

Mr. William J. LeMay, Director New Mexico Oil Conservation Division 2040 South Pacheco Street Santa Fe, NM 87505 Mr. Duane Spencer Bureau of Land Management 1235 La Plata Highway Farmington, NM 87401

Re: Application for Administrative Downhole Commingling Dugan's Mona Lisa Well No. 1 (API No. 30-039-25739) Unit P, Section 14, T-26N, R-7W, Rio Arriba Co., NM South Blanco Pictured Cliffs & Otero Chacra gas pools Federal Lease No. NM 99002

Dear Mr. LeMay:

Attached is NMOCD form C-107A requesting your Administrative approval to downhole commingle the South Blanco Pictured Cliffs and the Otero Chacra in Dugan's recently drilled Mona Lisa No. 1. This well was spudded as an Otero Chacra development well on 9-30-97 and 4-1/2" casing was cemented at a total depth of 3475' on 10-5-97. We are currently planning our completion and now desire to complete the South Blanco Pictured Cliffs interval in addition to the Otero Chacra. Upon review of offset completions, we find that it is common for these two pools to be downhole commingled and 5 of the 8 direct offset completions are downhole commingled in these two pools. In addition, we find that Caulkins Oil Co., who is the operator of all offsetting acreage, has received NMOCD approval to downhole commingle the Pictured Cliffs and Chacra formations in all wells they operate, which are located in Sections 13, 14, 23, and 24 of T-26N, R-7W. Attachment No. 5 is a copy of NMOCD order R-5648 which was issued in this matter, finding that wells completed in the Pictured Cliffs and Chacra zones in these 4 sections may be expected to produce only at low rates of production and also provided for allocating 70% of the commingled production to the Pictured Cliffs and 30% to the Chacra. Since Caulkins operates all other wells in Section 14 and Dugan's 160 acre spacing unit comprising the SE/4 of Section 14. which was acquired at a federal lease sale in 7/97, is also surrounded by wells operated by Caulkins in Section 13, 23 and 24, we propose to complete our well in the same manner as are 5 of the 8 direct offsets operated by Caulkins. We are comfortable with the existing 70/30 allocation of commingled production and propose this same allocation for our Mona Lisa #1. Dugan Production holds all working interest and only 1 federal lease covers the 160 acre spacing unit for both zones. All interest in both zones is common.

We are requesting approval for downhole commingling prior to completion, as our well is offset in all directions by wells that have demonstrated only low rates of production and have all been approved for similar downhole commingling. Attachment No. 2 presents offset well information and Attachment No. 3 presents offset well production information. Downhole commingling approval will allow us to more efficiently complete both zones.

We are sending copies of this application to Caulkins Oil Company as the operator of all offsetting acreage.

Please let me know if you need additional information or have questions.

Sincerely,

John D. Roe

Engineering Manager

John D. Ree

JDR/tmf

attachs.

cc: Frank Chavez - NMOCD, Aztec

Robert Verquer - Caulkins Oil Co., Bloomfield

P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

APPROVAL PROCESS:

DISTRICT II 811 South First St., Artesia, NM 88210-2835

2040 S. Pacheco Santa Fe, New Mexico 87505-6429

DISTRICT III 1000 Rio Brazos Rd, Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

 \underline{X} Administrative $\underline{\hspace{1cm}}$ Hearing **EXISTING WELLBORE** X YES __NO

Dugan Production Corp.	P. O.	Box 420, Farmington,	NM 87499-0420
Mona Lisa		4-26N-7W	Rio Arriba
OGRID NO. <u>006515</u> Property Code		· -	County nut Lesse Types: (check 1 or more), State, (and/or) Fee
The following facts are submitted in support of downhole commingling:	Upper Zona	Intermediate Zone	Lower Zone
Pool Name and Pool Code	South Blanco Pictured Cliffs		Otero Chacra
Top and Bottom of Pay Section (Perforations)	Proposed 2278—2342		Proposed 3170—3399
3. Type of production (Oil or Gas)	gas		gas
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current	a. (Current) Not completed	a.	a. Not completed
Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	b. (Original) 916 PSIA (est)	b.	ь. 1254 PSIA (est)
6. Oil Gravity ([®] API) or Gas BTU Content	1161 BTU/SCF (est)		1172 BTU/SCF (est)
7. Producing or Shut-In?	Not completed		Not completed
Production Marginal? (yes or no) If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data If Producing, give date andoil/gas/water rates of recent test (within 60 days)	Anticipated to be Date: See Attachment Rates: No. 3 68 mcfd(est.) Date: Rates:	Date: Rates: Date: Raies:	Anticipated to be Date: See Attachment Rates: No. 3 29 mcfd (est.) Date: Rates:
8. Fixed Percentage Allocation Formula -% for each zone	Oil: NA % Gas: 70 %	Oil: Ges: %	Oil: NA % Gas: 30 %
If allocation formula is based submit attachments with sup			1 ased upon some other method, ections or other required data.
 Are all working, overriding, a If not, have all working, over Have all offset operators beer 	nd royalty interests identical in riding, and royalty interests be n given written notice of the pro	all commingled zones? en notified by certified mail? posed downhole commingling?	X Yes No X Yes No X Yes No
11. Will cross-flow occur? flowed production be recover	Yes \underline{X} No $$ If yes, are fluids ed, and will the allocation form	compatible, will the formations tula be reliable. X Yes	not be damaged, will any cross No (If No, attach explanation
12. Are all produced fluids from a		 -	
13. Will the value of production I14. If this well is on, or commun United States Bureau of Land			
15. NMOCD Reference Cases for			
16. ATTACHMENTS: * C-102 for each zo * Production curve f * For zones with no * Data to support al * Notification list of	ne to be commingled showing or each zone for at least one y production history, estimated location method or formula. all offset operators. Attachma working, overriding, and royalt tements, data, or documents re	its spacing unit and acreage de ear. (If not available, attach ex production rates and supporting	dication. Attachment #1 splanation.) data. Attachments #2 &
I hereby certify that the informat	ion above is true and complete	to the best of my knowledge a	and belief.
SIGNATURE John			
TYPE OR PRINT NAMEJ	ohn D. Roe	TELEPHONE NO. (505) 325–1821

