

6995

Case No.

Application

Transcripts



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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR LARRY KEHDE SECRETARY

September 12, 1980

Re:

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

والمراجع والمحافة والمسافة والمسافة

Mr. Thomas Kellahin Kellahin & Kellahin Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico

Applicant:

ORDER NO. R-6463

CASE NO.

--- Petro-Lewis Corporation-

6995

Dear Sir:

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

Pours very truly, JOE D. RAMEY Director

JDR/fd

Copy of order also sent to:

Hobbs OCD \_\_\_\_\_ Artesia OCD \_\_\_\_\_ 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. 6995 Order No. R-6463

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 August 6, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>10th</u> day of September, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDST

EX.

(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 pwner and operator of the L. G. Warlick Well No. 2, located in Unit B of Section 19, Township 21 South, Range 37 East, NMPM, Lea County, New Maxico.

(3) That the applicant seeks authority to commingle Penrose Skelly, Blinebry, and Drinkard production within the wellbore of the above-described well.

(4) That from the Penrose Skelly zone, the subject well is capable of low marginal production only.

(5) That from the Blinebry zone, the subject well is capable of low marginal production only.

(6) That from the Drinkard zone, the subject well is capaple of low marginal production only. -2-Case No. 6995 Order No. R-6463

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(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, 15 percent of the commingled oil production and 75 percent of the gaspproduction should be allocated to the Penrose Skelly zone; 15 percent of the commingled oil production and 20 percent of the gas production to the Blinebry zone; and 70 percent of the commingled oil production and 5 percent of the gas production should be percent of the commingled of the gas production should be

IT IS THEREFORE ORDERED:

(1) That the applicant, Petro-Lewis Corporation, is hereby authorized to commingle Penrose Skelly, Blinebry, and Drinkard production within the wellbore of the L. G. Warlick Well No. 2, located in Unit B of Section 19, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That 15 percent of the commingled oil production and 75 percent of the gas production shall be allocated to the Penrose Skelly zone; 15 percent of the commingled oil production and 20 percent of the gas production shall be allocated to the Blinebry zone; and 70 percent of the commingled oil production and 5 percent of the gas production shall be allocated to the Drinkard 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-Gase No. 6995 Order No. R-6463

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(A) 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 herein-bove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

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tarl JOE D. RAMEY Director

fils interes Page 0 1 STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT 2 OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. 3 SANTA FE, NEW MEXICO 6 August 1980 4 EXAMINER HEARING 5 8 IN THE MATTER OF: Application of Petro-Lewis Corpor-8 ation for downhole commingling, Lea County, New Mexico. CASE 9 6995 SALLY W. BCYD, C.S.R. Rt. 1 Box 193-B Santa Fe, New Mexico 87501 Phone (305) 455-7409 10 BEFORE: Daniel S. Nutter 11 12 TRANSCRIPT OF HEARING 13 14 APPEARANCES 15 16 For the Oil Conservation Ernest L. Padilla, Esq. 17 Division: Legal Counsel to the Division 18 State Land Office Bldg. Santa Fe, New Mexico 87501 19 20 For the Applicant: W. Thomas Kellahin, Esq. 21 KELLAHIN & KELLAHIN 500 Don Gaspar 22 Santa Fe, New Mexico 87501 23 24 

MICHAEL G. HANDREN Direct Examination by Mr. Kellahin 3 Cross Examination by Mr. Nutter 12 Redirect Examination by Mr. Kellahin 16

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EXHIBITS

Applicant Exhibit One, Plat Applicant Exhibit Two, Schematic Applicant Exhibit Three, Document Applicant Exhibit Four, C-116 Applicant Exhibit Five, C-116 Applicant Exhibit Six, C-116 Applicant Exhibit Seven, Curve Applicant Exhibit Eight, Curve Applicant Exhibit Eight, Curve Applicant Exhibit Nine, Curve Applicant Exhibit Ten, List Applicant Exhibit Ten, List

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SALLY W. BOYD, C.S.R RL 1 Box 13-B Santa Fc. New Ker 20 97201 MR. NUTTER: We'll call next Case Number

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SALLY V. BOYD, C.S.R.

Phone (SCS) 455-740

MR. PADILLA: Application of Petro-Lewis Corporation for downhole commingling, Lea County, New Mexico. MR. KELLAHIN: I'm Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant, and I have one witness.

## (Witness sworn.)

MTCHAEL G, HANDREN

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Would you please state your name, by whom you're employed, and in what capacity?

A. I'm Michael G. Handren, I'm employed by Petro-Lewis Corporation as a staff operations engineer.

A. Mr. Handren, how do you spell your last name?

H-A-N-D-R-E-N,

Q And have you previously testified before the Oil Conservation Division as a petroleum engineer and had

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And pursuant to your employment as a 3 petroleum engineer for Petro-Lewis, have you made a study of the facts surrounding this application? Yes, I have. 6 A. MR, KELLAHIN: We tender Mr. Handren as 7 an expert petroleum engineer. 8 MR. NUTTER; Mr. Handren is qualified. 9 Mr, Handren, would you refer to what we've 10 marked as Applicant's Exhibit Number One and identify that 11 12 plat for us? Exhibit Number One is a plat of Section 13 19 and portions of Section 17, 18, and 20, Township 21 South, 14 Range 37 East, in Lea County, New Mexico. 15 Would you identify for us the subject 16 0. 17 well at this hearing? The subject well is indicated by an arrow 18 19 It's Petro-Lewis L. G. Warlick No. 2. And what are you proposing to accomplish 20 21 by this application? We are proposing to commingle downhole in 22 the wellbore of L. G. Warlick No. 2, the Penrose Skelly, the 23 24 Blinebry, and Drinkard zones. Are all three of those zones currently 26

your qualifications accepted and made a matter of record?

Yes.

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SALLY W. BOYD, C.S.R.

ta Fe, Nev. Merico 875 Phone (S1)5) 455-740)

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		Page5										
)	1	classified as oil zones?										
- N.	2	A. Yes, they are.										
بالانتقار المست <del>محمد م</del>	3	Q. And what acreage is dedicated to the well?										
	4	A. There's 40 acres dedicated for each pro-										
	5	ducing horizon.										
	- 6	Q. Are there any other wells in the area, Mr.										
	7	Handren, that have been approved for downhole commingling of										
	8	these same three zones?										
	9	A. Yes, there are, Our L. G. Warlick No. 3.										
C.S.R.	10	Q Where is that located?										
	11	A. That is in it's right there. It is in										
SALLY W. BOYD, Rt. I Box 193-B Sants Fe, New Merico Phone (503) 455-74	12	the southeast quarter of Section 18, directly above Section 19,										
Samua Samua	13	It's shown as No. 3 on the map, not to be confused with the										
	14	gas well, No. 3, which is a deeper well.										
	15	Q. Do you have the order number of the Divi-										
	16	sion that approved the commingling of those three zones?										
	17	A. Yes, Order No. R-6210, approved commingling										
	18	of the same three zones that we propose to commingle in Well										
	19	No. 2. This was approved on December 21st, 1979.										
	20 21	Q. Would you turn to Exhibit Number Two,										
	22	which is your schematic,										
	23	A. Got ît.										
	24	0. And would you describe that exhibit for										
	25	<b>us?</b>										
		A. Exhibit Number Two is a wellbore schematic										

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of L. G. Warlick No. 2. It shows our present completion in which -- it's a dually completed well. We're currently producing the Blinebry zone and the Penrose Skelly-Grayburg zone, with a retrievable bridge plug isolating the Drinkard perfor-

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SALLY W. BOYD, C.S.R.

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Pt. 1 Box,193-P ta Fe, New Mexico <sup>3</sup> Phone (505) 455-74

Page

ations. 5 How would you propose to recomplete the Q. 6

well for commingling of the three zones? If approval for commingling is granted, A. we would remove the bridge plug, remove the packer, and two of the strings of tubing that you see on the schematic, and we would end up with only one string of tubing set at approximately 6680, and we would pump that with a rod pump. Why do you want to do this, Mr. Handren?

It's a matter of economics. This well was previously a triple completion and we were pumping the A. Blinebry zone and the Drinkard zone and flowing the Penrose Skelly-Grayburg zone when the Grayburg zone ceased to flow. We temporarily abandoned the Drinkard zone and put the Grayburg zone on pump and it's just not economical to pump all three

zones separately as a triple completion. Do you pump all three zones with the same Q. .

pumping unit? There are two pumping units No. No. A. sitting over the well right now. If the commingling is approved, then

you could reduce it to one pumping unit? Right, we would only need to pump it with 2 A. We could eliminate two strings of tubing; one pumping unit. 3 eliminate packers; one of the pumping units, and one of the rod 4 strings that we're currently using right now; and it would 5 make mechanics and economics a lot more favorable. 6 In your opinion will approval of this 7 Q application be the most effective and efficient way to maximize 8 production of all formations? 9 I feel it will. 10 SALLY W. BOYD, C.S.R Would you indicate for us what the oil, 11 gas, and water production is, first of all, for the Skelly 12 Penrose-Grayburg formation? 13 As of -- we took special tests on each 14 A. of these zones, and as of the last test on this Grayburg zone, 15 it was 3 oil, 7 water, and 267 Mcf of gas per day. 16 The Blinebry produces what? 17 Q. 4 oil, 1 barrel of water, and 83 Mcf per 18 19 day. Drinkard formation produces what? 20 Q. 16 oil, 50 water, and 8 Mcf per day. 21 A. Okay, Do you have the documentation that 22 Q. represents the test for each of those formations? 23 Yes, I do, These would be labeled Appli-24 cant's Exhibit Number Four. It is a Form C-116, 25

And that's on the Drinkard zone?
A The first one, yeah, Exhibit Four is a
C-116 on the Drinkard zone, which we submitted July 8th, 1980.
All right, sir, and Exhibit Number Five?
A Exhibit Number Five is a C-116 on the

Blinebry zone.

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SALLY W. BOYD, C.S.R. Rt. I.Box 193-11 Santa Fe. New Mericov 87501

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And Exhibit Number Six?

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A. Exhibit Six is the C-116 on Penrose Skelly Grayburg zone.

