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

DISTRICT III

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

2040 9. Pacheco Santa Fe, New Mexico 875054-6429

APPROVAL PROCESS:

X_Administrative __Hearing

EXISTING WELLBORE

OIL CONSERVATION DIVISION

1000 Rio Brazos Rd, Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

X_YES ___NO

Taurus Exploration U.S.A., 1	Inc. 2198	Bloomfield Highway	, Farmin	gton, New Mexico 87401
Jicarilla 98	2 A	Sec. 19, T26N,	R3W	
Lease	Well No. Unit Ltr	Sec - Twp - Rge		Rio Arriba County,
OGRID NO. 162928 Property Co	ode 007167 API NO. 30-0	39-06389	_ Federal _	Unit Lease Types: (check 1 or more) X . State , (and/or) Fee
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)	3730 notched			5361-5967
Type of production (Oil or Gas)	gas			gas
Method of Production (Flowing or Artificial Lift)	flowing			flowing
Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current	a. (Current) 485 calc.	a.		a. 665 calc.
Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	b. (Original) 976 calc.	b.		b.
6. Oil Gravity (^O API) or Gas BTU Content)	1180 BTU			1469 calc.
7. Producing or Shut-In?	producing			1191 BTU shut in
Production Marginal? (yes or no)	no			yes
* If Shut-In, give date and oil/gas/ water rates of last production	Date:	Date: Rates:		Date: 4/90
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data				Rates: 0/68/0
If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	Date: 4/3/98 Rates: 0/115/0	Date: Rates:		Date: Rates:
Fixed Percentage Allocation Formula -% for each zone	Oil: Gas: 63 %	Oil: Gas:	%	Oil: Gas: 37 %
 If allocation formula is based a submit attachments with support 	upon something other than curre	ent or past production method and providing	, or is ba	
 Are all working, overriding, and roy If not, have all working, overriding Have all offset operators been giv 	valty interests identical in all comm	aimmiani mana a O		Yes No Yes No Yes No
	on Y No If you are district	*** * *** **		
2. Are all produced fluids from all co	mmingled zones compatible with e	each other?		es No
3. Will the value of production be dec	_ _	Yes <u>X</u> No	(If Yes,	attach explanation)
4. If this well in on, or communitized United States Bureau of Land Man	agement has been nothied in Wilt	ng of this application.	_X_Yes .	No
5. NMOCD Reference Cases for Rule	303(D) Exceptions: ORDE	ER NO(S)		
* For zones with no prod * Data to support allocati * Notification list of all of	be commingled showing its space ich zone for at least one year. (If uction history, estimated production method or formula. If set operators. If set operators, and royalty interesting, overriding, and royalty interesting, data, or documents required to	on rates and supporting	data.	
hereby certify that the information ab	11			
YPE OR PRINT NAME CON HERE	int.			·····
YPE OR PRINT NAME Gary W. Br	ink	TELEPHON	NE NO. (_	<u>505</u>) <u>325-6800</u>

District I

.PO Box 1980, Hobbs, NM 88241-1980

District II

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

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

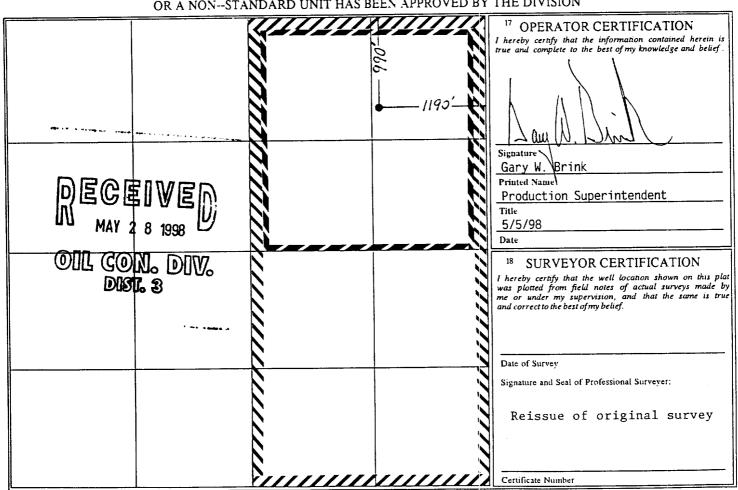
OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