District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719 District III 1000 Rio Brazos Rd., Aztec, NM 87410 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office

State Lease - 4 Copies
Fee Lease - 3 Copies

1000 Rio Bruzos District IV	Rd., Azec.	NM 87410	• ••	Sa	inta Fe, N	MI :	87504-2088		•	Fe	e Lease - 3 Copi
PO Box 2088, Sa	ala Fe, NM	87504-2088								□ амј	ENDED REPOR
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	API Numb	er.		Pool Code					No.1 Pg lofz		
30 039	- 2573	19		82329	9	Otero Chacra					P# 10+ Z
' Property	Code		•		5 Prop	perty N	(ame				• Well Number
		Mona	Lisa								1
'OGRID	No.				¹ Oper	ratur N	Vame				* Élevation
006515		Duga	n Produ	ction Cor	·			·····		61281	Estimated
					10 Surfa	ice I	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from th	he	North/South line	Feet from the	Eust/We	t line	County
	14	26N	7W	Р	920		South	790	Ea	st	Rio Arriba
			11 Bot	tom Hol	e Locatio	n If	Different Fro	om Surface	-		•
UL or lot no.	Section	Township	Range	Lot Ida	Feet from th	he	North/South line	Feet from the	East/Wes	t line	County
Dedicated Acr	es 13 Joint	or Infill 14 C	onsolidatio	n Code " C	order No.						
160											
NO ALLOY	VABLE '						N UNTIL ALL			EN CO	NSOLIDATED
		OR A	YON-ST.	ANDARD	UNIT HAS	BEI	EN APPROVED				
16								I hereby certi	fy that the in	formation	TIFICATION a contained herein is be knowledge and belief
			Section	14				Signature Sherman Printed Nam Vice-P Title August Date	reside	nt (Laray
				The second secon	da para da			I hereby certification was plotted from under my correct to the Aug	fy that the wrom field not supervision, best of my light 26,	eell location of actual and that the belief. 1997	TIFICATION on shown on this plat was surveys made by n the same is true and
				NM-	an Prod. 99002		920'	Signature and	To day	59 91811111	

District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Deawer DD, Artesia, NM 88211-0719 District III 1000 Rio Beazos Rd., Aztec, NM 87410

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

District IV PO Bux 2088, Sa	nta Fe. NM	87504-20H8							C	_ /	NDED REPO	~
		WE	ELL LC	CATION	UNA P	ACE	REAGE DEDI	CATION PI	LAT	1	AHACHMEN No.1	4
	API Numb	cr		1 Pual Cad	c			Pool N	wille		Pg ZofZ	t
	39 <u>-2</u> 573	39	72439 South Blanco Pictured Cliffs Property Name					<u> </u>		<u>J</u>		
1 Property		Mon	Triperty Name						* Well Number			
2158: 'ogrid		11011	<u> </u>		Operator Name						* Élevation	
0065	15	Dug	an Produ	action Cor	poration					6128	Estimated	
· · · · · · · · · · · · · · · · · · ·					10 Sur	face	Location			.		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	EastWe	t line	County	
P	14	26N	7W		920		South	790	Ea	st	Rio Arriba	
			11 Bot	tom Hol	e Locati	on I	f Different Fro	om Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	East/Wes	t line	County	
12 Dedicated Acr	o "Joint	or Infill 1" (l Consolidatio	n Code 11 O	rder No.				L		<u> </u>	
160		ļ										
NO ALLOV	VABLE '						ON UNTIL ALL			EN CO	NSOLIDATE)
<u> </u>	·	OKA								CEDT	IFICATIO	N
16								OFER			Contained herein is	
	·		Section	14				Signature John D Printed Name Enginee Title 10-10- Date	Roe : ering 1	- D /A		
	·				Ougan Pr IM 99002		©-790'	I hereby certif was plotted fro or under my s correct to the	y that the we om field note upervision, a best of my b ust 26,	ell location es of actual and that the elief. 1997	shown on this plat surveys made by resame is true and	, }

ATTACHMENT NO. 2

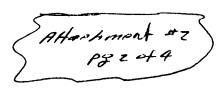
OFFSET WELL DATA - ALL OFFSET WELLS OPERATED BY CAULKINS OIL CO. SOUTH BLANCO PICTURED CLIFFS & OTERO CHACRA POOLS DUGAN PRODUCTION'S MONA LISA #1 (P-14-26N-7W) RIO ARRIBA COUNTY, NEW MEXICO

<u>@</u>	1 2	5								
AVERAGE ON-MOFE	AGOAHO	5	23	142	45	23	27	21		38
CURPENT AVERAGE PRODUCTION-MCFD (6)	ORDER GAS ALLOCATION—% PICTURED	P&A	53	106	33	55	63	50	89	91
			Q)	-	6	2	9	20	8	6,
DOWNHOLE COMMINGLING	LLOCATION	<u> </u>	8	9	0	8	30	ဓ	ල	8
HOLEC	GAS A	2 ⊚	8	ග	0	2	0/	20	©	2
INMOG	ORDEF	<u>:</u> @	AR-708 70	9	0	R-5648 70	R-5648 70	R-5648 70	<u>ල</u>	R-5648
SICP	OR AGORA	6 6 6	5194	994	858	1196	831	1080	<u></u>	1150
INITIAL SICP	× nonecontainment	843	519 4	845	845	906	770	735	863	759
	COMPLETION	10-24-57	10-15-79	11-26-57	06-01-52	07-25-75	08-14-76	08-11-76	06-01-52	07-26-75
	API NO.	06505	21998	06510	06470	21101	21210	21211	06458	21102
T-26N, H-7W	WELL LOCATION API NO.	A-14	B-14	D-13	L-13	F-24	A-23	C-23	L-14	D-14
	WELL	BREECH B 220	вреесн в 2208	BREECH 221	BREECH 283	BREECH 352	BREECH 332	внеесн 330	BREECH B 281	BREECH B 217
	OFFSET DIRECTION	North	North	NE	East	SE	South	SW	West	ΝK