Q. Would you turn now to Exhibits Numbers Seven, Eight, and Ninc, and describe each of those exhibits for us?

A. Exhibit Number Seven is a 3-year producing rate curve for the Grayburg formation, showing oil, water, and gas production from the year 1977 up through '79.

Exhibit Eight is also a producing curve on the Blinebry formation with the same time interval.

Exhibit Number Nine is the Drinkard production curve, for the same interval of time.

Q. Do you have a recommendation to the Examined of the er as to how you propose to allocate the production among the three zones?

A Yes. Based on these current C-ll6's, we would allocate 70 percent of the oil production to the Drinkard zone: 17 percent to the Blinebry zone; and 13 percent to the Penrose Skelly-Grayburg zone. On the oil it will be 70 percent to the

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Drinkard?

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SALLY W. BOYD, C.S.R.

193-B Box Yes, 17 percent to the Blinebry, and 13 percent

to the Grayburg?

Right. The water production would be allocated A 7 86 percent to the Drinkard, 2 percent to the Blinebry, and 12 8 9

percent to the Grayburg.

And we would allocate 2 percent of the 10 gas to the Drinkard, 23 percent to the Blinebry, and 75 percent 11 12

to the Grayburg. The gas production is casinghead gas? 13 Q. 14

Right, it's casinghead gas. You've indicated your allocation based A. 15 upon production tests. Why have you not chosen to make the 16 allocation based upon past productive history for each of the 17 18

Past production shows an erratic decline formations? 19 and we have recently in June of this year, we stimulated all 20 three zones, which these C-116's are based on tests after the 21 22 stimulation, which we feel is more accurate measure. I notice on Exhibit Number Seven for the 23

Grayburg zone there is some erratic up and down pattern to the

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graph there in '79. Is that the period of time in which the It was treated then, acidized with 500 formation was treated? gallons of 15 percent acid, and -- which is -- that is the time we temporarily abandoned the Drinkard completion and we acidized the Penrose Skelly because it had quit flowing, and the production curve there in December of '79 is the result of that

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C.S.R.

SALLY W. BOYD, C SALLY W. BOYD, C Rt. 1 Box 193-B Santa Fe, New Mexico 8 Santa Fe, New (505) 455-740

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The information you've given us on the acid work. Skelly Penrose-Grayburg formation indicates a current daily production of gas at 267 Mcf per day. Do you anticipate that that gas volume will be continued to produce at that level? No, it won't. It -- that was immediately following a 1500 gallon acid job and historically you can see 13 that the gas will run around -- it runs around 3700 Mcf per 14 15

month, which is roughly 110 Mcf per day. In your opinion, Mr. Handren, are all 16

these zones marginal in productive characteristics? It's obvious that the Blinebry and Grayburg are marginal, because those production figures were after an acid stimulation and they're only showing 4 barrels of oil 20 21

for the Blinebry and 3 for the Grayburg. The Drinkard is also marginal at that 22 depth, which immediately after the acid job was producing 23 about 16 barrels of oil a day, which will probably taper off 24 25

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to around 10.

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When was this well first put on production? Q. This well -- it was drilled in 1964. A. Drilling operations were concluded about March 21st that year. It was first put on production May 21st, 1964.

Has this well always been produced as a Q. 7 Penrose Skelly-Grayburg-Blinebry dual?

A, As I mentioned earlier, it had been produced as a triple completion, and we had been pumping the Drinkard and the Blinebry zones and the Penrose Skelly was flowing, and --

Q. Your schematic shows that the Drinkard is shut off now?

Right.

How long has that been shut off? Q, 16 A. Since December of 1979, is when we tempo-17 rarily abandoned that zone,

Referring you to your Exhibit Number Ten, 19 what is that? 20

A. Exhibit Number Ten is a list of offset 21 operators and a waiver letter, which we sent to all the offset operators.

And what is the package of letters indi-Q cated as Exhibit Numbe Eleven?

Exhibit Eleven is a package of ten let-

SALLY W. BOYD, C.S.R

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ters from all ten offset operators in which each operator did not object to commingling in this well.

In your opinion, Mr. Handren, will appro-0 val of this application be in the best interests of conservation, the prevention of waste, and the protection of correla-

6 tive rights?

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SALLY W. BOYD, C.S.F

Yes, it will.

And were Exhibits One through Eleven com-Q. piled by you directly or under your supervision and direction? Yes.

And the letters attached as Exhibit Number n, Eleven are the waivers you obtained from the offset operators?

Yes, they are.

MR, KELLAHIN: If the Examiner please, we

move the introduction of Exhibits One through Eleven, Exhibits One through Eleven MR. NUTTER: 16 will be admitted in evidence, 17

CROSS EXAMINATION

20 BY, MR. NUTTER:

Mr. Handren, you stated that the 267 Mcf that you had on a recent test from the Penrose Skelly was not representative of what the gas production would be.

Right.

However, it would appear that this 75 per-

13 cent allocation that you've given us for gas is reflective of 1 that 267. 2 It's reflective of that. All of these 3 zones will probably deplete in gas. As I said, each of these 4 tests were right after an acid stimulation and we're basing 5 this allocation on those tests and also on the fact that you --6 you could possibly consider that as flush production immediately 7 following a stimulation, and that each of the zones will taper 8 off at approximately the same rate. 9 Do you have the cumulative production 10 from each of these zones here? (505) 455-7409 11 I don't have it with me. No, I don't. 12 I think we've got that in our records. 13 We'll take administrative notice of our records on cumulative 14 production from each of these zones in this well. 15 Now what about pressures, Mr. Handren? 16 I notice on your Exhibit Number Three, that you have some 17 bottom hole pressures for each zone. 18 i''Yes, sir. 19 And the Penrose Skelly only shows 205 psi 20 at a -166, whereas the Blinebry has 634 at a -2313, and the 21 Drinkard is 579 at a -3115. I wonder if you would compute 22 those to a common datum, say, bring the other -- bring the 23 Blinebry -- not now, you can do this after you get home --24 26 Okay.

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SALLY W. BOYD, C.S.

-- and send it to us.

All right, I'll do that.

Q.

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SALLY W. BOYD, C.S

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Q. Compute the Blinebry and the Drinkard pressure back up to the Penrose Skelly datum. You've probably got a fluid level in the well and so forth.

Right, I can do that,

Q And you can bring the pressures back because I'm afraid that this differential we've got here, this is three times -- your Blinebry is three times what the Penrose Skelly is on the face value of the pressures at the datum given. I'm afraid the differential would prohibit approval of this application, unless -- bring it back to a common datum, or lowering the Penrose Skelly pressure down to a -- now I think you said you were going to set your tubing and your pump down at 6880, I believe,

A Right, through the Drinkard perforations. Q. Down in the Drinkard, right, so if you could drop that Penrose Skelly datum down to the Drinkard perforations, that will bring that pressure up and you won't have so much differential on there.

Okay.

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Q. Now, another thing I want to know is how you were able to get this test on April the 10th in the Drinkard when you abandoned the zone in December of '79.

Okay. We did it purely for a special test

Like I said, purpose. We temporarily abandoned the zone. in June of '80 we went and stimulated all the zones and the procedure for doing that, we treated each zone separately and ran bottom hole pressures and production tests on each zone

separately at that time. with the others blanked off?

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SALLY W. BOYD, C.S.R. Rt. 1 Box 193-B Santa Fe, New Medoco 87501 Phone (505) 455-7409

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Right, just for --

I see.

Purely for purposes of gathering this Q. Α.

Page

I see. So those are legitimate single data. 10 0. 11 zone production tests that you have. 12 Yes, sir, they have.

After the stimulation and treatment ---Ά. Q.

Right.

-- of each of the respective zones.

I have filed a Form C-103 showing all that Q. work and we didn't bring it as a matter of exhibit, but it is

a matter of record in the file.

Okay, fine. 0

MR. NUTTER: Are there any further ques-20 21

tions of Mr. Handren? 22

Α.

Q.

Α.

MR. KELLAHIN: Yes, sir.

# REDIRECT EXAMINATION

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BY MR. KELLAHIN: Do you -- are you aware now or can you obtain for us, Mr. Handren, the pressure differentials of the three zones involved in the No. 3 Well, for which Order Number

R-6210 was entered? I can probably do that. I can search the A.

file and probably come up with that. I think it would be helpful to know what the pressure differentials were for those three zones for an approved order, how they compare to the offset well that is

the subject of this application. MR. NUTTER: Do that, we might want to

re-open that.

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SALLY W. BOYD, C.S.R. Rt. 1 Box 199-B

MR, KELLAHIN: Might want to.

I hope not.

But you're looking at approximately 400 psi pressure differential over about 2200 feet of depth difference, which taking a, say, a point 4 gradient, .4 times 2000 feet is 800 pounds, and were you concerned with these lower zones entering into the Penrose Skelly or vice versa? MR. NUTTER: Our rule of thumb, Mr. Handren, is that pressures that are more than two times another zone at a common datum --

okay.

