State of New Mexico

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

PO Box 1980, hobbs, NM 88240

Energy, Minerals and Natural Resources Department CENED OIL CONSERVATION DIVISION 3LM

APPROVAL PROCESS:

DISTRICT II

811 South First St., Artesia, NM 88210

BIL South First St., Artesia, NM 88210 DISTRICT III 10801 Rio Brazos Rd., Adec, NM 87410 CAULKINS OIL COMPAN OPERATOR BREECH "C" LEASE	Santa Fe, New A APPLICATION FOR DOV	uth Pacheco 1exico 87505-64283 AUS 2 PH WNHOLE COMMINGLING P.O. BOX 670, BEOOMFIE ADDRESS C - SEC. 12-26N-6W UNIT LITE - SEC TWP RGE	RIO ARRIBA
OGRID NO. 003824 Proper	y Code <u>2457</u> API NO. <u>30-0</u>	39-24386 Federal	Spacing Unit Lease types—check For more) X. 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	South Blanco Mesa Verde	South Blanco Tocito	Basin Dakota
2. Top and Bottom of Pay Section (Perforations)	4911' to 5816'	6896' to RECEIV	To 7593'
3. Type of production (Oil or Gas)	Gas and Condensate	Gas and Oil SEP 8 1998	and Condensate
Method of Production (Flowing or Artificial Lift)	Flowing	Flowing DIGT S	Howing
5. Bottomhole Pressure Zones - Artificial Lift: Estimated Current Gas & Oil Flowing: Measured Current All Gas Zones: Estimated or Measured Original	a. (Current) 7-8-98 761 psia b. (Original)	a. 7-10-97 458 psia b.	a. 7-10-97 569 psia b.
Oil Gravity (* API) or Gas BTU Content	1218 BTU	1340 BTU	1196 BTU
7. Producing or Shut-In	Producing	Shut-in Temp. Abandoned	Shut-in Temp. Abandoned
Production Marginal? (yes or no)	Yes	Yes	Yes
If Shut-In, give date and oil/gass/water rates of last production Note: For new zones with no production listory, applicant shall be required to attach production estimates and supporting data If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates : Date: 8-13-98 Rates 100 MCF/D + 1.93 BOPD	Date: 12 month average Rates: 39 MCF/D + .20 BOPD Date: Rates:	Date: 12 month average Rates: 105 MCF/D + .21 BOPD Date: Rates:
8. Fixed Percentag Allocation Formula - % for each zone	Oil Gas 82 % 41 %	Oil Gas 9 % 16 %	Oil Gas 9 % 43 %

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 rte projections or oth

	reprojections of other required data.
10.	Are all working, overriding, and royalty interests identical in all commingled zones? X Yes No
	If not, have all working overriding and royalty interacts have all working overriding and royalty interacts have all
	Have all offset operators been given written notice of the new
11.	Will cross-flow occur? X 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. X Yes No (If No, attach explanation)
12.	Are all produced fluids from all commingled zones compatible with each other?X Yes No
13.	Will the value of production be decreased by commingling? Yes X No (If Yes, attach explanation)
14.	If this well is on, or communitized with, state or federal lands, either the Commissioner or Public Lands or the United States Bureau of Land Management has been notified in writing of this application. X Yes No
5.	NMOCD Reference Cases of Rule 303 © Exceptions: ORDER NO(S). DHC-1780, DHC-878, DHC-659
6.	ATTACHMENTS:
	• C-102 for each zone to be comminded assuring to

- - to be commingled sowing 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 com	aplete to the best of by knowledge and balling
SIGNATURE Robert I Verquer TITLE SU TYPE OR PRINT NAME ROBERT I VEROLIER	IPERINTENDENT DATE A CONTROL
TYPE OR PRINT NAME ROBERT L. VERQUER	TERRINTENDENT DATE August 19, 1998
	TELEPHONE NO (505) 632-1544

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

State of New Mexico

Energy, Minerals & Natural Resources Department

RECEIVED

Revised October 18, 1994

Instructions on back

Submit to Appropriate District Office

2040 South Pacheco

Santa Fe. NM 87505

93 AUG 21

PM 12: 40

Form C-102

Revised October 18, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

District IV				Santa Fe. NM 87505 93 AUG 21 11112					Fee Lease - 3 Co
040 South Pach	ieco, Santa F					0.	70 FATALLING!	ON' NW	AMENDED REPO
			<u>WELL L</u>	OCATIO	ON AND AC	REAGE DED	ICATION PI	АТ	
	API Numi	ber		² Pool Co	de		³ Pool		
	0-039-24	386		71599)		BASIN D		
Propert	7				SProperty Name BREECH "C"				
OGRID No. 003824				⁸ Operator Name Caulkins Oil Company					144-E ⁹ Elevation 6630 GR
				-	10 Surface	e Location		———— <u>—</u>	- COSO GR
IL or lot no.	Section 12	Township 26N	Range 6W	Lot Idn	Feet from the 990'	North/South line North	Feet from the 1650'	East/West line West	County Rio Arriba
			11 B	ottom Ho	ole Location	If Different Fr	ana Camba		- Kio Airioa
L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	es Joint	or Infill 1+ (Consolidation	Code 15 O	rder No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A

	NON-51A.	NDARD UNIT HAS BEEN APPROVED BY	Y THE DIVISION
1650'	990'	- THE STATE OF THE	THE DIVISION 17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and Robert 1 Veggee Signature
			Printed Name Robert L. Verquer Title Superintendent
			18 SURVEYOR CERTIFICATION 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. Date of Survey Signature and Seal of Professional Surveyor:
			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

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

Form C-102 Revised October 18, 1994

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Coming

AMENDED REPORT

2040 South Pacheco Santa Fe. NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	² Pool Code	² Pool Code ³ Pool Name			
30-039-24386	06460	SOUTH BLANCO TOCITO			
Property Code	⁵ Property N	⁶ Well Number			
2457	BREECH	144-E			
OGRID No.	⁸ Operator N	⁹ Elevation			
003824	Caulkins Oil (6630 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
C	12	26N	6W		990'	North	1650'	West	Rio Arriba

11 Bottom Hole Location If Different From Surface

Bottom Hole Location if Different Holn 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 Infill 14 (Consolidation	Code 15 O	rder No.				1	
80										

