FORM APPROVED **UNITED STATES** Form 3 160-5 Budget Bureau No. 1004-0135 (June 1990) DEPARTMENT OF THE INTERIOR Expires: March 3 1,1993 BUREAU OF LAND MANAGEMENT 5. Lease Designation and Seriai No. $\operatorname{qq} \mathfrak{DEC}$ – SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allonee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. "APPLICATION FOR PERMIT—" for such proposals Jicarilla 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICA TE 1. Type of Well **CONT 105** Oil Well Gas Well 8. Well Name and No. 2. Name of Operato Jicarilla A # 14 CONOCO INC 3. Address and Telephone No. 30-039-20629 10 DESTA DR. STE. 100W, MIDLAND, TX. 79705-4500 (915) 686-5424 10. Field nithras Charge Blanco Mesaverde 4. Location of Well (Footage, Sec., T. R. M. or Survey Description) OIL COMo D Wounty or Parish, State Section 24, T-26-N,R-4-W, A 1186' FNL & 1160' FEL Rio Arriba, NM CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA In TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Change of Plans Abandonment New Construction Recompletion Non-Routine Fracrunng Plugging Back Water Shut-Off Casing Repair Conversion to Injection Downhole Commingle INole: Reponresultsof multiplecompitiononWdl Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state ail pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) It is proposed to Downhole Commingle the Chacra and Mesaverde in this well. 14. I hereby certify that the foregoing is Kay Maddox Title Regulatory Agent Lands and Mineral Resources Date BLM(6), NMOCD(1), SHEAR, PONCA, COST ASST, FILE ROOM Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements

or representations as to any matter within its junsdiction

BITRICT II

State of New Mexico Energy, Minerals and Natural Rasources Department

OIL CONSERVATION DIVISION

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

APPROVAL PROCESS:

811 South First St. Autossa NM 88210 2835 DISTRICT III 1000 Rue Brazos Rd. Aztec, NM 87410 1663	Santa Fe. New A APPLICATION FOR DO	⊠Administrative ☐ Hearing EXISTING WELLBORE ☑ YES ☐ NO		
Conoco Inc.	10	Desta Dr. Ste 100W, Midland	d, Tx. 79705-4500	
Jicarilla A	#14	Section 24, T-26-N, R-4-W,	A Rio Arriba	
OGRID NO. 005073 Property Coc	ie 18018 API NO.	30-039-20629 Federal C	Unit Lease Types. (check. I or more) State	
The following facts are submitted in support of downhole commingling:	Upper Zone	intermediate Zone	Lower Zone	
Pool Name and Pool Code	Blanco Mesaverde 72319		Wild Horse Gallup 87360	
2 TOP and Bottom of Pay Section (Perforations)	5584-6016		7534-7550	
3 Type of production (Oil or Gas)	Gas		Gas	
Method of Production (Flowing or Artificial Litt)	Flowing		Flowing	
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing:	a (Current)	a.	305	
All Gas Zones: Estimated Or Measured Original	b(Original) 1302 psi	ь	696 psi	
6 Oil Gravity (*API) or Gas BT Content	1304		1354	
7 Producing or Shut-In?	Producing		Producing	
Production Marginal? (yes or no)	Yes		Yes	
If Shut-in give date and owgas/ water rates of isst production Note for now cones with on production history	Date Rates	Date Rulus	Date Rales	
applicant shad be required to attach production estimates and supposing data If Producing, date and oligas/ water lates of scent less (within 60 days)	Date 10/98 Rates 264. MCFD, 0 BOPD, 1.5 BWPD	Date Rates	10/98 Rates 83 MCFD, 0 BOPD, 1.6 BWPD	
Fixed Percentage Allocation Formula -% or each zone	t. Gas. 140 %	od Gas %	86 60 '	
9. If allocation formula is based usubmit attachments with supp	ipon something other than curriorting data and/or explaining r	rent or past production, or is ba nethod and providing rate proje	ased upon some other method, actions or other required data.	
 Are all working, overriding, an If not, have all working, overri Have all offset operators been 	IGING. 20d (OV2)IV Interests hee	n notified by certified mail?	X Yes — No Yes — No Yes — No	
11. Will cross-flow occur? X Y flowed production be recovered	es No If yes, are fluids co ed, and will the allocation formu	mpatible, will the formations not labeled with the second		
2. Are all produced fluids from all			'es No	
Will the value of production be If this well is on, or community It is a State Surgay of Land	zed with state or federal land:		es, attach explanation) Public Lands or the	
15. NMOCD Reference Cases for		ORDER NO(S).		
6. ATTACHMENTS * C-102 for each zone * Production curve for * For zones with no p • Data to support allo • Notification list of • Notification list of	e to be commingled showing it or each zone for at least one ye reduction history, estimated p cation method or formula. If offset operators. working, overriding and royalt	s spacing unit and acreage dec ar. (If not available, attach exp roduction rates and supporting y interests for uncommon inter uired to support commingling.	fication. Janation.) data.	
	 			

