### SIPES. WILLIAMSON & AYCOCK, INC. CONSULTING ENGINEERS

1200 BLANKS BUILDING 310 WEST WALL AVENUE MIDLAND, TEXAS 79701 915 685-6100

October 22, 1979

Midland

1212 THE MAIN BUILDING SUITE 902 **HOUSTON, TEXAS 77002** 713 658-8278

DHC Dave 11/15/79

The Division Director New Mexico Oil Conservation Commission State Land Office Building Santa Fe, New Mexico 87501

Penrose - Skelly Blinebry

Dear Sir:

Subject: Request for Down-hole Commingling Permit Rule 303-C

2. (a) Name and address of the operator.

Petro-Lewis Corporation Energy Center One 717 17th Street P. O. Box 2250 Denver, Colorado 80201

(b) Lease name, well number, well location.

Warlick "B" No. 1, 1,980 feet FNL and 660 feet FEL, Section 19, T-21-S, R-37-E, Lea County, New Mexico.

(c) Names of the pools the well is completed in and the Division order number which authorized the dual completion.

Drinkard - Plugged and Abandoned Penrose-Skelly-Grayburg - Perforations 3,772-3,821 feet.

Blinebry - Perforations 5,706-5,995 feet. First production August 25, 1979.

Bottom perforations, lowermost pool - 5,000-5,999 feet equals 30 barrels per day allowable total daily production under commingled operations

(d) A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, sas and water produced from each zone.

OIL CONSERVATION DIVISION SANTA FE

See Attachment No. 1

The Division Director New Mexico Oil Conservation Commission October 22, 1979 Page 2

(e) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes. (This requirement may be dispensed with in the case of a newly completed or recently completed well which has little or no production history. However, a complete resume of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be submitted.)

Production Decline Curves for each zone. See Attachment No. 2.

(f) Estimated bottom-hole pressure for each artificially lifted zone. A current (within 30 days) measured bottom-hole pressure for each zone capable of flowing.

Estimated BHP - all zones on pump:

Blinebry 50 psig Penrose-Skelly-Grayburg 50 psig.

(g) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the well-bore.

Fluids compatible as evidenced by Petro-Lewis State "DC" Lease, S/2 NW/4 Section 19, T-21-S, R-37-E, Lea County, New Mexico. Original Commingling Order PC-435 (Attachment No. 3) by Amerada Hess Corporation, March 6, 1972 for Blinebry, Drinkard, Paddock and Penrose-Skelly-Grayburg Pools. Blinebry and Drinkard oil is 34.4° API at 58° Fahrenheit; Penrose-Skelly-Grayburg oil is 35.3° API at 78° Fahrenheit.

(h) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams.

Blinebry - sweet crude - 37 Barrels per Day, \$28.96 per barrel current price

Penrose-Skelly-Grayburg - sour crude - 1 Barrel per Day, \$26.28 per barrel current price. The Division Director New Mexico Oil Conservation Commission October 22, 1979 Page 3

It should be noted that Penrose-Skelly-Grayburg crude is sour while Blinebry crude is sweet. However, because the production rate from the Blinebry zone is much higher than that from the Penrose-Skelly-Grayburg zone, the total stream may be classified as sweet crude. Even if the total stream is classified as sour crude, and a lower price is received for the oil, it is still more economical to commingle the two zones rather than squeeze the Penrose-Skelly-Grayburg zone or complete the well as a dual.

Because of the low production rate of the Penrose-Skelly-Grayburg zone, economics will not warrant a dual completion. Therefore, based on economics considerations and on waste prevention, downhole commingling of the produced fluids from the two zones is necessary.

There is a common ownership of the two zones.

(i) A statement that all offset operators and, in the case of a well on Federal land, the United States Geological Survey, have been notified in writing of the proposed commingling.

Offset operators have been notified, including United States Geological Survey. See Attachment No. 4.

#### COMMENT:

Every effort will be made to obtain waivers of objection from offset operators and United States Geological Survey, since lease storage facilities are nearing fill-up and well will have to be shut-in unless down-hole commingling permit is received soon.

Respectfully submitted,

Roy d. Williamson, Jr., P.E.

