DISTRICT

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

P.O. Box 1980, Hobbs, NM 88240

Bir-wouth First St., Artesia, NM 88210

State of New Mexico Energy, Minerals and Natural Resources Department OIL CONSERVATION DIVISION

APPROVAL PROCESS:

'ICT II

2040 S. Pacheco Santa Fe, New Mexico 87505-6429 11 12 12 13 13 13 13 Administrative Hearing

DISTRICT III

EXISTING WELLBORE

1000 Peo Brazos Rd, Aztec, NM 87410	APPLICATION FO	OR DOWNHOLE COMMINGL	ING : WAYES _ N	
Caulkins Oil Company		P.O. Box 340, Bloom	field, NM 87413	
Uperator		Address		
Breech "E"	50-E	D - 5 - 26N - 6W	Rio Arriba	
(+314	Well No.	Unit Ltr Sec - Twp - Hge	County	

OGRID NO. 003824 Property Code 02459 API NO. 30-039-22908 Federal X , State , (and/or) Fee The following facts are submitted in support of downhole commingling: Intermediate Zones Lower Zone Upper Zone Pool Name and Pool Code Blanco Mesa Verde Basin Dakota Top and Bottom of Pay Section (Perforations) 4573' to 5426' 7262' to 7452' 3. Type of production (Oil or Gas) Gas and Condensate Gas and Condensate 4. Method of Production (Flowing or Artificial Lift) Flowing Flowing a. (Current) 6-24-98 a. 6-24**-**98 5. Bottomhole Pressure a. 446 psia ones - Artificial Lift:
Estimated Current

b. & Oil - Flowing:
Measured Current 493 psia b. (Original) b. All Gas Zones:
Estimated Or Measured Original 6. Oil Gravity (*API) or Gas BTU Content 1162 BTU 1253 BTU 7. Producing or Shut-In? Producing Producing Yes Production Marginal? (yes or no) Yes Date: If Shut-In, give date and oil/gas/, water rates of last production Rates: Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data Date: 7-2-98 Date: 7-2-98 If Producing, give date and cil/gas/ water rates of recent test (within 60 days) Rates: 122 MCFD + .19 BCPD 25 MCFD + .14 BCPD

8. Fixed Percentage Allocation Formula -% for each zona	ой: 43	Gas:	17 %	Oil:	Gas:	%	oii: 57	Gas:	83 %	
If allocation formula is based submit attachments with sup	upon some	ething ot ita and/o	her than cu r explainin	urrent or p g method	ast production	on, or is grate pro	based upo bjections o	n some (or other r	other me required (thod, data.
 Are all working, overriding, ar If not, have all working, overr Have all offset operators been 	nd royalty iding, and given writ	interests royalty i ten notic	identical interests be e of the pr	n all comn een notifie oposed do	ningled zone: d by certifie wnhole com	s? d mail? mingling?	$\frac{X}{X}$	Yes Yes Yes	- No - No - No	
1 $\frac{1}{1000}$ Ill cross-flow occur? $\frac{x}{1000}$ Y	es No ed, and wi	If yes	s, are fluids ocation for	compatib mula be re	le, will the for X	rmations Yes	not be dar No (If N	maged, v lo, attacl	vill any o	cross- ation
12. Are all produced fluids from a	II comming	gled zone	es compati	ble with e	ach other?	<u>X</u>	Yes !	Vo		
13. Will the value of production b	e decrease	ed by co	mmingling?		Yes <u>X</u> No	(If Y	es, attach	explana	ation)	
 If this well is on, or communi United States Bureau of Land 	tized with, Managem	state or ent has	federal lar been notifi	nds, either led in writ	the Commis	ssioner of oplication	Public La	nds or th	he	
15. NMOCD Reference Cases for	Rule 303(C) Excep	tions:	ORD	R NO(S)	DHC-65	9, R-10 ⁴	+76 - B		
16. ATTACHMENTS: C-102 for each zor Production curve for For zones with no Data to support all Notification list of the Any additional state	or each zon production ocation me all offset o working, o	ne for at history, thod or perators verriding	least one estimated formula. . and roya	year. (If r production	not available, in rates and ts for uncom	attach e supportin imon inte	xplaination g data. rest cases			
I hereby certify that the informati	on above i	s true ar	nd complet	e to the b	est of my kn	owledge	and belief			
SIGNATURE Bolest IV.	erque			TITLE	Superint	endent	DAT	E Jul	y 7, 19	998

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

1006 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 Instructions on back

OIL CONSERVATION DIVISION

2040 South Pacheco -9 PM 1:31 Santa Fe. NM 87505 2 ""

Submit to Appropriate District Office State Lease - 4 Copies

AMENDED REPORT

Fee Lease - 3 Copies

		-	
WELLI	OCATION AND	ACREAGE DEDICATION PI	.AT

71599	BASIN DAKOTA	
• •		Well Number
		* Elevation
Caulkins Oil C	Company	6572 GR
	S Property No. BREECH * Operator No.	71599 BASIN DAKOTA Property Name BREECH "E" Operator Name Caulkins Oil Company

Surface Location

ſ	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
-	D	5	36N	6W		990'	North	1120'	West	Rio Arriba

11 Bottom Hole Location If Different From Surface

UL or let no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	s 13 Joint	or Infill 14 (Consolidatio	n Code 15 O	rder No.				