NOTES

① Data from NMOCD MST-KARDEX File and NM Oil & Gas Engineering Committee Monthly Reports.
② Well total depth is in the PC. Chacra was completed 6-13-77 and dually completed with the MV & Dakota in Caulkin's Breech #307
③ Chacra is below total depth.
④ PC & Chacra commingled downhole with Mesa Verde at time of test.
⑤ Well total depth is in the PC. Chacra was completed in Caulkin's Breech 224A. Downhole commingled with the Mesa Verde & Dakota.
⑥ Average daily production 2/97 & 3/97.

Average daily production 2/97 & 3/97.



Calculate BHP and Z-factor from surface shut-in pressure

10/09/97

WELL NAME :	Mona Lisa #1PC		
GAS GRAVITY:	0.66	8 N2	0.23
CONDENSATE (YES=1)	: 0	용 CO2	0.27 %
RESERVOIR TEMP:	90 'F	% H2S	0.00 %
SURFACE TEMP:	60 'F	Pc =	671.48 %
DEPTH OF ZONE:	2,310 feet	Tc =	375.00

SURFACE	PRES	BHP	Z	BHP/Z
(psia \	psia		psia
	860	916	0.8629	1,061
4				

ANS SIED (MAIS # 220, 221, 283, 352, 281) = 843+845+845+906+863

Calculate BHP and Z-factor from surface shut-in pressure 10/09/97

Mona Lisa #1CH WELL NAME : % N2 GAS GRAVITY: 0.66 0.28 0 % CO2 0.26 % CONDENSATE (YES=1): 105 'F % H2S 0.00 % RESERVOIR TEMP: 60 'F Pc = 671.11 % SURFACE TEMP: DEPTH OF ZONE: 3,285 feet Tc =377.05

SURFACE PRES BHP Z BHP/Z psia psia 1,142 1,254 0.8294 1,512

Aug Siep (wells #352,330,217) = 1196+1080+1150

EL PASO NATURAL GAS COMPANY
VOLUME ACCOUNTING DEPARTMENT
MEASUREMENT DIVISION
POST OFFICE BOX 1492
EL PASO, TEXAS 79978
PHONE: (915) 541-2595
CHROMATOGRAPHIC GAS ANALYSIS REPORT

DATE 8/09/96

MAILEE 26730

DUGAN PRODUCTION CORPORATION P 0 BOX 420 FARMINGTON, NM 87499-0420

METER NUMBER 94581 - FARMING D COM #1R - South Blanco PC (K-Z-Z7N-9W)
OPERATOR 1862 - DUGAN PRODUCTION CORP

1/08/96 1/04/96 7/01/96 ANALYSIS DATE SAMPLE DATE EFFECTIVE DATE EFFECTIVE FOR 12 MONTHS TYPE CODE H2S GRAINS LOCATION 2 - ACTUAL

D - DANIELS FM

COMPONENTS	NORMALIZED MOL %	GPM
CO2	.27	.000
H2S	.00	.000
N2	.23	.000
METHANE	89.44	.000
ETHANE	5.14	1.375
PROPANE	2.39	.659
ISO-BUTANE	.47	.154
NORM-BUTANE	.59	.186
ISO-PENTANE	.30	.110
NORM-PENTANE	.24	.087
HEXANE PLUS	93	<u>.406</u>
	100.00	2.977

SPECIFIC GRAVITY .656 MIXTURE HEATING VALUE (BTU @ 14.73 DRY) 1161 RATIO OF SPECIFIC HEATS .000 NO TEST SECURED FOR H2S CONTENT CO.CD 23 EL PASO NATURAL GAS CUSTOMER ACCOUNTING SERVICES DEPARTMENT VOLUME CALCULATION DIVISION POST OFFICE BOX 1492 EL PASO, TEXAS 79978

DATE 4/07/97

CHROMATOGRAPHIC GAS ANALYSIS REPORT

MAILEE 26730

DUGAN PRODUCTION CORPORATION P O BOX 420 FARMINGTON, NM 87499-0420

CONTACTS: EL PASO FIELD SERVICES (713) 510-2931 EL PASO MAINLINE (915) 496-2595

SAHarhment #Z
P3 40f4

METER NUMBER 90379 - HANLEY B #1 CH - Ofero Chaera (N-18-29N-10ω)
OPERATOR 1862 - DUGAN PRODUCTION CORP

ANALYSIS DATE 2/11/97 SAMPLE DATE 2/07/97 EFFECTIVE DATE 3/01/97 EFFECTIVE FOR 6 MONTHS TYPE CODE 2 - ACTUAL 12S GRAINS 0 LOCATION F - FARM BECK

COMPONENTS	NORMALIZED MOL %	GPM
CO2	.26	.000
H2S	.00	.000
N2	.28	.000
METHANE	86.90	.000
ETHANE	7.02	1.878
PROPANE	3.41	.940
ISO-BUTANE	.45	.147
NORM-BUTANE	.88	.277
ISO-PENTANE	.25	.092
NORM-PENTANE	.20	.072
HEXANE PLUS	35	.153
	100.00	3.559

SPECIFIC GRAVITY .663
MIXTURE HEATING VALUE
(BTU @ 14.73 DRY) 1172
RATIO OF SPECIFIC HEATS .000

NO TEST SECURED FOR H2S CONTENT

AHarborand No.3 (Pg10f17)