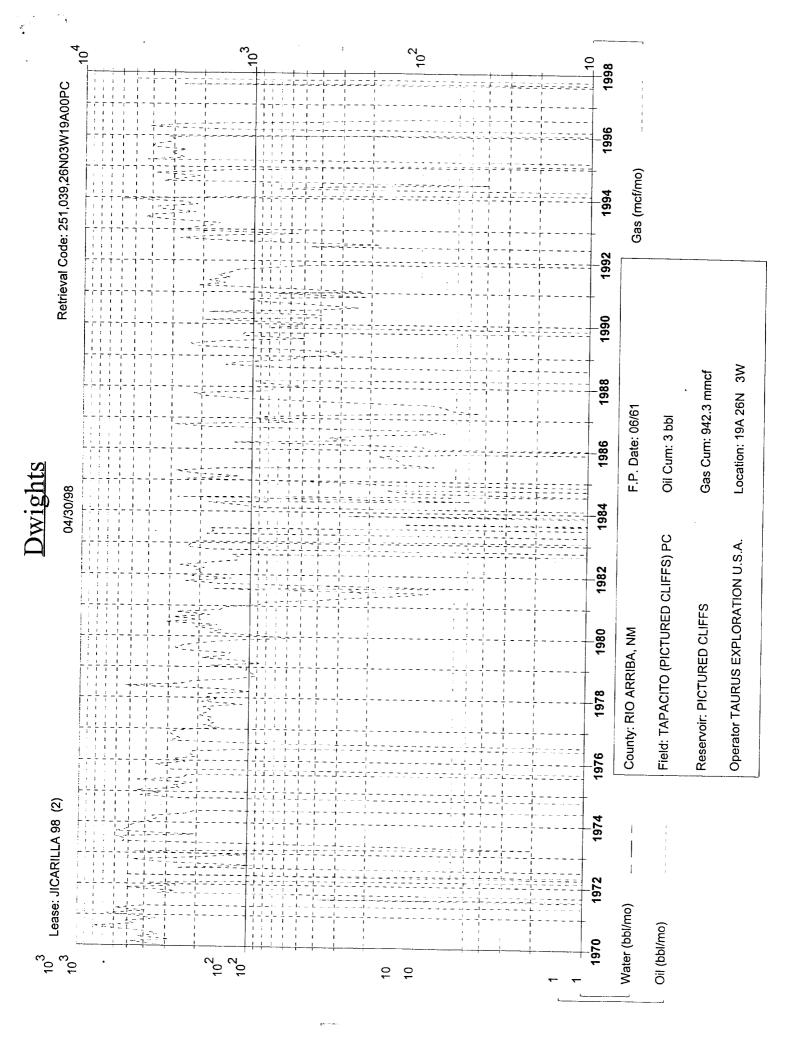
AMENDED REPORT

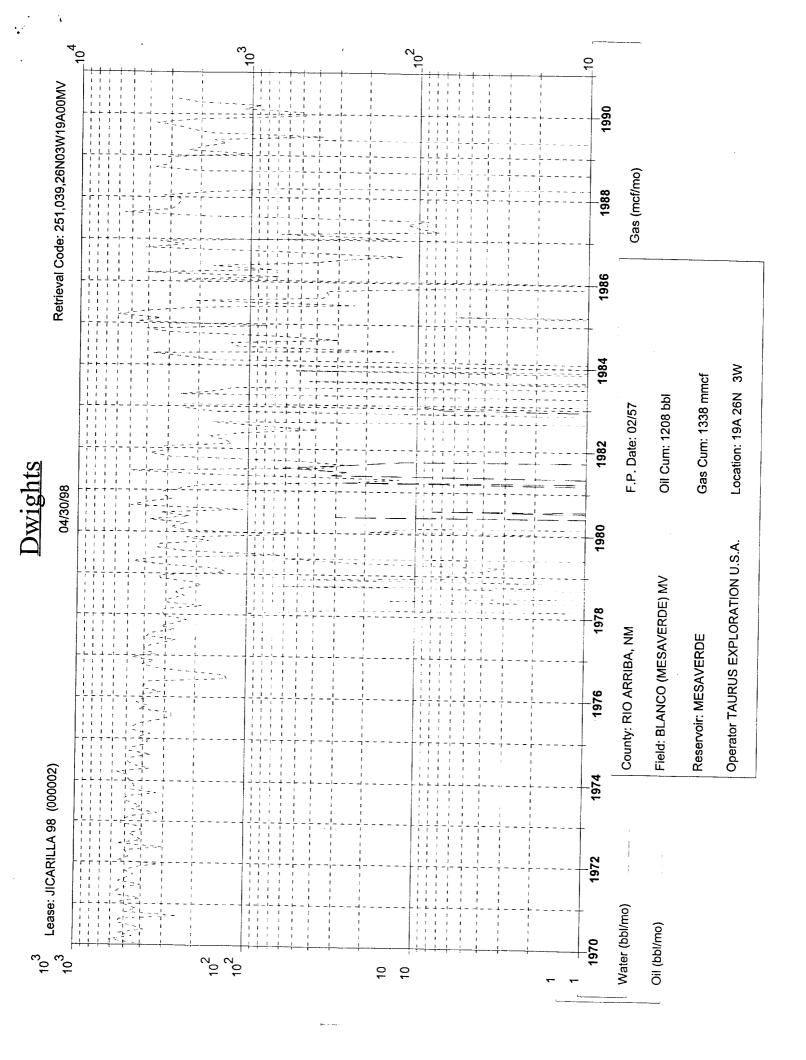
WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	r	² Pool Code ³ Pool Name					e			
30	0-039-063	189		85920/723	19	Tapacito Pictured Cliffs/Blanco Mesa Verde					
4 Property			5 Property Name				me 6 y				
0071					Jicarilla	98	2				
7 OGRID					8 Operator Na	ime		9	⁹ Elevation		
1629	28		Taurus Exploration, U.S.A., Inc.						7019		
1023				10							
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County		
A	19	26N	3W	ļ	990	North	1190	East	Rio Arriba		
	<u>-l_ ,</u>	1	11 Bo	ottom Hole	Location If Diff	erent From Surfa	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 