17 Page -- wouldn't qualify. MR. NUTTER: 1 At a common datum I think we'll be in good A. 2 shape. MR, NUTTER: You'll probably be in pretty 3 4 good shape if you take them to a common datum. 5 Are there any other questions? Mr. 6 Padilla? 7 Mr. Handren, is the owner-MR. PADILLA: 8 ship of the three formations common? 8 Yes, it is. It's common ownership. Ă. MR, NUTTER: Are there any other questions? 10 11 The witness may be excused, Do you have anything further, Mr. Kellahin? 12 13 MR. KELLAHIN: No, sir. 14 MR, NUTTER: Did you offer the exhibits? 15 MR. KELLAHIN: Yes, sir. 16 MR. NUTTER: If there is nothing further 17 in Case Number 6995, we'll take the case under advisement. 18 19 (Hearing concluded.) 20 21 22 23 24 25

SALLY W. BOYD, C.S.R. Rt. 1 Box 19-B

hope (50:5) 455-

SAN SANTO Pade CERTIFICATE Case of I, SALLY W. BOYD, C.S.R., DO HEREEY CERTIFY that the foregoing Transcript of Hearing before the Oil Conserva-tion 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. Solly W. Bayd C.S.E. SALLY W. BOYD, C.S.R. Rt. 1 Box 199-B Santa Fe, New Metico 87901 Phone (300) 455-7409 the Example on 8/6 1995, heard by the on 8/6 1995, I do hereby certify that the foregoing is \_, Examiner Conservation Division Þ an and a second to a second





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Direct Examination by Mr. Kellahin							
Cross Examination by	Mr. Nutter	12					
Redirect Examination	by Mr. Kellahin	16					

# EXHIBITS

Applicant Exhibit One, Plat Applicant Exhibit Two, Schematic Applicant Exhibit Three, Document Applicant Exhibit Four, C-116 Applicant Exhibit Five, C-116 Applicant Exhibit Six, C-116 Applicant Exhibit Seven, Curve Applicant Exhibit Eight, Curve Applicant Exhibit Eight, Curve Applicant Exhibit Nine, Curve Applicant Exhibit Ten, List Applicant Exhibit Eleven, Letters

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1 MR. NÜTTER: We'll call next Case Number 2 6995. 3 MR. PADILLA: Application of Petro-Lewis 4 Corporation for downhole commingling, Lea County, New Mexico. 5 MR. KELLAHIN: I'm Tom Kellahin of Santa 6 Fe, New Mexico, appearing on behalf of the applicant, and I 7 have one witness. 8 9 (Witness sworn.) 10 11 MICHAEL G. HANDREN 12 being called as a witness and having been duly sworn upon his 13 oath, testified as follows, to-wit: 14 15 DIRECT EXAMINATION 16 BY MR. KELLAHIN: ٦ċ. 17 Would you please state your name, by whom 0 18 you're employed, and in what capacity? 19 I'm Michael G. Handren. I'm employed by Α. 20 Petro-Lewis Corporation as a staff operations engineer. 21 Mr. Handren, how do you spell your last A. 22 name? 23 H-A-N-D-R-E-N. Å. 24 And have you previously testified before 25 the Oil Conservation Division as a petroleum engineer and had

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SALLY W. BOYD, C.S.

Rt. 1 Box 193

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your qualifications accepted and made a matter of record? Yes. 2 And pursuant to your employment as a 3 petroleum engineer for Petro-Lewis, have you made a study of 4 the facts surrounding this application? 5 Yes, I have. 6 MR. KELLAHIN: We tender Mr. Handren as 7 an expert petroleum engineer. 8 MR. NUTTER: Mr. Handren is qualified. 9 Mr. Handren, would you refer to what we've 10 marked as Applicant's Exhibit Number One and identify that 11 12 plat for us? Exhibit Number One is a plat of Section 13 19 and portions of Section 17, 18, and 20, Township 21 South, 14 Range 37 East, in Lea County, New Mexico. 15 Would you identify for us the subject 16 0. well at this hearing? 17 The subject well is indicated by an arrow. 18 Ά. It's Petro-Lewis L. G. Warlick No. 2. 19 And what are you proposing to accomplish 20 21 by this application? We are proposing to commingle downhole in 22 the wellbore of L. G. Warlick No. 2, the Penrose Skelly, the 23 Blinebry, and Drinkard zones. 24 Are all three of those zones currently 25 Ô.

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SALLY W. BOYI), C.S.R. Rt. 1 Box 193-B Santa Fe, New Merico 87501 Phone (500) 455-7409

## classified as oil zones?

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Yes, they are.

And what acreage is dedicated to the well?
A. There's 40 acres dedicated for each producing horizon.

Q Are there any other wells in the area, Mr. Handren, that have been approved for downhole commingling of these same three zones?

> Yes, there are. Our L. G. Warlick No. 3. Where is that located?

A. That is in -- it's right there. It is in the southeast quarter of Section 18, directly above Section 19. It's shown as No. 3 on the map, not to be confused with the gas well, No. 3, which is a deeper well.

Do you have the order number of the Division that approved the commingling of those three zones?

A. Yes, Order No. R-6210, approved commingling of the same three zones that we propose to commingle in Well No. 2. This was approved on December 21st, 1979.

Q. Would you turn to Exhibit Number Two,

which is your schematic.

A.

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Got it.

and a stand and the second and the second second

And would you describe that exhibit for

Exhibit Number Two is a wellbore schematic

of L. G. Warlick No. 2. It shows our present completion in which -- it's a dually completed well. We're currently producing the Blinebry zone and the Penrose Skelly-Grayburg zone, with a retrievable bridge plug isolating the Drinkard perforations.

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A. How would you propose to recomplete the well for commingling of the three zones?

A. If approval for commingling is granted, we would remove the bridge plug, remove the packer, and two of the strings of tubing that you see on the schematic, and we would end up with only one string of tubing set at approximately 6680, and we would pump that with a rod pump.

Q. Why do you want to do this, Mr. Handren?
A. It's a matter of economics. This well

was previously a triple completion and we were pumping the Blinebry zone and the Drinkard zone and flowing the Penrose Skelly-Grayburg zone when the Grayburg zone ceased to flow. We temporarily abandoned the Drinkard zone and put the Grayburg zone on pump and it's just not economical to pump all three zones separately as a triple completion.

Q Do you pump all three zones with the same pumping unit?

A No. No. There are two pumping units sitting over the well right now.

If the commingling is approved, then

you could reduce it to one pumping unit?

A. Right, we would only need to pump it with one pumping unit. We could eliminate two strings of tubing; eliminate packers; one of the pumping units, and one of the rod strings that we're currently using right now; and it would make mechanics and economics a lot more favorable.

In your opinion will approval of this application be the most effective and efficient way to maximize production of all formations?

I feel it will.

Q Would you indicate for us what the oil, gas, and water production is, first of all, for the Skelly Penrose-Grayburg formation?

A. As of -- we took special tests on each of these zones, and as of the last test on this Grayburg zone, it was 3 oil, 7 water, and 267 Mcf of gas per day.

The Blinebry produces what?

4 oil, 1 barrel of water, and 83 Mcf per

day.

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SALLY W. BOYD, C.S.R

Q. Drinkard formation produces what?
A. 16 oil, 50 water, and 8 Mcf per day.
Q. Okay. Do you have the documentation that
represents the test for each of those formations?
A. Yes, I do. These would be labeled Appli-

cant's Exhibit Number Four. It is a Form C-116.

And that's on the Drinkard zone? The first one, yeah, Exhibit Four is a Q. C-116 on the Drinkard zone, which we submitted July 8th, 1980. All right, sir, and Exhibit Number Five? Exhibit Number Five is a C-116 on the Q. Α.

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SALLY W. BOYD, C.S.R. Rt. 1 Box 193-B Santa Fc, New Mexico, 87501

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Blinebry zone. And Exhibit Number Six? 6 Exhibit Six is the C-116 on Penrose Skell 0. 7

Would you turn now to Exhibits Numbers Grayburg zone. Seven, Eight, and Nine, and describe each of those exhibits 11 Exhibit Number Seven is a 3-year producing for us? 12

rate curve for the Grayburg formation, showing oil, water, and gas production from the year 1977 up through '79.

Exhibit Eight is also a producing curve on the Blinebry formation with the same time interval.

Exhibit Number Nine is the Drinkard pro-17 18

duction curve, for the same interval of time. Do you have a recommendation to the Examin er as to how you propose to allocate the production among the 21

Yes. Based on these current C-116's, we three zones? would allocate 70 percent of the oil production to the Drinkard zone; 17 percent to the Blinebry zone; and 13 percent to the and the second second second

Penrose Skelly-Grayburg zone. On the oil it will be 70 percent to the 2 Drinkard? 3 Yes. A. 4 17 percent to the Blinebry, and 13 percent 5 to the Grayburg? 6 Right. 7 ā, The water production would be allocated 8 86 percent to the Drinkard, 2 percent to the Blinebry, and 12 9 percent to the Grayburg. 10 And we would allocate 2 percent of the 11 gas to the Drinkard, 23 percent to the Blinebry, and 75 percent a Fe, New M Phone (505) 4 12 to the Grayburg. 13 The gas production is casinghead gas? 14 0 Right, it's casinghead gas. 15 You've indicated your allocation based 16 Q. upon production tests. Why have you not chosen to make the 17 allocation based upon past productive history for each of the 18 19 formations? Past production shows an erratic decline 20 A. and we have recently in June of this year, we stimulated all 21 three zones, which these C-116's are based on tests after the 22 stimulation, which we feel is more accurate measure. 23 T notice on Exhibit Number Seven for the ŹŚ Q'------Grayburg zone there is some erratic up and down pattern to the 25

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

graph there in '79. Is that the period of time in which the

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formation was treated? It was treated then, acidized with 500 gallons of 15 percent acid, and -- which is -- that is the time we temporarily abandoned the Drinkard completion and we acidized the Penrose Skelly because it had guit flowing, and the production curve there in December of '79 is the result of that

acid work.

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The information you've given us on the Skelly Penrose-Grayburg formation indicates a current daily production of gas at 267 Mcf per day. Do you anticipate that that gas volume will be continued to produce at that level? No, it won't. It -- that was immediately following a 1500 gallon acid job and historically you can see Λ. that the gas will run around --- it runs around 3700 Mcf per

month, which is roughly 110 Mcf per day. In your opinion, Mr. Handren, are all these zones marginal in productive characteristics? It's obvious that the Blinebry and Grayburg are marginal, because those production figures were after an acid stimulation and they're only showing 4 barrels of oil

for the Blinebry and 3 for the Grayburg. The Drinkard is also marginal at that depth, which immediately after the acid job was producing about 16 barrels of oil a day, which will probably taper off

-20

Q. When was this well first put on production?
 A. This well -- it was drilled in 1964.
 Drilling operations were concluded about March 21st that year.
 It was first put on production May 21st, 1964.

0 Has this well always been produced as a Penrose Skelly-Grayburg-Blinebry dual?

As I mentioned earlier, it had been produced as a triple completion, and we had been pumping the Drinkard and the Blinebry zones and the Penrose Skelly was flowing, and --

Q Your schematic shows that the Drinkard is shut off now?

Right.

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A How long has that been shut off?
A Since December of 1979, is when we temporarily abandoned that zone.

Q. Peferring you to your Exhibit Number Ten, what is that?

A. Exhibit Number Ten is a list of offset operators and a waiver letter, which we sent to all the offset operators.

cated as Exhibit Numbe Eleven?

