OIL CONSERVE TON DIVISION

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BEITIS, BOYLE & STOVALL P. O. BOX 1240 GRAHAM, TEXAS 76046 (817)-549-0780 OR FAX (817)-549-7405

March 25, 1991

State of New Mexico Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87504

Re: Downhole Commi

Commingling

Application

Exxon Federal "8" No. 1

Dear Mr. Catanach:

At your request I have reviewed the Division Rule #303 and have included the enclosed additional information. Not all of the information requested in Part 2 of Rule 303 is available because we do not have individual tests on the Morrow zone. To gather the actual bottom hole pressure would require isolating both zones to individually test.

At this time the two zones combined are producing approximately 2700 mcf/month. At this rate and at a 50% rate of decline the remaining reserves are small and do not warrant the expense of isolating and testing these zones separately. It is our opinion that neither zone alone could be economically produced and that to deny commingling would be wasteful as these reserves would not be recovered.

Both zones produce dry, pipeline quality gas with only traces of water and condensate. These fluids are compatible and should present no operational problems.

Based on current tests we now recommend allocating 55% of production to the Morrow and 45% of production to the Atoka.

Please be advised that we have sent letters to all offset operators regarding this proposed commingling of production. If you need further information please advise.

Yours truly,

BETTIS, BOYLE & STOVALL

Steven D. Gray

Petroleum Engineer

Exxon Federal "8" No. 1 Rustler Bluff Field Eddy County, NM

Morrow - Bottom Hole Pressure Unknown Atoka - Bottom Hole Pressure Est. - 1600 PSIG

Recommended Formula For Allocating Production

Atoka production prior to adding Morrow perfs.

From decline curve was 1500 mcf/month 12/90

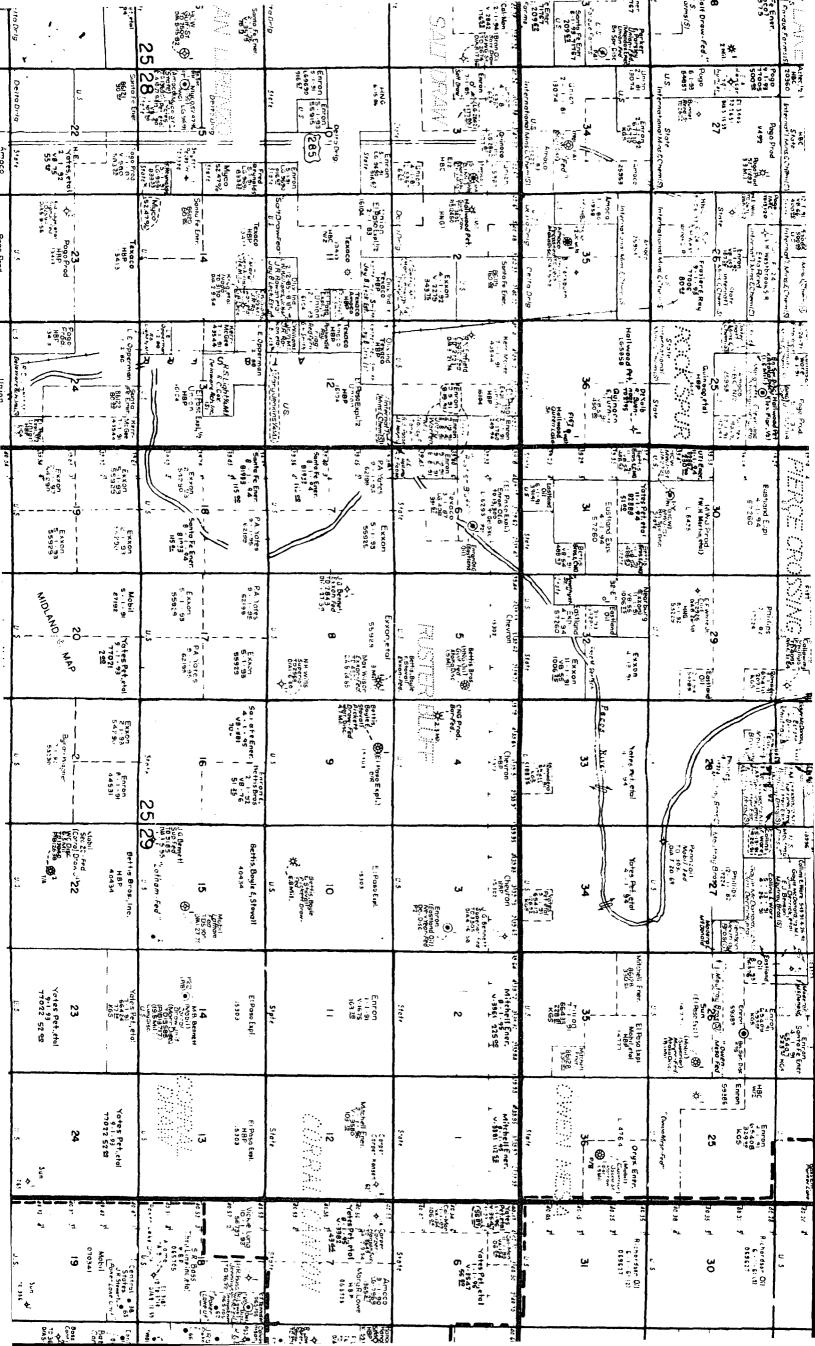
Production after workover - 3300 mcf/month 12/90