Acre 160/320	es ¹³ Join	t or Infill 14	Consolidation	n Code 15 O	rder 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



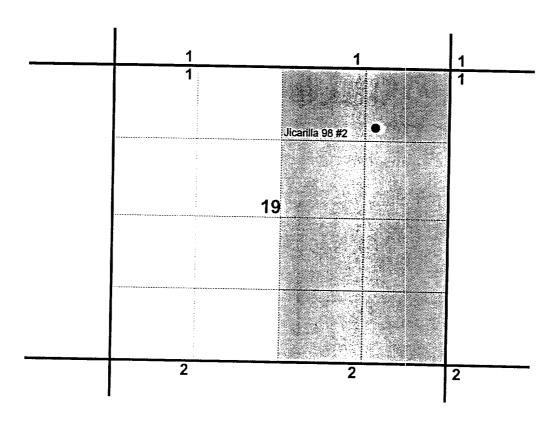




Taurus Exploration U.S.A., Inc

Jicarilla 98 #2 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 100W Midland Tx 79705-4500

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	10 斧	€	10 ×	*	us Exploration U Jicarilla 98 #2 Well Loaction P nit A , Section 19, T 2	2 Yat

CONDITIONS OF APPROVAL FOR DOWNHOLE COMMINGLING

Operator <u>Taurus Expl. USA, Inc</u> Well Name <u>Jic. 98 B #2</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 APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

