



Amoco Production Company (USA)

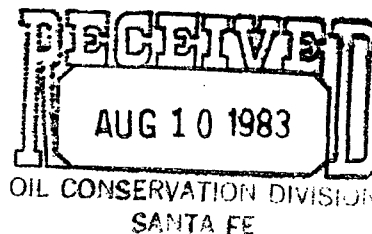
Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

August 5, 1983

File: SJ0-1429-WF

Re: Application to Downhole Commingle
State E Tract 27 Well No. 1
Blinebry and Drinkard Oil and Gas Pools
Lea County, New Mexico



State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention: Mr. Joe D. Ramey

Gentlemen:

Approval is hereby requested to downhole commingle the State E Tract 27 Well No. 1 in accordance with NMOCD Rule 303-C.

The well is located 430' FSL x 1980' FWL, Section 18, T-21-S, R-37-E, Lea County, New Mexico. Originally, the well was drilled to the Drinkard formation. Initial completion attempts included perforating and acidizing. The Drinkard was pump tested for seven (7) days and pumped at a rate of 26 BOPD, 1 BWPD, 130 MCFD. On August 31, 1979, the Drinkard was temporarily abandoned to test the more competitive Blinebry formation. The well was completed in the Blinebry and is currently shut-in due to downhole mechanical problems.

Two immediate offset wells to the State E Tract 27 No. 1 have received approval to downhole commingle the Blinebry and Drinkard zones. The wells are as follows:

- Petro-Lewis - Operator
1. L. G. Warlick No. 2
Unit B, Sec. 19, T-21-S, R-37-E
Administrative Order No. R-6463
 2. L. G. Warlick No. 3
Unit P, Sec. 18, T-21-S, R-37-E
Administrative Order No. R-6210

In support of our request, we submit the following facts:

1. The latest productivity tests are as follows:

	<u>Date</u>	<u>BOPD</u>	<u>BWPD</u>	<u>MCFD</u>	<u>Perforations</u>
*Blinebry	6-16-83	8	.5	28	5744'-5942'
**Drinkard	8-18-79	26	1	130	6682'-6738'

* Blinebry is currently shut-in due to downhole mechanical problems.
See Attached, latest C-116
**Pump tested for 7 days and temporarily abandoned for the Blinebry completion.

2. Neither zone produces more water than the combined oil limit as determined by Rule 303-C.
3. The produced fluids should be compatible and commingling these fluids should not result in precipitates which might damage the reservoirs.
4. Downhole commingling of the Blinebry and Drinkard will not jeopardize the efficiency of future secondary recovery operations in either zone.
5. No depreciation of value will occur from downhole commingling. API Gravities for the two zones are as follows:

Blinebry: 38.2 API Gravity
Drinkard: 38.4 API Gravity

6. Expected daily production from the commingled zones are as follows:

	<u>Blinebry</u>	<u>Drinkard</u>	<u>Commingled</u>
BOPD	8	26	34
BWPD	.5	1	1.5
MCFD	28	130	158

7. As stated earlier, neither zone is capable of producing at the current time. We are unable to determine the bottom hole pressure of these zones for the subject well. Due to the fact that the immediate offset wells have met the bottomhole pressure requirements for downhole commingling, Amoco believes the bottom hole pressure on our State E Tract 27 No. 1 are comparative and should also meet the requirements.
8. Both zones to be commingled have common ownership.

9. Recommended oil and gas allotments are as follows:
(Based on the averaging of offset allocations)

	<u>Oil</u>	<u>Gas</u>
Blinebry	39%	69%
Drinkard	61%	31%

The above allocation formula was based on the average of the allocations for the two previously mentioned offset wells. Normally we would prefer to use some measure of the well's productivity to determine the allocation (i.e. latest well tests, reserves, etc.); however, the State "B" Tr 27 No. 1 did not produce from the Drinkard long enough in order to establish a stabilized producing trend. We do not feel it is warranted to obtain a stabilized production trend from the subject zone because it is not practical in this instance. There are two ways to obtain the separate zone test. The first is to squeeze the current Blinebry perforations and produce only the Drinkard, then later open up the Blinebry zone. Because of the high costs and risk associated with this operation, we do not feel there are sufficient reserves in the Drinkard to do this work at this time. We would probably leave the Drinkard abandoned. Secondly, we could pump the Drinkard under a packer; however, the rates would not be representative of the well's producing capabilities under downhole commingling conditions. Therefore, we recommend using the above allocations.

10. All offset operators have been notified by registered mail. (Copy of receipts attached.)
11. Attached are: Ownership plat showing the well and all offsets, Production decline curve for the Blinebry zone, Production graph for the 7 days the Drinkard was pump tested, and a list of offset operators and their addresses.

If additional information is required, contact Charles Herring at 393-1781.

Yours very truly,

S. J. Okeron

Attachments

cc: State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 1980
Hobbs, NM 88240

bcc: Mr. R. E. Ogden
Bldg. ACT
RM 21.150
Houston, TX

Mr. Jim Allen - Proration Dept.
Bldg. ACL
RM 4.548
Houston, TX

ADDRESSEE LIST
OFFSET OPERATORS

Gulf Oil Exploration and Production Company
P. O. Box 670
Hobbs, NM 88240

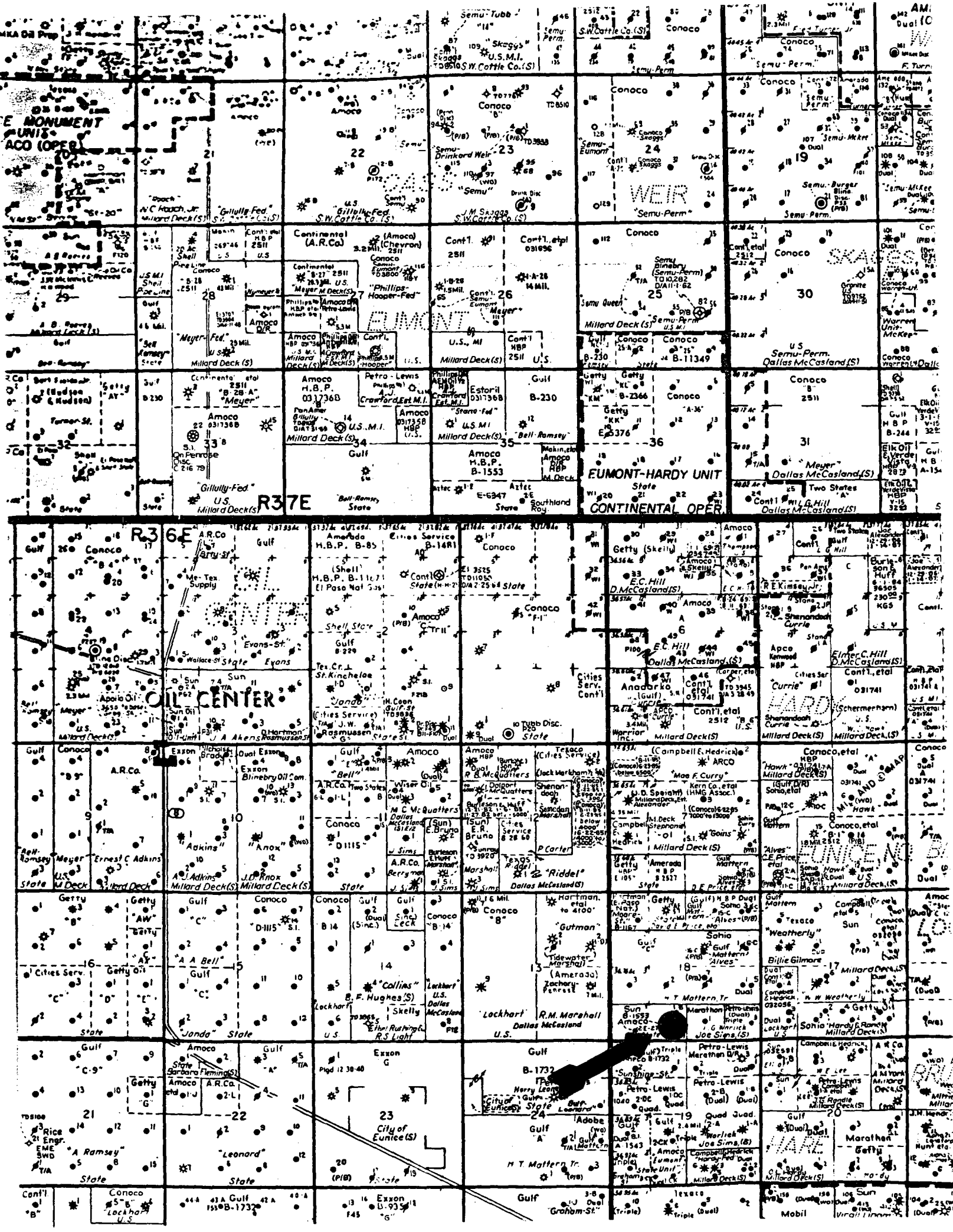
Sohio Petroleum Company
P. O. Box 3000
Midland, TX 79702

Marathon Oil Company
P. O. Box 2409
Hobbs, NM 88240

Petro-Lewis Corporation
1111 West Loop 289
Lubbock, TX 79416

Tenneco Oil Exploration and Production Company
Southwestern Division
7990 I.H. 10 West
San Antonio, TX 78230
Attention: Special Projects/Joint Interest Group

Sun Exploration and Production Company
P. O. Box 1861
Midland, TX 79702



No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in 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 allowances when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity based will be 0.60.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Administrative Analyst

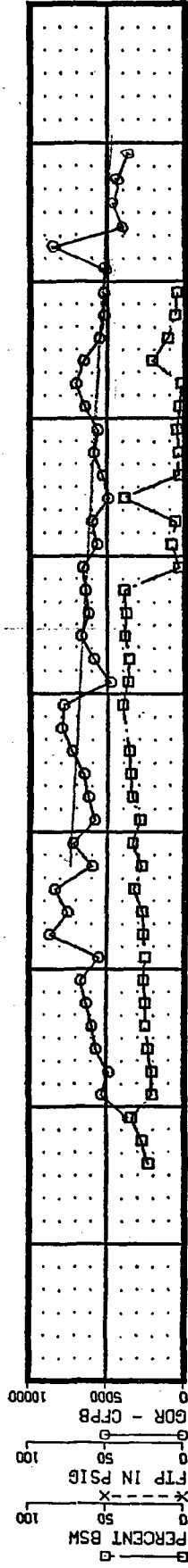
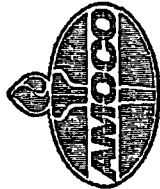
0+2:NMOC-D-Hobbs	1-File	533.11	1-LRB
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INDUSTRY PRODUCTION DATA RATE-TIME PLOTS

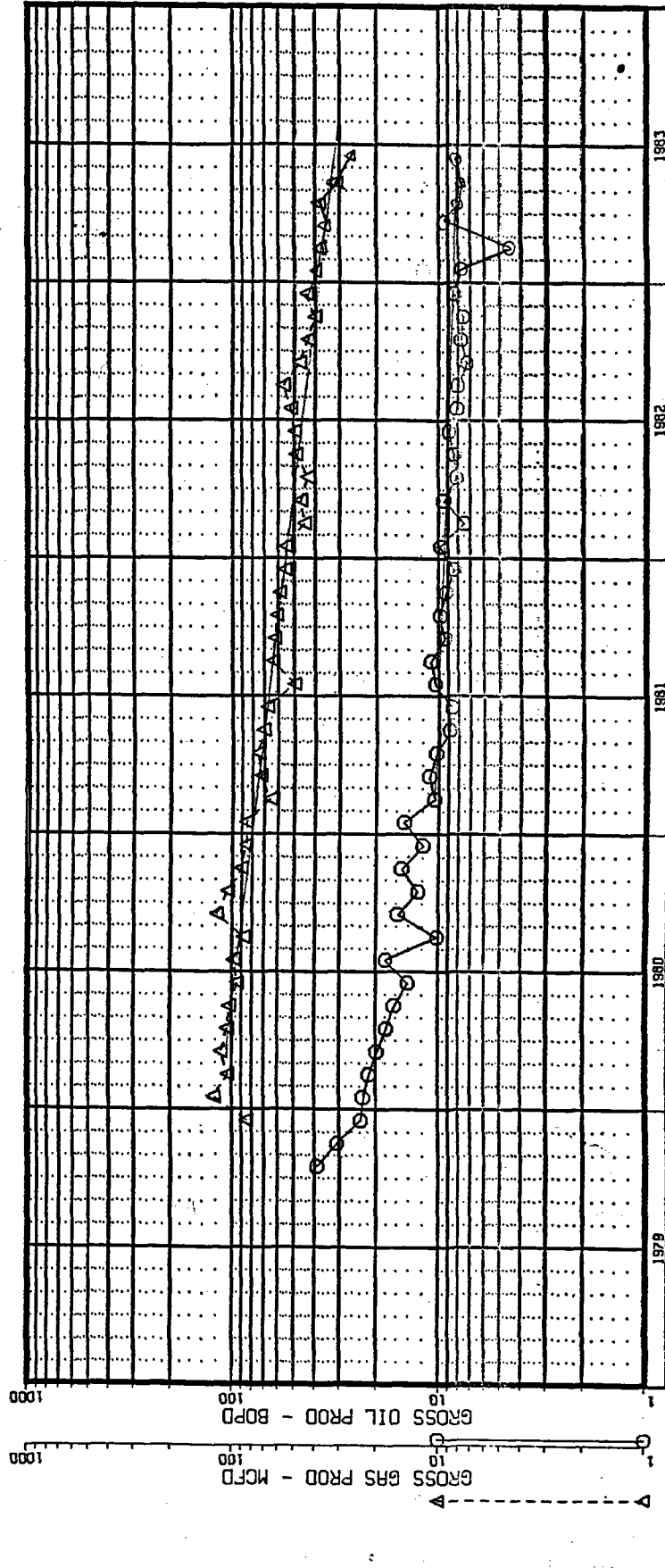
OIL

WELL: STATE E TRACT 27 000001
 FIELD: BLINERY OIL AND GAS BL 008007424 PERFS.
 OPERATOR: AMOCO PRODUCTION CO 019922
 STATE: NM 30 COUNTY: LEA 025
 FIRST PROD LAST PROD 82 12
 REQUESTOR: WHITE - AGAIN LOCATION: HOBBS
 API NO: 300250000000
 COMP DATE: 79 10
 GENID: 4W020364
 RESERVOIR: BL
 MAJOR PROD CUM: 15,573

Rev = 22.9



MAJOR PRODUCT



1983-06-08

TIME

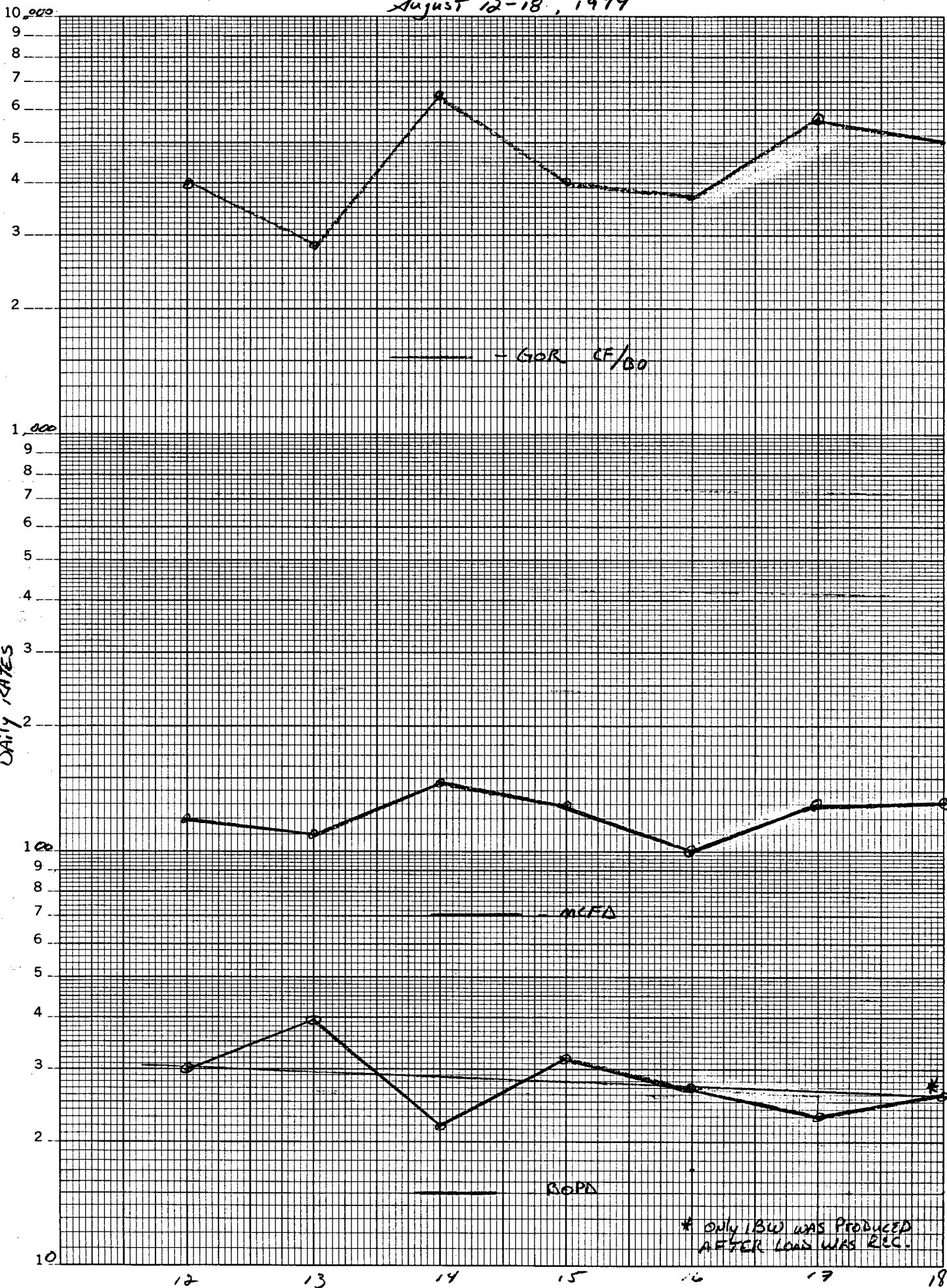
REPORT NUMBER 221

Pump Tests ON THE STATE 'E' TRACT 27 N41 (DINKARD) August 12-18, 1979

46 5810

SEMI-LOGARITHMIC 3 CYCLES x 140 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

DAILY RATES



State E Tract 27 #1
Well History

Cement Record:

- 06/05/79: Set 9 5/8"-32.3#, H-40 ST&C casing at 1225' in a 12 1/4" hole. Cmt'd w/300 sx Class C w/3% sodium silicate and 6# salt/sk. Tail-in 150 sx Class C w/2% KCl. Circ. 35 sx.
- 07/01/79: Set 7"-23# & 26#, K-55 ST&C casing at 6900' in an 8 3/4" hole. Cmt'd w/1175 sx Class C Incor w/3% sodium silicate, 6# salt, and 1/2" cellophane/sk. Followed w/350 sx Class C, Incor with 9.5# salt/sk. Cmt did not circ. Top of cmt approximately 1340' (per temp survey).
- TD - 6900'
PBD - 6855'


Initial Completion:

- 08/18/79: Perforate 6772'-76', 6800'-09', 6842'-52' w/2 JSPF. Spot acid. Acidize w/2400 gals 15% NE acid. Retainer set at 6760'. Squeezed perfs 6772'-6852' w/200 sx Class H w/2% HCl and 5% CFR-2. Followed by 100 sx Class H. Reversed 20 bbl cmt to pit. Perforate Drinkard 6682'-86', 6700'-06', 6712'-16', 6725'-28', 6734'-38' w/2 JSPF. Spot acid across perfs 6682'-6738'. Acidize perfs w/2500 gals 15% NE acid. Ran pump and 3/4 rods. Initial potential = Hrs 24, 26 BOPD, 1 BWPD, 130 MCFD. Well completed in Drinkard.
- 09/28/79: Pull rods and pump. Retr. BP set at 6016' & topped w/10' sd. Perforate 5774'-78', 5800'-03', 5848'-51', 5938'-42' w/2 JSPF. Spot acid across perfs. Acidize w/3400 gals 15% NE acid. Frac in 3 stgs w/33,000 gal gelled brine, 33000# 20/40 sd, 1000 gal 15% NE acid & 2200# rock salt as blocking agent. Temp survey indicated perfs 5775'-78', 5800'-03', 5848'-51' treated. 5938'-5942' not treated. Ran pump and rods. Initial potential = Hrs 24, 65 BOPD, 12 BWPD, 254 MCFD. Well recompleted to Blinebry.

P 267 164 389

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)


SENT TO		<i>Sun Exploration Hldg.</i>	
STREET AND NO.		<i>P.O. Box 1861</i>	
P.O. STATE AND ZIP CODE		<i>Midland, TX 79702</i>	
POSTAGE		\$54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75	
	SPECIAL DELIVERY	€	
	RESTRICTED DELIVERY	€	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE	60	
	SHOW TO WHOM AND DATE DELIVERED	€	
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	€	
	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	€	
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	€	
TOTAL POSTAGE AND FEES		\$1.89	
POSTMARK OR DATE			
			

PS Form 3800, Apr. 1976

P 267 164 388

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)


SENT TO		<i>Tenneco Oil Exp. & Prod. Co.</i>	
STREET AND NO.		<i>1990 E. H. 10 West</i>	
P.O. STATE AND ZIP CODE		<i>San Antonio, TX 78230</i>	
POSTAGE		\$54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75	
	SPECIAL DELIVERY	€	
	RESTRICTED DELIVERY	€	
	OPTIONAL SERVICES		
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POSTMARK OR DATE			
			

PS Form 3800, Apr. 1976

P 267 164 387

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(See Reverse)


SENT TO		<i>Petro-Lewis Corp.</i>	
STREET AND NO.		<i>1111 West Loop 289</i>	
P.O. STATE AND ZIP CODE		<i>Lubbock, TX 79416</i>	
POSTAGE		\$54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75	
	SPECIAL DELIVERY	€	
	RESTRICTED DELIVERY	€	
	OPTIONAL SERVICES		
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SENT TO		<i>Marathon Oil Company</i>	
STREET AND NO.		<i>P.O. Box 2409</i>	
P.O. STATE AND ZIP CODE		<i>Hobbs, NM 88240</i>	
POSTAGE		\$54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75	
	SPECIAL DELIVERY	€	
	RESTRICTED DELIVERY	€	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE	60	
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P 267 164 385

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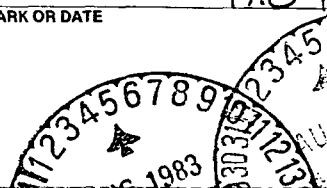
SENT TO		<i>Shio Petroleum Co.</i>	
STREET AND NO.		<i>P.O. Box 3000</i>	
P.O. STATE AND ZIP CODE		<i>Midland, TX 79702</i>	
POSTAGE		\$54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75	
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	RESTRICTED DELIVERY	€	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE	60	
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TOTAL POSTAGE AND FEES		\$1.89	
POSTMARK OR DATE			
			

PS Form 3800, Apr. 1976

P 267 164 384

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		<i>Gulf Oil Exp. & Prod. Co.</i>	
STREET AND NO.		<i>P.O. Box 670</i>	
P.O. STATE AND ZIP CODE		<i>Hobbs, NM 88240</i>	
POSTAGE		\$54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75	
	SPECIAL DELIVERY	€	
	RESTRICTED DELIVERY	€	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE	60	
	SHOW TO WHOM AND DATE DELIVERED	€	
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	€	
	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	€	
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	€	
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POSTMARK OR DATE			
			

PS Form 3800, Apr. 1976



Amoco Production Company (USA)

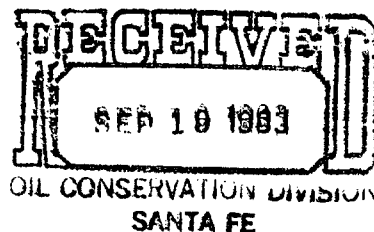
Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

August 4, 1983

File: SJ0-1468-WF

Re: Downhole Commingling of the
State E Tract 27 Well No. 1
Blinbry and Drinkard Oil and Gas Pools
430' FSL x 1980' FWL
Section 18, T-21-S, R-37-E
Lea County, New Mexico



Petro-Lewis Corporation
1111 West Loop 289
Lubbock, TX 79416

Gentlemen:

Amoco Production Company, as operator of the State E Tract 27 Well No. 1, hereby notifies you that we have applied to the NMOCD for Administrative Approval to downhole commingle the subject well. Commingling will enhance the economic operation of the well.

If you have no objections to the commingling, sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Hobbs, one copy to this office, and retain one copy for your records. Addressed, stamped envelopes have been provided for your convenience.

Yours very truly,

S. J. Okerson

Attachment

APPROVAL

Company: Petro-Lewis Corp

By: Wayne Wise

Date: Sept 9, 1983



Amoco Production Company (USA)

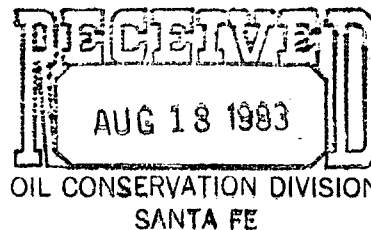
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District Superintendent

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Blinebry and Drinkard Oil and Gas Pools
430' FSL x 1980' FWL
Section 18, T-21-S, R-37-E
Lea County, New Mexico



Sohio Petroleum Company
P. O. Box 3000
Midland, TX 79702

Gentlemen:

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Yours very truly,

S. J. Okerson

Attachment

APPROVAL

Company: *Sohio Oil Co.*

By: *C. H. Allen*

Date: *8-11-83*

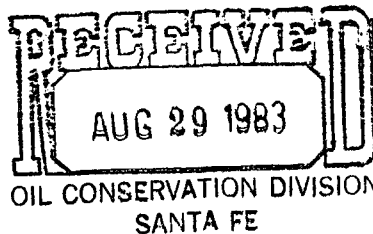


Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

August 4, 1983



File: SJO-1468-WF

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430' FSL x 1980' FWL
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Lea County, New Mexico

Tenneco Oil Exploration and Production Company
Southwestern Division
7990 I. H. 10 West
San Antonio, TX 78230
Attention: Special Projects/Joint Interest Group

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Yours very truly,

S. J. Okerson

Attachment

APPROVAL

Company: **TENNECO OIL COMPANY**

By: *OT Wilson*

Date: 8-23-83



Amoco Production Company (USA)

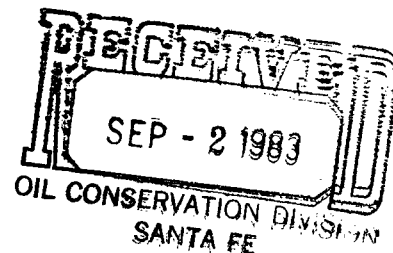
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Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

August 4, 1983

File: SJ0-1468-WF

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Blinebry and Drinkard Oil and Gas Pools
430' FSL x 1980' FWL
Section 18, T-21-S, R-37-E
Lea County, New Mexico



Gulf Oil Exploration and Production Company
P. O. Box 670
Hobbs, NM 88240

Gentlemen:

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Yours very truly,

APPROVAL

S. J. Okerson

Attachment

Company: Gulf Oil Corporation

By: *Alan W. Bohling* J. R. Frank
for Chief Proration Engineer

Date: August 30, 1983



Amoco Production Company (USA)

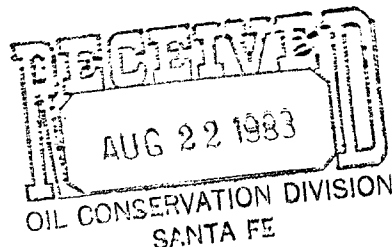
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Midland, TX 79702

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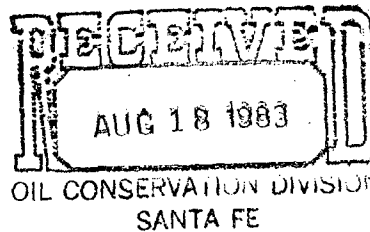
Yours very truly,

S. J. Okerson

Attachment

APPROVAL
Company: SUN EXPLORATION & PRODUCTION CO.
By: *J. L. Power*
Date: 8-18-83

OIL CONSERVATION DIVISION
DISTRICT 1



OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

DATE August 10, 1983

RE: Proposed MC
Proposed DHC ☒ X
Proposed KSL
Proposed USP
Proposed SWP
Proposed WFX
Proposed PRX

Re: [illegible]

I have examined the application for the:

Amoco Production Co. State E Tr. 27 No. 1-M 18-21-37

Operator [illegible] Lease and Well No. [illegible] DATE 5-1-83

and my recommendations are as follows.

O.K.-----J.S.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Jerry L. [illegible]".

Jac.

Additional information received on September 9, 1983
concerning offset pressures via telephone.
Offset pressures seem to be comparable
to one another, and are relatively
close enough to justify acceptance.

SPQ