Exhibit Eleven is a package of ten let-

ters from all ten offset operators in which each operator did not object to commingling in this well.

Q In your opinion, Mr. Handren, will approval of this application be in the best interests of conservation, the prevention of waste, and the protection of correlative rights?

Yes, it will.

Yes.

Q And were Exhibits One through Eleven compiled by you directly or under your supervision and direction?

And the letters attached as Exhibit Number
Eleven are the waivers you obtained from the offset operators?
A. Yes, they are.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits One through Eleven.

MR. NUTTER: Exhibits One through Eleven will be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

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SALLY W. BOYD, C.S. R. 1 Hox 193-B

> Q. Mr. Handren, you stated that the 267 Mcf that you had on a recent test from the Penrose Skelly was not representative of what the gas production would be.

> > Right.

However, it would appear that this 75 per-

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cent allocation that you've given us for gas is reflective of that 267.

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SALLY W. BOYD, C.S.R.

1 Box 193-New Mexic (505) 455Page

A. It's reflective of that. All of these zones will probably deplete in gas. As I said, each of these tests were right after an acid stimulation and we're basing this allocation on those tests and also on the fact that you --you could possibly consider that as flush production immediately following a stimulation, and that each of the zones will taper off at approximately the same rate.

Do you have the cumulative production from each of these zones here?

A. I don't have it with me. No, I don't.
 Q. I think we've got that in our records.
 We'll take administrative notice of our records on cumulative production from each of these zones in this well.

Now what about pressures, Mr. Handren? I notice on your Exhibit Number Three, that you have some bottom hole pressures for each zone.

Yes, sir.

Okay.

And the Penrose Skelly only shows 205 psi at a -166, whereas the Blinebry has 634 at a -2313, and the Drinkard is 579 at a -3115. I wonder if you would compute those to a common datum, say, bring the other -- bring the Blinebry -- not now, you can do this after you get home ---

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All right, I'll do that.
 Q. Compute the Blinebry and the Drinkard
 pressure back up to the Penrose Skelly datum. You've probably
 got a fluid level in the well and so forth.

--- and send it to us.

Right, I can do that.

And you can bring the pressures back because I'm afraid that this differential we've got here, this is three times -- your Blinebry is three times what the Penrose Skelly is on the face value of the pressures at the datum given. I'm afraid the differential would prohibit approval of this application, unless -- bring it back to a common datum, or lowering the Penrose Skelly pressure down to a -- now I think you said you were going to set your tubing and your pump down at 6880, I believe.

A Right, through the Drinkard perforations.
 Q Down in the Drinkard, right, so if you
 could drop that Penrose Skelly datum down to the Drinkard
 perforations, that will bring that pressure up and you won't
 have so much differential on there.

Okay.

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SALLY W. BOYD, C.S.

Now, another thing I want to know is how you were able to get this test on April the 10th in the Drinkard when you abandoned the zone in December of 179.

Okay. We did it purely for a special test

purpose. We temporarily abandoned the zone. Like I said, in June of '80 we went and stimulated all the zones and the procedure for doing that, we treated each zone separately and ran bottom hole pressures and production tests on each zone separately at that time.

Page

With the others blanked off? Right, just for --

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SALLY W. BOYD, C.S.R.

Rt. 1 Box ] Fe, New M hone (S05) 4 A. Purely for purposes of gathering this data.

Q I see. So those are legitimate single zone production tests that you have.

Yes, sir, they have.

After the stimulation and treatment --Right.

--- of each of the respective zones.

A. I have filed a Form C-103 showing all that work and we didn't bring it as a matter of exhibit, but it is a matter of record in the file.

Okay, fine.

MR. NUTTER: Are there any further questions of Mr. Handren?

MR. KELLAHIN: Yes, sir.

### REDIRECT EXAMINATION

BY MR. KELLAHIN:

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SALLY W. BOYD, C.S.R.

Q. Do you --- are you aware now or can you obtain for us, Mr. Handren, the pressure differentials of the three zones involved in the No. 3 Well, for which Order Number R-6210 was entered?

7 A. I can probably do that. I can search the 8 file and probably come up with that.

Q. I think it would be helpful to know what the pressure differentials were for those three zones for an approved order, how they compare to the offset well that is the subject of this application.

MR. NUTTER: Do that, we might want to

re-open that.

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MR. KELLAHIN: Might want to.

I hope not.

But you're looking at approximately 400 psi pressure differential over about 2200 feet of depth difference, which taking a, say, a point 4 gradient, .4 times 2000 feet is 800 pounds, and were you concerned with these lower zones entering into the Penrose Skelly or vice versa? MR. NUTTER: Our rule of thumb, Mr. Han-

dren, is that pressures that are more than two times another zone at a common datum --

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Okay.

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			Page 17		ά -		
		1	MR. NUTTER: wouldn't qualify.				
		2	A. At a common datum I think we'll be in goo	đ		•	
		3	shape.				
		4	MR. NUTTER: You'll probably be in pretty			- i	
		6	good shape if you take them to a common datum.				
		6	Are there any other questions? Mr.				•
		7	Padilla?			•	
•		8	MR. PADILLA: Mr. Handren, is the owner-				1
ŝ		9	ship of the three formations common?				
	<u>е</u> С. 5	10	A. Yes, it is. It's common ownership.				
	SALLY W. BOYD, C.S.R. Rt. 1 Box 193-B Santa Pe, New Mecico 87501 Phone (505) 455-7409	11	MR. NUTTER: Are there any other question	?			
)	W. BO Rt. 1 Box Fe, New M	12	The witness may be excused.				
	ALLY Samca R Plue	13	Do you have anything further, Mr. Kellahi	?			
	3	14	MR. KELLAHIN: No, sir.				
		15	MR. NUTTER: Did you offer the exhibits?				
		16	MR. KELLAHIN: Yes, sir.				
		17	MR. NUTTER: If there is nothing further			<b>)</b>	
		18	in Case Number 6995, we'll take the case under advisement.				
		19					
		20 21	(Hearing concluded.)				
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PETRO LEWIS CORPORATION

Oil and Gas Producers

A Dec

P.O. Drawer 937 Levelland, Texas 79336



Cil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

Attn: Mr. Daniel Nutter

Re: L.G. Warlick #2 Case Number 6995

August 12, 1980

Dear Mr. Nutter:

At the examiner hearing on August 6, 1980 you requested some additional information. The information involved correcting BHP data to a common datum plane. I have corrected these pressures to a datum of 6638' (-3115' SS) which is the midpoint of the Drinkard perforations.

The pressures for each zone corrected to the Drinkard datum are as follows:

Penrose-Skelly Grayburg: Blinebry: Drinkard: 1090 psi @ 6638' 962 psi @ 6638' 579 psi @ 6638'

Sincerely,

Michael S. Handhen

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Michael G. Handren Staff Operations Engineer

MGH/ap cc; Tom Kellahim



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WF PETRO: LEWIS CORPORATION P.O. Drawer 937 Levelland, Texas 79336 Oil and Gas Producers July 8, 1980 BEFORE EXAMINER NUTTER OIL CONSERVATION DIVISION Division Director New Mexico Oil Conservation Commission RETRO Lewis EXHIBIT NO. 3 State Land Office Building Santa Fe, New Mexico 87501 CASE NO. 6 995 Dear Sir: Subject: Request for Downhole Commingling Permit Rule 303-C (a) Name and address of the operator Petro-Lewis Corporation P.O. Box 937 Levelland, Texas 79336 (b) Lease name, well number, well location. L.G. Warlick Lease Well Number 2 990' FNL, 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico Names of the pools in which the well is completed and the division (c) order number authorizing the triple completion. Illocation: Penrose-Skelly-Grayburg perforations 3536'-46', 3729'-3841' 13 oil w 267 kt 767 Blinebry perforations 5604'-5988' 117. 4011W 8 SHOF Drinkard perforations 6597'-99', 6678'-80' 70 % SOW BHCF- 1 16 Division order number R-2704 aut orized the triple completion on May 13, 1964. A current production test on form C-116 showing the amount of oil, (d) gas, and water. when BGD (700 2% Dr 23% B1 See Attachment 1. 2 81 12 &B 757. BB يك والمعادي ومدينة وتتريخ فالمرجود والمعادية والمتعالية والمعالية والمعالية والمعالية والمعالية والمعالية والم anne a ha bhanna airte a ta Bhanna a Bhaile anna a bhaile anna an tha bhaile anna an tha bhaile anna an tha bha

The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 2

(c) A production decline curve for each zone.

See Attachment No. 2.

(f) BHP for each zone

Penrose-Skelly		205 psi @ ~ 166'*
Blinebry		634 psi @ -2313'*
Drinkard		579 psi @ -3115'*
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Subsea datum @ midpoint of perforations

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

Blinebry and Dyinkard oil is 34.4° API @ 58° Fahrenheit Penrose-Skelly-Grayburg oil is 35.3° API @ 78° Fahrenheit These three zones are downhole commingled in L.G. Warlick No. 3 as authorized by order number R-6210, on December 21, 1979.

(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-4 BOPD @ \$39.40/bbl. Drinkard-sweet curde-16 BOPD @ \$39.40/bbl. Penrose-Skelly-Grayburg-sour crude-3 BOPD @ \$35.86/bbl.

(4 BOPD x 39.40/bbl.) + (16 BOPD x 39.40/bbl.) + (3 BOPD x 35.86/bbl.) = \$895.58/day

If commingled: (23 BOPD x \$39.40/bbl.) = \$906.20/day

The value would actually be increased and operational problems significantly decreased. By commingling downhole, we could eliminate two strings of tubing, two packers, one rod string, one pumping unit, and all the problems associated with them. We could produce the same amount of fluid through one string of tubing using only one rod string and one pumping unit.

It is presently uneconomic to return the Drinkard zone to production since it will not flow and would require pumping equipment. However, if granted premission to commingle production downhole, we could return the Drinkard zone to production and prevent underground waste and protect our correlative rights.

A Contractory

The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 3

(i) All offset operators have been notified, including the United States Geological Survey.

See Attachments 3 and 4.

