DISTRICT I

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

State of New Mexico Energy, Minerals and Natural Resources Department

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

DISTRICT II

OIL CONSERVATION DIVISION 2040 S. Pacheco Santa Fe, New Mexico 875054-6429

APPROVAL PROCESS:

 $\underline{\underline{\mathsf{X}}}$ Administrative $\underline{\phantom{\mathsf{X}}}$ Hearing

EXISTING WELLBORE

811 S. First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

<u>X</u> YES ____NO

Taurus Exploration U.S.A., Isoperator	nc. 2198 I	Bloomfield Highway, Farmin	gton, New Mexico 87401					
Jicarilla 98	5 A	Sec. 20, T26N, R3W	Rio Arriba County,					
Lease	Well No. Unit Ltr S	ec - Twp - Rge	County cing Unit Lease Types: (check 1 or more)					
OGRID NO. 162928 Property Coo	de <u>007167</u> API NO. <u>30-0</u>	39-06390 Federal						
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone					
Pool Name and Pool Code	Tapacito PC 85920		Blanco MV 72319					
Top and Bottom of Pay Section (Perforations)	3945-3997		6093-6220					
Type of production (Oil or Gas)	gas		gas					
Method of Production (Flowing or Artificial Lift)	flowing		flowing					
5. Bottomhole Pressure	a. (Current)	a.	a.					
Oil Zones - Artificial Lift: Estimated Current	537 mea.		685 mea.					
Gas & Oil - Flowing: Measured Current All Gas Zones:	b. (Original)	b.	b.					
Estimated Or Measured Original	903 calc.		1421 calc.					
6. Oil Gravity (^O API) or Gas BTU Content)	1201 BTU		1202 BTU					
7. Producing or Shut-In?	producing		shut in					
Production Marginal? (yes or no)	yes		yes					
If Shut-In, give date and oil/gas/ water rates of last production	Date:	Date:	Date: 5/97					
Note: For new zones with no production history, applicant shall be required to attach production	Rates:	Rates:	Rates: 0/29/.5					
estimates and supporting data If Producing, give date and oil/gas/	Date: 4/16/98	Date:	Date:					
water rates of recent test (within 60 days)	Rates:	Rates:	Rates:					
	0/60/0							
Fixed Percentage Allocation Formula -% for each zone	Oil: Gas: 67 %	Cil: Gas: %	Oil: Gas: 33 [%]					
9. If allocation formula is based usubmit attachments with support	upon something other than currently orting data and/or explaining n	ent or past production, or is I nethod and providing rate pro	pased upon some other method, ections or other required data.					
 Are all working, overriding, and rould foot, have all working, overriding Have all offset operators been given. 	yalty interests identical in all comr , and royalty interests been notifie en written notice of the proposed	mingled zones? ed by certified mail? I downhole commingling?						
 Will cross-flow occur?Y flowed production be recovered, 			not be damaged, will any cross-					
12. Are all produced fluids from all co			Yes No					
13. Will the value of production be de-								
14. If this well in on, or communitized	14. If this well in on, or communitized with, state or federal lands, either the Commissioner of Bublio 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: ORDER NO(S)								
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 ab	\							
SIGNATURE JAM W. DW	M	TITLE <u>Prod. Superintendent</u>	DATE <u>5/7/98</u>					
TYPE OR PRINT NAME Gary W. Br	rink	TELEPHONE NO. (<u>505</u>) <u>325-6800</u>					

