CASE 7256: PETRO-LEWIS CORPORATION FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO

N. N.

Case No.

Application
Transcripts

Small Exhibits

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO 20 May 1981 EXAMINER HEARING IN THE MATTER OF: Application of Petro-Lewis Corporation for downhole commingling, Lea County, New Mexico. CASE BEFORE: Daniel S. Nutter 7256 10 11 12 13 TRANSCRIPT OF HEARING 14 15 APPEARANCES 16 For the Oil Conservation Division: Ernest L. Padilla, Esq. Legal Counsel to the Division State Land Office Bldg. Santa Fe, New Mexico 87501 For the Applicant: W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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18	Applicant E	xhibit	Four, Hi	story			7	
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20	Applicant E	xhibìt	Six, Dec	cline Cur	ve		8	٠ .
21	Applicant E	xhibit	Seven, N	Vaiver	$\epsilon_{\mu} = 1$		9	
22	Applicant E	xhibit	Eight, W	Vaiver	,		9	
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                           MR. PADILLA: Application of Petro-
3
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                           MR. KELLAHIN: Mr. Examiner, I'm Tom
    Kellahin, Santa Fe, New Mexico, appearing on behalf of the
6
    applicant, and I have one witness.
                           (Witness sworn.)
10
                              JAMES SIECK
11
    being called as a witness and being duly sworn upon his oath,
12
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14
15
                              DIRECT EXAMINATION
     BY MR, KELLAHIN:
16
                           Mr. Sieck, would you please state your
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18
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                           MR. NUTTER: How do you spell your last
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    the University of Wyoming in petroleum engineering.
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19
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                           MR. KELLAHIN: We tender Mr. Sieck as
20
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21
                           MR. NUTTER: Mr. Sieck is qualified.
22
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23
     the application itself, which is the first three pages of the
24
     exhibit packet, and direct your attention to the plat, which
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    and fraced. The Blinebry zone IP'd for 49 barrels a day, 95
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6
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8
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3 plug, or
5 making h
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11 plug was
12 barrels
13 of water
14 bottom h
16 zones, M

wimately a half a barrel of -- well, I take that back.

Up until the time we set the bridge

plug, or at the time we set the bridge plug, the Drinkard was

making half a barrel of oil per day, 2 barrels of water, and

approximately 1 Mcf.

Q. Okay. Turn to Exhibit Number Six and have you identify that.

A. That's a decline curve on the Wantz-Abo formation for the same well, and at the time a bridge plug was set the Wantz-Abo was making approximately 5-1/2 barrels of oil per day, 21 Mcf per day, and about 5 barrels of water per day.

Q. All right. Let me ask you about any bottom hole pressure information that you have on the three zones, Mr. Sieck, what is that?

A. Okay. The bottom hole pressure information we have is estimated static bottom hole pressures.

We estimate the Blinebry to 550 psi; the Drinkard to be 600; and the Wantz-Abo to be 800 psi,

Q In your opinion is there a significant pressure differential between or among any of the zones that would cause fluids to migrate into any of the producing formations?

A. I don't think there is.

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1 Is there any incompatibility with regards to the quality of the oil to be commingled? 3 I don't believe there is. Blinebry oil is approximately 38-1/2 degree API oil. The Drinkard is the same, and the Wantz-Abo is 39-1/2 degree API. 7 What are you currently doing, or propose to do, with regards to the water production? The water production is trucked from 9 the battery to a disposal well. 10 The increased water production as a re-11 12 sult of the commingling all three zones will not be any prob-13 lem for you? No, it won't. The Blinebry is currently 14 making 45 barrels of water per day. We will be gaining an 15 additional 7 barrels of water per day, 16 17 Is there any risk of contamination to 18 any of the zones by the water production? 19 And is the ownership common with regards 20 21 to all three zones? The ownership is common to all three 22 23 zones. All right, sir. Let's turn to Exhibits 24 Number Seven and Eight and have you tell me what those are.

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2	A. These are the waivers signed by the
3	two offset operators that we solicited: The two offset opera-
4	tors being Mobil Oil Corporation and Sun Texas Company.
5	0 All right, sir, Mr. Sieck, are there
6	any other wells in the area that have been commingled between
7	the Blinebry and the Drinkard or the Blinebry and the Wantz-
8	Abo?
9	A. The Gulf Sarkeys No. 1, the other well
10	on this lease, is currently commingled in the Blinebry and
11	Wantz-Abo, downhole commingled.
12	Q. All right, sir.
13	A. Under Order No. DHC-72.
14	Q. Were Exhibits One through Eight prepared
15	by you or compiled under your direction and supervision?
16	A. Yes, they were.
17	Q And in your opinion, Mr. Sieck, will
18	approval of this application be in the best interest of con-
19	servation, the prevention of waste, and the protection of
20	correlative rights?
21	A. Yes, it will.
22	MR. KELLAHIN: Move the introduction of
23	Exhibits One through Eight.
24	MR. NUTTER; Exhibits One through
25	Eight will be admitted in evidence.

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3	CROSS EXAMINATION
4	BY MR. NUTTER:
5	Q. Mr. Sieck, now the Blinebry was just
6	opened up in January of this year, correct?
7	A. February.
8	Q. Or February, and it's already declined
.9	from the initial 49 barrels down to 15 barrels of oil per day.
10	A. That's true.
11	And at the time the bridge plug was set
12	the Aho was making 5-1/2 barrels of oil, but only a 1/2 barrel
13	the prinkard.
14	A. That's correct.
15	MR. NUTTER: Are there any further
10	guestions of the witness? He may be excused.
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1.

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CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sooly W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner nearing of Gase .o. 7256 heard by me on _, Examiner

Oil Conservation Division

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO

20 May 1981

EXAMINER HEARING

IN THE MATTER OF:

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Application of Petro-Lewis Corporation for downhole commingling, Lea County, New Mexico.

7256

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel to the Division State Land Office Bldg. Santa Fe, New Mexico 37501

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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6		Cross	Examination	by Mr. N	utter	11	
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15	Applica	nt Exhibit	One, Plat			5	•
16	Applica	nt Exhibit	Two, Scheme	atic		5	
17	Applica	nt Exhibit	Three,		en e	7	
18	Applica	nt Exhibit	Four, Histo	ory			n week
19	Applica	nt Exhibit	Five, Decl	ine Curve		7	
20	Applica	nt Exhibit	Six, Declin	ne Curve		8	
21	Applica	nt Exhibit	Seven, Wair	ver		9	
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15	A.	Yes, they do.
16	Q	And pursuant to those duties have you
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20		MR. KELLAHIN: We tender Mr. Sieck as
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22		MR. NUTTER: Mr. Sieck is qualified.
23	Q.	Mr. Sieck, I'll ask you to turn past
24	the application itse	olf, which is the first three pages of the
25	exhibit packet, and	direct your attention to the plat, which

1				5
2	is marked as Exhibit Numb	er One, and h	ave you locate	for us
3,	the subject well that's t	he subject of	the applicati	on.
4	A. The	subject well	is the Gulf S	arkeys No.
5	2. It is located in Unit	F, Section 2	5, Township 21	South,
6	Range 37 East.			
7	Q. And	what do you	seek to accomp	lish by
8	the application?			
9	A. Wha	t we'd like t	o đo is downho	le com-
10	mingle the Blinebry, the	Drinkard, and	the Wantz-Abo	formation.
11	Q. Are	all these oi	1 formations?	
12	A. The	ey are all oil	formations.	
13	Q. And	are all the	formations mar	ginal?
14	ħ. Yes	;		
15	Q. Do	any of these	formations flo	w or do
16	they require artificial	ift?		
17	A. The	y all require	artificial li	.ft.
18	Q All	right, sir,	let's turn to	the
19	schematic, which is your	Exhibit Number	er Two, and has	e you
20	give us a little backgrou	and about the	well. How was	it ori-
21	ginally completed?			
22	A. Oka	ay. This well	was drilled	ln December
23	of 1968 to a total depth	of 7400 feet	, and the 7-5/	3ths
24	production casing was se	t and cemented	l at TD.	
25	Th	e Wantz-Abo fo	ormation was po	erforated