Date Initials Approved by Prepared by

DAILY Average Production - wells off-Setting
Dugans mone LIST NOT. production = South Blanco Pt - meta T-24 N 4-1-97 R-7W Average 3/97 2/97 MCF 4+5 OPERATOR - Well PYA 578,626 Coulkins - Breech B #220 PHA A-14) 155,991 55 53 B-14 50 22/ D-13 - Breech 111 106 1, 4.81,939 33 2-13 590,905 283 33 33 5 352 58 713,342 F-24 55 7 66 59 63 477.493 A-23 332 8 C-23 330 52 48 50 466.497 86 2-14 Breech B 281 1,356,340 92 89 D-14 " " Z17 92 89 91 558,025 9 well Total 540 6,379,153 68 B Well Average -797,394 Ofero Chaera - moro 3/97 2/97 A-14 Canlkins - Breech B #220 11 " Z20 R B-14 25 ZZ 23 217,762 / Z 11 - Breech 2-13 Z24 A 140 142 723,555 143 13 307 M-13 48 42 341,519 45 14 F-24 352 Ź5 23 216,723 15 A-23 332 28 148,830 16 C-23. 330 ZZ 103,004 4-14 Breech B 17 217 38 D-14 39 38 305,119 7 WP/1 Total 2,056,512 319 45 293,787 Post # of Attached production Note croluding Graph Breech 274A 6 well fo fal A 09

AHachment #3 Pg 2 of 17 1984 Lease: BREECH B | Well #220 $(A-/4-26N-7\omega)$ 1982 Operator: CAULKINS OIL COMPANY
Production Rate vs Time
For the Period 01/1970 to 12/1984 | API: 30039065050000 1980 Field: BLANCO, SOUTH 1978 3 1976 1974 Reported Oil Production = 0 Bbls Reported Gas Production = 578,626 Mcf 3-l-g 7 Reported Water Production = 0 Bbls 1972 Water Wells Gas 1970 10,00010 + 100 BBI/Mo or Mcf/Mo

Plot Displays Monthly Totals Copyright (C) 1997 by Petroleum Information/Dwights LLC

1998 Lease: BREECH B | Well #220R (B-14-26 N-7W) 1995 Production Rate vs Time For the Period 01/1980 to 12/1997 | API: 30039219980000 Operator: CAULKINS OIL COMPANY Field: BLANCO SOUTH AC 1992 1989 1986 1983 Reported Oil Production = 0 Bbls Reported Gas Production = 154,440 Mcf Reported Water Production = 0 Bbls Water Wells Gas 1980 1,000 10,00010 -100 BBI/Mo or Mcf/Mo

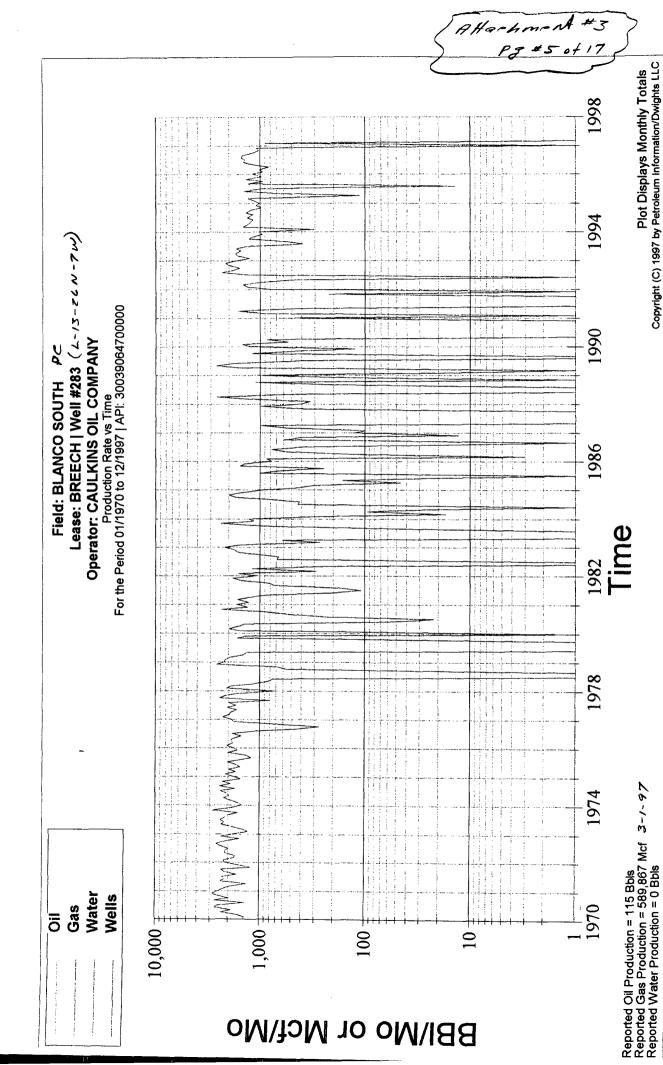
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Plot Displays Monthly Totals Copyright (C) 1997 by Petroleum Information/Dwights LLC 1998 į 1994 1990 1986 Time 1978 1974 1970 10