State of New Mexico

District I Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

X AMENDED REPORT

District II 811 S. 1st Street, Artesia. NM 88210-2834 District III

1000 Rio Brazos Rd., Aztec, NM 87410 District IV

PO Box 1980, Hobbs, NM 88241-1980

2040 South Pacheco, Santa Fe, NM 87505

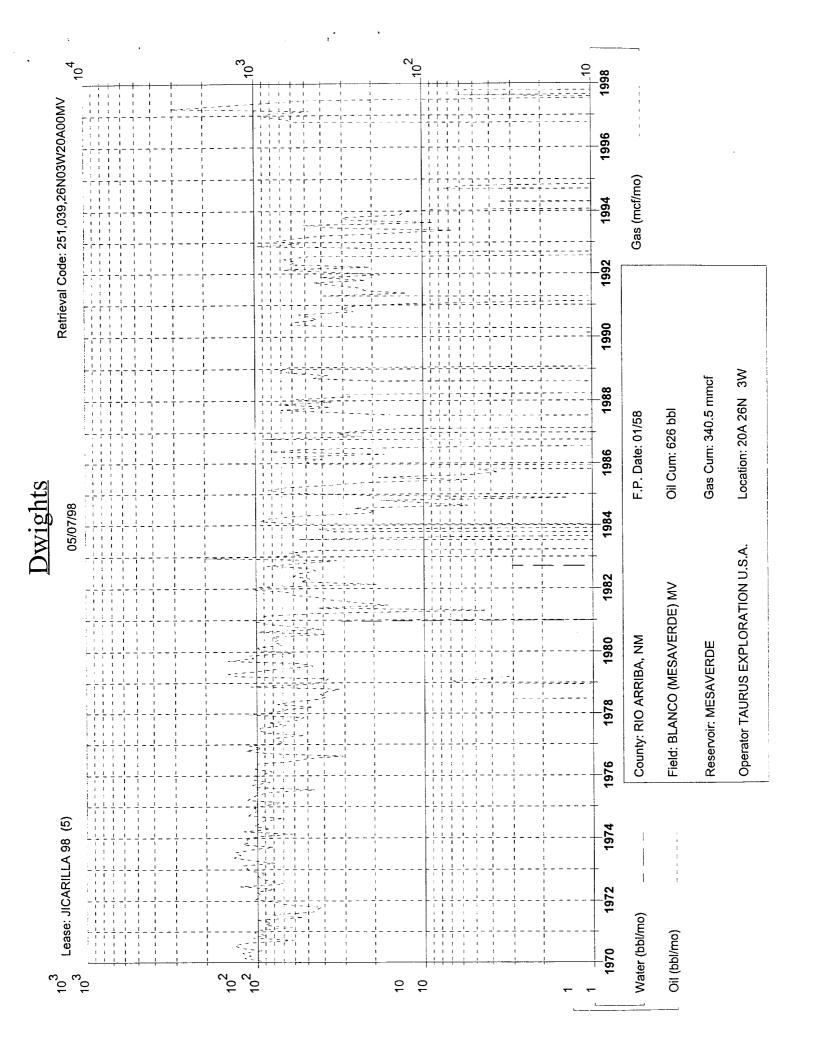
WELL LOCATION AND ACREAGE DEDICATION PLAT

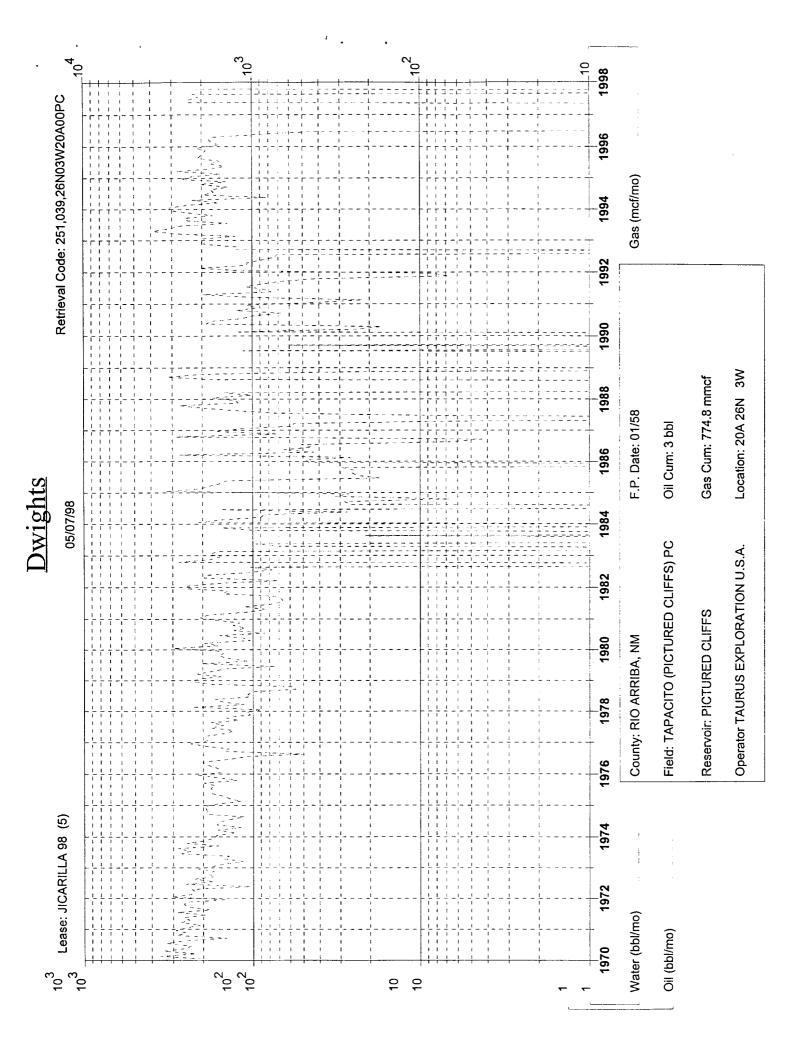
t	API Numbe	r		² Pool Code ³ Pool Name						
30	0-039-063	390	İ	85920/723	19	Tapacito Pictured Cliffs/Blanco Mesa Verde				
⁴ Property			5 Property Name						⁶ Well Number	
0071					Jicarilla	98			5	
7 OGRID	No.		3-0		8 Operator Na	ime		9	Elevation	
1629	28		Taurus Exploration, U.S.A., Inc. 7267 GL					7267 GL		
				10	Surface Local	tion				
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County	
Α	20	26N	3W		990	990 North 990 East Rio A			Rio Arriba	
			11 Bo	ottom Hole	Location If Diff	erent From Surfac	ce			
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County	
12 Dedicated Acr 160/320	es 13 Join	t or Infill 140	Consolidatio	n Code 15 Oi	rder No.					