5. Lease Designation and Serial No.

<u>Jicarilla Contract 98</u>

SUNDRY NOTICES AN	D REPORTS ON WELLS	Jicarilla Contract 98
Do not use this form for proposals to drill		6. If Indian, Allottee or Tribe Name
·	PERMIT - " for such proposals	Jicarilla
	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well Oil X Gas Well Other 2. Name of Operator Taurus Exploration, U.S.A., Inc. 3. Address and Telephone No. 2198 Bloomfield Highway; Farmingtor 4. Location of Well (Footage, Sec., T., R., M., or Survey De 990' FNL, 1190' FEL Sec. 19., T26N,	scription) R3W, NMPM	8. Well Name and No. Jicarilla 98 2 9. API Well No. 30-039-06389 10. Field and Pool, or exploratory Area Tapacito Pictured Cliffs Blanco Mesaverde 11. County or Parish, State Rio Arriba NM
) TO INDICATE NATURE OF NOTICE	DE, REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TY	PE OF ACTION
X Notice of Intent Subsequent Report Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off
	Altering Casing X Other Downhole	Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
13. Describe Proposed or Completed Operations (Clearly state all give subsurface locations and measured and true vertical trial intended to downhole comming). 1. Pull and lay down 120 joints 3/2. Pull and lay down 192 joints 3/3. Release packer and TOH with 2 3 4. TIH and clean out to below 5967 5. Land tubing at 5900'. Install An application to commingle has been	e this well as follows: 4" tubing from PC. 4" tubing from MV. /8" tubing. . single wellhead and swab in.	timated date of starting any proposed work. If well is directionally drilled
1		Commission of the Commission o

14. I hereby certify that the foregoing is true and correct Signed	Title Production Superintendent	Date 5/5/98
(This space for Federal of State of Federal of	Lands and Mineral Resources	MÂY 2 2 1998

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.

Jicarilla 98 #2 Economic Justification to Downhole Commingle

Pictured Cliffs is producing thru 3720' of 3/4" tubing Mesa Verde is logged off with fluid, unable to swab with 5945' of 3/4" tubing inside 2 3/8" string

Commingle wellbore and run single string of 2 3/8" tubing with plunger lift Utilize Pictured Cliffs gas to help lift Mesa Verde fluid

Anticipated rate increase - 75 MCFD

Gas Price = \$2.00/ MCF Increased Revenue Stream = $75 \times 2 = $150/$ day Increased Royality = $$150 \times .125 = 18.75 per day

Commingling with return a non-productive well to production and increase the total life and royality stream from the well

TAURUS

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

98 MAY 11 PM 12: 59

May 6, 1998

ALBUQUERQUE, N.M.

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 #2

990' FNL, 1190' FEL, Sec. 19, 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 existing mechanical problems 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
- 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.

Sincerely,

Gary W.\Brink

Production Superintendent

GWB/df

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

AN **ENERGEN** COMPANY

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

DISTRICT III

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

APPROVAL PROCESS:

 $\underline{\underline{\mathsf{X}}}$ Administrative $\underline{\underline{\hspace{0.3cm}}}$ Hearing

EXISTING WELLBORE

1000 Rio Brazos Rd, Aztec, NM 87410-1693 APPLICATION FOR DOWNHOLE COMMINGLING

X_YES ___NO

Taurus Exploration U.S.A., I	nc. 2198	Bloomfield Highway,	Farming	ton, New Mexico 87401
Jicarilla 98	2A	Sec. 19, T26N,	R3W	Rio Arriba County,
OGRID NO. 162928 Property Co	Well No. Unit Ltr : de <u>007167 </u>	39 - 06389	Spacing Federal	County Unit Lease Types: (check 1 or more)
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)	3730 notched			5361-5967
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 Gas & Oil - Flowing:	485 calc.			665 calc.
Measured Current All Gas Zones:	b. (Original)	b.		b.
Estimated Or Measured Original	976 calc.			1469 calc.
6. Oil Gravity ([©] API) or Gas BTÜ Content)	1180 BTU			1191 BTU
7. Producing or Shut-In?	producing			shut in
Production Marginal? (yes or no)	no			yes
* If Shut-In, give date and oil/gas/ water rates of last production	Date: Rates:	Date:		Date: 4/90
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data				0/68/0
* If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	Date: 4/3/98 Rates: 0/115/0	Date: - Rates:		Date: Rates:
8. Fixed Percentage Allocation Formula -% for each zone	Oil: Gas: 63 %	Oil: Gas:	%	Oil: Gas: 37 %
If allocation formula is based usubmit attachments with support	inon something other than curr	ent or past production	, or is ba	
Are all working, overriding, and rould not, have all working, overriding Have all offset operators been given.	valty interests identical in all com-	mindled zones?		YesNoNoYesNoNoYesNoNo
 Will cross-flow occur?Y flowed production be recovered, 	es <u>X</u> No If yes, are fluids and will the allocation formula be	compatible, will the for	rmations n Yes1	ot be damaged, will any cross- No (If No, attach explanation)
12. Are all produced fluids from all co				es No
Will the value of production be dec	creased by commingling?	Yes <u>X</u> No	(If Yes,	, attach explanation)
 If this well in on, or communitized United States Bureau of Land Mar 	with, state or federal lands, eithe nagement has been notified in writ	r the Commissioner of F ting of this application.	Public Land _X_Yes	ds or the No
15. NMOCD Reference Cases for Rule	e 303(D) Exceptions: ORD	ER NO(S)		
* Froduction curve for ea * For zones with no proof * Data to support allocat * Notification list of all o	o be commingled showing its spanish zone for at least one year. (If uction history, estimated production method or formula. If set operators. cing, overriding, and royalty interesting, data, or documents required to	not available, attach ex ion rates and supporting	planation.) data.	
hereby cortification that the installant				
SIGNATURE	11	est of my knowledge ar TITLE <u>Prod, Superi</u> r		DATE 5/5/08
TYPE OR PRINT NAME Gary W. Br				505) 325-6800

District I

PO Box 1980, Hobbs, NM 88241-1980

-FO Bux 1980, Hubus, 14M 68241-190

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2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 Form C-102
Revised October 18, 1994
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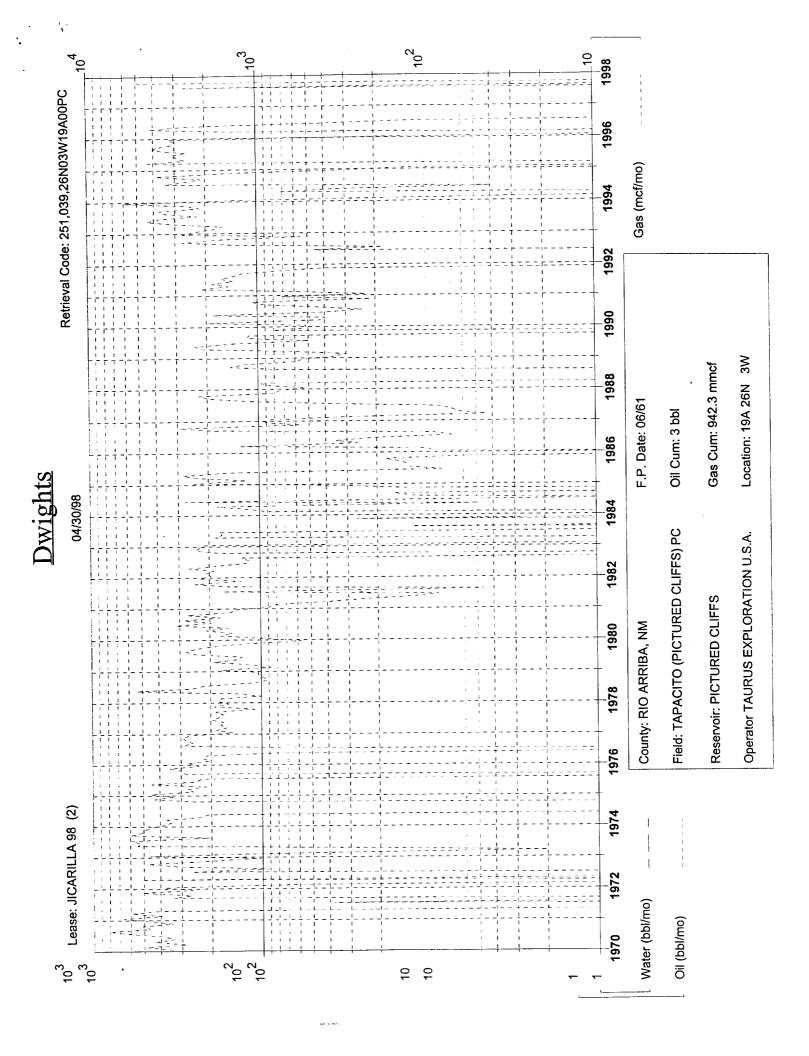
X AMENDED REPORT

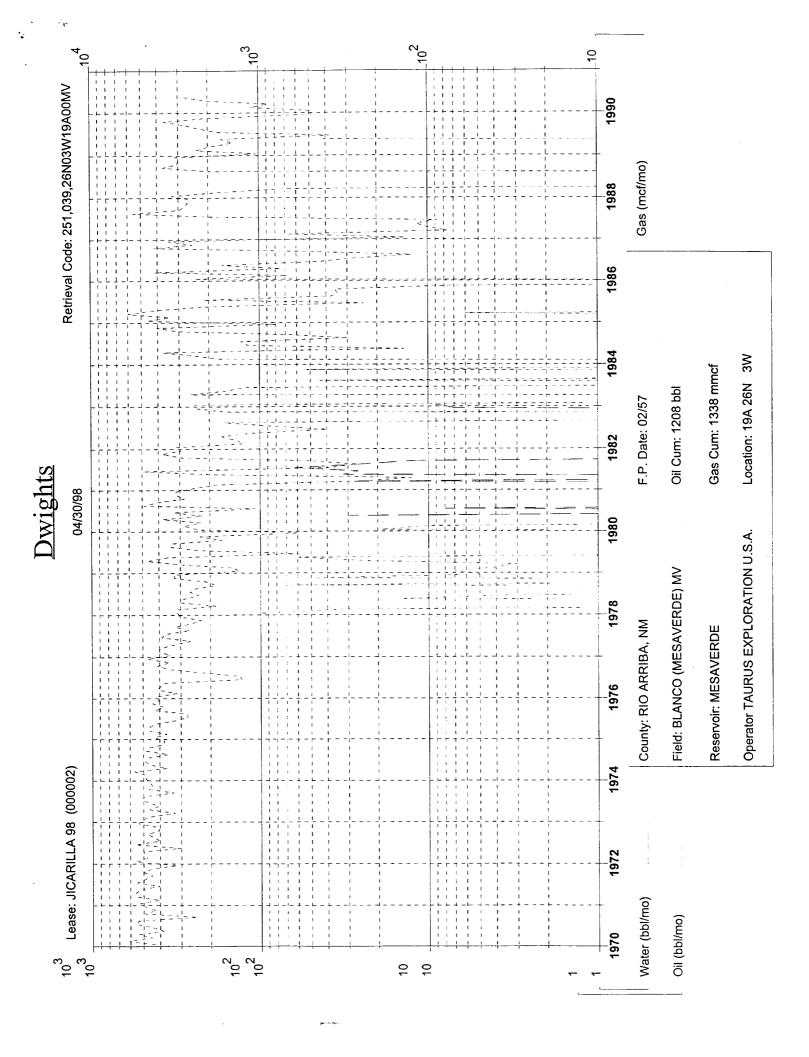
WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Numbe	r		² Pool Code		³ Pool Name						
30	0-039-063	389		85920/7231	9	Tapacito Pictured Cliffs/Blanco Mesa Verde						
⁴ Property	Code				⁵ Property Na	operty Name 6 Well Number						
0071	.67			Jicarilla 98				carilla 98 2				
7 OGRII	No.		_		8 Operator Na	me		9	Elevation			
1629	928			Taurus I	Exploration.	U.S.A., Inc.			7019			
				10	Surface Locat	ion						
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County			
Α	19	26N	3W		990	North	1190	East	Rio Arriba			
			11 Bo	ottom Hole L	ocation If Diffe	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			
Dedicated Acr 160/320	es ¹³ Join	t or Infill 14	Consolidatio	n Code 15 Ord	er No.	3	<u> </u>					
NO ALLO	WABLE V					INTIL ALL INT APPROVED B			SOLIDATED			
					2066	— 1190'—	I hereby certify	TOR CERTIF that the information e to the best of my k	ICATION 1 contained herein is thoused by and belief			

12 cm 10. 12/2/21 Signature > Gary W. ∖Brink Printed Name Production Superintendent MAY 2 8 1998 Title 5/5/98 Date 18 SURVEYOR CERTIFICATION DIST. 3 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 Signature and Seal of Professional Surveyer: Reissue of original survey

Certificate Number

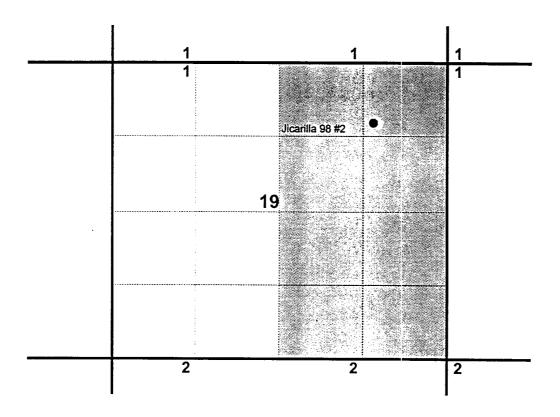




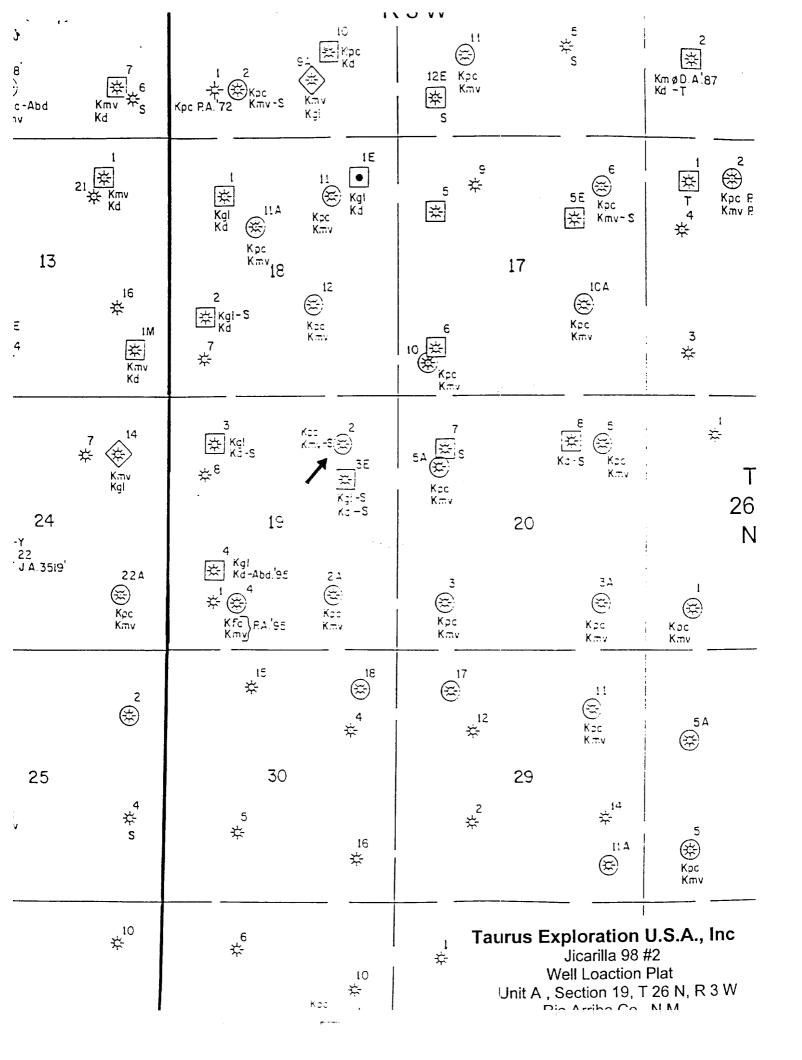
Taurus Exploration U.S.A., Inc

Jicarilla 98 #2 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 100W Midland Tx 79705-4500



CONDITIONS OF APPROVAL FOR DOWNHOLE COMMINGLING

Operator <u>Taurus Expl. USA, Inc</u> Well Name <u>Jic. 98 B #2</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.
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