Consultant for Petro-Lewis Corporation

/djs

Copy to: Director
District I Office
New Mexico Oil Conservation Commission
Box 1980
Hobbs, New Mexico 88240

Petro-Lewis Corporation

Rotton pf 5995

Pen 180 370 316 met 42

Pen 180 47 386

Pen 22 47 386

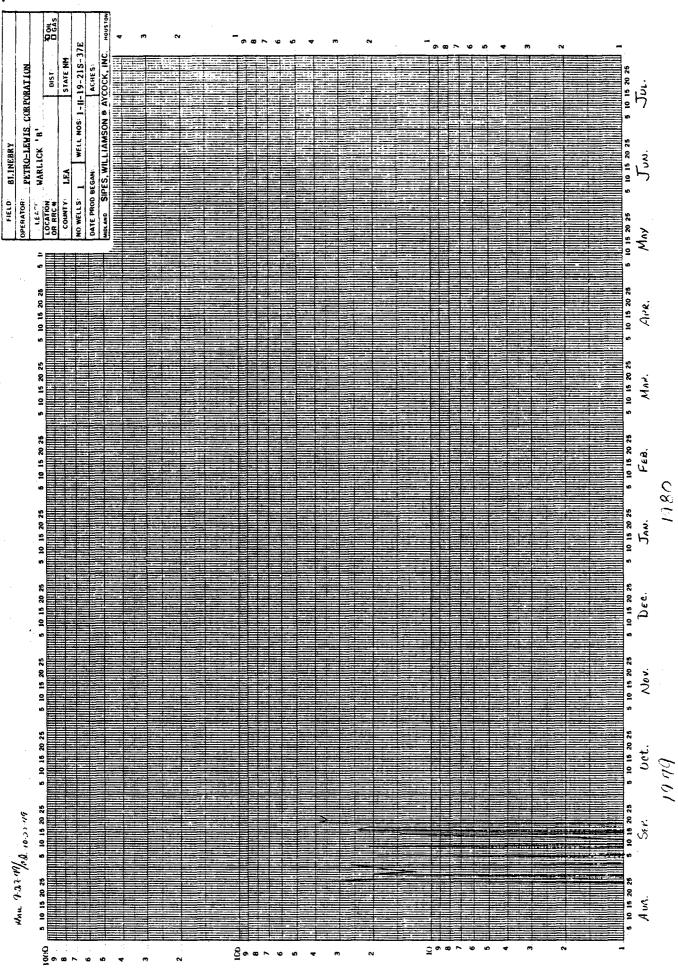
LIACHMENI NO. I

(d) Production History - Warlick "B" No. 1

	Pen	rose-Skell	Penrose-Skelly-Grayburg Zone	Zone		Blinebry Zone	Zone 7	
Date	B0	BW	MCF	GOR MCF/BO	B0	BW	MCF	GOR MCF/BO
1979 June	27	93	312	11.6	3	<b>1</b>		1
July	35	93	338	9.7	•	1	•	•
August	31	96	310	10.0	20/D	42/D	NR	*
September	30	95	315	10.5	23/D	30/D	70/D	3.04
* Produced 6 days					TN CN C	CHDTEMRER	• ¤:	
Average for June,								
July, August, Sept.	1 BO/D	3 BW/D		10.37 MCF/BO	22 BO/D	23 BW/D		3.04 MCF/BO

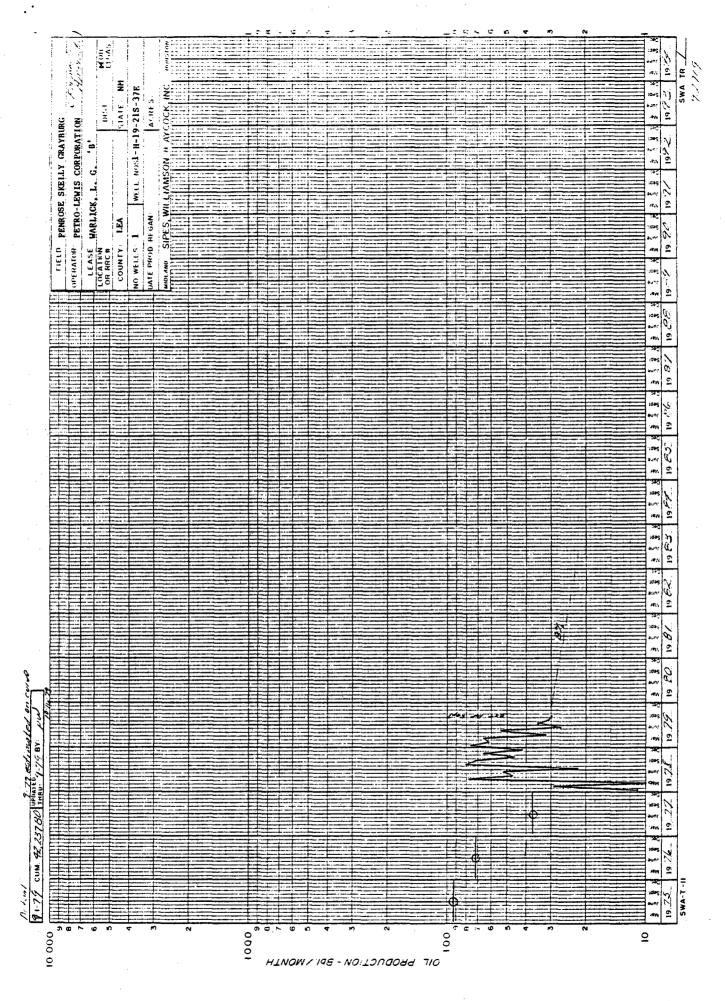
Current production from all zones equals 23 barrels of oil per day plus 26 barrels of water per day.

SIPES, WILLIAMSON & AYCOCK, INC.
1200 BLANKS BUILDING MIDLAND, TEXAS 79701
ROY C. WILLIAMSON, JR., P.E/djs 10/22/79
CONSULTANT FOR PETRO-LEWIS CORPORATION



ATTACHMENT NO. 2 PAGE 1 of 3

· FERRIA CO: WYDE W TO



7. R. 011168 100 Chaire. 4 ₹ H-19-21S-37E SIATE COM 1510 Bor CORPORATION PENROSE SKELLY GRAYBURG ì 2 (NO TR No. E/CUIN NOS o 1.55 × 1. PETRO-LEWIS OR N P WARLICK, L, WELL PRODUCTION 906 GAS ¥00 LEA 3222222 6/3/ LR No. PATE/ 1146 WATER-BU LORPS NO. FIELD COUNTY LEASE NO WELLS: PERATOR DI IM PROD 90f CUMULATIVE 5/11/18/10 11. 19 Clus TRNO. OTHER CONDENSATE - BAL 3 2220022 PRODUCTION NN 900 den fint uf 479 CLIENT 8 2 37E OIL ALLOWABLE TR No. 62.91.01 OWIGHT'S 218 3 0,00 VELLS ANNUAL 30° ANNUAL 11166 į į \* : : : : 201.0 : 1001 į • . 1 VA-PAGO NP AFEIN 10111 1113 1113 1013 1013 1013 謡 in in the second 굨 201 Z: --------------:<u>:</u> ₩. ==== # 쨢 ----+ ### 7 \* ------200 靐 點 TODGE STATE STREET 悪霊 悪霊 弁 竜 背 号 ż -20° ₩. SESSER WELL WESTERNER **155** ----------靐 THE WEST 1 STREET, STREET andere prote most protect to ž: HA4 APR The state of the s STREET STREET STREET STREET # # 22 22 23 24 25 ---with the second second ii ii # # \$1.54 BECTON (CPTON SELECTION (CPTON SELECTION CON SELECTI 103 16 512 16 51 16 52 1 557 BOYD 1322517E DI CAMPARY TOTAL

0

ATTACHMENT NO. 2 PAGE 3 of 3

### \_XICO OIL CONSERVATION COST OFFICE BOX 2088 SANTA FE, NEW MEXICO 87501

1972 MAR - 1 70 M : 05 COMMINGLING ORDER PC-435

Company

Amerada Hess Corporation

Address

line) Midla Midland

Richfield)

(Atlantic

Willia ( Sessions Troop -

mailed

P.A.

o Pipeline)

Drawer 817

city, State, Zip

Seminole, Texas 79360

attention:

Mr. G. F. Dewhurst

Lease Name:

State "DC" Lease

pescription:

S/2 NW/4, Sec. 19, T-21-S, R-37-E, Lea County, New Mexico

The above-named company is hereby authorized to commingle production from the following pools

Blinebry Gas Pool and Drinkard, Paddock, and Penrose Skelly

Oil Pools

in a common tank battery, and to determine the production from each pool by

separately metering the production from each pool prior to commingling

separately metering the production from

and determining the production by the subtraction method

x well tests (if this method is to be authorized, all commingled production must be of marginal nature; further, the operator shall notify the Santa Fe Office of the Commission in the event any well producing into the commingled battery becomes capable of top allowable production, at which time the Commission will amend this order or take such other action as may be appropriate)

V.C. B.R. This installation shall be installed and operated in accordance Note: with the applicable provisions of Rule 303 of the Commission Rules and Regulations and the Commission "Manual for the Installation and Operation of Commingling Facilities." It is the responsibility of the producer to notify the transporter of this commingling authority.

REMARKS:

DONE at Santa Fe, New Mexico, on this

6th day of March

PORTER, Secretary-Director

SIPES, WILLIAMSON & AYCOCK, INC. ROY C. WILLIAMSON, JR., P.E. 10/22/70 CONSULTANT FOR PETER 1 CONSULTANT FOR PETRO-LEWIS CORPORATION

## SIPES, WILLIAMSON & AYCOCK, INC.

Midland

1200 BLANKS BUILDING 310 WEST WALL AVENUE MIDLAND, TEXAS 79701 915 685-6100

October 22, 1979

1212 THE MAIN BUILDING SUITE 902 HOUSTON, TEXAS 77002 713 658-8278

TO: OFFSET OPERATORS

(ADDRESS LIST ATTACHED)

Gentlemen:

Subject: Request for Down-hole Commingling Permits

Rule 303-C

Attached for your review are two commingling requests by Petro-Lewis Corporation for two wells, Warlick No. 3 and Warlick "B" No. 1, located as described in the requests. Your waiver of objection to these requests is respectfully solicited. Please indicate your decision in the space below and return one copy to the undersigned and one copy to the New Mexico Oil Conservation Commission in the enclosed envelopes, and retain one copy for your files.

Thank you for your cooperation.

Yours very truly,
Original Signed By
ROY C. WILLIAMSON, JR.

Roy C. Williamson, Jr., P.E. Consultant for Petro-Lewis Corporation

I.		3 - I do ( ) request for this		) object to
II.		No. 1 - I do ( request for this		) object to
	Signed			
	Date		-	
	COMPANY			

## ADDRESS LIST (Alphabetical Order)

#### OFFSET OPERATORS\*

Amoco Production Company P. O. Box 3092 Houston, TX 77001

Attn Mr. George M. Simmons, Division Geologist, NM & TX (713) 652-5222

Campbell and Hedrick P. O. Box 401 Midland, TX 79701 (915) 684-4393

Continental Oil Company P. O. Box 460 Hobbs, NM 88240

Attn Mr. Paul Thompson, Division Manager (505) 393-4141

Gulf Oil Company-U. S. P. O. Box 670 Hobbs, NM 88240

Attn Mr. R. C. Anderson, Production Manager (505) 393-4121 Peery, J. W., Estate P. O. Box 401 Midland, TX 79701 (915) 684-4651

Sun Oil Company
P. O. Box 1861
Midland, TX 79701

Attn Mr. R. K. Beggs, District Manager (915) 685-0300

Tenneco Oil Company Ciudad Bldg. - Suite 139 3000 United Founders Blvd. Oklahoma City, OK 73112

Attn Mr. Don Wright (405) 848-8551

Texas Pacific Oil Company, Inc. P. O. Box 4067 Midland, TX 79701

Attn Mr. R. J. Womack, Regional Manager (915) 684-5584

\* Offset Operators to Petro-Lewis Corporation's Warlick No. 3 well, located 330' FEL and 660' FSL, Section 18 and Warlick "B" No. 1 well, located 1,980' FNL and 660' FEL, Section 19, both wells in T-21-S, R-37-E, Lea County, New Mexico.

Copy: U. S. Department of The Interior Geological Survey 1012 Federal Building 1961 Stout Street Denver, Colorado 80202

Sipes, Williamson & Aycock, Inc. 1200 Blanks Building Midland. Texas 79701 Roy C. Williamson, Jr., P.E./pw 10/22/79 Consultant for Petro-Lewis Corporation

# OIL CONSERVATION DIVISION DISTRICT I

	•			
OIL CONSERVATION DIVISEP. O. BOX 2088	•	_	October 26, 1979	
SANTA FE, NEW MEXICO	87501  ECELVED  OCT CO 1979  CL CONSTRUCTION DIVISION  SALVES	RE:	Proposed MC Proposed DHC X Proposed NSL Proposed NSP Proposed SWD Proposed WFX Proposed PMX	
Gentlemen:				
I have examined the a	pplication for the:			
Petro-Lewis Corp. Operator	L. G. Warlick "B"  Lease and Well No		1-H 19-21-37 Unit, S - T - R	<del></del> .
and my recommendation 0.KJ.S.	s are as follows:			<u>-</u> -
Yours very truly,				
Jones	h for			