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

OR A NON-STANDARD LINIT HAS BEEN APPROVED BY THE DIVISION

	OR A NON-STA	NDARD UNIT HAS B	EER MITRO - DD DT	
			`066 —990'—	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Gary W. Brink Printed Name
				Production Superintendent Title 5/7/98 Date
in!	CEIVED			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 under my supervision, and that the same is true and correct to the best of my belief. Date of Survey
@0L	CON. DIV. DIST. 3			Signature and Seal of Professional Surveyer: Reissue of original survey
	Today procure a algorithm (1991) to the			Certificate Number

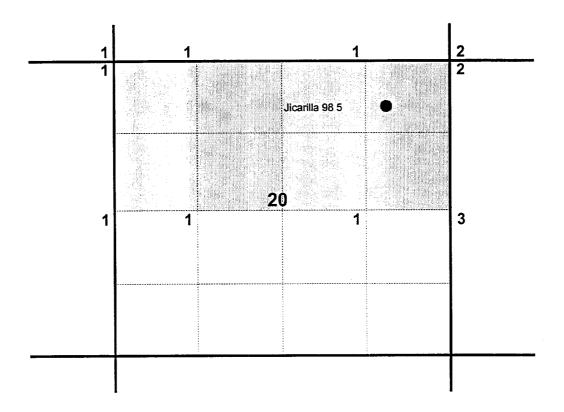




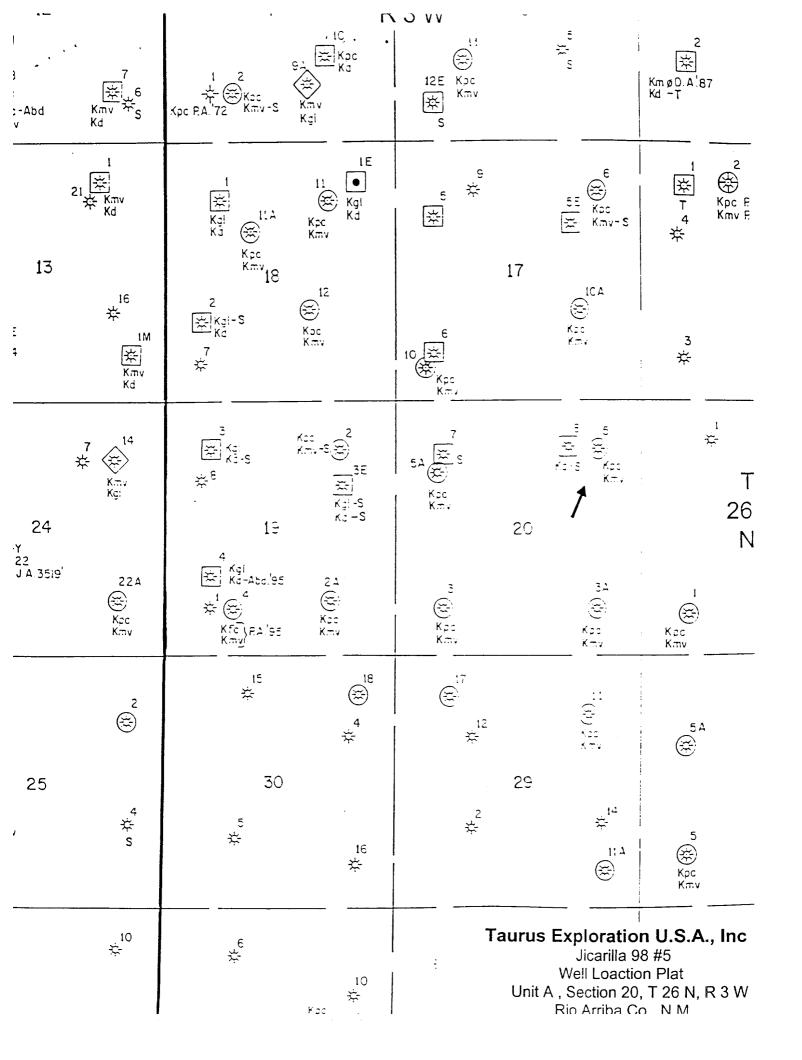
Taurus Exploration U.S.A., Inc

Jicarilla 98 #5 Offset Operator / Ownership Plat Tapicito Pictured Cliffs / Blanco Mesa Verde Downhole Commingling

Township 26 N, Range 3 W



- 1) Taurus Exploration U.S.A., Inc
- 2) Conoco, Inc.10 Desta Dr. Ste 100WMidland Tx 79705-4500
- 3) Dugan Production Corp. P. O. Box 420 Farmington, N.M. 87401



Jicarilla 98 #5 Unit A, Section 20,T 26 N, R 3 W Rio Arriba Co., N.M.

Subject: Economic Justification To Downhole Commingle

Current Oil Price --\$16.00 Current Gas Price-- \$1.50 Net less gathering & processing

The Blanco Mesa Verde side of this dual completion has extreme liquid loading problems. We have swabbed the well 2 times in the six months to keep it producing at a marginal rate. Listed below is the economic justification to commingle.

Mesa Verde Current rate when flowing: 30 MCFD & 1 BW

Gas Revenue 30 * 1.50 * 30 = \$1350

Total Revenue \$1350 per month

Less Royalty -\$169

Net Revenue to Well \$1181 per month

Monthly Net Revenue \$1181

Monthly fixed operating cost \$650

Monthly swabbing cost \$800

- \$269 per month loss

We are currently losing \$269 per month to keep this well flowing, thus making this well uneconomical to produce. Downhole commingling would prevent downtime by using the Pictured Cliffs gas stream to unload the Mesa Verde liquid. This will increase the overall production from the well and prevent waste by eliminating pre-mature abandonment.