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2	first and initial potential on that zone was 142 barrels a
3	day, barrels of oil per day, 16 barrels of water, and 168 Mcf
4	The well was the Drinkard zone was
5	later completed in May of '69 for 165 barrels of oil per day,
δ	41 barrels of water, and 218 Mcf per day.
7	A How were the Prinkard and Wantz-Abo zon
8	produced?
9	A. They were dual there was a dual com-
10	pletion in this well incorporating two tubing strings and a
11	packer, authorized by Administrative Order MC-1870 on June
12	25th, 1969.
13	Q. And how long did the well produce as
14	a dually completed Drinkar-Wantz-Abo well?
15	A. Up until 1970, November of 1970.
16	Q And then what happened?
17	A. In November of 1970 they were downhole
18	commingled under Order No. DHC-71.
19	Q. And thereafter how long were they pro-
20	duced as a commingled well?
21	A. From that point they were commingled
22	up until January of '81.

Then what happened?

February 16th of '81 the retrievable bridge plug shown in the

In January of -- or in February, on

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         diagram was set at 6273 and the Blinebry zone was perforated
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4	plug, or at the time we set the bridge plug, the Drinkard was
5	making half a barrel of oil per day, 2 barrels of water, and
6	approximately 1 Mcf.
7	Q Okay. Turn to Exhibit Number Six and
8	have you identify that.
9	A. That's a decline curve on the Wantz-
10	Abo formation for the same well, and at the time a bridge
11	plug was set the Wantz-Abo was making approximately 5-1/2
12	barrels of oil per day, 21 Mcf per day, and about 5 barrels
13	of water per day.
14	Q All right. Let me ask you about any
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23	would cause fluids to migrate into any of the producing form-
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10 2 These are the waivers signed by the 3 two offset operators that we solicited: The two offset operators being Mobil Oil Corporation and Sun Texas Company. All right, sir, Mr. Sieck, are there 6 any other wells in the area that have been commingled between 7 the Blinebry and the Drinkard or the Blinebry and the Wantz-8 Abo? The Gulf Sarkeys No. 1, the other well 10 on this lease, is currently commingled in the Blinebry and 11 Wantz-Abo, downhole commingled. 12 All right, sir. 13 Under Order No. DHC-72. 14 Were Exhibits One through Eight prepared 15 by you or compiled under your direction and supervision? 16 Yes, they were. 17 And in your opinion, Mr. Sieck, will 18 approval of this application be in the best interest of con-19 servation, the prevention of waste, and the protection of 20 correlative rights? 21 Yes, it will. 22 MR. KELLAHIN: Move the introduction of 23 Exhibits One through Eight. 24 MR. NUTTER: Exhibits One through 25 Eight will be admitted in evidence.

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5	Q	Mr. Sieck, now the Blinebry was just
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7	A.	February.
8	Q	Or February, and it's already declined
9	from the initial 49 b	arrels down to 15 barrels of oil per day.
10	A.	That's true.
11	Q	And at the time the bridge plug was set
12	the Abo was making 5-	1/2 barrels of oil, but only a 1/2 barrel
13	of oil from the Drink	ard.
14	ä.	That's correct.
15		MR. NUTTER: Are there any further
16	questions of the witr	less? He may be excused.
17		Do you have anything further, Mr. Kel-
18	lahin?	
19	v v	MR. KELLAHIN: No, sir.
20		MR. NUTTER: Does anyone have anything
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22		We'll take the case under advisement.
23	# # # # # # # # # # # # # # # # # # #	
24		(Hearing concluded.)
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CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Snory W. Bayd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing the proceedings in the Examiner hearing in the Proceedings in the Examiner hearing of the Proceedings in the Proc

ALLY W. BOYD, C.S.F Rt. 1 Box 193-R Santa Fe, New Mexico 87501 Phone (303) 435-7409

No. 12 No. 12 No. 12 No. 13 No. 14 No. 15 No. 16 No



LARRY KEHOE SECRETARY

ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

May 28, 1981

POST OFFICE BOX 2008 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Mr. Thomas Kellahin & Attornas	
. OGG UTTIAA	D
Santa Fe, N	ew Mexico

CASE NO. 7256
ORDER NO. R-6696

Applicant:

Petro-Lewis Corporation

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD X
Artesia OCD X
Aztec OCD

Other

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 7256 Order No. R-6696

APPLICATION OF PETRO-LEWIS CORPORATION FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on May 20, 1981, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>27th</u> day of May, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Petro-Lewis Corporation, is the owner and operator of the Gulf Sarkeys Well No. 2, located in Unit F of Section 25, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the applicant seeks authority to commingle Blinebry, Drinkard and Wantz-Abo production within the wellbore of the above-described well.
- (4) That from the Blinebry zone, the subject well is capable of low marginal production only.
- (5) That from the Drinkard zone, the subject well is capable of low marginal production only.
- (6) That from the Abo zone, the subject well is capable of low marginal production only.

-2-Case No. 7256 Order No. R-6696

- (7) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (8) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (9) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobbs district office of the Division any time the subject well is shut-in for 7 consecutive days.
- (10) That in order to allocate the commingled production to each of the commingled zones in the subject well, 72 percent of the commingled oil production and 82 percent of the gas production should be allocated to the Blinebry zone, two percent of the commingled oil production and one percent of the gas production to the Drinkard zone, and 26 percent of the commingled oil production and 17 percent of the gas production to the Abo

IT IS THEREFORE ORDERED:

- (1) That the applicant, Petro-Lewis Corporation, is hereby authorized to commingle Blinebry, Drinkard and Wantz-Abo production within the wellbore of the Gulf Sarkeys Well No. 2, located in Unit F of Section 25, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.
- (2) That 72 percent of the commingled oil production and 82 percent of the gas production shall be allocated to the Blinebry zone, two percent of the commingled oil production and one percent of the gas production shall be allocated to the Drinkard zone, and 26 percent of the commingled oil production and 17 percent of the gas production shall be allocated to the Abo zone.
- (3) That the operator of the subject well shall immediately notify the Division's Hobbs district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

-3-Case No. 7256 Order No. R-6696

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may doem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OXL CONSERVATION DIVISION

JOE D. RAMEY Director

SEAL

Dockets Nos. 17-81 and 18-81 are tentatively set for June 3 and 17, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 20, 1981

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

- ALLOWABLE: '(1) Consideration of the allowable production of gas for June, 1981, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for June, 1981, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 7242: (Readvertised)

Application of Harvey E. Yates Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox Wolfcamp-Mississippian location of its McDonald Well No. 1 to be drilled 660 feet from the South line and 990 feet from the East line of Section 33, Township 13 South, Range 36 East, the S/2 of said Section 33 to be dedicated to the well.

CASE 7243: (Readvertised)

Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian and Mississippian formations underlying the \$/2 of Section 33, Township 13 South, Range 36 East, for a gas completion and/or all mineral interests in the Pennsylvanian-Devonian formations underlying the \$E/4 of said Section 33 for an oil completion. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

- CASE 7253: Application of Bandera Energy Company for compulsory pooling, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the E/2 of Section 27, Township 16 South, Range 35 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7254: Application of Mesa Petroleum Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde formation underlying the W/2 of Section 15, Township 30 North, Range 11 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7255: Application of Gulf Oil Corporation for compulsory pooling, Lea Gounty, New Mexico.

 Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the top of the Wolfcamp formation to the base of the Morrow formation underlying the W/2 of Section 28, Township 18 South, Range 32 East, to be dedicated to a well to be drilled at a standard location thereon.

 Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7256: Application of Petro-Lewis Corporation for downhole commingling, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinebry,
 Drinkard, and Abo production in the wellbore of its Gulf Sarkeys Well No. 2 located in Unit F of
 Section 25, Township 21 South, Range 37 East.

CASE 7257: (This case will be dismissed and a different well will be docketed for hearing later.)

Application of Cities Service Company for a salt water disposal well, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Entrada formation at approximately 5300 feet in its Federal "M" Well No. 1 in Unit P of Section 21, Township 19 North, Range 5 West.

PETRO LEWIS CORPORATION

Oil and Gas Producers

P.O. Box 937 Sundown Highway Farm to Market Road 300 Levelland, Texas 79336 806/894-8589

May 14, 1981

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

Subject: Request for Downhole Commingling Permit Rule 303-C

(a) Name and address of the operator Petro-Lewis Corporation P.O. Box 937 Levelland, TX 79336

Energy Center (Home Office) 717 17th St. P.O. Box 2250 Denver, Colorado 80201

- (b) Lease name, well number, well location Gulf Sarkeys No. 2, 1980' FNL, 2030' FWL, Unit F, Section 25, T21S, R37E
- (c) Names of the pools the well is completed in and the Division order number which authorized the dual completion

Blinebry - Current production zone.

RBP set at 6273' (2-18-81).

Perfed from 5844'-6176' with
total of 39 selective shots.

Drinkard - Perfed from 6476'-6849' with total of 32 selective shots.

Wantz Abo - Perfed from 6925'-7356' with total of 48 selective shots.

Wantz Abo and Drinkard dual completion was authorized by Order No. MC-1870. Downhole commingling of the Wantz Abo and Drinkard was authorized on October 12, 1970 by Order DHC-71. A wellbore schematic is attached. (Attachment I)

- (d) A current (within 30 days) 24 hour productivity test on Division Form C-116 showing the amount of oil, gas, and water produced from each zone. (See Attachment II)
- (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 shall be submitted.)

 (See Attachment III)
- (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	
Blinebry	550 psi
Drinkard	600 psi
Wantz Abo	800 psi

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

Fluid compatibility is evidenced in that in the Gulf-Sarkeys No. 2, the Drinkard and Wantz Abo were downhole commingled under Order No. DHC-71 and the Blinebry and Wantz Abo are downhole commingled in the Gulf Sarkeys No. 1 under Order No. DHC-72. Blinebry oil is 38.5° A.P.I. Drinkard oil is 38.5° A.P.I. and Wantz oil is 39.5° A.P.I.

(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 and Wantz Abo production, and Wantz Abo and Drinkard production are downhole commingled on this lease as per Orders DHC-72 and DHC-71 respectively with no affect on the value. Therefore, downhole commingling of Blinebry, Drinkard, and Wantz Abo will not affect the value.

It is our intent, if granted permission to commingle the Blinebry, Drinkard and Wantz Abo zones of the subject well. At present the Drinkard and Wantz Abo zones are shut-in by the retreivable bridge plug set at 6273'. The Blinebry zone is currently being produced by means of artificial lift.

(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 of the proposed commingling.

> All offset operators have been notified and copies of the signed waivers received from the operators are attached.

> > Respectfully Submitted,

James F. Sieck

Sr. Operations Engineer

JFS/ap Attachments

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DEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

PETAS-Aux EXHIBIT NO. /

CASE NO. 7256

PETRO-LEWIS CORPORATION

GULF SARKEYS

F-25-21S-37E-Lea County, NM

Plat & Ownership Map

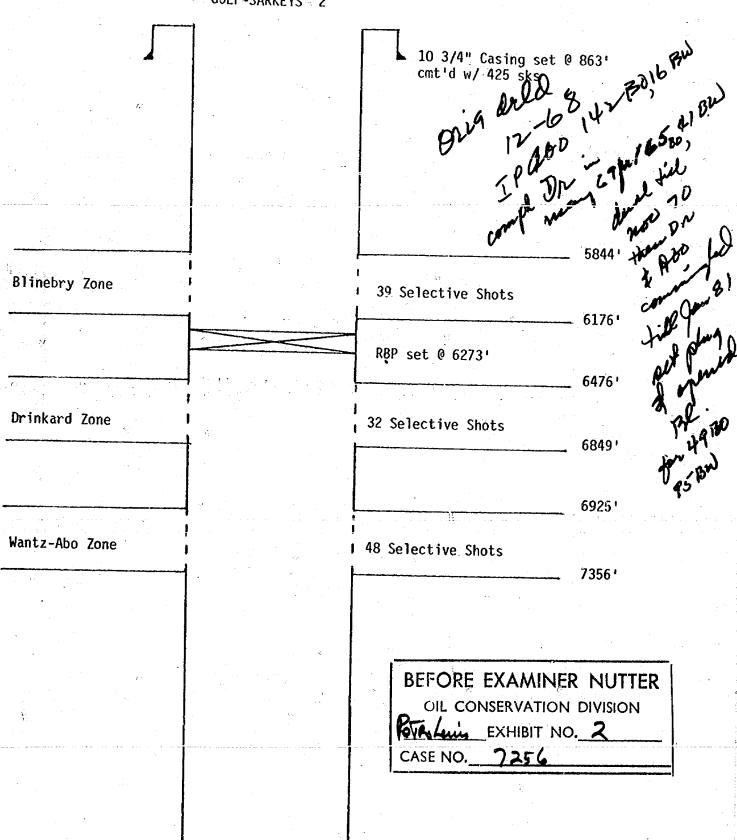
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WELL BORE SCHEMATIC PETRO-LEWIS CORPORATION GULF-SARKEYS 2



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STATE OF NEW MEXICO ENERGY NO MINERALS DEPARTMENT

P. G. B. A Zain SANTA FE, NEW MEXICO 67501

Form C-116 Revised 10-1-73

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

Duing gas-oil ratio test, each well shell 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.

Gos volumes must be reported in MCP measured at a pressure base of 15,025 psio and a temperature of 60° P. Specific gravity base

Report costing pressure in lieu of tubing pressure for any well producing through costing,

Hall original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 331 and appropriate pool rules.

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

(Signalure)

Operations Engr

5/14/81

(Tille)

COMPLETION HISTORY

GULF SARKEYS #2

BLINEBRY ZONE

Perforated Blinebry Zone with 39 select fire holes from 5884'-6176': Fraced Zone with 31,000 gallons Titan II and 45,000 pounds of 20/40 sand. The concentration was increased from 1 to 3 pounds per gallon. Maximum treating rate was 20 BPM, maximum pressure was 4750 psi, average pressure was 3700 psi with an ISDP of 2000 psi and a 15 minute SDP of 1850 psi. Installed pumping equipment.