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

	MON-91 MAD	WIND ONLI LIVE DEEP	N APPROVED BY THE	
16				17 OPERATOR CERTIFICATION
990'			Î	I hereby certify that the information contained herein is true
// ²				and complete to the best of my knowledge and beltef
1120"				
				Robert 2 Verger
				Signature
				Printed Name Robert L. Verquer
				Title Superintendent
				Date July 7, 1998
			-	¹⁸ SURVEYOR CERTIFICATION
			li de la companya de	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
				best of my knowledge and belief.
				Date of Survey
				Signature and Seal of Professional Surveyor:
				Certificate Number

PO Box 1980, Hobbs, NM 88241-1989

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Rivised October 18, 1994

Instructions on back

OIL CONSERVATION DIVISION -811 South First, Artesia, NM 88210

Submit to Appropriate District Office

1000 Rio Brazos Rd., Aztec, NM 87410

12 Dedicated Acres

320

13 Joint or Infill

14 Consolidation Code

District II

District III

District IV

2040 South Pacheco

State Lease - 4 Copies Fee Lease - 3 Copies

2040 South Pacheco, Santa Fe, NM 87505

Santa Fe. NM 87505 11 -9 11 1:31

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

3	0-039-229			72319	1	MESA VERDE				
⁴ Propert			Property Name							
2459 BREECH "E" OGRID No. Operator Name							50-E			
003824 Caulkins Oil Company							6572 GR			
					10 Surface	e Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
D	5	236N	6W		990'	North	1120'	West	Rio Arriba	
	-		¹¹ F	Bottom H	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	

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

18 Order No.

- "	NON-STANI	DARD UNIT HAS BEE	N APPROVED BY TE	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 belief
1120"				
			· · · · · · · · · · · · · · · · · · ·	Robert I Verguer
				Signature
				Printed Name Robert L. Verquer
				Title Superintendent
				Title Superintendent
				Date July 7, 1998
				¹⁸ SURVEYOR CERTIFICATION
				I hereby certify that the well location shown on this plat was
				piotted from field notes of actual surveys made by me or under 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:
-				
14				Certificate Number



2030 'ton Place Farmington, N.M. 87401

(505) 325-6622

Analysis No. CAU80008 Cust. No. 17000-10050

WELL/LEASE INFORMATION

Source

Company : CAULKINS OIL COMPANY Well Name : BREECH E 50-E Source : Pressure : 88 PSIG

County

State Location Sample Temp. : N/A DEG.F Well Flowing : YES Date Sampled : 02/03/98

Fld/Formation : DAKOTA

Sampled By : RG Foreman/Engr :

Cust.Stn.No. :

Remarks:

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.* SP.GR.*	
NITROGEN CO2 METHANE ETHANE PROPANE I-BUTANE N-BUTANE I-PENTANE N-PENTANE HEXANES	0.248 1.244 85.949 7.559 2.651 0.508 0.763 0.323 0.227 0.528	0.0000 0.0000 0.0000 2.0220 0.7306 0.1662 0.2406 0.1182 0.0822	0.00 0.0024 0.00 0.0189 870.06 0.4761 134.07 0.0785 66.86 0.0404 16.56 0.0102 24.95 0.0153 12.95 0.0080 9.12 0.0057 27.15 0.0170	
TOTAL	100.000	3.5901	1161.72 0.6725	

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR	(1/Z)	1.0030
BTU/CU.FT. (DRY) CORRECTED	FOR (1/Z)	1165.2
BTU/CU.FT. (WET) CORRECTED	FOR $(1/Z)$	1144.9
REAL SPECIFIC GRAVITY		0.6742

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER # : AO37 CYLINDER PRESSURE : 86 PSIG DATE RUN : 02/04/98 ANALYSIS RUN BY : DAVE MARTIN



2030 Tton Place Farmington, N.M. 87401 (505) 325-6622

Analysis No. CAU80009 Cust. No. 17000-10055

WELL/LEASE INFORMATION

Company : CAULKINS OIL COMPANY
Well Name : BREECH E 50-E
County : Source :
Pressure : 262 PSIG
Sample Temp. : N/A DEG.F

Well Flowing : NO State

Date Sampled: 02/03/98 Location

Fld/Formation : MESA VERDE Sampled By : RG Cust.Stn.No. : Foreman/Engr :

Remarks:

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR.*	
NITROGEN	0.513	0.0000	0.00	0.0050	
CO2	0.493	0.0000	0.00	0.0075	
METHANE	79.469	0.0000	804.47	0.4402	
ETHANE	10.335	2.7646	183.31	0.1073	
PROPANE	5.932	1.6349	149.60	0.0903	
I-BUTANE	0.981	0.3209	31.98	0.0197	
N-BUTANE	1.411	0.4449	46.14	0.0283	
I-PENTANE	0.353	0.1292	14.16	0.0088	
N-PENTANE	0.235	0.0851	9.44	0.0059	
HEXANES	0.278	0.1213	14.29	0.0089	
TOTAL	100.000	5.5009	1253.38	0.7218	

^{* @ 14.730} PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

^{** @ 14.730 &}amp; 60 DEG. F

COMPRESSIBILITY FACTOR	(1/Z)	1.0036
BTU/CU.FT. (DRY) CORRECTED	FOR (1/Z)	1257.9
BTU/CU.FT. (WET) CORRECTED	FOR (1/Z)	1236.0
REAL SPECIFIC GRAVITY		0.7241

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER # : AZT-014 CYLINDER PRESSURE : 268 PSIG DATE RUN : 02/04/98 ANALYSIS RUN BY : DAVE MARTIN Company: CAULKINS OIL CO.

Well: BREECH #50-E Field: DAKOTA FORMATION

Engineer:

Gauge Type: AMERADA

Gauge Range: 0-3000

Gauge Depth: 7350 ft Serial No.: 44537

TO 7400 Tubing: 2 1/16"

TO Tubing:

Oil Level TOCasing: Perfs.: 7266-7452 H20 Level

Shut-in Time 216 hrs

Shut-in BHP 446 @ 7350 ft Shut-in BHT 0 F @ 0 ft

Shut-in WHT 0 F Shut-in WHP 373

[Tefteller Incorporated]

County: RIO ARRIBA State: NEW MEXICO Date: 06/24/1998

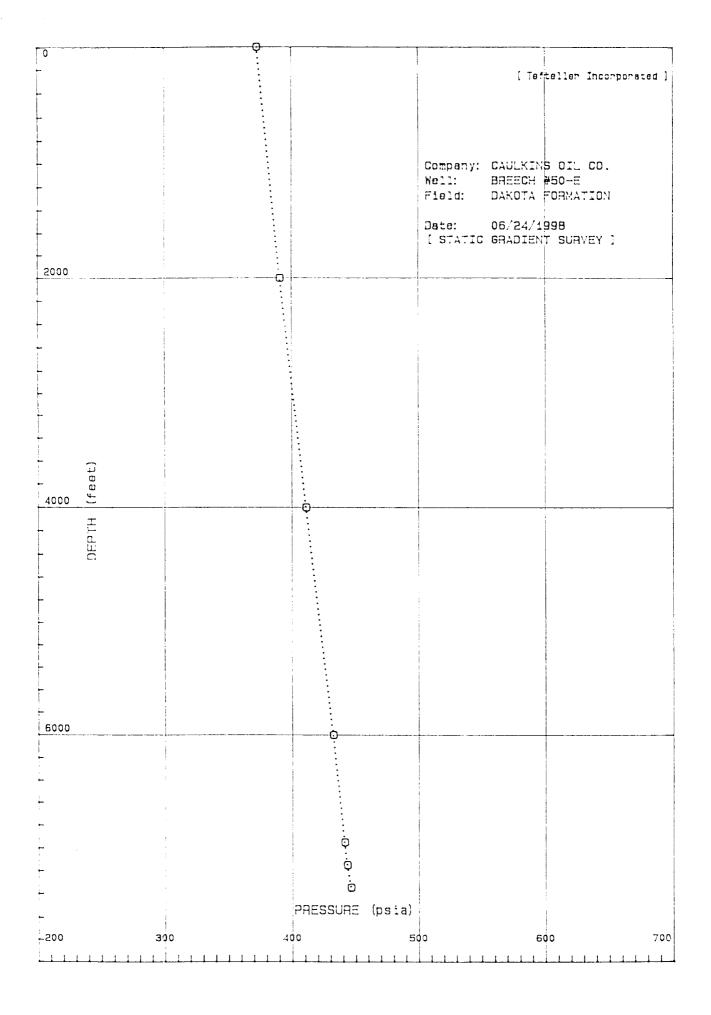
Status: SHUT-IN

File Name: 32090-1

Test Type: STATIC GRADIENT

Well Type:

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	373.00	
2	2000	2000	391.00	0.009
3	4000	4000	411.00	0.010
4	6000	6000	432.00	0.010
5	6950	6950	441.00	0.009
6	7150	7150	443.00	0.010
7	7350	7350	446.00	0.015



Company: CAULKINS OIL CO.