CONDITIONS OF APPROVAL FOR DOWNHOLE COMMINGLING

Operator <u>Taurus Expl. USA, Inc</u> Well Name <u>Jic. 98 B #5</u>

- 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.
- 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:

Submit well bore diagram with subsequent report.

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVE	D
Budget Bureau No. 10	04-0135
Expires: March 31,	1993

. Lease Designation and Serial No

BUREAU OF L	AND MANAGEMENT	5. Lease Designation and Serial No.
SUNDRY NOTICES AN	D REPORTS ON WELLS	Jicarilla 98
Do not use this form for proposals to drill	6. If Indian, Allottee or Tribe Name	
Use "APPLICATION FOR	Undaritha 07	
	IN TRIPLICATE	
1. Type of Well		8. Well Name and No.
Oil X Gas Well Other	···	Jicarilla 98 5
2. Name of Operator Taurus Exploration, U.S.A., Inc.		
3. Address and Telephone No.	The state of the s	9. API Well No.
2198 Bloomfield Highway; Farmington	n. NM 87401	30-039-06390 10. Field and Pool, or exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey De		Tapacito Pictured Cliffs/
990' FNL, 990' FEL, Sec. 20, T26N,	R3W, NMPM	Blanco Mesaverde
		11. County or Parish, State
		Rio Arriba NM
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
X Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	X Other Downhole Commingle	Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
	is tubing string. With tubing. Mill out Baker Model "D" at 6050'. TOH. Ing at 6200'. Install single wellhead. The has been filed with NMOCD.	CEIVED AY 2 8 1998 GON. DIV. DIST. 3
14. I hereby certify that the foregoing in true and correct Signed	Title Production Superintendent	5/7/ΩΩ
Signed	The 11 sauge for Super mediadit	Date <u>5/7/98</u>
(This space for Federal or State office (196) Approved by Conditions of approval, if any:	Title Lands and Mineral Resources	Date MAY 2.2 1088