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A

	NON-STAN	DAKD UNIT HAS BEE	NAPPROVEDBY IH	E DIVISION
16				17 OPERATOR CERTIFICATION
	990'			I hereby certify that the information contained herein is
				true and complete to the best of my knowledge and
1650'	*			
	→ ◎			Robert I Verguer
				Signature
				D
				Printed Name Robert L. Verquer
				Title Superintendent
				Date August 18, 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 my supervision, and that the same is true and correct to
				the best of my knowledge and belief.
				Date of Survey
			_	
				Signature and Seal of Professional Surveyor:
			And the state of t	
				Certificate Number

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District [1]
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Co, NAI 9750

State of New Mexico Energy, Minerals & Natural Resources Department

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

811 South First, District III 1000 Rio Brazos District IV 2040 South Pach	Rd., Aztec, !	NM 87410		OIL	2040 Sout	ATION DIVISI th Pacheco NM 87505	ON 98 AUG 21 070 FAFA	Bhingion' 'M	propriate District Office State Lease - 4 Copies Fee Lease - 3 Copies AMENDED REPOR	
	ADI N	V	VELL L			REAGE DED	ICATION PI	LAT		
API Number					ode		¹ Pool	Name	 	
	0-039-24	386		7231			MESA	VERDE		
⁴ Property					⁵ Property Name ⁶ Well Num					
245					BREEC		144-E			
OGRID					8 Operator Name 2 Elevation					
0038	24				Caulkins Oi		6630 GR			
					10 Surface	e Location		<u>-</u>	- OUT OR	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
С	12	26N	6W		990'	North	1650'	West	Rio Arriba	
		_	11 B	ottom H	lole Location	If Different Fro		1 ,,, est	Rio Arriba	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	10		
			ľ			1 to tain south line	rectifom the	East/West line	County	
Dedicated Acre	s 3 Joint o	or Infill	Consolidation	Code 15	Order No.					

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

	7	IBITICE GIVET TIAS BEI	EN ATTROVED BY T	
16				17 OPERATOR CERTIFICATION
	990'			I hereby certify that the information contained herein is
				true and complete to the best of my knowledge and
	1 1			
1650'				
				Robert I Verguer
				Signature
				Printed Name Robert L. Verquer
				Title Superintendent
				Date August 18, 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 my supervision, and that the same is true and correct to
				the best of my knowledge and belief.
				Date of Survey
				Signature and Scal of Professional Surveyor:
				general and recording surveyor.
				Certificate Number

LAST 12-MONTHS PRODUCTION FOR BREECH C 144-E

DAKOTA

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
10/96	2,192	3	0	20		0.150
11/96	3,571	3	0	30	119	
12/96	2,998	5	1	15	200	0.100
01/97	3,023	6		31		0.333
02/97	2,276	6	1		98	0.194
03/97	3,193	6	1	28	81	0.214
04/97	1,912			30	106	0.200
05/97		8	1	30	64	0.267
	3,714	9	1	29	128	0.310
06/97	2,882	10	2	30	96	0.333
07/97	1,836	4	1	21	87	0.190
08/97	2,469	8	1	30	82	0.267
09/97	2,688	0	0	29	93	0.000
	32,754	68	10		105	0.213

TOCITO

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
08/96	901	0	0	31	29	
09/96	865	0	0			0.000
10/96	1,640			30	29	0.000
11/96			0	20	82	0.050
	1,149	0	0	30	38	0.000
12/96	1,048	20	0	30	35	0.667
03/97	1,224	19	0	25	49	0.760
04/97	941	14	0	30	31	
05/97	1,188	5	0	22		0.467
06/97	909	 			54	0.227
07/97				30	30	0.033
	895	4	0	22	41	0.182
08/97	974	2	0	30	32	0.067
09/97	335	0	0	17	20	0.000
	12,069	66	0		39	0.000

MESA VERDE

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
12/97	5,267	105	16	29	182	3.621
01/98	5,119	79	12	29	177	2.724
02/98	4,738	60	9	28	169	2.143
03/98	4,562	52	8	31	147	1.677
04/98	2,122	17	3	11	193	1.545
05/98	4,707	44	7	31	152	1.419
06/98	1,947	25	4	26	75	0.962
	28,462	382	59		156	2.013

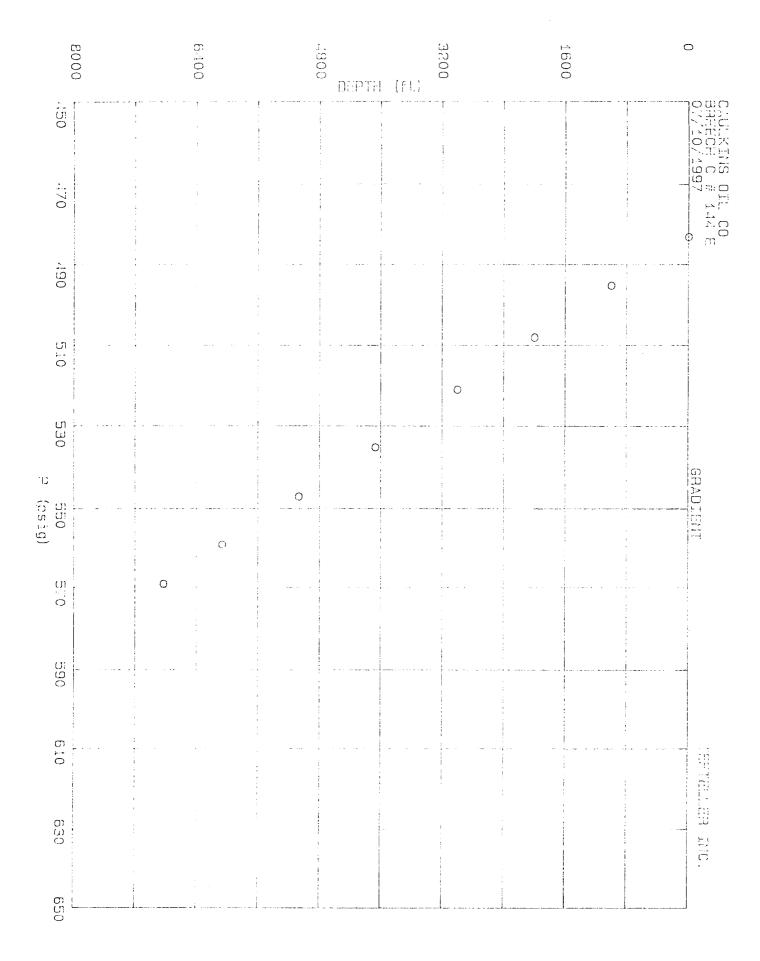
TEFTELLER INC

Pressure Gradient Report

COMP : CAULKINS OIL C FIELD : DATE : 07/10/1997 TBG : DPTH : CSG : DPTH :	O WELL RES STATUS END : PERFS :	: BREECH C # 144 E : DAKOTA : S.I. PKR : GRAD : 0.013000	T : 0.0 DATUM : 6831.0 HRS : 168.0 S N : T D :
Depth (ft)	Pressure (psig)	Delta P (psi)	Gradient (psi/ft)
0 1000	483.0 495.0	12.0	0.0120
2000	508.0	13.0	0.0130
3000	521.0	13.0	0.0130
4069	535.0	14.0	0.0131
5069	547.0	12.0	0.0120
6069	559.0	12.0	0.0120
6831	569.0	10.0	0.0131