County: RIO ARRIBA State: NEW MEXICO Date: 06/24/1998 Well: BREECH #50-E Field: MESA VERDE FORMATION

Engineer:

Gauge Type: AMERADA

Test Type: STATIC GRADIENT Gauge Range: 0-3000

Gauge Depth: 5400 ft Status: SHUT-IN Serial No.: 44537 File Name: 32090-2

Tubing: 2 1/16" TO 5503

Tubing:

TO

Casing:

TOOil Level

Well Type:

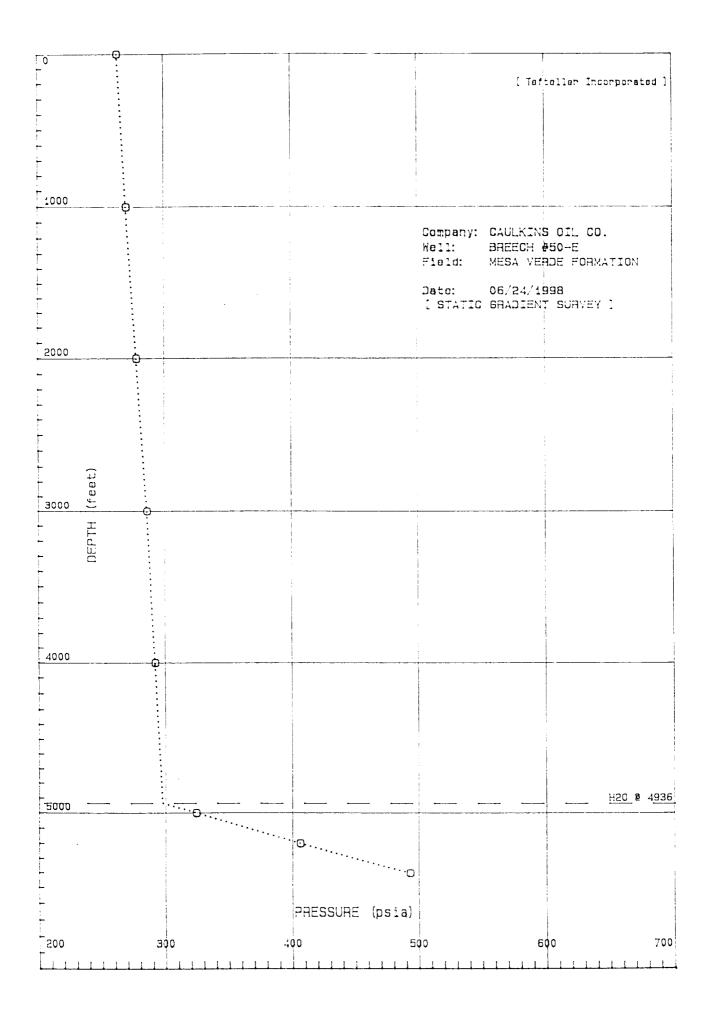
H20 Level 4936 ft Perfs.: 4573-5426

Shut-in Time 216 hrs

Shut-in BHP 493 @ 5400 ft Shut-in BHT 0 F @ 0 ft Shut-in WHP 263 Shut-in WHT 0 F

[Tefteller Incorporated]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	263.00	
2	1000	1000	270.00	0.007
3	2000	2000	278.00	0.008
4	3000	3000	286.00	0.008
5	4000	4000	292.00	0.006
6	5000	5000	324.00	0.032
7	5200	5200	406.00	0.410
8	5400	5400	493.00	0.435



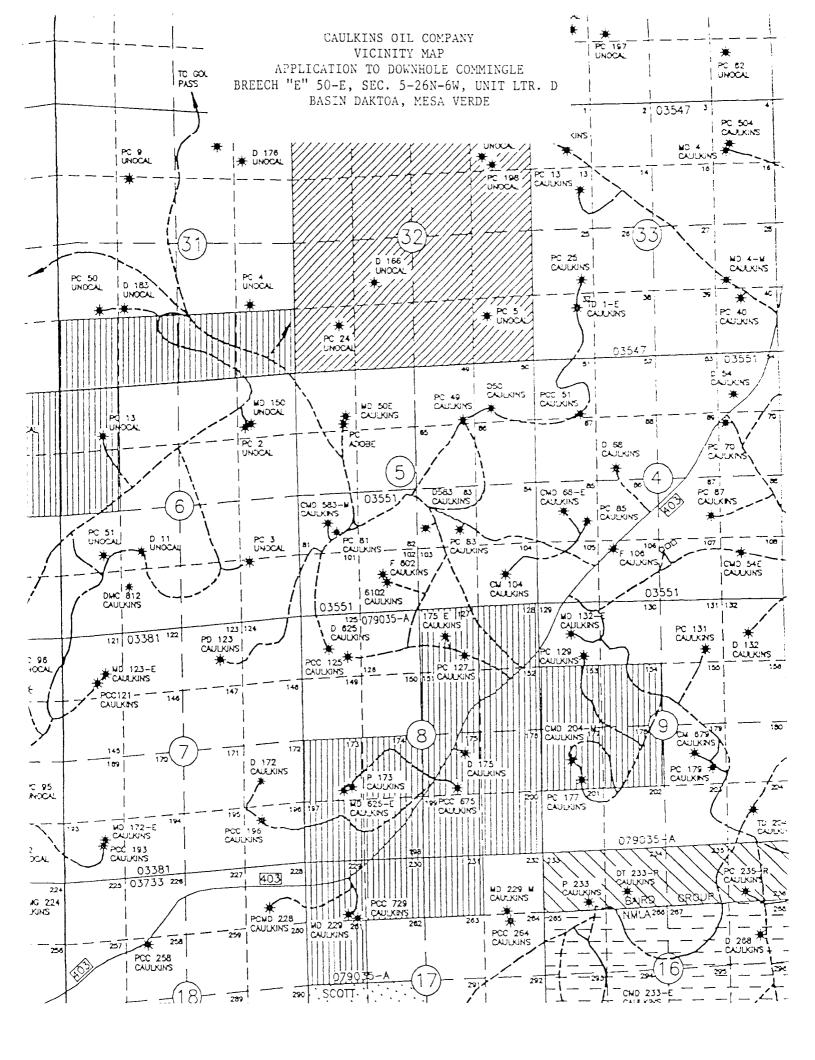
LAST 12-MONTHS PRODUCTION FOR BREECH E 50-E