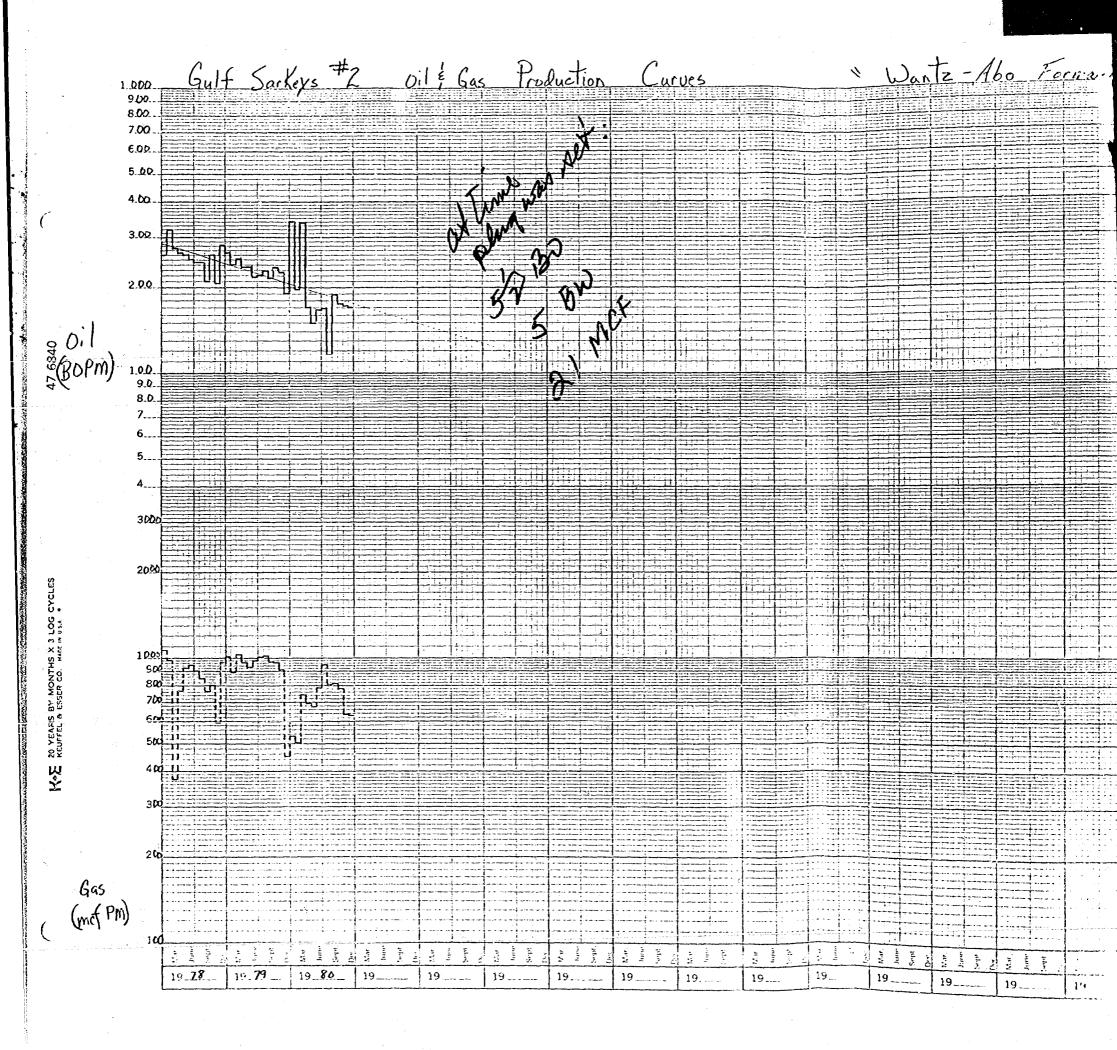
OIL CONSERVATION DIVISION

EXPORT

EXHIBIT NO. 4

CASE NO. 7256

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BEFORE EXAMINER NUTTER OL CONSERVATION DIVISION EXHIBIT NO._ CASE NO.

Offset Operators

Petro-Lewis Corporation wishes to downhole commingle production from the Blinebry (5844'-6176'), Drinkard (6476'-6849'), and Wantz Abo (6925'-7356') zones in its Gulf-Sarkeys No. 2 well, located in Unit F, Section 25, T21S, R37E, Lea County, New Mexico. The combined total production will be less than 50 BOPD. All three zones require artificial lift and have common ownership. The fluids are compatible and commingling will not affect the value of

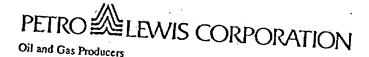
If you have no objection to the downhole commingling, please sign the waiver below and return in the enclosed envelope. You may retain one copy for your files.

Michael G. Handren

Michael G. Handren Staff Operations Engineer

We have been notified of Petro-Lewis Corporation's request for downhole commingling in its Gulf-Sarkeys No. 2. We are aware of the facts and hereby waive any objection to approval of this request as stated in the above letter.

	J. a. Maris	
Signed:	LIOBIL PRODUCING TX & NM INC.	
Company:	4/24/81	



BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Stistien EXHIBIT NO. 8

CASE NO.

Offset Operators

Gentlemen:

Petro-Lewis Corporation wishes to downhole commingle production from the Blinebry (5844'-6176'), Drinkard (6476'-6849'), and Wantz Abo (6925'-7356') zones in its Gulf-Sarkeys No. 2 well, located in Unit F, Section 25, T21S, R37E, Lea County, New Mexico. The combined total production will be less than 50 BOPD. All three zones require artificial lift and have common ownership. The fluids are compatible and commingling will not affect the value of

If you have no objection to the downhole commingling, please sign the waiver below and return in the enclosed envelope. You may retain one copy for your files.

Sincerely,

Michael G. Danden

Michael G. Handren Staff Operations Engineer

WAIVER

We have been notified of Petro-Lewis Corporation's request for downhole commingling in its of this request as stated in the above letter.

Signed:	Mahrodes	
Company:	SUN TEXAS COMPANY	_
Date:	May 15 1981	
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Oil and Gas Producers

P.O. Box 937 Sundown Highway Farm to Market Road 300 Levelland, Texas 79336 806/894-8589

May 14, 1981

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

Subject: Request for Downhole Commingling Permit Rule 303-C

(a) Name and address of the operator Petro-Lewis Corporation P.O. Box 937 Levelland, TX 79336

Energy Center (Home Office) 717 17th St. P.O. Box 2250 Denver, Colorado 80201

- (b) Lease name, well number, well location Gulf Sarkeys No. 2, 1980' FNL, 2030' FWL, Unit F, Section 25, T21S, R37E
- (c) Names of the pools the well is completed in and the Division order number which authorized the dual completion
 - Blinebry Current production zone. RBP set at 6273! (2-18-81). Perfed from 5844!-6176! with total of 39 selective shots.
 - Drinkard Perfed from 6476'-6849' with total of 32 selective shots.
 - Wantz Abo Perfed from 6925'-7356' with total of 48 selective shots.

Wantz Abo and Drinkard dual completion was authorized by Order No. MC-1870. Downhole commingling of the Wantz Abo and Drinkard was authorized on October 12, 1970 by Order DHC-71. A wellbore schematic is attached. (Attachment I)

- (d) A current (within 30 days) 24 hour productivity test on División Form C-116 showing the amount of oil, gas, and water produced from each zone.
- A production decline curve for both zones showing that for a period of at least one year a steady zone which will permit a reasonable allocation of the commingled production to each zone for be dispensed with in the case of a newly completed production history. However, a complete resume cription of treating, testing, etc., of each zone (See Attachment III)
- (f) Estimated bottom-hole pressure for each artificially lifted zone. A current (within 30 days) measured bottom-hole pressure for each zone capable of

Estimated BHP
Blinebry
Drinkard 550 psi
Wantz Abo 600 psi
800 psi

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

Fluid compatibility is evidenced in that in the Gulf-Sarkeys No. 2, the Drinkard and Wantz Abo were downhole commingled under Order No. DHC-71 and the Blinebry in the Gulf Sarkeys No. 1 under Order No. DHC-72. Blinebry oil is 38.50 A.P.I. Drinkard oil is 38.50 A.P.I. and Wantz oil is 39.50 A.P.I.

(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 and Wantz Abo production, and Wantz Abo and Drinkard production are downhole commingled on this lease as per Orders DHC-72 and DHC-71 respectively with no affect on the value. Therefore, downhole commingling of Blinebry, Drinkard, and Wantz Abo will not affect the value.

It is our intent, if granted permission to commingle the Blinebry, Drinkard and Wantz Abo zones of the subject well. At present the Drinkard and Wantz Abo zones are shut-in by the retreivable bridge plug set at 6273'. The Blinebry zone is currently being produced by means of artificial lift.

(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 of the proposed commingling.

All offset operators have been notified and copies of the signed waivers received from the operators are attached.

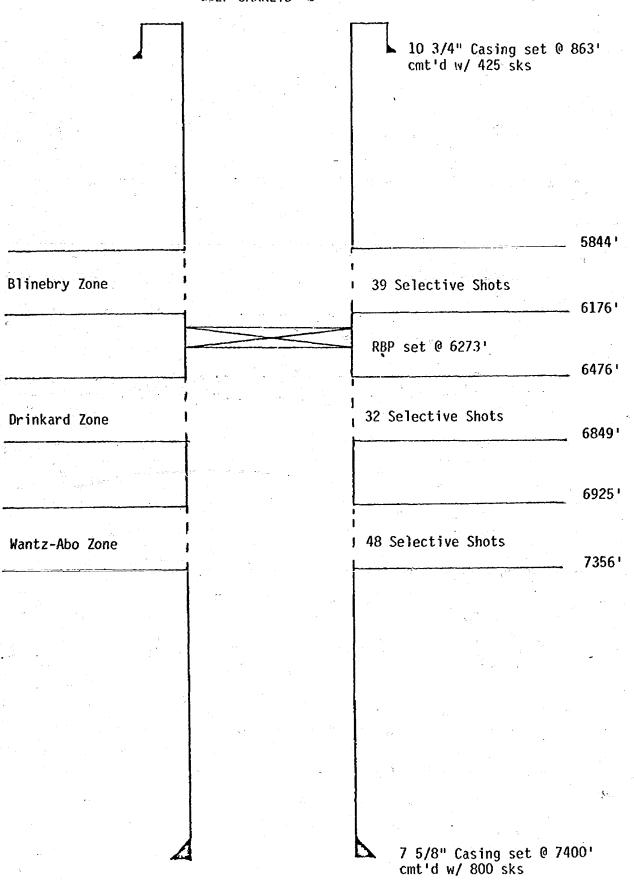
Respectfully Submitted,

James F. Sieck

amio 7.

Sr. Operations Engineer

JFS/ap Attachments WELL BORE SCHEMATIC PETRO-LEWIS CORPORATION GULF-SARKEYS 2



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

P OCULA 24.4 SANTA FE, NEW MEXICO 67501

Form C-116 Revised 10-1-78

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

Duing gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well la facated 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 MCP measured at a pressure base of \$5.025 pale and a temperature of 60° P. Specific gravity base will be 0.60.

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

Mail original and one copy of this report to the district office of the New Kexico Oli Conservation Division in accordance with Rule 331 and appropriate pool rules.

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

James F Sich

Sr Operations Engr

5/14/81

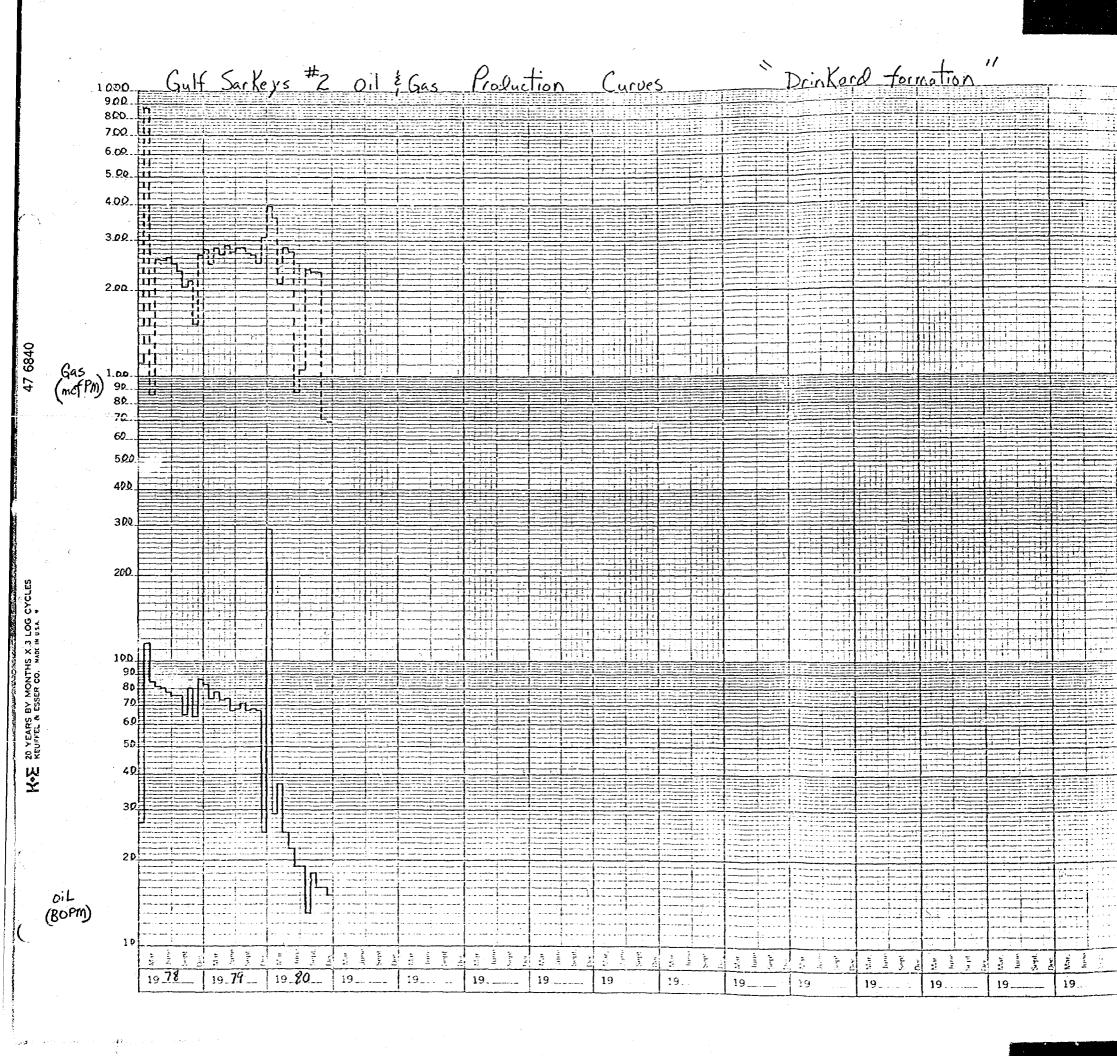
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COMPLETION HISTORY

GULF SARKEYS #2

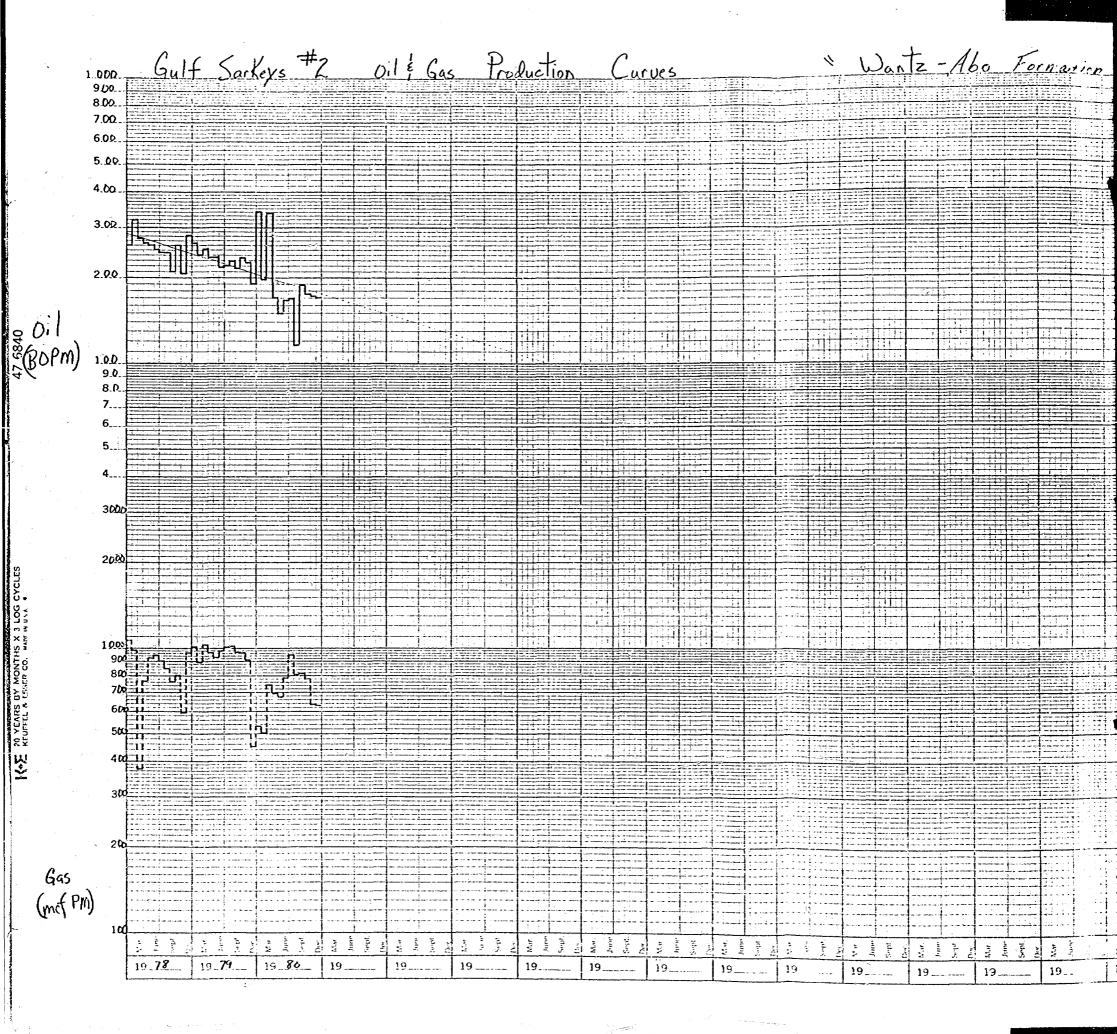
BLINEBRY ZONE

Perforated Blinebry Zone with 39 select fire holes from 5884'-6176': Fraced Zone with 31,000 gallons Titan II and 45,000 pounds of 20/40 sand. The concentration was increased from 1 to 3 pounds per gallon. Maximum treating rate was 20 BPM, maximum pressure was 4750 psi, average pressure was 3700 psi with an ISDP of 2000 psi and a 15 minute SDP of 1850 psi. Installed pumping equipment.



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Offset Operators

Gentlemen:

Petro-Lewis Corporation wishes to downhole commingle production from the Blinebry (5844'-6176'), Drinkard (6476'-6849'), and Wantz Abo (6925'-7356') zones in its Gulf-Sarkeys No. 2 well, located in Unit F, Section 25, T21S, R37E, Lea County, New Mexico. The combined total production will be less than 50 BOPD. All three zones require artificial lift and have common ownership. The fluids are compatible and commingling will not affect the value of the crude.

If you have no objection to the downhole commingling, please sign the waiver below and return in the enclosed envelope. You may retain one copy for your files.

Michael G. Handren

Michael G. Handren Staff Operations Engineer

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We have been notified of Petro-Lewis Corporation's request for downhole commingling in its Gulf-Sarkeys No. 2. We are aware of the facts and hereby waive any objection to approval of this request as stated in the above letter.

Signed:	J. a. Maris	
-Company:	MOBIL PRODUCING TX & NM INC.	
Date:	4/29/81	
	1	



Offset Operators

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Signed:	MySchro	ade)	· · · · · · · · · · · · · · · · · · ·
Company:	SUN TEXAS COMEA		
Date:	May 15	, 1981	
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Oil and Gas Producers

May 14, 1981

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

Subject: Request for Downhole Commingling Permit Rule 303-C

(a) Name and address of the operator Petro-Lewis Corporation P.O. Box 937 Levelland, TX 79336

Energy Center (Home Office) 717 17th St. P.O. Box 2250 Denver, Colorado 80201

- (b) Lease name, well number, well location Gulf Sarkeys No. 2, 1980' FNL, 2030' FWL, Unit F, Section 25, T21S, R37E
- (c) Names of the pools the well is completed in and the Division order number which authorized the dual completion

Blinebry - Current production zone.

RBP set at 6273' (2-18-81).

Perfed from 5844'-6176' with
total of 39 selective shots.

Drinkard - Perfed from 6476'-6849' with total of 32 selective shots.

Wantz Abo - Perfed from 6925'-7356' with total of 48 selective shots.

Wantz Abo and Drinkard dual completion was authorized by Order No. MC-1870. Downhole commingling of the Wantz Abo and Drinkard was authorized on October 12, 1970 by Order DHC-71. A wellbore schematic is attached. (Attachment I)

- (d) A current (within 30 days) 24 hour productivity test on Division Form C-116 showing the amount of oil, gas, and water produced from each zone. (See Attachment II)
- (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 shall be submitted.)

 (See Attachment III)
- (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
Blinebry 550 psi
Drinkard 600 psi
Wantz Abo 800 psi

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

Fluid compatibility is evidenced in that in the Gulf-Sarkeys No. 2, the Drinkard and Wantz Abo were downhole commingled under Order No. DHC-71 and the Blinebry and Wantz Abo are downhole commingled in the Gulf Sarkeys No. 1 under Order No. DHC-72. Blinebry oil is 38.5° A.P.I. Drinkard oil is 38.5° A.P.I. and Wantz oil is 39.5° A.P.I.

(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 and Wantz Abo production, and Wantz Abo and Drinkard production are downhole commingled on this lease as per Orders DHC-72 and DHC-71 respectively with no affect on the value. Therefore, downhole commingling of Blinebry, Drinkard, and Wantz Abo will not affect the value.

It is our intent, if granted permission to commingle the Blinebry, Drinkard and Wantz Abo zones of the subject well. At present the Drinkard and Wantz Abo zones are shut-in by the retreivable bridge plug set at 6273'. The Blinebry zone is currently being produced by means of artificial lift.

(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 of the proposed commingling.

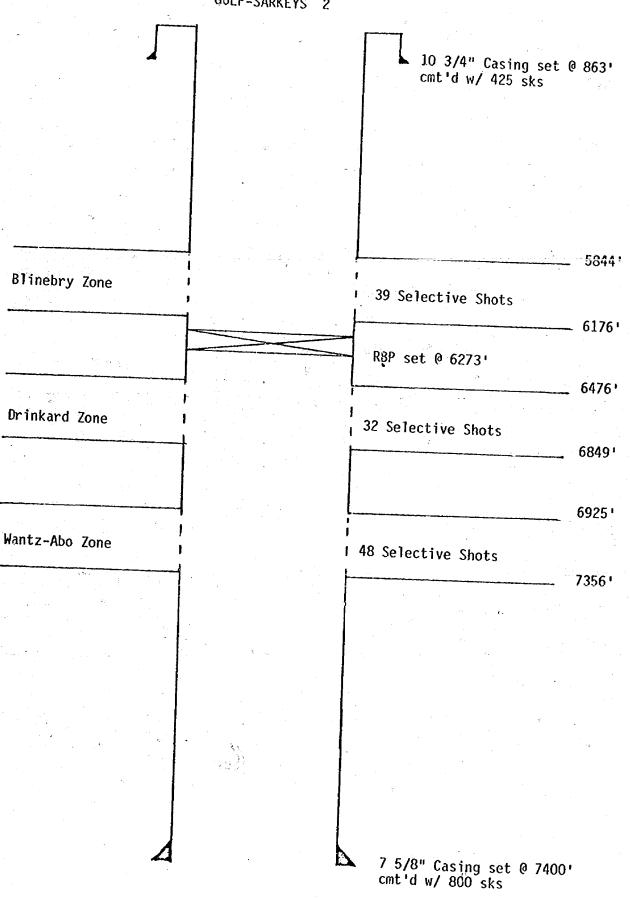
> All offset operators have been notified and copies of the signed waivers received from the operators are attached.

> > Respectfully Submitted,

James F. Sieck

Sr. Operations Engineer

JFS/ap Attachments WELL BORE SCHEMATIC PETRO-LEWIS CORPORATION GULF-SARKEYS 2



STATE OF NEW MEXICO ENERGY NO MINERALS DEPARTMENT

PROBLETING SANTA FE, NEW MEXICO 67501

Form C-115 Revised 10-1-73

GAS-OIL RATIO TESTS County Pcol 10101990 Petro-Lewis Corporation Blinebry Lea Address TYPEOF P.O. Box 937 Levelland, TX 79336 Special X TEST - (X) Scheduled [__] Completion [4 CH 6 TH 0 P T C 3 T PROD. DURING TEST GAS - CIL DAILY LOCATION WELL DATEOF CHOKE TBG, RATIO LEASE NAME ALLOY-WATER CRAV. OIL GAS NO. TEST SIZE PRESS. CU.FT/88L U s . ABLE Bals. OIL 8865 M.C.F. Gulf Sarkeys 37 2 F .25 21 5/1/81 37 24 45 38.5 15 100 6667

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

Duing 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 telerance 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 psic 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.

Mall original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 131 and appropriate post rules.

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

(Signalure)

Sr. Operations Engr

5/14/81

COMPLETION HISTORY

GULF SARKEYS #2

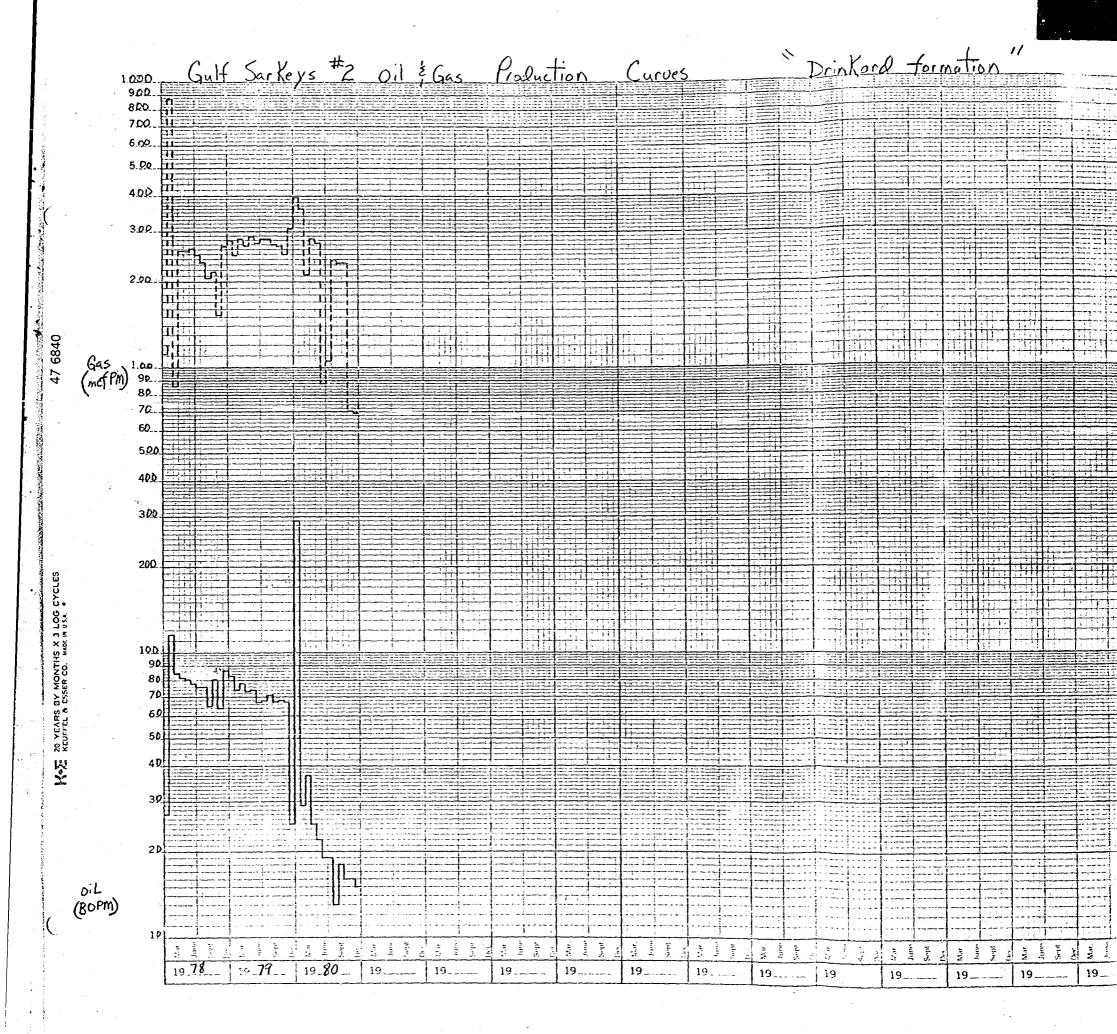
BLINEBRY ZONE

Perforated Blinebry Zone with 39 select fire holes from 5884'-6176': Fraced Zone with 31,000 gallons Titan II and 45,000 pounds of 20/40 sand. The concentration was increased from 1 to 3 pounds per gallon. Maximum treating rate was 20 BPM, maximum pressure was 4750 psi, average pressure was 3700 psi with an ISDP of 2000 psi and a 15 minute SDP of 1850 psi. Installed pumping equipment.

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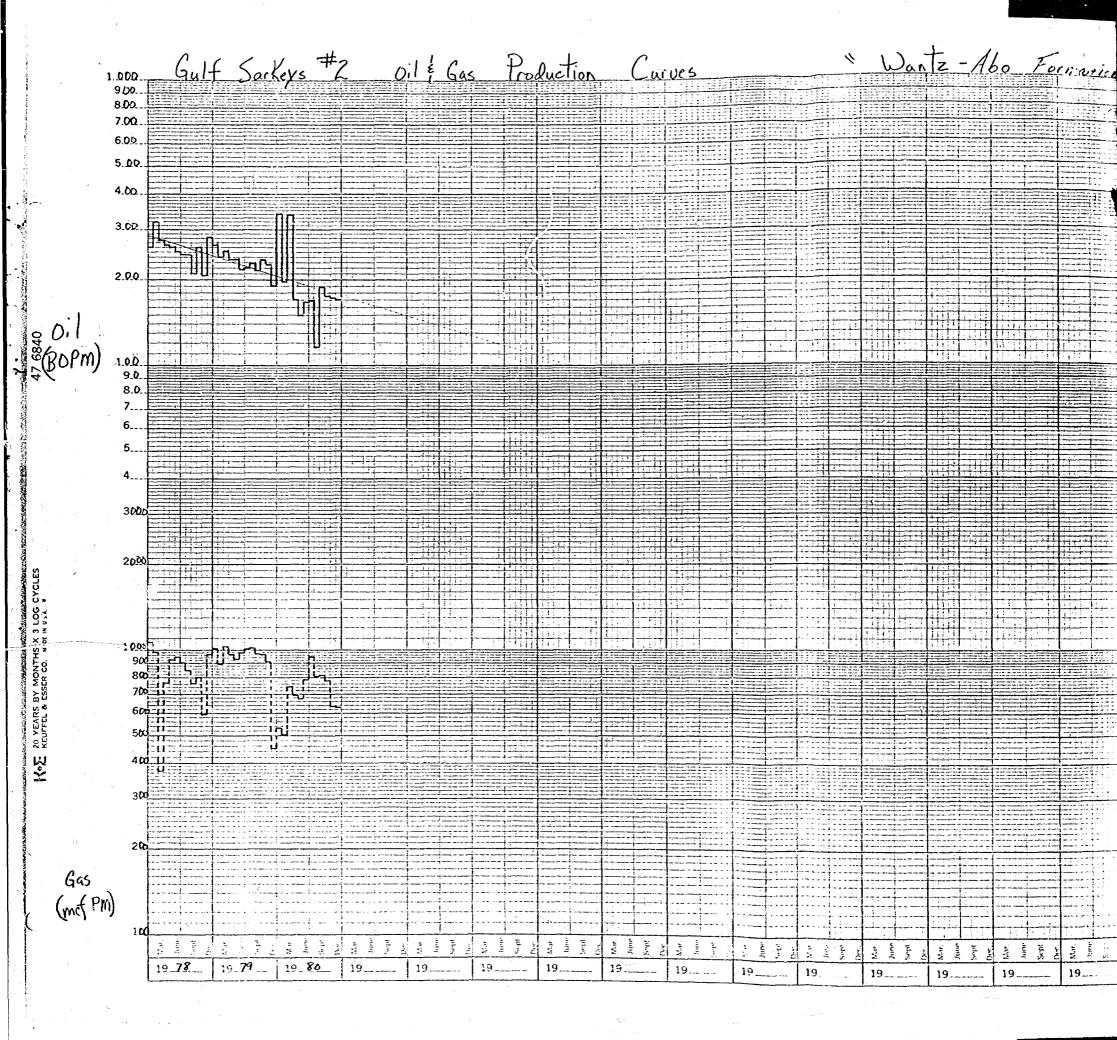
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Offset Operators

Gentlemen:

Petro-Lewis Corporation wishes to downhole commingle production from the Blinebry (5844'-6176'), Drinkard (6476'-6849'), and Wantz Abo (6925'-7356') zones in its Gulf-Sarkeys No. 2 well, located in Unit F, Section 25, T21S, R37E, Lea County, New Mexico. The combined total production will be less than 50 BOPD. All three zones require artificial lift and have common ownership. The fluids are compatible and commingling will not affect the value of the crude.

If you have no objection to the downhole commingling, please sign the waiver below and return in the enclosed envelope. You may retain one copy for your files.

Sincerely,

Michael G. Handren

Michael G. Handren Staff Operations Engineer

WAIVER

We have been notified of Petro-Lewis Corporation's request for downhole commingling in its Gulf-Sarkeys No. 2. We are aware of the facts and hereby waive any objection to approval of this request as stated in the above letter.

Signed:	J. a. Maris	·
Company:	MOBIL PRODUCING TX & NM INC.	
Date:	4/29/81	



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Signed:	1141X hrode	<u> </u>			
Company:_	SUN TEXAS COMPANY				
Date:	May 15,	1981		• 71	
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Oil and Gas Producers

April 13, 1981

Pase 7256

New Mexico Oil Conservation Division P.O. Box 2088 State Land Office Building Santa Fe, New Mexico 87501

Re: Hearing Request
Downhole Commingling
Gulf Sarkeys #2

Gentlemen:

Petro-Lewis Corporation requests a hearing for downhole commingling in its Gulf Sarkeys well number 2 located in Unit F, 1980' FNL, 2030' FWL, Section 25, T21S, R37E, Lea County, New Mexico. We wish to downhole commingle the Blinebry (5844'-6176'), Drinkard (6476'-6849'), and Abo (6925'-7536').

By copy of this letter we are notifying offset operators of our application and requesting waivers for said application.

Sincerely,

Michael S. Handren Staff Operations Engineer

Attachment

MGH/ap

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APR 1 7 1981

OIL CONSERVATION DIVISION SANTA FE

Sun Texas Company P.O. Box 4067 Midland, TX 79701

Attn: R.J. Womack

Mobil Producing Co. Box 633 Wall Towers Unit Midland, TX 79702

Attn: G.W. Barb

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P.O. Box 937 A Súndown Highway 7 100 7 1 Levelland, Texas 79336 806/894-8589 A 7 4 D 2000

Offset Operators

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Michael G. Handren Staff Operations Engineer

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Signed:			
Company:			
Date:			

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

· · · · · ·			CASE NO.	7256	
· · · · · · · · · · · · · · · · · · ·			Order No.	R-6696	
APPLICA	TION OF PE	TRO-LEWIS C	CORPORATION		
FOR DOW	NHOLE COMMIN	IGLING,	LEA		
	NEW MEXICO.		HE DIVISION	Ola	·
*	£	on for he	aring at 9 a	.m. on May 2	20
				Examiner Dar	
the second secon	ter	•			:
NOW	, on this	day o	£ May	, 19 81	the
Division	n Director,	having con	sidered the	testimony, th	e record,
and the	recommendat	ions of th	e Examiner,	and being ful	ly
advised	in the prem	nises,		•	
FINI	DS:	41			, A
(1)	That due p	oublic noti	ce having be	en given as r	equired
by law,	the Divisio	n has juri	sdiction of	this cause an	d the
subject	matter ther	eof.			
· (2)	That the a	pplicant,	Petro-Lewis (Corporation	, is
the owner	er and opera	tor of the	Gulf Sarkey	s Well No. 2	
		of Sect	ion <u>25</u> ,	Township 21	South
Range	37 East	, NMPM,	Lea	County, New	Mexico.
(3)	That the a	pplicant s	eeks authori	ty to comming	le "
(3)					

	(4) That from the Blinebry zone, the subject well is capable of
low	marginal production only.
	(9) That from the <u>Drinkard</u> zone, the
	subject well is capable of low marginal production only.
	(5) That from the Abo zone, the
	subject well is capable of low marginal production only.
	(6) That the proposed commingling may result in the recovery
	of additional hydrocarbons from each of the subject pools, thereby
	preventing waste, and will not violate correlative rights.
	(智) That the reservoir characteristics of each of the
	subject zones are such that underground waste would not be caused
	by the proposed commingling provided that the well is not shut-in
	for an extended period.
	(8) That to afford the Division the opportunity to assess
	the potential for waste and to expeditiously order appropriate
,	remedial action, the operator should notify the Hobbs
	district office of the Division any time the subject well is
	shut-in for 7 consecutive days.
	(9) That in order to allocate the commingled production
101	to each of the commingled zones in the subject well. 72 and 82 percent of the gas production
	percent of the commingled 0// production should be
	allocated to the Blinebry zone, and the two
N.=	percent of the commingled production to the
ha	Drinkard zone, and 26 percent of the Abo zone. production to the Abo zone.
	(ALTERNATE)
N.	(9) That in order to allocate the commingled production to
	each of the commingled sense in the wells, applicant should
	consult with the supervisor of the Hobbs district office
	of the Division and determine an allocation formula for each of
	the production zones.
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IT IS THEREFORE ORDERED:

(1) That the applicant, Petro-Lewis Corporation , is
hereby authorized to commingle Blinebry, Drinkard and
Abo production within the wellbore of
the Gulf Sarkeys Well No. 2 , located in Unit F of
Section 25 , Township 21 South , Range 37 East ,
NMPM, Lea County, New Mexico.
(2) That the applicant shall consult with the Supervisor
of the Hobbs district office of the Division and
Retermine an allocation formula for the allocation of production
to each zone in each of the subject wells.
(ALTERNATE)
production shall be allocated to the Blinebry zone, and present of the gas production production shall be allocated to the Blinebry zone present of the commingled of the production shall be allocated to the Drinkard production shall be allocated to the Drinkard
zone: and 26 percent of the commingled 0// production shall be allocated to the Abo zone.
(3) That the operator of the subject well shall immediately
notify the Division's Hobbs district office any time the
well has been shut-in for 7 consecutive days and shall concurrent
present, to the Division, a plan for remedial action.
(4) That jurisdiction of this cause is retained for the
entry of such further orders as the Division may deem necessary.
DONE at Santa Fe, New Mexico, on the day and year hereinabove
designated.
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