Respectfully Submitted,

Michael J. Handhen

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Michael G. Handren Staff Operations Engineer

MGH/ap Attachments

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

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ADDRESS LIST (Alphabetical Order)

OFFSET OPERATORS\*

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

24号的公式方法: 10日本

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

Campbell and Hedrick P. O. Box 401 Midland, Texas 79701

(915) 684-4393

Continental Oil Company p. O. Box 460 Hobbs, New Mexico 88240

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

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

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

(513) 001 1000

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

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

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

Attn: Mr. Don Wright (405) 848-8551

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

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

\* Offset Operators to Petro-Lewis Corporation's L.G. Warlick No. 2 located 990' FNL and 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico.

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

ATTACIMENT NO. 4

and a state of the st



J. R. Barnett Regional Engineering Manager JULY 23, 1980 Amoco Production Company Houston Region 500 Jefferson Building Post Office Box 3092 Houston, Texas 77001

File: JCA-986.51NM-3046

Re: Request for Down-Hole Commingling Permit L. G. Warlick Well No. 2 Lea County, New Mexico

Division Director New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Dear Sir:

Petro-Lewis Corporation has filed a request for a down-hole, commingling permit for its L. G. Warlick Well No, 2 located 990' FNL, 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico.

As an offset operator, Amoco Production Company has no objection to this down-hole commingling request.

Yours very truly,

Barnetl Mg MLC/1g 617/09

cc: Petro-Lewis Corporation P. O. Drawer 937 Levelland, Texas 79336

> BEFORE EXAMINER NUTTER OIL CONSERVATION DIVISION

> > er en ser en Je

CASE NO. 6995

DATE RECEIVED JUL 25 1980

JUL 9 1980

P.O. Drawer 937 Levelland, Texas 79336

## PETRO LEWIS CORPORATION

Oil and Gas Producers

July 8, 1980

Campbell and Hedrick P. O. Box 401 Midland, Texas 79701

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael S. Handren

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not (V) object to commingling request for this well.

Signed (	FAd	ich	
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ATTACHMENT NO. 3

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July 14, 1980

New Mexico Oil Conservation Commission Box 2038 Santa Fe, New Mexico 87501

Attention Mr. Dick Stamets

Gentlegent

Request for Downhole Commingling - Patro-Lewis Corporation - L.G. Warlick #2

Conoco Inc. has approved Petro-Lewis' request for downhole commingling the subject well. A copy of their letter ballot showing cur approval is attached for your file.

Very truly yours,

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<u>,</u>13.

SIGNED: JOHN R. KEMP

HAI:rej Enc CC Petro-Lewis Corporation P.O. Box 937 Levelland, Texas 79336

DATE RECEIVED JUL 1 7 1000

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## PETRO LEWIS CORPORATION

P.O. Drawer 937 Levelland, Texas 79336

Oil and Gas Producers

July 8, 1980

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attn: Mr. Paul Thompson

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael S. Handen

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not (X) object to commingling request for this well.

Signed ohn R, Kemp Date July 14, 1980

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COMPANY CONOCO INC.

ATTACHMENT NO. 3

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## PETRO LEWIS CORPORATION

Oil and Gas Producers

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P.O. Drawer 937 Levelland, Texas 79336

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

Attn: Mr. R.J. Womack

Gentlemen:

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

July 8, 1980

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael S. Handren

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not (V ) object to commingling request\_for this well.

Sign ħVi Womack Regional Manager Date 80

COMPANY Texas Pacific Oil Company, Inc.

DATE RECEIVED JUL 2 L 1980

Start And Start

ATTACHMENT NO. 3

LEWIS CORPORATION PETRO

Oil and Gas Producers

### July 8, 1980

Peery, J.W., Estate P. O. Box 401 Midland, Texas 79701

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael S. Handhen

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 = I do ( ) do not ( ) object to commingling request for this well.

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COMPAND

DATE RECEIVED JUL 21 1980

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P.O. Drawer 937

Levellarid, Texas 7:336

ATTACHMENT 10.

PETRO LEWIS CORPORATION

P.O. Drawer 937 Levelland, Texas 79336

Oil and Gas Producers

NA STATES

July 8, 1980

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

Attn: Mr. R.C. Anderson

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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, Well Location: 990' FNL & 2310' FEL Section 19, T21S, R37E, Lea County, New Mexico

michael &. Handren

Pay zones: Penrose-Skelly-Grayburg, Michael G. Handren Blinebry, and Drinkard MGH/ap

I. L.G. Warlick #2 - I do ( ) do not ( $\times$ ) object to commingling request for this well.

Signed C. F. Kalteyer, Chief Proration Engineer Date\_July 14; 1980

COMPANY Gulf 011 Production

DATE RECEIVED JUL 16 1980

the states and

ATTACHMENT NO. 3

P.O. Drawer 937 Levelland, Texas 79336

PETRO LEWIS CORPORATION

Oil and Gas Producers

July 8, 1980

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

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick Attached for your review is a commingling request is respectfully solicited. #2. Your waiver of objection to this request is respectfully solicited. #2. Your waiver of objection in the space below and return one copy to 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 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,

Michael 2. Handhen

Michael G. Handren

MGH/ap

) do not ( X object to commingling

I. L.G. Harlick #2 - I do ( ) do not ( )
request for this well.

FOR: I. G. STADIHER DIVISION PRODUCTION WANAGER

Date July 24, 1980

COMPANY TENNECO OIL COMPANY

ATTACHUENT NO.

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à. Traisiù

Stand Dense stream Stream

P.O. Box 509 Levelland, Texas 79336 806/894-7376

### July 17, 1980

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

PETRO LEWIS CORPORATION

Dear Sir:

Oil and Gas Producers

Petro-Lewis Corporation requests a hearing for down hole commingling in its L.G. Warlick well number 2. at the earliest possible date (August 6, 1980).

We propose to commingle the Penrose-Skelly-Grayburg, the Blinebry, and the Drinkard pools. The well is located in Section 19, T21S, R37E, Lea County, New Mexico.

Sincerely,

Michael &. Danchen

Michael G. Handren Staff Operations Engineer

MGH/ap

### LEWIS CORPORATION PETRO

P.O. Drawer 937 Levelland, Texas 79336

Oil and Gas Producers

July 8, 1980

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

Attn: Mr. R.K. Beggs

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael D. Handen

Michael G. Handren

MGH/ap

L.G. Warlick #2 - I do ( ) do not (  $\checkmark$  ) object to commingling I. request for this well.

J. Z. Powe 1.22.80 Signed Date SUN DIL COMPANY

COMPANY

JUL 24 1960 DATE RECEIVED

ATTACHMENT NO. 3





#### Page 2 of 2 Examiner Hearing - Wednesday - August 6, 1980

Docket No. 25-80

55

CASE 6992: Application of Amoco Production Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow forma-tion for its Anderson 3 Com. Well No. 1 in Unit R of Section 3, Township 16 South, Range 32 East.

CASE 6956: (Continued from July 9, 1980, Examiner Hearing)

Application of Amoco Production Company for an NGPA determination, Les County, New Hexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for its State "GH" Well No. 1 located in Unit F of Section 21, Township 16 South, Range 35 East.

CASE 6957:

(Continued from July 9, 1980, Examiner Hearing)

Application of Amoco Production Company for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for its State HK Com Well No. 1 located in Unit L of Section 6, Township 24 South, Range 25 East.

Application of Tom Bolack for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the S/2 of Section 1, Township 30 North, Range 12 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of dril-ling 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 CASE 6993: risk involved in drilling said well.

Application of Enserch Exploration, Inc. for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Siluro-Devonian formations underlying the N/2 of Section 14, Township 25 South, Range 34 East, CASE 6994: 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 6995: 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 Penrose Skelly, Blinebry, and Drinkard production in the wellbore of its L. G. Warlick Well No. 2 located in Unit B of Section 19, Township 21 South, Range 37 East.

CASE 6996: Application of John E. Schalk for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Blanco Mesaverde Pool underlying the NE/4 of Section 8, Township 25 North, Range 3 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of dril-ling 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 6982: (Continued from July 23, 1980, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Aminoil USA to appear and show cause why its 1980 Plan of Operation/Development for its Willow Lake Unit Area, Eddy County, New Mexico, should not be disapproved.

CASE 6997: Application of Benson-Montin-Greer Drilling Corporation for amendment of pool rules, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the Special Rules and Regulations for the West Puerto Chiquito-Mancos Oil Pool, as promulgated by Order No. R-2565-B, which currently prescribe 320-acre spacing for pool.

> Applicant proposes that said rules be amended to provide for 640-acre spacing units with wells to be located within 165 feet of the center of a governmental quarter section.

Applicant further seeks approval for the following non-standard spacing units in Township 24 North, Range 1 East: two 640-acre units being the E/2 of Section 7 and W/2 of 8, and the W/2 of Section 17 and E/2 of 18; and two 480-acre units being the N/2 of Section 19 and NW/4 of 20, and the S/2 of Sec-tion 19 and SW/4 of 20; in Township 24 North, Range 1 West: a 320-acre unit being the N/2 of Section 1 and two 640-acre units being the N/2 of Sections 23 and 24, and the S/2 of Sections 23 and 24; also the following eight 640-acre units: the W/2 of Section 29 and E/2 of 30, Township 25 North, Range 1 East; the E/2 of Section 19 and W/2 of 20, Township 26 North, Range 1 East; the E/2 of Sections 5 and ' 8: the W/2 of Sections 3 and 8; the E/2 of Sections 17 and 20; and the W/2 of Sections 17 and 20, all in Township 26 North, Range 1 West; the W/2 of Sections 1 and 12, and the W/2 of Sections 13 and 24, all in Township 27 North, Range 1 West; also three 600-acre units being the W/2 of Section 25 and all of 26; all of Section 27 and the E/2 of 28; and the W/2 of Section 28 and all of 29, Township 27 North, Range 1 West; and one 400-acre unit in the same township comprising all of Section 30.

Docket No. 24-90

Dockets Nos. 26-80 and 27-80 are tentatively set for August 20 and September 3, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - TUESDAY - AUGUST 5, 1980

OIL CONSERVATION COMMISSION - 9 A.H. - ROOM 205 STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6848: (DE NOVO)

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Application of Petroleum Development Corporation for pool contraction and creation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Querecho Plains-Bone Spring Pool to comprise the Upper Bone Spring formation only, from 6390 feet to 8660 feet on the log of its McKay West Federal Well No. 1 located in Unit P of Section 34, Township 18 South, Range 32 East, and the creation of the Querecho Plains-Lower Bone Spring Pool to comprise said formation from 8680 feet to the base of the Bone Spring underlying the NW/4 of said Section 34.