BASIN DAKOTA

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
02/97	3,862	4	1	25	154	0.160
03/97	3,604	6	1	31	116	0.194
04/97	2,904	4	1	23	126	0.174
05/97	4,004	8	1	31	129	0.258
06/97	4,048	11	2	30	135	0.367
07/97	3,462	6	1	26	133	0.231
08/97	2,470	2	0	31	80	0.065
09/97	2,382	5	1	30	79	0.167
10/97	2,694	5	1	31	87	0.161
11/97	4,265	7	1	30	142	0.233
12/97	3,945	5	1	31	127	0.161
01/98	4,731	2	0	31	153	0.065
	42,371	65	11		122	0.186

MESA VERDE

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
04/96	731	7	1	30	24	0.233
05/96	739	8	1	31	24	0.258
10/96	737	4	1	29	25	0.138
11/96	597	4	1	30	20	0.133
12/96	645	5	1	31	21	0.161
01/97	718	2	0	25	29	0.080
02/97	324	2	0	22	15	0.091
03/97	469	5	1	31	15	0.161
04/97	437	2	0	24	18	0.083
05/97	681	4	1	31	22	0.129
06/97	586	5	1	30	20	0.167
07/97	307	0	0	26	12	0.000
	6,971	48	8		20	0.136



CAULKINS OIL COMPANY

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

July 7, 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 "E" 50-E, section 5, township 26N, range 6W.

Little Oil & Gas, Inc. P.O. Box 1258 Farmington, NM 87499

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

		5. Lease
UNITED ST	ATES	ļ
DEPARTMENT OF T		24.49
BUREAU OF LAND M		13.4° 6.133.19.1
DOREAG OF EARD I	MANAGEMENT	6. If Indian, Allottee or Tribe Name
SUNDRY NOTICES AND R	EPORTS ON WELLS	7. Unit Agreement 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.	7. Ontrigoenen indie
1. Oil Well [] Gas Well [] Other []	0.0 3.0 0 0.0 0.0 0.0	8. Well Name and No.
GAS WELL		BREECH "E" 50-E
2. Name of Operator:		9. API Well No.
Caulkins Oil Company		30-039-22908-00-D1
3. Address of Operator: (505) 632-1544		10. Field and Pool, Exploratory Area
P.O. Box 340, Bloomfield, NM 87413		BASIN DAKOTA, MESA VERDE
4. Location of Well (Footage, Sec., Twp., Rge.)	1 -	11. Country or Parish, State
990' F/N 1120' F/W SEC. 5-2	% N-6W	Rio Arriba Co., New Mexico
12. CHECK APPROPRIATE BOX(s)		
TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[Abandonment	[Change of Plans
[A] Notice of filterit	[]Recompletion	[] New Construction
[Subsequent Report		Non-Routine Fracturing
[] Subsequent Report	Casing Repair	Water Shut-Off
[] Final Abandonment Notice	[] Altering Casing	[] Conversion to Injection
[] I mai / toundoimient / touce	[X] Other <u>Commingle well</u>	[] Dispose Water
17. Describe Proposed or Completed Operations:	(-1 outs <u></u>	
	Iministrative approval for downhole convenies of the Mexico Oil Conservation Division.	mmingling of the Mesa Verde and Basin Dakota
		•
1	'	
	• •	
NOTE: The format is issued in lieu of U.S.	S RIM Form 3160.5	
NOTE. The format is issued in field of O.	3. BEW FORM 3100-3	
18. I HEREBY CERTIFY THE FOREGOIN	G IS TRUE AND CORRECT	
SIGNED: Robert I Verguer		
SIGNED: Noun I Vergue	TITLE: Superintendent	DATE: <u>July 7, 1998</u>
ROBERT L. VERQUER		
APPROVED BY: /S/ Duane W. Sp CONDITIONS OF APPROVAL, IF ANY	encer TITLE:	date: JUL 2 1998
the section of the first of the		

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION

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

TYPE OR PRINT NAME Robert L. Verquer

APPROVAL PROCESS:

'ICT II 87-wouth First St., Artesia, NM 88210

2040 S. Pacheco Santa Fe, New Mexico 87505-6429 11 - 9 FM 1: 31 X Administrative Hearing

DISTRICT III

EXISTING WELLBORE

1000 Reg Brazos Rd, Aztec, NM 87410	APPLICATION FOR DOV	VNHOLE COMMINGLING	i, N.1 <u>x</u> yes <u></u> no
Caulkins Oil Company			•
Breech "E"	50-E Wall No. Unit LI	D - 5 - 26N - 6W	Rio Arriba
OGRID NO. 003824 Property Cod		Sp	sacing Unit Lease Types: (check 1 or more)
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		Basin Dakota
Top and Bottom of Pay Section (Perforations)	4573' to 5426'		7262' to 7452'
3. Type of production (Oil or Gas)	Gas and Condensate		Gas and Condensate
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
Bottomhole Pressure Ones - Artificial Lift: Estimated Current	a. (Current) 6-24-98 493 psia	a.	a. 6-24-98 446 psia
Estimated Current Solution Measured Current All Gas Zones: Estimated Or Measured Original	b. (Original)	b.	b
6. Oil Gravity (*API) or Gas BTU Content	1253 BTU		1162 BTU
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		Yes
If Shut-In, give date and oil/gas/, water rates of last production	Date: Rates:	Date: Rates:	Date: Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	7.0.00		7 2 00
 If Producing, give date andoil/gas/ water rates of recent test (within 60 days) 		Date: Rates:	Date: 7-2-98 Rates:
8. Fixed Percentage Allocation Formula -% for each zone	Oii: 43 % Gas: 17 %	Oil: Gas: %	0ii: Gas: 83 %
If allocation formula is based submit attachments with su	upon something other than cu	rrent or past production, or is	based upon some other method ojections or other required data.
10. Are all working, overriding, a If not, have all working, over Have all offset operators beer			•
ill cross-flow occur? \underline{x} Thoward production be recover			
12. Are all produced fluids from a			
13. Will the value of production t			
14. If this well is on, or commun United States Bureau of Land	itized with, state or federal lan d Management has been notifie	ds, either the Commissioner of ed in writing of this application	f Public Lands or the X Yes No
15. NMOCD Reference Cases for			
• Froduction curve t • For zones with no • Data to support al • Notification list of	or each zone for at least one y production history, estimated location method or formula. all offset operators	its spacing unit and acreage divear. (If not available, attach e production rates and supporting ty interests for uncommon inte equired to support comminglin	explaination.) ng data.
I hereby certify that the informat	ion above is true and complete	to the best of my knowledge	and belief.
SIGNATURE Blost 19	legue		DATE <u>July</u> 7, 1998

TELEPHONE NO. (505) 632-1544

CAULKINS OIL COMPANY

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

50 JUL - 9 FM 1: 31

July 8, 1998

Citing and and

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

Re: Administrative Approval to Commingle

Breech "E" 50-E, Section 5, Township 26N, Range 6W, Unit Letter D

Basin Dakota and Blanco Mesa Verde Formations

Dear Mr. Catanach:

Caulkins Oil Company seeks administrative approval to downhole commingle this well in the Dakota – Mesa Verde formations. The Mesa Verde zone in this well has become uneconomical to produce due to low gas volumes and the frequency required to clean well to the atmosphere. Commingling this well should substantially reduce wasted gas to the atmosphere by allowing Dakota zone to aid in lifting fluid Mesa Verde is producing.

If commingling is approved, Caulkins Oil Company intends to pull and salvage 2 1/16" Mesa Verde tubing set at 5503'. Pull 2 1/16" Dakota string set at 7400' with packer now set at 5615'. Remove packer and re-run 2 1/16" tubing for commingled production string. Well will be cleaned out with air to TD at 7475'. Tubing will be landed at approximately 7400' for commingled production.

Dakota perforations (7262' to 7452') Mesa Verde perforations (4573' to 5426')

Allocation percentages were calculated from test run July 2, 1998.

Please find the enclosed documents:

- A. Form C-107-A
- B. Form C-102 for each zone
- C. Gas Analysis
- D. Bottom hole pressure measurements
- E. Monthly production history for months well produced
- F. Vicinity map
- G. Notification list of offset operators

Robert I Verguer

H. 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

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

Section

UL or lot no.