Field: BLANCO SOUTH RC

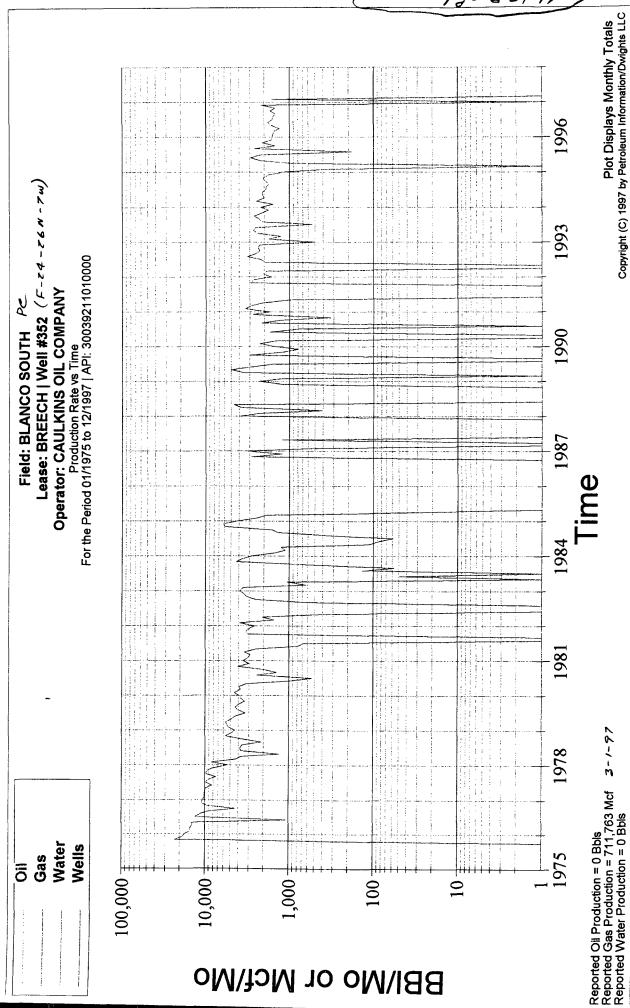
Lease: BREECH | Well #221 (ロー・3-26ルーフル) Production Rate vs Time For the Period 01/1970 to 12/1997 | API: 30039065100000 Operator: CAULKINS OIL COMPANY Water Wells Gas 10,000 ∓ $1,000 \pm$ ± 001 BBI/Mo or Mcf/Mo

Reported Oil Production = 0 Bbls
Reported Gas Production = 1,478,948 Mcf 3-1-97
Reported Water Production = 0 Bbls



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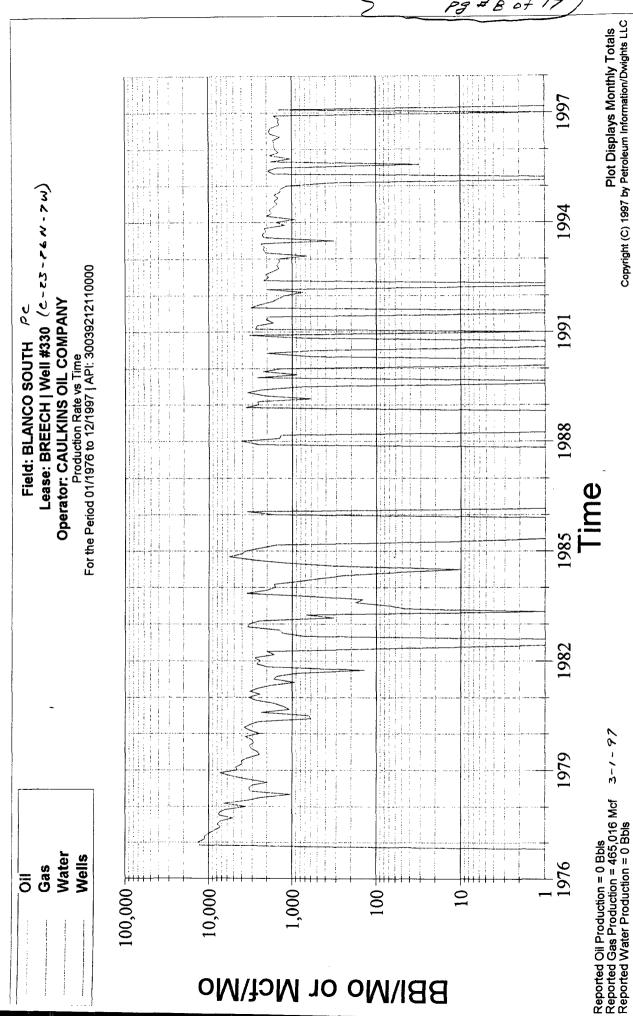


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AHarhmont #3 1997 Lease: BREECH | Well #332 (4-75-76ルーアル) 1994 Production Rate vs Time For the Period 01/1976 to 12/1997 | API: 30039212100000 Operator: CAULKINS OIL COMPANY 1991 Field: BLANCO SOUTH 1988 1985 1982 1979 Reported Oil Production = 0 Bbls Reported Gas Production = 475,658 Mcf Reported Water Production = 0 Bbls Water Wells 1976 Gas 10,000 100,000 ± 1,000 100 10 BBI/Mo or Mcf/Mo

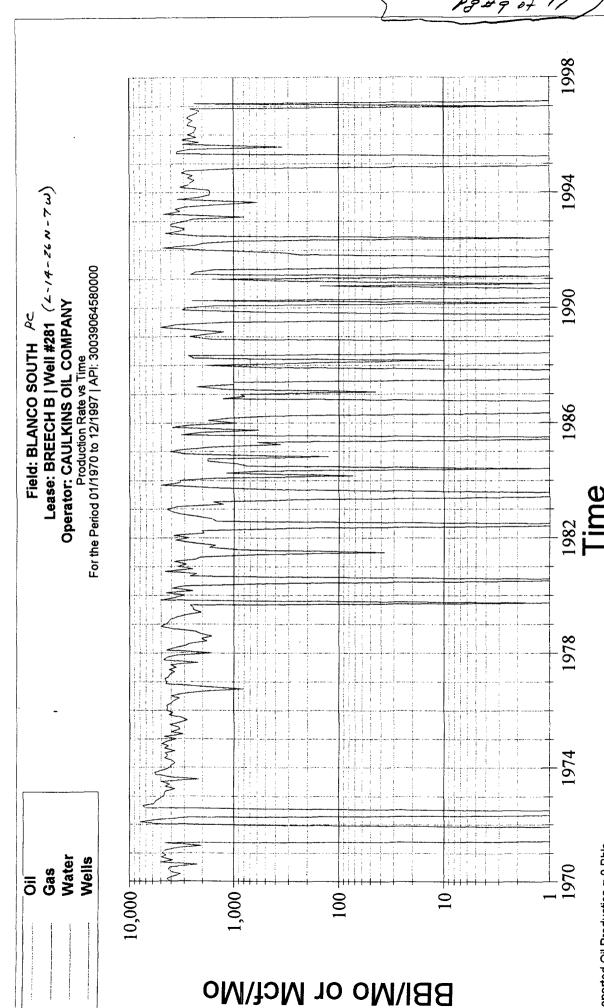
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AHaramont #3 Pg # 8 of 17