REMARKS : CASING PRESSURE : PKR TUBING PRESSURE : 483

6831 569.0 0.0



TEFTELLER INC

Pressure Gradient Report

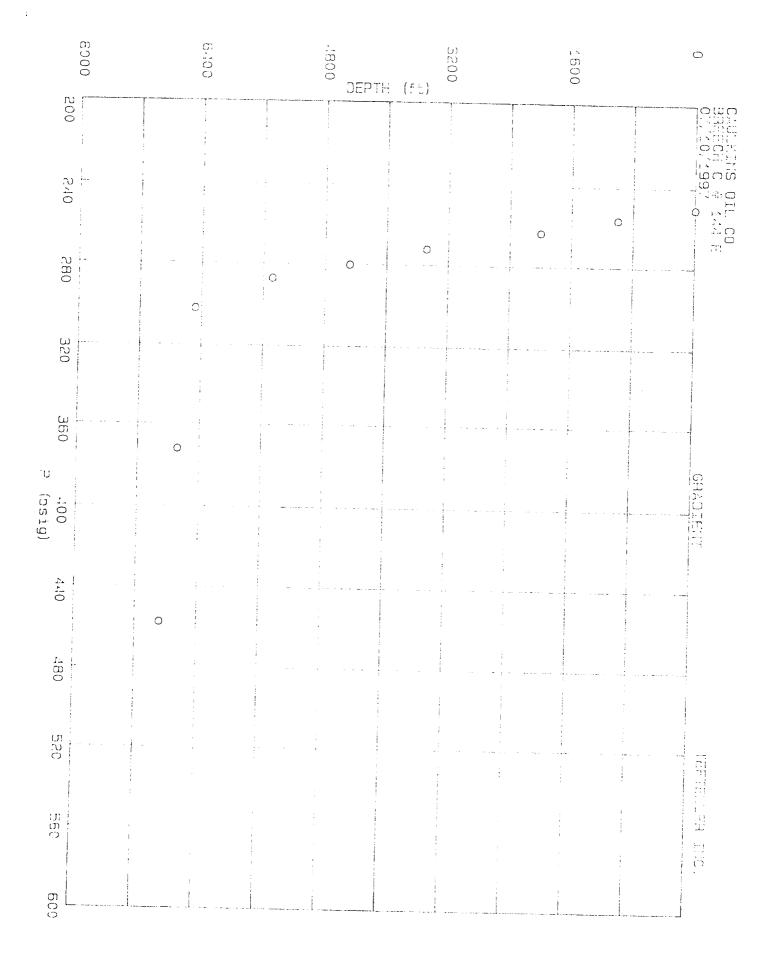
COMP : CAULKINS GIL CO FIELD : DATE : 07/10/1997 TBG : DPTH : CSG : DPTH :	RES	: BREECH C # 144 E : TOCITO : S.I. PKR : GRAD : 0.430000	T : 0.0 DATUM : 6882.0 HRS : 168.0 S N : T D :
Depth (ft)	Pressure (psig)	Delta P (psi)	Gradient (psi/ft)
0 1000 2000 3482 4482 5482 6482 6682 6882	250.0 254.0 263.0 272.0 280.0 287.0 302.0 372.0 458.0	6.0 7.0 9.0 8.0 7.0 15.0 70.0 86.0	0.0060 0.0070 0.0061 0.0080 0.0070 0.0150 0.3500 0.4300
6882	458.0	0.0	

REMARKS : CASING PRESSURE : 395

TOP OF WATER @ 6637

TUBING PRESSURE : 249

TOP OF OIL @ 6457



Company: CAULKINS OIL CO.

County: RIO ARRIBA
State: NEW MEXICO
Date: 07/08/1998 Well: BREECH #144-E Field: MESA VERDE FORMATION Engineer: Well Type:

Gauge Type: AMERADA

Gauge Range:

Test Type: STATIC GRADIENT Gauge Depth: 5810 ft Status: SHUT-IN File Name: 32107-1 Serial No.: 44537

Tubing: 2 3/8" TO 5879

Tubing: TO

TOOil Level Casing:

H20 Level 5402 ft Perfs.:

Shut-in Time 216 hrs

 Shut-in BHP
 761 @ 5810 ft
 Shut-in BHT 0 F @ 0 ft

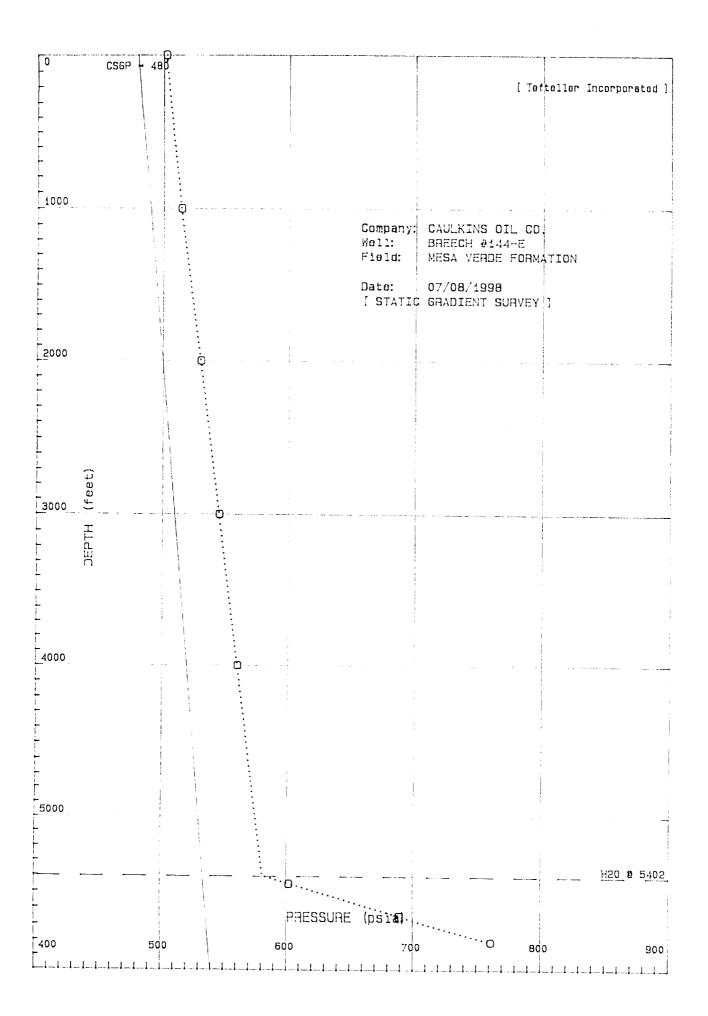
 Shut-in WHP
 502 Shut-in WHT 0 F

 Casing CSGP
 480

[Tefteller Incorporated]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	502.00	
2	1000	1000	514.00	0.012
3	2000	2000	530.00	0.016
4	3000	3000	545.00	0.015
5	4000	4000	560.00	0.015
6	5450	5450	602.00	0.029
7	5650	5650	689.00	0.435
8	5810	5810	761.00	0.450

SET DOWN @ 5817'.



CAULKINS OIL COMPANY

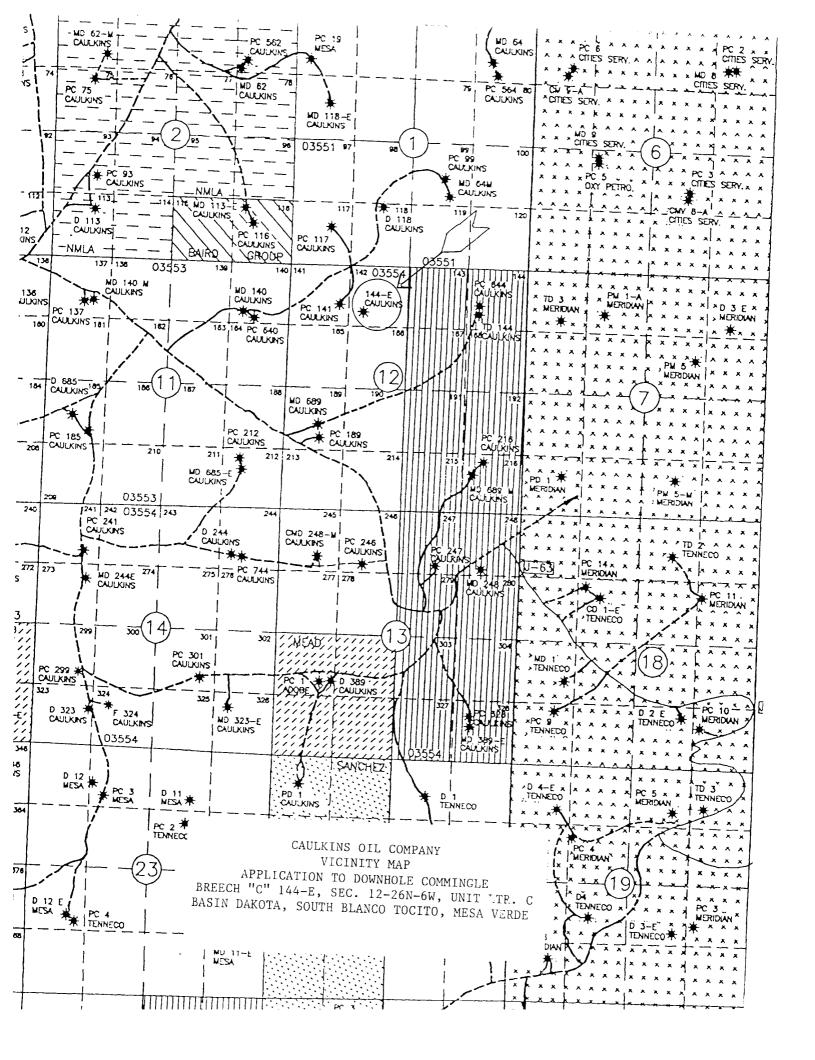
P. O. BOX 340 BLOOMFIELD, NEW MEXICO 87413 PHONE: 505-632-1544 FAX 505-632-1471

August 18, 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 "C" 144-E, section 12, township 26N, range 6W.

Conoco, Inc. 3315 Bloomfield Highway Farmington, NM 87401

Taurus Exploration USA, Inc. 2198 Bloomfield Highway Farmington, NM 87401



Conditions of Approval

Caulkins Oil Company Breech C, 144E 990' FNL and 1650 FWL Sec 12-26N-6W

1) After a review of the supporting data supplied in your application and the recently conducted well test for the Mesaverde interval, we concur with your established allocation factors.

Commingled production from each zone must be reported in accordance with the allocation factors identified below:

Formation	Gas	Oil
Dakota	43%	9%
Tocito	16%	9%
Mesaverde	41%	82%

2) Within 30 days of commingling the production in this well bore, file a Sundry Notice (form 3160-5) subsequent report of all operation conducted. The effective date of commingling will be the date commingling of production first occurs.