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

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

Santa Fe. NM 87505 ^

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number			² Pool Code		³ Pool Name					
30	0-039-229	800		71599)	BASIN DAKOTA				
Property			Property Name BREECH "E"						Well Number 50-E	
'OGRII 0038			Operator Name Caulkins Oil Company						'Elevation 6572 GR	
					10 Surface	e Location				
UL or lot no.	Section 5	Township	Range 6W	Lot Idn	Feet from the	North/South line North	Feet from the 1120'	East/West line West	County Rio Arriba	

Bottom Hole Location If Different From Surface Range Lot Idn Feet from the North/South line Feet from the East/West line County

12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code is Order No. 320

Township

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

	NON-STAN	DARD UNIT HAS BEI	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 belief
1120*				
				Robert 2 Verger
				Signature
				Printed Name Robert L. Verquer
				Constitution 1
				Title Superintendent
				Date July 7, 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 unde 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:
	1			
	,			
				Certificate Number

	Box 1980, Hobbs, NM 88241-1980 Energy, Minerals & Natural Resources Department							Rev	Form C-102 used October 18, 1994	
District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV				OIL (CONSERVA 2040 Sour Santa Fe		Instructions on back to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies			
2040 South Pach	eco, Santa Fe	•				C No.			AMENDED REPORT	
	¹ API Numbe		VELL L			REAGE DEDI	<u>CATION PL</u>	<u>AT </u>		
	0-039-229			² Pool Co 72319		Pool Name MESA VERDE				
Property 245			1		⁵ Proper BREE(*Well Number 50-E	
'OGRII 0038			Operator Name Caulkins Oil Company						'Elevation 6572 GR	
			1		10 Surfac	e Location		 		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
D	5	6736N	6W		990'	North	1120'	West	Rio Arriba	

Lot Idn

14 Consolidation Code

UL or lot no.

12 Dedicated Acres

320

Section

11 Joint or Infill

Township

County

East/West line

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

¹¹ Bottom Hole Location If Different From Surface

North/South line

Feet from the

15 Order No.

16		17 OPERATOR CERTIFICATION
990'		I hereby certify that the information contained herein is true
		and complete to the best of my knowledge and belief
1120*		
1120		
		40
		 Robert I Verguer
		Signature
		- · · · ·
		Printed Name Robert L. Verquer
		Title Superintendent
		Date July 7, 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 unde
		my supervision, and that the same is true and correct to the
		best of my knowledge and belief. Date of Survey
		Bute of Startey
		Signature and Seal of Professional Surveyor:
~		
	<u> </u>	Certificate Number



2030 `ton Place Farmington, N.M. 87401 (505) 325-6622

Analysis No. CAU80008 Cust. No. 17000-10050

WELL/LEASE INFORMATION

Company : CAULKINS OIL COMPANY Well Name : BREECH E 50-E Source

Source :
Pressure : 88 PSIG
Sample Temp. : N/A DEG.F County

State

Well Flowing : YES Date Sampled : 02/03/98 Location

Fld/Formation : DAKOTA Sampled By : RG

Cust.Stn.No. : Foreman/Engr :

Remarks:

ANALYSIS

	_				
COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR.*	
NITROGEN CO2 METHANE ETHANE PROPANE I-BUTANE N-BUTANE I-PENTANE N-PENTANE	0.248 1.244 85.949 7.559 2.651 0.508 0.763 0.323 0.227	0.0000 0.0000 0.0000 2.0220 0.7306 0.1662 0.2406 0.1182 0.0822	0.00 0.00 870.06 134.07 66.86 16.56 24.95 12.95 9.12	0.0024 0.0189 0.4761 0.0785 0.0404 0.0102 0.0153 0.0080 0.0057	
HEXANES TOTAL	0.528 100.000	0.2303 3.5901	27.15 1161.72	0.0170 0.6725	-

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR (1/Z)1.0030 BTU/CU.FT. (DRY) CORRECTED FOR (1/Z) 1165.2 BTU/CU.FT. (WET) CORRECTED FOR (1/Z) 1144.9 REAL SPECIFIC GRAVITY 0.6742

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER # : AO37 CYLINDER PRESSURE: 86 PSIG DATE RUN : 02/04/98 ANALYSIS RUN BY : DAVE MARTIN



2030 fton Place Farmington, N.M. 87401 (505) 325-6622

Analysis No. CAU80009 Cust. No. 17003-10055

WELL/LEASE INFORMATION

Company : CAULKINS OIL COMPANY Source : Well Name : BREECH E 50-E Pressure : 262 PSIG

Sample Temp. : N/A DEG.F Well Flowing : NO County

State

Date Sampled: 02/03/98 Location

Fld/Formation : MESA VERDE Sampled By : RG

Cust.Stn.No. : Foreman/Engr :

Remarks:

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR.*
NITROGEN	0.513	0.0000	0.00	0.0050
CO2	0.493	0.0000	0.00	0.0075
METHANE	79.469	0.0000	804.47	0.4402
ETHANE	10.335	2.7646	183.31	0.1073
PROPANE	5.932	1.6349	149.60	0.0903
I-BUTANE	0.981	0.3209	31.98	0.0197
N-BUTANE	1.411	0.4449	46.14	0.0283
I-PENTANE	0.353	0.1292	14.16	0.0088
N-PENTANE	0.235	0.0851	9.44	0.0059
HEXANES	0.278	0.1213	14.29	0.0089
TOTAL	100.000	5.5009	1253.38	0.7218

^{* @ 14.730} PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 14.730 & 60 DEG. F

COMPRESSIBILITY FACTOR	(1/2)	1.0036
BTU/CU.FT. (DRY) CORRECTED	FOR $(1/Z)$	1257.9
BTU/CU.FT. (WET) CORRECTED	FOR (1/Z)	1236.0
REAL SPECIFIC GRAVITY		0.7241

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER # : AZT-014 CYLINDER PRESSURE : 268 PSIG DATE RUN : 02/04/98 ANALYSIS RUN BY : DAVE MARTIN Company: CAULKINS OIL CO.