Production after workover 3300 mcf/mo Production from Atoka prior to workover -1500 mcf/mo

Production estimated from Morrow 1800 mcf/mo

Morrow 1800/3300 = 55%Atoka 1500/3300 = 45%

GAS, MCF/MONTH And Andrews An Texas Oil & Cas Corp. 19 RUSTLER BLUFF



March 25, 1991

Oil Conservation Division 324 West Main Petroleum Building P.O. Drawer DD Artesia, NM 88210

RE: BETTIS, BOYLE & STOVALL

Exxon "8" Federal Well No. 1 Sec. 8, T-25-S, R-29-E Eddy County, New Mexico

Gentlemen:

I, Kim Ligon, hereby certify that on March 25, 1991, written notification was given of our application to downhole commingle, exception to Rule 303-A, to each of the attached offset operators.

Sincerely,

BETTIS, BOYLE & STOVALL

Kim Ligon

Production Analyst

kl Encl.

BETTIS, BOYLE & STOVALL P. 0. BOX 1240 GRAHAM, TEXAS 76046 817-549-0780

OFFSET OPERATORS TO

BETTIS, BOYLE & STOVALL'S EXXON "8" FEDERAL WELL NO. 1 SEC. 8, T-25-S, R-29-E EDDY COUNTY, NEW MEXICO

APPLICATION TO DOWNHOLE COMMINGLE EXCEPTION TO RULE 303-A

Section	6	_	Enron Oil & Gas Company
			#1 Rustler Bluff Well State of New Mexico Lease No. L-6293
Section	5		Bettis Borthers Inc. #1 Gulf Federal "5" Well Federal Lease No. NM-15302
Section	4		CNG Producing Company #1 Bar "4" Federal Well Federal Lease No. NM-15302
Section	9	- .	Bettis, Boyle & Stovall #1 Pickett Draw Federal Well Federal Lease No. NM-15303
Section	7	-	Exxon Corporation Federal Lease No. NM-55929
Section	18	-	P. A. Yates Federal Lease No. NM-62199
Section	17	-	P. A. Yates Federal Lease No. NM-62199
			Exxon Corporation Federal Lease No. NM-55929
Section	16	-	Santa Fe Energy Operating Partnership, LP State of New Mexico Lease No. VB-381

March 25, 1991

Enron Oil & Gas Company P.O. Box 2267 Midland, TX 79702

Attn: Mr. Bill Lewis

RE: Bettis, Boyle & Stovall Exxon Fed. 8 Well No. 1 660' FNL & 860' FEL of Sec. 8, T-255, R-29-E Eddy County, New Mexico

Dear Gentlemen:

Please be advised that Bettis, Boyle & Stovall has applied to the Director of the Division to grant an exception to Rule 303-A to permit the commingling in the well bore of the above referenced well of which your company is an offset operator.

Sincerely,

BETTIS, BOYLE & STOVALL

Kim Ligon

Production Analyst

March 25, 1991

Exxon Company, U. S. A. P.O. Box 1600 Midland, TX 79702-1600

Attn: Mr. James Howell

RE: Bettis, Boyle & Stovall Exxon Fed. 8 Well No. 1 660' FNL & 860' FEL of Sec. 8, T-25S, R-29-E Eddy County, New Mexico

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Sincerely,

BETTIS, BOYLE & STOVALL

Kim Ligon

Production Analyst

March 25, 1991

Bettis Brothers, Inc. One First City Center 500 West Texas, Suite 830 Midland, TX 79701

Attn: Harry M. Bettis, Jr.

RE: Bettis, Boyle & Stovall Exxon Fed. 8 Well No. 1 660' FNL & 860' FEL of Sec. 8, T-25S, R-29-E Eddy County, New Mexico

Dear Gentlemen:

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Sincerely,

BETTIS, BOYLE & STOVALL

Kim Ligon V Production Analyst

March 25, 1991

Chevron U. S. A., Inc. P.O. Box 1150 Midland, TX 79702

Attn: Mr. D.H. Messer

RE: Bettis, Boyle & Stovall Exxon Fed. 8 Well No. 1 660' FNL & 860' FEL of Sec. 8, T-25S, R-29-E Eddy County, New Mexico

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Sincerely,

BETTIS, BOYLE & STOVALL

Kim Ligon

Production Analyst

March 25, 1991

P. A. Yates 105 South 4th Artesia, NM 88210

> RE: Bettis, Boyle & Stovall Exxon Fed. 8 Well No. 1 660' FNL & 860' FEL of Sec. 8, T-25S, R-29-E Eddy County, New Mexico

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Sincerely,

BETTIS, BOYLE & STOVALL

Kim Ligon V

Production Analyst

March 25, 1991

Santa Fe Energy Operating Partnership, LP 1616 S. Voss Rd., Suite 1000 Houston, TX 77057

RE: Bettis, Boyle & Stovall Exxon Fed. 8 Well No. 1 660' FNL & 860' FEL of Sec. 8, T-25S, R-29-E Eddy County, New Mexico

Dear Gentlemen:

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Sincerely,

BETTIS, BOYLE & STOVALL

Kim Ligon

Production Analyst

March 25, 1991

CNG Producing Company CNG Tower, 1450 Poydras Street New Orleans, LA 70112-6000

Attn: Mr. Logan Magruder

RE: Bettis, Boyle & Stovall Exxon Fed. 8 Well No. 1 660' FNL & 860' FEL of Sec. 8, T-25S, R-29-E Eddy County, New Mexico

Dear Gentlemen:

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Sincerely,

BETTIS, BOYLE & STOVALL

Kim Ligon

Production Analyst

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III Submit 2 copies to Appropriate District Office.

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-116 Revised 1/1/89

CIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

GAS - OIL RATIO TEST

Operator Bettis, Boyle & Stovall					R	Pool Rustler Bl	uff	Bluff Morrow (Gas	(Gas)			<u>ر</u>	County Eddy	dy	ļ	
ox 1240, Graham,	TX 76	76046					TYPE OF TEST - (X)	÷ ₽	Scheduled		δ	Completion		တ္	Special X	
	WELL		LOCATION	N N		DATE OF	rus	CHOKE	TRG	DAILY	HIDNET	골	PROD. DURING TEST	NG TEST		GAS - OIL
LEASE NAME	NO.	c	S	-	20	TEST	STAT	SIZE	PRESS.	ALLOW-	HOURS	WATER BBLS.	GRAV.	OIL BBLS.	GAS M.C.F.	RATIO CU.FT/BBL
Exxon "8" Federal	9	Α	08	258	29E	3/23/91	П	16/64	640		24	0	0	0	36	
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During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in	shall be p	угодисе	data:	rate no	excee	ding the top	unit al	lowable fo	r the pool		1/2	Ser Com	Pupp	A C		
which well is located by more than 25 betterit. Obtains is encouraged to take advantage of this 25 betterit obtained in order that well can be assigned increased allowables when authorized by the Division.	d allowab	perator les whe	is circ	orized b	by the	Division.	i dus	co percen	Colerance		Signature	-		5	+	
Gas volumes must be reported in MCr measured at a pressure dase of 13.025 Isla and a temperature of o Specific gravity base will be 0.60.	MCL INES	SELECT.	at a pro	Suc	Daye O	io.uzo psia	311G	ı meraperanı	ire of our r.		Printed name and title	and title	ישורי וי	tide	You	

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Specific gravity base will be older.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

Date 3/25/91 817/549-0780

Telephone No.

DISTRICT I P.O. Box 1980, Hobbs, NM 88240 Submit 2 copies to Appropriate District Office. P.O. Drawer DD, Artesia, NM 88210 DISTRICT III DISTRICT

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Department

Revised 1/1/89 Form C-116

CIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

GAS - OIL RATIO TEST

	Report casing pressure in lieu of tubing pressure for any well producing through casing.	Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° specific gravity base will be 0.60.	which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.	During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in	Instructions:	Exxon "8" Federal	LEASE NAME	Address Box 1240, Graham, TX	Operator Bettis, Boyle & Stovall
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'(Sze Rule 301, Rule 1116 & appropriate pool rules.)

Telephone No.	Date
817-549-0780	3/25/91
	Printed name and title
Kim Ligon, Production Analyst	Kim Ligon, Pro
	Signature
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Telephone No.