UNITED ST DEPARTMENT OF T BUREAU OF LAND M SUNDRY NOTICES AND R	HE INTERIOR RECEIVED	6. If Indian, Afforce of Tribe Name
(Do not use this form for proposals to drill or to de Use "APPLICATION FOR PERM	epen or plug back to a different reservoir.	NM
1. Oil Well [] Gas Well [] Other [] OIL & GAS WELL	DECENTE	DRINGT Name and No. BREECH "C" 144-E
2. Name of Operator: Caulkins Oil Company	SEP 8 1998	API Well No. 30-039-24386-00-D1
3. Address of Operator: (505) 632-1544	02. 0 1336	10. Field and Pool, Exploratory Area
P.O. Box 340, Bloomfield, NM 87413	DIL COM DIT	BASIN DAKOTA, MESA VERDE, TOCITO
4. Location of Well (Footage, Sec., Twp., Rgc.)	DIST. 3	11. Country or Parish, State
990' F/N 1650' F/W SEC. 12	-26N-6W	Rio Arriba Co., New Mexico
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF N	OTICE, REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[] Abandonment	[] Change of Plans
Subsequent Report	[]Recompletion [] Plugging Back	[] New Construction [] Non-Routine Fracturing
[] Subsequent Report	Casing Repair	[] Water Shut-Off
[Final Abandonment Notice	Altering Casing	Conversion to Injection
	[X] Other <u>Commingle Well</u>	Dispose Water
17. Describe Proposed or Completed Operations:		
8-18-98 Caulkins Oil Company has	submitted an application to downhole	commingle this well to the NMOCD.
Application and documents	attached.	
Upon approval of comming	ding application, well will be comming	gled by following procedures:
Rig up – kill well – nipple		6
	318' with retrieving head on bottom of	Tuhing
-	top of retrievable bridge plug set at 5	
-		
-	top of retrievable bridge plug set at 6	
	eaning out wellbore with air package t	
		nately 7590' for commingled production.
Dakota perforations.	7374' to 7593'	
Tocito perforations:	6896' to 6920'	
Mesa Verde perforations:	4911' to 5816'	
No new surface will be dist	urbed, location area will be cleaned up	when work is completed.
Estimated starting date: Sep	otember 21, 1998	
NOTE: The format is issued in lieu of U.S.	S. BLM Form 3160-5	
18. THEREBY CERTIFY THE FOREGOING	G IS TRUE AND CORRECT	
SIGNED: Robert I Vergue	TITLE: Superintendent	DATE: August 19, 1998
ROBERT L. VERQUER		
APPROVED BY: /S/ Duane W. Spen CONDITIONS OF APPROVAL, IF ANY	cer TITLE:	DATE: SEP - 3 1998

CAULKINS OIL COMPANY

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

98 AUG 21 PH 12: 40

070 FARNINGTON, NM

August 19, 1998

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

Re:

Administrative Approval to Commingle

Breech "C" 144-E, Section 12, Township 26N, Range 6W, Unit Letter C Basin Dakota, South Blanco Tocito, and Blanco Mesa Verde Formations

Dear Mr. Catanach:

This well was originally dual completed as a Basin Dakota, South Blanco Tocito well and was first delivered to pipeline in November 1990. Since being first delivered, Dakota has been capable of producing marginal volumes of gas against pipeline pressure. Tocito zone has required the use of compression to flow against pipeline pressure and due to low gas and oil volumes was very uneconomical to produce.

Approval to temporarily abandon Dakota and Tocito zones and recomplete well in Blanco Mesa Verde formation was obtained June 18, 1997. Mesa Verde zone has been completed and produced to pipeline since December 3, 1997. Following initial flush production. Mesa Verde zone has tested capable of producing marginal gas volumes to pipeline.

Caulkins Oil Company is requesting administrative approval to commingle all three zones in an effort to enhance overall production from the well and do away with compression that would be required to lift Tocito if produced separately.

Allocation percentages were calculated using the average production from monthly volume statements for the 12 month period that Dakota and Tocito zones were produced prior to being temporarily abandoned. Mesa Verde allocation percentage was calculated using a 24 hour test run on August 13, 1998.

Please find the enclosed documents:

- A. Form C-107-A
- B. Form C-102 for each zone
- C. Production data for Dakota. Tocito and Mesa Verde
- D. Bottom hole pressure tests
- E. Notification list of offset operators
- 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

Robert I Verguer

P.O. Box 1980, hobbs, NM 88240

DISTRICT II 811 South First St., Artesia, NM 88210

NSERVATION DIVISION RECEIVED 2040 South Pacheco

New 3-12-96 APPROVAL PROCESS:

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

Santa Fe, New Mexico 87505-6429

OIL COPPLICE FOR DOWNHOLE COMMINGLING

PM 12: 4 Odministrative __Hearing EXISTING WELLBORE

CAULKINS OIL COMPANY DIST. 3 P.O. BOX 340 1000 MFIELD, NM 87413 BREECH "C" 144-E C - SEC. 12-26N-6W RIO ARRIBA LEASE WELL NO UNIT LTR. - SEC. - TWP. - RGI

98 AUG 21

Spacing Unit Lease types: (check 1 or more) OGRID NO. <u>003824</u> Property Code 2457 API NO. 30-039-24386 Federal X, State ____ (and or) Fee _ The following facts are submitted in Upper Intermediate Lower support of downhole commingling: Zone Zone Zone 1. Pool Name and Pool Code South Blanco Mesa Verde South Blanco Tocito Basin Dakota 2. Top and Bottom of Pay Section 4911' to 5816' 6896' to 6920' (Perforations) 7374' to 7593' 3. Type of production Gas and Condensate Gas and Oil (Oil or Gas) Gas and Condensate 4. Method of Production Flowing Flowing (Flowing or Artificial Lift) Flowing 5. Bottomhole Pressure (Current) 7-8-98 Artificial Lift: a. 7-10-97 a. 7-10-97 **Estimated Current** 458 psia 761 psia 569 psia Gas & Oil - Flowing: Measured Current (Original) All Gas Zones: b Estimated or Measured Original Oil Gravity (* API) or Gas BTU 1218 BTU 1340 BTU Content 1196 BTU 7. Producing or Shut-In Producing Shut-in Temp. Abandoned Shut-in Temp. Abandoned Production Marginal? (yes or no) Yes Yes Yes If Shut-In, give date and Date: oil/gas/water rates of last production 12 month average 12 month average lote. For new zones with no production history, applican Rates Rates: 39 MCF/D + .20 BOPD shall be required to attach production estimates and 105 MCF/D + .21 BOPD Rates: supporting data Date: 8-13-98 Date Date: If Producing, give date and oil/gas/water rates of recent test 100 MCF/D + 1.93 BOPD Rates Rates: (within 60 days) 8. Fixed Percentag Allocation Formula

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 rte projections or other required data. 10. Are all working, overriding, and royalty interests identical in all commingled zones?

Oil

9

<u>X</u> 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?