Upon application of Petroleum Development Corporation this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 6987:

Application of Getty Oil Company for statutory unitization, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order unitizing, for the purpose of continued secon-dary recovery operations, all mineral interests from a point 100 feet above the base of the Seven Rivers formation down to the base of the Queen formation underlying the Myers Langlie Mattix Unit Area, which encompasses 9360 acres, more or less, being all or portions of the following lands in Lea County, New Mexico: Sections 25 and 36, Township 23 South, Range 36 East; Sections 28 thru 34, Township 23 South, Range 37 East; Sections 1 and 12, Township 24 South, Range 36 East; and Sections 2 thru 11, Township 24 South, Range 37 East.

Among the matters to be considered at the hearing will be the necessity of unit operations; the designation of a unit operator; the determination of the horizontal and vertical limits of the unit area; the determination of a fair, reasonable, and equitable allocation of production and costs of production, including capital investment, to each of the various tracts in the unit area; the determination of credits and charges to be made among the various owners in the unit area for their investment in wells and equipment; and such other matters as may be necessary and appropriate for carrying on efficient unit operations, including, but not necessarily limited to, unit voting procedures, selection, removal, or substitution of unit operator, and time of commencement and termination of unit operations.

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Docket No. 25-80

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 6, 1980

	9 A.M OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO
The followi	ing cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:
<u>CASE 6988</u> :	In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Bennett Petroleum Corporation, The Travelers Indemnity Company, and all other interested parties to appear and show cause why the Phelps Dodge Well No. 2 in Unit J of Section 4 and Wells Nos. 3 in Un P and 3Y in Unit I of Section 9, all in Township 28 North, Range 21 East, and No. 5 in Unit P of Section 24, Township 28 North, Range 20 East, Colfax County, should not be plugged and abandoned in accordance with a Division-approved plugging program.
CASE 6989:	Application of Read & Stevens, Inc. for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Lancaster Spring Unit Area, comprising 960 acres, more or less, of State, Federal, and fee lands in Township 22 South, Range 26 East.
CASE 6990:	Application of Read & Stevens, Inc. for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the North Haystack Unit Area, comprising 4800 acres, more or less, of State, Pederal, and fee lands in Township 5 South, Range 26 East.
<u>CASE 6991</u> :	Application of Amoco Production Company for salt water disposal, Les County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in a 100 foot perforated interval between 4400 feet and 4800 feet in its South Robbs Unit Well No. 103 in Unit B of Section 15, Township 19 South, Range 38 East, Hobbs Grayburg- San Andres Pool.

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# PETRO LEWIS CORPORATION

Oil and Gas Producers

And Alexandre

July 17, 1980

Case 6995

P.O. Box 509

Levelland, Texas 79336 806/894-7376

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

Dear Sir:

Petro-Lewis Corporation requests a hearing for down hole commingling in its L.G. Warlick well number 2. at the earliest possible date (August 6, 1980).

We propose to commingle the Penrose-Skelly-Grayburg, the Blinebry, and the Drinkard pools. The well is located in Section 19, T21S, R37E, Lea County, New Mexico.

Sincerely,

Michael S. Hancher

Michael G. Handren Staff Operations Engineer

MGH/ap

LEWIS CORPORATION PETRO

P.O. Drawer 937 Levelland, Texas 79336

Oil and Gas Producers

July 8, 1980

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

Attn: Mr. R.K. Beggs

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request is respectfully solicited. Flease 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,

Michael D. Handien

Michael G. Handren

MGH/ap

L.G. Warlick #2 - I do ( ) do not ( ) object to commingling I. request for this well.

Signed

2.2. Power 7.22.80 Sin Die Company Date COMPANY

JUL 24 1960 DATE RECEIVED

ATTACHMENT NO. 3

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J. R. Barnett Regional Engineering Menager July 23, 1980 Amoco Production Company

Houston Region 500 Jefferson Building Post Office Box 3092 Houston, Texas 77001

File: JCA-986.51NM-3046

Re: Request for Down-Hole Commingling Permit L. G. Warlick Well No. 2 Lea County, New Mexico

**Division Director** New Mexico Oil Conservation Commission P. 0. Box 2088 Santa Fe, New Mexico 87501

Dear Sir:

Petro-Lewis Corporation has filed a request for a down-hole commingling permit for its L. G. Warlick Well No. 2 located 990' FNL, 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico.

As an offset operator, Amoco Production Company has no objection to this

Yours very truly,

zarnett 11c MLC/ig 617/09

cc: Petro-Lewis Corporation P. O. Drawer 937 Levelland, Texas 79336

DATE RECEIVED JUL 25 1980

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" The second

JUL 9 1980

F.O. Drawer 937 Levelland, Texas 79336



Oil and Gas Producers

July 8, 1980

Campbell and Hedrick P. O. Box 401 Midland, Texas 79701

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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, Michael S. Handren Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not ( $\checkmark$ ) object to commingling request for this well.

<u>rdrih</u> 180 Signed Date Campbell & Hestrick COMPANY



July 14, 1980

New Mexico Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

Attention Mr. Dick Stamets

Gentlement

Request for Downhole Commingling - Petro-Lewis Corporation - L.G. Warlick #2

Conoco Inc. has approved Petro-Lewis' request for downhole commingling the subject well. A copy of their letter ballot showing our approval is attached for your file.

Very truly yours,

SIGNED: JOHN R. KEMP

HAI:rej Ene CC Petro-Lewis Corporation P.O. Box 937 Lavelland, Texas 79336

DATE RECEIVED JUL 17 1990

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### PETRO LEWIS CORPORATION

P.O. Drawer 937 Levelland, Texas 79336

Oil and Gas Producers

July 8, 1980

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attn: Mr. Paul Thompson

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2, Your waiver of objection to this request 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,

Michael D. Handen

Michael G. Handren

MGH/ap

I. L.

L.G. Warlick #2 - I do ( ) do not ( X ) object to commingling request for this well.

Signed ohn R, Kemp Date July 14, 1980 23 CONOCO INC. COMPANY

ATTZCHMENT NO. 3

ALTERNAL SOLATION CONTRACTOR

### PETRO LEWIS CORPORATION

P.O. Drawer 937 Levelland, Texas 79336

Oil and Gas Producers

July 8, 1980

Texas Pacific Oil Company, Inc. P. O. Box 4067 Midland, Texas 79701 Attn: Nr. R.J. Womack

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael S. Handien

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not ( $\checkmark$ ) object to commingling request for this well.

Sign Womack Regional Manager Date

COMPANY Texas Pacific Oil Company, Inc.

DATE RECEIVED JUL 21 1980

PETRO: LEWIS CORPORATION

Oil and Gas Producers

Shirt Markerson

P.O. Drawer 937 Levelland, Texas 79336

July 8, 1980

Peery, J.W., Estate P. O. Box 401 Midland, Texas 79701 Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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, Michael S. Handren

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not ( ) object to commingling request for this well.

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DATE RECEIVED JUL 2 1 1980

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#### PETRO LEWIS CORPORATION

Oil and Gas Producers

P.O. Drawer 937 Levelland, Texas 79336

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July 8, 1980

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

Attn: Mr. R.C. Anderson

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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.

Well Location: 990' FNL & 2310' FEL Yours very truly, Section 19, T21S, R37E, Lea County, New Mexico Michael &. Handrer

Pay zones: Penrose-Skelly-Grayburg, Michael G. Handren Blinebry, and Drinkard MGH/ap

I. L.G. Warlick #2 - I do ( ) do not ( $\times$ ) object to commingling request for this well.

Signed C. F. Kalteyer, Chief Proration Engineer Date July 14, 1980

COMPANY\_\_\_\_Gulf Oil Production\_\_\_\_

DATE	RECEIVED	JUL 1	6 1980	
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### PETRO LEWIS CORPORATION

Oil and Gas Producers

P.O. Drawer 937 Levelland, Texas 79336

July 8, 1980

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

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael I. Handren

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not ( X object to commingling request for this well.

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Date <u>July 24, 1980</u>

COMPANY TENNECO OIL COMPANY

ATTACHMENT NO. 3

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## PETRO LEWIS CORPORATION

Oil and Gas Producers

P.O. Drawer 937 Levelland, Texas 79336

July 8, 1980

Case 6995

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

Dear Sir:

Subject: Request for Downhole Commingling Permit

(a) Name and address of the operator

Petro-Lewis Corporation P.O. Box 937 Levelland, Texas 79336 990 990 990 9023-0-1

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

L.G. Warlick Lease Well Number 2 990' FNL, 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico

(c) Names of the pools in which the well is completed and the division order number authorizing the triple completion.

Penrose-Skelly-Grayburg perforations 3536'-46', 3729'-3841'

Blinebry perforations 5604'-5988'

Drinkard perforations 6597'-99', 6678'-80'

Division order number R-2704 authorized the triple completion on May 13, 1964.

(d) A current production test on form C-116 showing the amount of oil, gas, and water.

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See Attachment 1.

The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 2

(e) A production decline curve for each zone.

See Attachment No. 2.

(f) BHP for each zone

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Penrose-Skelly			205 psi @ - 166'*
Blinebry			634 psi @ -2313'*
Drinkard			579 psi @ -3115'*

\* Subsea datum 0 midpoint of perforations

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

Blinebry and Drinkard oil is 34.4° API @ 58° Fahrenheit Penrose-Skelly-Grayburg oil is 35.3° API @ 78° Fahrenheit These three zones are downhole commingled in L.G. Warlick No. 3 as authorized by order number R-6210, on December 21, 1979.

(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-4 BOPD @ \$39.40/bbl. Drinkard-sweet curde-16 BOFD @ \$39.40/bbl. Penrose-Skelly-Grayburg-sour crude-3 BOPD @ \$35.86/bbl.