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Paug of 17



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1996 - 26 N-7W) 1993 Production Rate vs Time For the Period 01/1975 to 12/1997 | API: 30039211020000 Lease: BREECH B | Well #217 (D-Operator: CAULKINS OIL COMPANY 1990 Field: BLANCO SOUTH 1987 1984 1981 1978 Reported Oil Production = 0 Bbis Reported Gas Production = 555,266 Mcf Reported Water Production = 0 Bbis Water Wells Gas 1975 $1,000 \pm$ $100 \pm$ 10,00010 BBI/Mo or Mcf/Mo

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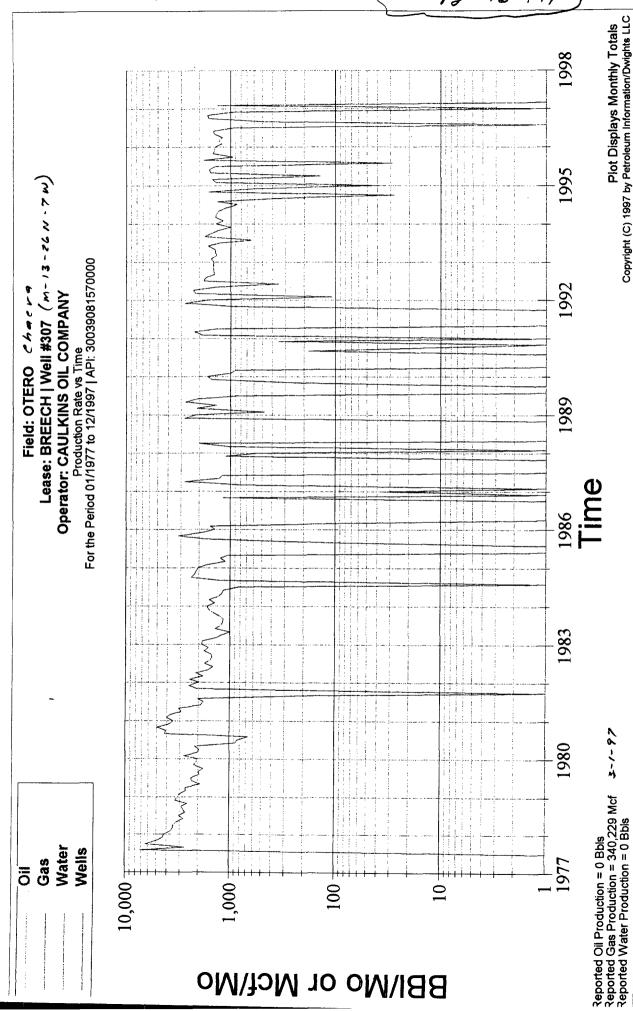
1998 (B-14-26N-7W) 1995 Production Rate vs Time For the Period 01/1980 to 12/1997 | API: 30039219980000 Operator: CAULKINS OIL COMPANY Field: OTERO Chacra Lease: BREECH B | Well #220R 1992 1989 1986 1983 Reported Oil Production = 0 Bbls
Reported Gas Production = 217,074 Mcf
Reported Water Production = 0 Bbls Water Wells Gas 1980 10,000 ∓ 10 -1,000 -100 BBI/Mo or Mcf/Mo

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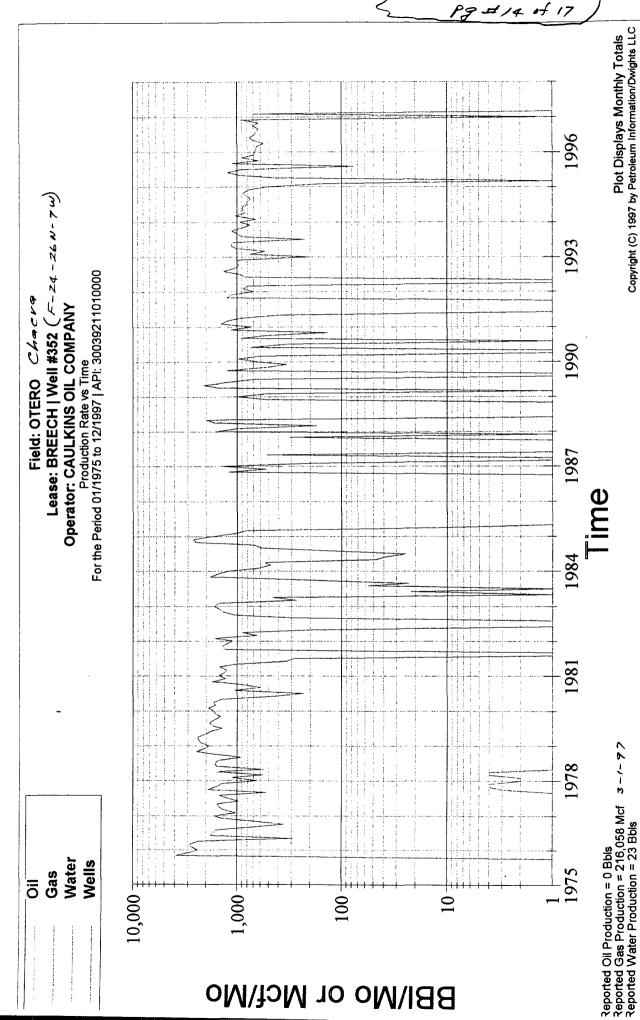
1997 Lease: BREECH | Well #224A (0-13-24 N-7 N) 1994 Production Rate vs Time For the Period 01/1979 to 12/1997 | API: 30039219970000 Operator: CAULKINS OIL COMPANY Field: OTERO Chacre 1991 1988 Time 1985 1982 Reported Oil Production = 0 Bbls
Reported Gas Production = 719,545 Mcf
Reported Water Production = 0 Bbls Water Wells Gas 1979 100,000 <u>∓</u> 100 10 10,000 1,000 BBI/Mo or Mcf/Mo