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 jurisdiction.

TAURUS

TAURUS EXPLORATION, INC. 2198 Bloomfield Highway Farmington, New Mexico 87401 Telephone (505) 325-6800

May 7, 1998

Ms. Lori Wrotenbery New Mexico Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505

RE:

Administrative Approval to Downhole Commingle

Taurus Exploration U.S.A., Inc.

Jicarilla 98 #5

990' FNL, 990' FEL, Sec. 20, T26N, R3W, NMPM

Rio Arriba County, New Mexico

Dear Ms. Wrotenbery:

Taurus Exploration U.S.A., Inc. requests administrative approval for downhole commingling the Tapacito Pictured Cliffs and Blanco Mesa Verde pools in the subject well. The well is currently producing as a Pictured Cliffs/Mesa Verde dual completion. The Mesa Verde zone has experienced liquid loading problems and it is felt downhole commingling will eliminate excessive operational and swabbing expenditures and allow the Pictured Cliffs flow stream to aid in keeping the Mesa Verde zone unloaded and producing.

To comply with New Mexico Oil Conservation Rules, Taurus Exploration U.S.A., Inc. is submitting the following data for your approval of the proposed commingling:

- 1. For C107A Application for Downhole Commingling
- 2. C102 Location plat showing each spacing unit and dedicated acreage
- 3. Production curves for both the Mesa Verde and Dakota
- 4. Offset operator plat
- 5. Well location plat

In accordance to New Mexico Oil Conservation Division Rule 303C, all offset operators are being notified of this application by certified mail. As an offset operator, if you have no objection to this application, you do not have to respond to this notification.

If additional information is needed, please contact me.

17 mm n,

Sincerely

Gary W.\Brink
Production Superintendent

GWB/df

cc: NMOCD-Aztec, BLM-Albuquerque, Offset Operators

DISTRICT I

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

State of New Mexico Energy, Minerals and Natural Resources Department

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

DISTRICT II

811 S. First St., Artesia, NM 88210-2835

1000 Rio Brazos Rd, Aztec, NM 87410-1693

DISTRICT III

OIL CONSERVATION DIVISION 2040 S. Pacheco Santa Fe, New Mexico 875054-6429

APPROVAL PROCESS:

X_Administrative __Hearing EXISTING WELLBORE

APPLICATION FOR DOWNHOLE COMMINGLING

<u>X</u>_YES ____NO

Taurus Exploration U.S.A., Inc. 2198 Bloomfield Highway, Farmington, New Mexico 87401							
Jicarilla 98	5 A	Sec. 20, T26N,	R3W	Rio Arriba County,			
CORID NO. 162928 Property Coo		ec - Twp - Rge		County Unit Lease Types: (check 1 or more)			
The following facts are submitted in support of downhole commingling.	Upper Zone	Intermedia Zone		Lower Zone			
Pool Name and Pool Code	Tapacito PC 85920			Blanco MV 72319			
Top and Bottom of Pay Section (Perforations)	3945-3997			6093-6220			
Type of production (Oil or Gas)	gas			gas			
Method of Production (Flowing or Artificial Lift)	flowing			flowing			
5. Bottomhole Pressure	a. (Current)	a .		a.			
Oil Zones - Artificial Lift: Estimated Current	537 mea.			685 mea.			
Gas & Oil - Flowing:	b. (Original)			000 11104.			
Measured Current All Gas Zones:	[-·	b.		b.			
Estimated Or Measured Original	903 calc.			1421 calc.			
Oil Gravity (⁹ API) or Gas BTU Content)	1201 BTU			1202 BTU			
7. Producing or Shut-In?	producing			shut in			
Production Marginal? (yes or no)	yes			yes -			
* If Shut-In, give date and oil/gas/ water rates of last production	Date:	Date:		Date: 5/97			
Note: For new zones with no production history, applicant shall be required to attach production	Rates:	Rates:		Rates: 0/29/.5			
estimates and supporting data * If Producing, give date and oil/gas/ water rates of recent test	Date: 4/16/98 Rates:	Date:		Date:			
(within 60 days)	0/60/0			nates.			
Fixed Percentage Allocation Formula -% for each zone	Oil: Gas: 67 [%]	Oil: Gas	3: %	Oil: Gas: 33 [%]			
 If allocation formula is based of submit attachments with support 	upon something other than curre orting data and/or explaining n	ent or past produc nethod and providir	tion, or is ba ng rate proje	ised upon some other method, ctions or other required data.			
 Are all working, overriding, and ro If not, have all working, overriding Have all offset operators been given 	i, and rovalty interests been notifie	ed by certified mail?	ing?	_X_YesNo YesNo _X_YesNo			
11. Will cross-flow occur?\ flowed production be recovered,	es X No If yes, are fluids and will the allocation formula be	compatible, will the reliable.	formations n Yes				
12. Are all produced fluids from all co	mmingled zones compatible with	each other?	<u>X</u> Y	es No			
13. Will the value of production be de	creased by commingling?	Yes <u>X</u> N	o (If Yes,	, attach explanation)			
14. If this well in 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: ORD	ER NO(S)					
# 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.							
hereby certify that the information at	be is true and complete to the b	est of my knowledge	e and belief.				
SIGNATURE 12 My W. PM	M	TITLE <u>Prod. Supe</u>	rintendent	DATE <u>5/7/98</u>			
TYPE OR PRINT NAME Gary W. BI	rink	TEI EB	HONE NO (505 \ 325 6800			

District I

District II

District III

District IV

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco

Form C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

³ Pool Name

Santa Fe, NM 87505

2040 South Pacheco, Santa Fe, NM 87505

¹ API Number

PO Box 1980, Hobbs, NM 88241-1980

811 S. 1st Street, Artesia, NM 88210-2834

1000 Rio Brazos Rd., Aztec, NM 87410

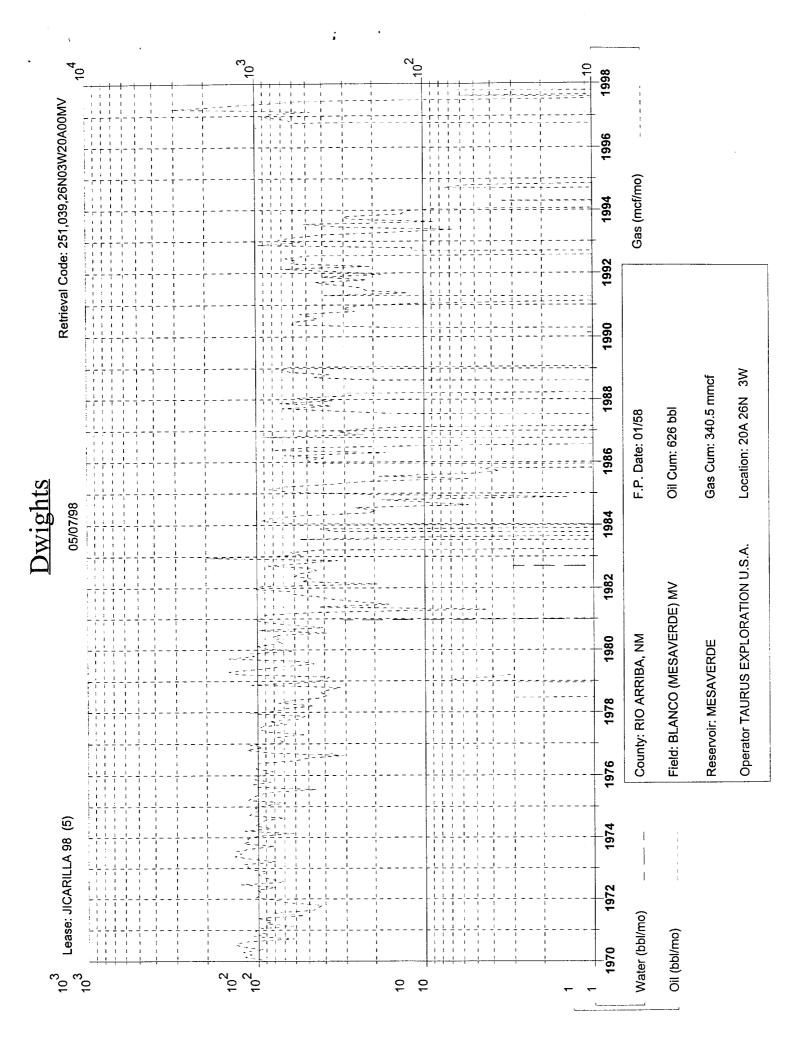
WELL LOCATION AND ACREAGE DEDICATION PLAT