41

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

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

Gas

82

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

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

15. NMOCD Reference Cases of Rule 303® Exceptions:

ORDER NO(S). DHC-1780, DHC-878, DHC-659

Gas

16

Oil

9

Gas

43

16. ATTACHMENTS:

- % for each zone

- C-102 for each zone to be commingled sowing 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 ir	iformation above is true and	complete to the best of	by knowledge and belief.
SIGNATURE Robert I	Verquer TITLE	SUPERINTENDENT	DATE August 19, 1998
TYPE OR PRINT NAME	ROBERT L. VERQUER		TELEPHONE NO. (505) 632-1544

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
2010 Court Dealing Court E. NAI 97504

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

OR NUG 21

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-24386	² Pool Code 71599	³ Pool Name BASIN DAKOTA
Property Code 2457	⁵ Property Na BREECH ¹	
OGRID No.	⁸ Operator Na	Sicialion
003824	Caulkins Oil Co	ompany 6630 GR

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
С	12	26N	6W		990'	North	1650'	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
Dedicated Acres	¹³ Joint o	r Infill	onsolidation	Code 15 Oi	der No.		_ 1		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A

	11011-3171	DARD UNIT HAS BEE	EN APPROVED BY TH	IE DIVISION
16				17 OPERATOR CERTIFICATION
	990'			I hereby certify that the information contained herein is
				true and complete to the best of my knowledge and
1650'	•			
	•			Robert I Vergreen
		,		Signature
				Printed Name Robert L. Verquer
				Title Superintendent
				Date August 18, 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 my supervision, and that the same is true and correct to
				the best of my knowledge and belief.
				Date of Survey
				Signature and Seal of Professional Surveyor.
				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

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 18, 1994

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AMENDED REPORT

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

070 FARMING WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name
30-039-24386	06460	SOUTH BLANCO TOCITO
⁴ Property Code	5 Property !	fame 6 Well Numb
2457	BREECH	"C" 144-E
OGRID No.	⁸ Operator I	ame Selevation
003824	Caulkins Oil (Company 6630 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
C 12	26N	6W		990'	North	1650'	West	Rio Arriba

11 Bottom Hole Location If Different From Surface

	r				- Boundary	II Different I I	om Same			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
				1			1 *************************************	Cast West title	County	
1		i		i				1		- 1
12 Dedicated Acres	113	1 60 114 60		115	L	_				i
Dedicated Acres	5 '' Joint o	r Infill C	onsolidation	Code ["Oi	rder No.					
80	1			1						
00	1	I		ì						- 1
	_1	I								

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A

	NON-STAN	DARD UNIT HAS BEEN	APPROVED BY THE I	DIVISION
16				OPERATOR CERTIFICATION
	990'		l h	ereby certify that the information contained herein is
			tru	e and complete to the best of my knowledge and
1650'	*			
	→ ◎			11/19/
				Robert 1 Verguer
			Sig	gnature
			Pri	inted Name Robert L. Verquer
			Tit	tle Superintendent
			Da	
				⁸ SURVEYOR CERTIFICATION
				ereby certify that the well location shown on this plat
			wa:	s plotted from field notes of actual surveys made by supervision, and that the same is true and correct to
			ii ii	best of my knowledge and belief.
			Dai	le of Survey
			Sign	nature and Seal of Professional Surveyor:
	<u> </u>		ļ l	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

2040 South Pacheco, Santa Fe, NM 87505

District IV

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe. NM 87505

Form C-102

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OTO FERMINATON, MA

WELL LOCATION AND ACREAGE DEDICATION PLAT

Property Code
O03824 Caulkins Oil Company 6630 CR
10 Surface Location
Surface Location
C 12 26N 6W Feet from the North/South line Feet from the East/West line County
Bottom Hole Location If Different From Surface

Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 12 Dedicated Acres ³ Joint or Infill 14 Consolidation Code Order No. 320

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVE

	1.07.5771	DARD UNIT HAS BEEN APPROVED BY THE DIVISION
6	990'	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and
1650'	→ ◎	Robert I Verguer
		Signature Printed Name Robert L. Verquer
		Date August 18, 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 my supervision, and that the same is true and correct to the best of my knowledge and belief. Date of Survey
		Signature and Seal of Professional Surveyor:
		Certificate Number

LAST 12-MONTHS PRODUCTION FOR BREECH C 144-E

DAKOTA

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
10/96	2,192	3	0	20	110	0.150
11/96	3,571	3	0	30	119	0.100
12/96	2,998	5	1	15	200	0.333
01/97	3,023	6	1	31	98	0.194
02/97	2,276	6	1	28	81	0.214
03/97	3,193	6	1	30	106	0.200
04/97	1,912	8	1	30	64	0.267
05/97	3,714	9	1	29	128	
06/97	2,882	10	2	30	96	0.310
07/97	1,836	4		21		0.333
08/97	2,469	8	1	30	87	0.190
09/97	2,688	0		29	82	0.267
	32,754	68	10	29	93	0.000
	32,704		10		105	0.213

TOCITO

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
08/96	901	0	0	31	29	0.000
09/96	865	0	0	30	29	
10/96	1,640	1	0	20	82	0.000
11/96	1,149	0	0	30	38	0.050
12/96	1,048	20	0	30		0.000
03/97	1,224	19	0	25	35	0.667
04/97	941	14	0		49	0.760
05/97	1,188	5		30	31	0.467
06/97	909		0	22	54	0.227
07/97			0	30	30	0.033
08/97	895	4	0	22	41	0.182
	974	2	0	30	32	0.067
09/97	335	0	0	17	20	0.000
	12,069	66	0		39	0.204

MESA VERDE

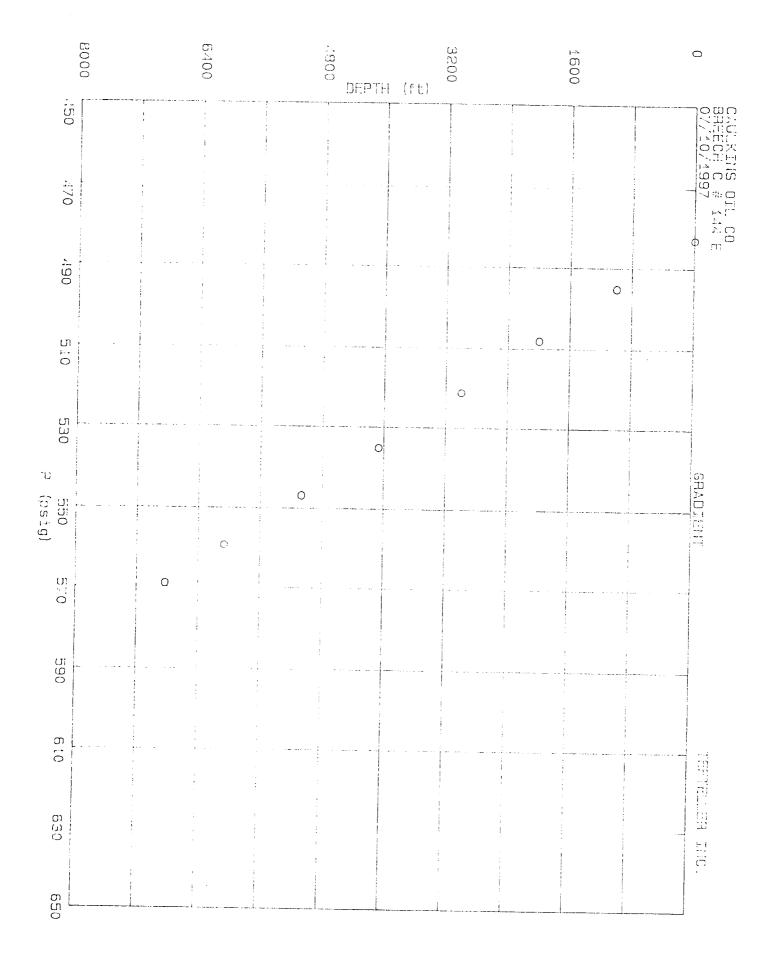
MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
12/97	5,267	105	16	29	182	3.621
01/98	5,119	79	12	29	177	2.724
02/98	4,738	60	9	28	169	2.143
03/98	4,562	52	8	31	147	1.677
04/98	2,122	17	3	11	193	1.545
05/98	4,707	44	7	31	152	1.419
06/98	1,947	25	4	26	75	0.962
	28,462	382	59		156	2.013