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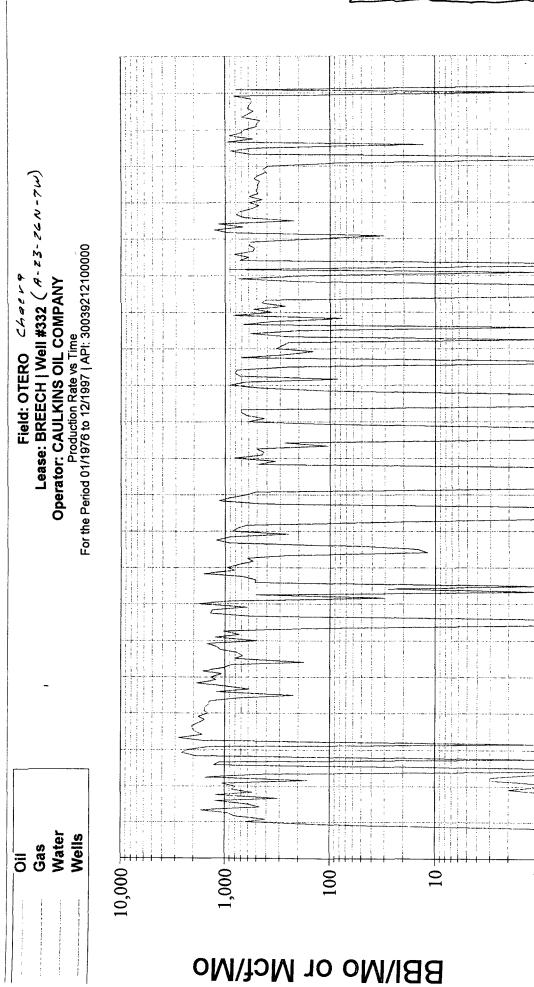
P3 #13 of 17



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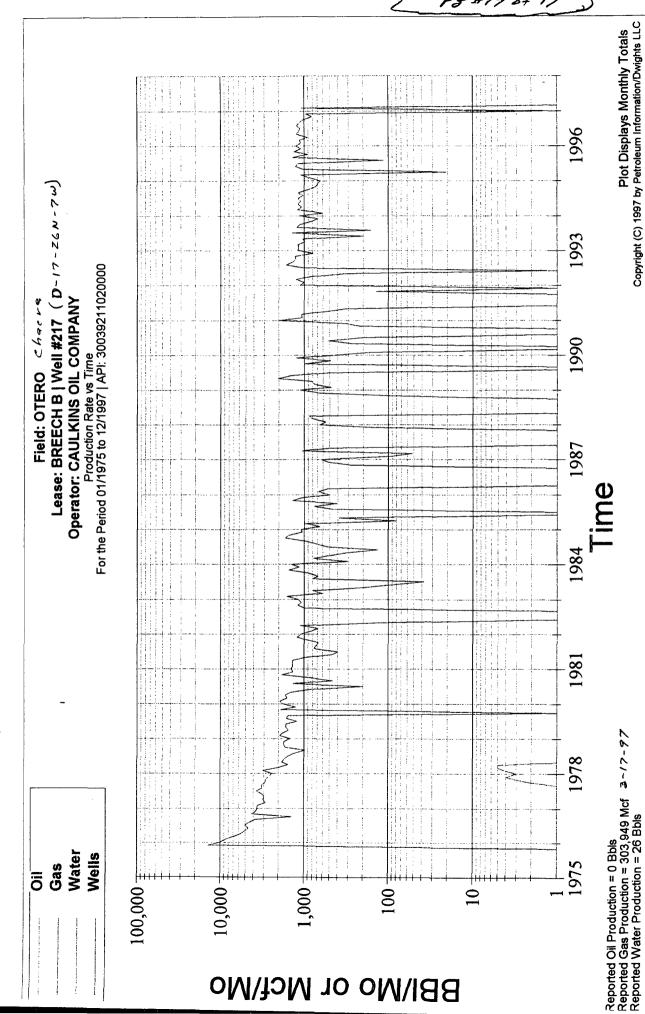


Reported Oil Production = 0 Bbls
Reported Gas Production = 148,056 Mcf 3-/- ??
Reported Water Production = 12 Bbls