(4 BOPD x \$39.40/bbl.) + (16 BOPD x \$39.40/bbl.) + (3 BOPD x \$35.86/bbl.) = \$895.58/day

If commingled: (23 BOPD x \$39.40/bbl.) = \$906.20/day

The value would actually be increased and operational problems significantly decreased. By commingling downhole, we could eliminate two strings of tubing, two packers, one rod string, one pumping unit, and all the problems associated with them. We could produce the same amount of fluid through one string of tubing using only one rod string and one pumping unit.

It is presently uneconomic to return the Drinkard zone to production since it will not flow and would require pumping equipment. However, if granted premission to commingle production downhole, we could return the Drinkard zone to production and prevent underground waste and protect our correlative rights. The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 3

(i) All offset operators have been notified, including the United States Geological Survey.

See Attachments 3 and 4.

Respectfully Submitted, Michael J. Handren

AL MONDAY

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Michael G. Handren Staff Operations Engineer

MGH/ap Attachments

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

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P.O. Drawer 937 Levelland, Texas 79336

OFFSET OPERATORS

ADDRESS LIST ATTACHED

Gentlemen:

TO:

Subject: Request for Down-hole Commingling Permit

July 8, 1980

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael S. Handren

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( request for this well.

) do not ( ) object to commingling

Signed

Date

COMPANY

ADDRESS LIST (Alphabetical Order)

OFFSET OPERATORS\*

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

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

Campbell and Hedrick P. O. Box 401 Midland, Texas 79701

(915) 684-4393

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

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

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

Attn: Mr. R.C. Anderson Production Manager (505) 393-4121 Peery, J.N., Estate P. O. Box 401 Midland, Texas 79701

(915) 684-4651

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

Atin: Mr. R.K. Beggs District Manager (915) 685-0300

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

Attn: Mr. Don Wright (405) 848-8551

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

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

\* Offset Operators to Petro-Lewis Corporation's L.G. Warlick No. 2 located 990' FNL and 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico.

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



July 8, 1980

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

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael &. Handhen

ATTACHMENT NO. 3

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not (X) object to commingling request for this well.

FOR: J. G. STROTHER DIVISION PRODUCTION MANAGER Signed-

Date July 24, 1980

COMPANY TENNECO OIL COMPANY



and a state of the second second



J. R. Barnett Regional Engineering Manager July 23, 1980

File: JCA-986.51NM-3046

Re: Request for Down-Hole Commingling Permit L. G. Warlick Well No. 2 Lea County, New Mexico

Division Director New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Dear Str:

Petro-Lewis Corporation has filed a request for a down-hole commingling permit for its L. G. Warlick Well No. 2 located 990' FNL, 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico.

As an offset operator, Amoco Production Company has no objection to this down-hole commingling request.

CONTRACT CARACTER SE

tale and the second and the second states and the second states and the

Yours very truly,

gasnett

MLC/1g 617/09

cc: Petro-Lewis Corporation P. O. Drawer 937 Levelland, Texas 79336 Amoco Production Company Houston Region 500 Jefferson Building Post Office Box 3092 Houston, Texas 77001

Case 6995

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133 States PETRO LEWIS CORPORATION P.O. Drawer 937 Oil and Gas Producers Levelland, Texas 79336 時代の著作品 Case 6995 July 8, 1980 Sun Oil Company ECEIVED P. O. Box 1861 Midland, Texas 79701 JUE 2 5 1980 Attn: Mr. R.K. Beggs OIL CONSERVATION DIVISION SANTA FE Centlemen: Subject: Request for Down-hole Commingling Permit Rule 303-C Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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, michael G. Handen Michael G. Handren MGH/ap I. L.G. Warlick #2 - I do ( M do not (X) object to commingling J. 2. 10000 - 1. 22-80 Sen On Company Signed Date COMPANY ATTACHMENT NO. 3 and a second 15

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PETRO LE Oil and Gas Producers	WIS CORPORATION	P.O. Box 509 Levelland, Texas 793 806/894-7376	936	
		Case 6995		
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	July 17, 1980	ூல் அது அ	D III	
Division Direct	tor			
New Mexico Oil State Land Offi Santa Fe, New M	Conservation Commission			
Dear Sir:				
Petro-Lewis Cor	poration requests a hearin g in its L.G. Warlick well			
at the earliest	poration requests a hearin g in its L.G. Warlick well possible date (August 6,	number 2		
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Me propose to co the Blinebry, ar located in Secti Mexico.	ommingle the Penrose-Skell nd the Drinkard pools. The ion 19, T21S, R37E, Lea Con Sincerely, Michael G. Ward	1980). Y-Grayburg, e well is unty, New		

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JUL 9 1980 PETRO LEWIS CORPORATION Oil and Gas Producers P.O. Drawer 937 Levelland, Texas 79336 Case 6995 ECEIVED July 8, 1980 JUL 2 1 1980 OIL CONSERVATION DIVISION SANTA FE Peery, J.W., Estate P. O. Box 401 Midland, Texas 79701 Gentlemen: Subject: Request for Down-hole Commingling Permit  $\sim$ Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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, Michael S. Handren Michael G. Handren MGH/ap I. L.G. Warlick #2 - I do ( ) do not ( request for this well ) object to commingling Signed Date COMPANY ins Sh ATTACHMENT NO. 3 and a second second

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# PETRO LEWIS CORPORATION

P.O. Drawer 937 Levelland, Texas 79336

Case 6995

July 8, 1980

ECEIVED JUL 2 1 1980 OIL CONSERVATION DIVISION

Campbell and Hedrick P. O. Box 401 Midland, Texas 79701

Gentlemen:

A CAR

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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.

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Yours very truly,

Michael L. Handren

Michael G. Handren

MGH, ap

I. L.G. Warlick #2 - I do ( ) do not ( ) object to commingling request for this well.

7/16/80 Signed Date COMPANY (ampbel & Highich

ATTACHMENT NO. 3

PETRO LEWIS CORPORATION Oil and Gas Producers

P.O. Drawer 937 Levelland, Texas 79336

OIL CONSERVATION DIVISION

SANTA FE

Case 6995 ECEIVED

July 8, 1980

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

Dear Sir:

Subject: Request for Downhole Commingling Permit

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

(b) Lease name, well number, well location. L.G. Warlick Lease Well Humber 2

990' FNL, 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico (c) Names of the pools in which the well is completed and the division order number authorizing the triple completion.

Penrose-Skelly-Grayburg perforations 3536'-46', 3729'-3841'

Blinebry perforations 5604'-5988'

Drinkard perforations 6597'-99', 6678'-80'

Division order number R-2704 authorized the triple completion on

A current production test on form C-116 showing the amount of oil. (d)



en anti-

See Attachment 1.

The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 2

(e) A production decline curve for each zone.

See Attachment No. 2.

BHP for each zone

(£)

(q)

ECEIVED  $2\,1\,1980$ OIL CONSERVATION DIVISION SANTA FE

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Penrose-Skelly 205 psi @ - 166'\* Blinebry 634 psi @ -2313'\* Drinkard 579 psi @ -3115'\*

Subsea datum @ midpoint of perforations

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

Elinebry and Drinkard oil is 34.4° API @ 58° Fahrenheit Penrose-Skelly-Grayburg oil is 35.3° API @ 78° Fahrenheit These three zones are downhole commingled in L.G. Warlick No. 3 as authorized by order number R-6210, on December 21, 1979.

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

Blinebry-sweet crude-4 BOPD @ \$39.40/bbl. Drinkard-sweet curde-16 BOPD @ \$39.40/bbl. Penrose-Skelly-Grayburg-sour crude-3 BOPD @ \$35.86/bbl.

(4 BOPD x \$39.40/bbl.) + (16 BOPD x \$39.40/bbl.) + (3 BOPD x \$35.86/bbl.) = \$895.58/day

If commingled: (23 BOPD x \$39.40/bbl.) = \$906.20/day

The value would actually be increased and operational problems significantly decreased. By commingling downhole, we could eliminate two strings of tubing, two packers, one rod string, one pumping unit, and all the problems associated with them. We could produce the same amount of fluid through one string of tubing using only one rod string

It is presently uneconomic to return the Drinkard zone to production since it will not flow and would require pumping equipment. However, if granted premission to commingle production downhole, we could return the Drinkard zone to production and prevent underground waste and protect our correlative rights.

The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 3



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(i) All offset operators have been notified, including the United States Geological Survey.

See Attachments 3 and 4.

Respectfully Submitted,

Michael G. Handhen

Michael G. Handren Staff Operations Engineer

MGH/ap Attachments

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

Oil and Gas Producers

July 8, 1980



P.O. Drawer 937 Levelland, Texas 79336

Case 6995

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

Attn: Mr. R.J. Womack

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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, Michael D. Handren

Michael G. Handren

MGH/ap

I. L.G. Marlick #2 - I do ( ) do not (V) object to commingling

request for this well. Signa Data

COMPLEY Texas Pacific Oil Company, Inc.

S. S. Sing

ATTACHMENT NO. 3

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	PETRO LEWIS CORPORATION P.O. Drawer 937 Levelland, Texas 79336	
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	JUL 1 8 1980	
	OIL CONSERVATION DIVISION SANTA FE TULY 8 1980	
	041y 0, 1900	
	Case 6995	
	Gulf Oil Company - U.S. P. O. Box 670	
	Hobbs, New Mexico 88240	
are da	Attn: Mr. R.C. Anderson	
	Gentlemen:	
	Subject: Request for Down-hole Commingling Permit	
	Rule 303-C	
	Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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.	
	Well Location: 990' FNL & 2310' FEL Yours very truly,	
	Section 19, T21S, R37E, Lea County, New Mexico Michael S. Handren	
••	Pay zones: Penrose-Skelly-Grayburg, Michael G. Handren	
	Blinebry, and Drinkard MGH/ap	
	I. L.G. Warlick #2 - I do ( ) do not ( $X$ ) object to commingling	
	request for this well.	
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	Male 1.1.1.1.1.1.1.1.1.1.000	
	Date July 14, 1980 Engineer	
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# PETRO LEWIS CORPORATION

Oil and Gas Producers

July 8, 1980

ECEIVED

IUL 1 7 1980

OIL CONSERVATION DIVISION

SANTA FE

Case 6995

P.O. Drawer 937 Levelland, Texas 79336

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attn: Mr. Paul Thompson

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request is respectfully solicited. Flease 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.