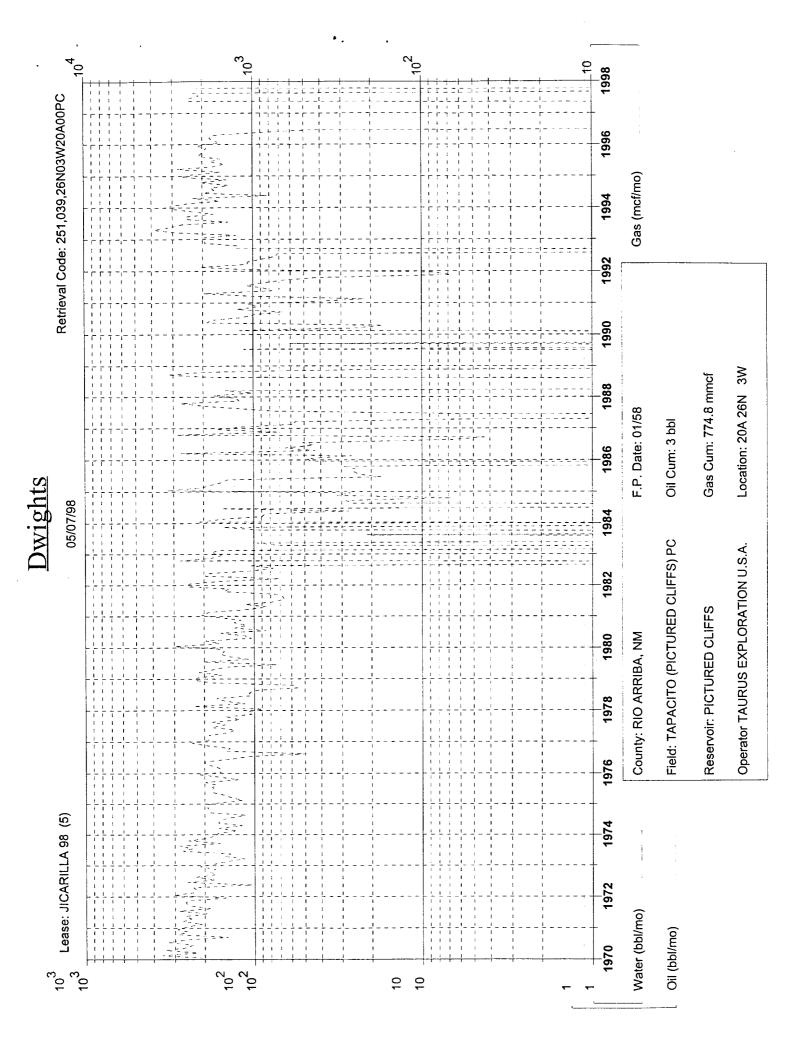
² Pool Code

30	0-039-063	90	85920/72319 Tapacito Pictured Cliffs/Blanco Mesa Verde					a Verde		
⁴ Property	Code				⁵ Property Na	ime		⁶ Well Number		
0071	.67				Jicarilla	98		5		
7 OGRII	No.				8 Operator Na	ame		9 Elevation		
1629	928		Taurus Exploration, U.S.A., Inc.						7267 GL	
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	
Α	20	26N	3W		990 North 990 East Rio		Rio Arriba			
	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	
¹² Dedicated Acr 160/320	es B Join	13 Joint or Infill 14 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

 	NDARD UNIT HAS B		
		,066 	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
			Signature Gary W. Brink Printed Name Production Superintendent Title 5/7/98 Date
2	EGEIVE May 2 8 1998	0	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 under my supervision, and that the same is true and correct to the best of my belief. Date of Survey
@ []	L GON. DIV Dist. 3		Signature and Seal of Professional Surveyer: Reissue of original survey Certificate Number

