2	10	/97	3	/3	197	<u> </u>	1,00mm	ΚV	DHC
	<del></del>								

ABOVE THIS LINE FOR DIVISION USE ONLY

### NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -ORANCE . ADMINISTRATIVE APPLICATION COVERSHEET THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS **Application Acronyms:** [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 Prod [1] TYPE OF APPLICATION - Check Those Which Apply for [A] [A] Location - Spacing Unit - Directional Drilling ☐ NSL ☐ NSP CONSERVATION DIVISION Check One Only for [B] or [C] [B] Commingling - Storage - Measurement **X** DHC ☐ CTB Q PLC ☐ PC OLS OLM OLM [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery □ WFX ☐ PMX □ SWD ☐ IPI ☐ EOR ☐ PPR NOTIFICATION REQUIRED TO: - Check Those Which Apply, or \(\sigma\) Does Not Apply [2] [A] ☐ Working, Royalty or Overriding Royalty Interest Owners Offset Operators, Leaseholders or Surface Owner [B] 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 For all of the above, Proof of Notification or Publication is Attached, and/or, [E] [F] ☐ Waivers are Attached INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding 131

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 further verify that all applicable API Numbers are included. 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.

Print or Type Name

Signature Signature

REGULATORY AFFAIRS ENGR.

Title

2/7/97 Date



February 7, 1997

P. O. Box 6429

Mr. William J. LeMay, Director

2040 S. Pacheco Street

Santa Fe, NM 87505

New Mexico Oil Conservation Division

1457

#### **Amoco Production Company**

San Juan Business Unit Post Office Box 800 Denver, Colorado 80201 303-830-4040

Application for Exception to Rule 303-A- Downhole Commingling Florance D LS #9 Well Unit M Section 17-T27N-R8W Otero Chacra and Blanco Mesaverde Pools San Juan County, New Mexico

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. By copy of this application by certified mail, return receipt requested, Amoco is notifying all offset operators in the formations captioned above as well as all affected interest owners if the ownership of those formations is not common. The Division Director may approve the proposed downhole commingling in the absence of a valid objection from any offset operator or any interest owner in those instances where ownership is not common in the zones to be commingled within 20 days after the receipt of the application if, in his opinion, waste will not result thereby, and correlative rights will not be violated.

Should there be questions concerning this matter, please contact me at (303) 830-5344.

Sincerely

Pamela W. Staley

**Enclosures** 

cc: Mark Rothenberg

Pat Archuleta

177 1161

Wellfile

**Proration File** 

Frank Chavez, Supervisor NMOCD District III 1000 Rio Brazos Road Aztec, NM 87410

Duane Spencer
Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87401

District I PO Box 1980, Hobbs, NM 22241-1980 \$11 South First, Artesia, NM 88210

# State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 18, 1994 Instructions on back

OIL CONSERVATION DIVISION FOR

Submit to Appropriate District Office

District III 1000 Rio Brazos Rd., Aztec, NM 37410 District IV							Pacheco BI	M	ount to re	State	Lease - 4 Copies Lease - 3 Copies	
2040 South Pacheco, Santa Fe, NM 87505							97 JAN 17	PH 2: 05		AME	NDED REPORT	
		WE	LL LO	CATION	AND A	<b>ACF</b>	REAGE PERI	CATURNIM	LAT		·.	
'7	API Numbe		$\top$	<sup>1</sup> Pool Code			<b>G, G</b>	Poul N	ause <i>G</i>	AS Po.	ol.	
3004	506453			82329			Otero C	hacra Gas	is Pool			
* Property 0				Floran	perty			* Well Number				
<b>'ogrid</b> 00077			Amoco	Produc	Ope tion Co		Name .ny			* Elevation 6792 *		
	6, 3				10 Surfa	ace	Location	,				
UL or let po.	Section	Township	Range	Lot Ida	Feet from t	ibe	North/South line	Feet from the	East/Wes	t line	County	
. м.	17	27N	8W	[	1090		South	1090	West		San Juan	
			11 Bot	tom Hol	e Locatio	on I	f Different Fro	om Surface				
UL or lot so.	Section	Township	Range	Lot ldn	Feet from t	ιbe	North/South line	Feet from the	East/Wes	rt line	County	
" Dedicated Acr	es 13 Joint	or Infill 14 (	Consolidatio	is Code 15 C	Order No.							
NO ALLOV	WABLE '						ON UNTIL ALL EEN APPROVED			EN CO	NSOLIDATED	
16								I hereby cer	tify that the i	nformation	TIFICATION contained herein is knowledge and belief	
								Printed Na Staff Title	chuleta	a ant	leta	
					<del></del>		· · · · · · · · · · · · · · · · · · ·	Date				
		·						I hereby cer was ploued me or under and correct	tify that the v from field no my supervisi to the best of 17,1957	vell location tes of actua ion, and th	TIFICATION on shown on this plat al surveys made by hat the same is true	
1090'	1090							Signature as	d Scal of Pro	ofessional (	Surveyer:	

Certificate Number

# State of New Mexico Energy, Minerals and Natural Resources Department

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

x: YES \_\_ NO

### **OIL CONSERVATION DIVISION**

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

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

X Administrative \_\_ Hearing

B11 South First S

1000 Rio Brazos Rd. Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

Amoco Production Company										
Operator Florance D LS	9	M-17-27N-8W San Juan								
Lease	Weil No.	Unit Ltr Sec Twp - Rge Spa	County  cing Unit Lease Types: (check 1 or more)							
OGRID NO. 000778 Property Code	000529 API NO. 3004506		State (and/or) Fee							
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone							
Pool Name and	OTERO CHACRA 82329		BLANCO MESAVERDE 72319							
Pool Code  2. Top and Bottom of     Pay Section (Perforations)	3844' - 3992'		5146' - 5306'							
Type of production     (Oil or Gas)	GAS		GAS							
Method of Production     (Flowing or Artificial Lift)	FLOWING		FLOWING							
Bottomhole Pressure     Oil Zones - Artificial Lift:	a. (Current) 635 PSI	a.	a. 450 PSI							
Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) 1050 PSI	b.	b. 1250 PSI							
6. Oil Gravity (° API) or Gas BTU Content	1150 BTU		1200 BTU / 49 DEG API							
7. Producing or Shut-In?	PRODUCING		PRODUCING							
Production Marginal? (yes or no)	YES		NO							
If Shut-In, give data 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	Date: Rates:	Date Rates:	Date Rates:							
If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates: MODEL OF OFFSETS 120 MCFD	Date: Rates:	12/96 Date: 97 MCFD Rates: 95 BCPD 0.5 BWPD							
Fixed Percentage Allocation     Formula -% for each zone	Oil: 0 Gas 55 %	Oil: Gas %: %	Oil: 100 %: Gas 45 %							
supporting data and/or explaining  10. Are all working, overriding, and ro	method and providing rate projections yalty interests identical in all commingle	ed zones?								
Have all offset operators been give	, and royalty interests been notified by on written notice of the proposed downline.	hole commingling?	_X_ Yes No Yes No _X_ Yes No							
and will the allocation formula be	reliableX_Yes No (If No, attach		cross-flowed production be recovered,							
	mmingled zones compatible with each									
14. If this well is on, or communitized	creased by commingling? Yes _ with, state or federal lands, either the C	Commissioner of Public Lands or the Unite	•							
has been notified in writing of this	<ul> <li>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 applicationX_ Yes No NM-03380</li> <li>15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S)</li></ul>									
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.										
	ove is true and complete to the best of		···							
SIGNATURE SIGNATURE PAMELA	W. STALEY	TITLE REGULATORY AFFAIRS E								
THE UN PRINT NAME PAMELA	VV. STALET	TELEPHONE NO. ( _303	3 ) 830-5344							

#### MEXICO OIL CONSERVATION COMM.

Well Location and Acreage Dedication Plat

ALOF EL PASO NATURAL GAS COMPANO. 9-D (PM) Unit Letter M Se	etion 17	Lease FLC	PRANCE 27 I	NM I V Range	8 🕷 🕛	_NM
ed 1090 Feet From SOUI y SAN JUAN G. L. Elevat	ion 16797	Luan De	. Feet From diented Aeronge	320 & 10	)0 	1.
of Producing Formation MESA VERDE the Opapator the joily owner in the dedic	e pictured	CLIFFPo	" Branco RX	r by - 50	BLANCO	PC.
No				4. 2. 2. 2. 2.		 
the miswer to question one is "no", greement or otherwise? Yes						iliza
:						
the answer to question two is "no", lis	st all the owne	rs and their res	spective interes Land Descrip			-
. <del></del>					EIVE	ب
**			a de la composição de l	FER	1958	}
		1	The second secon	U. S. GEO	OSICAL.	MR)
		<u> </u>		U. S. GEO! FARMINGT	UN' NEM	MIL
$\mathbf{n}_{i}\mathbf{B}_{i}$ . The second $\mathbf{a}_{i}$	Note: All	distantas must	be tropi outer b	oundaries of	section.	1
is to certify that the information	l .				ı	
tion A above is true and complete best of my knowledge and bolief.		· -   · · · · · · · · · · · · · · · · ·				
Paso Natural Gas Company			1		1	İ
(Operator)		<u> </u>			1	
g'nal Signed D. C. Johns'on 997 (Representative)					1	
					1 2	
nington, Meir Mexico			1		1	
	××××××	***	SECTION 17			
		*****	***		1	
						7
	₩N X	03380	- <b>X</b>			
	× 1090'					
		<b>-⊙</b>	- <b>X</b>		1	
		0	- · 💥 - i		1	
		0			1	
		<b>XI</b> XXXXXXX	×			] ;
$\mathcal{L}_{\mathbf{u}} = \{ \mathbf{u}_{\mathbf{u}}^{(i)} : \mathbf{u}_{\mathbf{u}}^{(i)} \in \mathcal{U}_{\mathbf{u}}^{(i)} \} $ , where $\mathbf{u}_{\mathbf{u}}^{(i)} \in \mathcal{U}_{\mathbf{u}}^{(i)} \}$	0 330 660	90 1320 1680 1980	2310 2640 2000	1800 1000	500	j .
		Scale 1	inches equal 1	mile		
	• •	10 m			· · · · · · · · · · · · · · · · · · ·	

of my knowledge and belief.

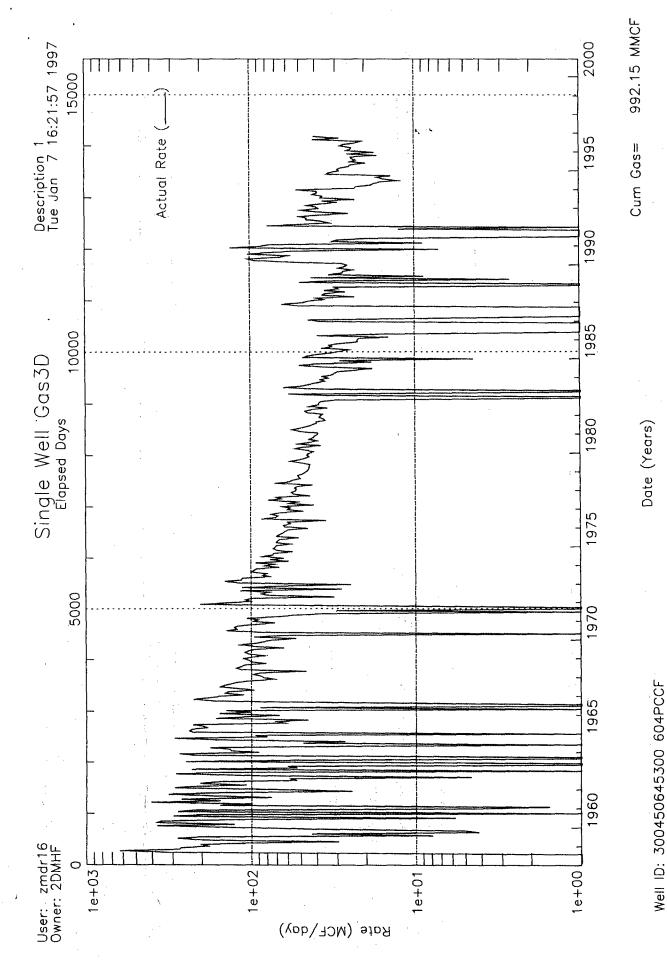
Farmington, New Mexico

(Seal)

Date Surveyed OCTOBER 17, 1951

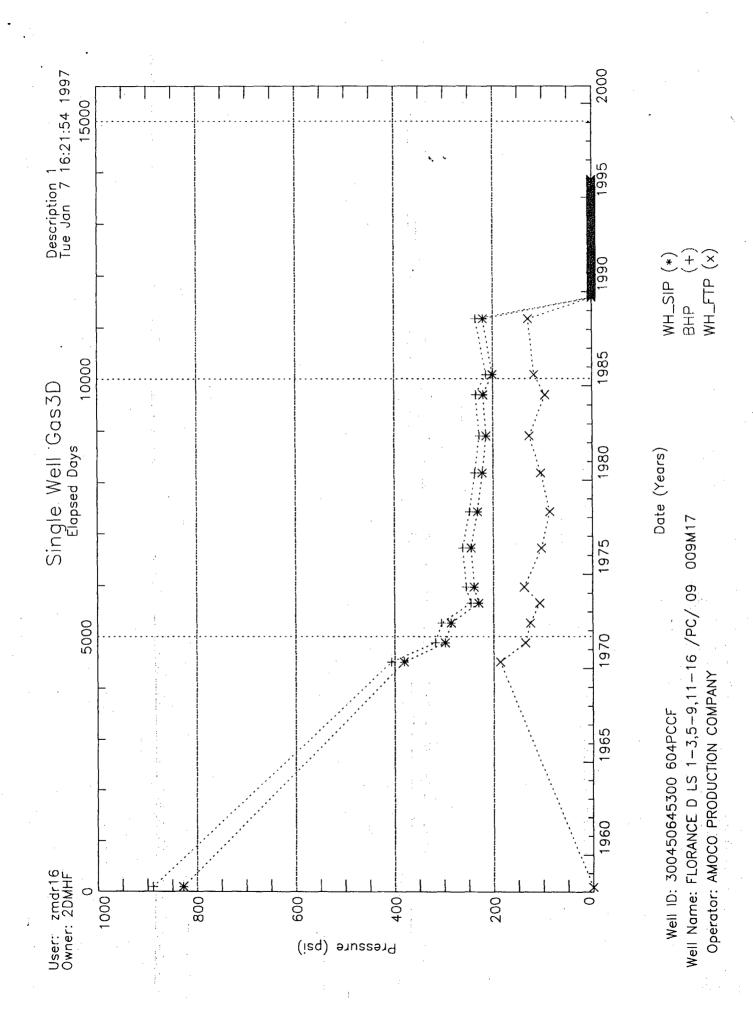
made by me or under my supervision and that the same are true and correct to the best

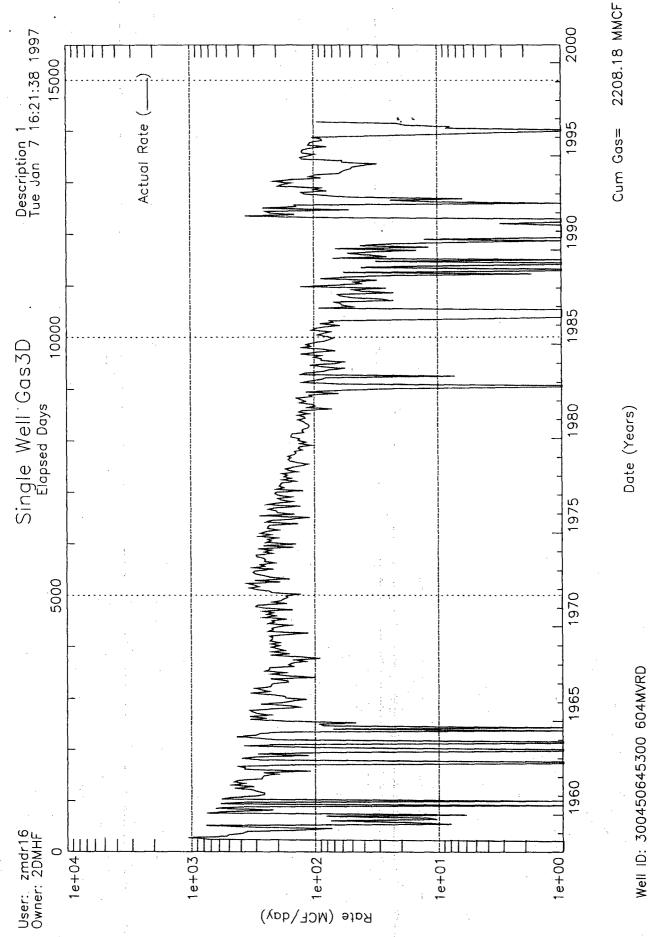
Registered Professional Engineer and/or Land Surveyor



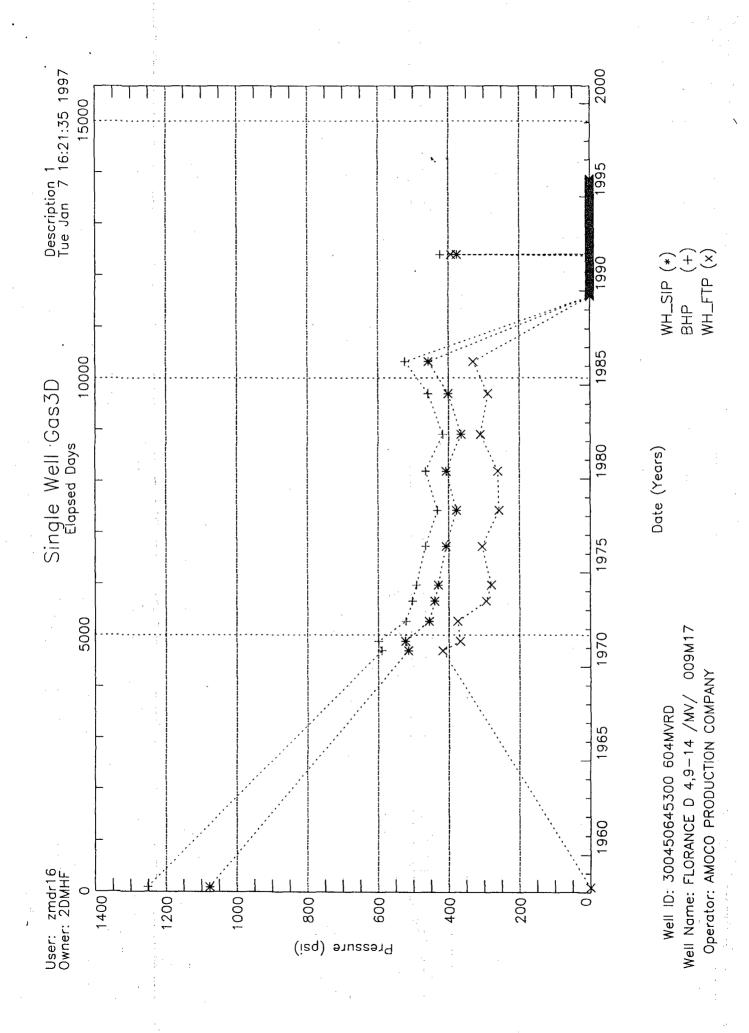
Well Name: FLORANCE D LS 1-3,5-9,11-16 /PC/ 09 009M17

Operator: AMOCO PRODUCTION COMPANY

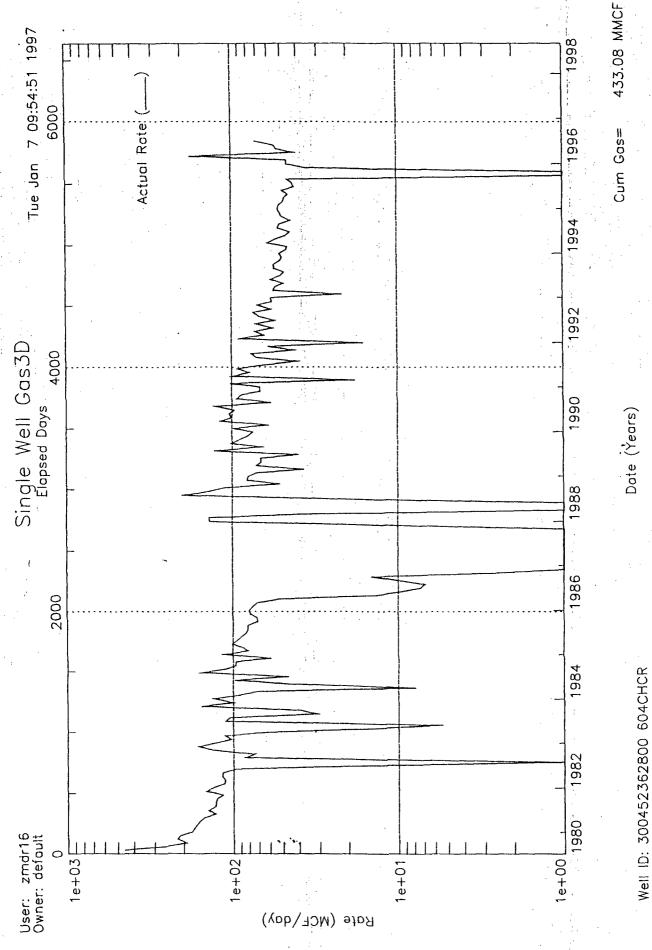




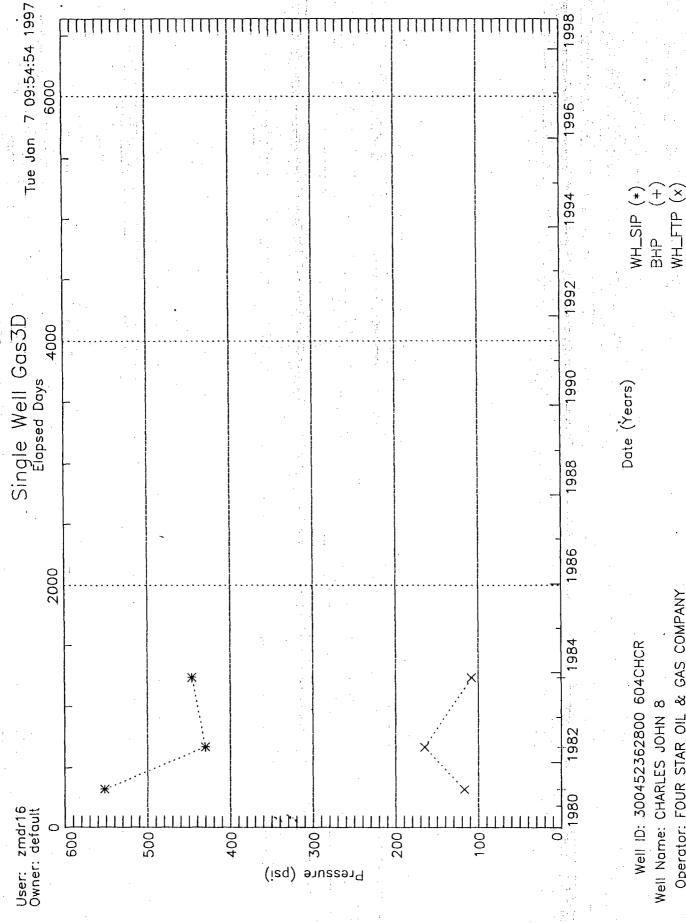
Well Name: FLORANCE D 4,9-14 /MV/ 009M17
Operator: AMOCO PRODUCTION COMPANY



	000mp				
♦	<b>⊕</b>	H + + + + + + + + + + + + + + + + + + +	⊕ • • • • • • • • • • • • • • • • • • •		<b>1</b>
<b>(a)</b> ♦	<b>⊕</b> <sup>♠</sup>	*	+ ⊕ <u>A</u> <u>+</u> ®	<u>A</u> ⊕	æ ÷
1	s John 8 +	\$ ⊕	<u>A</u> ⊕		<b>₩</b>
3200 5560	P±i	⊕ <b>(2)</b>	<b>(</b>	<b>+</b>	<b>⊕</b> Å
♠ A ⊕	<u>A</u> <b>®</b> ⊕	FLOMINED 9 Flora 80 mg 1650	UCA D 17  FD		Ð
<b>(1)</b>	± € 60	<b>♣</b>	<b>D</b>	Marrow 42-2 80 MCFD 7007si A	⊕_+
(III)	<b>⊕ ⊕</b>	<b>Ø</b> ◆3	FLORANCE & 14	( <del>+</del> )	<b>B</b> <sup>+</sup>
(A)	<b>(b)</b>	<b>A (b)</b>	€ ⊕	⊕ <u>A</u>	
<b>(</b>	♣ ♦	A S	<b>A</b>	⊕ Æ⊕ <u>Å</u>	<b>⊕</b>
<b>*</b>	★ ★ ★ ★		<b>★ ★</b>	<b>Å</b> ⊕	<b>P</b>
<b>®</b> ⊕	♦ ♠	<b>®</b> ⊕	<b>△</b>	<b>№</b>	⊕ ♠
4		AVG RATE - 120 ML AVG PR. = 637 PS	50		



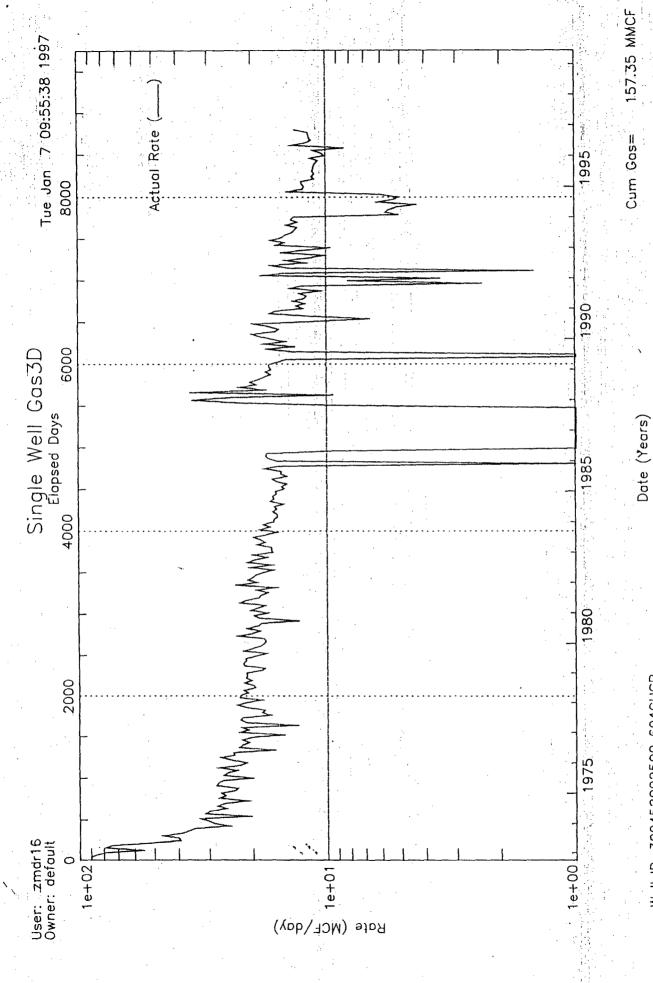
Well Name: CHARLES JOHN 8 Operator: FOUR STAR OIL & GAS COMPANY



Well ID: 300452362800 604CHCR Well Name: CHARLES JOHN 8

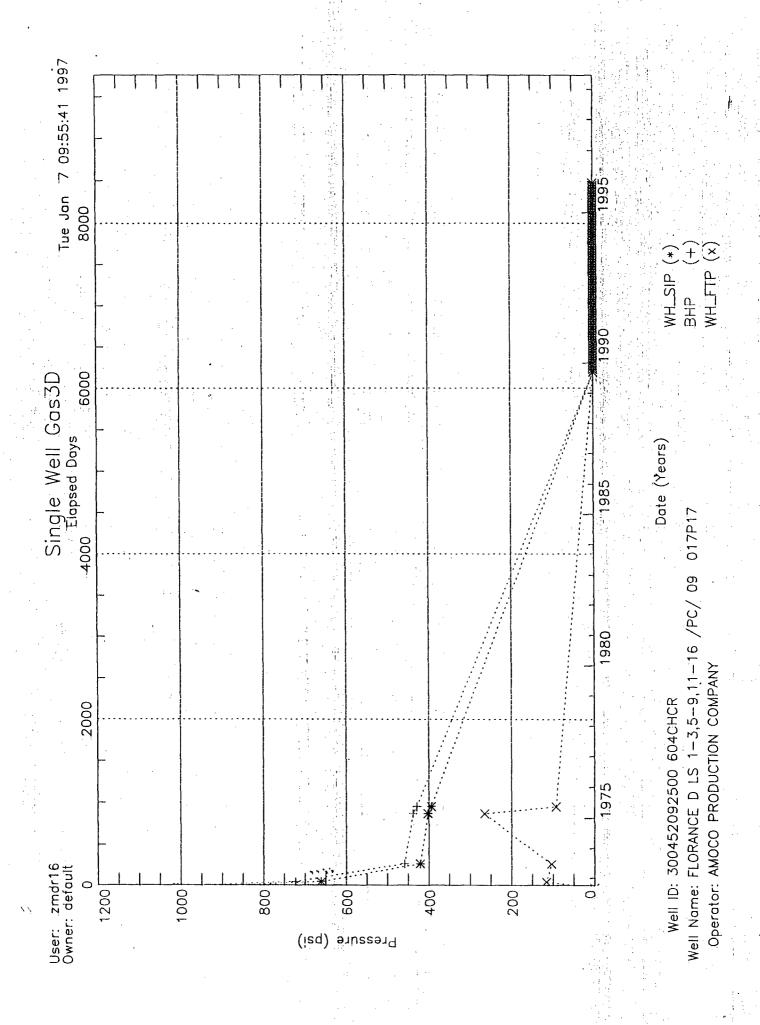
 $\pm$ 

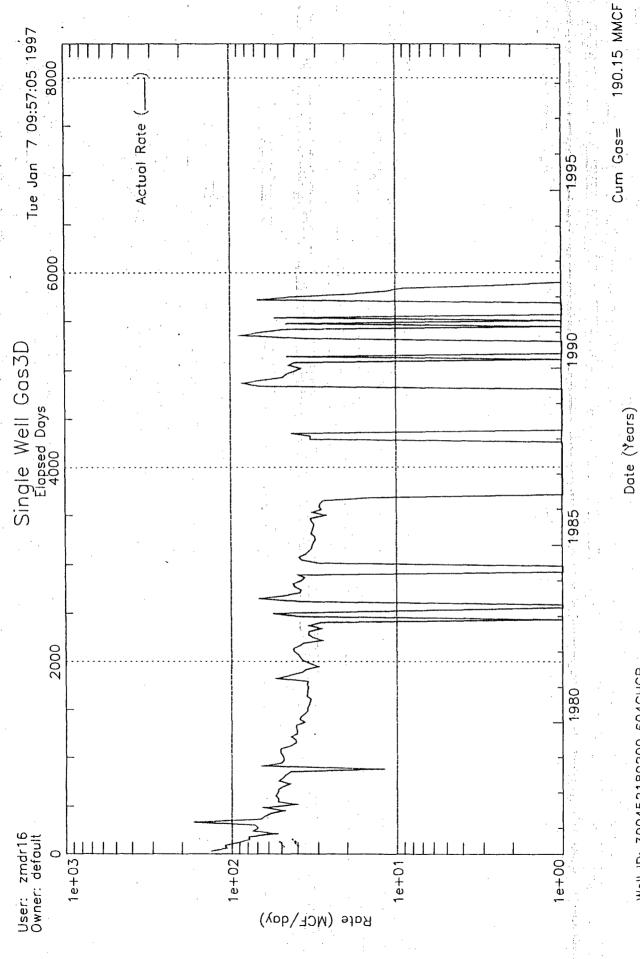
Operator: FOUR STAR OIL & GAS COMPANY



Well Name: FLORANCE D LS 1-3,5-9,11-16 /PC/ 09 017P17

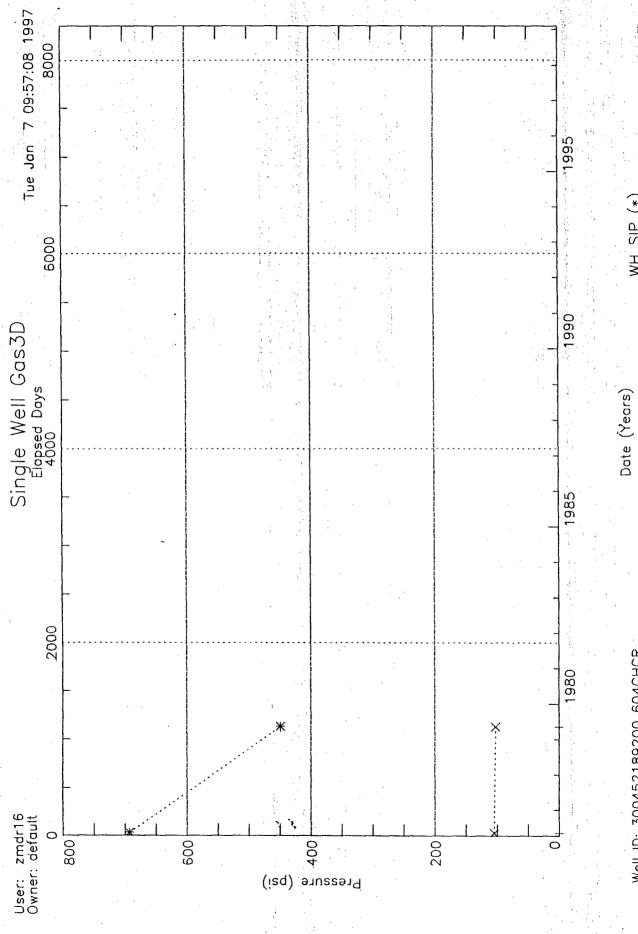
Operator: AMOCO PRODUCTION COMPANY





Well ID: 300452189200 604CHCR

Well Name: MARRON 42-A Operator:



Well ID: 300452189200 604CHCR

Well Name: MARRON 42-A

Operator:

WH\_SIP (
BHP (

## Wellbore Configuration Florance D LS #9

Note that this well is currently a Pictured Cliffs and Mesaverde Dual Completion. The Pictured Cliffs formation pressure is too low to be commingled at this point with the Chacra and Mesaverde. Therefore, the wellbore will be configured with the Pictured Cliffs zone isolated as a dual completion with the Mesaverde and Chacra downhole commingled.

## Allocation Method and Bottomhole Pressure Data Florance D LS #9

We recommend allocating production based on modeling of the surrounding wells. The Chacra is estimated to produce at an average rate of 120 MCFD and no condensate at a reservoir pressure of 637 PSI. Average production for the past month in the Mesaverde is 97 MCFD with 0.5 BOPD and 0.5 BWPD. Therefore we recommend allocation of 55% of the gas production to the Chacra and 45% of the gas production to the Mesaverde. Allocation of condensate should be 100% to the Mesaverde as the Chacra does not produce liquids in this area.

# OFFSET OPERATORS Florance D LS #9

Conoco, Inc. 10 Desta Drive West Midland, Texas 79705