TEFTELLER INC

Pressure Gradient Report

COMP : CAULKINS OIL CO FIELD : DATE : 07/10/1997 TBG : DPTH : CSG : DPTH :	RES :	BREECH C # 144 E DAKOTA S.I. PKR : GRAD : 0.013000	T : 0.0 DATUM : 6831.0 HRS : 168.0 S N : T D :
Depth (ft)	Pressure (psig)	Delta P (psi)	Gradient (psi/ft)
0 1000 2000 3000 4069 5069	483.0 495.0 508.0 521.0 535.0 547.0	12.0 13.0 13.0 14.0 12.0	0.0120 0.0130 0.0130 0.0131 0.0120
6069 6831	559.0 569.0	12.0 10.0	0.0120
6831	569.0	0.0	

REMARKS : CASING PRESSURE : PKR TUBING PRESSURE : 483



TEFTELLER INC

Pressure Gradient Report

COMP : CAULKINS DIL CO FIELD : DATE : 07/10/1997 TBG : DPTH : CSG : DPTH :	RES :	BREECH C # 144 E TOCITO S.I. PKR : GRAD : 0.430000	T : 0.0 DATUM : 6882.0 HRS : 168.0 S N : T D :
Depth (ft)	Pressure (psig)	Delta P (psi)	Gradient (psi/ft)
0 1000 2000 3482	250.0 254.0 243.0 272.0	6.0 7.0 9.0	0.0060 0.0070 0.0061

8.0

7.0

15.0

0.0080

0.0070

0.0150

0.3500

0.4300

 6682
 372.0
 70.0

 6882
 458.0
 86.0

 6882
 458.0
 0.0

280.0

287.0

302.0

4482

5482

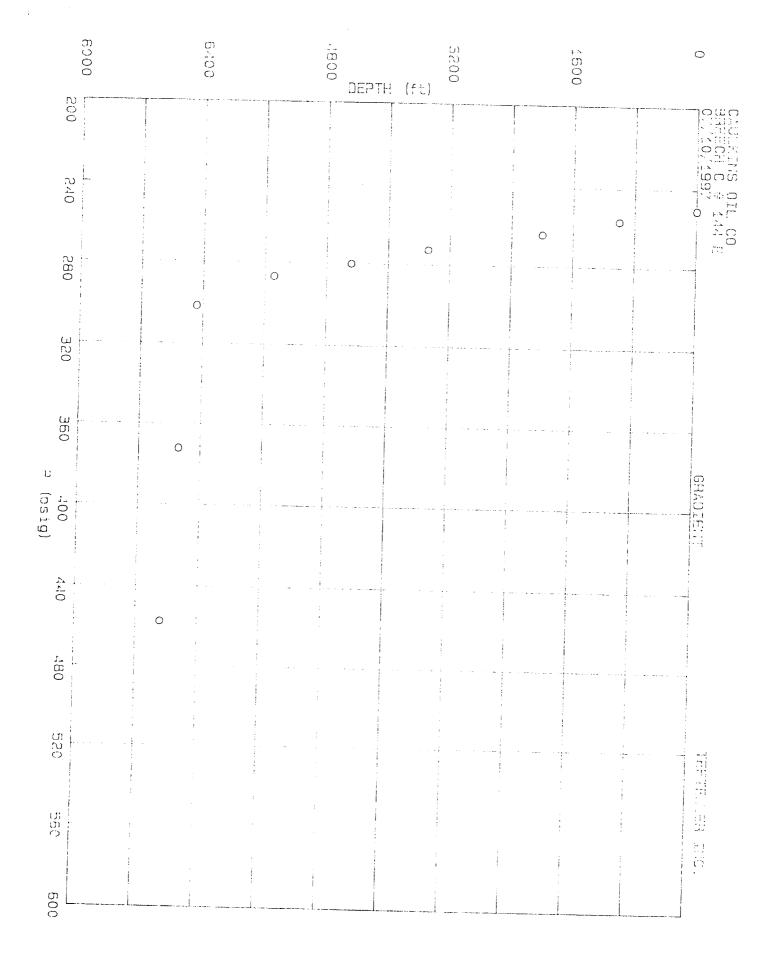
6482

REMARKS : CASING PRESSURE : 395

TOP OF WATER @ 6637

TUBING PRESSURE : 249

TOP OF OIL @ 6457



Company: CAULKINS OIL CO.

Well: BREECH #144-E County: RIO ARRIBA Field: MESA VERDE FORMATION State: NEW MEXICO Date: 07/08/1998 Engineer:

Gauge Type: AMERADA Well Type:

Gauge Range:

Test Type: STATIC GRADIENT Gauge Depth: 5810 ft Status: SHUT-IN Serial No.: 44537 File Name: 32107-1

Tubing: 2 3/8" TO 5879

Tubing: TO Casing:

TOOil Level Perfs.: H2O Level 5402 ft

Shut-in Time 216 hrs

Shut-in BHP 761 @ 5810 ft Shut-in BHT 0 F @ 0 ft Shut-in WHP 502 Shut-in WHT O F

Casing CSGP 480

[Tefteller Incorporated]