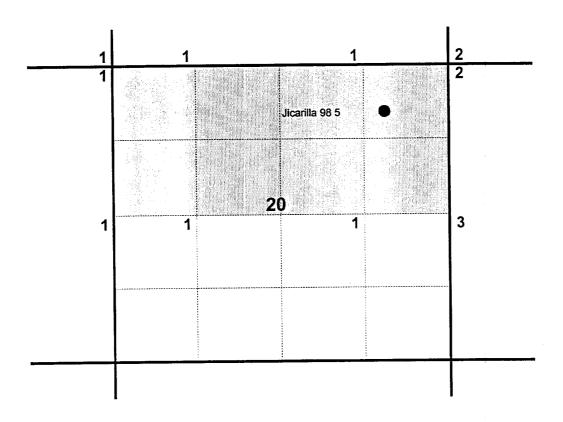




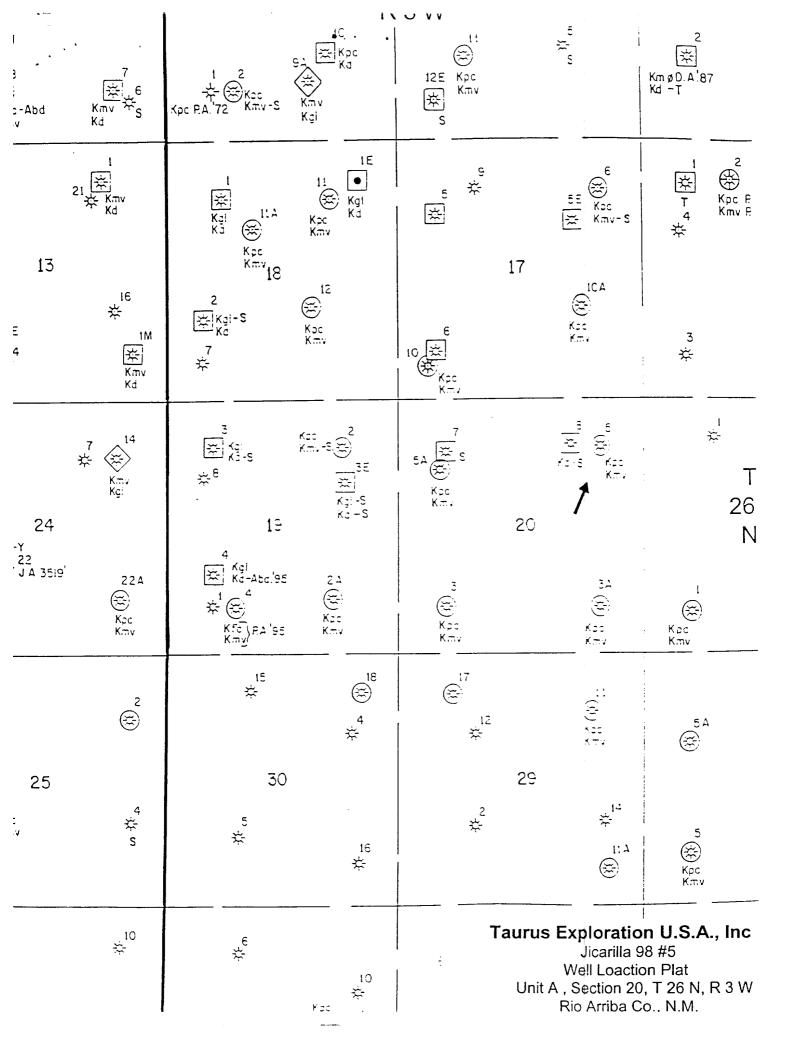
Taurus Exploration U.S.A., Inc

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Township 26 N, Range 3 W



- 1) Taurus Exploration U.S.A., Inc
- 2) Conoco, Inc. 10 Desta Dr. Ste 100W Midland Tx 79705-4500
- 3) Dugan Production Corp. P. O. Box 420 Farmington, N.M. 87401



Jicarilla 98 #5 Unit A, Section 20,T 26 N, R 3 W Rio Arriba Co., N.M.

Subject: Economic Justification To Downhole Commingle

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Operator Taurus Expl. USA, Inc Well Name Jic. 98 B #5

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