I hereby certify that the information above is true and complete to the best of my knowledge and belief. TITLE Regulatory Agent DATE December 7, 1998 TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

Gallup

Fixed Commingle Allocation Factors:

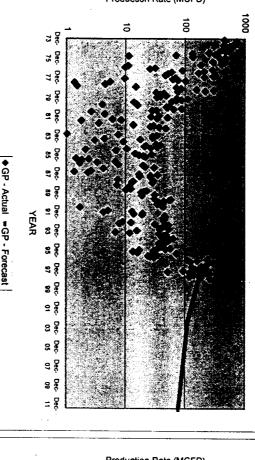
GAS

60.3% 39.7%

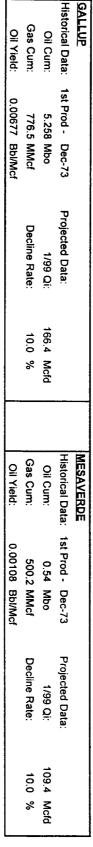
13.8% 86.2%

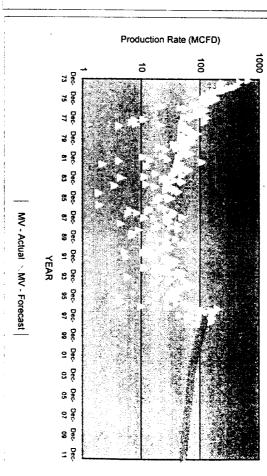
Mesaverde

Production Rate (MCFD) 1000 8 5 Dec. Dec. Dec. Dec. Dec. 73 75 77 79 81 JICARILLA A 14 - GP / MV DHC 26N-4W-24A, Rio Arriba County, New Mexico Dec Dec Dec Dec Dec Dec Dec Dec Dec 53 85 87 89 91 93 95 97 99 ◆GP - Actual #GP - Forecast YEAR 9 ç ဒ နို ဒ နဲ့ 9 P Dec Dec