MD TVD PRESSURE PSI/ft 1 0 0 502.00 2 1000 1000 514.00 0.012 3 2000 2000 530.00 0.016 4 3000 545.00 0.015 3000

 4000
 4000
 560.00
 0.015

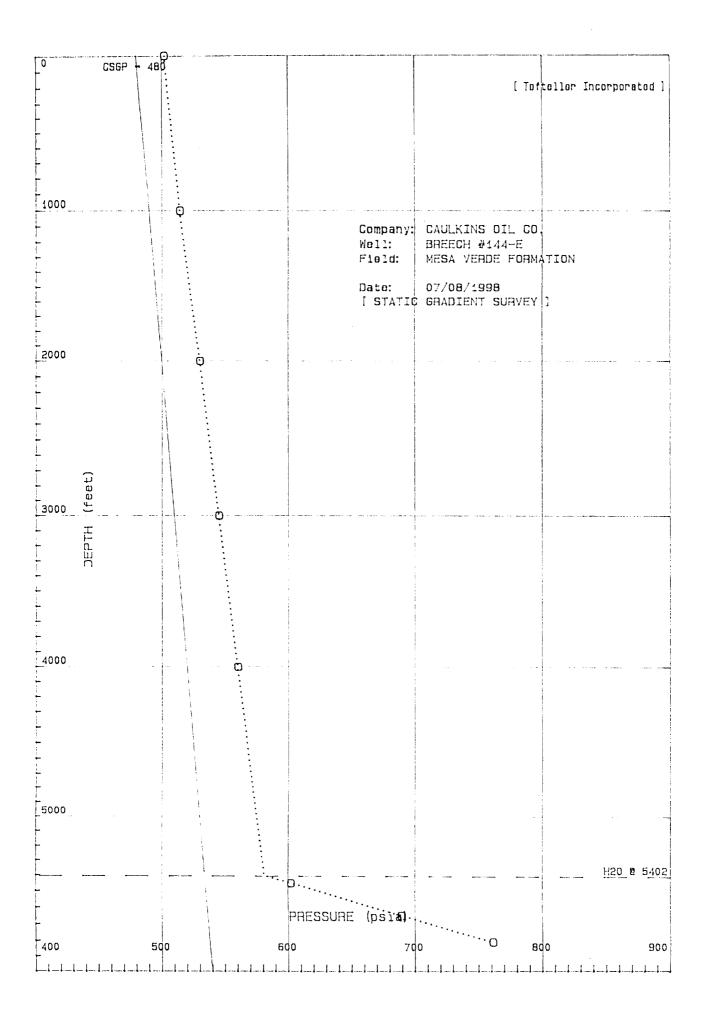
 5450
 5450
 602.00
 0.029

 5650
 5650
 689.00
 0.435

 5810
 5810
 761.00
 0.450

 5 6 7 8

SET DOWN @ 5817'.



CAULKINS OIL COMPANY

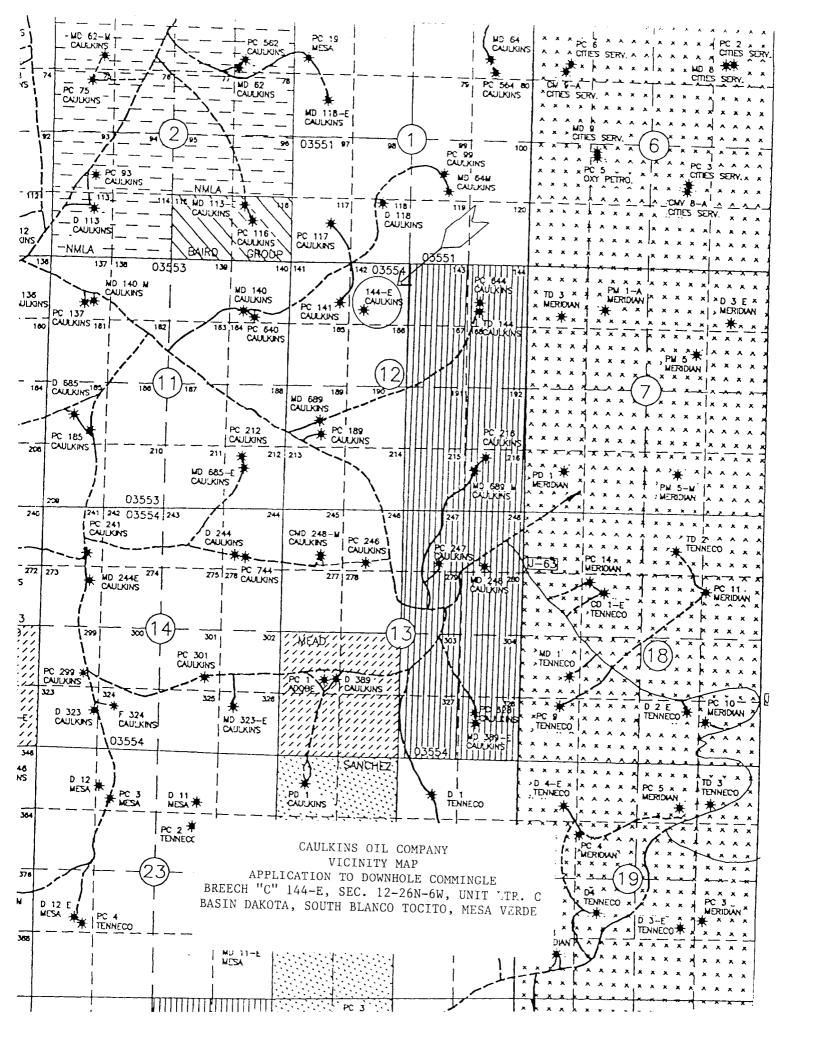
P. O. BOX 340
BLOOMFIELD, NEW MEXICO 87413
PHONE: 505-632-1544
FAX 505-632-1471

August 18, 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 "C" 144-E, section 12, township 26N, range 6W.

Conoco, Inc. 3315 Bloomfield Highway Farmington, NM 87401

Taurus Exploration USA, Inc. 2198 Bloomfield Highway Farmington, NM 87401



Conditions of Approval

Caulkins Oil Company Breech C, 144E 990' FNL and 1650 FWL Sec 12-26N-6W

1) After a review of the supporting data supplied in your application and the recently conducted well test for the Mesaverde interval, we concur with your established allocation factors.

Commingled production from each zone must be reported in accordance with the allocation factors identified below:

Formation	<u>Gas</u>	<u>Oil</u>
Dakota	43%	9%
Tocito	16%	9%
Mesaverde	41%	82%

2) Within 30 days of commingling the production in this well bore, file a Sundry Notice (form 3160-5) subsequent report of all operation conducted. The effective date of commingling will be the date commingling of production first occurs.