m ERATOR The ERATOR Report Super Su	CERT mation co ny knowlect t L. Ver intende 26, 1998 CERT ocation sh vual surve; vame is tru	rquer
<u> </u>	1 +				1			\dashv			Signature and	Seal of Profession	onal Surve	yor:

NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

93 JUN 30 PN 12: 27

ADMINISTRATIVE ORDER DHC-1920

Dugan Production Corporation P.O. Box 420 Farmington, New Mexico 87499-0420

OIL COM. DIV.

Attention: Mr. John Alexander

Mona Lisa No. 2 API No. 30-039-25745 Unit J, Section 14, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico. Ice Canyon-Gallup (Gas - 93235), Basin-Dakota (Prorated Gas - 71599) and, Blanco-Mesaverde (Prorated Gas - 72319)

Dear Mr. Alexander:

Reference is made to your request for an amendment to Division Order No. R-10963, which authorized the downhole commingling of Basin-Dakota and Blanco-Mesaverde Gas Pool production within the subject well, to add the Ice Canyon-Gallup Gas Pool as a third commingled zone in the wellbore.

It appearing that the subject well qualifies for approval for such amendment pursuant to the provisions of Rule 303.C., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the zones is hereby placed in abeyance.

The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Blanco-Mesaverde Gas Pool	Oil 30%	Gas 30%
Basin-Dakota Gas Pool	Oil 45%	Gas 45%
Ice Canyon-Gallup Gas Pool	Oil 25%	Gas 25%

Administrative Order No. DHC-1920 Dugan Production Corporation May 11, 1998 Page 2

The allocation method established herein may be altered at some time subsequent to initiating downhole commingling operations upon request by the operator and for good cause shown.

REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

Pursuant to Rule 303.H., the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 11th day of May, 1998.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

LORI WROTENBERY

Director

SEAL

LW/DRC

cc:

Oil Conservation Division - Aztec

Bureau of Land Management-Farmington

Case File-11897

STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

> CASE NO. 11920 Order No. R-10964

APPLICATION OF CAULKINS OIL COMPANY FOR COMPULSORY POOLING AND DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 5, 1998, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 2nd day of March, 1998, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Division Case Nos. 11897, 11899 and 11920 were consolidated at the time of the January 8th hearing for the purpose of testimony. No additional appearances were entered in this case at the February 5th hearing.
- (3) The applicant, Caulkins Oil Company, seeks an order pooling all mineral interests in the Blanco-Mesaverde and Basin-Dakota Gas Pools underlying the 5/2 of Section 14, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico, thereby forming a standard 320-acre gas spacing and proration unit for said pools. This unit is to be dedicated to its proposed Breech "B" 781 well to be drilled at a standard gas well location 1800 feet from the South line and 1150 feet from the West line (Unit L) of Section 14.
- (4) The applicant further seeks authority to downhole commingle Blanco-Mesaverde and Basin-Dakota Gas Pool production within the subject well.

CASE NO. 11920 Order No. R-10964 Page -2-

- (5) By Order No. R-10961 issued in companion Case No. 11899 on February 18, 1998, the Division, upon application of Dugan Production Corporation, established vo 160-acre non-standard gas spacing and proration units in the Blanco-Mesaverde as Basin-Dakota Gas Pools comprising the SE/4 and SW/4 of Section 14, Township 26 North, Range 7 West, NMPM.
- (6) As a result of the issuance of Order No. R-10961, the portion of the immediate case seeking to compulsory pool the interests within the S/2 of Section 14, thereby forming a standard 320-acre gas spacing and proration unit for the Blanco-Mesaverde and Basin-Dakota Gas Pools, is unnecessary and should therefore be dismissed.
 - (7) The evidence and testimony presented in this case indicates that:
 - a) Caulkins proposes to commingle the Blanco-Mesaverde and Basin-Dakota Gas Pools and dually complete these commingled zones with the Chacra formation within the subject Breech "B" 781 well;
 - b) a well drilled within the S/2 of Section 14 should encounter marginal gas production only from the Blanco-Mesaverde and Basin-Dakota Gas Pools;
 - Ç) the estimated bottomhole pressures within the Mesaverde and Dakota formations are expected to exceed the requirements set forth in Division Rule No. 303.C., which states that the Division may grant administrative approval for downhole commingling provided that the bottomhole pressure of the highest pressured commingled zone does not exceed the original reservoir pressure of any other commingled zone in the wellbore, adjusted to a common datum. Administrative notice was taken in this case of the engineering evidence and testimony presented in Case No. 11815, in which case Conoco Inc. demonstrated that even though the bottomhole pressure of the Dakota formation exceeds the original bottomhole pressure of the Mesaverde formation, there is no possibility of damage to the Mesaverde formation, nor will there be any loss of reserves, waste, or violation of correlative rights. Conoco presented this evidence in support of a downhole commingling request for its San Juan 28-7 Unit which is located approximately four miles northwest of the proposed Breech "B" 781 well.

CASE NO. 11920 Order No. R-10964 Page -3-

- (8) At this time, the applicant seeks only an exception to the pressure requirements contained within Division Rule No. 303.C., as described above. The applicant testified that it will file a Division Form No. C-107-A subsequent to the entry of this order.
- (9) The evidence and testimony in this case is sufficient to grant an exception to the pressure requirements for administrative approval for downhole commingling within the proposed Breech "B" 781 well.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Caulkins Oil Company for an order pooling all mineral interests in the Blanco-Mesaverde and Basin-Dakota Gas Pools underlying the S/2 of Section 14, Township 26 North, Range 7 West, NMPM, Rio Arriba County, New Mexico, thereby forming a standard 320-acre gas spacing and proration unit for said pools, said unit to be dedicated to its proposed Breech "B" 781 well to be drilled at a standard gas well location 1800 feet from the South line and 1150 feet from the West line (Unit L) of Section 14, is hereby dismissed.
- (2) The applicant, Caulkins Oil Company, is hereby granted an exception to the pressure requirements for administrative approval for downhole commingling as contained within Division Rule No. 303.C., for its proposed Breech "B' 781 well, which is to be drilled at a standard gas well location 1800 feet from the South line and 1150 feet from the West line (Unit L) of Section 14, and which is proposed to be downhole commingled in the Blanco-Mesaverde and Basin-Dakota Gas Pools.
- (3) In order to obtain administrative approval to downhole commingle Blanco-Mesaverde and Basin-Dakota Gas Pool production within the aforesaid Breech "B" 781 well, the applicant shall file a Division Form No. C-107-A complete with all attachments.
- (4) 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

LOKI WROTENBERY

Director

CAULKINS OIL COMPANY

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

June 26, 1998

The following list is all the offset operators that Caulkins Oil Company has notified by certified mail of the application to downhole commingle of Breech "B" 781, section 14, township 26N, range 7W.

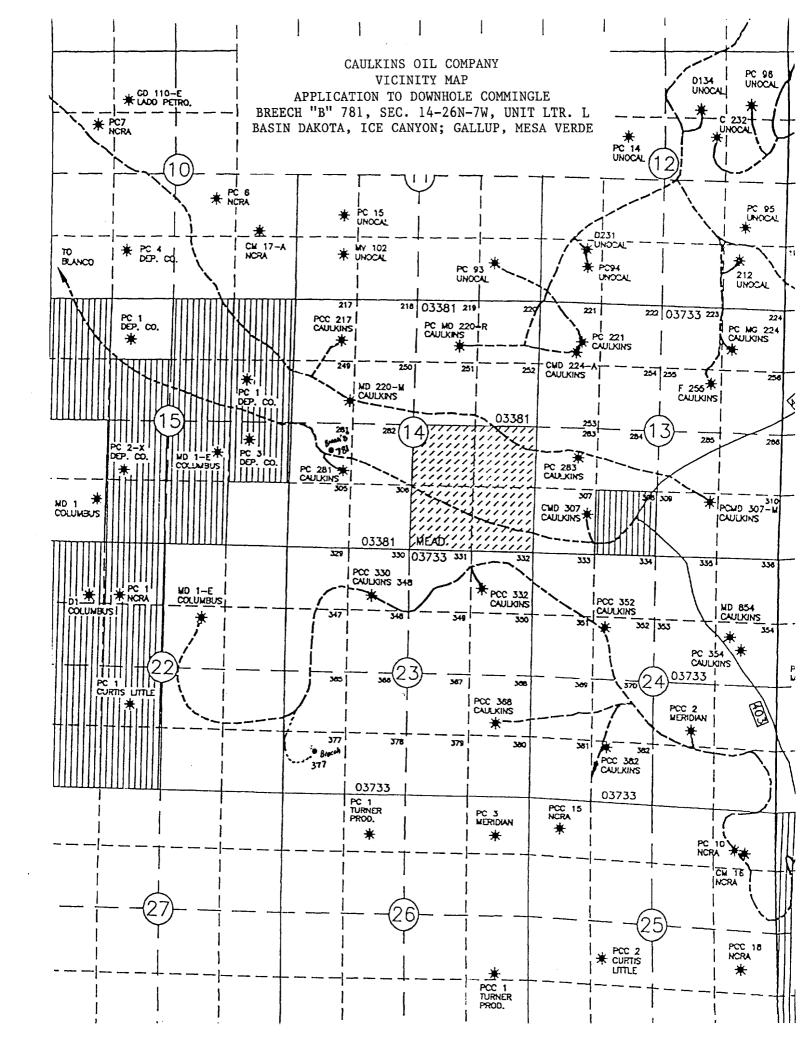
Central Resources, Inc. 1776 Lincoln St. Suite 1010 Denver, CO 80202

Chateau Oil & Gas 5802 U.S. Hwy 64 Farmington, NM 87402

Dugan Production Corporation 709 E. Murray Dr. Box 420 Farmington, NM 87401

Louis Dreyfus Natural Gas Co. 1400 Quail Springs Corporate Park Suite 600 Oklahoma City, OK 73134

Union Oil & Gas of CA 1004 Big Spring Midland, TX 79702



Conditions of Approval

Caulkins Oil Company Breech "B" No. 781 1800 FSL and 1150' FWL Sec 14-26N-07W

After a review of a representative set of Mesaverde and Dakota production histories in the vicinity of this well and the recent well performance data from the Breech 377 well (SWSW 23-26N-7W), we have established the following allocation procedures since these formations have been extensively developed in this area. In addition, since the Ice Canyon Gallup pool has not been as extensively developed as the Dakota or Mesaverde, we cannot concur with your proposed method of allocation for this zone at this time. The following is the authorized allocation procedure for the Dakota, Gallup, and Mesaverde producing horizons:

Formation	<u>Gas</u>	<u>Oil</u>
Dakota	240 MCFD	5.0 BCPD
Mesaverde	75 MCFD	0.5 BCPD
Gallup	*	*

^{*} The balance of the remaining production

Commingled production from each zone must be reported in accordance to the allocation factors presented above. Once **stabilized** production is exhibited from these combined intervals, file your final allocation factors with this office. Please notify this office when these final allocation factors are established

2) Within 30 days of the well's completion, file Well Completion Report, form # 3160-4. In addition, within 30 days of completing down hole commingling operations, file a subsequent report of all operations conducted.