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Thank you for your cooperation.

Yours very truly,

Michael L. Handren

Michael G. Handren

MGH/ap

) do not ( X) object to commingling

ATTACHIENT NO. 3

I. L.G. Warlick #2 - I do ( request for this wall. Signed John R. Kemp July 14, 1980 Date

CONOCO INC. COMPANY

Hearing Que list PETRO LEWIS CORPORATION P.O. Drawer 937 Levelland, Texas 79336 Oil and Gas Producers JULI I JOBO CHI CONS Case 6995 July 8, 1980 Division Director New Mexico Oil Conserverion Commission State Land Office Building Santa Fe, New Mexico 87501 Dear Sir: Subject: Request for Downhole Commingling Permit Rule 303-C (a) Name and address of the operator 0 Petro-Lewis Corporation P.O. Box 937 Levelland, Texas 79336 (b) Lease name, well number, well location. L.G. Warlick Lease Well Number 2 990' FNL, 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico Names of the pools in which the well is completed and the division (c) order number authorizing the triple completion. Penrose-Skelly-Grayburg perforations 3536'-46', 3729'-3841' Blinebry perforations 5604'-5988' Drinkard perforations 6597'-99', 6678'-80' Division order number R-2704 authorized the triple completion on May 13, 1964. A current production test on form C-116 showing the amount of oil, (d) gas, and water. See Attachment 1.

The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 2

(e) A production decline curve for each zone.

See Attachment No. 2.

(f) BHP for each zone

Penrose-Skelly	
Blinebry	205 psi @ - 166'*
Drinkard	634 psi @ -2313'*
	579 psi @ -3115'*

Subsea datum 0 midpoint of perforations

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

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

Blinebry-sweet crude-4 BOPD @ \$39.40/bbl. Drinkard-sweet curde-16 BOPD @ \$39.40/bb1. Penrose-Skelly-Grayburg-sour crude-3 BOPD @ \$35.86/bbl.

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The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 3

(i) All offset operators have been notified, including the United States Geological Survey.

See Attachments 3 and 4.

Respectfully Submitted,

Michael S. Handren

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Michael G. Handren Staff Operations Engineer

MGH/ap Attachments

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

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Service Services

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PETRO LEWIS CORPORATION Oil and Gas Producers

P.O. Drawer 937 Levelland, Texas 79336

July 8, 1980

OFFSET OPERATORS TO: ADDRESS LIST ATTACHED

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael G. Handren

Michael G. Handren

MGH/ap

I. L.G. Warlick #2 - I do ( ) do not ( ) object to commingling

Signed

Date

COMPANY

ATTACHMENT NO. 3

and the second second

ADDRESS LIST (Alphabetical Order)

OFFSET OPERATORS\*

Amoco Production Company P. O. Box 3092 Houston, Texas 77001 Peery, J.W., Estate P. O. Box 401 Midland, Texas 79701

(915) 684-4651

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

Campbell and Hedrick P. O. Box 401 Midland, Texas 79701

(915) 684-4393

19 년 년 1911년 - 1915년 역

> Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

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

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

14 H 2 1

Attn: Mr. R.C. Anderson Production Manager (505) 393-4121 Sun Oil Company P. O. Box 1861 Midland, Texas 79701

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

Tenneco<sup>°</sup>Oil Company Ciudad Bldg. - Suite 139 3000 United Founders Blvd. Oklahoma City, Oklahoma 73112

Attn: Mr. Don Wright (405) 848-8551

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

10

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

\* Offset Operators to Petro-Lewis Corporation's L.G. Warlick No. 2 located 990' FNL and 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico.

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

ATTACHMENT NO. 4

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PETRO LEWIS CORPORATION

P.O. Drawer 937 Levelland, Texas 79336

Cuse 6995

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

RVATION DIVISION

JUL 1 1 1980

Dear Sir:

Oil and Gas Producer

OIL CONS

Subject: Request for Downhole Commingling Permit Rule 303-C

July 8, 1980

(a) Name and address of the operator

Petro-Lewis Corporation P.O. Box 937 Levelland, Texas 79336

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

L.G. Warlick Lease Well Number 2 990' FNL, 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico

(c) Names of the pools in which the well is completed and the division order number authorizing the triple completion.

Penrose-Skelly-Grayburg perforations 3536'-46', 3729'-3841'

Blinebry perforations 5604'-5988'

Drinkard perforations 6597'-99', 6678'-80'

Division order number R-2704 authorized the triple completion on May 13, 1964.

(d) A current production test on form C-116 showing the amount of oil, gas, and water.

See Attachment 1.

The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 2

(e) A production decline curve for each zone.

See Attachment No. 2.

(f) BHP for each zone

Penrose-Ske	11y		205	•
Blinebry			205 psi 634 psi	@ - 166'* @ -2313'*
Drinkard	a na serie da composition de la compos La composition de la c	and a star of a second s		@ -3].15'*

Subsea datum @ midpoint of perforations

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

Blinebry and Drinkard oil is 34.4° API @ 58° Fahrenheit Penrose-Skelly-Grayburg oil is 35.3° API @ 78° Fahrenheit These three zones are downhole commingled in L.G. Warlick No. 3 as authorized by order number R-6210, on December 21, 1979.

(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-4 BOPD @ \$39.40/bbl. Drinkard-sweet curde-16 BOPD @ \$39.40/bbl. Penrose-Skelly-Grayburg-sour crude-3 BOPD @ \$35.86/bbl.

(4 BOPD x \$39.40/bbl.) + (16 BOPD x \$39.40/bbl.) + (3 BOPD x \$35.86/bbl.) = \$895.58/day

If commingled: (23 BOPD x \$39.40/bbl.) = \$906.20/day

The value would actually be increased and operational problems significantly decreased. By commingling downhole, we could eliminate two strings of tubing, two packers, one rod string, one pumping unit, and all the problems associated with them. We could produce the same amount of fluid through one string of tubing using only one rod string and one pumping unit.

It is presently uneconomic to return the Drinkard zone to production since it will not flow and would require pumping equipment. However, if granted premission to commingle production downhole, we could return the Drinkard zone to production and prevent underground waste and protect our correlative rights.

The Division Director New Mexico Oil Conservation Commission July 8, 1980 Page 3

(i) All offset operators have been notified, including the United States Geological Survey.

See Attachments 3 and 4.

Respectfully Submitted,

Michael J. Handhen

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Michael G. Handren Staff Operations Engineer

MGH/ap Attachments

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Copy to: Director District I Office

New Mexico Oil Conservation Commission Dox 1980 Hobbs, New Mexico 88240

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## PETRO LEWIS CORPORATION

Oil and Gas Producers

P.O. Drawer 937 Levelland, Texas 79336

July 8, 1980

TO: OFFSET OPERATORS ADDRESS LIST ATTACHED

Gentlemen:

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

Attached for your review is a commingling request for the L.G. Warlick #2. Your waiver of objection to this request 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,

Michael S. Handren

Michael G. Handren

MGH/ap

 L.G. Warlick #2 - I do ( ) do not ( ) object to commingling request for this well.

Signed

Date

COMPANY

ATTACHMENT NO. 3

an the second second

ADDRESS LIST (Alphabetical Order)

## OFFSET OPERATORS\*

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

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

Campbell and Hedrick P. O. Box 401 Midland, Texas 79701

(915) 684-4393

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Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

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

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

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

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

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

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

Attn: Mr. Don Wright (405) 848-8551

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

5

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

\* Offset Operators to Petro-Lewis Corporation's L.G. Warlick No. 2 located 990' FNL and 2310' FEL, Section 19, T21S, R37E, Lea County, New Mexico.

Copy: U.S. Department of the Interior Geological Survey 1012 Federal<sup>3</sup>Building 1961 Stout Street Denver, Colorado 80202

ATTACHMENT NO. 4

## STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 6995 Order No. <u>R-6463</u>

APPLICATION OF PETRO-LEWIS CORPORATION

COUNTY, NEW MEXICO.

FOR DOWNHOLE COMMINGLING,

BY THE DIVISION: This cause came on for hearing at 9 a.m. on <u>August 6</u> 19<u>80</u>, at Santa Fe, New Mexico, before Examiner <u>Daniel S</u>.

ORDER OF THE DIVISION

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NOW, on this <u>day of August</u>, 1980, 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, <u>Petro-Lewis Corporation</u>, is the owner and operator of the <u>L. G. Warlick Well No. 2</u>, located in Unit <u>B</u> of Section <u>19</u>, Township <u>21 South</u> Range <u>37 East</u>, NMPM, <u>Lea</u> County, New Mexico.

(3) That the applicant seeks authority to commingle <u>Penrose Skelly, Blinebry and Drinkard</u> production within the wellbore of the above-described well.

dr/

(4) That from the Penrose Skelly zone, the subject well is capable of low marginal production only.

(f) That from the <u>Blinebry</u> zone, the subject well is capable of low marginal production only.
(b) That from the <u>Drinkard</u> zone, the subject well is capable of low marginal production only.

(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.

(\$) 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 <u>Hobbs</u> district office of the Division any time the subject well is shut-in for 7 consecutive days.

That in order to allocate the commingled production (/0) to each of the commingled zones in the subject well, /5 production should be and 75 percent of percent of the commingled 011 allocated to the Penrose Skelly zone: xaxx - gas production percent of the commingled Dil production to the Blinebry percent of the production should be allocated to the Drinkard zone mmingled That in order to allocate the commingled production to ((1)) each of the commingled zones in the wells, applicant should consult with the supervisor of the district office Hobbs of the Division and determine an allocation formula for each of the production zenes.

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## IT IS THEREFORE ORDERED:

	(1) What	the applicant,	Petro-Lewis Corpo	pration, is
here	()) That	ed to commingle	Penrose Skelly, E	linebry and
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the	Ľ. G. Warl		, located in Uni	•
	ion 19	, Township	21 South , Range	37 East
NMPM	1 ·	Lea Cou	nty, New Mexico.	• ***
	126 That	the applicant s	hall consult with	The Supervisor

of the Hobbs district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells. (ALTERNATE) (2) That 'S percent of the commingled \_\_\_\_\_

(3) That the operator of the subject well shall immediately notify the Division's <u>Hobbs</u> 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.

(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.