County: RIO ARRIBA State: NEW MEXICO Date: 06/24/1998 Well: BREECH #50-E Field: DAKOTA FORMATION

Engineer:

Gauge Type: AMERADA

Well Type: Test Type: STATIC GRADIENT Gauge Range: 0-3000

Gauge Depth: 7350 ft Serial No.: 44537 Status: SHUT-IN File Name: 32090-1

TO 7400 Tubing: 2 1/16"

TOTubing:

Oil Level TOCasing: H20 Level Perfs.: 7266-7452

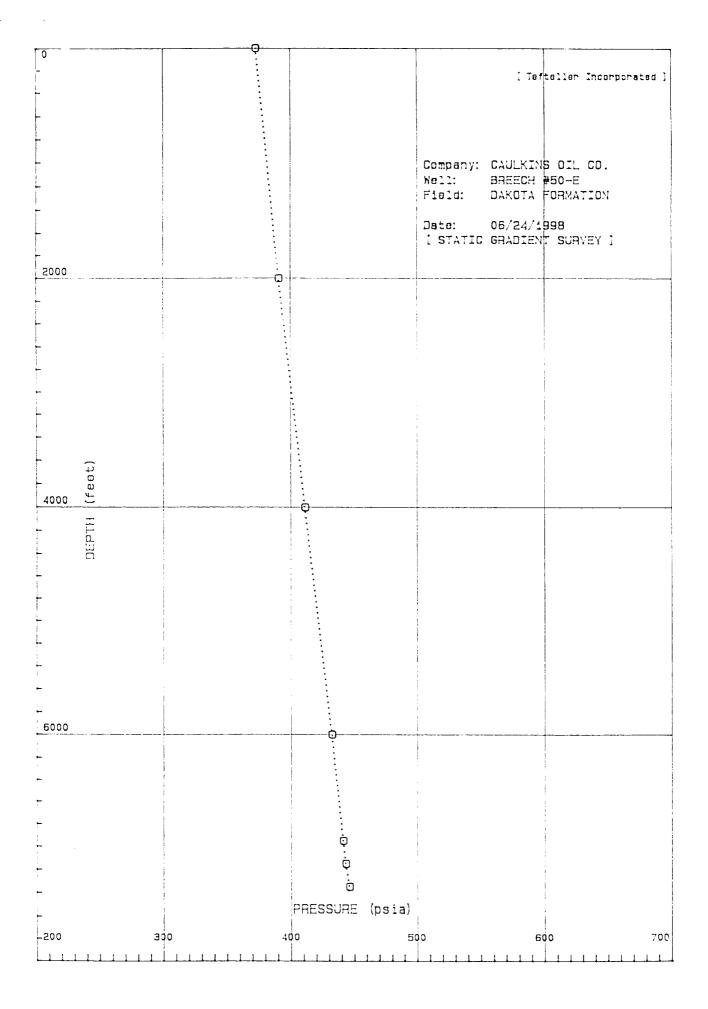
Shut-in Time 216 hrs

Shut-in BHP 446 @ 7350 ft Shut-in BHT 0 F @ 0 ft

Shut-in WHT Shut-in WHP 373 0 F

[Tefteller Incorporated]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	373.00	
2	2000	2000	391.00	0.009
3	4000	4000	411.00	0.010
4	6000	6000	432.00	0.010
5	6950	6950	441.00	0.009
6	7150	7150	443.00	0.010
7	7350	7350	446.00	0.015



Company: CAULHINS OIL CO.

Well: BREECH #50-E Field: MESA VERDE FORMATION County: RIO ARRIBA State: NEW MEXICO Date: 06/24/1998 Engineer:

Well Type:

Gauge Type: AMERADA
Gauge Range: 0-3000 Test Type: STATIC GRADIENT

Gauge Depth: 5400 ft Status: SHUT-IN Serial No.: 44537 File Name: 32090-2

Tubing: 2 1/16" TO 5503

TO Tubing:

TO Casing:

Oil Level H2O Level 4936 ft Perfs.: 4573-5426

Shut-in Time 216 hrs

Shut-in BHP 493 @ 5400 ft Shut-in BHT 0 F @ 0 ft Shut-in WHP 263 Shut-in WHT 0 F

[Tefteller Incorporated]

# 1	MD O	TVD 0	PRESSURE 263.00	PSI/ft
2	1000	1000	270.00	0.007
3	2000	2000	278.00	0.008
4	3000	3000	286.00	0.008
5	4000	4000	292.0C	0.006
6	5000	5000	324.00	0.032
7	5200	5200	406.00	0.410
8	5400	5400	493.00	0.435