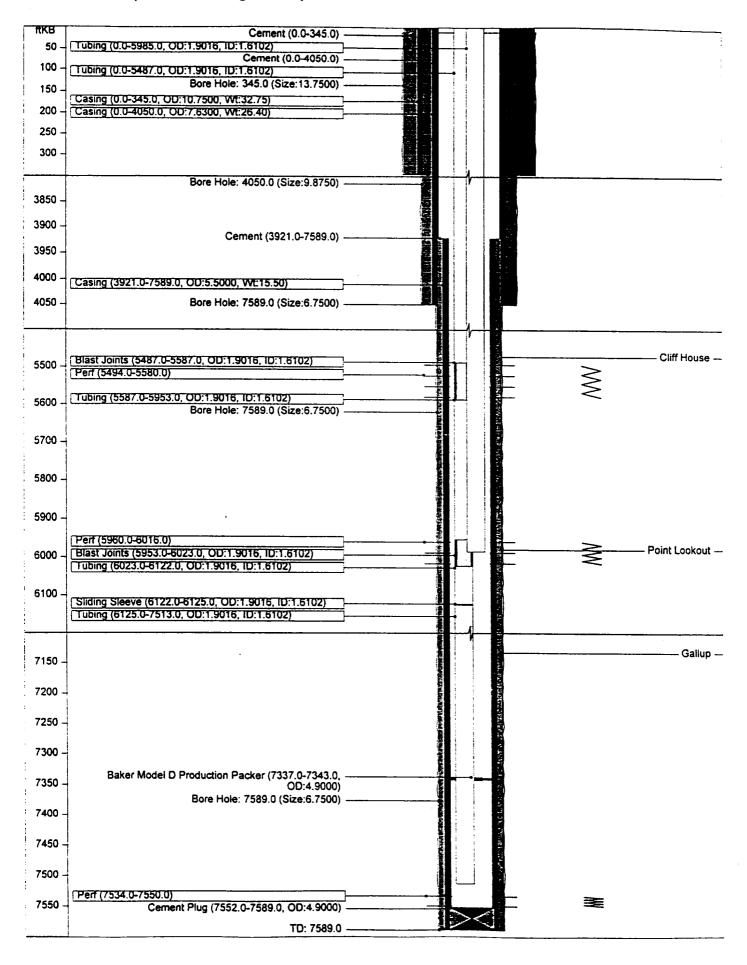




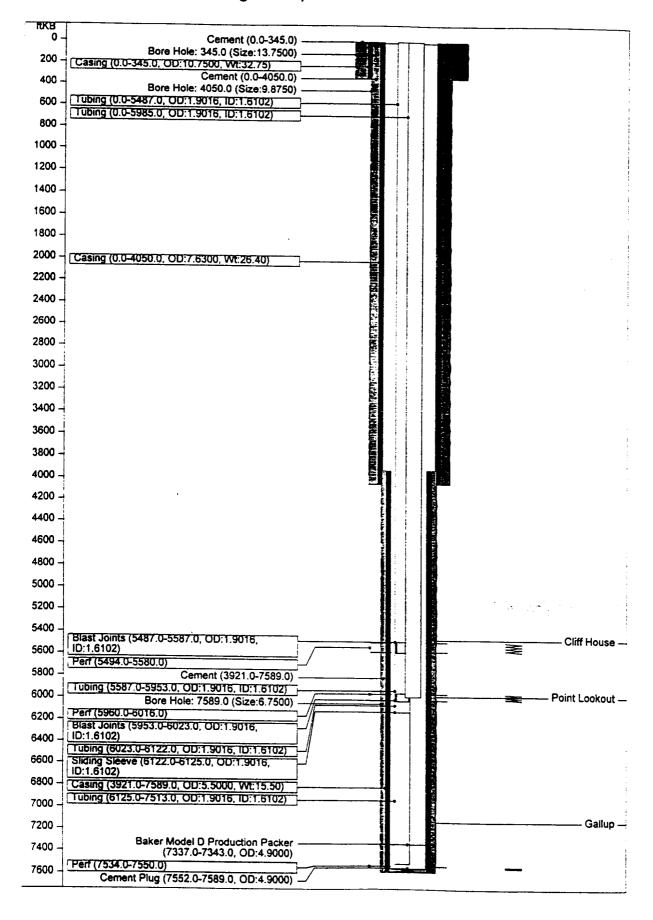


JICARILLA A 14 - GP / MV DHC 26N-4W-24A, Rio Arriba County, New Mexico

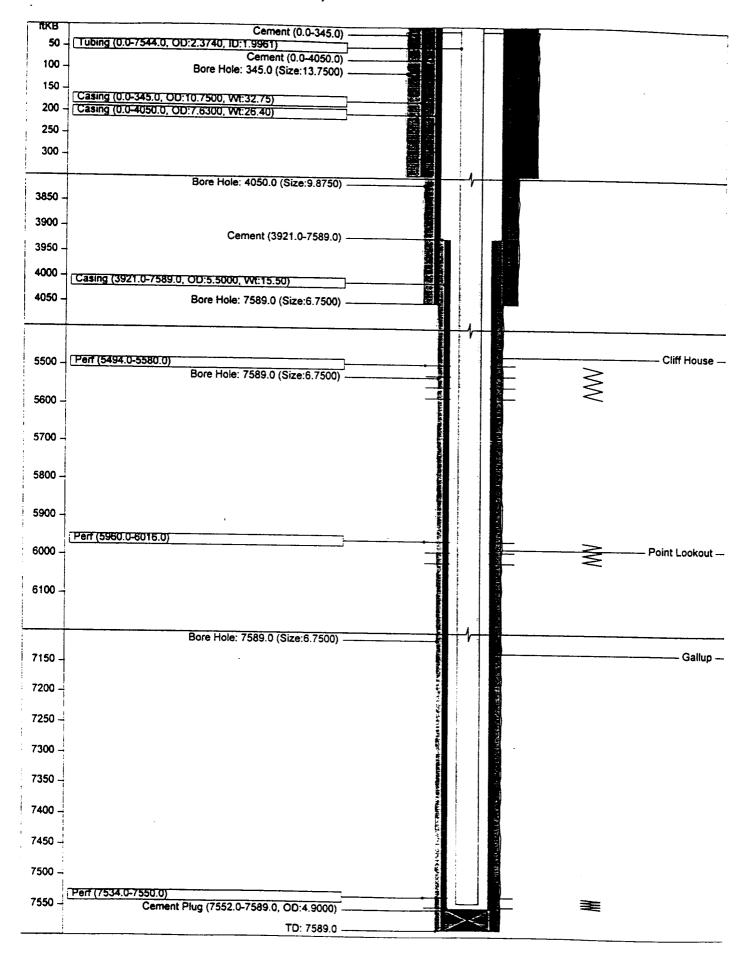
Jicarilla A #14 (Current Configuration)



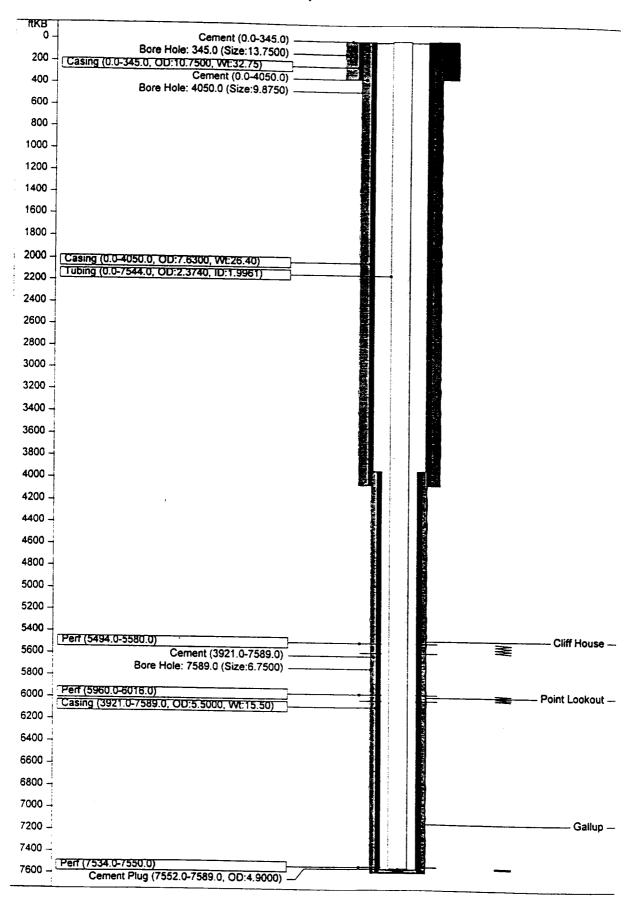
Jicarilla A #14 (Current Configuration)

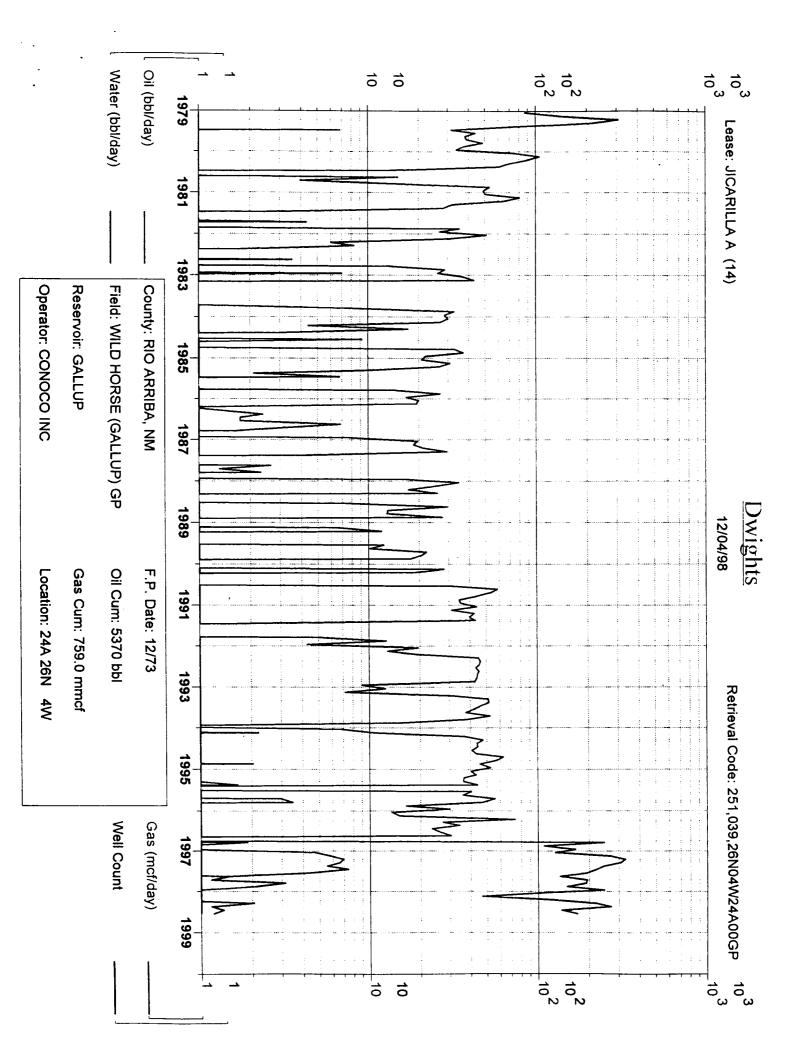


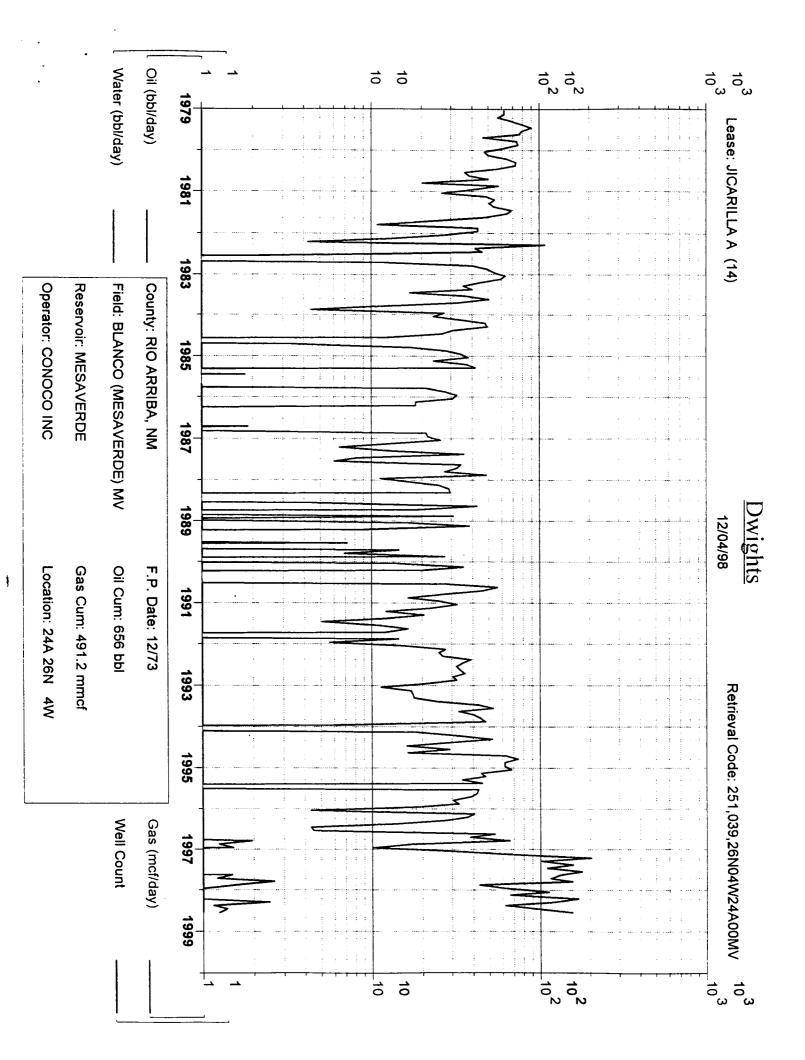
Jicarilla A #14 (Proposed Configuration)



Jicarilla A #14 (Proposed Configuration)



