	ABOVE THIS LINE FOR DIVISION USE ONLY
·	NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau -
	ADMINISTRATIVE APPLICATION COVERSHEET
	THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS
- ppilo	[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [SD-Simultaneous Dedication] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF APPLICATION - Check Those Which Apply for [A][A]Location - Spacing Unit - Directional DrillingDEC - 8 1993INSLINSPDDSD
	Check One Only for [B] and [C] [B] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
[2]	NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply [A] Working, Royalty or Overriding Royalty Interest Owners
	[B] I Offset Operators, Leaseholders or Surface Owner
	[C] Application is One Which Requires Published Legal Notice

- [D] Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Uvaivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Regulatory Agent

Kay Maddox Print or Type Name

#### DISTRICT I

PO Box 1980, Hobbs, NM 88241 1980

SITRICT II 811 SouthI First St. Artesia NM 88210 2835

DISTRICT III

1000 Rio Brazos Rd. Aztec, NM 87410 1693

# State of New Mexico Energy, Minerals and Natural Rasources Department **OIL CONSERVATION DIVISION**

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

APPROVAL PROCESS:

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

### APPLICATION FOR DOWNHOLE COMMINGLING

Administrative Hearing EXISTING WELLBORE YES NO

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10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500 Address

Jicarilla A	#14	Section 24, T-26-N, R-4-W, A	Rio Arriba
Lease	Well No	Unit Ltr Sec Twp Rge	County
		Spacing Unit	Lease Types: (check 1 or more)

DGRID NO. 005073 Property Code	e <u>18018</u> API NO.	30-039-20629 Federal	, State 🛄 (and/or) Fee 🗌
The following facts ate submitted in support of downhole commingilng:	Upper Zone	intermediate Zone	Lower Zone
1. 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
4. Method of Production {Flowing or Artificial Lilt}	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artilicial Lift: Estimated Current	a (Current) 376	а.	a. 305
Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	b(Original) 1302 psi	b.	b. 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 oil/gas/ water rates of Isst production Note For new zones with no production history annican shad be required to attach production	Date Rates	Date Rotes:	Date Rates
estimates and supporting dara • If Producing, date and oil/gas/ water rates of recent test (within 60 days)	Dale !0/98 Retes 264. MCFD, 0 BOPD, 1.5 BWPD	Dale Rates	Date 10/98 Rates 83 MCFD, 0 BOPD, 1.6 BWPD
8. Fixed Percentage Allocation Formula -% or each zone	oil: Gas	oil: Gas %	oil: Gas 86 <sup>%</sup> 60 <sup>%</sup>

9. 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 rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? If not, have all working, overriding, and royalty interests been notified by certified mail? Have all offset operators been given written notice of the proposed downhole commingling?

X Yes Yes No No No

11.	Will cross-flow occur? X Yes No If yes, are fluids compatible, will	the	formation	is not be dama	aged, wi	Il any cross-
	flowed production be recovered, and will the allocation formula be reliable.	e. 2	X Yes	No (If No,	attach e	explanation)

ORDER NO(S).

12. Are all produced fluids from all commingled zones compatible with each others	<u>X</u> Ye	es	No
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13. Will the value of production be decreased by commingling? \_Yes <u>×</u>No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of 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 for Rule 303(D) Exceptions:

16. ATTACHMENTS

\* C-102 for each zone to be commingled showing 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 complete to the best of my knowledge and belief.

SIGNATURE TWY // add /	Regulatory Agent	DATE	December 7, 1998
TYPE OR PRINT NAME Kay Maddox	 TELEPHONE NO.	<u>(915)</u>	686-5798



GALLUP				MESAVERDE				
Historical Data:	1st Prod - Dec-73	Projected Data:		Historical Data:	1st Prod -	Dec-73	Projected Data:	
Oil Cum:	5.258 Mbo	1/99 Qi:	166.4 Mcfd	Oil Cum:	0.54	Mbo	1/99 Qi:	109.4 Mcfd
Gas Cum:	776.5 MMcf	Decline Rate:	10.0 %	Gas Cum:	500.2	MMcf	Decline Rate:	10.0 %
Oil Yield:	0.00677 Bbl/Mcf			Oil Yield:	0.00108	Bbl/Mcf		

gle Allocation Factors: GAS OIL 60.3% 86.2% 39.7% 13.8%	Mesaverde	Gallup		Fixed Comming
actors: OIL 86.2% 13.8%	39.7%	60.3%	GAS	gle Allocation F
	13.8%	86.2%	OIL	-actors:

Prepared by RDB :\data\dhc\jick14gpmv.xls

# Jicarilla A #14 (Current Configuration)

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ftKB	Cement (0.0-345.0)	
50 -	Tubing (0.0-5985.0, OD:1.9016, ID:1.6102)	
100 -	Tubing (0.0-5487.0, OD:1.9016, ID:1.6102)	
150 -	Bore Hole: 345.0 (Size:13.7500)	
200 -	Casing (0.0-4050.0, OD:7.6300, Wt.26.40)	
250		
300 -		
	Pore Hole: 4050 0 (Size 9 8750)	
3850 ~	Bore Hole. 4050.0 (322.3.0750)	
3900 -	Cement (3921 0-7589 0)	
3950 -		
4000	Casing (3921.0-7589.0, OD:5.5000, Wt:15.50)	
4050	Bore Hole: 7589.0 (Size:6.7500)	
	Blact Inints (5487 0-5587 0 00-1 0015 00-1 6102)	Cliff House –
5500 -	Perf (5494.0-5580.0)	
5600	Tubing (5587.0-5953.0, OD:1.9016, ID:1.6102)	
5000 -	Bore Hole: 7589.0 (Size:6.7500)	
5700 -		
5800 -		
5900 -		
6000	Perf (5960.0-6016.0)	Point Lookout –
0000 -	Tubing (6023.0-6122.0, OD:1.9016, ID:1.6102)	
6100 -		
	Sliding Sleeve (6122.0-6125.0, OD:1.9016, ID:1.6102) Tubing (6125.0-7513.0, OD:1.9016, ID:1.6102)	
7150		Gallup Gallup
. 150 -		
7200 -		
7250 -		
7300 -		
7350 -	Baker Model D Production Packer (7337.0-7343.0, OD:4.9000)	
7400	Bore Hole: 7589.0 (Size:6.7500)	
1400 -		
7450 -		
7500 -		
	Perf (7534.0-7550.0)	
7550 -	Cement Plug (7552.0-7589.0, OD:4.9000)	
L	TD: 7589.0	

### Jicarilla A #14 (Current Configuration)



# Jicarilla A #14 (Proposed Configuration)

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TRKB	Cement (0.0-345.0)	
50 -	Tubing (0.0-7544.0, OD:2.3740, ID:1.9961)	
100 -	Cement (0.0-4050.0) Bore Hole: 345.0 (Size:13.7500)	
100	BUIE HUIE. 343.0 (SIZE. 13.7300)	
150 -	Casing (0.0-345.0, OD:10.7500, Wt:32.75)	
200 -	Casing (0.0-4050.0, OD:7.6300, Wt:26.40)	
250 -		
300 -		
	Bore Hole: 4050.0 (Size: 9.8750)	
3850		
3650 -		
3900		
2050	Cement (3921.0-7589.0)	
3920 -		
4000 -	Casing (3921 0-7589 0 (11):5 5000 W/:15 50)	
	Des 41-1 - 7000.0, 00.0000, V4.10.00	
4050	Bore Hole: 7589.0 (Size:6.7500)	
5500	Perf (5494 0-5580 0)	Cliff House
5500 -	Bore Hole: 7589.0 (Size:6.7500)	
5600 -		
5700 -		
5000		
- 0080		
5900 -		
	Perf (5960.0-6016.0)	
6000 -		Point Lookout –
6100		
0100 -		
<u>}</u>	Bore Hole: 7589.0 (Size:6.7500)	
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7400 -		
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7450 -		
7500 -		
7650	Perf (7534.0-7550.0)	
/ 000 -	Cement Plug (7552.0-7589.0, OD:4.9000)	
L	TD: 7589.0	

### Jicarilla A #14 (Proposed Configuration)







## NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACERAGE DEDICATION PLAT

SAIMU	TRON IN	TON DOAL	∩ <b>!!@ሞ</b> ፐ∩™	CO	Leose			Well No.
nit Lette	Section		Township		Range	County	<u>A</u>	14
A		24	26	NORTH	<u> </u>	/EST	RIO ARE	RIBA
ual Footage 1186	Location of	Well: from the N(	ORTH	line and	1160	feet from the	RAST	line
und Level E	lev.	Producino, For	nation		Popla main 1		BAUL	Dedicated Avereage:
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. If more	than one	lease is ded	icated to t	he well, ou	tline each an	d identify the ov	vnership the	reof (both as to working
nterest an	d royalty),					·	·	· · · · ·
If more	than one	lease of diff	erent ownei	rship is ded	licated to the	well, have the in	terests of al	l cwners been consolidated
y commur	nitization,	unitization,	force-poolin	ng. etc?				
) Yes	() No	i If ar	nswer is "ye	s," type of	consolidation	8+ ++ ++ ++ + + + + + + + + + + + + + +		······································
i Fanswer i	s "no." list	the owners	and tract c	escriptions	which have (	actually consolida	ted (11se re	werse side of this form if
ecessary.)								
lo ollowab	le will be c	ssigned to th	ne well until	all interes	ts have been	consolidated (by	communitiz	ation, unitization, forced-
coling, or	otherwise)	br until a no	on standard	unit, elimi	nating such in	nterests, has been	approved by	the Commission.
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Jicarilla A #14 Section 24, T-26-N, R-4-W, A API # 30-039-20629 1186' FNL & 1160' FEL Rio Arriba County, NM

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RE: Application fo Downhole Commingle (C107A)

### NOTIFICATION OF OFFSET OPERATORS:

Taurus Exploration, Inc 2101 6<sup>th</sup> 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.).