



**Amoco Production Company (USA)**

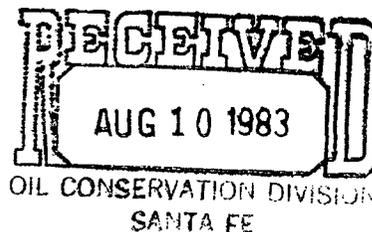
Post Office Box 68  
Hobbs, New Mexico 88240

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. Okerson*

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

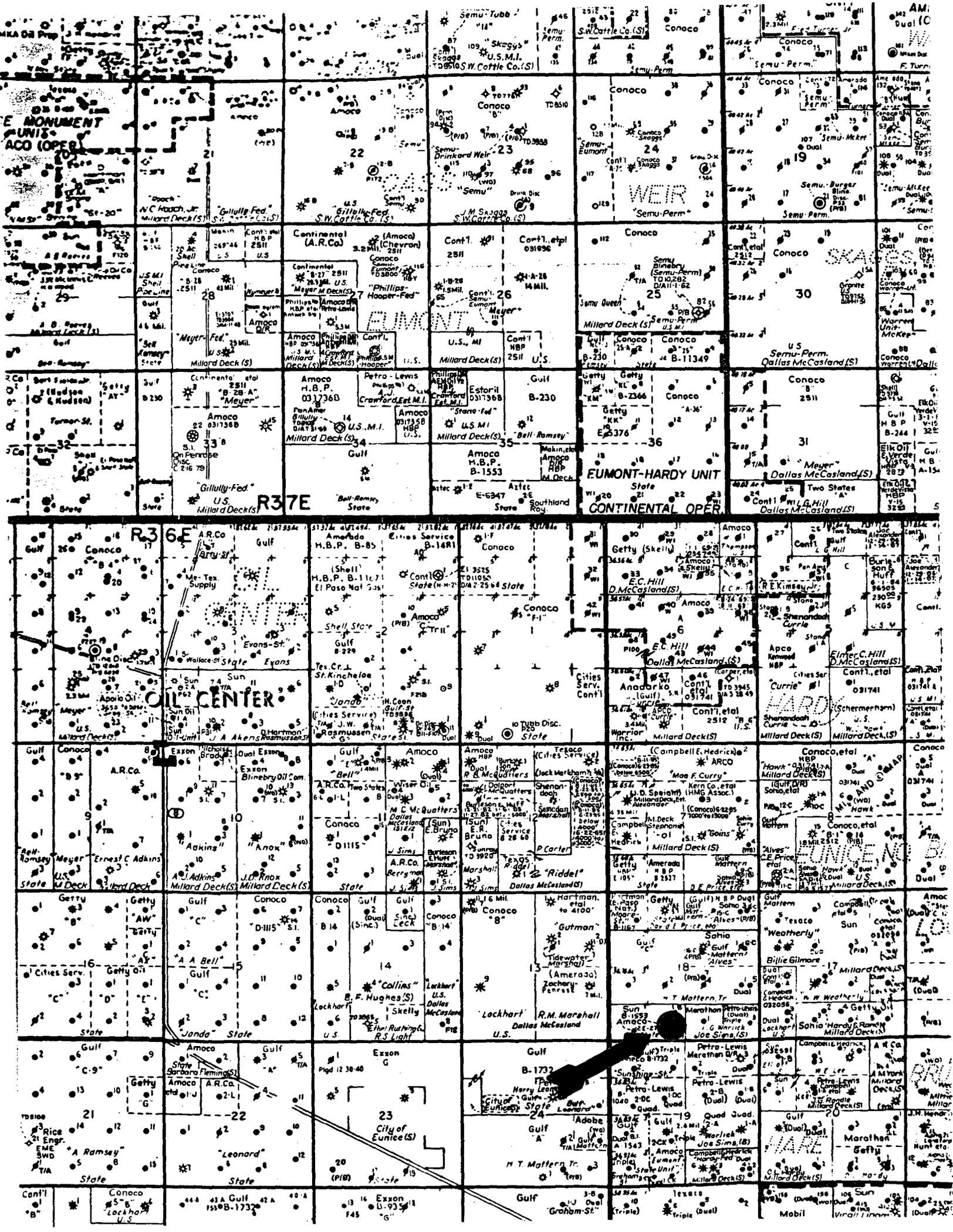
Sohio Petroleum Company  
P. O. Box 3000  
Midland, TX 79702

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



GAS-OIL RATIO TESTS

Operator Address	Pool	County	Lea	Type of Test		Scheduled	Special	Completion			
				TEST - (X)	( )			Water	Prod. During Test	Gas	
LEASE NAME	WELL NO.	LOCATION	DATE OF TEST	CHOKE SIZE	TEG. PRESS.	DAILY ALLOW. ABLG.	LENGTH OF TEST HOURS	WATER GALS.	PROD. DURING TEST OIL BLS.	GAS M.C.F.	GAS-OIL RATIO CU.FT./BBL.
AMOCO Production Co. P.O. Box 68, Hobbs New Mexico 88240			Blinbry Oil & Gas			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	1	N 18 21 37	6-16-83	P		8	24	.5	8	28	3500

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 allowables 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 base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.  
 Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 33 and appropriate pool rules.

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

*Ruth Burman*  
 (Signature)  
 Administrative Analyst  
 0+2:NM0CD-Hobbs 1-File 533.11 1-LRB



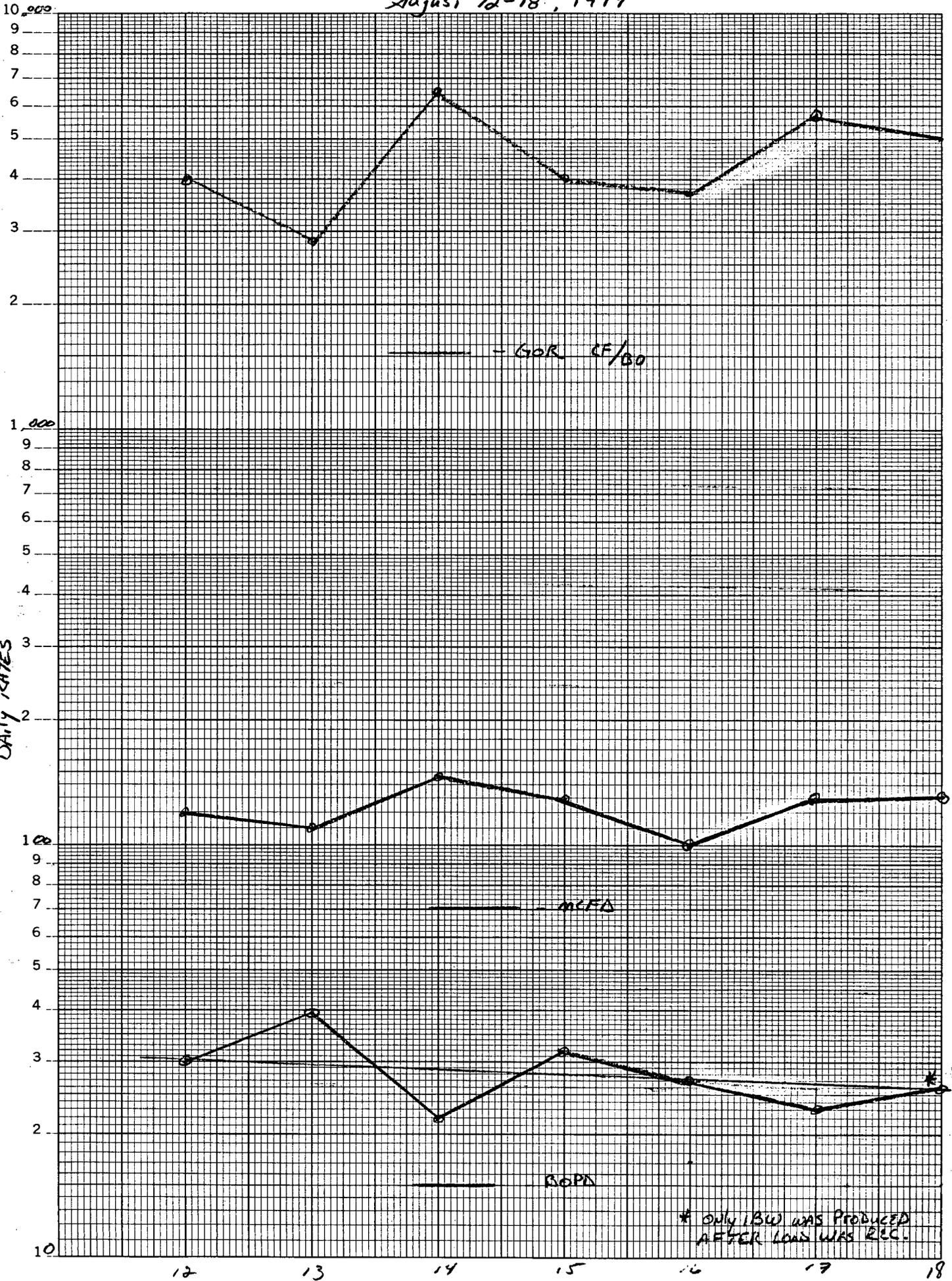
# Pump Tests ON THE STATE 'E' TRACT 27 N01 (DINKARD)

August 12-18, 1979

46 5810

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

DAILY RATES



\* only 1 BW WAS PRODUCED AFTER LOAD WAS REC.

DATE 12-18-1979

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 1/2" 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 Holdings</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	SHOW TO WHOM AND DATE DELIVERED	60	¢
		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. &amp; 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			
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	60	¢
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POSTMARK OR DATE				



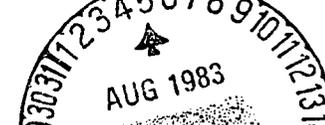
PS Form 3800, Apr. 1976

P 267 164 387

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
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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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POSTMARK OR DATE				



PS Form 3800, Apr. 1976

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(See Reverse)

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	SHOW TO WHOM AND DATE DELIVERED	60	¢
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POSTMARK OR DATE				



PS Form 3800, Apr. 1976

P 267 164 385

RECEIPT FOR CERTIFIED MAIL

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

SENT TO		<i>Shell 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	¢	
	SPECIAL DELIVERY		¢	
	RESTRICTED DELIVERY		¢	
	OPTIONAL SERVICES			
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	60	¢
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PS Form 3800, Apr. 1976

P 267 164 384

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
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(See Reverse)

SENT TO		<i>Gulf Oil Exp. &amp; Prod. Co.</i>		
STREET AND NO.		<i>P.O. Box 1670</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	SHOW TO WHOM AND DATE DELIVERED	60	¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢
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	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)**

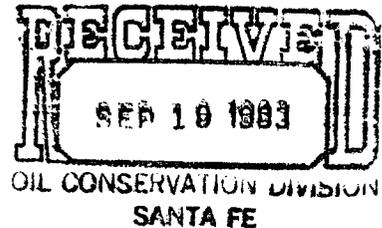
Post Office Box 68  
Hobbs, New Mexico 88240

S. J. Okerson  
District Superintendent

August 4, 1983

File: SJO-1468-WF

Re: Downhole Commingling of the  
State E Tract 27 Well No. 1  
Blinebry 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

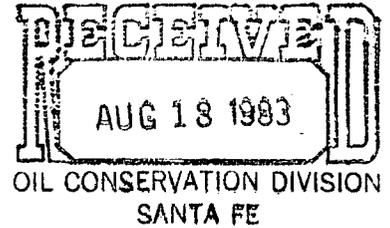


**Amoco Production Company (USA)**

Post Office Box 68  
Hobbs, New Mexico 88240

S. J. Okerson  
District Superintendent

August 4, 1983



File: SJO-1468-WF

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State E Tract 27 Well No. 1  
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:

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 Sante 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*

APPROVAL

Company: *Sohio Co.*

By: *C. H. Allen*

Date: *8-11-83*

Attachment

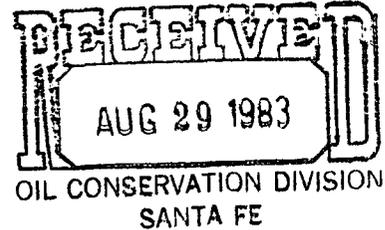


**Amoco Production Company (USA)**

Post Office Box 68  
Hobbs, New Mexico 88240

S. J. Okerson  
District Superintendent

August 4, 1983



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Blinebry and Drinkard Oil and Gas Pools  
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)**

Post Office Box 68  
Hobbs, New Mexico 88240

S. J. Okerson  
District Superintendent

August 4, 1983

File: SJ0-1468-WF

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State E Tract 27 Well No. 1  
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:

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.

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Yours very truly,

APPROVAL

*S. J. Okerson*

Company: Gulf Oil Corporation

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

Date: August 30, 1983

Attachment



Amoco Production Company (USA)

Post Office Box 68  
Hobbs, New Mexico 88240

*P*

S. J. Okerson  
District Superintendent

August 4, 1983

File: SJ0-1468-WF

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430' FSL x 1980' FWL  
Section 18, T-21-S, R-37-E  
Lea County, New Mexico

RECEIVED  
AUG 22 1983  
OIL CONSERVATION DIVISION  
SANTA FE

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

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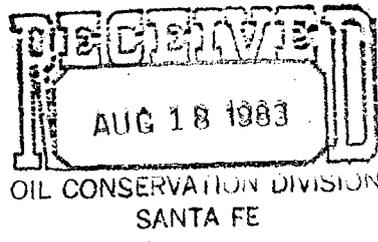
APPROVAL

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 SWC  
Proposed WFX  
Proposed PRX

Dear Sirs:

I have examined the application for the:

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

Operator Lease and Well No. DIST. 5-1-18

and my recommendations are as follows.

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

Very truly yours,

J.S.

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.

JPG