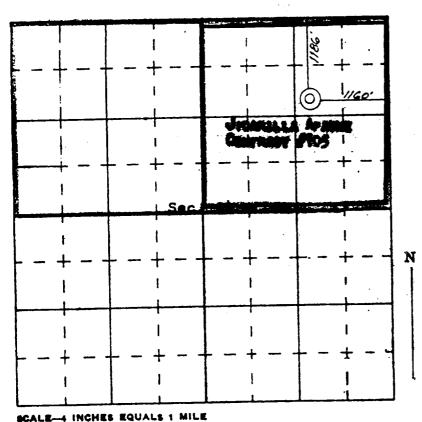




HEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator				Leose			Well No.	
Souther	N UNION P	PRODUCTION	co.		Mospilla	A	14	
Unit Lette	Section	Township		kange	County			
A	24	26	NORTH	4	WEST	RIO ARRII	BA	
Actual Footage Loc 1186	ation of Well: feet from the	NORTH	line anu	1160	feet from the		line	
Ground Level Elev.	Panducyc	. Formation		Pool	Makamunian	l D	edicated Avereage:	
7128.0					CHARLES SALLES		1007 /s d	Mar Ja
2. If more tha	an one lease is				cil or hachure mark and identify the c			rorking
interest and ro	yalty),						•	
3. If more the by communitize	a <mark>n one lease</mark> ol a tio n, unitizat	f different owner non, force-poolin	ship is dec g. etc?	dicated to t	he well, have the i	nterests of all co	wners been consol	lidated
() Yes () No	If answer is "ye	s," type of	f consol <mark>idat</mark> i	on			*********
If answer is "r	•	mers and tract o	lescriptions	s which have	e actually consolid	ated. (Use reve	rse side of this T	form if
					n consolidated (b n interests, has bee			forced-
			Barra Milian			CERT	IFICATIO	N
***************************************			1000	5				,
-		THE PERSON NAMED IN		<u>English</u>	-	I hereby certify	y that the information	a contained



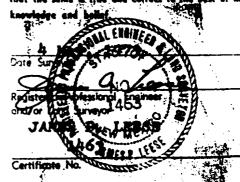
POACE THOUSAND THE

SAN JUAN ENGINEERING COMPANY, FARMINGTON, N. M.

I hereby cortify that the information contained herein is true and complete to the best of my knowledge and belief.

Original signed by
GILBERT D. NOLAND, IR
Name
Position De Recommendate
Company Land Commendate
Commendate
Commendate
Commendate
Commendate
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Commendate
Co

I hereby certify that the well location shown on this plet was platted from field notes of actual surveys made by one or under my unpervision, and that the same is type and correct to the best of my knowledge and belief



Jicarilla A #14 Section 24, T-26-N, R-4-W, A API # 30-039-20629 1186' FNL & 1160' FEL Rio Arriba County, NM

RE: Application fo Downhole Commingle (C107A)

NOTIFICATION OF OFFSET OPERATORS:

Taurus Exploration, Inc 2101 6th Avenue N Birmingham, AL 35203-2784

Chateau Oil & Gas 5802 US HWY 64 Farmington, NM 87401

The above listed parties have been sent a copy of the C107A application.

Jicarilla A #14

Economic Justification for Downhole Co-mingling

The subject well has a 51/2" production liner (drift ID of 4.825") and 75/6" intermediate casing.

Production from each of the two current production zones (Mesa Verde and Gallup) is produced up two separate 1.9" IJ tubing strings. The Gallup zone currently has sand fill that is limiting the production to less than 50 mcfd (production from the Gallup has averaged approximately 250 mcfd for the last year). The Mesa Verde zone is produced up the 1.9" tubing string and is plunger lifted. To clean out the wellbore, it will be necessary to drill up the Model "D" permanent production packer. Since the packer will be removed from the well, Conoco recommends that 2%" EUE tubing be installed in the well. The larger tubing will allow the Gallup formation to produce at higher flowrates (less friction pressure up the larger tubing ID) and the Gallup/Mesa Verde co-mingled production rates will be high enough that artificial lift will no longer be necessary at this time.

The installation of the larger 2%" tubing will increase production from the wellbore by approximately 50 mcfd over the previously established rates. Co-mingling of the producing horizons will allow the removal and reuse of one of the surface production facilities while also saving approximately \$2,000 per year in plunger lift expenses (replacement plungers, maintenance, etc.).

CONDITIONS OF APPROVAL FOR DOWNHOLE COMMINGLING

Operator Conoco	Inc.	Well Name	_Jic.	105 A #:	14

- 1. The individual production zones will be tested every three years, or more often if production rates indicate a change to allocation factors, to verify that the allocation factors and methods remain proper.
- 2. Production from downhole commingled wells are to be reported with an alpha character, "C" (ie C1, C2, etc).
- 3. The following modifications to your downhole commingling program are to be made:

None