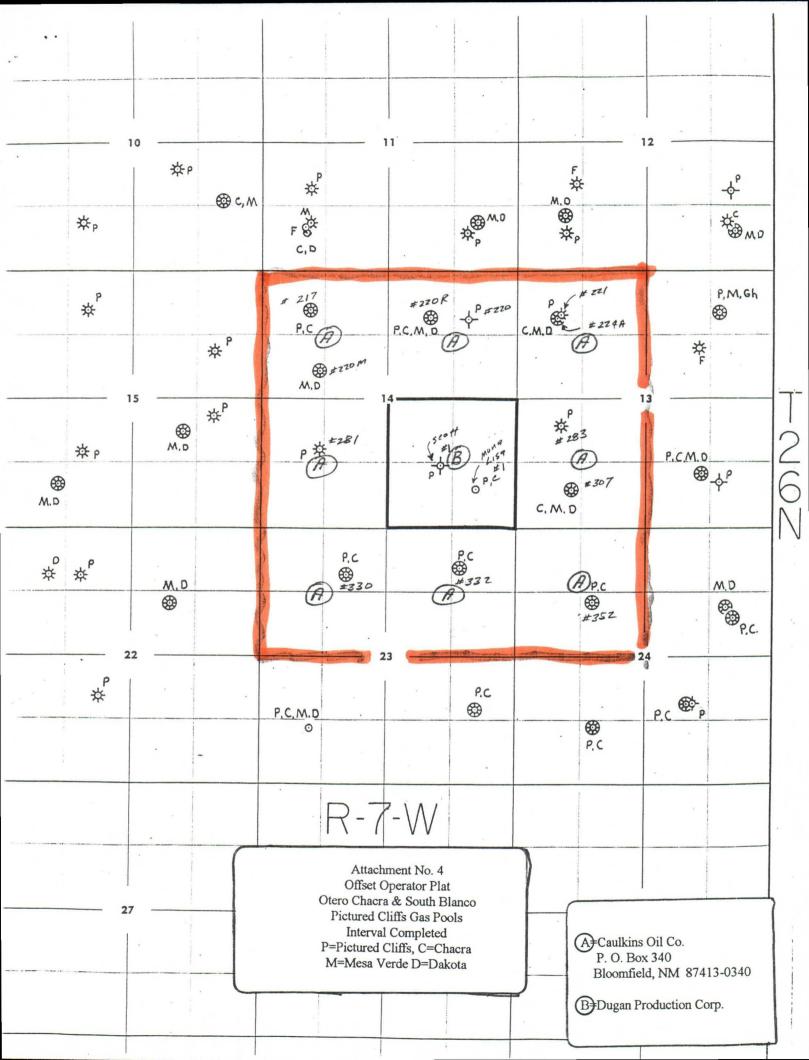
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AHarboret +3 1997 Lease: BREECH | Well #330 (C-z3-でら ハーア w) 1994 Production Rate vs Time For the Period 01/1976 to 12/1997 | API: 30039212110000 Charro Operator: CAULKINS OIL COMPANY 1991 Field: OTERO 1988 Time 1985 1982 1979 Reported Oil Production = 0 Bbls
Reported Gas Production = 192,384 Mcf
Reported Water Production = 25 Bbls Water Wells Gas 1976 10,0001,000 100 10 BBI/Mo or Mcf/Mo

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Plot Displays Monthly Totals Copyright (C) 1997 by Petroleum Information/Dwights LLC



BEFORE THE OIL CON OF THE STATE

Atachmout No.5 Pg1of3

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATIO COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 6121 Order No. R-5648

> >

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

AJ .

175.51

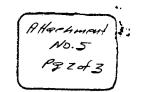
Ludhalia .

This cause came on for hearing at 9 a.m. on January 18, 1978, at Santa Fe, New Mexico, before Examiner Richard L. Stamets,

NOW, on this <u>21st</u> day of February, 1978, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Caulkins Oil Company, seeks authority to commingle, within the wellbore, Pictured Cliffs and Chacra production in its wells located in Sections 3, 4, 5, 7 thru 11, 13 thru 18, 21, 22, 24, and 25 in Township 26 North, Range 6 West and Sections 13, 14, 23, and 24 in Township 26 North, Range 7, West, Rio Arriba County, New Mexico.
 - (3) That from the Pictured Cliffs zone, the subject wells are, or may be expected to be, capable of low rates of production only.
 - (4) That from the Chacra zone, the subject wells, are or may be expected to be, capable of low rates of production only.
 - (5) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
 - (6) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the wells are not shut-in for an extended period.



- (7) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Commission any time any of the subject wells are shut-in for 7 consecutive days.
 - (8) That in order to allocate the commingled production to each of the commingled zones in the subject wells, 70 percent of the commingled production should be allocated to the Pictured Cliffs zone, and 30 percent of the commingled production to the Chacra zone.
 - (9) That if the pressure in either of the zones to be commingled under provisions of this order in any well be less than 50 percent of the pressure in the other zone in such well, or in the event that a producing potential of more than 200 MCF/day be established for each zone in any such well, the operator should notify the Secretary-Director of the Commission of such fact, and the Secretary-Director should order such action taken as he deems advisable, including the requirement for separation of the zones by dual completion equipment.
 - (10) That the downhole commingling of Pictured Cliffs and Chacra production in wells located on the above-described lands and subject to the above conditions will not cause but may prevent waste, and will not impair correlative rights and should be approved.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Caulkins Oil Company, is hereby authorized to commingle Pictured Cliffs and Chacra production within the wellbores of its wells in Sections 3, 4, 5, 7 thru 11, 13 thru 18, 21, 22, 24, and 25 in Township 26 North, Range 6 West, and Sections 13, 14, 23, and 24 in Township 26 North, Range 7 West, Rio Arriba County, New Mexico.
- (2) That 70 percent of the commingled production shall be allocated to the Pictured Cliffs zone and 30 percent of the commingled production shall be allocated to the Chacra zone.
- (3) That the operator of the subject wells shall immediately notify the Commission's Aztec district office any time any of the wells have been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.
- (4) That should the formation pressure in either the Pictured Cliffs zone or the Chacra zone in any well commingled pursuant to Order No. (1) above be less than 50 percent of the formation pressure in the other zone, or should both zones in any such well be calculated to have a producing potential in excess of 200 MCF per day, the operator shall notify the

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Secretary-Director of the Commission of such fact, and the Secretary-Director shall order such action taken as he may deem advisable, including the requirement for separation of the zones by conventional dual completion equipment.

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

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL