

CASE 6749: PETRO-LEWIS CORPORATION FOR  
DOWNHOLE COMINGLING, LEA COUNTY, NEW  
MEXICO

Case No.

67 49

Application

Transcripts.

Small Exhibits

ETC.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
28 November 1979

EXAMINER HEARING

IN THE MATTER OF:

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

CASE  
6749

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation  
Division:

Ernest L. Padilla, Esq.  
Legal Counsel to the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For the Applicant:

Gary Kilpatric, Esq.  
MONTGOMERY LAW FIRM  
Paseo de Peralta  
Santa Fe, New Mexico 87501

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I N D E X

ROY WILLIAMSON

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MR. STAMETS: Call now Case 6749.

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

MR. STAMETS: Ask for appearances in this case.

MR. KILPATRIC: Mr. Examiner, I'm Gary Kilpatric of Montgomery, Andrews, and Hannahs, P. A., on behalf of Petro-Lewis Corporation. I have one witness to be sworn.

MR. STAMETS: Any other appearances in this case? I'd like to have the witness stand and be sworn, please.

(Witness sworn.)

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

DIRECT EXAMINATION

BY MR. KILPATRIC:

Q Will you state your name and address for the record, please?

A My name is Roy Williamson and I live in Midland, Texas.

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1 Q Mr. Williamson, by whom are you employed  
2 and in what capacity?

3 A I'm the chief executive officer of the  
4 petroleum consulting firm of Sikes, Williamson, and Associates,  
5 Incorporated.

6 Q And what is your profession?

7 A I have two degrees, one in petroleum engin-  
8 eering and one in geological engineering, and I am a petroleum  
9 consultant.

10 Q Have you previously testified before the  
11 Division and had your credentials accepted and made as a mat-  
12 ter of record as a petroleum consultant?

13 A Yes, I have.

14 MR. KILPATRIC: Mr. Examiner, are the wit-  
15 ness' qualifications accepted?

16 MR. STAMETS: They are.

17 Q Are you familiar, Mr. Williamson, with  
18 Case Number 6749, and what has been requested by the appli-  
19 cant, Petro-Lewis Corporation in that application?

20 A Yes, I am.

21 Q Specifically what is it that Petro-Lewis  
22 Corporation is requesting in their application?

23 A Petro-Lewis is seeking a commingling per-  
24 mit to commingle the Blinebry, the Drinkard, and the Penrose-  
25 Skelly-Grayburg completions in their Warlick No. 3 Well,

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1 which is located 330 feet from the east line and 660 feet  
2 from the south line, Section 13, 21 South, 37 East, of Lea  
3 County, New Mexico.

4 Q Why is it that Petro-Lewis is requesting  
5 permission for downhole commingling?

6 A They have recently completed the Penrose-  
7 Skelly-Grayburg zone and I'll call your attention to attach-  
8 ment number one, to show the current production from this  
9 zone.

10 Q That's attachment number one to what's been  
11 marked for identification as Exhibit Number One?

12 A That is correct. The well had previously  
13 been completed in the Blinebry zone and the Drinkard zone,  
14 and both of these zones have been under a bridge plug while  
15 the Penrose-Skelly-Grayburg zone has been produced. The  
16 Blinebry zone had averaged about 1.4 barrels of oil per day,  
17 11.5 barrels of water, and a ratio of about 25.5 Mcf per  
18 barrel of oil.

19 The Drinkard had produced 3.25 barrels of  
20 oil per day, 8.5 barrels of water, and about 1.45 Mcf per  
21 barrel of oil.

22 The Penrose zone is a better zone and the  
23 well started producing in August and produced in September  
24 and I just have gotten October's production today, but the  
25 well for September averaged about 29 barrels of oil and 19

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1 barrels of water, and 97 Mcf per day of gas.

2 Petro-Lewis seeks to commingle these three  
3 zones together because it would be impossible to pump all  
4 three zones, which would be required, plus the Blinebry zone  
5 is a fairly gassy zone and would probably need a dead string,  
6 which means we'd have to have four strings of pipe in the  
7 hole, which would be almost impossible and would be very ex-  
8 pensive.

9 Q Is there common ownership of the zones  
10 that are requested to be commingled?

11 A Yes, there are. They are all the same  
12 ownership.

13 I just might mention, the Blinebry perfs  
14 are from 5679 to 5873; the Drinkard are 6630 to 6693; and  
15 the Penrose-Skelly-Grayburg is perforated 3723 to 3784.  
16 And I might point out that the combined production is less  
17 than the permitted 40 barrels per day allowed for commingled  
18 operations.

19 Q And have you done any current 24-hour pro-  
20 ductivity tests on Divison Form C-116?

21 A No, not really. As I say, the Blinebry  
22 and Drinkard zones have been shut in and the Penrose-Skelly-  
23 Grayburg zone, we have these production figures from Petro-  
24 Lewis Corporation, and I called them today. The forms have  
25 not arrived here in the office, I checked that also, but

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1 for October the well averaged 23 barrels of oil per day, 12  
2 barrels of water, and 40 Mcf of gas, so it's declining some-  
3 what below what it was in September. I would expect this well  
4 probably to decline somewhat further before leveling out.

5 Q Mr. Williamson, has there been performed  
6 a current measured bottom hole pressure for each zone for the  
7 well flowing?

8 A Yes, and --

9 Q I refer to you what's been marked for ident-  
10 ification as Exhibit Number Two.

11 A Okay, which well is Exhibit Two?

12 Q Exhibit Two is all three wells.

13 A Oh, okay. Exhibit Two consists of a bottom  
14 hole pressure report made for the Drinkard zone, the Blinebry  
15 zone, and the Penrose-Skelly zone. These are quite recent.  
16 In fact, I received them Monday evening prior to leaving for  
17 Santa Fe.

18 I call your attention to the Drinkard zone  
19 and this test was run on November 26th, 1979. The liquid  
20 level was incurred at 4700 feet. There was a liquid gradient  
21 of .46 psi per feet and the pressure at the datum, which was  
22 the midpoint of the casing perfs, was 899 pounds with that  
23 datum being -3166.

24 The Blinebry zone also measured on the same  
25 day, had a liquid level in the hole of 4100 feet; a similar

1 liquid gradient of .46 psi per foot and a pressure at the  
2 datum of these perforations of 773 pounds, which was -2278.  
3 Using that liquid gradient I have extrapolated the 773 pounds  
4 to the lowest datum, -3166, just to compare the pressures,  
5 and I apologize for just having to write it on here in pencil,  
6 but that was all the time I had to do, and the extrapolated  
7 pressure then for the Blinebry zone at a datum of -3166 is  
8 1,181 pounds.

9 I now call your attention to the third  
10 part of the exhibit, which is the bottom hole pressure report  
11 for Penrose-Skelly interval. Liquid level for the Penrose-  
12 Skelly was at 2712 feet. The liquid gradient was .302 psi  
13 per foot and the pressure at a datum of -256 feet was 315  
14 pounds, and I also extrapolated that pressure to the datum  
15 of -3166 -- well, let me back up. The 315 pounds, if you  
16 will refer to the actual plotted bottom hole pressure, you  
17 have noticed that the pressure was still building at the end  
18 of the pressure period, which was only 48 hours, and in order  
19 to get some rough estimate of what the pressure might build  
20 to, I extrapolated a straight line portion to a total shut in  
21 time of 100 hours and obtained about 405 psi bottom hole  
22 pressure. Extrapolating the 405 pounds to a datum of -3166  
23 we get a pressure then of 1284 pounds.

24 So in recap then to the same datum, the  
25 Drinkard has a pressure of 899 pounds, the Blinebry, 1181,

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1 and the Penrose, 1284. Now, I realize we do have between  
2 the Drinkard and the Penrose some 380 pounds of pressure  
3 difference. I do not think that any significant occurrence  
4 of cross flow will be allowed to happen because -- because of  
5 the low volume of fluid, and we will be able to keep the  
6 well pumped down, and I do not feel that any fluid will be  
7 lost from the higher pressured zones to the lower pressured  
8 zones.

9 Q Mr. Williamson, have you been able to  
10 determine the fluid characteristics of each zone and able to  
11 determine whether the fluids will or will not be incompatible  
12 in the wellbore?

13 A The fluids are compatible and I will refer  
14 to a previous exhibit that was presented in an earlier hearing.  
15 They are evidenced by the Petro-Lewis "BC" Lease, which is  
16 in the south half of the northwest quarter of Section 19 of  
17 21 South, 37 East, in Lea County, New Mexico, and this was  
18 under an original commingling order of PC-435, which I have  
19 attached as attachment number three, and I offer that approval  
20 as proof of compatibility of the commingling fluids.

21 Q And that is attachment number three to  
22 what has been marked as Exhibit Number One?

23 A That is correct. The gravity of the Blin-  
24 bry and Drinkard oil is approximately 34.4 degrees API at  
25 58 degrees Fahrenheit. The Penrose-Skelly oil is 35.3 degrees

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1 API at 78 degrees Fahrenheit.

2 Q Mr. Williamson, have you made any computa-  
3 tions showing that the value of the commingled production  
4 will not be less than the sum of the values of the individual  
5 streams?

6 A I have made this computation and I think we  
7 have to admit that the total combined stream is going to be  
8 somewhat less valuable in that the Blinebry is sweet, the  
9 Drinkard is sweet, and the Penrose-Skelly is sour. I have  
10 shown under paragraph H of Exhibit One that the Blinebry at  
11 1.4 barrels per day was selling for \$28.96 a barrel at this  
12 particular point in time; the Drinkard, making 3.25 barrels  
13 per day at \$28.96 per barrel; the Penrose-Skelly at 29 bar-  
14 rels per day was selling for \$26.28 per barrel, so assuming  
15 that all the stream would be sold at sour prices, then there  
16 would be a slight reduction because of the sour nature of the  
17 Penrose-Skelly-Grayburg, but I believe that the total reduction  
18 in price is very minor compared to the underground waste  
19 that would occur if the two sweet zones, that is, the Blinebry  
20 and the Drinkard, were not allowed to be commingled with  
21 the Penrose oil.

22 Q And what is the reason for that?

23 A Well, because if the commingling is not  
24 allowed, the operator would not be economically advised to  
25 try to set four strings of pipe, or a minimum of three strings

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1 of pipe in this hole to pump the three zones separately, so  
2 therefore, if the, say, the Penrose were the only one pro-  
3 duced, why then the remaining reserves in the Blinebry and  
4 the Drinkard would be lost.

5 Q Mr. Williamson, have you made an attempt  
6 to collect statements from offset operators that they would  
7 waive any objection to this commingling?

8 A Yes, sir, I have, and I have not prepared  
9 them as exhibits because I had asked them to send a similar  
10 approval to the State, and I have in hand a number of letters  
11 that state they have no objection. I'll be happy to record  
12 which ones I have received and see if the State has received  
13 the same ones.

14 MR. KILPATRICK: Would you be desirous of  
15 that information, Mr. Examiner?

16 MR. STAMETS: It's not necessary in this  
17 case. You haven't received any objections?

18 A No. I might point out that one person, Mr.  
19 Hedrick, who is responsible for an interest termed Campbell  
20 and Hedrick, and also is involved with the J. W. Perry Estate  
21 he advised by phone that he would not object to it but he  
22 didn't have time to send a telegram or to send my letter  
23 back, so I would presume we'll hear no complaint from anyone.

24 Q With the exception of the Perry Estate and  
25 Campbell and Hedrick, have you received waivers of objection

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1 from all of the other offset operators?

2 A. Yes, I have. I did -- I would like to say  
3 one more thing about the precedent for commingling. I have  
4 another commingling order, which is DHC-206, dated October 1,  
5 1976, for Sun's Elliott B-1 Lease, which is in the northwest  
6 quarter of the northwest quarter of Section 20, 21 South, 37  
7 East, Lea County, and that allowed the commingling of the  
8 Penrose and the Blinebry production.

9 Q. Mr. Williamson, in your opinion will the  
10 granting of this application be in the interests of the pre-  
11 vention of waste and the protection of correlative rights?

12 A. Yes, it will.

13 Q. Do you have anything else to offer to the  
14 Examiner at this time?

15 A. Other than under attachment two of Exhibit  
16 One I have some production curves. The page one shows the  
17 daily producing rate for the Penrose completion. Right at  
18 that point in time I only had it to about the third week in  
19 September.

20 Page number two is a production graph of  
21 the Blinebry, followed by a tabulation of production.

22 Page four is the Drinkard production, fol-  
23 lowed by page five, which is a tabulation of production.

24 And I do believe by the shape of these de-  
25 cline curves and with the continued production of the Penrose

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1 field, that we will be able to allocate production to zones  
2 by virtue of the production performance.

3 Q Mr. Williamson, were Exhibits Numbers One  
4 and Two prepared by you or under your direction?

5 A Yes, they were.

6 MR. KILPATRIC: Mr. Examiner, we now tender  
7 Exhibits One and Two into evidence.

8 MR. STAMETS: These exhibits will be ad-  
9 mitted.

10 MR. KILPATRIC: That concludes our direct  
11 testimony.

12  
13 CROSS EXAMINATION

14 BY MR. STAMETS:

15 Q Mr. Williamson, would you prefer that --  
16 would you prefer to work out the actual division of production  
17 with the Hobbs District Supervisor subsequent to this hearing  
18 rather than trying to come up with a set formula at this  
19 time?

20 A Right, that would be fine.

21 Q Okay.

22 MR. STAMETS: Any other questions of the  
23 witness?

24 MR. PADILLA: I have one.

25 Mr. Williamson, the only -- is the USGS the only royalty

1 owner involved in here?

2 A Well, they are not actually a royalty owner.  
3 They've got a second lease. There's a US lease and I just  
4 sent them a copy of it just for information.

5 I have a little plat here if you'd like to  
6 look at the location of it. Actually, they are not a direct  
7 offset to this lease, as far as I know.

8 MR. PADILLA: Well, maybe I should ask  
9 questions to the ownership of all three zones, is it common?

10 A Yes, it is common.

11 MR. PADILLA: That's all I have.

12 MR. STAMETS: Does anyone have any other  
13 questions of the witness? He may be excused.

14 Anything further in this case?

15 The case will be taken under advisement.

16

17 (Hearing concluded.)

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## REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Certified Shorthand Reporter  
DO HEREBY CERTIFY that the foregoing and attached Transcript  
Of Hearing before the Oil Conservation Division was reported  
by me; that the said transcript is a full, true, and correct  
record of the hearing, prepared by me to the best of my  
ability from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.  
Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is  
a complete and correct transcript of the proceedings in  
the Oil Conservation Division of Case No. 6749  
heard by me on 11-28 1979.  
Richard L. Stenmet, Examiner  
Oil Conservation Division

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STATE OF NEW MEXICO  
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BY MR. KILPATRIC:

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San Antonio, Texas 78201

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1 and the Penrose, 1284. Now, I realize we do have between  
2 the Drinkard and the Penrose some 380 pounds of pressure  
3 difference. I do not think that any significant occurrence  
4 of cross flow will be allowed to happen because --- because of  
5 the low volume of fluid, and we will be able to keep the  
6 well pumped down, and I do not feel that any fluid will be  
7 lost from the higher pressured zones to the lower pressured  
8 zones.

9 Q Mr. Williamson, have you been able to  
10 determine the fluid characteristics of each zone and able to  
11 determine whether the fluids will or will not be incompatible  
12 in the wellbore?

13 A The fluids are compatible and I will refer  
14 to a previous exhibit that was presented in an earlier hearing.  
15 They are evidenced by the Petro-Lewis "BC" Lease, which is  
16 in the south half of the northwest quarter of Section 19 of  
17 21 South, 37 East, in Lea County, New Mexico, and this was  
18 under an original commingling order of PC-435, which I have  
19 attached as attachment number three, and I offer that approval  
20 as proof of compatibility of the commingling fluids.

21 Q And that is attachment number three to  
22 what has been marked as Exhibit Number One?

23 A That is correct. The gravity of the Blin-  
24 kery and Drinkard oil is approximately 34.4 degrees API at  
25 58 degrees Fahrenheit. The Penrose-Skelly oil is 35.3 degrees

1 API at 78 degrees Fahrenheit.

2 Q Mr. Williamson, have you made any computa-  
3 tions showing that the value of the commingled production  
4 will not be less than the sum of the values of the individual  
5 streams?

6 A I have made this computation and I think we  
7 have to admit that the total combined stream is going to be  
8 somewhat less valuable in that the Blinebry is sweet, the  
9 Drinkard is sweet, and the Penrose-Skelly is sour. I have  
10 shown under paragraph H of Exhibit One that the Blinebry at  
11 1.4 barrels per day was selling for \$28.96 a barrel at this  
12 particular point in time; the Drinkard, making 3.25 barrels  
13 per day at \$28.96 per barrel; the Penrose-Skelly at 29 bar-  
14 rels per day was selling for \$26.28 per barrel, so assuming  
15 that all the stream would be sold at sour prices, then there  
16 would be a slight reduction because of the sour nature of the  
17 Penrose-Skelly-Grayburg, but I believe that the total reduction  
18 in price is very minor compared to the underground waste  
19 that would occur if the two sweet zones, that is, the Blinebry  
20 and the Drinkard, were not allowed to be commingled with  
21 the Penrose oil.

22 Q And what is the reason for that?

23 A Well, because if the commingling is not  
24 allowed, the operator would not be economically advised to  
25 try to set four strings of pipe, or a minimum of three strings

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Grand Court Reporting Service  
Suite 100, New Mexico 87501

1 of pipe in this hole to pump the three zones separately, so  
2 therefore, if the, say, the Penrose were the only one pro-  
3 duced, why then the remaining reserves in the Blinebry and  
4 the Drinkard would be lost.

5 Q Mr. Williamson, have you made an attempt  
6 to collect statements from offset operators that they would  
7 waive any objection to this commingling?

8 A Yes, sir, I have, and I have not prepared  
9 them as exhibits because I had asked them to send a similar  
10 approval to the State, and I have in hand a number of letters  
11 that state they have no objection. I'll be happy to record  
12 which ones I have received and see if the State has received  
13 the same ones.

14 MR. KILPATRIC: Would you be desirous of  
15 that information, Mr. Examiner?

16 MR. STAMETS: It's not necessary in this  
17 case. You haven't received any objections?

18 A No. I might point out that one person, Mr.  
19 Hedrick, who is responsible for an interest termed Campbell  
20 and Hedrick, and also is involved with the J. W. Perry Estate  
21 he advised by phone that he would not object to it but he  
22 didn't have time to send a telegram or to send my letter  
23 back, so I would presume we'll hear no complaint from anyone.

24 Q With the exception of the Perry Estate and  
25 Campbell and Hedrick, have you received waivers of objection

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San Francisco, New Mexico 87501



reporting service  
Central Court Reporting Service  
Santa Fe, New Mexico 87501

1 from all of the other offset operators?

2 A Yes, I have. I did -- I would like to say  
3 one more thing about the precedent for commingling. I have  
4 another commingling order, which is DHC-206, dated October 1,  
5 1976, for Sun's Elliott B-1 Lease, which is in the northwest  
6 quarter of the northwest quarter of Section 20, 21 South, 37  
7 East, Lea County, and that allowed the commingling of the  
8 Penrose and the Blinebry production.

9 Q Mr. Williamson, in your opinion will the  
10 granting of this application be in the interests of the pre-  
11 vention of waste and the protection of correlative rights?

12 A Yes, it will.

13 Q Do you have anything else to offer to the  
14 Examiner at this time?

15 A Other than under attachment two of Exhibit  
16 One I have some production curves. The page one shows the  
17 daily producing rate for the Penrose completion. Right at  
18 that point in time I only had it to about the third week in  
19 September.

20 Page number two is a production graph of  
21 the Blinebry, followed by a tabulation of production.

22 Page four is the Drinkard production, fol-  
23 lowed by page five, which is a tabulation of production.

24 And I do believe by the shape of these de-  
25 cline curves and with the continued production of the Penrose

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General Court Reporting Service  
Santa Fe, New Mexico 87501

1 field, that we will be able to allocate production to zones  
2 by virtue of the production performance.

3 Q Mr. Williamson, were Exhibits Numbers One  
4 and Two prepared by you or under your direction?

5 A Yes, they were.

6 MR. KILPATRIC: Mr. Examiner, we now tender  
7 Exhibits One and Two into evidence.

8 MR. STAMETS: These exhibits will be ad-  
9 mitted.

10 MR. KILPATRIC: That concludes our direct  
11 testimony.

12  
13 CROSS EXAMINATION

14 BY MR. STAMETS:

15 Q Mr. Williamson, would you prefer that --  
16 would you prefer to work out the actual division of production  
17 with the Hobbs District Supervisor subsequent to this hearing  
18 rather than trying to come up with a set formula at this  
19 time?

20 A Right, that would be fine.

21 Q Okay.

22 MR. STAMETS: Any other questions of the  
23 witness?

24 MR. PADILLA: I have one.

25 Mr. Williamson, the only -- is the USGS the only royalty

1 owner involved in here?

2 A Well, they are not actually a royalty owner.  
3 They've got a second lease. There's a US lease and I just  
4 sent them a copy of it just for information.

5 I have a little plat here if you'd like to  
6 look at the location of it. Actually, they are not a direct  
7 offset to this lease, as far as I know.

8 MR. PADILLA: Well, maybe I should ask  
9 questions to the ownership of all three zones, is it common?

10 A Yes, it is common.

11 MR. PADILLA: That's all I have.

12 MR. STAMETS: Does anyone have any other  
13 questions of the witness? He may be excused.

14 Anything further in this case?

15 The case will be taken under advisement.

16

17 (Hearing concluded.)

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General Court Reporting Service  
Santa Fe, New Mexico 87501

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REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Certified Shorthand Reporter  
DO HEREBY CERTIFY that the foregoing and attached Transcript  
Of Hearing before the Oil Conservation Division was reported  
by me; that the said transcript is a full, true, and correct  
record of the hearing, prepared by me to the best of my  
ability from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is  
a complete and correct transcript of the proceedings in  
the hearing of Case No. \_\_\_\_\_  
heard by me on \_\_\_\_\_ 19\_\_\_\_.

\_\_\_\_\_, Examiner  
Oil Conservation Division

reporting service  
General Court Reporting Service  
Sally W. Boyd, New Mexico 87501



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

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

December 31, 1979

Mr. Gary Kilpatrick  
Montgomery, Andrews & Hannahs  
Attorneys at Law  
Post Office Box 2307  
Santa Fe, New Mexico 87501

Re: CASE NO. 6749  
ORDER NO. R-6210

**Applicant:**

Petro-Lewis Corporation

Dear Sir:

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

Yours very truly,

JOE D. RAMEY  
Director

JDR/fd

Copy of order also sent to:

|             |   |
|-------------|---|
| Hobbs OCD   | x |
| Artesia OCD | x |
| Aztec OCD   |   |

Other

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

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

CASE NO. 6749  
Order No. R-6210

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 November 28, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 21st day of December, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Petro-Lewis Corporation, is the owner and operator of the Warlick Well No. 3, located in Unit P of Section 18, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(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 newly completed and capable of moderate rates of production.

(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 capable of low marginal production only.

-2-

Case No. 6749  
Order No. R-6210

(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 well, applicant should consult with the supervisor of the Hobbs district office of the Division and determine an allocation formula for each of the production zones.

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 Warlick Well No. 3, located in Unit P of Section 18, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Hobbs district office of the Division and determine an allocation formula for the allocation of production to each zone in the subject well.

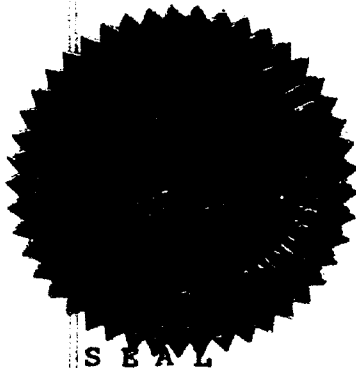
(3) That the operator of the subject well shall immediately notify the Division's Hobbs district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

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

-3-

Case No. 6749  
Order No. R-6210

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

*Joe D. Ramey*  
JOE D. RAMEY  
Director

fd/



SIPES, WILLIAMSON & AYCOCK, INC.

CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

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

Dear Sir:

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

|                         |
|-------------------------|
| BEFORE PERMITTING STATE |
| CHS OF                  |
| PERRO-LEWIS             |
| 6749                    |
| Petro-Lewis Corp        |
| Hearing Date 11/28/79   |

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

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

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

Warlick No. 3, 330 feet FEL and 660 feet FSL, Section 18,  
T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry perforations 5,679-5,873 feet and Drinkard per-  
forations 6,630-6,693 feet dual completion - Order No.  
MC 1984. Penrose-Skelly-Grayburg completion through  
perforations 3,723-3,784 feet. First production August  
28, 1979. (Blinebry and Drinkard under bridge plug  
during testing of Penrose-Skelly-Grayburg zone).  
Bottom perforations, lowermost pool - 6,000-6,999 feet  
equals 40 barrels per day allowable total daily produc-  
tion under commingled operations.

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

See Attachment No. 1.

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

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

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

Estimated BHP -

All zones on pump:

|                         |          |
|-------------------------|----------|
| Drinkard                | 50 psig  |
| Blinebry                | 50 psig  |
| Penrose-Skelly-Grayburg | 50 psig. |

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

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

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

Blinebry - sweet crude - 1.4 Barrels per Day - \$28.96  
per barrel current price

Drinkard - sweet crude - 3.25 Barrels per Day - \$28.96  
per barrel current price

Penrose-Skelly-Grayburg sour crude - 29 Barrels per Day -  
\$26.28 per barrel current price.

The operational problems of a triple completion would be immense due to the fact that all three zones require artificial lift. The Blinebry zone produces enough gas that pumping below a packer would be impossible unless a vent string was added. This would mean that four strings of tubing would be necessary to complete the well as a triple. No attempt will be made to complete the well in this manner.

Although commingling the sour Penrose-Skelly-Grayburg oil with the sweet Blinebry and Drinkard oil would lower the value of the sweet oil, the low volume of the sweet oil in relation to the volume of sour oil makes the total value reduction small and prevents underground waste by allowing low productivity zones to be produced. Precedent is set by Commingling Order DHC-206, dated October 1, 1976, for Sun's Elliot B-1 Lease, NW/4 NW/4, Section 20, T-21-S, R-37-E, Lea County, New Mexico, for the Penrose-Skelly-Grayburg Pool and the Blinebry Oil and Gas Pool.

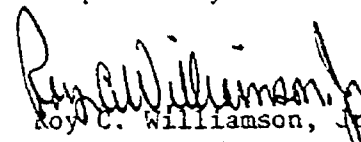
- (i) A statement that all offset operators and, in the case of a well on Federal land, the United States Geological Survey, have been notified in writing of the proposed commingling.

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

COMMENT:

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

Respectfully submitted,

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

/djs

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

Attachment No. 1

(d) Production History (Warlick No. 3)

| Year<br>Month | Blinbry Zone |             |            |               | Drinkard Zone |             |            |               | Penrose-Skelly-Grayburg Zone |             |            |               |
|---------------|--------------|-------------|------------|---------------|---------------|-------------|------------|---------------|------------------------------|-------------|------------|---------------|
|               | BBL<br>OIL   | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL    | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL                   | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO |
| 1979          |              |             |            |               |               |             |            |               |                              |             |            |               |
| June          | 46           | 330         | 1,299      | 28.2          | 126           | 240         | 177        | 1.4           | -                            | -           | -          | -             |
| July          | 61           | 372         | 1,426      | 23.4          | 131           | 279         | 195        | 1.5           | -                            | -           | -          | -             |
| August        | 22           | NA          | NA         | -             | 42            | NA          | NA         | -             | 34/D                         | 38/D        | NA         | -             |
| Sept.         | -----CI----- |             |            |               | -----CI-----  |             |            |               | 29/D                         | 19/D        | 97/D       | 3.34          |
| Average for)  |              |             |            |               |               |             |            |               |                              |             |            |               |
| June, July )  | 1.4          | 11.5        |            | 25.5          | 3.25          | 8.5         |            | 1.45          |                              |             |            |               |
| & August )    | BO/D         | BW/D        |            | MCF/BO        | BO/D          | BW/D        |            | MCF/BO        |                              |             |            |               |
| Average for)  |              |             |            |               |               |             |            |               | 29                           | 19          | 97         |               |
| September )   |              |             |            |               |               |             |            |               | BO/D                         | BW/D        | MCF/D      | 3.34          |

Current production from all zones equals 33.65 barrels of oil per day plus 39.00 barrels of water per day.

\* Penrose-Skelly-Grayburg produced 4 days in August.

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

Draw 7-31/90 10 22-77

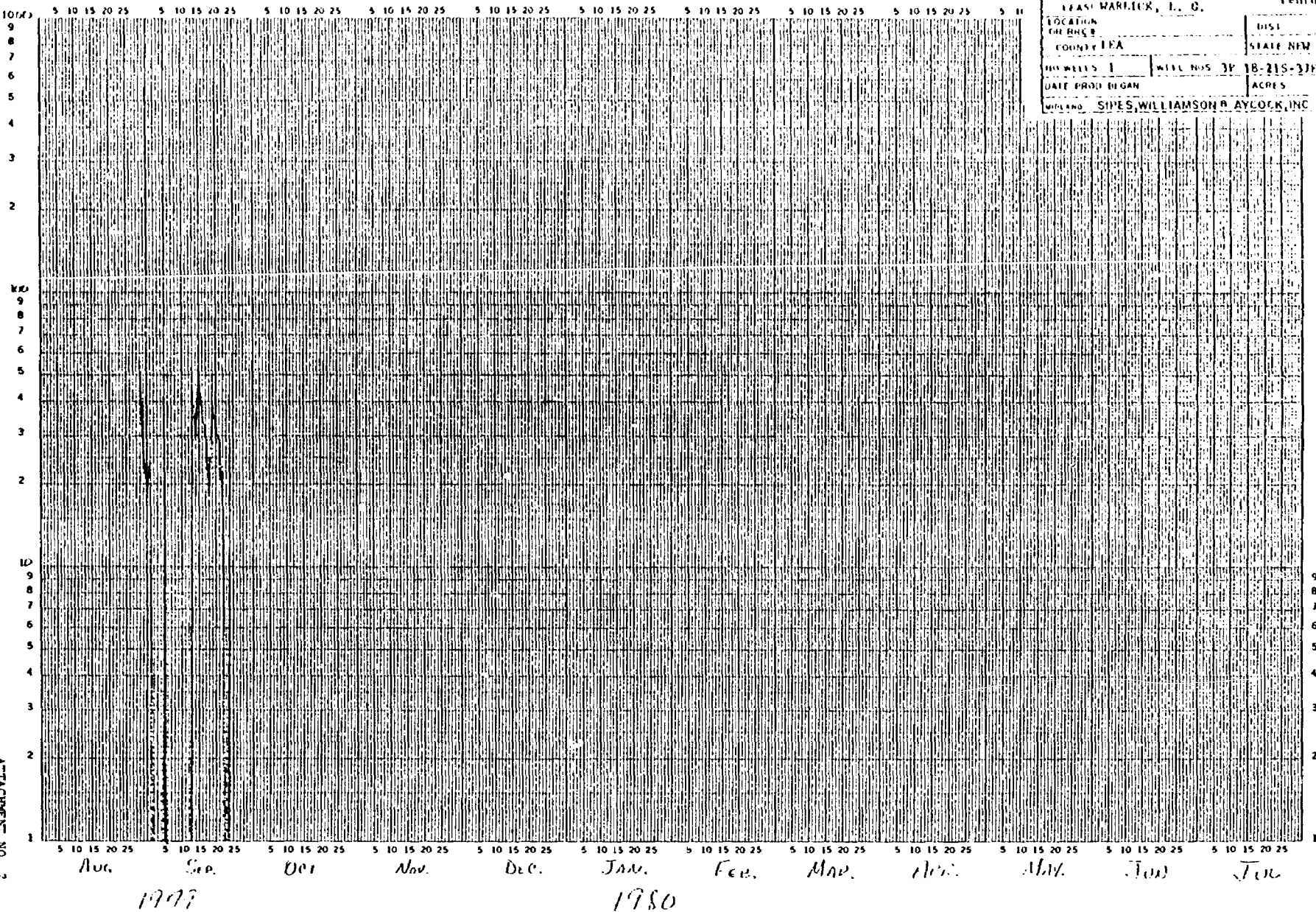
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| FIELD BATTERY OIL AND GAS                                |                        |
| OPERATOR PETRO-LEWIS CORPORATION (Formerly Ventose Prod) |                        |
| LEASER WARREN, L. O.                                     |                        |
| LOCATION                                                 | DIST. H. O. GAS        |
| COUNTY TEA                                               | STATE NEW MEXICO       |
| WELLS 1                                                  | WELL NOS 3P 18-21S-3DE |
| DATE PROD BEGAN                                          | ACRES                  |
| LANDS SINES, WILLIAMSON & AYCOCK, INC                    |                        |

47 6540

K-E 1 YEAR BY DAYS + 1 LOG CYCLES

BO/DAY

ATTACHMENT NO. 2  
PAGE 1 OF 5





ATTACHMENT NO. 2  
Page 3 of 3

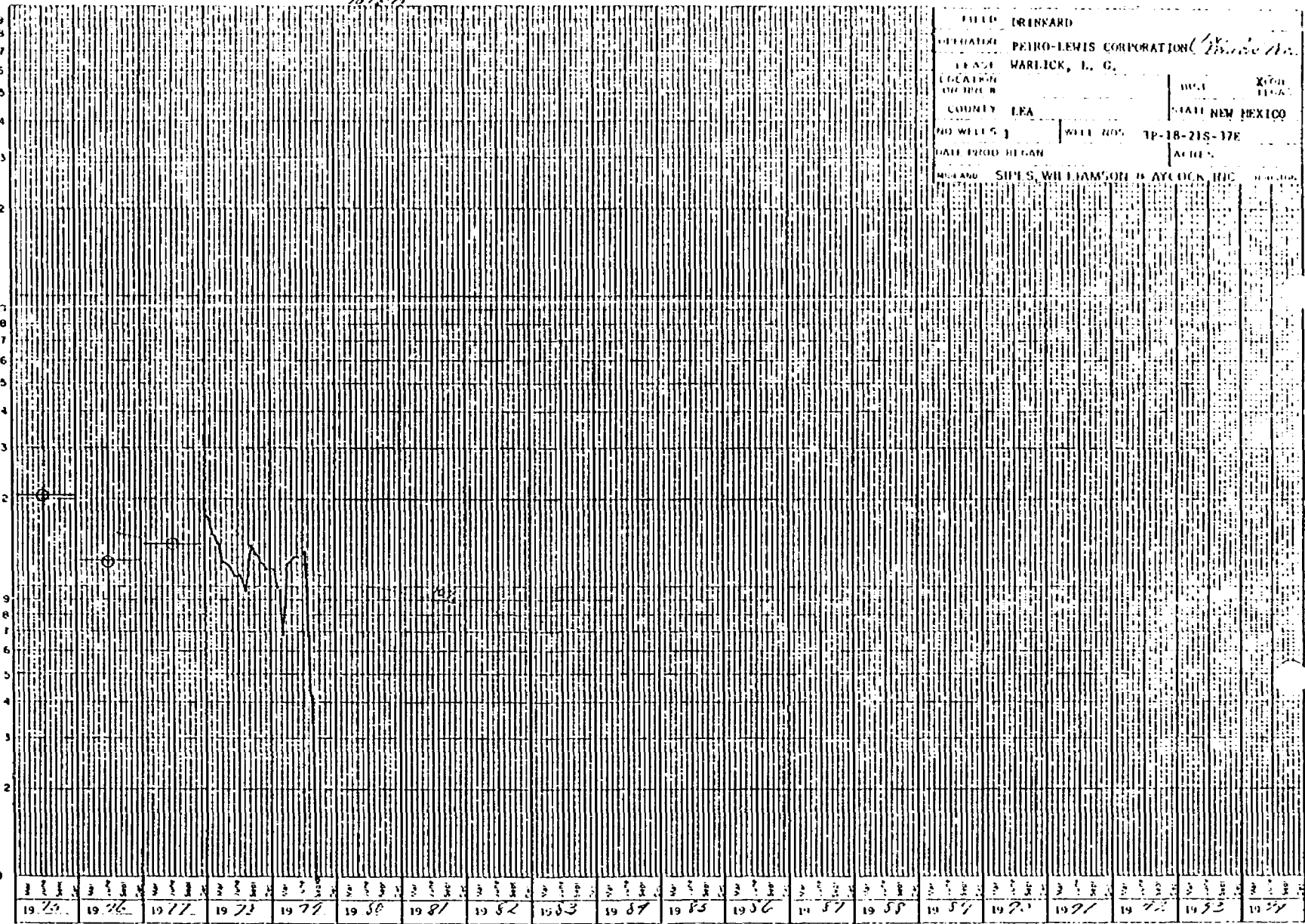
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FILE NO. COM 1975-40 DATA MONTH 1279 BY P.V.

12/16/79

10 000

OIL PRODUCTION - SEC./MONTH



FIELD DRINKARD  
 OPERATOR PETRO-LEWIS CORPORATION (Ind. Inc.)  
 LEASE WARLICK, L. G.  
 LOCATION OF WELL  
 COUNTY LEA  
 STATE NEW MEXICO  
 NO. WELL 1  
 WELL NO. 1P-18-21S-17E  
 DATE PROD BEGAN  
 PROD. BY SHIP'S, WILLIAMSON & AYCOCK, INC.

SWA-T-11

SWA TR 11  
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NEW MEXICO OIL CONSERVATION COMMISSION  
POST OFFICE BOX 2088  
SANTA FE, NEW MEXICO 87501

057 10 1972

1972 MAR - 1 11:05  
COMMINGLING ORDER PC-435

Company Amerada Hess Corporation  
Address Drawer 817  
City, State, Zip Seminole, Texas 79360  
Attention: Mr. G. F. Dewhurst  
Lease Name: State "DC" Lease  
Description: S/2 NW/4, Sec. 19, T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry Gas Pool and Drinkard, Paddock, and Penrose Skelly Oil Pools

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

\_\_\_\_\_ separately metering the production from each pool prior to commingling

\_\_\_\_\_ separately metering the production from

and determining the production by the subtraction method

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

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

REMARKS:

DONE at Santa Fe, New Mexico, on this 6th day of March 1972.

*A. L. Porter, Jr.*  
A. L. PORTER, Jr., Secretary-Director

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

ATTACHMENT NO. 3

Xerox copies mailed 3-11-72  
P.A. Lyons (Texas-New Mexico Pipeline) Midland  
V.C. Willis (Atlantic Richfield) Midland  
B.R. Sessions - Galena Park  
A.J. Troop - Monument

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

Gentlemen:

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

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

Thank you for your cooperation.

Yours very truly,

Original Signed By  
ROY C. WILLIAMSON, JR.

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

- I. Warlick No. 3 - I do ( ) do not ( ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( ) object to  
commingling request for this well.

Signed \_\_\_\_\_

Date \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS LIST  
(Alphabetical Order)

OFFSET OPERATORS\*

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

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

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

(915) 684-4393

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

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

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

Attn Mr. R. C. Anderson,  
Production Manager  
(505) 393-4121

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

(915) 684-4651

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

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

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

Attn Mr. Don Wright  
(405) 848-8551

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

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

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

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

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

|                      |   |
|----------------------|---|
| TYPE OF REPORT - (X) |   |
| Initial Completion   |   |
| Special              |   |
| General Survey       | X |

NEW MEXICO OIL CONSERVATION COMMISSION

Form O-124  
Revised 12-65

RESERVOIR PRESSURE REPORT

|                                                      |  |                                        |  |                                |  |                                  |  |
|------------------------------------------------------|--|----------------------------------------|--|--------------------------------|--|----------------------------------|--|
| Operator<br><b>Petro-Lewis Corporation</b>           |  | Pool<br><b>Blinebry</b>                |  | County<br><b>Lea</b>           |  | Date<br><b>November 26, 1979</b> |  |
| Address<br><b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Blinebry</b> |  | Oil Gradient<br><b>psi/ft.</b> |  | Water Gradient<br><b>psi/ft.</b> |  |
|                                                      |  |                                        |  | Gas Gravity                    |  | Datum Plane<br><b>(-2278) **</b> |  |

| LEASE                                                                                                | WELL NO. | LOCATION   |               |                  |                       | ELEV.   | OIL (O) OR GAS (G) | DATE TESTED | SHUT - IN HOURS | SHUT. IN TEG. PRESS. | BOMB TEST DATA |                          |                        | SONIC INSTRUMENT TEST DATA* |             |      |       |  |  |     | PRESS. AT DATUM |
|------------------------------------------------------------------------------------------------------|----------|------------|---------------|------------------|-----------------------|---------|--------------------|-------------|-----------------|----------------------|----------------|--------------------------|------------------------|-----------------------------|-------------|------|-------|--|--|-----|-----------------|
|                                                                                                      |          | TEST DEPTH | B.H. TEMP. °F | OB-SERVED PRESS. | PROD. TEST (BBL./DAY) |         |                    |             |                 |                      | LIQUID LEVEL   | LIQUID GRAD-IENT PSI/FT. | WT. OF LIQUID COL. PSI | WT. OF GAS COL. PSI         | CSG. PRESS. |      |       |  |  |     |                 |
|                                                                                                      |          |            |               |                  |                       |         |                    |             |                 |                      |                |                          |                        |                             |             | OIL  | WATER |  |  |     |                 |
| L.G. Warlick                                                                                         | 3        | P          | 18            | 21               | 37                    | 3498 GL | O                  | 11/21/79    | 24              | 0                    | 5476           | 100                      | 635                    |                             | 4100        | .460 | 138   |  |  | 773 |                 |
| <p>** MIDPOINT OF CASING PERFORATIONS</p> <p>773' + (3166' - 2278') .46 PSI/FT = 1181' @ (-3166)</p> |          |            |               |                  |                       |         |                    |             |                 |                      |                |                          |                        |                             |             |      |       |  |  |     |                 |

REPORTED BY: PETRIS LEWIS  
OIL COMPANY: PETRIS LEWIS DIVISION  
Petro-Lewis  
CASE NO. 6749  
Submitted by: Petris-Lewis Corp.  
Hearing Date: 11/28/79

|                                |   |
|--------------------------------|---|
| REPORTED BY STAMENIS           |   |
| CHECKED BY DIVISION            |   |
| Petro-Lewis                    | 2 |
| CASE NO. 6749                  |   |
| Submitted by Petro-Lewis Corp. |   |
| Hearing Date 11/28/79          |   |

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JARREL SERVICES, INC.

(Signature)

Agent

(Title)

November 26, 1979

(Date)

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

COMPANY: Petro-Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly - Blinebry

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL                                         | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ (-2278 -)<br>5776' PSIG |
|-------|--------------------------------------------------------|----------|--------------|------|------------------|-----|-------------------------------|
|       |                                                        |          | HRS.         | MIN. | TBG              | CSG |                               |
| 1979  |                                                        |          |              |      |                  |     |                               |
| 11/20 | Shut in. Run Static<br>Gradient & Hung Bomb<br>@ 5476' | 11:00 AM | -            | -    | 0                | PKR | 768                           |
|       | Shut in                                                | 11:15    | 0            | 15   | -                | -   | 768                           |
|       | "                                                      | 11:30    | 0            | 30   | -                | -   | 768                           |
|       | "                                                      | 12:00 N  | 1            | 00   | -                | -   | 769                           |
|       | "                                                      | 1:00 PM  | 2            | 00   | -                | -   | 769                           |
|       | "                                                      | 2:00     | 3            | 00   | -                | -   | 769                           |
|       | "                                                      | 3:00     | 4            | 00   | -                | -   | 769                           |
|       | "                                                      | 4:00     | 5            | 00   | -                | -   | 771                           |
|       | "                                                      | 5:00     | 6            | 00   | -                | -   | 771                           |
|       | "                                                      | 6:00     | 7            | 00   | -                | -   | 771                           |
|       | "                                                      | 7:00     | 8            | 00   | -                | -   | 771                           |
|       | "                                                      | 8:00     | 9            | 00   | -                | -   | 771                           |
|       | "                                                      | 9:00     | 10           | 00   | -                | -   | 773                           |
|       | "                                                      | 10:00    | 11           | 00   | -                | -   | 773                           |
|       | "                                                      | 11:00    | 12           | 00   | -                | -   | 773                           |
|       | "                                                      | 12:00 MN | 13           | 00   | -                | -   | 773                           |
| 11/21 | "                                                      | 1:00 AM  | 14           | 00   | -                | -   | 773                           |
|       | "                                                      | 2:00     | 15           | 00   | -                | -   | 773                           |
|       | "                                                      | 3:00     | 16           | 00   | -                | -   | 773                           |
|       | "                                                      | 4:00     | 17           | 00   | -                | -   | 773                           |
|       | "                                                      | 5:00     | 18           | 00   | -                | -   | 773                           |
|       | "                                                      | 6:00     | 19           | 00   | -                | -   | 773                           |
|       | "                                                      | 7:00     | 20           | 00   | -                | -   | 773                           |
|       | "                                                      | 8:00     | 21           | 00   | -                | -   | 773                           |
|       | "                                                      | 9:00     | 22           | 00   | -                | -   | 773                           |
|       | "                                                      | 10:00    | 23           | 00   | -                | -   | 773                           |
|       | Pulled Bombs & Ran<br>Static Gradient                  | 11:00    | 24           | 00   | 0                | -   | 773                           |

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

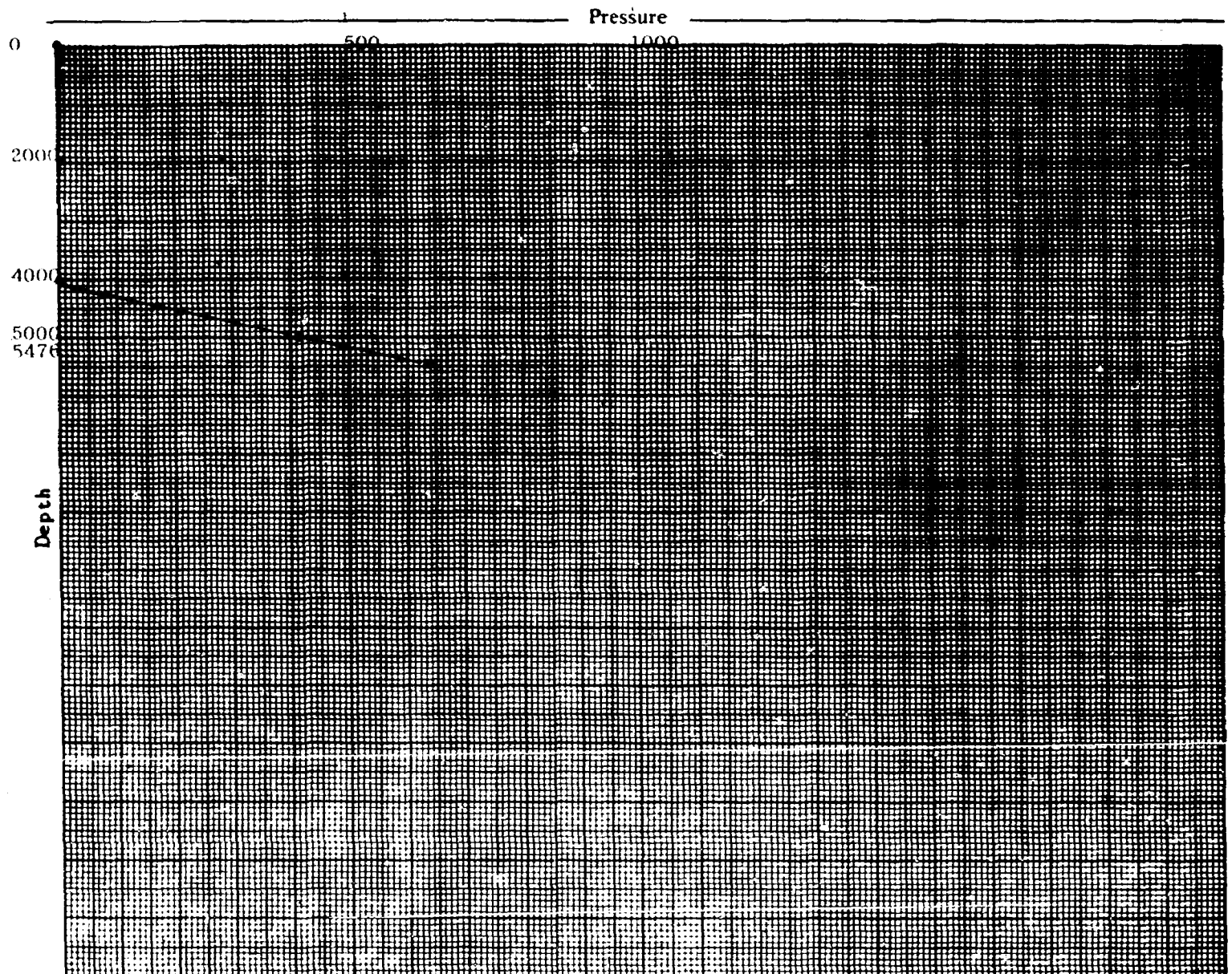
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Blinchry  
 LEASE L.G. Warlick WELL # 3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 21, 1979 TIME 11:00 AM  
 Status Shut in  
 Test Depth 5476'  
 Time S. I. 24.0hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. PRK BHP change -  
 Elev. 3498' GL Fluid top -  
 Datum (-2278) \*\* Water top 4100'  
 Temp. @ 100° F Run by JSI #18  
 Cal. No. A 4586 N Chart No. 2

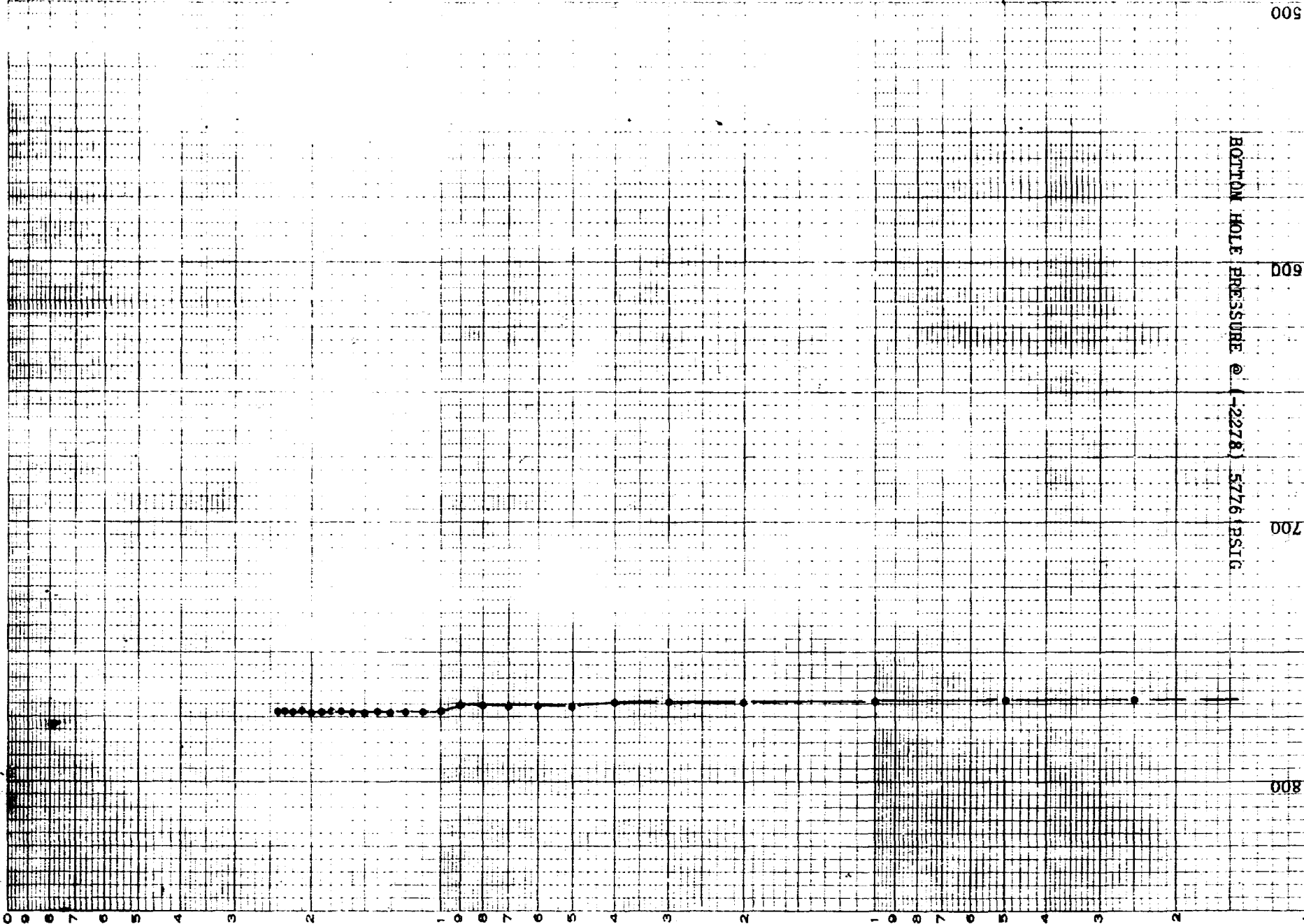
| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 2000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 416      | .416     |
| 5476         | 635      | .460     |
| 5776 (-2278) | 773 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



100.0 10.0 1.0 0.1

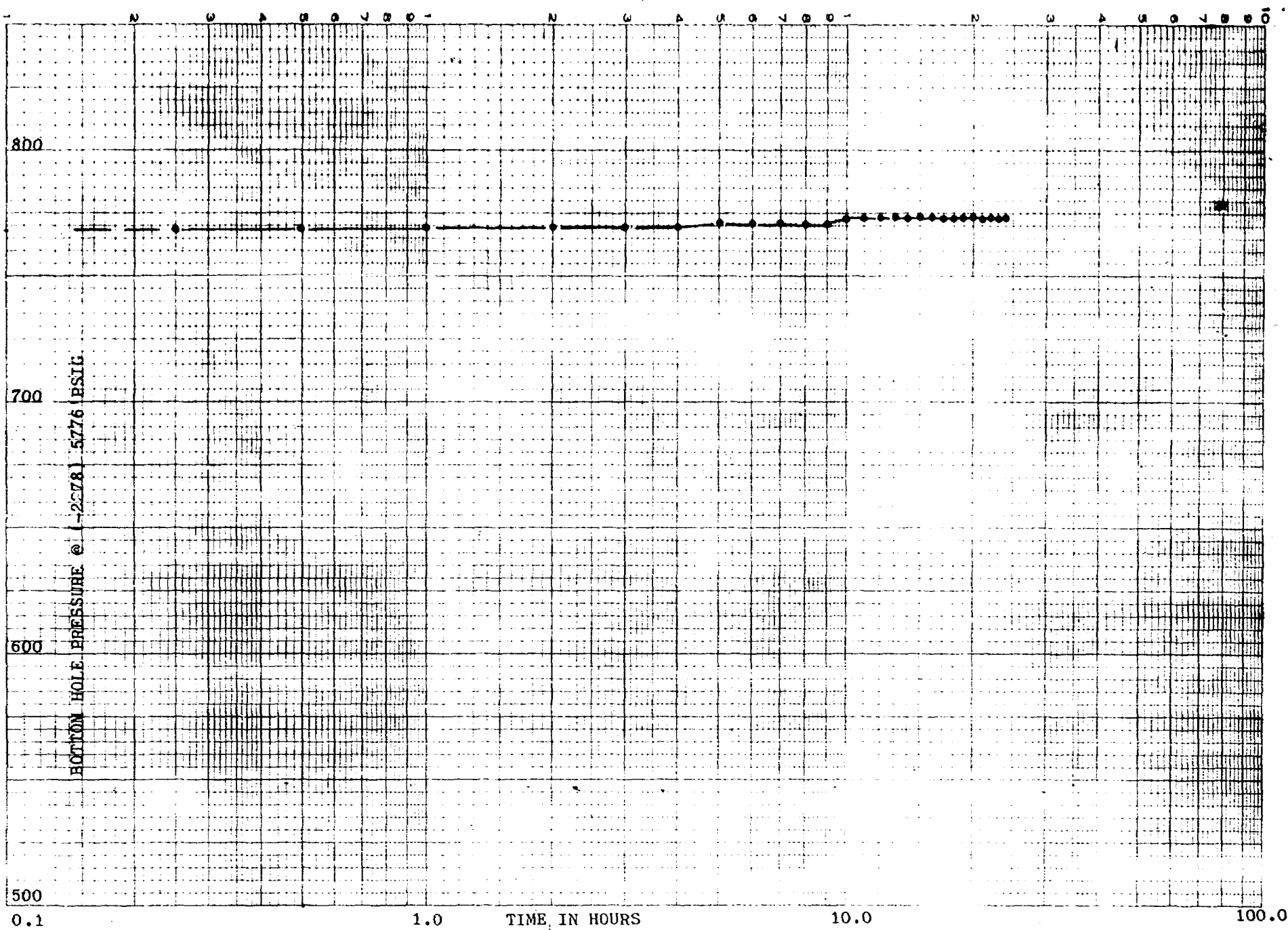


JARREL SERVICES, INC.

NO. 340R-L310 DIETZEN GRAPH PAPER  
SEMI-LOGARITHMIC  
3 CYCLES X 10 DIVISIONS PER INCH  
DIETZEN CORPORATION  
MADE IN U.S.A.



JARREL SERVICES, INC.



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

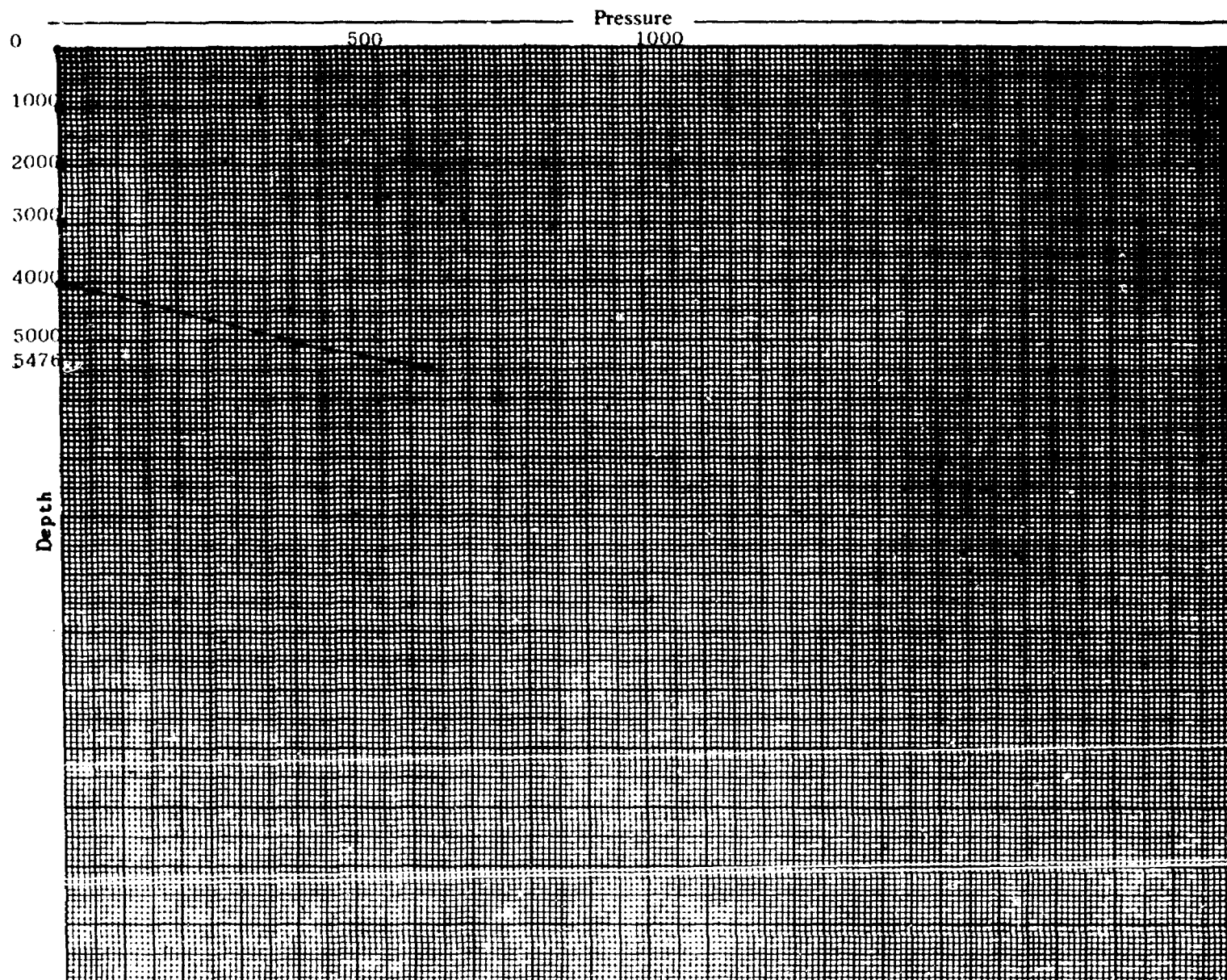
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Blinbry  
 LEASE L.G. Warlick WELL #5  
 COUNTY Lea STATE New Mexico  
 DATE November 20, 1977 TIME 11:00 AM  
 Status Open  
 Test Depth 5476'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. PKR BHP change -  
 Elev. 3498' GL Fluid top Open  
 Datum (-2278) \*\* Water top -  
 Temp. @ 100' F Run by JSI #12  
 Cal. No. A 4586 N Chart No. 1

| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 411      | .411     |
| 5476         | 630      | .460     |
| 5776 (-2278) | 768 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



|                      |   |
|----------------------|---|
| TYPE OF REPORT - (X) |   |
| Initial Completion   |   |
| Special              | X |
| General Survey       |   |

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-124  
Revised 1-3-65

## RESERVOIR PRESSURE REPORT

|                                                      |  |                                        |  |                         |  |                                  |  |
|------------------------------------------------------|--|----------------------------------------|--|-------------------------|--|----------------------------------|--|
| Operator<br><b>Petro-Lewis Corporation</b>           |  | Pool<br><b>Drinkard</b>                |  | County<br><b>Lea</b>    |  | Date<br><b>November 26, 1979</b> |  |
| Address<br><b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Drinkard</b> |  | Oil Gradient<br>psi/ft. |  | Water Gradient<br>psi/ft.        |  |
|                                                      |  |                                        |  | Gas Gravity             |  | Datum Plane<br><b>(-3166) **</b> |  |

| LEASE                              | WELL NO. | LOCATION |    |    |    |  | ELEV.<br>(O) OR<br>GAS (G) | DATE TESTED | SHUT-IN<br>HOURS | SHUT-IN<br>T&C<br>PRESS. | BOMB TEST DATA |               |                   | SONIC INSTRUMENT TEST DATA* |              |                         |                        |                     |             | PRESS. AT DATUM |
|------------------------------------|----------|----------|----|----|----|--|----------------------------|-------------|------------------|--------------------------|----------------|---------------|-------------------|-----------------------------|--------------|-------------------------|------------------------|---------------------|-------------|-----------------|
|                                    |          | U        | S  | T  | R  |  |                            |             |                  |                          | TEST DEPTH     | B.H. TEMP. °F | OB. SERVED PRESS. | PROD. TEST (BBLs./DAY)      | LIQUID LEVEL | LIQUID GRADIENT PSI/FT. | WT. OF LIQUID COL. PSI | WT. OF GAS COL. PSI | CSG. PRESS. |                 |
| L.G. Warlick                       | 3        | P        | 18 | 21 | 37 |  | 3498 GL                    | 11/26/79    | 39.5             | 0                        | 6300           | 106           | 732               |                             | 4700'        | .460                    | 167                    |                     |             | 899             |
| ** MIDPOINT OF CASING PERFORATIONS |          |          |    |    |    |  |                            |             |                  |                          |                |               |                   |                             |              |                         |                        |                     |             |                 |

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JARREL SERVICES, INC.

*Joe M. Jarrel*  
(Signature)

Agent

(Title)

November 26, 1979

(Date)

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-9396

HOBBS, NEW MEXICO 88240

COMPANY: Petro-Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly - Drinkard

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL       | TIME     | ELAPSED TIME<br>HRS. | MIN. | SURFACE PRESSURE<br>TBG | CSG | BHP @ ( -3166 )<br>6664' PSIG |
|-------|----------------------|----------|----------------------|------|-------------------------|-----|-------------------------------|
| 1979  |                      |          |                      |      |                         |     |                               |
| 11/24 | Swabbed & Open. Run  |          |                      |      |                         |     |                               |
|       | Open Gradient & Hung |          |                      |      |                         |     |                               |
|       | Bomb @ 6300'         | 3:45 PM  | -                    | -    | 0                       | PKR | 870                           |
|       | Shut in              | 4:00     | 0                    | 15   | 0                       | -   | 870                           |
|       | "                    | 4:15     | 0                    | 15   | -                       | -   | 873                           |
|       | "                    | 4:30     | 0                    | 30   | -                       | -   | 879                           |
|       | "                    | 5:00     | 1                    | 00   | -                       | -   | 885                           |
|       | "                    | 6:00     | 2                    | 00   | -                       | -   | 893                           |
|       | "                    | 7:00     | 3                    | 00   | -                       | -   | 897                           |
|       | "                    | 8:00     | 4                    | 00   | -                       | -   | 899                           |
|       | "                    | 9:00     | 5                    | 00   | -                       | -   | 899                           |
|       | "                    | 10:00    | 6                    | 00   | -                       | -   | 899                           |
|       | "                    | 11:00    | 7                    | 00   | -                       | -   | 899                           |
|       | "                    | 12:00 MN | 8                    | 00   | -                       | -   | 899                           |
| 11/25 | "                    | 1:00 AM  | 9                    | 00   | -                       | -   | 899                           |
|       | "                    | 2:00     | 10                   | 00   | -                       | -   | 899                           |
|       | "                    | 3:00     | 11                   | 00   | -                       | -   | 899                           |
|       | "                    | 4:00     | 12                   | 00   | -                       | -   | 899                           |
|       | "                    | 5:00     | 13                   | 00   | -                       | -   | 899                           |
|       | "                    | 6:00     | 14                   | 00   | -                       | -   | 899                           |
|       | "                    | 7:00     | 15                   | 00   | -                       | -   | 899                           |
|       | "                    | 8:00     | 16                   | 00   | -                       | -   | 899                           |
|       | "                    | 9:00     | 17                   | 00   | -                       | -   | 899                           |
|       | "                    | 10:00    | 18                   | 00   | -                       | -   | 899                           |
|       | "                    | 11:00    | 19                   | 00   | -                       | -   | 899                           |
|       | "                    | 12:00 N  | 20                   | 00   | -                       | -   | 899                           |
|       | "                    | 1:00 PM  | 21                   | 00   | -                       | -   | 899                           |
|       | "                    | 2:00     | 22                   | 00   | -                       | -   | 899                           |
|       | "                    | 3:00     | 23                   | 00   | -                       | -   | 899                           |
|       | "                    | 4:00     | 24                   | 00   | -                       | -   | 899                           |
|       | "                    | 5:00     | 25                   | 00   | -                       | -   | 899                           |
|       | "                    | 6:00     | 26                   | 00   | -                       | -   | 899                           |
|       | "                    | 7:00     | 27                   | 00   | -                       | -   | 899                           |
|       | "                    | 8:00     | 28                   | 00   | -                       | -   | 899                           |
|       | "                    | 9:00     | 29                   | 00   | -                       | -   | 899                           |
|       | "                    | 10:00    | 30                   | 00   | -                       | -   | 899                           |
|       | "                    | 11:00    | 31                   | 00   | -                       | -   | 899                           |
|       | "                    | 12:00 MN | 32                   | 00   | -                       | -   | 899                           |
| 11/26 | "                    | 1:00 AM  | 33                   | 00   | -                       | -   | 899                           |
|       | "                    | 2:00     | 34                   | 00   | -                       | -   | 899                           |
|       | "                    | 3:00     | 35                   | 00   | -                       | -   | 899                           |
|       | "                    | 4:00     | 36                   | 00   | -                       | -   | 899                           |
|       | "                    | 5:00     | 37                   | 00   | -                       | -   | 899                           |
|       | "                    | 6:00     | 38                   | 00   | -                       | -   | 899                           |
|       | "                    | 7:00     | 39                   | 00   | -                       | -   | 899                           |
|       | Pulled Bomb & Ran    |          |                      |      |                         |     |                               |
|       | Static Gradient      | 7:30     | 39                   | 30   | 0                       | -   | 899                           |

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

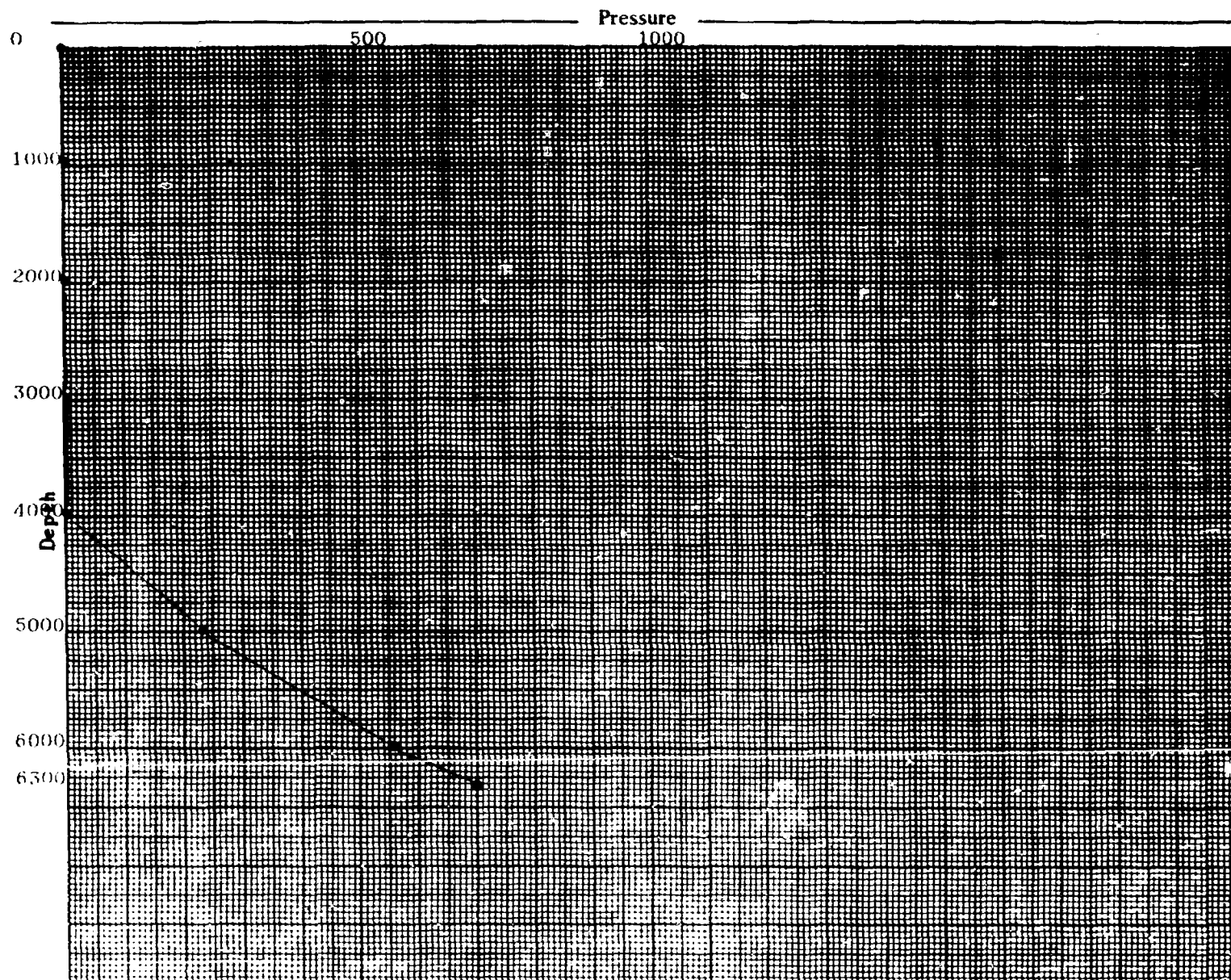
OPERATOR Petro-Lewis Corporation  
 FIELD Pemrose Skelly  
 FORMATION Drinkard  
 LEASE L.G. Warlick WELL # 3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 24, 1979 TIME 3:45  
 Status Swabbed & Open  
 Test Depth 6300'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. P&R BHP change -  
 Elev. 3498' GL Fluid top Open  
 Datum (-3166) \*\* Water top -  
 Temp. @ 106' Run by JSI #12  
 Cal. No. A 4586 N Chart No. 1

## BOTTOM HOLE PRESSURE RECORD

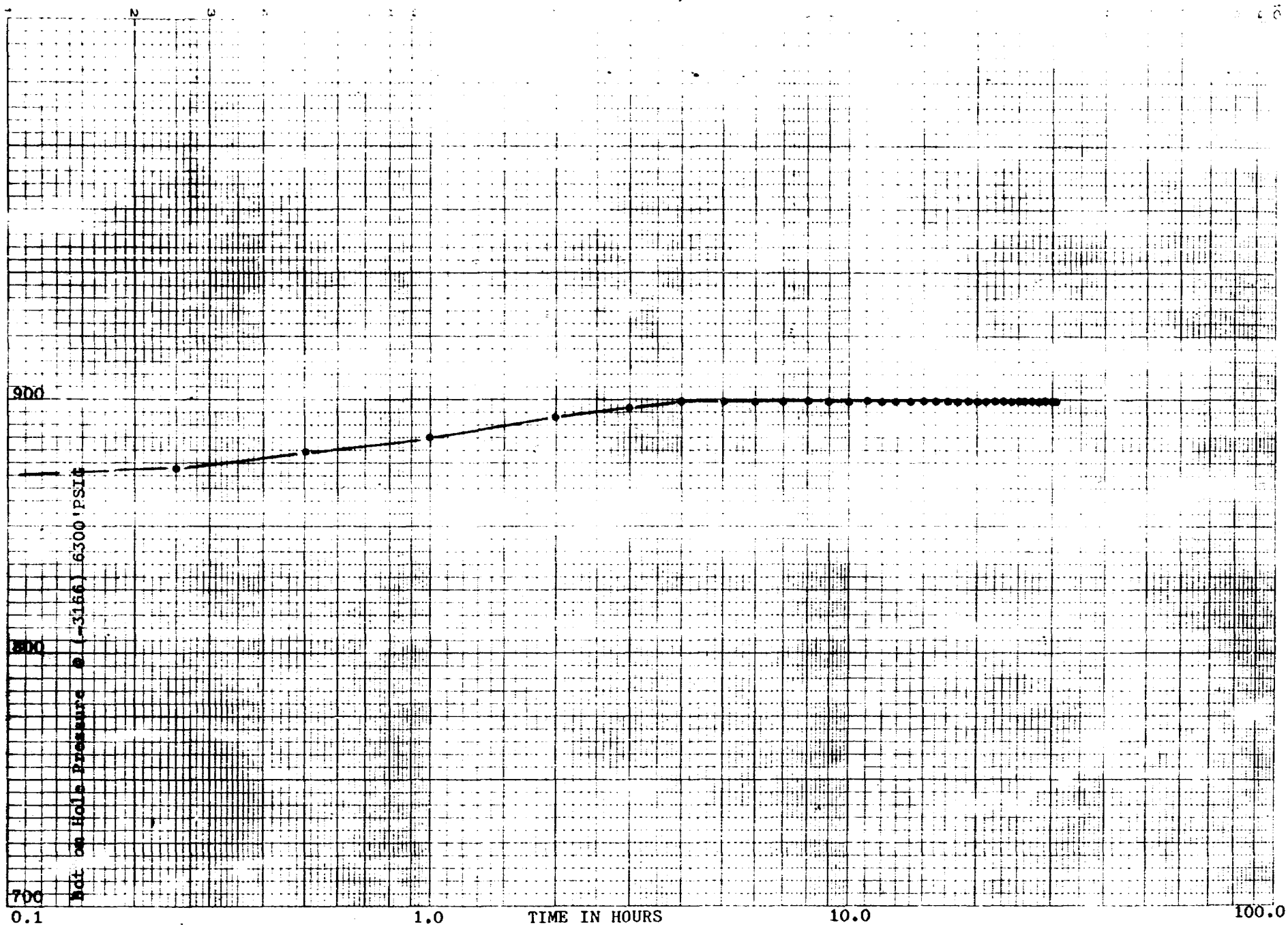
| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 234      | .234     |
| 6000         | 560      | .326     |
| 6300         | 700      | .467     |
| 6664 (-3166) | 870 * ** | (.467)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



JARREL SERVICES, INC.





# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

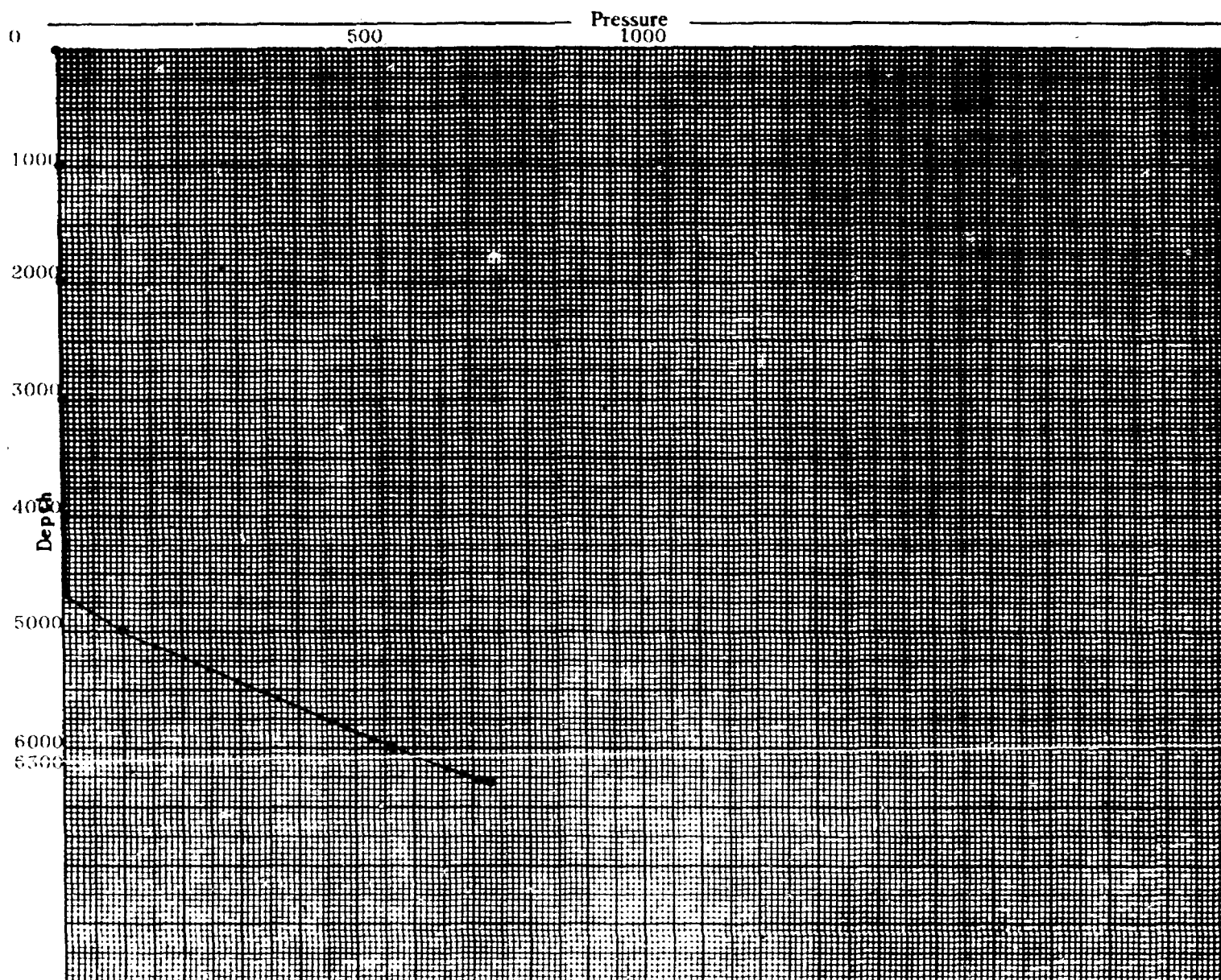
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Drinkard  
 LEASE L.G. Warlick WELL # 3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 26, 1979 TIME 7:30 AM  
 Status Shut in  
 Test Depth 6300'  
 Time S. I. 39.5 hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. PKR BHP change -  
 Elev. 3498' GL Fluid top 4700'  
 Datum (-3166) \*\* Water top 5000'  
 Temp. @ 106° F Run by JSI #12  
 Cal. No. A 4586 N Chart No. 2

| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 100      | .100     |
| 6000         | 560      | .460     |
| 6300         | 732      | .460     |
| 6664 (-3166) | 899 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



|                      |   |
|----------------------|---|
| TYPE OF REPORT - (X) |   |
| Initial Completion   |   |
| Special              | X |
| General Survey       |   |

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-124  
Revised 1-1-65

RESERVOIR PRESSURE REPORT

|                                                      |  |                                        |  |                         |  |                                  |  |
|------------------------------------------------------|--|----------------------------------------|--|-------------------------|--|----------------------------------|--|
| Operator<br><b>Petro-Lewis Corporation</b>           |  | Pool<br><b>Penrose Skelly</b>          |  | County<br><b>Lea</b>    |  | Date<br><b>November 26, 1979</b> |  |
| Address<br><b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Grayburg</b> |  | Oil Gradient<br>psi/ft. |  | Water Gradient<br>psi/ft.        |  |
|                                                      |  |                                        |  | Gas Gravity             |  | Datum Plane<br><b>(-256) **</b>  |  |

| LEASE                                                                                                                                  | WELL NO. | LOCATION |       |    |    | ELEV.      | OIL (O) OR GAS (G) | DATE TESTED | SHUT-IN HOURS | SHUT-IN TAG. PRESS. | BOMB TEST DATA |               |                  | SONIC INSTRUMENT TEST DATA* |  |              |                          |                        |                     |             | PRESS AT DATUM |
|----------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-------|----|----|------------|--------------------|-------------|---------------|---------------------|----------------|---------------|------------------|-----------------------------|--|--------------|--------------------------|------------------------|---------------------|-------------|----------------|
|                                                                                                                                        |          |          |       |    |    |            |                    |             |               |                     | TEST DEPTH     | B.H. TEMP. °F | OB-SERVED PRESS. | PROD. TEST (BBL./DAY)       |  | LIQUID LEVEL | LIQUID GRAD-IENT PSI/FT. | WT. OF LIQUID COL. PSI | WT. OF GAS COL. PSI | CSG. PRESS. |                |
|                                                                                                                                        |          | OIL      | WATER |    |    |            |                    |             |               |                     |                |               |                  |                             |  |              |                          |                        |                     |             |                |
| L.G. Warlick                                                                                                                           | 3        | P        | 18    | 21 | 37 | 3498<br>GL | 0                  | 11/18/79    | 48            | 0                   | 3850           | 90            | 344              |                             |  | 2712         | .302                     | 29                     | -                   |             | 315            |
| <div>EXTRAP. TO 405'</div> <div>405' + 3166' - 286' (.302 PSI/FT) = 1254' @ (-346)</div> <div>** MIDPOINT OF CASING PERFORATIONS</div> |          |          |       |    |    |            |                    |             |               |                     |                |               |                  |                             |  |              |                          |                        |                     |             |                |

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JARREL SERVICES, INC.

*[Signature]*  
(Signature)

Agent

(Title)

November 26, 1979

(Date)



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-8396

HOBBS, NEW MEXICO 88240

COMPANY: Petro Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly Grayburg

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL                                 | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ ( -256 ) |     |
|-------|------------------------------------------------|----------|--------------|------|------------------|-----|----------------|-----|
|       |                                                |          | HRS.         | MIN. | TBG              | CSG | 3754'PSIG      |     |
| 1979  |                                                |          |              |      |                  |     |                |     |
| 11/16 | Open. Run Open Gradient<br>& Pung Bomb @ 3850' | 3:25     | -            | -    | 0                | -   | 154            | 125 |
|       | Shut in                                        | 3:30     | 0            | 05   | -                | -   | 154            | 125 |
|       | "                                              | 3:45     | 0            | 15   | 0                | -   | 155            | 126 |
|       | "                                              | 4:00     | 0            | 30   | -                | -   | 157            | 128 |
|       | "                                              | 4:30     | 1            | 00   | -                | -   | 159            | 130 |
|       | "                                              | 5:30     | 2            | 00   | -                | -   | 166            | 137 |
|       | "                                              | 6:30     | 3            | 00   | -                | -   | 171            | 142 |
|       | "                                              | 7:30     | 4            | 00   | -                | -   | 176            | 147 |
|       | "                                              | 8:30     | 5            | 00   | -                | -   | 181            | 152 |
|       | "                                              | 9:30     | 6            | 00   | -                | -   | 185            | 156 |
|       | "                                              | 10:30    | 7            | 00   | -                | -   | 191            | 162 |
|       | "                                              | 11:30    | 8            | 00   | -                | -   | 195            | 166 |
| 11/17 | "                                              | 12:30 AM | 9            | 00   | -                | -   | 200            | 171 |
|       | "                                              | 1:30     | 10           | 00   | -                | -   | 205            | 176 |
|       | "                                              | 2:30     | 11           | 00   | -                | -   | 210            | 181 |
|       | "                                              | 3:30     | 12           | 00   | -                | -   | 215            | 186 |
|       | "                                              | 4:30     | 13           | 00   | -                | -   | 220            | 191 |
|       | "                                              | 5:30     | 14           | 00   | -                | -   | 223            | 194 |
|       | "                                              | 6:30     | 15           | 00   | -                | -   | 228            | 199 |
|       | "                                              | 7:30     | 16           | 00   | -                | -   | 232            | 203 |
|       | "                                              | 8:30     | 17           | 00   | -                | -   | 236            | 207 |
|       | "                                              | 9:30     | 18           | 00   | -                | -   | 242            | 213 |
|       | "                                              | 10:30    | 19           | 00   | -                | -   | 247            | 218 |
|       | "                                              | 11:30    | 20           | 00   | -                | -   | 250            | 221 |
|       | "                                              | 12:30 PM | 21           | 00   | -                | -   | 255            | 226 |
|       | "                                              | 1:30     | 22           | 00   | -                | -   | 258            | 229 |
|       | "                                              | 2:30     | 23           | 00   | -                | -   | 263            | 234 |
|       | "                                              | 3:30     | 24           | 00   | -                | -   | 267            | 238 |
|       | "                                              | 4:30     | 25           | 00   | -                | -   | 269            | 240 |
|       | "                                              | 5:30     | 26           | 00   | -                | -   | 272            | 243 |
|       | "                                              | 6:30     | 27           | 00   | -                | -   | 277            | 248 |
|       | "                                              | 7:30     | 28           | 00   | -                | -   | 281            | 252 |
|       | "                                              | 8:30     | 29           | 00   | -                | -   | 283            | 254 |
|       | "                                              | 9:30     | 30           | 00   | -                | -   | 287            | 258 |
|       | "                                              | 10:30    | 31           | 00   | -                | -   | 291            | 262 |
|       | "                                              | 11:30    | 32           | 00   | -                | -   | 294            | 265 |
| 11/18 | "                                              | 12:30 AM | 33           | 00   | -                | -   | 297            | 268 |
|       | "                                              | 1:30     | 34           | 00   | -                | -   | 301            | 272 |
|       | "                                              | 2:30     | 35           | 00   | -                | -   | 305            | 276 |
|       | "                                              | 3:30     | 36           | 00   | -                | -   | 309            | 280 |
|       | "                                              | 4:30     | 37           | 00   | -                | -   | 312            | 283 |
|       | "                                              | 5:30     | 38           | 00   | -                | -   | 315            | 286 |

WELL: L.G. Warlick, No. 3

PAGE: 2

| DATE | STATUS OF WELL                        | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP • (-256 ) |     |
|------|---------------------------------------|----------|--------------|------|------------------|-----|---------------|-----|
|      |                                       |          | HRS.         | MIN. | TBG              | CSG | 3754'PSIG     |     |
|      | Shut in                               | 6:30     | 39           | 00   | -                | -   | 318           | 289 |
|      | "                                     | 7:30     | 40           | 00   | -                | -   | 321           | 292 |
|      | "                                     | 8:30     | 41           | 00   | -                | -   | 324           | 295 |
|      | "                                     | 9:30     | 42           | 00   | -                | -   | 328           | 299 |
|      | "                                     | 10:30    | 43           | 00   | -                | -   | 330           | 301 |
|      | "                                     | 11:30    | 44           | 00   | -                | -   | 332           | 303 |
|      | "                                     | 12:30 PM | 45           | 00   | -                | -   | 335           | 306 |
|      | "                                     | 1:30     | 46           | 00   | -                | -   | 338           | 309 |
|      | "                                     | 2:30     | 47           | 00   | -                | -   | 341           | 312 |
|      | Pulled Bombs & Ran<br>Static Gradient | 3:30     | 48           | 00   | 0                | -   | 344           | 315 |

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

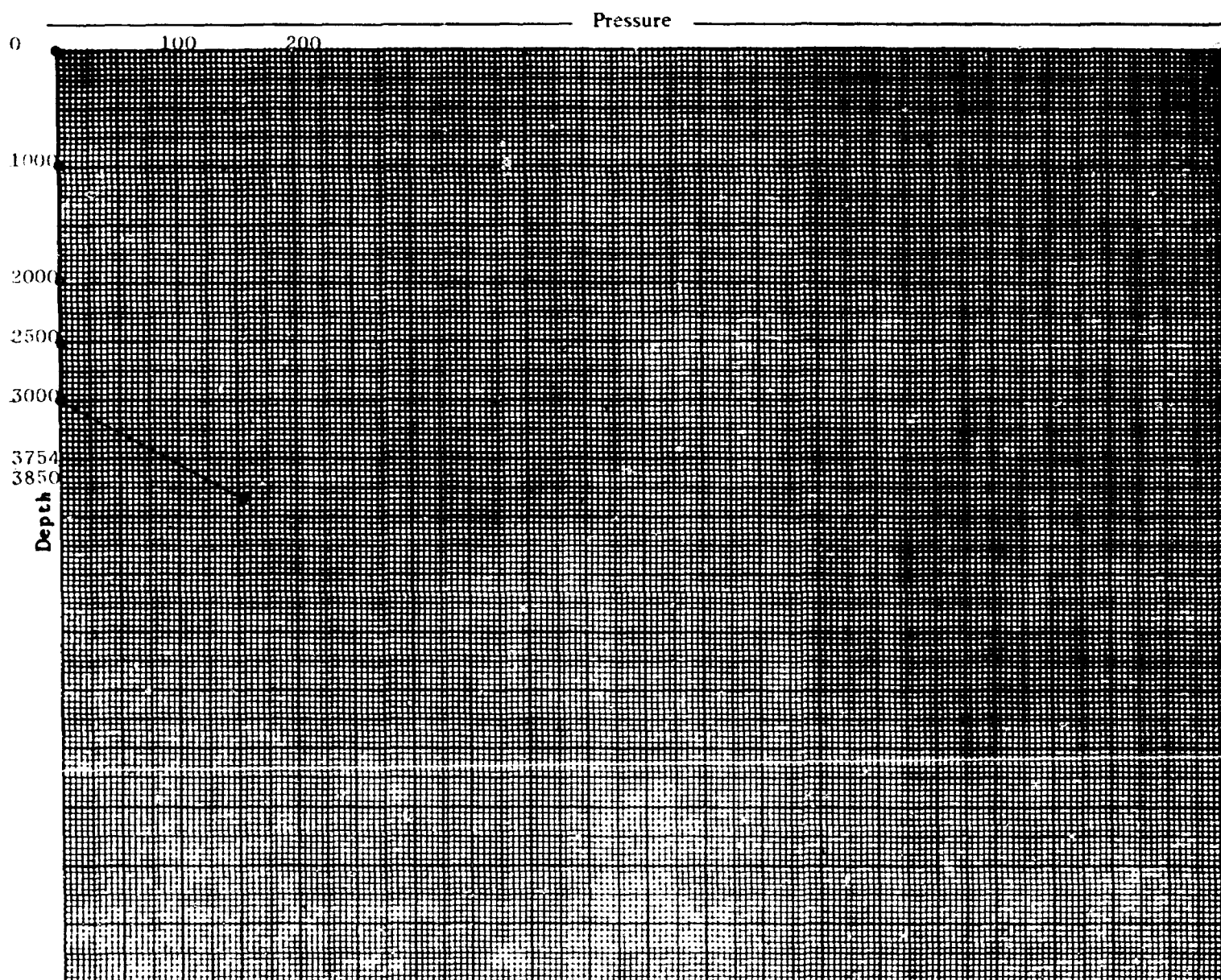
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Grayburg  
 LEASE L.G. Warlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 16, 1979 TIME 3:25 P.M.  
 Status Open  
 Test Depth 3850'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. - BHP change -  
 Elev. 3498' GL Fluid top 3341'  
 Datum (-256) Water top -  
 Temp. @ 90° F Run by JSI #19  
 Cal. No. A 6497 N Chart No. 1

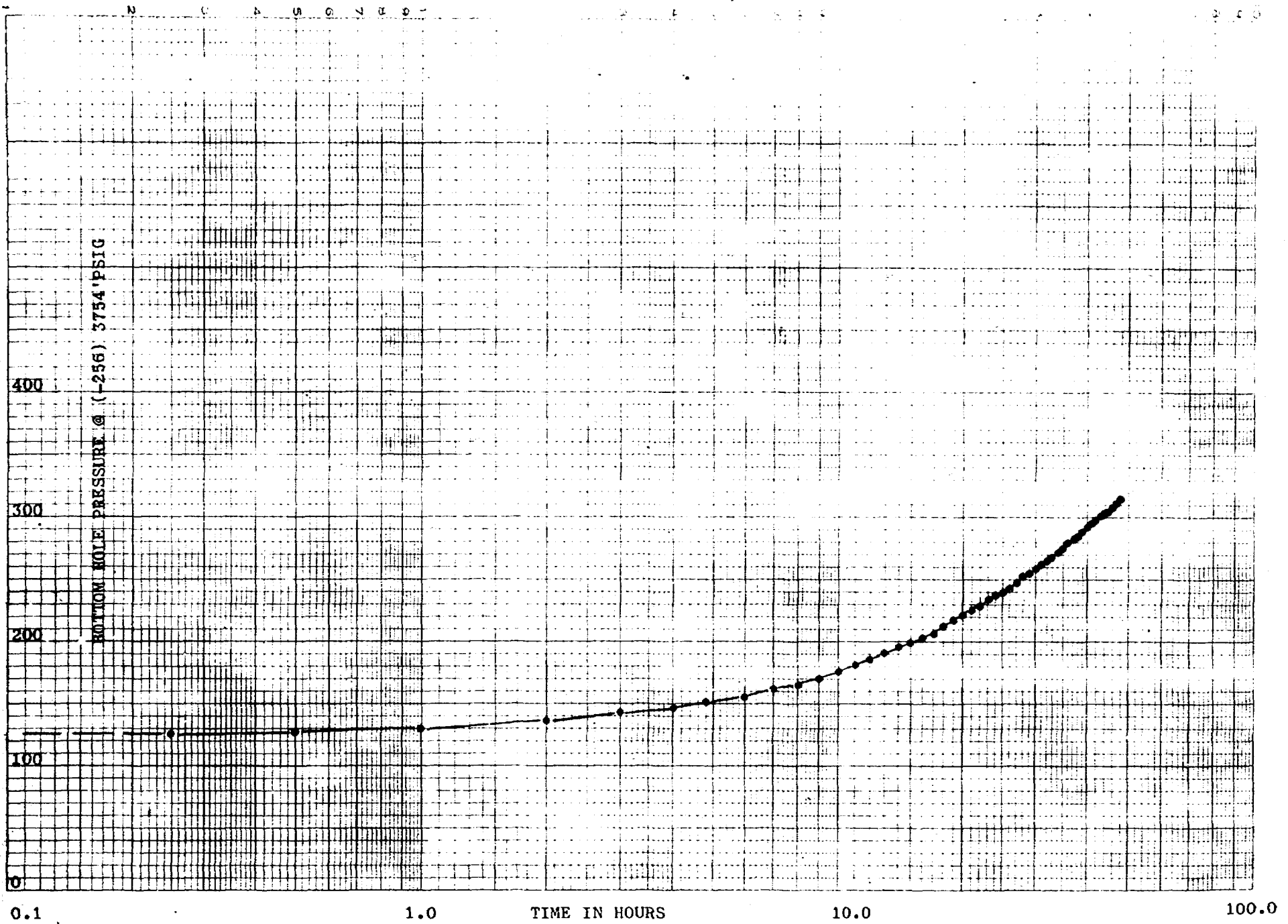
| Depth       | Pressure | Gradient |
|-------------|----------|----------|
| 0           | 0        | -        |
| 1000        | 0        | -        |
| 2000        | 0        | -        |
| 2500        | 0        | -        |
| 3000        | 0        | -        |
| 3754 (-256) | 125 * ** | (.302)   |
| 3850        | 154      | .181     |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



JARREL SERVICES, INC.



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

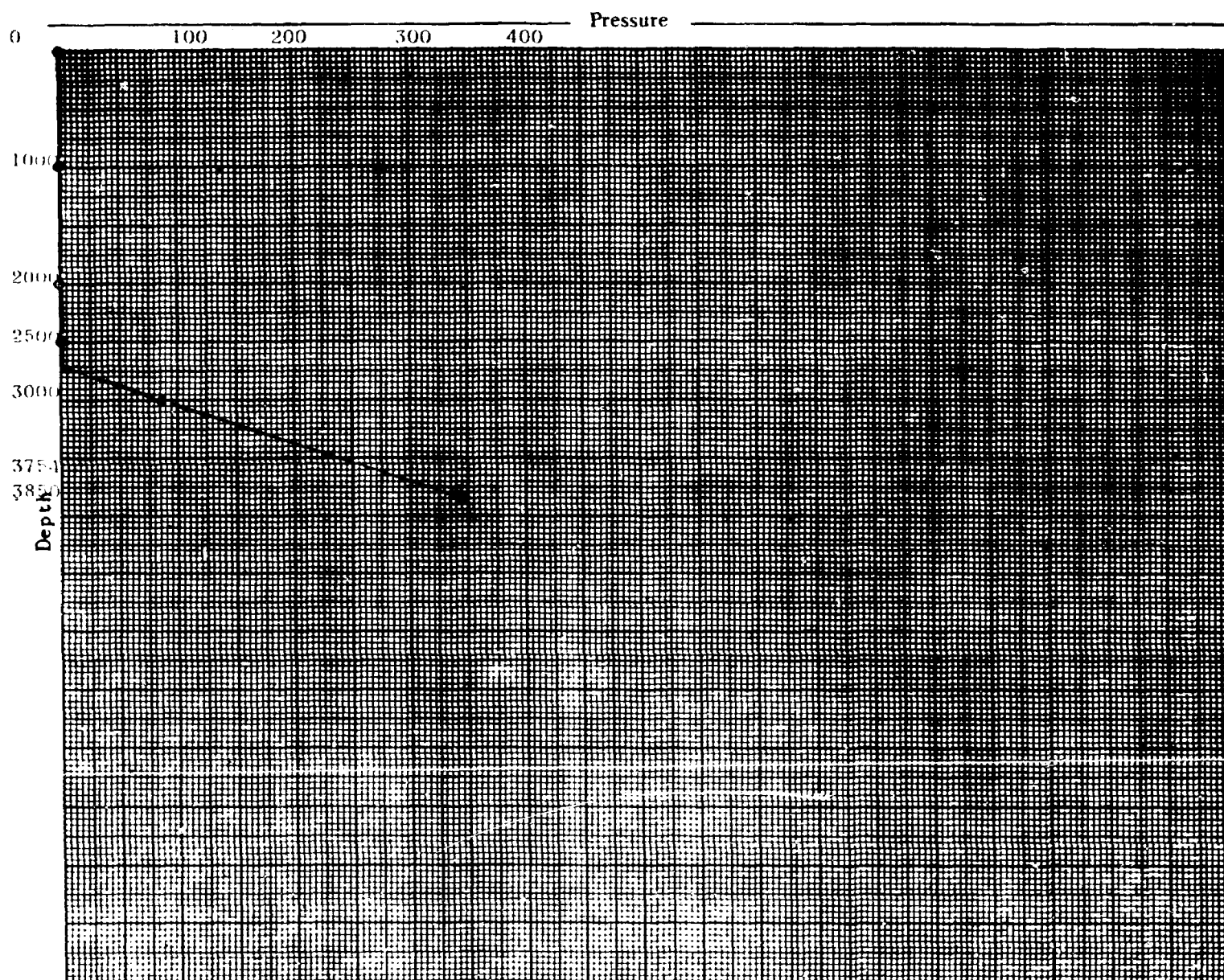
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro Lewis Corporation  
 FIELD Penrose Skell  
 FORMATION Grayburg  
 LEASE J.G. Warlick WELL # 3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 18, 1979 TIME 3:30 PM  
 Status Shut in  
 Test Depth 3850'  
 Time S. I. 48.9 hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. - BHP change -  
 Elev. 3498' GL Fluid top 2712  
 Datum (-256) \*\* Water top -  
 Temp. @ 90° F Run by JSI #19  
 Cal. No. A 6497 N Chart No. 2

| Depth          | Pressure | Gradient |
|----------------|----------|----------|
| 0              | 0        | -        |
| 1000           | 0        | -        |
| 2000           | 0        | -        |
| 2500           | 0        | -        |
| 3000           | 87       | .174     |
| 3754 (-256) ** | 315 **   | (.302)   |
| 3850           | 344      | .302     |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



SIPES, WILLIAMSON & AYCOCK, INC.

CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

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

Dear Sir:

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

|             |                  |
|-------------|------------------|
| BENEFICIARY | DATE             |
| CHARGE      |                  |
| PETRO-LEWIS | 1                |
|             | 6749             |
|             | Petro-Lewis Corp |
|             | 11/28/79         |

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

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

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

Warlick No. 3, 330 feet FEL and 660 feet FSL, Section 18,  
T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry perforations 5,679-5,873 feet and Drinkard per-  
forations 6,630-6,693 feet dual completion - Order No.  
MC 1984. Penrose-Skelly-Grayburg completion through  
perforations 3,723-3,784 feet. First production August  
28, 1979. (Blinebry and Drinkard under bridge plug  
during testing of Penrose-Skelly-Grayburg zone).  
Bottom perforations, lowermost pool - 6,000-6,999 feet  
equals 40 barrels per day allowable total daily produc-  
tion under commingled operations.

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

See Attachment No. 1.

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

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

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

Estimated BHP -

All zones on pump:

|                         |          |
|-------------------------|----------|
| Drinkard                | 50 psig  |
| Blinebry                | 50 psig  |
| Penrose-Skelly-Grayburg | 50 psig. |

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

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

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

Blinebry - sweet crude - 1.4 Barrels per Day - \$28.96  
per barrel current price

Drinkard - sweet crude - 3.25 Barrels per Day - \$28.96  
per barrel current price

Penrose-Skelly-Grayburg sour crude - 29 Barrels per Day -  
\$26.28 per barrel current price.

The operational problems of a triple completion would be immense due to the fact that all three zones require artificial lift. The Blinebry zone produces enough gas that pumping below a packer would be impossible unless a vent string was added. This would mean that four strings of tubing would be necessary to complete the well as a triple. No attempt will be made to complete the well in this manner.

Although commingling the sour Penrose-Skelly-Grayburg oil with the sweet Blinebry and Drinkard oil would lower the value of the sweet oil, the low volume of the sweet oil in relation to the volume of sour oil makes the total value reduction small and prevents underground waste by allowing low productivity zones to be produced. Precedent is set by Commingling Order DHC-206, dated October 1, 1976, for Sun's Elliot B-1 Lease, NW/4 NW/4, Section 20, T-21-S, R-37-E, Lea County, New Mexico, for the Penrose-Skelly-Grayburg Pool and the Blinebry Oil and Gas Pool.

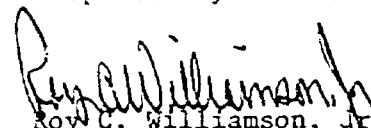
- (i) A statement that all offset operators and, in the case of a well on Federal land, the United States Geological Survey, have been notified in writing of the proposed commingling.

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

COMMENT:

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

Respectfully submitted,

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

/djs

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

Petro-Lewis Corporation



## Attachment No. 1

## (d) Production History (Warlick No. 3)

| Year<br>Month | Blinebry Zone |             |            |               | Drinkard Zone |             |            |               | Penrose-Skelly-Grayburg Zone |             |            |               |
|---------------|---------------|-------------|------------|---------------|---------------|-------------|------------|---------------|------------------------------|-------------|------------|---------------|
|               | BBL<br>OIL    | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL    | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL                   | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO |
| 1979          |               |             |            |               |               |             |            |               |                              |             |            |               |
| June          | 46            | 330         | 1,299      | 28.2          | 126           | 240         | 177        | 1.4           | -                            | -           | -          | -             |
| July          | 61            | 372         | 1,426      | 23.4          | 131           | 279         | 195        | 1.5           | -                            | -           | -          | -             |
| August        | 22            | NA          | NA         | -             | 42            | NA          | NA         | -             | 34/D                         | 38/D        | NA         | -             |
| Sept.         | -----CI-----  |             |            |               | -----CI-----  |             |            |               | 29/D                         | 19/D        | 97/D       | 3.34          |
| Average for)  |               |             |            |               |               |             |            |               |                              |             |            |               |
| June, July )  | 1.4           | 11.5        |            | 25.5          | 3.25          | 8.5         |            | 1.45          |                              |             |            |               |
| & August )    | BO/D          | BW/D        |            | MCF/BO        | BO/D          | BW/D        |            | MCF/BO        |                              |             |            |               |
| Average for)  |               |             |            |               |               |             |            |               | 29                           | 19          | 97         |               |
| September )   |               |             |            |               |               |             |            |               | BO/D                         | BW/D        | MCF/D      | 3.34          |

Current production from all zones equals 33.65 barrels of oil per day plus 39.00 barrels of water per day.

\* Penrose-Skelly-Grayburg produced 4 days in August.

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

11/20 7:31 PM 10/22/77

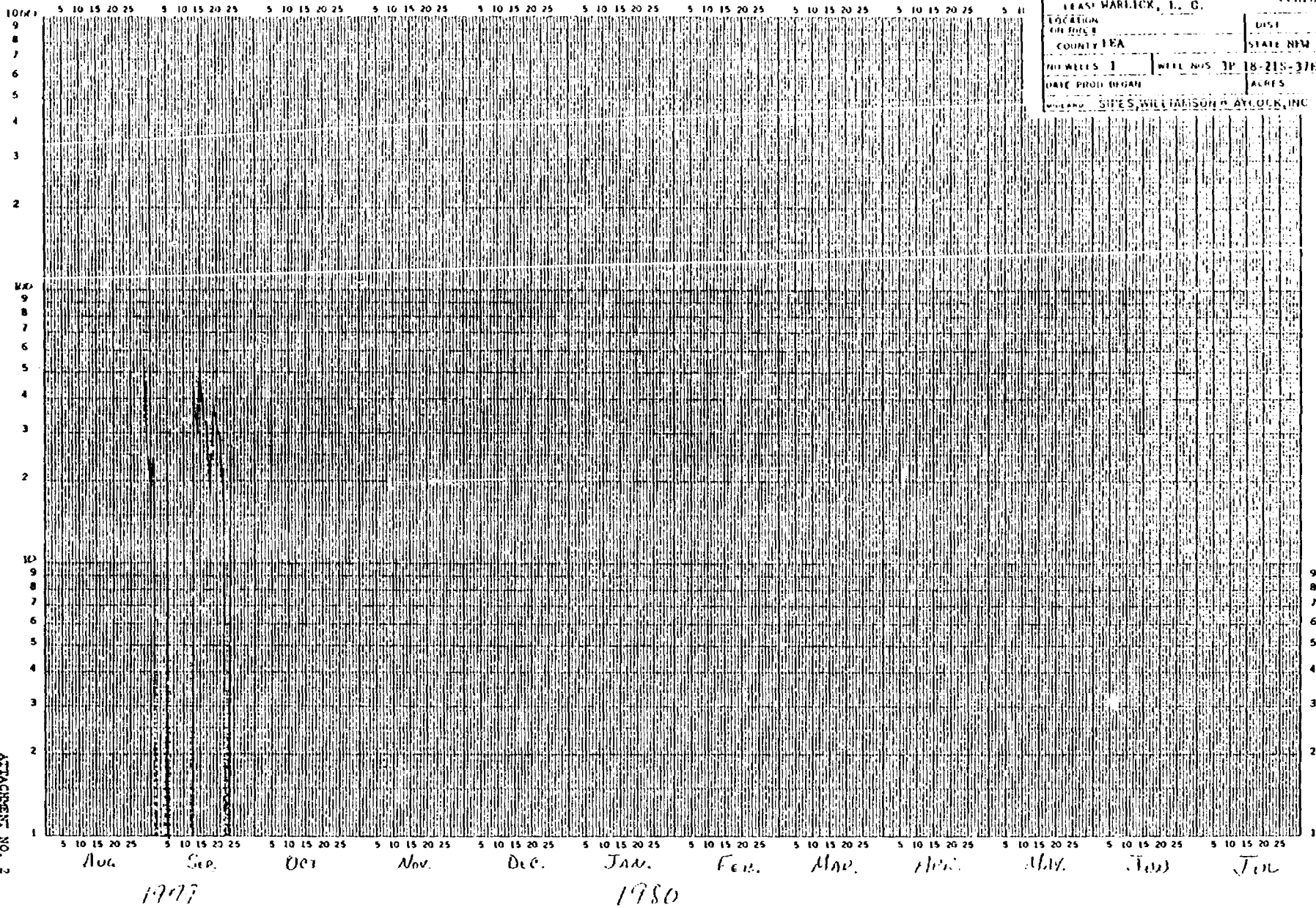
|                                                           |                        |
|-----------------------------------------------------------|------------------------|
| FIELD BINEBERRY OIL AND GAS                               |                        |
| OPERATOR PETRO-LEWIS CORPORATION (Formerly Petrogas Prod) |                        |
| LEASE WARLICK, L. G.                                      |                        |
| LOCATION                                                  | UNIT                   |
| COUNTY 1EA                                                | STATE NM MEXICO        |
| WELLS 1                                                   | WELL NOS 3P 18-21S-37E |
| DATE PROD BEGAN                                           | ACRES                  |
| MINOR SITES WILLIAMSON AYCLEN, INC                        |                        |

47 6540

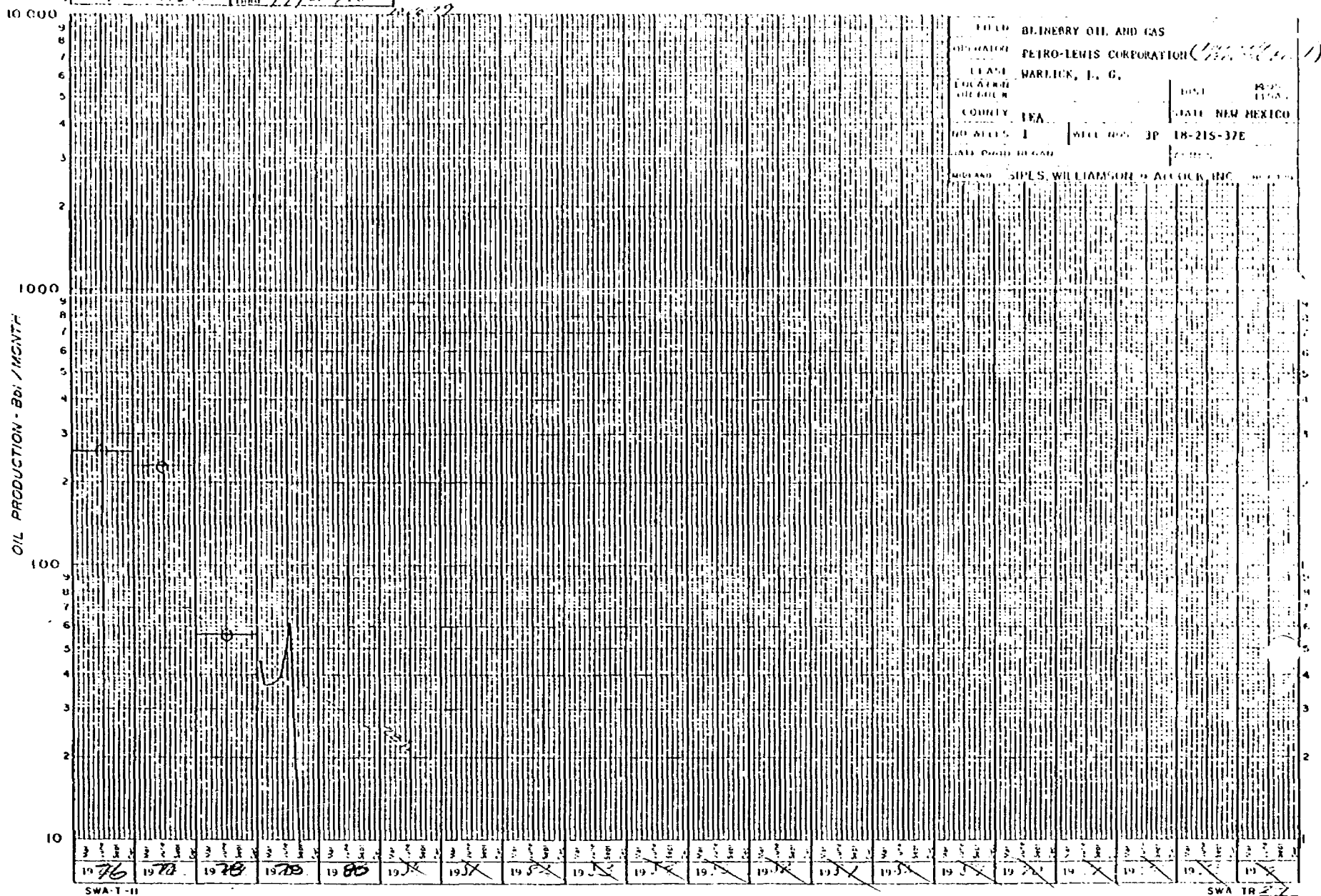
KOE 1 YEAR BY DAYS 1.00 CYCLES  
1000000 1000000 1000000

BO/DAY

ATTACHMENT NO. 2  
PAGE 1 OF 5

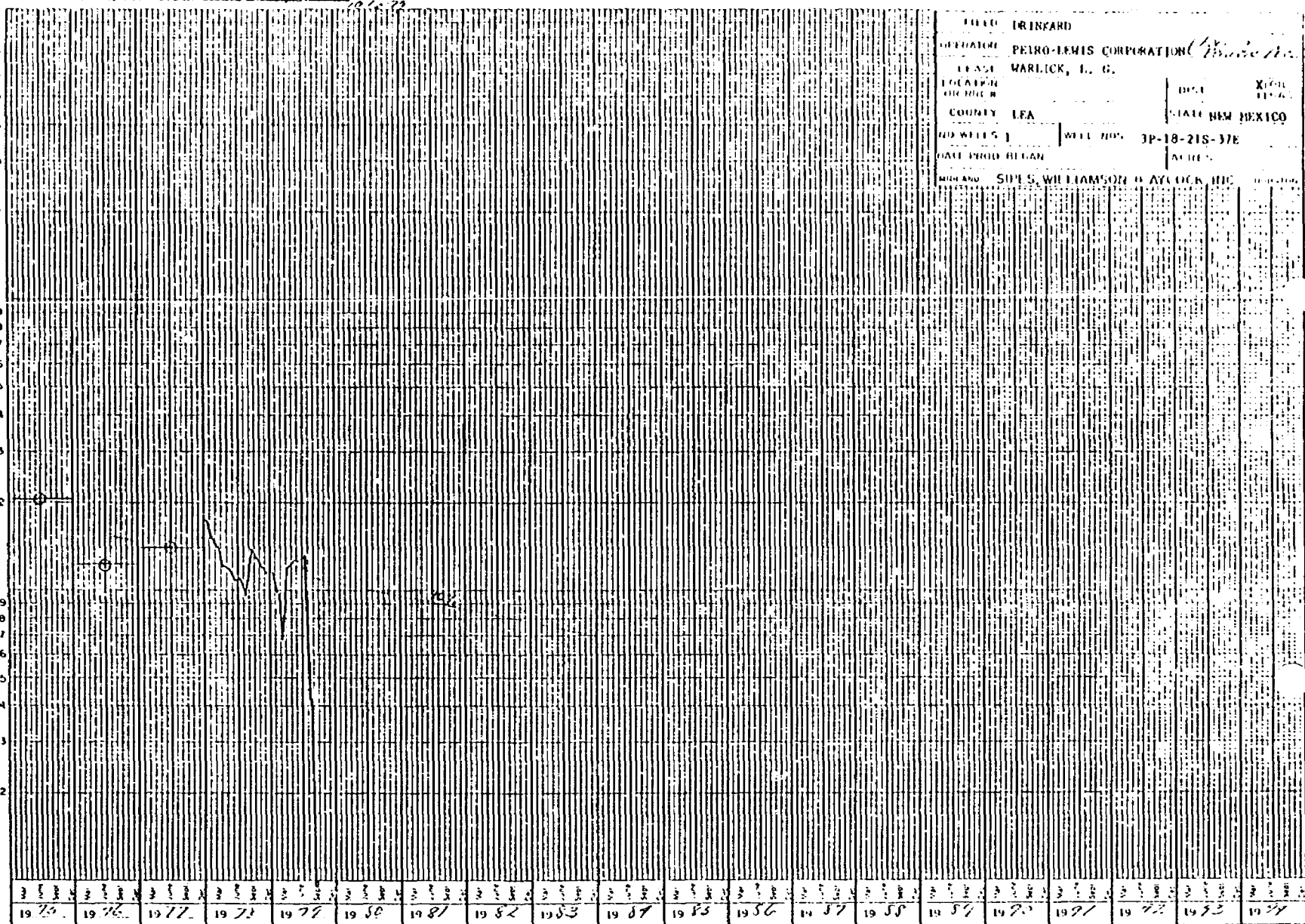


121 77 522 (5) UPDATED 7.27.01 BY JLO



ATTACHMENT NO. 2  
Page 3 of 5

CIL PRODUCTION - SEC./MONTH



SWA-T-11

SWA TR



NEW MEXICO OIL CONSERVATION COMMISSION  
POST OFFICE BOX 2088  
SANTA FE, NEW MEXICO 87501

057-10-1970

1972 MAR - 11:05  
COMMINGLING ORDER PC-435

Company Amerada Hess Corporation  
Address Drawer 817  
City, State, Zip Seminole, Texas 79360  
Attention: Mr. G. F. Dewhurst  
Lease Name: State "DC" Lease  
Description: S/2 NW/4, Sec. 19, T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry Gas Pool and Drinkard, Paddock, and Penrose Skelly Oil Pools

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

\_\_\_\_\_ separately metering the production from each pool prior to commingling

\_\_\_\_\_ separately metering the production from

and determining the production by the subtraction method

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

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

REMARKS:

DONE at Santa Fe, New Mexico, on this 6th day of March 1972.

*A. L. Porter, Jr.*  
A. L. PORTER, Jr., Secretary-Director

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

ATTACHMENT NO. 3

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

Gentlemen:

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

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

Thank you for your cooperation.

Yours very truly,

Original Signed By  
ROY C. WILLIAMSON, JR.

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

- I. Warlick No. 3 - I do ( ) do not ( ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( ) object to  
commingling request for this well.

Signed \_\_\_\_\_

Date \_\_\_\_\_

COMPANY \_\_\_\_\_



ADDRESS LIST  
(Alphabetical Order)

OFFSET OPERATORS\*

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

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

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

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

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

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

Attn Mr. R. C. Anderson,  
Production Manager  
(505) 393-4121

Peery, J. W., Estate  
P. O. Box 401  
Midland, TX 79701  
(915) 684-4651

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

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

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

Attn Mr. Don Wright  
(405) 848-8551

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

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

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

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

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

|                      |   |
|----------------------|---|
| TYPE OF REPORT - (X) |   |
| Initial Completion   |   |
| Special              | X |
| General Survey       |   |

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-104  
Revised 10-65

RESERVOIR PRESSURE REPORT

|                                                      |  |                                        |  |                         |  |                                      |  |
|------------------------------------------------------|--|----------------------------------------|--|-------------------------|--|--------------------------------------|--|
| Operator<br><b>Petro-Lewis Corporation</b>           |  | Field<br><b>Blinebry</b>               |  | County<br><b>Lea</b>    |  | Date<br><b>November 26, 1979</b>     |  |
| Address<br><b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Blinebry</b> |  | Oil Gradient<br>psi/ft. |  | Water Gradient<br>psi/ft.            |  |
|                                                      |  |                                        |  | Gas Gravity             |  | Status Pressure<br><b>(-2278) **</b> |  |

| LEASE                                                                                                                                   | WELL NO. | LOCATION |    |    |    | ELEV.   | OIL (O) OR GAS (G) | DATE TESTED | SHUT-IN TBG. PRESS. | BOMB TEST DATA |               |                  | SONIC INSTRUMENT TEST DATA* |              |                          |                        |                     |             | PRESS. AT DATUM |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----|----|----|---------|--------------------|-------------|---------------------|----------------|---------------|------------------|-----------------------------|--------------|--------------------------|------------------------|---------------------|-------------|-----------------|
|                                                                                                                                         |          | U        | S  | T  | R  |         |                    |             |                     | TEST DEPTH     | B.H. TEMP. °F | OB-SERVED PRESS. | PROD. TEST (BBLs./DAY)      | LIQUID LEVEL | LIQUID GRAD-IENT PSI/FT. | WT. OF LIQUID COL. PSI | WT. OF GAS COL. PSI | CSG. PRESS. |                 |
| L.G. Warlick                                                                                                                            | 3        | P        | 18 | 21 | 37 | 3498 GL | 0                  | 11/21/79    | 24                  | 0              | 5476          | 100              | 635                         |              | 4100                     | .460                   | 138                 |             | 773             |
| <p>** MIDPOINT OF CASING PERFORATIONS</p> <p><math>773^{\#} + (3166' - 2278') \cdot .46 \text{ psi/ft} = 1181^{\#} @ (-3166)</math></p> |          |          |    |    |    |         |                    |             |                     |                |               |                  |                             |              |                          |                        |                     |             |                 |

|                               |       |
|-------------------------------|-------|
| RECORD EXAMINER'S SIGNATURE   |       |
| OIL CONSERVATION DIVISION     |       |
| Petro-Lewis                   | NO. 2 |
| 6749                          |       |
| Submitted by Petro-Lewis Corp |       |
| Hearing Date 11/28/79         |       |

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JANREL SERVICES, INC.  
*[Signature]*  
(Signature)

Agent  
(Title)

November 26, 1979  
(Date)

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-8396

HOBBS, NEW MEXICO 88240

COMPANY: Petro-Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly - Blinebry

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL                                         | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ (-2278 )<br>5776' PSIG |
|-------|--------------------------------------------------------|----------|--------------|------|------------------|-----|------------------------------|
|       |                                                        |          | HRS.         | MIN. | TBG              | CSG |                              |
| 1979  |                                                        |          |              |      |                  |     |                              |
| 11/20 | Shut in. Run Static<br>Gradient & Hung Bomb<br>@ 5476' | 11:00 AM | -            | -    | 0                | PKR | 768                          |
|       | Shut in                                                | 11:15    | 0            | 15   | -                | -   | 768                          |
|       | "                                                      | 11:30    | 0            | 30   | -                | -   | 768                          |
|       | "                                                      | 12:00 N  | 1            | 00   | -                | -   | 769                          |
|       | "                                                      | 1:00 PM  | 2            | 00   | -                | -   | 769                          |
|       | "                                                      | 2:00     | 3            | 00   | -                | -   | 769                          |
|       | "                                                      | 3:00     | 4            | 00   | -                | -   | 769                          |
|       | "                                                      | 4:00     | 5            | 00   | -                | -   | 771                          |
|       | "                                                      | 5:00     | 6            | 00   | -                | -   | 771                          |
|       | "                                                      | 6:00     | 7            | 00   | -                | -   | 771                          |
|       | "                                                      | 7:00     | 8            | 00   | -                | -   | 771                          |
|       | "                                                      | 8:00     | 9            | 00   | -                | -   | 771                          |
|       | "                                                      | 9:00     | 10           | 00   | -                | -   | 773                          |
|       | "                                                      | 10:00    | 11           | 00   | -                | -   | 773                          |
|       | "                                                      | 11:00    | 12           | 00   | -                | -   | 773                          |
|       | "                                                      | 12:00 MN | 13           | 00   | -                | -   | 773                          |
| 11/21 | "                                                      | 1:00 AM  | 14           | 00   | -                | -   | 773                          |
|       | "                                                      | 2:00     | 15           | 00   | -                | -   | 773                          |
|       | "                                                      | 3:00     | 16           | 00   | -                | -   | 773                          |
|       | "                                                      | 4:00     | 17           | 00   | -                | -   | 773                          |
|       | "                                                      | 5:00     | 18           | 00   | -                | -   | 773                          |
|       | "                                                      | 6:00     | 19           | 00   | -                | -   | 773                          |
|       | "                                                      | 7:00     | 20           | 00   | -                | -   | 773                          |
|       | "                                                      | 8:00     | 21           | 00   | -                | -   | 773                          |
|       | "                                                      | 9:00     | 22           | 00   | -                | -   | 773                          |
|       | "                                                      | 10:00    | 23           | 00   | -                | -   | 773                          |
|       | Pulled Bombs & Ran<br>Static Gradient                  | 11:00    | 24           | 00   | 0                | -   | 773                          |

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

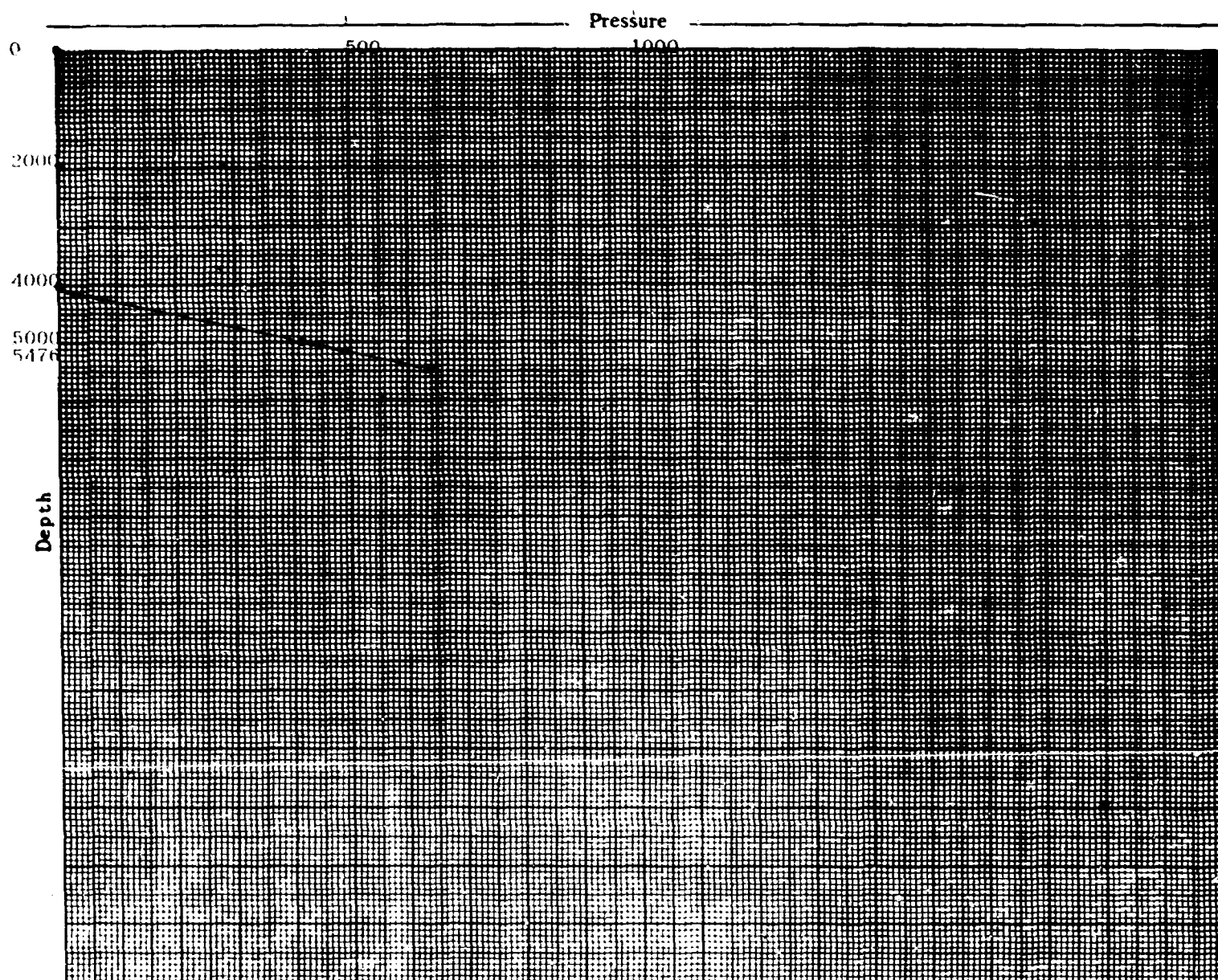
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Blincry  
 LEASE L.G. Warlick WELL # 3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 21, 1979 TIME 11:00 AM  
 Status Shut in  
 Test Depth 5476'  
 Time S. I. 24.0 hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. PRK BHP change -  
 Elev. 3498' GL Fluid top -  
 Datum (-2278) \*\* Water top 4100'  
 Temp. @ 100' F Run by JSI #18  
 Cal. No. A 4586 N Chart No. 2

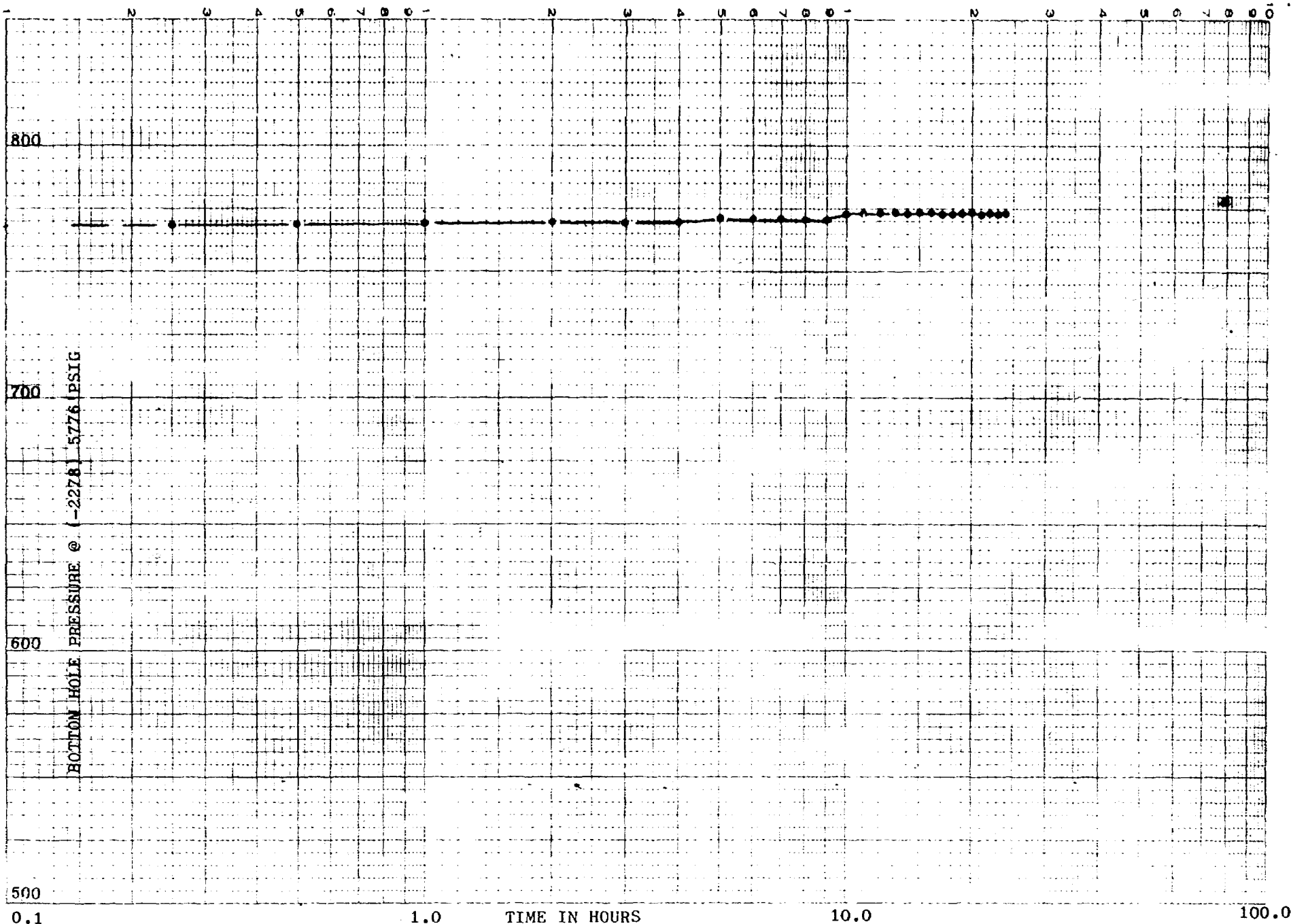
| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 2000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 416      | .416     |
| 5476         | 635      | .460     |
| 5776 (-2278) | 773 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



JARREL SERVICES, INC.



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

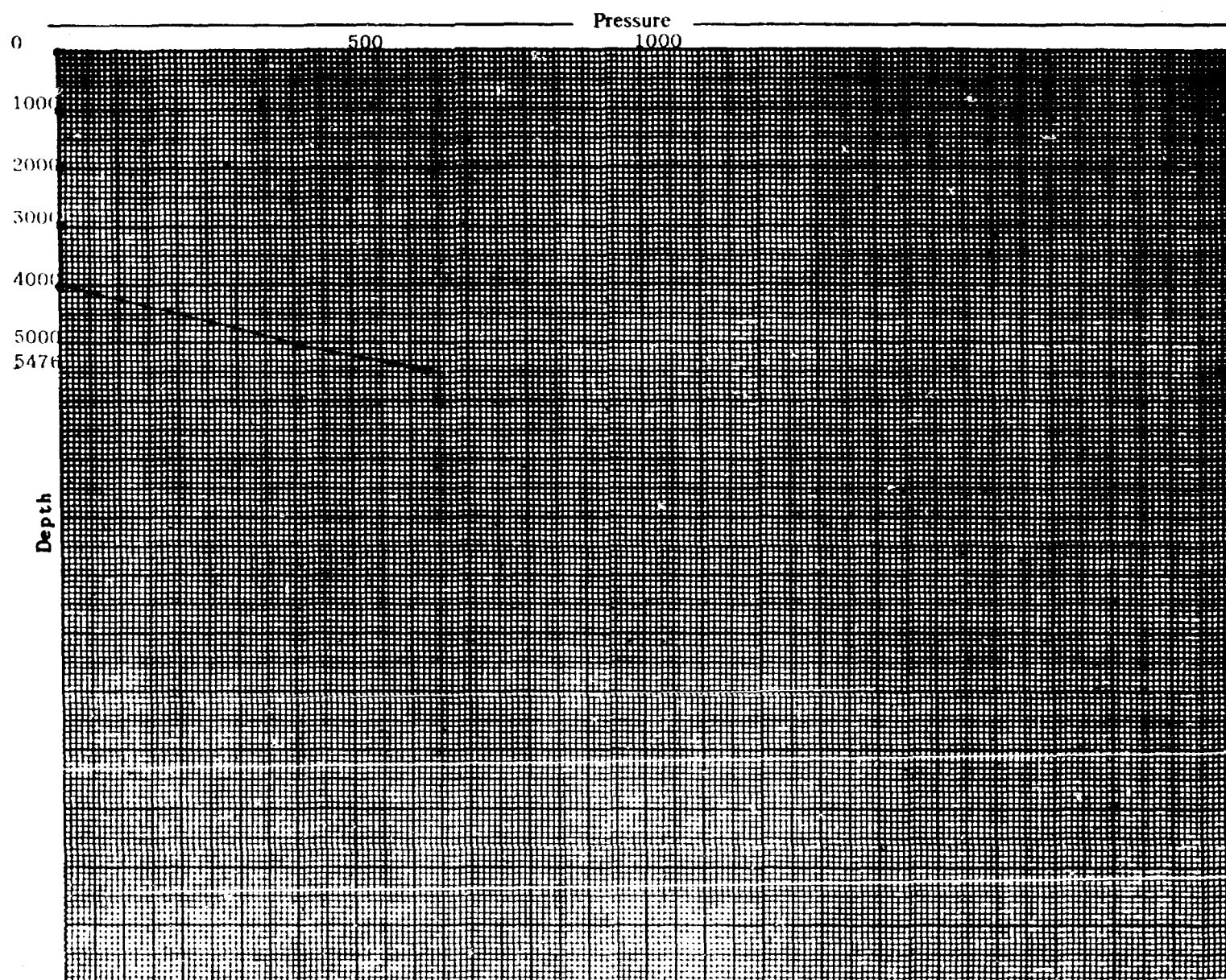
OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Blinbry  
 LEASE L.G. Warlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE November 20, 197 TIME 11:00 AM  
 Status Open  
 Test Depth 5476'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. PKR BHP change -  
 Elev. 3498' GL Fluid top Open  
 Datum (-2278) \*\* Water top -  
 Temp. @ 100 F Run by JSI #12  
 Cal. No. A 4586 N Chart No. 1

## BOTTOM HOLE PRESSURE RECORD

| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 411      | .411     |
| 5476         | 630      | .460     |
| 5776 (-2278) | 768 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



|                      |   |
|----------------------|---|
| TYPE OF REPORT - (X) |   |
| Initial Completion   |   |
| Special              | X |
| General Survey       |   |

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-124  
Revised 1-1-65

RESERVOIR PRESSURE REPORT

|                                                   |  |                                        |  |                         |  |                                  |  |
|---------------------------------------------------|--|----------------------------------------|--|-------------------------|--|----------------------------------|--|
| Operator<br><b>Petro-Lewis Corporation</b>        |  | Pool<br><b>Drinkard</b>                |  | County<br><b>Lea</b>    |  | Date<br><b>November 26, 1979</b> |  |
| Address <b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Drinkard</b> |  | Oil Gradient<br>psi/ft. |  | Water Gradient<br>psi/ft.        |  |
|                                                   |  |                                        |  | Gas Gravity             |  | Datum Plane<br><b>(-3166) **</b> |  |

| LEASE                              | WELL NO. | LOCATION |    |    |    | ELEV.      | OIL (O) OR GAS (G) | DATE TESTED | SHUT-IN HOURS | SHUT-IN TBC. PRESS. | BOMB TEST DATA |               |                  | SONIC INSTRUMENT TEST DATA* |       |              |                          |                        |                     |             | PRESS. AT DATUM |
|------------------------------------|----------|----------|----|----|----|------------|--------------------|-------------|---------------|---------------------|----------------|---------------|------------------|-----------------------------|-------|--------------|--------------------------|------------------------|---------------------|-------------|-----------------|
|                                    |          | U        | S  | T  | R  |            |                    |             |               |                     | TEST DEPTH     | B.H. TEMP. °F | OB-SERVED PRESS. | PROD. TEST (BBLs./DAY)      |       | LIQUID LEVEL | LIQUID GRAD-IENT PSI/FT. | WT. OF LIQUID COL. PSI | WT. OF GAS COL. PSI | CSG. PRESS. |                 |
|                                    |          |          |    |    |    |            |                    |             |               |                     |                |               |                  | OIL                         | WATER |              |                          |                        |                     |             |                 |
| L.G. Warlick                       | 3        | P        | 18 | 21 | 37 | 3498<br>GL | 0                  | 11/26/79    | 39.5          | 0                   | 6300           | 106           | 732              |                             |       | 4700'        | .460                     | 167                    |                     |             | 899             |
| ** MIDPOINT OF CASING PERFORATIONS |          |          |    |    |    |            |                    |             |               |                     |                |               |                  |                             |       |              |                          |                        |                     |             |                 |

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JARREL SERVICES, INC.

*John Jarrel*  
(Signature)

Agent

(Title)

November 26, 1979

(Date)

# JARREL SERVICES, INC.

POST OFFICE BOX 1684

PHONE 505 393-8396

HOBBS, NEW MEXICO 88240

COMPANY: Petro-Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly - Drinkard

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL       | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ (-3166')<br>6664' PSIG |
|-------|----------------------|----------|--------------|------|------------------|-----|------------------------------|
|       |                      |          | HRS.         | MIN. | TBG              | CSG |                              |
| 1979  |                      |          |              |      |                  |     |                              |
| 11/24 | Swabbed & Open. Run  |          |              |      |                  |     |                              |
|       | Open Gradient & Hung |          |              |      |                  |     |                              |
|       | Bomb @ 6300'         | 3:45 PM  | -            | -    | 0                | PKR | 870                          |
|       | Shut in              | 4:00     | 0            | 15   | 0                | -   | 870                          |
|       | "                    | 4:15     | 0            | 15   | -                | -   | 873                          |
|       | "                    | 4:30     | 0            | 30   | -                | -   | 879                          |
|       | "                    | 5:00     | 1            | 00   | -                | -   | 885                          |
|       | "                    | 6:00     | 2            | 00   | -                | -   | 893                          |
|       | "                    | 7:00     | 3            | 00   | -                | -   | 897                          |
|       | "                    | 8:00     | 4            | 00   | -                | -   | 899                          |
|       | "                    | 9:00     | 5            | 00   | -                | -   | 899                          |
|       | "                    | 10:00    | 6            | 00   | -                | -   | 899                          |
|       | "                    | 11:00    | 7            | 00   | -                | -   | 899                          |
|       | "                    | 12:00 MN | 8            | 00   | -                | -   | 899                          |
| 11/25 | "                    | 1:00 AM  | 9            | 00   | -                | -   | 899                          |
|       | "                    | 2:00     | 10           | 00   | -                | -   | 899                          |
|       | "                    | 3:00     | 11           | 00   | -                | -   | 899                          |
|       | "                    | 4:00     | 12           | 00   | -                | -   | 899                          |
|       | "                    | 5:00     | 13           | 00   | -                | -   | 899                          |
|       | "                    | 6:00     | 14           | 00   | -                | -   | 899                          |
|       | "                    | 7:00     | 15           | 00   | -                | -   | 899                          |
|       | "                    | 8:00     | 16           | 00   | -                | -   | 899                          |
|       | "                    | 9:00     | 17           | 00   | -                | -   | 899                          |
|       | "                    | 10:00    | 18           | 00   | -                | -   | 899                          |
|       | "                    | 11:00    | 19           | 00   | -                | -   | 899                          |
|       | "                    | 12:00 N  | 20           | 00   | -                | -   | 899                          |
|       | "                    | 1:00 PM  | 21           | 00   | -                | -   | 899                          |
|       | "                    | 2:00     | 22           | 00   | -                | -   | 899                          |
|       | "                    | 3:00     | 23           | 00   | -                | -   | 899                          |
|       | "                    | 4:00     | 24           | 00   | -                | -   | 899                          |
|       | "                    | 5:00     | 25           | 00   | -                | -   | 899                          |
|       | "                    | 6:00     | 26           | 00   | -                | -   | 899                          |
|       | "                    | 7:00     | 27           | 00   | -                | -   | 899                          |
|       | "                    | 8:00     | 28           | 00   | -                | -   | 899                          |
|       | "                    | 9:00     | 29           | 00   | -                | -   | 899                          |
|       | "                    | 10:00    | 30           | 00   | -                | -   | 899                          |
|       | "                    | 11:00    | 31           | 00   | -                | -   | 899                          |
|       | "                    | 12:00 MN | 32           | 00   | -                | -   | 899                          |
| 11/26 | "                    | 1:00 AM  | 33           | 00   | -                | -   | 899                          |
|       | "                    | 2:00     | 34           | 00   | -                | -   | 899                          |
|       | "                    | 3:00     | 35           | 00   | -                | -   | 899                          |
|       | "                    | 4:00     | 36           | 00   | -                | -   | 899                          |
|       | "                    | 5:00     | 37           | 00   | -                | -   | 899                          |
|       | "                    | 6:00     | 38           | 00   | -                | -   | 899                          |
|       | "                    | 7:00     | 39           | 00   | -                | -   | 899                          |
|       | Pulled Bomb & Ran    |          |              |      |                  |     |                              |
|       | Static Gradient      | 7:30     | 39           | 30   | 0                | -   | 899                          |



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

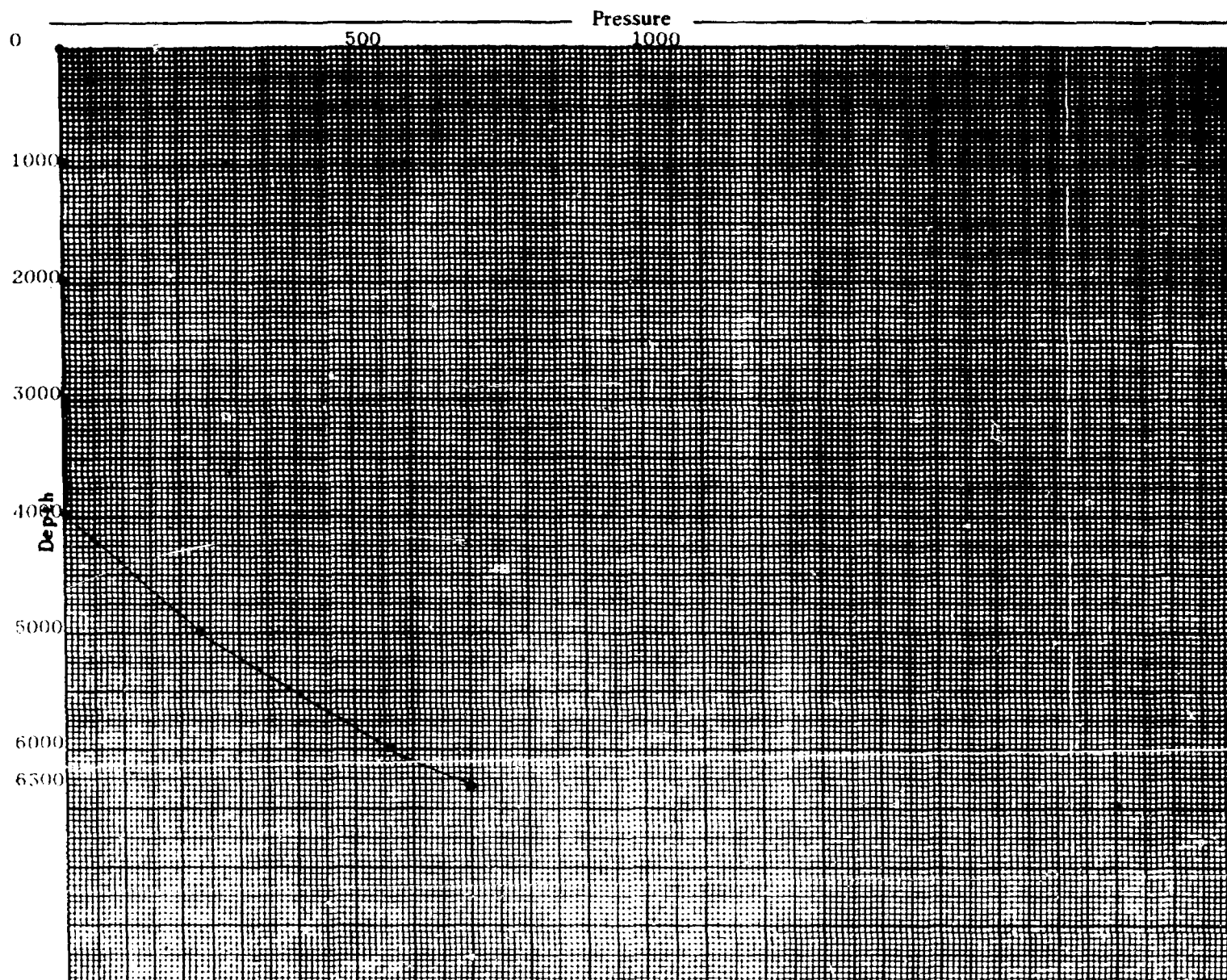
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Drinkard  
 LEASE L.G. Warlick WELL #5  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 24, 1979 TIME 3:45  
 Status Swabbed & Open  
 Test Depth 6300'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. P&R BHP change -  
 Elev. 3498' GL Fluid top Open  
 Datum (-3166) \*\* Water top -  
 Temp. @ 106° F Run by JSI #12  
 Cal. No. A 4586 N Chart No. 1

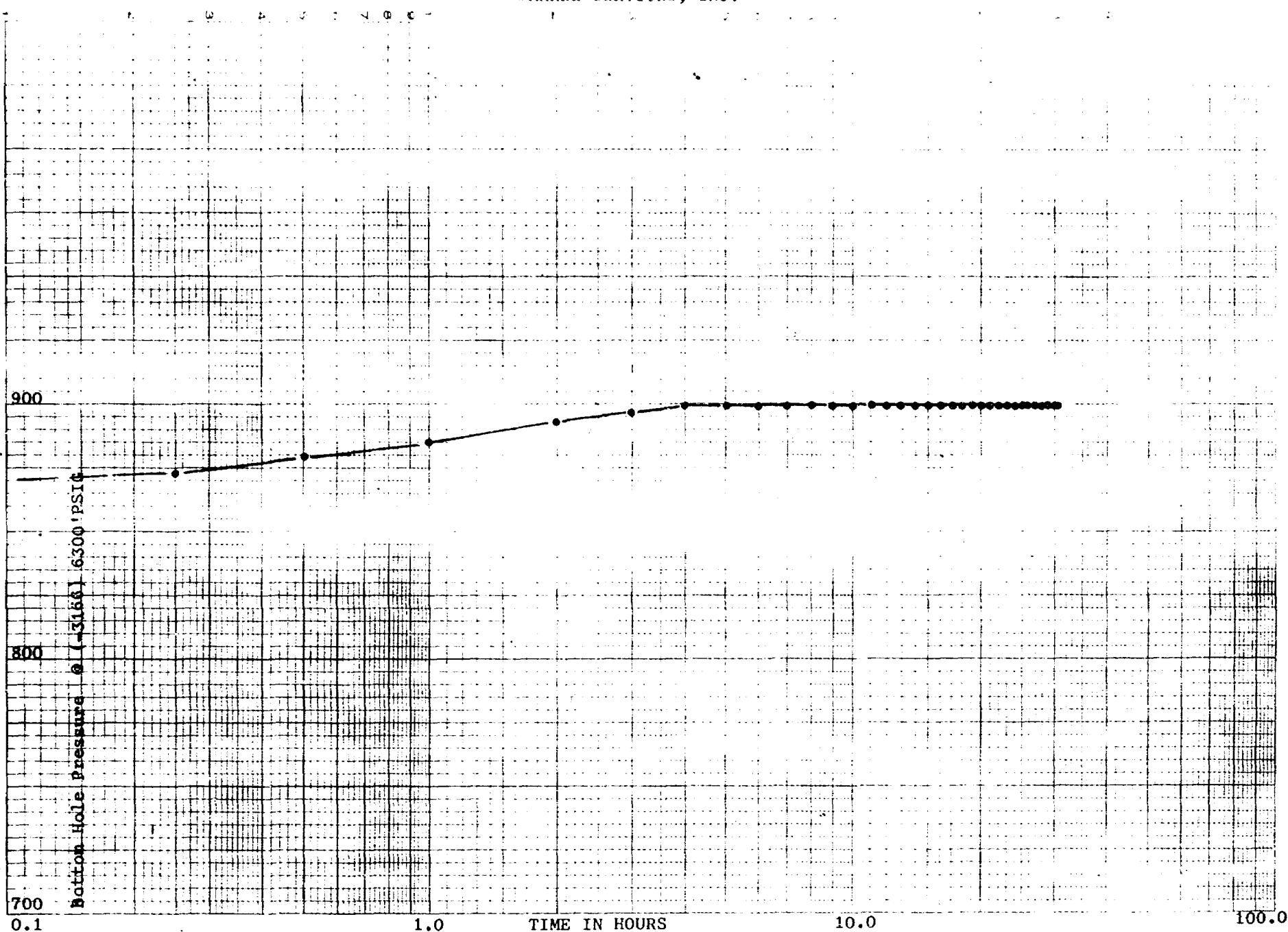
| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 234      | .234     |
| 6000         | 560      | .326     |
| 6300         | 700      | .467     |
| 6664 (-3166) | 870 * ** | (.467)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



JARREL SERVICES, INC.



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

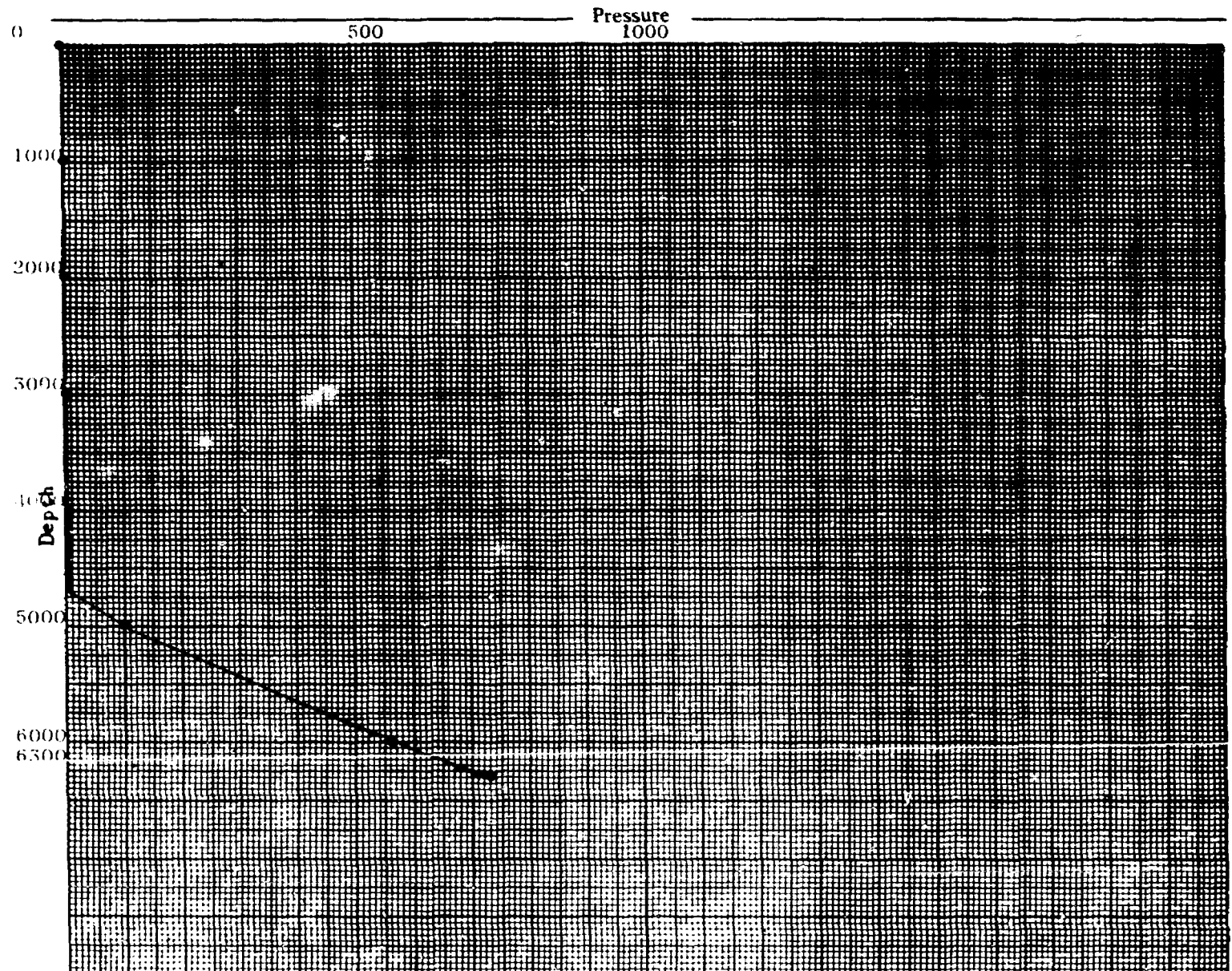
OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Drinkard  
 LEASE L.G. Warlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 26, 1979 TIME 7:30 AM  
 Status Shut in  
 Test Depth 6300'  
 Time S.I. 39.5 hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. PKR BHP change -  
 Elev. 3498' GL Fluid top 4700'  
 Datum (-3166) \*\* Water top 5000'  
 Temp. @ 106° F Run by JSI #12  
 Cal. No. A 4586 N Chart No. 2

## BOTTOM HOLE PRESSURE RECORD

| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 100      | .100     |
| 6000         | 560      | .460     |
| 6300         | 732      | .460     |
| 6664 (-3166) | 899 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



|                      |   |
|----------------------|---|
| TYPE OF REPORT - (X) |   |
| Initial Completion   |   |
| Special              | X |
| General Survey       |   |

NEW MEXICO OIL CONSERVATION COMMISSION

Form O-104  
Revised 1-1-65

RESERVOIR PRESSURE REPORT

|                                                      |  |                                        |  |                                 |  |                                   |  |
|------------------------------------------------------|--|----------------------------------------|--|---------------------------------|--|-----------------------------------|--|
| Operator<br><b>Petro-Lewis Corporation</b>           |  | Pool<br><b>Penrose Skelly</b>          |  | County<br><b>Lea</b>            |  | Date<br><b>November 26, 1979</b>  |  |
| Address<br><b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Grayburg</b> |  | Oil Gradient<br><b>psl./ft.</b> |  | Water Gradient<br><b>psl./ft.</b> |  |
|                                                      |  |                                        |  | Gas Gravity                     |  | Datum: <b>(-256) **</b>           |  |

| LEASE        | WELL NO. | LOCATION |    |    |    | ELEV.   | OIL (G) OR GAS (G) | DATE TESTED | SHUT-IN HOURS | SHUT-IN TBG. PRESS. | BOMB TEST DATA |               |                  | SONIC INSTRUMENT TEST DATA* |              |                         |                        |                     |             | PRESS. AT DATUM |
|--------------|----------|----------|----|----|----|---------|--------------------|-------------|---------------|---------------------|----------------|---------------|------------------|-----------------------------|--------------|-------------------------|------------------------|---------------------|-------------|-----------------|
|              |          | U        | S  | T  | R  |         |                    |             |               |                     | TEST DEPTH     | B.H. TEMP. °F | OB-SERVED PRESS. | PROD. TEST (BBL./DAY)       | LIQUID LEVEL | LIQUID GRADIENT PSI/FT. | WT. OF LIQUID COL. PSI | WT. OF GAS COL. PSI | CSG. PRESS. |                 |
| L.G. Warlick | 3        | P        | 18 | 21 | 37 | 3498 GL | 0                  | 11/18/79    | 48            | 0                   | 3850           | 90            | 344              |                             | 2712         | .302                    | 29                     | -                   |             | 315             |

EXTRAP. TO 405'

LOG # + 3166' - 256' (.302 PSI/FT) = 1284' @ (-3166')

\*\* MIDPOINT OF CASING PERFORATIONS

All depths plus or minus sea level; all pressures psi. Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JABREL SERVICES, INC..

*(Signature)*

Agent

(Title)

November 26, 1979

(Date)

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 805 393.8396

HOBBS, NEW MEXICO 88240

COMPANY: Petro Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly Grayburg

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL                                 | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ ( -256 ) |     |
|-------|------------------------------------------------|----------|--------------|------|------------------|-----|----------------|-----|
|       |                                                |          | HRS.         | MIN. | TBG              | CSG | 3754' PSIG     |     |
| 1979  |                                                |          |              |      |                  |     |                |     |
| 11/16 | Open. Run Open Gradient<br>& Hung Bomb @ 3850' | 3:25     | -            | -    | 0                | -   | 154            | 125 |
|       | Shut in                                        | 3:30     | 0            | 05   | -                | -   | 154            | 125 |
|       | "                                              | 3:45     | 0            | 15   | 0                | -   | 155            | 126 |
|       | "                                              | 4:00     | 0            | 30   | -                | -   | 157            | 128 |
|       | "                                              | 4:30     | 1            | 00   | -                | -   | 159            | 130 |
|       | "                                              | 5:30     | 2            | 00   | -                | -   | 166            | 137 |
|       | "                                              | 6:30     | 3            | 00   | -                | -   | 171            | 142 |
|       | "                                              | 7:30     | 4            | 00   | -                | -   | 176            | 147 |
|       | "                                              | 8:30     | 5            | 00   | -                | -   | 181            | 152 |
|       | "                                              | 9:30     | 6            | 00   | -                | -   | 185            | 156 |
|       | "                                              | 10:30    | 7            | 00   | -                | -   | 191            | 162 |
|       | "                                              | 11:30    | 8            | 00   | -                | -   | 195            | 166 |
| 11/17 | "                                              | 12:30 AM | 9            | 00   | -                | -   | 200            | 171 |
|       | "                                              | 1:30     | 10           | 00   | -                | -   | 205            | 176 |
|       | "                                              | 2:30     | 11           | 00   | -                | -   | 210            | 181 |
|       | "                                              | 3:30     | 12           | 00   | -                | -   | 215            | 186 |
|       | "                                              | 4:30     | 13           | 00   | -                | -   | 220            | 191 |
|       | "                                              | 5:30     | 14           | 00   | -                | -   | 223            | 194 |
|       | "                                              | 6:30     | 15           | 00   | -                | -   | 228            | 199 |
|       | "                                              | 7:30     | 16           | 00   | -                | -   | 232            | 203 |
|       | "                                              | 8:30     | 17           | 00   | -                | -   | 236            | 207 |
|       | "                                              | 9:30     | 18           | 00   | -                | -   | 242            | 213 |
|       | "                                              | 10:30    | 19           | 00   | -                | -   | 247            | 218 |
|       | "                                              | 11:30    | 20           | 00   | -                | -   | 250            | 221 |
|       | "                                              | 12:30 PM | 21           | 00   | -                | -   | 255            | 226 |
|       | "                                              | 1:30     | 22           | 00   | -                | -   | 258            | 229 |
|       | "                                              | 2:30     | 23           | 00   | -                | -   | 263            | 234 |
|       | "                                              | 3:30     | 24           | 00   | -                | -   | 267            | 238 |
|       | "                                              | 4:30     | 25           | 00   | -                | -   | 269            | 240 |
|       | "                                              | 5:30     | 26           | 00   | -                | -   | 272            | 243 |
|       | "                                              | 6:30     | 27           | 00   | -                | -   | 277            | 248 |
|       | "                                              | 7:30     | 28           | 00   | -                | -   | 281            | 252 |
|       | "                                              | 8:30     | 29           | 00   | -                | -   | 283            | 254 |
|       | "                                              | 9:30     | 30           | 00   | -                | -   | 287            | 258 |
|       | "                                              | 10:30    | 31           | 00   | -                | -   | 291            | 262 |
|       | "                                              | 11:30    | 32           | 00   | -                | -   | 294            | 265 |
| 11/18 | "                                              | 12:30 AM | 33           | 00   | -                | -   | 297            | 268 |
|       | "                                              | 1:30     | 34           | 00   | -                | -   | 301            | 272 |
|       | "                                              | 2:30     | 35           | 00   | -                | -   | 305            | 276 |
|       | "                                              | 3:30     | 36           | 00   | -                | -   | 309            | 280 |
|       | "                                              | 4:30     | 37           | 00   | -                | -   | 312            | 283 |
|       | "                                              | 5:30     | 38           | 00   | -                | -   | 315            | 286 |

WELL: L.G. Warlick, No. 3  
PAGE: 2

| DATE | STATUS OF WELL                        | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP • (-256 ) |     |
|------|---------------------------------------|----------|--------------|------|------------------|-----|---------------|-----|
|      |                                       |          | HRS.         | MIN. | TBG              | CSG | 3754'PSIG     |     |
|      | Shut in                               | 6:30     | 39           | 00   | -                | -   | 318           | 289 |
|      | "                                     | 7:30     | 40           | 00   | -                | -   | 321           | 292 |
|      | "                                     | 8:30     | 41           | 00   | -                | -   | 324           | 295 |
|      | "                                     | 9:30     | 42           | 00   | -                | -   | 328           | 299 |
|      | "                                     | 10:30    | 43           | 00   | -                | -   | 330           | 301 |
|      | "                                     | 11:30    | 44           | 00   | -                | -   | 332           | 303 |
|      | "                                     | 12:30 PM | 45           | 00   | -                | -   | 335           | 306 |
|      | "                                     | 1:30     | 46           | 00   | -                | -   | 338           | 309 |
|      | "                                     | 2:30     | 47           | 00   | -                | -   | 341           | 312 |
|      | Pulled Bombs & Ran<br>Static Gradient | 3:30     | 48           | 00   | 0                | -   | 344           | 315 |

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

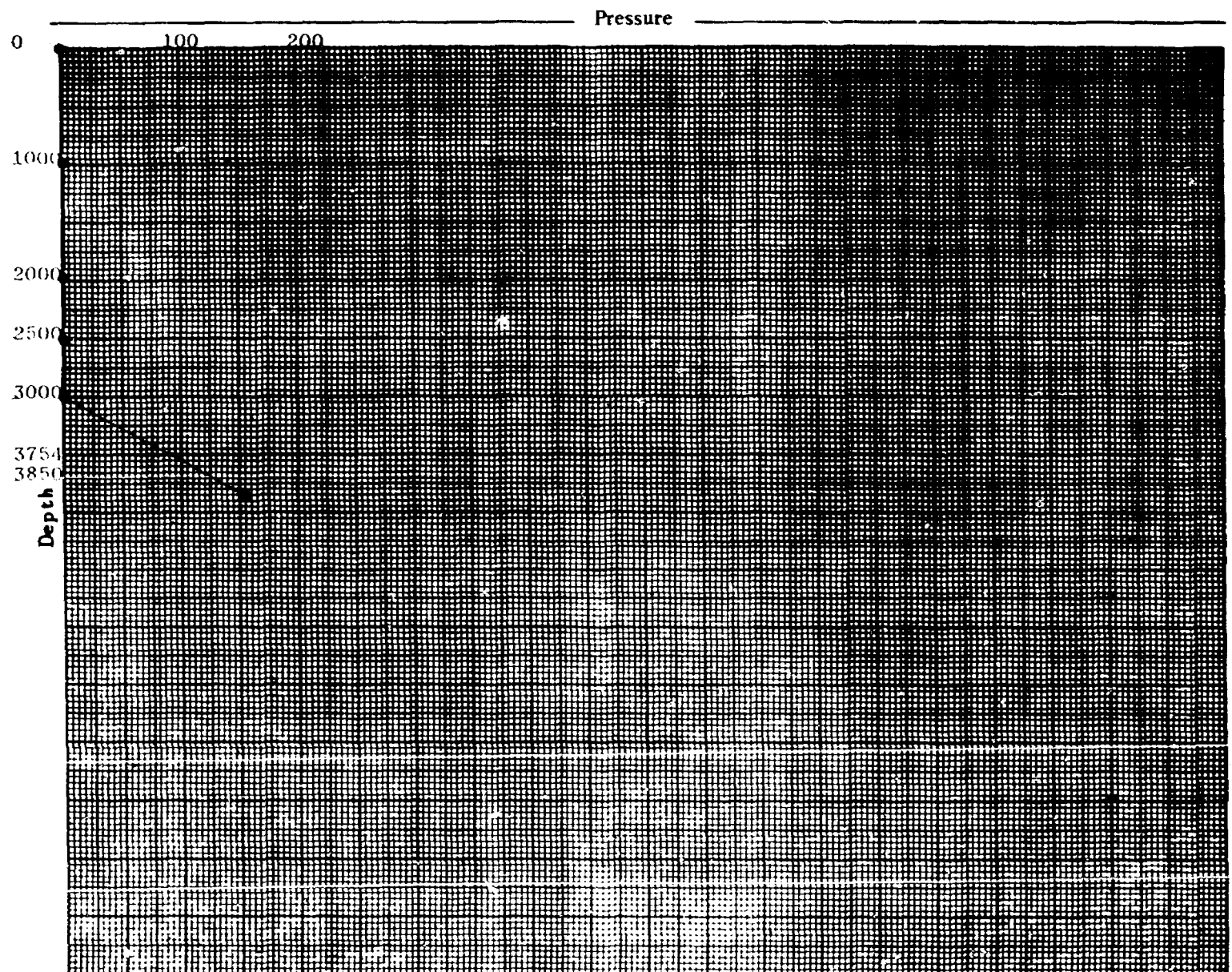
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Grayburg  
 LEASE L.G. Warlick WELL # 3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 16, 1979 TIME 3:25 P.M.  
 Status Open  
 Test Depth 3850'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. - BHP change -  
 Elev. 5498' GL Fluid top 3341'  
 Datum (-256) Water top -  
 Temp. @ 90° F Run by JSI #19  
 Cal. No. A 6497 N Chart No. 1

| Depth       | Pressure | Gradient |
|-------------|----------|----------|
| 0           | 0        | -        |
| 1000        | 0        | -        |
| 2000        | 0        | -        |
| 2500        | 0        | -        |
| 3000        | 0        | -        |
| 3754 (-256) | 125 * ** | (.302)   |
| 3850        | 154      | .181     |

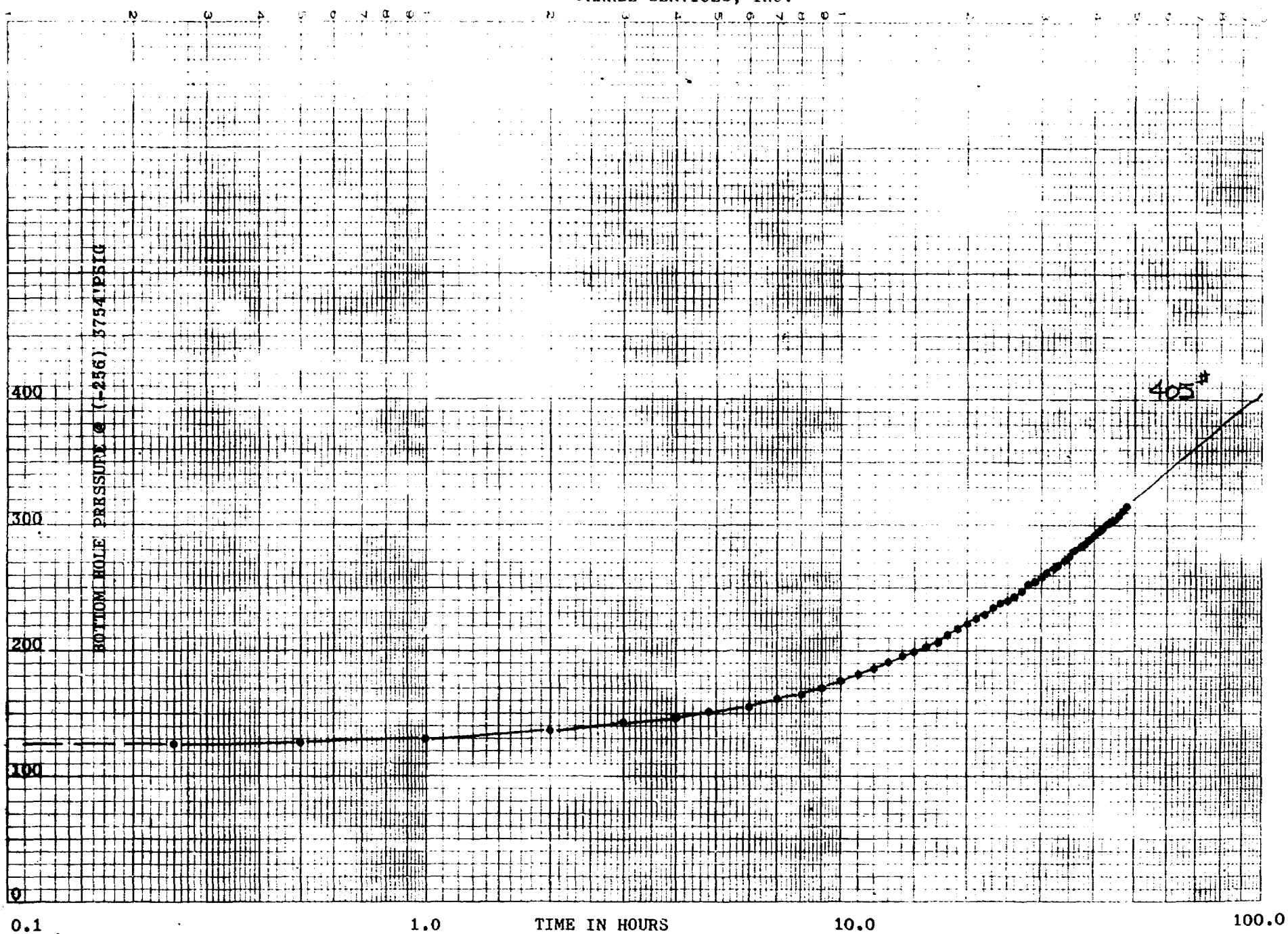
\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS





JARREL SERVICES, INC.





# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

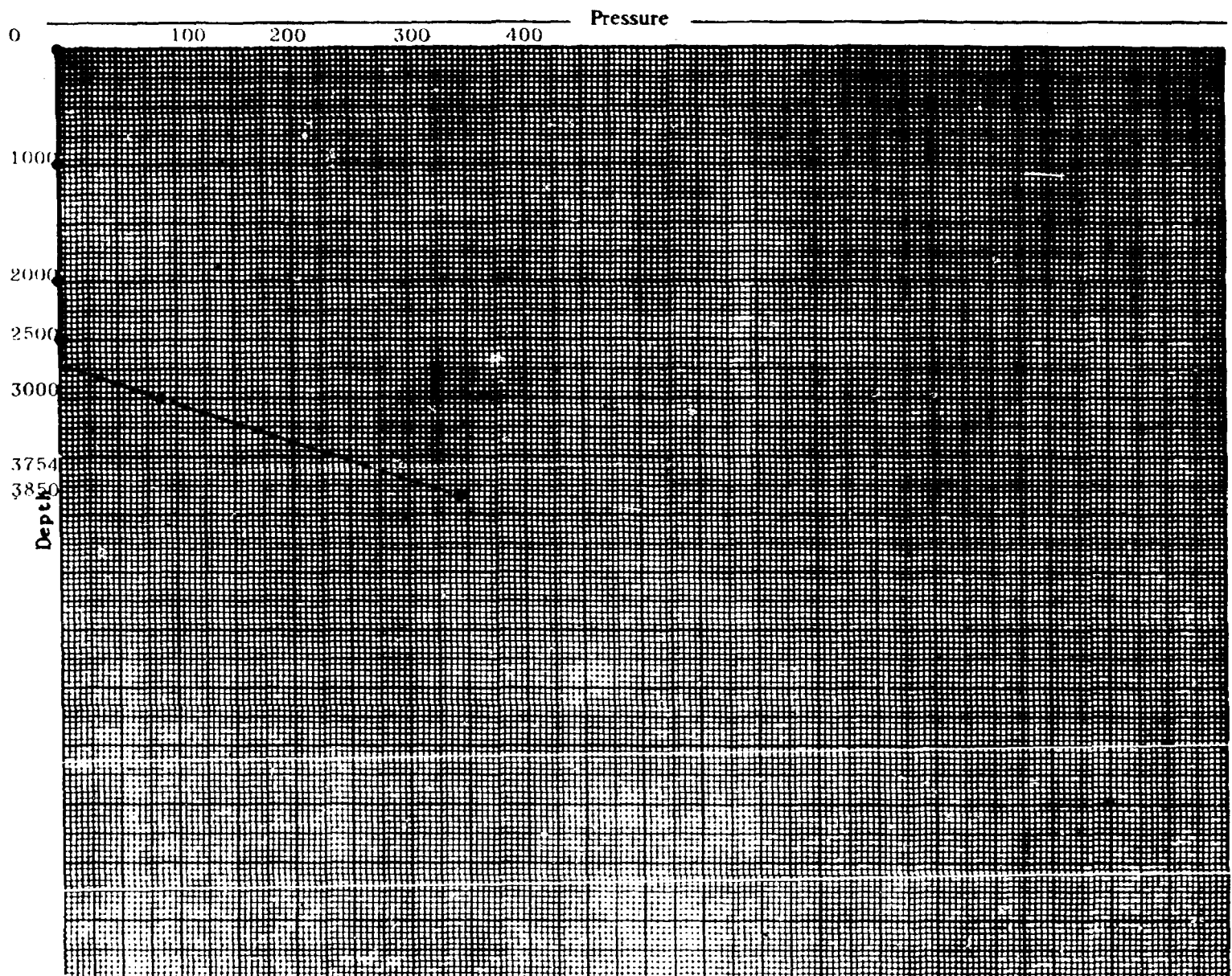
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Grayburg  
 LEASE L.G. Warlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 18, 1979 TIME 3:30 PM  
 Status Shut in  
 Test Depth 3850'  
 Time S. I. 48.0 hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. - BHP change -  
 Elev. 3498' GL Fluid top 2712  
 Datum (-256) \*\* Water top -  
 Temp. @ 90° F Run by JSI #19  
 Cal. No. A 6497 N Chart No. 2

| Depth       | Pressure | Gradient |
|-------------|----------|----------|
| 0           | 0        | -        |
| 1000        | 0        | -        |
| 2000        | 0        | -        |
| 2500        | 0        | -        |
| 3000        | 87       | .174     |
| 3754 (-256) | 315 **   | (.302)   |
| 3850        | 344      | .302     |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

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

October 22, 1979

1212 THE MAIN BUILDING  
SUITE 902  
HOUSTON, TEXAS 77002  
713 658-3278

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

Dear Sir:

*Petro-Lewis*

*6749*

*Petro-Lewis Corp.*

*11/28/79*

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

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

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

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

Warlick No. 3, 330 feet FEL and 660 feet FSL, Section 18,  
T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry perforations 5,679-5,873 feet and Drinkard per-  
forations 6,630-6,693 feet dual completion - Order No.  
MC 1984. Penrose-Skelly-Grayburg completion through  
perforations 3,723-3,784 feet. First production August  
28, 1979. (Blinebry and Drinkard under bridge plug  
during testing of Penrose-Skelly-Grayburg zone).  
Bottom perforations, lowermost pool - 6,000-6,999 feet  
equals 40 barrels per day allowable total daily produc-  
tion under commingled operations.

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

See Attachment No. 1.

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

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

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

Estimated BHP -

All zones on pump:

|                         |          |
|-------------------------|----------|
| Drinkard                | 50 psig  |
| Blinebry                | 50 psig  |
| Penrose-Skelly-Grayburg | 50 psig. |

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

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

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

Blinebry - sweet crude - 1.4 Barrels per Day - \$28.96  
per barrel current price

Drinkard - sweet crude - 3.25 Barrels per Day - \$28.96  
per barrel current price

Penrose-Skelly-Grayburg sour crude - 29 Barrels per Day -  
\$26.28 per barrel current price.

The operational problems of a triple completion would be immense due to the fact that all three zones require artificial lift. The Blinebry zone produces enough gas that pumping below a packer would be impossible unless a vent string was added. This would mean that four strings of tubing would be necessary to complete the well as a triple. No attempt will be made to complete the well in this manner.

Although commingling the sour Penrose-Skelly-Grayburg oil with the sweet Blinebry and Drinkard oil would lower the value of the sweet oil, the low volume of the sweet oil in relation to the volume of sour oil makes the total value reduction small and prevents underground waste by allowing low productivity zones to be produced. Precedent is set by Commingling Order DHC-206, dated October 1, 1976, for Sun's Elliot B-1 Lease, NW/4 NW/4, Section 20, T-21-S, R-37-E, Lea County, New Mexico, for the Penrose-Skelly-Grayburg Pool and the Blinebry Oil and Gas Pool.

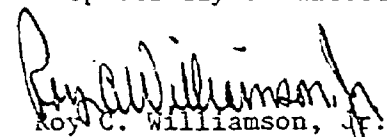
- (1) A statement that all offset operators and, in the case of a well on Federal land, the United States Geological Survey, have been notified in writing of the proposed commingling.

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

COMMENT:

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

Respectfully submitted,

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

/djs

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

## Attachment No. 1

## (d) Production History (Warlick No. 3)

| Year<br>Month | Blinbry Zone |             |            |               | Drinkard Zone |             |            |               | Penrose-Skelly-Grayburg Zone |             |            |               |
|---------------|--------------|-------------|------------|---------------|---------------|-------------|------------|---------------|------------------------------|-------------|------------|---------------|
|               | BBL<br>OIL   | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL    | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL                   | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO |
| 1979          |              |             |            |               |               |             |            |               |                              |             |            |               |
| June          | 46           | 330         | 1,299      | 28.2          | 126           | 240         | 177        | 1.4           | -                            | -           | -          | -             |
| July          | 61           | 372         | 1,426      | 23.4          | 131           | 279         | 195        | 1.5           | -                            | -           | -          | -             |
| August        | 22           | NA          | NA         | -             | 42            | NA          | NA         | -             | 34/D                         | 38/D        | NA         | -             |
| Sept.         | -----CI----- |             |            |               | -----CI-----  |             |            |               | 29/D                         | 19/D        | 97/D       | 3.34          |
| Average for)  |              |             |            |               |               |             |            |               |                              |             |            |               |
| June, July )  | 1.4          | 11.5        |            | 25.5          | 3.25          | 8.5         |            | 1.45          |                              |             |            |               |
| & August )    | BO/D         | BW/D        |            | MCF/BO        | BO/D          | BW/D        |            | MCF/BO        |                              |             |            |               |
| Average for)  |              |             |            |               |               |             |            |               | 29                           | 19          | 97         | 3.34          |
| September )   |              |             |            |               |               |             |            |               | BO/D                         | BW/D        | MCF/D      |               |

Current production from all zones equals 33.65 barrels of oil per day plus 39.00 barrels of water per day.

\* Penrose-Skelly-Grayburg produced 4 days in August.

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

Chas. 7-31-47/10 22-7)

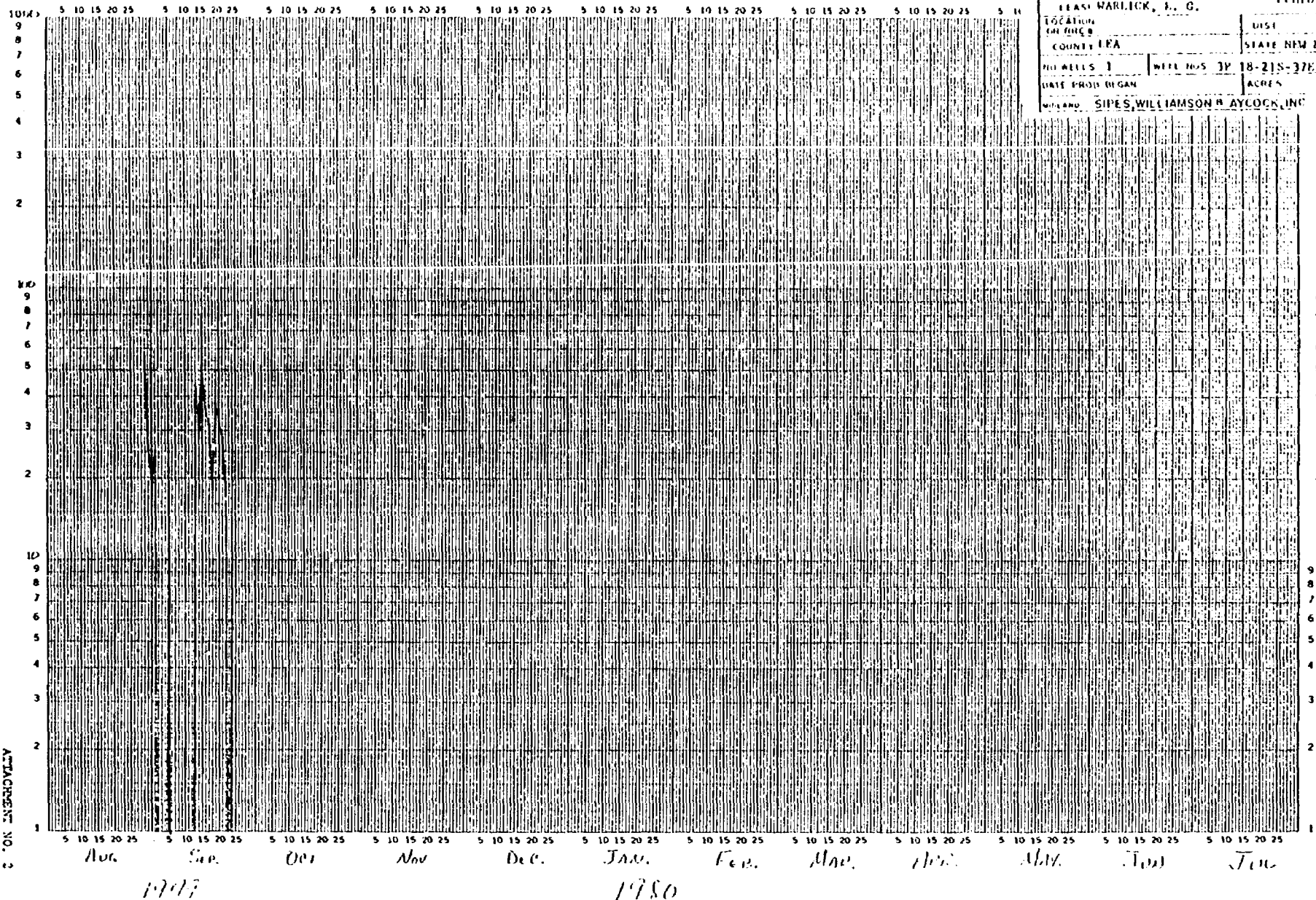
|                                                           |                        |
|-----------------------------------------------------------|------------------------|
| FIELD BLUEBERRY OIL AND GAS                               |                        |
| OPERATOR PETRO-LEWIS CORPORATION (Formerly Petro-88 Prod) |                        |
| LEAS: WARLICK, L. G.                                      |                        |
| LOCATION                                                  | DIST. H. 04            |
| COUNTY LEA                                                | STATE NEW MEXICO       |
| WELL NO. 1                                                | WELL NO. 3P 18-21S-37E |
| DATE PROD. BEGAN                                          | ACRES                  |
| OWNERS: SITES, WILLIAMSON & AYCOCK, INC.                  |                        |

47 6540

KOE 1 YEAR 84 DAYS 13 LOG CYCLES  
COPIES 2 SENT TO NEW MEX.

BO/DAY

ATTACHMENT NO. 2  
PAGE 2 OF 1, 2000



APR 17 1978 2:27 PM BY 100

10 000

1000

OIL PRODUCTION - BBL / MONTH

10

SWA-T-11

FIELD BLINEDRY OIL AND GAS  
 OPERATOR PETRO-LEWIS CORPORATION  
 LEASE WARLICK, J. G.  
 LOCATION OF WELL  
 COUNTY TEA  
 STATE NEW MEXICO  
 WELL NO. 3P 18-21S-37E  
 DATE PROD BEGAN  
 PRODUCED BY SUE'S WILLIAMSON & ASSOCIATES, INC.

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      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|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-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| 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 | 2101 | 2102 | 2103 | 2104 | 2105 | 2106 | 2107 | 2108 | 2109 | 2110 | 2111 | 2112 | 2113 | 2114 | 2115 | 2116 | 2117 | 2118 | 2119 | 2120 | 2121 | 2122 | 2123 | 2124 | 2125 | 2126 | 2127 | 2128 | 2129 | 2130 | 2131 | 2132 | 2133 | 2134 | 2135 | 2136 | 2137 | 2138 | 2139 | 2140 | 2141 | 2142 | 2143 | 2144 | 2145 | 2146 | 2147 | 2148 | 2149 | 2150 | 2151 | 2152 | 2153 | 2154 | 2155 | 2156 | 2157 | 2158 | 2159 | 2160 | 2161 | 2162 | 2163 | 2164 | 2165 | 2166 | 2167 | 2168 | 2169 | 2170 | 2171 | 2172 | 2173 | 2174 | 2175 | 2176 | 2177 | 2178 | 2179 | 2180 | 2181 | 2182 | 2183 | 2184 | 2185 | 2186 | 2187 | 2188 | 2189 | 2190 | 2191 | 2192 | 2193 | 2194 | 2195 | 2196 | 2197 | 2198 | 2199 | 2200 | 2201 | 2202 | 2203 | 2204 | 2205 | 2206 | 2207 | 2208 | 2209 | 2210 | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 | 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 | 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230 | 2231 | 2232 | 2233 | 2234 | 2235 | 2236 | 2237 | 2238 | 2239 | 2240 | 2241 | 2242 | 2243 | 2244 | 2245 | 2246 | 2247 | 2248 | 2249 | 2250 | 2251 | 2252 | 2253 | 2254 | 2255 | 2256 | 2257 | 2258 | 2259 | 2260 | 2261 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| 2548 | 2549 | 2550 | 2551 | 2552 | 2553 | 2554 | 2555 | 2556 | 2557 | 2558 | 2559 | 2560 | 2561 | 2562 | 2563 | 2564 | 2565 | 2566 | 2567 | 2568 | 2569 | 2570 | 2571 | 2572 | 2573 | 2574 | 2575 | 2576 | 2577 | 2578 | 2579 | 2580 | 2581 | 2582 | 2583 | 2584 | 2585 | 2586 | 2587 | 2588 | 2589 | 2590 | 2591 | 2592 | 2593 | 2594 | 2595 | 2596 | 2597 | 2598 | 2599 | 2600 | 2601 | 2602 | 2603 | 2604 | 2605 | 2606 | 2607 | 2608 | 2609 | 2610 | 2611 | 2612 | 2613 | 2614 | 2615 | 2616 | 2617 | 2618 | 2619 | 2620 | 2621 | 2622 | 2623 | 2624 | 2625 | 2626 | 2627 | 2628 | 2629 | 2630 | 2631 | 2632 | 2633 | 2634 | 2635 | 2636 | 2637 | 2638 | 2639 | 2640 | 2641 | 2642 | 2643 | 2644 | 2645 | 2646 | 2647 | 2648 | 2649 | 2650 | 2651 | 2652 | 2653 | 2654 | 2655 | 2656 | 2657 | 2658 | 2659 | 2660 | 2661 | 2662 | 2663 | 2664 | 2665 | 2666 | 2667 | 2668 | 2669 | 2670 | 2671 | 2672 | 2673 | 2674 | 2675 | 2676 | 2677 | 2678 | 2679 | 2680 | 2681 | 2682 | 2683 | 2684 | 2685 | 2686 | 2687 | 2688 | 2689 | 2690 | 2691 | 2692 | 2693 | 2694 | 2695 | 2696 | 2697 | 2698 | 2699 | 2700 | 2701 | 2702 | 2703 | 2704 | 2705 | 2706 | 2707 | 2708 | 2709 | 2710 | 2711 | 2712 | 2713 | 2714 | 2715 | 2716 | 2717 | 2718 | 2719 | 2720 | 2721 | 2722 | 2723 | 2724 | 2725 | 2726 | 2727 | 2728 | 2729 | 2730 | 2731 | 2732 | 2733 | 2734 | 2735 | 2736 | 2737 | 2738 | 2739 | 2740 | 2741 | 2742 | 2743 | 2744 | 2745 | 2746 | 2747 | 2748 | 2749 | 2750 | 2751 | 2752 | 2753 | 2754 | 2755 | 2756 | 2757 | 2758 | 2759 | 2760 | 2761 | 2762 | 2763 | 2764 | 2765 | 2766 | 2767 | 2768 | 2769 | 2770 | 2771 | 2772 | 2773 | 2774 | 2775 | 2776 | 2777 | 2778 | 2779 | 2780 | 2781 | 2782 | 2783 | 2784 | 2785 | 2786 | 2787 | 2788 | 2789 | 2790 | 2791 | 2792 | 2793 | 2794 | 2795 | 2796 | 2797 | 2798 | 2799 | 2800 | 2801 | 2802 | 2803 | 2804 | 2805 | 2806 | 2807 | 2808 | 2809 | 2810 | 2811 | 2812 | 2813 | 2814 | 2815 | 2816 | 2817 | 2818 | 2819 | 2820 | 2821 | 2822 | 2823 | 2824 | 2825 | 2826 | 2827 | 2828 | 2829 | 2830 | 2831 | 2832 | 2833 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| 2977 | 2978 | 2979 | 2980 | 2981 | 2982 | 2983 | 2984 | 2985 | 2986 | 2987 | 2988 | 2989 | 2990 | 2991 | 2992 | 2993 | 2994 | 2995 | 2996 | 2997 | 2998 | 2999 | 3000 | 3001 | 3002 | 3003 | 3004 | 3005 | 3006 | 3007 | 3008 | 3009 | 3010 | 3011 | 3012 | 3013 | 3014 | 3015 | 3016 | 3017 | 3018 | 3019 | 3020 | 3021 | 3022 | 3023 | 3024 | 3025 | 3026 | 3027 | 3028 | 3029 | 3030 | 3031 | 3032 | 3033 | 3034 | 3035 | 3036 | 3037 | 3038 | 3039 | 3040 | 3041 | 3042 | 3043 | 3044 | 3045 | 3046 | 3047 | 3048 | 3049 | 3050 | 3051 | 3052 | 3053 | 3054 | 3055 | 3056 | 3057 | 3058 | 3059 | 3060 | 3061 | 3062 | 3063 | 3064 | 3065 | 3066 | 3067 | 3068 | 3069 | 3070 | 3071 | 3072 | 3073 | 3074 | 3075 | 3076 | 3077 | 3078 | 3079 | 3080 | 3081 | 3082 | 3083 | 3084 | 3085 | 3086 | 3087 | 3088 | 3089 | 3090 | 3091 | 3092 | 3093 | 3094 | 3095 | 3096 | 3097 | 3098 | 3099 | 3100 | 3101 | 3102 | 3103 | 3104 | 3105 | 3106 | 3107 | 3108 | 3109 | 3110 | 3111 | 3112 | 3113 | 3114 | 3115 | 3116 | 3117 | 3118 | 3119 | 3120 | 3121 | 3122 | 3123 | 3124 | 3125 | 3126 | 3127 | 3128 | 3129 | 3130 | 3131 | 3132 | 3133 | 3134 | 3135 | 3136 | 3137 | 3138 | 3139 | 3140 | 3141 | 3142 | 3143 | 3144 | 3145 | 3146 | 3147 | 3148 | 3149 | 3150 | 3151 | 3152 | 3153 | 3154 | 3155 | 3156 | 3157 | 3158 | 3159 | 3160 | 3161 | 3162 | 3163 | 3164 | 3165 | 3166 | 3167 | 3168 | 3169 | 3170 | 3171 | 3172 | 3173 | 3174 | 3175 | 3176 | 3177 | 3178 | 3179 | 3180 | 3181 | 3182 | 3183 | 3184 | 3185 | 3186 | 3187 | 3188 | 3189 | 3190 | 3191 | 3192 | 3193 | 3194 | 3195 | 3196 | 3197 | 3198 | 3199 | 3200 | 3201 | 3202 | 3203 | 3204 | 3205 | 3206 | 3207 | 3208 | 3209 | 3210 | 3211 | 3212 | 3213 | 3214 | 3215 | 3216 | 3217 | 3218 | 3219 | 3220 | 3221 | 3222 | 3223 | 3224 | 3225 | 3226 | 3227 | 3228 | 3229 | 3230 | 3231 | 3232 | 3233 | 3234 | 3235 | 3236 | 3237 | 3238 | 3239 | 3240 | 3241 | 3242 | 3243 | 3244 | 3245 | 3246 | 3247 | 3248 | 3249 | 3250 | 3251 | 3252 | 3253 | 3254 | 3255 | 3256 | 3257 | 3258 | 3259 | 3260 | 3261 | 3262 | 3263 | 3264 | 3265 | 3266 | 3267 | 3268 | 3269 | 3270 | 3271 | 3272 | 3273 | 3274 | 3275 | 3276 | 3277 | 3278 | 3279 | 3280 | 3281 | 3282 | 3283 | 3284 | 3285 | 3286 | 3287 | 3288 | 3289 | 3290 | 3291 | 3292 | 3293 | 3294 | 3295 | 3296 | 3297 | 3298 | 3299 | 3300 | 3301 | 3302 | 3303 | 3304 | 3305 | 3306 | 3307 | 3308 | 3309 | 3310 | 3311 | 3312 | 3313 | 3314 | 3315 | 3316 | 3317 | 3318 | 3319 | 3320 | 3321 | 3322 | 3323 | 3324 | 3325 | 3326 | 3327 | 3328 | 3329 | 3330 | 3331 | 3332 | 3333 | 3334 | 3335 | 3336 | 3337 | 3338 | 3339 | 3340 | 3341 | 3342 | 3343 | 3344 | 3345 | 3346 | 3347 | 3348 | 3349 | 3350 | 335 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-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NEW MEXICO OIL CONSERVATION COMMISSION  
POST OFFICE BOX 2088  
SANTA FE, NEW MEXICO 87501

007 20 1972

1972 MAR 6  
COMMINGLING ORDER PC-435

Company Amerada Hess Corporation  
Address Drawer 817  
City, State, Zip Seminole, Texas 79360  
Attention: Mr. G. F. Dewhurst  
Lease Name: State "DC" Lease  
Description: S/2 NW/4, Sec. 19, T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry Gas Pool and Drinkard, Paddock, and Penrose Skelly Oil Pools

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

\_\_\_\_\_ separately metering the production from each pool prior to commingling

\_\_\_\_\_ separately metering the production from

and determining the production by the subtraction method

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

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

REMARKS:

DONE at Santa Fe, New Mexico, on this 6th day of March 1972.

*A. L. Porter, Jr.*

A. L. PORTER, Jr., Secretary-Director

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

ATTACHMENT NO. 3

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

Gentlemen:

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

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

Thank you for your cooperation.

Yours very truly,

Original Signed By

ROY C. WILLIAMSON, JR.

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

- I. Warlick No. 3 - I do ( ) do not ( ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( ) object to  
commingling request for this well.

Signed \_\_\_\_\_

Date \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS LIST  
(Alphabetical Order)

OFFSET OPERATORS\*

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

Attn Mr. George M. Simmons,  
Division Geologist, NM & TX  
(713) 632-5222

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

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

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

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

Attn Mr. R. C. Anderson,  
Production Manager  
(505) 393-4121

Peery, J. W., Estate  
P. O. Box 401  
Midland, TX 79701  
(915) 684-4651

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

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

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

Attn Mr. Don Wright  
(405) 848-8551

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

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

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

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

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

|                      |   |
|----------------------|---|
| TYPE OF REPORT - (Y) |   |
| Initial Completion   |   |
| Special              | X |
| General Survey       |   |

NEW MEXICO OIL CONSERVATION COMMISSION

Form O-114  
Revised 10-75

RESERVOIR PRESSURE REPORT

|                                                      |  |                                        |  |                                  |  |                                  |  |
|------------------------------------------------------|--|----------------------------------------|--|----------------------------------|--|----------------------------------|--|
| Operator<br><b>Petro-Lewis Corporation</b>           |  | Field<br><b>Blinebry</b>               |  | County<br><b>Lea</b>             |  | Date<br><b>November 26, 1979</b> |  |
| Address<br><b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Blinebry</b> |  | Oil Gradient<br><b>1.0211</b>    |  | Water Gradient<br><b>1.0000</b>  |  |
|                                                      |  |                                        |  | Gas Gravity<br><b>(-2278) **</b> |  |                                  |  |

| LEASE                                             | WELL NO. | LOCATION |    |    |    | ELEV.   | CIL. TOP OR GAS (G) | DATE TESTED | SHUT-IN PRESS. | BOMB TEST DATA |          |                   | SONIC INSTRUMENT TEST DATA |       |              |                         |                         |                      | PRESS. AT DATUM |             |
|---------------------------------------------------|----------|----------|----|----|----|---------|---------------------|-------------|----------------|----------------|----------|-------------------|----------------------------|-------|--------------|-------------------------|-------------------------|----------------------|-----------------|-------------|
|                                                   |          | U        | S  | T  | R  |         |                     |             |                | TEST DEPTH     | TEMP. °F | GR. CAPVED PRESS. | PROD. TEST (BBL./DAY)      |       | LIQUID LEVEL | LIQUID GRADIENT PSI/FT. | WT. OF LIQUID COLL. PSI | WT. OF GAS COLL. PSI |                 | CSG. PRESS. |
|                                                   |          |          |    |    |    |         |                     |             |                |                |          |                   | OIL                        | WATER |              |                         |                         |                      |                 |             |
| L.G. Warlick                                      | 3        | P        | 18 | 21 | 37 | 3498 GL | 11/21/79            | 24          | 0              | 5476           | 100      | 635               |                            | 4100  | .460         | 138                     |                         |                      | 773             |             |
| ** MIDPOINT OF CASING PERFORATIONS                |          |          |    |    |    |         |                     |             |                |                |          |                   |                            |       |              |                         |                         |                      |                 |             |
| 773# + (3166' - 2278) .46 PSI/FT = 1181' @ (-346) |          |          |    |    |    |         |                     |             |                |                |          |                   |                            |       |              |                         |                         |                      |                 |             |

BEFORE EXAMINER STAMETS  
OIL COMPANY DIVISION

PETRO-LEWIS

2

6749

Petro-Lewis Corp

11/28/79

|                                                        |
|--------------------------------------------------------|
| BEFORE EXAMINER STAMETS<br>OIL CONSERVATION COMMISSION |
| PETRO-LEWIS                                            |
| 2                                                      |
| 6749                                                   |
| Petro-Lewis Corp                                       |
| 11/28/79                                               |

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JARREL SERVICES, INC.  
*James R. Jarrel*  
(Signature)

Agent  
(Title)

November 26, 1979  
(Date)

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393.5396

HOBBS, NEW MEXICO 88240

COMPANY: Petro-Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly - Blinebry

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL                                         | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ (-2278 )<br>5776'PSIG |
|-------|--------------------------------------------------------|----------|--------------|------|------------------|-----|-----------------------------|
|       |                                                        |          | HRS.         | MIN. | TBG              | CSG |                             |
| 1979  |                                                        |          |              |      |                  |     |                             |
| 11/20 | Shut in. Run Static<br>Gradient & Hung Bomb<br>@ 5476' | 11:00 AM | -            | -    | 0                | PKR | 768                         |
|       | Shut in                                                | 11:15    | 0            | 15   | -                | -   | 768                         |
|       | "                                                      | 11:30    | 0            | 30   | -                | -   | 768                         |
|       | "                                                      | 12:00 N  | 1            | 00   | -                | -   | 769                         |
|       | "                                                      | 1:00 PM  | 2            | 00   | -                | -   | 769                         |
|       | "                                                      | 2:00     | 3            | 00   | -                | -   | 769                         |
|       | "                                                      | 3:00     | 4            | 00   | -                | -   | 769                         |
|       | "                                                      | 4:00     | 5            | 00   | -                | -   | 771                         |
|       | "                                                      | 5:00     | 6            | 00   | -                | -   | 771                         |
|       | "                                                      | 6:00     | 7            | 00   | -                | -   | 771                         |
|       | "                                                      | 7:00     | 8            | 00   | -                | -   | 771                         |
|       | "                                                      | 8:00     | 9            | 00   | -                | -   | 771                         |
|       | "                                                      | 9:00     | 10           | 00   | -                | -   | 773                         |
|       | "                                                      | 10:00    | 11           | 00   | -                | -   | 773                         |
|       | "                                                      | 11:00    | 12           | 00   | -                | -   | 773                         |
|       | "                                                      | 12:00 MN | 13           | 00   | -                | -   | 773                         |
| 11/21 | "                                                      | 1:00 AM  | 14           | 00   | -                | -   | 773                         |
|       | "                                                      | 2:00     | 15           | 00   | -                | -   | 773                         |
|       | "                                                      | 3:00     | 16           | 00   | -                | -   | 773                         |
|       | "                                                      | 4:00     | 17           | 00   | -                | -   | 773                         |
|       | "                                                      | 5:00     | 18           | 00   | -                | -   | 773                         |
|       | "                                                      | 6:00     | 19           | 00   | -                | -   | 773                         |
|       | "                                                      | 7:00     | 20           | 00   | -                | -   | 773                         |
|       | "                                                      | 8:00     | 21           | 00   | -                | -   | 773                         |
|       | "                                                      | 9:00     | 22           | 00   | -                | -   | 773                         |
|       | "                                                      | 10:00    | 23           | 00   | -                | -   | 773                         |
|       | Pulled Bombs & Ran<br>Static Gradient                  | 11:00    | 24           | 00   | 0                | -   | 773                         |

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

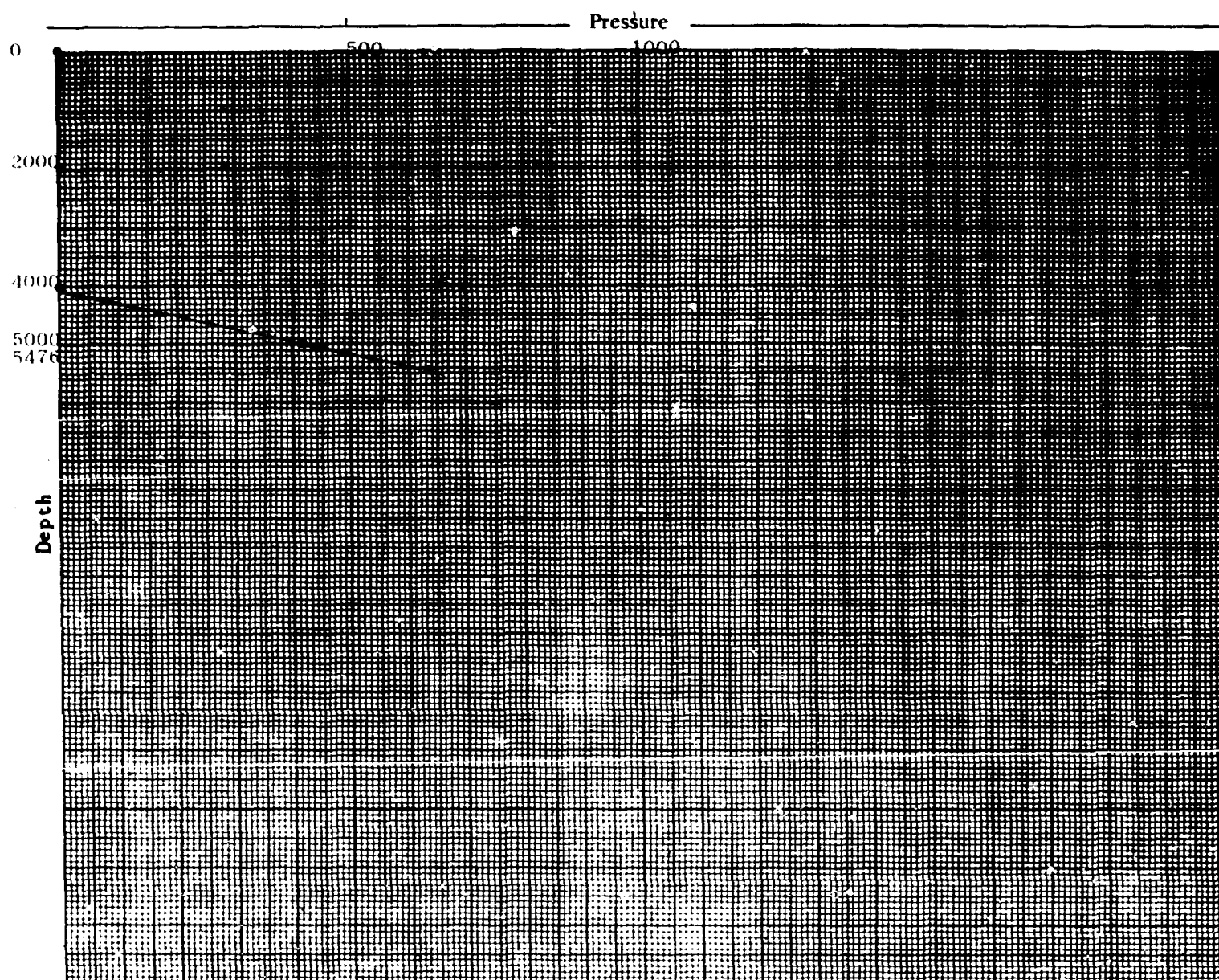
HOBBS, NEW MEXICO 88240

## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Blindery  
 LEASE L.G. Earlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 21, 1979 TIME 11:00 AM  
 Status Shut in  
 Test Depth 5476'  
 Time S. I. 24.0hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. 0 BHP change -  
 Elev. 3198' GL Fluid top -  
 Datum (-2278) \*\* Water top 4100'  
 Temp. @ 100° F Run by JSI #18  
 Cal. No. A 4586 N Chart No. 2

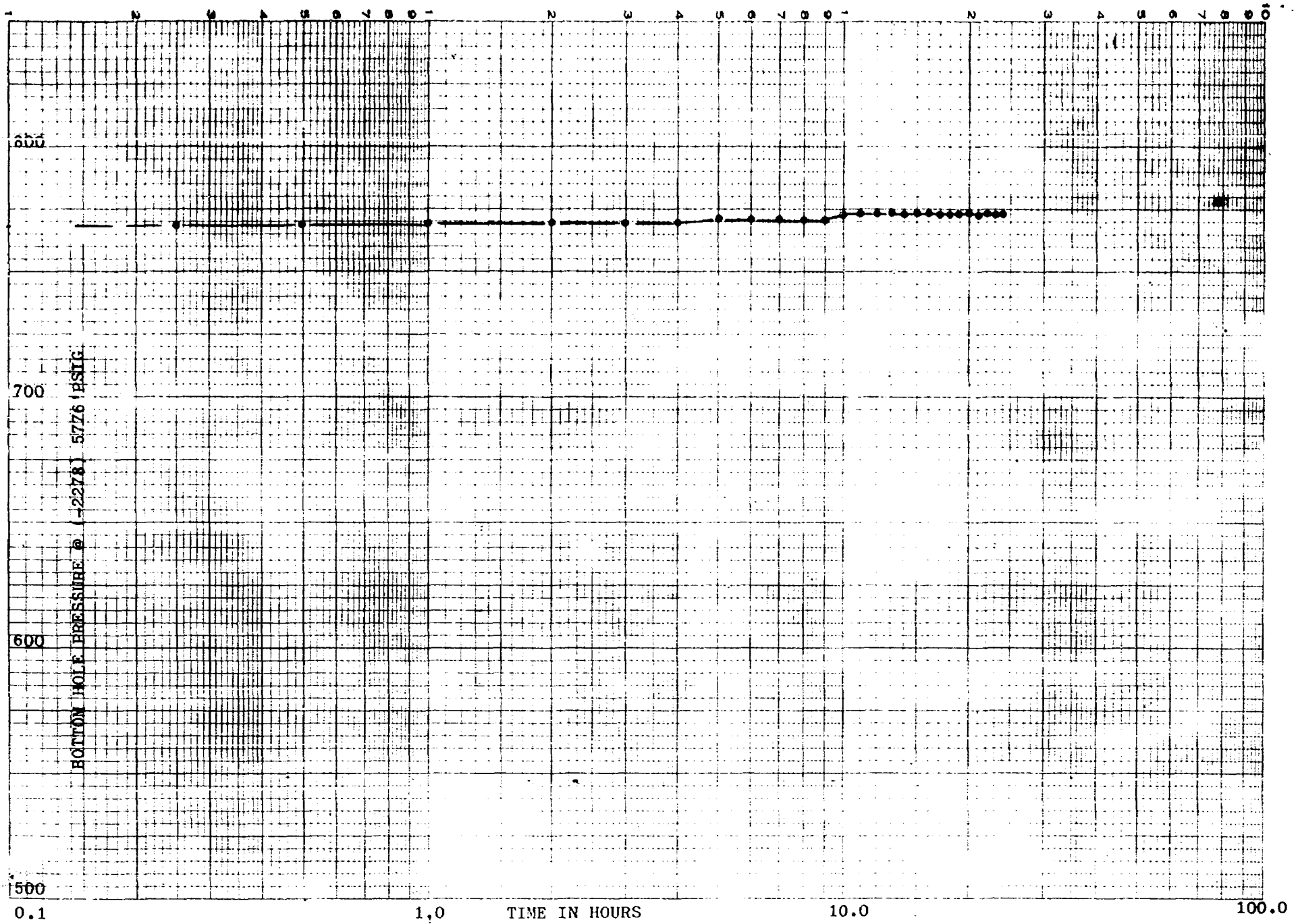
| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 2000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 416      | .416     |
| 5476         | 635      | .460     |
| 5776 (-2278) | 773 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE  
 \*\* MIDPOINT OF CASING PERFORATIONS





JARREL SERVICES, INC.



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

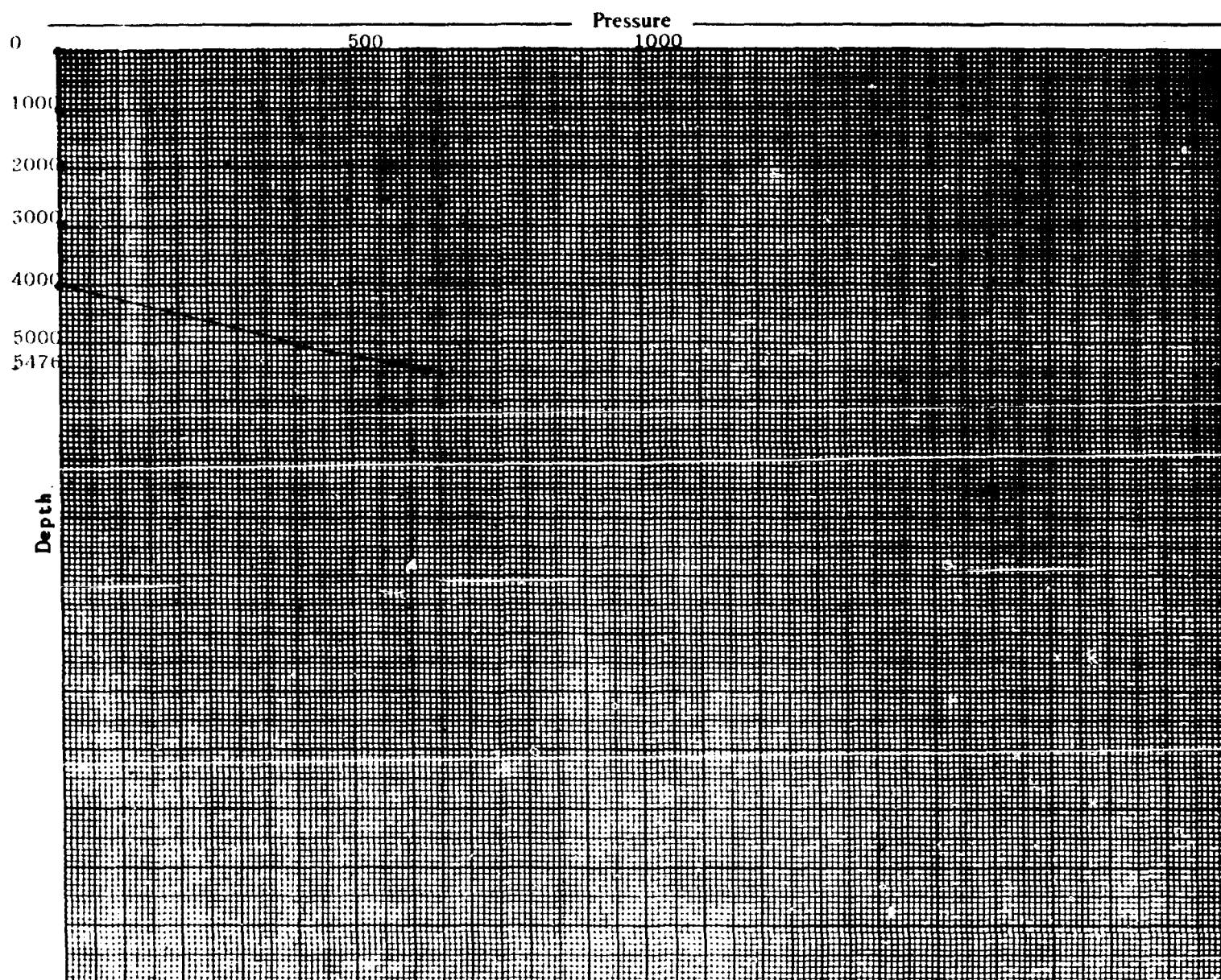
OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Blinebry  
 LEASE L.G. Warlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE November 20, 1979 TIME 11:00 AM  
 Status Open  
 Test Depth 5476'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. P&R BHP change -  
 Elev. 3498' GL Fluid top Open  
 Datum (-2278) \*\* Water top -  
 Temp. @ 100° F Run by JSI #12  
 Cal. No. A 4586 N Chart No. 1

## BOTTOM HOLE PRESSURE RECORD

| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 411      | .411     |
| 5476         | 630      | .460     |
| 5776 (-2278) | 768 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



|                      |   |
|----------------------|---|
| TYPE OF REPORT - (X) |   |
| Initial Completion   |   |
| Special              | X |
| General Survey       |   |

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-124  
Revised 1-5-65

RESERVOIR PRESSURE REPORT

|                                                      |  |                                        |  |                                |  |                                  |  |
|------------------------------------------------------|--|----------------------------------------|--|--------------------------------|--|----------------------------------|--|
| Company<br><b>Petro-Lewis Corporation</b>            |  | Pool<br><b>Drinkard</b>                |  | County<br><b>Lea</b>           |  | Date<br><b>November 26, 1979</b> |  |
| Address<br><b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Drinkard</b> |  | Oil Gradient<br><b>psi/ft.</b> |  | Water Gradient<br><b>psi/ft.</b> |  |
|                                                      |  |                                        |  |                                |  | Gas Gravity<br><b>(-3166) **</b> |  |

| LEASE                              | WELL NO. | LOCATION |       |    |    | ELEV.      | OIL (O) OR GAS (G) | DATE TESTED | SHUT IN HOURS | SHUT-IN TSG. PRESS. | BOMB TEST DATA |               |                 | SONIC INSTRUMENT TEST DATA* |  |              |                         |                        |                     | PRESS. AT DATUM |             |
|------------------------------------|----------|----------|-------|----|----|------------|--------------------|-------------|---------------|---------------------|----------------|---------------|-----------------|-----------------------------|--|--------------|-------------------------|------------------------|---------------------|-----------------|-------------|
|                                    |          |          |       |    |    |            |                    |             |               |                     | TEST DEPTH     | B.H. TEMP. °F | OBSERVED PRESS. | PROD. TEST (BBLS./DAY)      |  | LIQUID LEVEL | LIQUID GRADIENT PSI/FT. | WT. OF LIQUID COL. PSI | WT. OF GAS COL. PSI |                 | CSG. PRESS. |
|                                    |          | OIL      | WATER |    |    |            |                    |             |               |                     |                |               |                 |                             |  |              |                         |                        |                     |                 |             |
| L.G. Warlick                       | 3        | P        | 18    | 21 | 37 | 3498<br>GL | 0                  | 11/26/79    | 39.5          | 0                   | 6300           | 106           | 732             |                             |  | 4700'        | .460                    | 167                    |                     |                 | 899         |
| ** MIDPOINT OF CASING PERFORATIONS |          |          |       |    |    |            |                    |             |               |                     |                |               |                 |                             |  |              |                         |                        |                     |                 |             |

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JARREL SERVICES, INC.

*[Signature]*  
(Signature)

Agent

(Title)

November 26, 1979

(Date)

# JARREL SERVICES, INC.

POST OFFICE BOX 1854

PHONE 505 393-8398

HOBBS, NEW MEXICO 88240

COMPANY: Petro-Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly - Drinkard

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL       | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ ( -3166 ) |
|-------|----------------------|----------|--------------|------|------------------|-----|-----------------|
|       |                      |          | HRS.         | MIN. | TBG              | CSG |                 |
| 1979  |                      |          |              |      |                  |     | 6664' PSIG      |
| 11/24 | Swabbed & Open. Run  |          |              |      |                  |     |                 |
|       | Open Gradient & Hung |          |              |      |                  |     |                 |
|       | Bomb @ 6300'         | 3:45 PM  | -            | -    | 0                | PKR | 870             |
|       | Shut in              | 4:00     | 0            | 15   | 0                | -   | 870             |
|       | "                    | 4:15     | 0            | 15   | -                | -   | 873             |
|       | "                    | 4:30     | 0            | 30   | -                | -   | 879             |
|       | "                    | 5:00     | 1            | 00   | -                | -   | 885             |
|       | "                    | 6:00     | 2            | 00   | -                | -   | 893             |
|       | "                    | 7:00     | 3            | 00   | -                | -   | 897             |
|       | "                    | 8:00     | 4            | 00   | -                | -   | 899             |
|       | "                    | 9:00     | 5            | 00   | -                | -   | 899             |
|       | "                    | 10:00    | 6            | 00   | -                | -   | 899             |
|       | "                    | 11:00    | 7            | 00   | -                | -   | 899             |
|       | "                    | 12:00 MN | 8            | 00   | -                | -   | 899             |
| 11/25 | "                    | 1:00 AM  | 9            | 00   | -                | -   | 899             |
|       | "                    | 2:00     | 10           | 00   | -                | -   | 899             |
|       | "                    | 3:00     | 11           | 00   | -                | -   | 899             |
|       | "                    | 4:00     | 12           | 00   | -                | -   | 899             |
|       | "                    | 5:00     | 13           | 00   | -                | -   | 899             |
|       | "                    | 6:00     | 14           | 00   | -                | -   | 899             |
|       | "                    | 7:00     | 15           | 00   | -                | -   | 899             |
|       | "                    | 8:00     | 16           | 00   | -                | -   | 899             |
|       | "                    | 9:00     | 17           | 00   | -                | -   | 899             |
|       | "                    | 10:00    | 18           | 00   | -                | -   | 899             |
|       | "                    | 11:00    | 19           | 00   | -                | -   | 899             |
|       | "                    | 12:00 N  | 20           | 00   | -                | -   | 899             |
|       | "                    | 1:00 PM  | 21           | 00   | -                | -   | 899             |
|       | "                    | 2:00     | 22           | 00   | -                | -   | 899             |
|       | "                    | 3:00     | 23           | 00   | -                | -   | 899             |
|       | "                    | 4:00     | 24           | 00   | -                | -   | 899             |
|       | "                    | 5:00     | 25           | 00   | -                | -   | 899             |
|       | "                    | 6:00     | 26           | 00   | -                | -   | 899             |
|       | "                    | 7:00     | 27           | 00   | -                | -   | 899             |
|       | "                    | 8:00     | 28           | 00   | -                | -   | 899             |
|       | "                    | 9:00     | 29           | 00   | -                | -   | 899             |
|       | "                    | 10:00    | 30           | 00   | -                | -   | 899             |
|       | "                    | 11:00    | 31           | 00   | -                | -   | 899             |
|       | "                    | 12:00 MN | 32           | 00   | -                | -   | 899             |
| 11/26 | "                    | 1:00 AM  | 33           | 00   | -                | -   | 899             |
|       | "                    | 2:00     | 34           | 00   | -                | -   | 899             |
|       | "                    | 3:00     | 35           | 00   | -                | -   | 899             |
|       | "                    | 4:00     | 36           | 00   | -                | -   | 899             |
|       | "                    | 5:00     | 37           | 00   | -                | -   | 899             |
|       | "                    | 6:00     | 38           | 00   | -                | -   | 899             |
|       | "                    | 7:00     | 39           | 00   | -                | -   | 899             |
|       | Pulled Bomb & Ran    |          |              |      |                  |     |                 |
|       | Static Gradient      | 7:30     | 39           | 30   | 0                | -   | 899             |

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

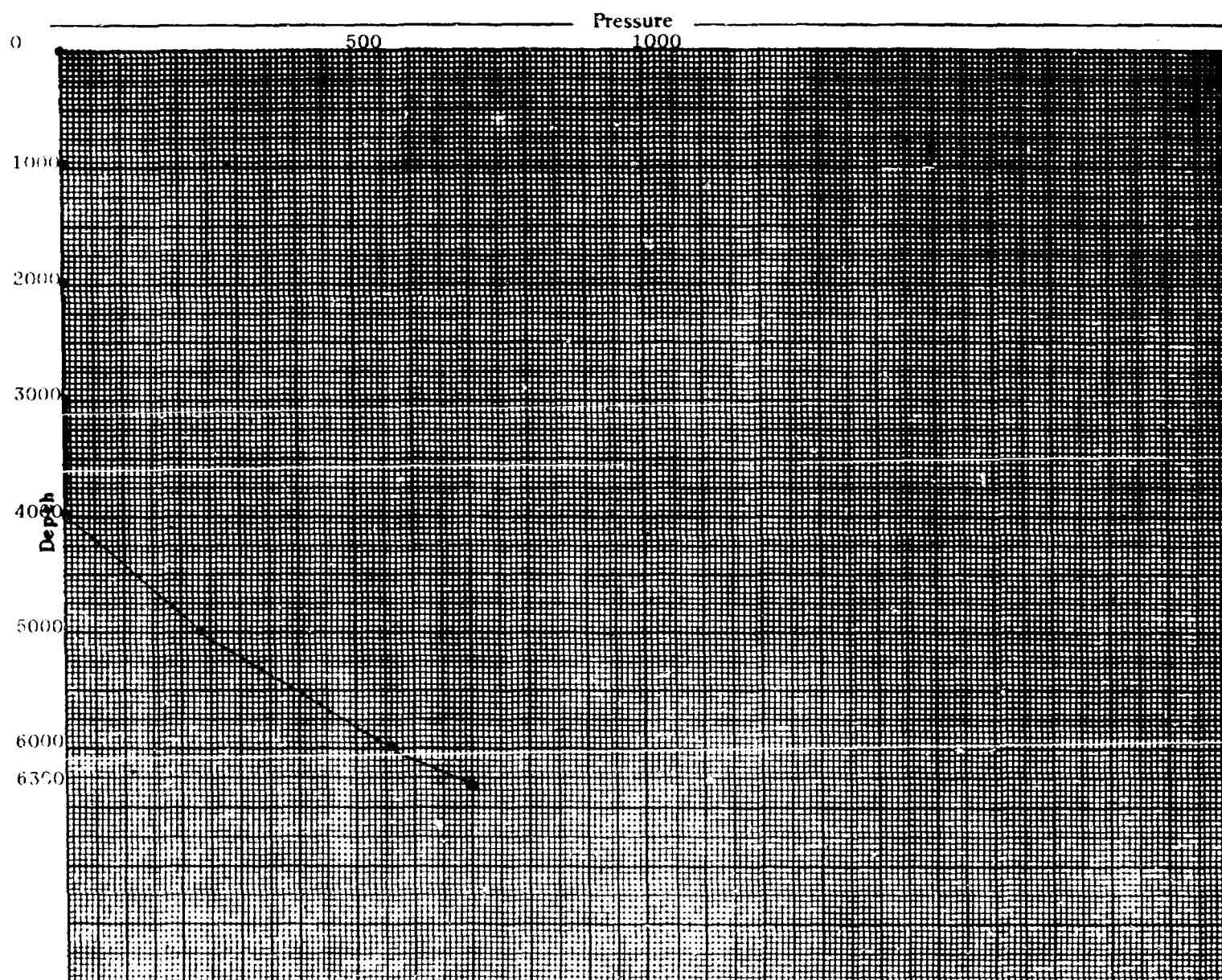
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Drinkard  
 LEASE L.G. Warlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 24, 1979 TIME 3:45  
 Status Swabbed & Open  
 Test Depth 6300'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. PKR BHP change -  
 Elev. 3498' GL Fluid top Open  
 Datum (-5166) \*\* Water top -  
 Temp. @ 106 F Run by JSI #12  
 Cal. No. A 4586 N Chart No. 1

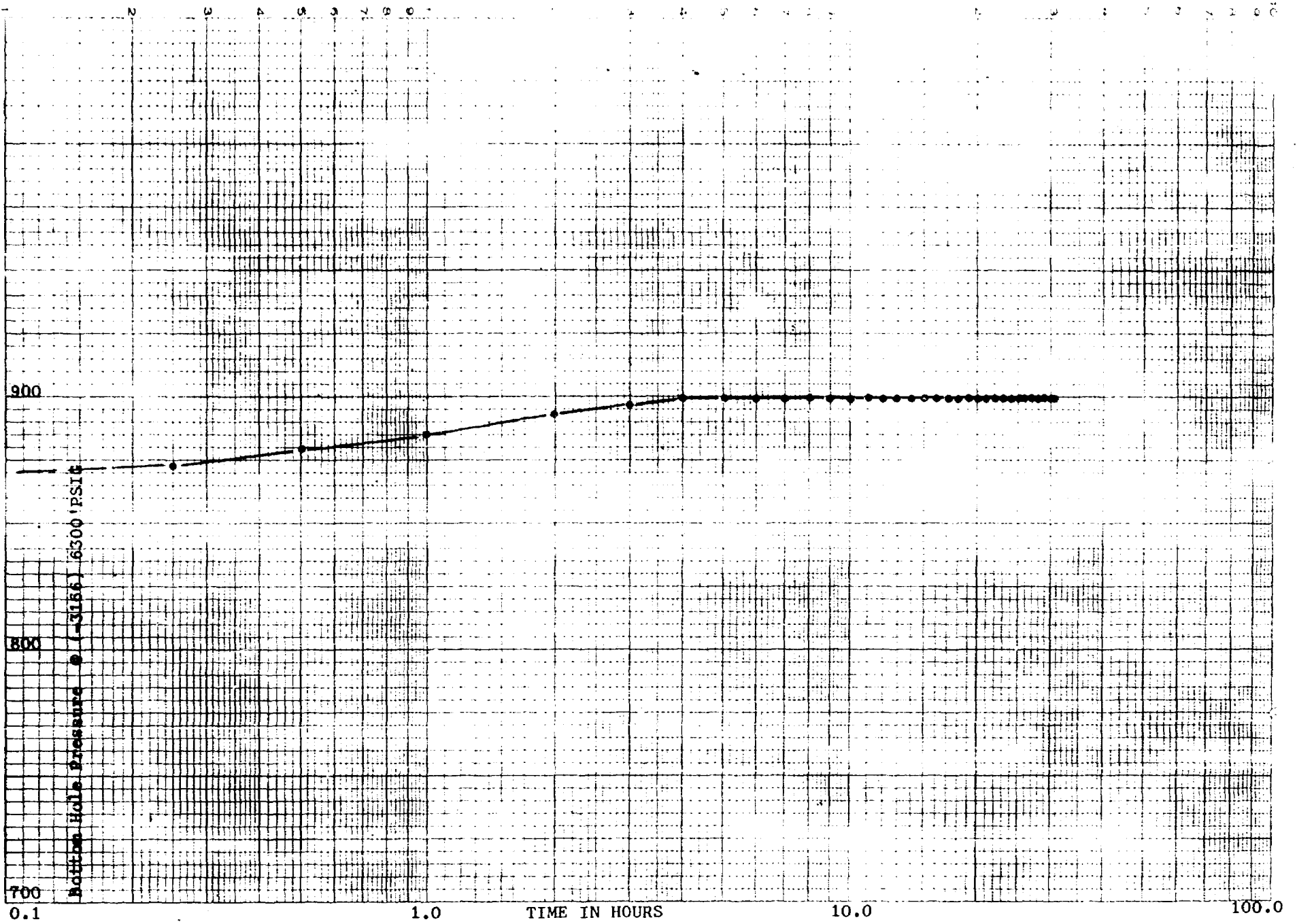
| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 234      | .234     |
| 6000         | 560      | .326     |
| 6300         | 700      | .467     |
| 6664 (-5166) | 870 * ** | (.467)   |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



JARREL SERVICES, INC.





# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393.5396

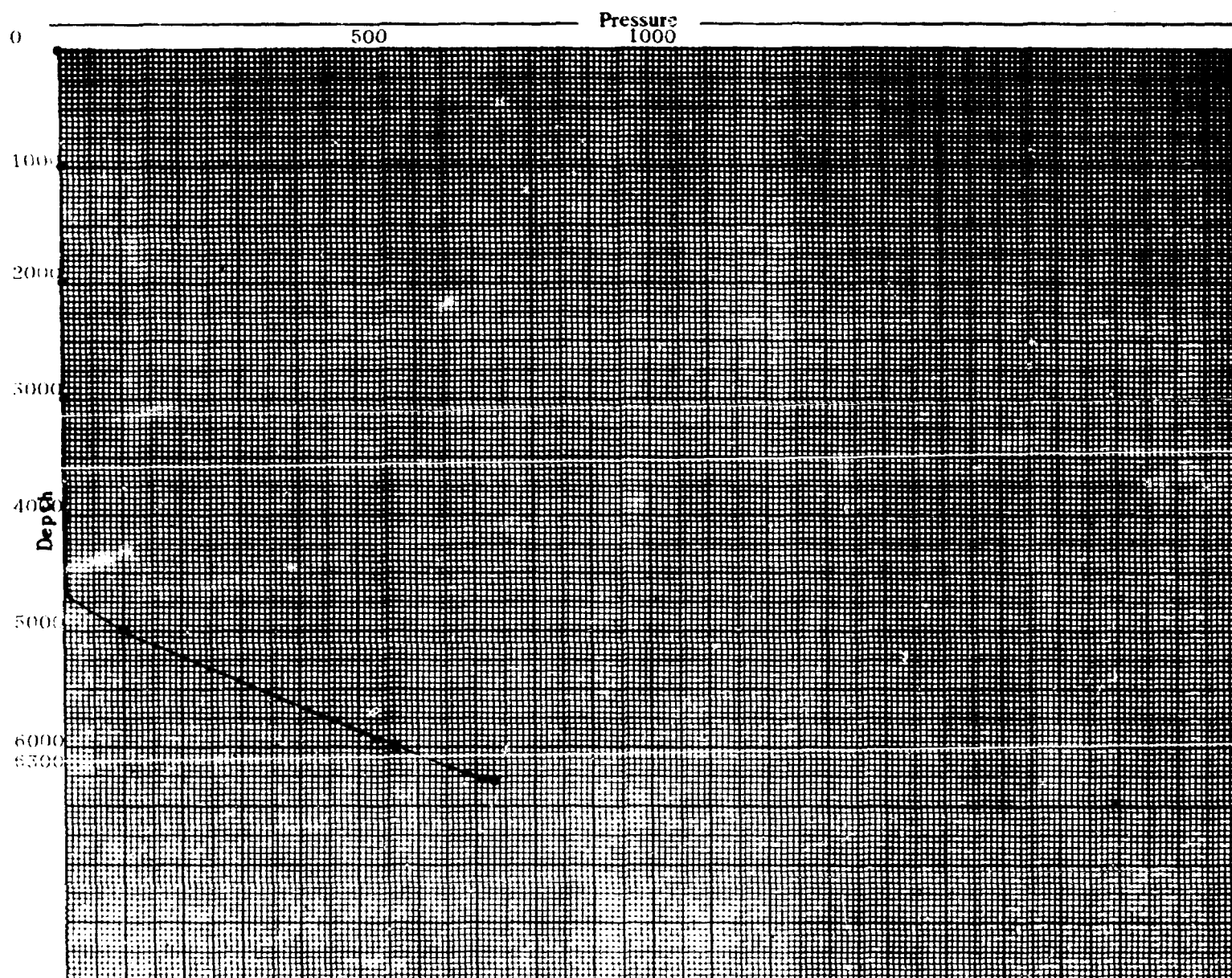
HOBBS, NEW MEXICO 88240

OPERATOR Petro-Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Drinkard  
 LEASE L.G. Warlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 26, 1979 TIME 7:30 AM  
 Status Shut in  
 Test Depth 6300'  
 Time S. I. 39.5 hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. PRR BHP change -  
 Elev. 3498' GL Fluid top 4700'  
 Datum (-3166) \*\* Water top 5000'  
 Temp. @ 106°F Run by JSI #12  
 Cal. No. A 4586 N Chart No. 2

## BOTTOM HOLE PRESSURE RECORD

| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 3000         | 0        | -        |
| 4000         | 0        | -        |
| 5000         | 100      | .100     |
| 6000         | 560      | .460     |
| 6300         | 732      | .460     |
| 6664 (-3166) | 899 * ** | (.460)   |

\* EXTRAPOLATED PRESSURE  
 \*\* MIDPOINT OF CASING PERFORATIONS



|                      |   |
|----------------------|---|
| TYPE OF REPORT - (X) |   |
| Initial Completion   |   |
| Special              | X |
| General Survey       |   |

NEW MEXICO OIL CONSERVATION COMMISSION

Form O-104  
Revised 1-1-65

RESERVOIR PRESSURE REPORT

|                                                      |  |                                        |  |                                     |  |                                       |  |
|------------------------------------------------------|--|----------------------------------------|--|-------------------------------------|--|---------------------------------------|--|
| Client<br><b>Petro-Lewis Corporation</b>             |  | Block<br><b>Penrose Skelly</b>         |  | County<br><b>Lea</b>                |  | Date<br><b>November 26, 1979</b>      |  |
| Address<br><b>Box 937<br/>Levelland, Texas 79336</b> |  | Producing Formation<br><b>Grayburg</b> |  | Oil Gradient<br><b>1.00 lb./ft.</b> |  | Water Gradient<br><b>1.00 lb./ft.</b> |  |
|                                                      |  |                                        |  | Gas Gravity<br><b>(-256) **</b>     |  |                                       |  |

| LEASE                                                                                                                    | WELL NO. | LOCATION   |               |                  |                        | ELEV.   | OIL (O) OR GAS (G) | DATE TESTED | SHUT-IN HOURS | SHUT-IN TBG. PRESS. | BOMB TEST DATA |                         |                        | SONIC INSTRUMENT TEST DATA* |             |       |      |    |   |  | PRESS. AT DATUM |
|--------------------------------------------------------------------------------------------------------------------------|----------|------------|---------------|------------------|------------------------|---------|--------------------|-------------|---------------|---------------------|----------------|-------------------------|------------------------|-----------------------------|-------------|-------|------|----|---|--|-----------------|
|                                                                                                                          |          | TEST DEPTH | B.M. TEMP. °F | OB-SERVED PRESS. | PROD. TEST (3BLS./DAY) |         |                    |             |               |                     | LIQUID LEVEL   | LIQUID GRADIENT PSI/FT. | WT. OF LIQUID COL. PSI | WT. OF GAS COL. PSI         | CSG. PRESS. |       |      |    |   |  |                 |
|                                                                                                                          |          |            |               |                  | OIL                    |         |                    |             |               |                     |                |                         |                        |                             |             | WATER |      |    |   |  |                 |
| L.G. Warlick                                                                                                             | 3        | P          | 18            | 21               | 37                     | 3498 GL | 0                  | 11/18/79    | 48            | 0                   | 3850           | 90                      | 344                    |                             |             | 2712  | .302 | 29 | - |  | 315             |
| <p>EXTRAP. TO 405'</p> <p>405' + 316' - 356' (.302 PSI/FT) = 1284' @ (316)</p> <p>** MIDPOINT OF CASING PERFORATIONS</p> |          |            |               |                  |                        |         |                    |             |               |                     |                |                         |                        |                             |             |       |      |    |   |  |                 |

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. SEE RULE 302.

\* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JARREL SERVICES, INC.

*[Signature]*

(Signature)

Agent

(Title)

November 26, 1979

(Date)



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-8396

HOBBS, NEW MEXICO 88240

COMPANY: Petro Lewis Corporation

WELL: L.G. Warlick, No. 3

FIELD: Penrose Skelly Grayburg

## CHRONOLOGICAL PRESSURE DATA

| DATE  | STATUS OF WELL                                 | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ ( -256 ) |     |
|-------|------------------------------------------------|----------|--------------|------|------------------|-----|----------------|-----|
|       |                                                |          | HRS.         | MIN. | TBG              | CSG | 3754' PSIG     |     |
| 1979  |                                                |          |              |      |                  |     |                |     |
| 11/16 | Open. Run Open Gradient<br>& Hung Bomb @ 3850' | 3:25     | -            | -    | 0                | -   | 154            | 125 |
|       | Shut in                                        | 3:30     | 0            | 05   | -                | -   | 154            | 125 |
|       | "                                              | 3:45     | 0            | 15   | 0                | -   | 155            | 126 |
|       | "                                              | 4:00     | 0            | 30   | -                | -   | 157            | 128 |
|       | "                                              | 4:30     | 1            | 00   | -                | -   | 159            | 130 |
|       | "                                              | 5:30     | 2            | 00   | -                | -   | 166            | 137 |
|       | "                                              | 6:30     | 3            | 00   | -                | -   | 171            | 142 |
|       | "                                              | 7:30     | 4            | 00   | -                | -   | 176            | 147 |
|       | "                                              | 8:30     | 5            | 00   | -                | -   | 181            | 152 |
|       | "                                              | 9:30     | 6            | 00   | -                | -   | 185            | 156 |
|       | "                                              | 10:30    | 7            | 00   | -                | -   | 191            | 162 |
|       | "                                              | 11:30    | 8            | 00   | -                | -   | 195            | 166 |
| 11/17 | "                                              | 12:30 AM | 9            | 00   | -                | -   | 200            | 171 |
|       | "                                              | 1:30     | 10           | 00   | -                | -   | 205            | 176 |
|       | "                                              | 2:30     | 11           | 00   | -                | -   | 210            | 181 |
|       | "                                              | 3:30     | 12           | 00   | -                | -   | 215            | 186 |
|       | "                                              | 4:30     | 13           | 00   | -                | -   | 220            | 191 |
|       | "                                              | 5:30     | 14           | 00   | -                | -   | 223            | 194 |
|       | "                                              | 6:30     | 15           | 00   | -                | -   | 228            | 199 |
|       | "                                              | 7:30     | 16           | 00   | -                | -   | 232            | 203 |
|       | "                                              | 8:30     | 17           | 00   | -                | -   | 236            | 207 |
|       | "                                              | 9:30     | 18           | 00   | -                | -   | 242            | 213 |
|       | "                                              | 10:30    | 19           | 00   | -                | -   | 247            | 218 |
|       | "                                              | 11:30    | 20           | 00   | -                | -   | 250            | 221 |
|       | "                                              | 12:30 PM | 21           | 00   | -                | -   | 255            | 226 |
|       | "                                              | 1:30     | 22           | 00   | -                | -   | 258            | 229 |
|       | "                                              | 2:30     | 23           | 00   | -                | -   | 263            | 234 |
|       | "                                              | 3:30     | 24           | 00   | -                | -   | 267            | 238 |
|       | "                                              | 4:30     | 25           | 00   | -                | -   | 269            | 240 |
|       | "                                              | 5:30     | 26           | 00   | -                | -   | 272            | 243 |
|       | "                                              | 6:30     | 27           | 00   | -                | -   | 277            | 248 |
|       | "                                              | 7:30     | 28           | 00   | -                | -   | 281            | 252 |
|       | "                                              | 8:30     | 29           | 00   | -                | -   | 283            | 254 |
|       | "                                              | 9:30     | 30           | 00   | -                | -   | 287            | 258 |
|       | "                                              | 10:30    | 31           | 00   | -                | -   | 291            | 262 |
|       | "                                              | 11:30    | 32           | 00   | -                | -   | 294            | 265 |
| 11/18 | "                                              | 12:30 AM | 33           | 00   | -                | -   | 297            | 268 |
|       | "                                              | 1:30     | 34           | 00   | -                | -   | 301            | 272 |
|       | "                                              | 2:30     | 35           | 00   | -                | -   | 305            | 276 |
|       | "                                              | 3:30     | 36           | 00   | -                | -   | 309            | 280 |
|       | "                                              | 4:30     | 37           | 00   | -                | -   | 312            | 283 |
|       | "                                              | 5:30     | 38           | 00   | -                | -   | 315            | 286 |

WELL: L.G. Warlick, No. 3  
PAGE: 2

| DATE | STATUS OF WELL                        | TIME     | ELAPSED TIME |      | SURFACE PRESSURE |     | BHP @ (-256 ) |     |
|------|---------------------------------------|----------|--------------|------|------------------|-----|---------------|-----|
|      |                                       |          | HRS.         | MIN. | TBG              | CSG | 3754'PSIG     |     |
|      | Shut in                               | 6:30     | 39           | 00   | -                | -   | 318           | 289 |
|      | "                                     | 7:30     | 40           | 00   | -                | -   | 321           | 292 |
|      | "                                     | 8:30     | 41           | 00   | -                | -   | 324           | 295 |
|      | "                                     | 9:30     | 42           | 00   | -                | -   | 328           | 299 |
|      | "                                     | 10:30    | 43           | 00   | -                | -   | 330           | 301 |
|      | "                                     | 11:30    | 44           | 00   | -                | -   | 332           | 303 |
|      | "                                     | 12:30 PM | 45           | 00   | -                | -   | 335           | 306 |
|      | "                                     | 1:30     | 46           | 00   | -                | -   | 338           | 309 |
|      | "                                     | 2:30     | 47           | 00   | -                | -   | 341           | 312 |
|      | Pulled Bombs & Ran<br>Static Gradient | 3:30     | 48           | 00   | 0                | -   | 344           | 315 |

# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

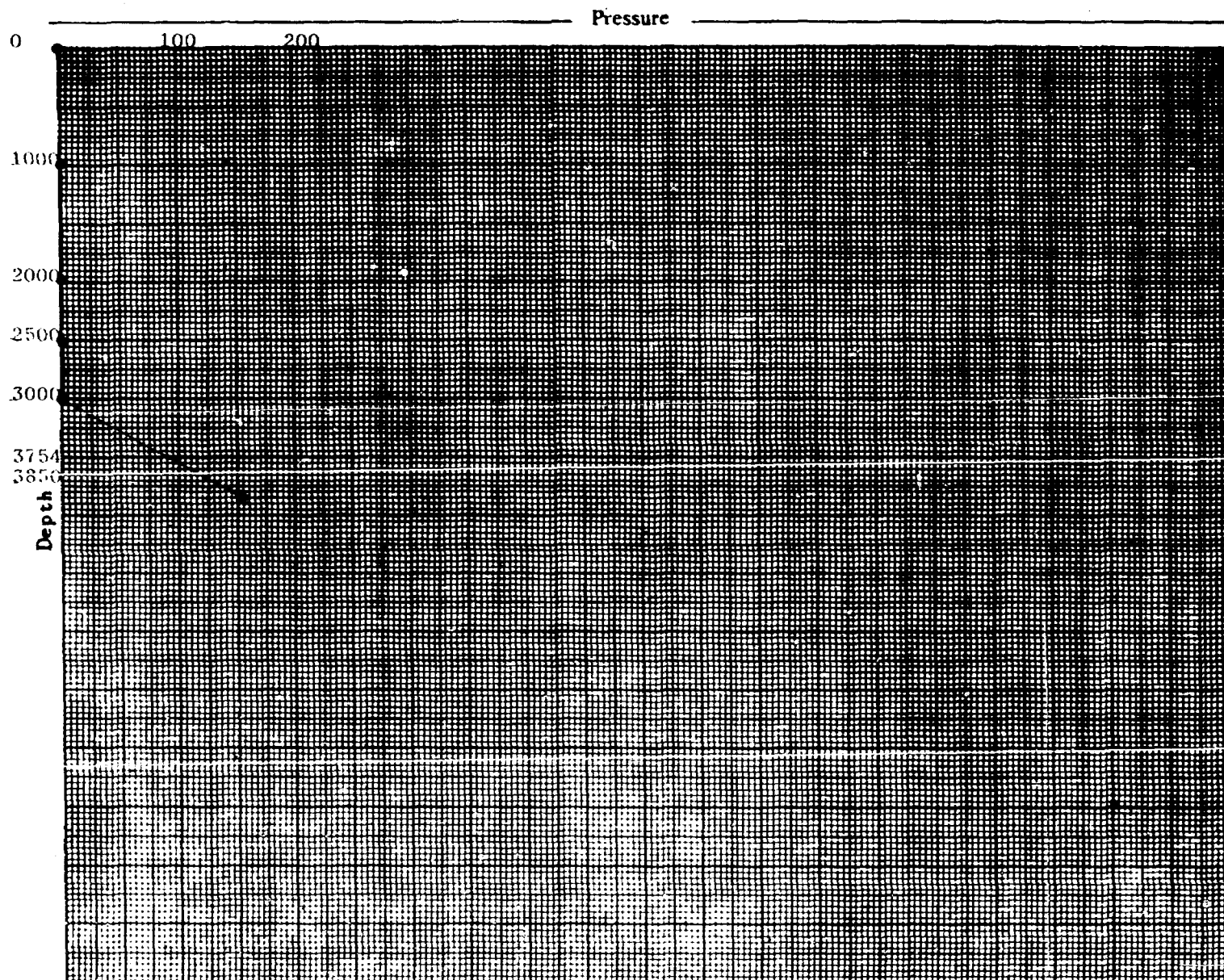
## BOTTOM HOLE PRESSURE RECORD

OPERATOR Petro Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Grayburg  
 LEASE L.G. Warlick WELL #3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 16, 1979 TIME 3:25 P.M.  
 Status Open  
 Test Depth 3850'  
 Time S. I. - Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. - BHP change -  
 Elev. 3498' GL Fluid top 3341'  
 Datum (-256) Water top -  
 Temp. @ 90° F Run by JSI #19  
 Cal. No. A 6497 N Chart No. 1

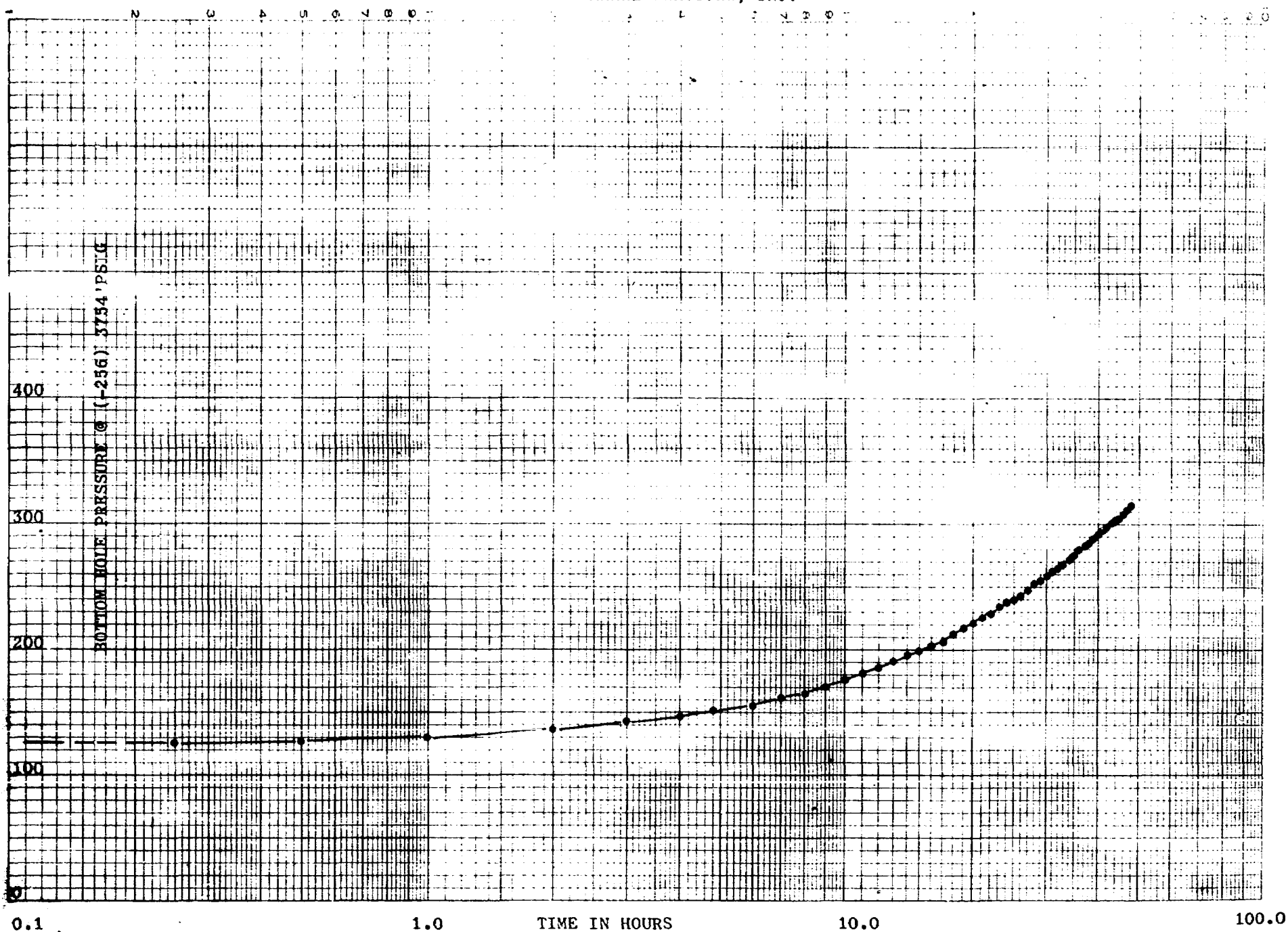
| Depth       | Pressure | Gradient |
|-------------|----------|----------|
| 0           | 0        | -        |
| 1000        | 0        | -        |
| 2000        | 0        | -        |
| 2500        | 0        | -        |
| 3000        | 0        | -        |
| 3754 (-256) | 125 * ** | (.302)   |
| 3850        | 154      | .181     |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



JARREL SERVICES, INC.



# JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

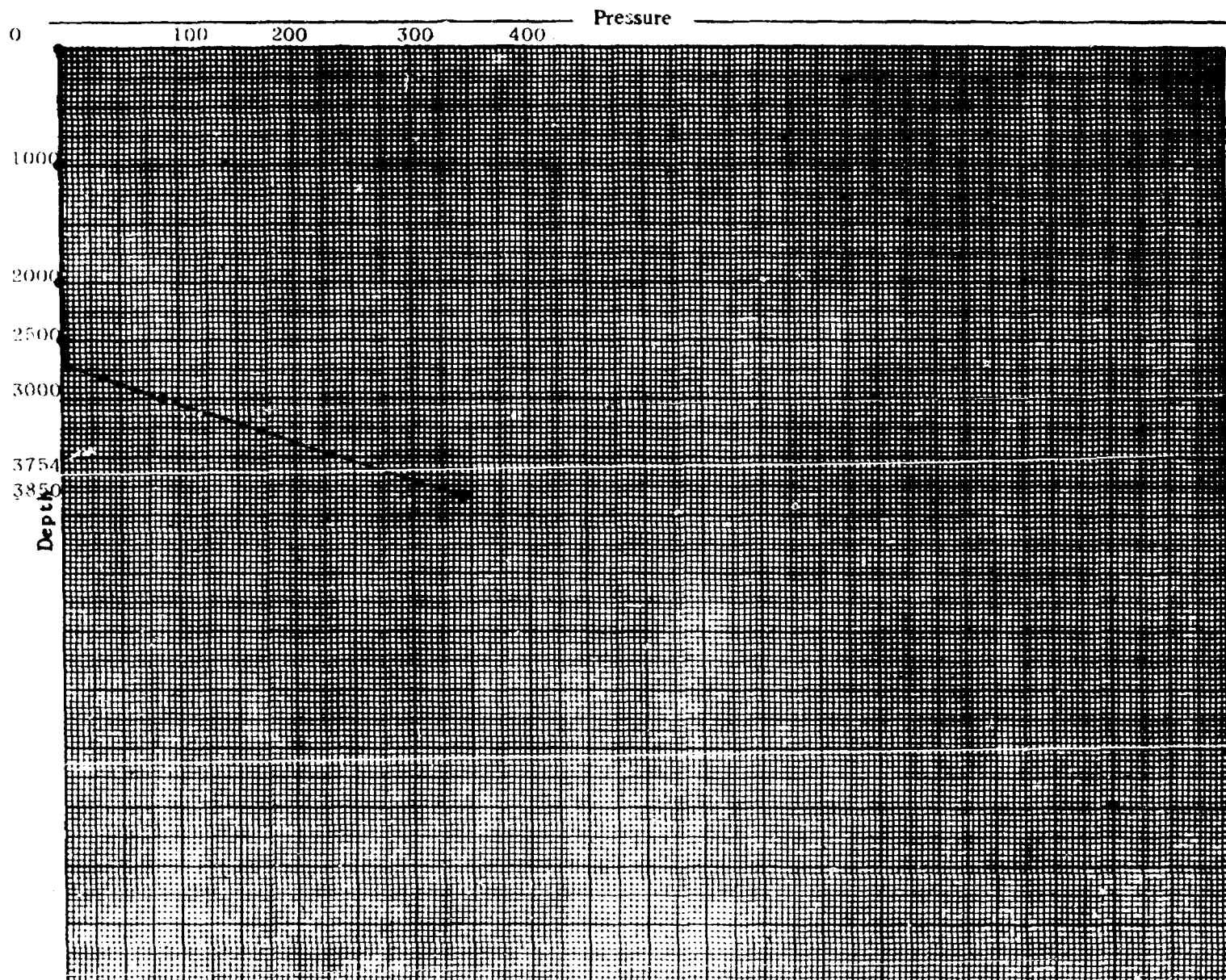
OPERATOR Petro Lewis Corporation  
 FIELD Penrose Skelly  
 FORMATION Grayburg  
 LEASE L.G. Warlick WELL # 3  
 COUNTY Lea STATE New Mexico  
 DATE Nov. 18, 1979 TIME 3:30 PM  
 Status Shut in  
 Test Depth 3850'  
 Time S. I. 18.0 hrs. Last test date -  
 Tub Pres. 0 BHP last test -  
 Cas. Pres. - BHP change -  
 Elev. 3498' GL Fluid top 2712  
 Datum 1-256 \*\* Water top -  
 Temp. @ 20' F Run by JSI #19  
 Cal. No. A 6497 N Chart No. 2

## BOTTOM HOLE PRESSURE RECORD

| Depth        | Pressure | Gradient |
|--------------|----------|----------|
| 0            | 0        | -        |
| 1000         | 0        | -        |
| 2000         | 0        | -        |
| 2500         | 0        | -        |
| 3000         | 87       | .174     |
| 3754 (1-256) | 315 **   | (.302)   |
| 3850         | 344      | .302     |

\* EXTRAPOLATED PRESSURE

\*\* MIDPOINT OF CASING PERFORATIONS



- CASE 6745: Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the W/2 of Section 28, Township 23 South, Range 24 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6746: Application of Yates Petroleum Corporation for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the S/2 of Section 31, Township 18 South, Range 26 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South line and 1100 feet from the West line of said Section 31. 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6747: Application of Yates Petroleum Corporation for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the S/2 of Section 23, Township 18 South, Range 25 East, to be dedicated to a well to be drilled at an unorthodox location in the center of Unit P of said Section 23. 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6748: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Rio Pecos "HH" Fed. Well No. 1, a Morrow test to be drilled 1980 feet from the South line and 1100 feet from the East line of Section 29, Township 18 South, Range 27 East, the S/2 of said Section 29 to be dedicated to the well.
- CASE 6749: 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 Warlick Well No. 3 located in Unit P of Section 18, Township 21 South, Range 37 East.
- CASE 6750: Application of CO<sub>2</sub>-In-Action, Inc. for creation of a new carbon dioxide gas pool and special pool rules, Harding County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the North Hueyeros-Santa Rosa CO<sub>2</sub> Gas Pool comprising all or parts of Sections 1, 2, 3, 10, 11, and 12, Township 20 North, Range 30 East and Sections 20 thru 23 and 26 thru 35, Township 21 North, Range 30 East, and the promulgation of special rules therefor including a provision for 160-acre spacing units with the option to drill on 40 acres, and with well locations as close as 330 feet to the unit boundary.
- CASE 6725: (Continued from November 14, 1979, Examiner Hearing)
- Application of Tenneco Oil Company for three non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 291.23-acre non-standard gas proration unit comprising the W/2 of Section 6 and the NW/4 of Section 7, a 347.58-acre unit comprising the W/2 of Section 19 and the NW/4 of Section 30, and a 375.17-acre unit comprising the SW/4 of Section 30 and the W/2 of Section 31, all in Township 29 North, Range 8 West, Basin-Dakota Pool, each unit to be dedicated to a well to be drilled at a standard location thereon.
- CASE 6751: Application of Tenneco Oil Company for the rescission of special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the rescission of the special pool rules for the Catclaw Draw-Morrow Gas Pool to provide for 320-acre spacing rather than 640 acres. In the absence of objection, the pool rules will be rescinded and the pool placed on standard 320-acre spacing for Pennsylvanian gas pools rather than the present 640-acre spacing.
- CASE 6357: (Reopened and Readvertised)
- In the matter of Case 6357 being reopened pursuant to the provisions of Order No. R-5953 which order established temporary special rules and regulations for the South Peterson-Pennsylvanian Pool, with provisions for 80-acre spacing. All interested parties may appear and show cause why the South Peterson-Pennsylvanian Pool should not be developed on 40-acre spacing units.

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

1200 BLANKS BUILDING  
310 WEST WALL AVENUE  
MIDLAND, TEXAS 79701  
915 695-6100

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

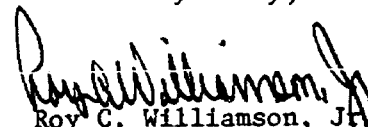
Gentlemen:

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

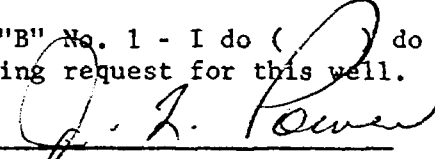
Attached for your review are two commingling requests by Petro-Lewis Corporation for two wells, Warlick No. 3 and Warlick "B" No. 1, located as described in the requests. Your waiver of objection to these requests is respectfully solicited. Please indicate your decision in the space below and return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

Thank you for your cooperation.

Yours very truly,

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

- I. Warlick No. 3 - I do ( ) do not ( X ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( X ) object to  
commingling request for this well.

Signed 

Date 10-30-79

Company SUN OIL COMPANY



J. R. Barnett  
Regional Engineering  
Manager

November 2, 1979

RECEIVED  
NOV 6 - 1979  
OIL CONSERVATION DIVISION  
SANTA FE

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

File: JCA-986.51NM-4097

Re: Request For Downhole Commingling Permits  
Rule 303-C  
Petro-Lewis Corporation  
Warlick No. 3 and Warlick "B" No. 1  
Lea County, New Mexico

Mr. Joe D. Ramey  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Sante Fe, NM 87501

Gentlemen:

Petro-Lewis Corporation has made a request for a downhole commingling permit, Rule 303-C, for their Warlick Well No 3 and Warlick "B" No. 1. The location of the wells are as follows:

Warlick No. 3, 330' FEL and 660' FSL Section 18, T-21-S,  
R-37-E, Lea County, New Mexico.

Warlick "B" No. 1, 1980' FNL and 660' FEL, Section 19,  
T-21-S, R-37-E, Lea County, New Mexico.

As an offset operator, Amoco Production Company has no objections to this proposed downhole commingling request.

Yours very truly

*J. R. Barnett*  
*mlc*

MLC/lp  
5/0932

cc: Sipes Williams & Aycock Inc.  
1212 The Main Bldg. Suite 902  
Houston, Texas 77002



OIL CONSERVATION DIVISION  
DISTRICT I

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

DATE October 26, 1979

RE: Proposed MC \_\_\_\_\_  
Proposed DHC X \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed NSP \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

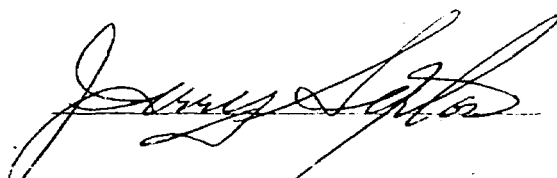
I have examined the application for the:

|                          |                      |                 |                 |
|--------------------------|----------------------|-----------------|-----------------|
| <u>Petro-Lewis Corp.</u> | <u>L. G. Warlick</u> | <u>No. 3-P</u>  | <u>18-21-37</u> |
| Operator                 | Lease and Well No.   | Unit, S - T - R |                 |

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,

  
/mc



L. P. Thompson  
Division Manager

John R. Kemp  
Assistant Division Manager

Production Department  
Hobbs Division  
North American Production

Conoco Inc.  
P. O. Box 460  
1001 North Turner  
Hobbs, NM 88240  
(505) 393-4141

21 9 21

NEW MEXICO OIL CONSERVATION COMMISSION

October 29, 1979

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

Attention Mr. Dan Nutter

Request for Downhole Commingling Permits Rule 303-C

Attached is a letter ballot wherein Conoco Inc. has waived any objection to Petro-Lewis Corporation's request for downhole commingling their Warlick No. 3 and Warlick "B" No. 1.

Very truly yours,

HAI:rej  
Enc  
CC  
Sipes, Williamson & Aycock, Inc.  
1200 Blanks Building  
310 West Wall Avenue  
Midland, Texas 79701

SIPES, WILLIAMSON & AYCOCK, INC.

CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

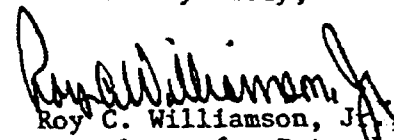
Gentlemen:

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

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

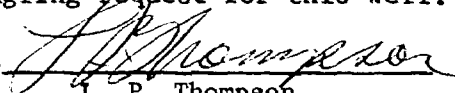
Thank you for your cooperation.

Yours very truly,

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

- I. Warlick No. 3 - I do ( ) do not ( X ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( X ) object to  
commingling request for this well.

Signed

  
L. P. Thompson

Date

October 29, 1979

Company

~~CONTINENTAL OIL COMPANY~~  
CONOCO INC.

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

October 22, 1979

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

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

NEW MEXICO OIL CONSERVATION COMMISSION

Gentlemen:

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

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

Thank you for your cooperation.

Yours very truly,

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

- I. Warlick No. 3 - I do ( ) do not ( X ) object to commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( X ) object to commingling request for this well.

Signed *D. T. Berlin*  
D. T. Berlin, Manager - Engineering  
Date October 31, 1979

Company Gulf Oil Corp.

Warlick No. 3 is located - 330' FSL and 660' FSL, Section 18,  
T-21-S, R-37-E, Lea County, New Mexico

Warlick "B" No. 1 is located - 1980' FNL and 660' FEL, Section 19,  
T-21-S, R-37-E, Lea County, New Mexico

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

NOV 3 5 35 PM '79 Midland

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

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

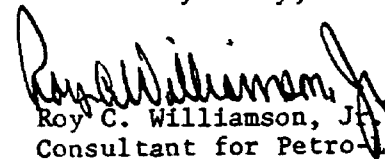
Gentlemen:

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

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Thank you for your cooperation.

Yours very truly,

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

- I. Warlick No. 3 - I do ( ) do not ( X ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( X ) object to  
commingling request for this well.

Signed J. G. Stothert

Date 10-31-79

Company TENNECO OIL COMPANY

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

Gentlemen:

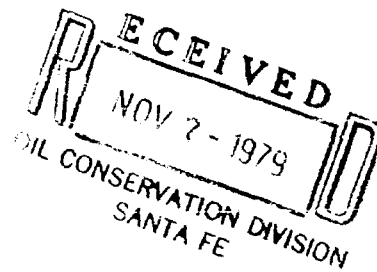
Subject: Request for Down-hole Commingling Permits  
Rule 303-C

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

Thank you for your cooperation.

Yours very truly,

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



- I. Warlick No. 3 - I do ( ) do not ( ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( ) object to  
commingling request for this well.

Signed *R. J. Womack, Jr.*  
R. J. Womack - Regional Manager

Date 10/26/79

Company TEXAS PACIFIC OIL COMPANY, INC.

SIPES, WILLIAMSON & AYCOCK, INC.

CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

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

*Case 6749*

Dear Sir:

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

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

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

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

Warlick No. 3, 330 feet FEL and 660 feet FSL, Section 18,  
T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry perforations 5,679-5,873 feet and Drinkard per-  
forations 6,630-6,693 feet dual completion - Order No.  
MC 1984. Penrose-Skelly-Grayburg completion through  
perforations 3,723-3,784 feet. First production August  
28, 1979. (Blinebry and Drinkard under bridge plug  
during testing of Penrose-Skelly-Grayburg zone).  
Bottom perforations, lowermost pool - 6,000-6,999 feet  
equals 40 barrels per day allowable total daily produc-  
tion under commingled operations.

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

See Attachment No. 1

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NEW MEXICO  
OIL CONSERVATION  
COMMISSION

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

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

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

Estimated BHP -

All zones on pump:

|                         |          |
|-------------------------|----------|
| Drinkard                | 50 psig  |
| Blinebry                | 50 psig  |
| Penrose-Skelly-Grayburg | 50 psig. |

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

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

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

Blinebry - sweet crude - 1.4 Barrels per Day - \$28.96  
per barrel current price

Drinkard - sweet crude - 3.25 Barrels per Day - \$28.96  
per barrel current price

Penrose-Skelly-Grayburg sour crude - 29 Barrels per Day -  
\$26.28 per barrel current price.



The operational problems of a triple completion would be immense due to the fact that all three zones require artificial lift. The Blinebry zone produces enough gas that pumping below a packer would be impossible unless a vent string was added. This would mean that four strings of tubing would be necessary to complete the well as a triple. No attempt will be made to complete the well in this manner.

Although commingling the sour Penrose-Skelly-Grayburg oil with the sweet Blinebry and Drinkard oil would lower the value of the sweet oil, the low volume of the sweet oil in relation to the volume of sour oil makes the total value reduction small and prevents underground waste by allowing low productivity zones to be produced. Precedent is set by Commingling Order DHC-206, dated October 1, 1976, for Sun's Elliot B-1 Lease, NW/4 NW/4, Section 20, T-21-S, R-37-E, Lea County, New Mexico, for the Penrose-Skelly-Grayburg Pool and the Blinebry Oil and Gas Pool.

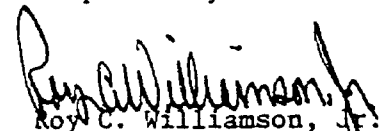
- (i) A statement that all offset operators and, in the case of a well on Federal land, the United States Geological Survey, have been notified in writing of the proposed commingling.

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

COMMENT:

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

Respectfully submitted,

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

/djs

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

Petro-Lewis Corporation

## Attachment No. 1

## (d) Production History (Warlick No. 3)

| Year<br>Month | Blinbry Zone |             |            |               | Drinkard Zone |             |            |               | Penrose-Skelly-Grayburg Zone |             |            |               |
|---------------|--------------|-------------|------------|---------------|---------------|-------------|------------|---------------|------------------------------|-------------|------------|---------------|
|               | BBL<br>OIL   | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL    | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL                   | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO |
| 1979          |              |             |            |               |               |             |            |               |                              |             |            |               |
| June          | 46           | 330         | 1,299      | 28.2          | 126           | 240         | 177        | 1.4           | -                            | -           | -          | -             |
| July          | 61           | 372         | 1,426      | 23.4          | 131           | 279         | 195        | 1.5           | -                            | -           | -          | -             |
| August        | 22           | NA          | NA         | -             | 42            | NA          | NA         | -             | 34/D                         | 38/D        | NA         | - *           |
| Sept.         | -----CI----- |             |            |               | -----CI-----  |             |            |               | 29/D                         | 19/D        | 97/D       | 3.34          |
| Average for)  |              |             |            |               |               |             |            |               |                              |             |            |               |
| June, July )  | 1.4          | 11.5        |            | 25.5          | 3.25          | 8.5         |            | 1.45          |                              |             |            |               |
| & August )    | BO/D         | BW/D        |            | MCF/BO        | BO/D          | BW/D        |            | MCF/BO        |                              |             |            |               |
| Average for)  |              |             |            |               |               |             |            |               | 29                           | 19          | 97         |               |
| September )   |              |             |            |               |               |             |            |               | BO/D                         | BW/D        | MCF/D      | 3.34          |

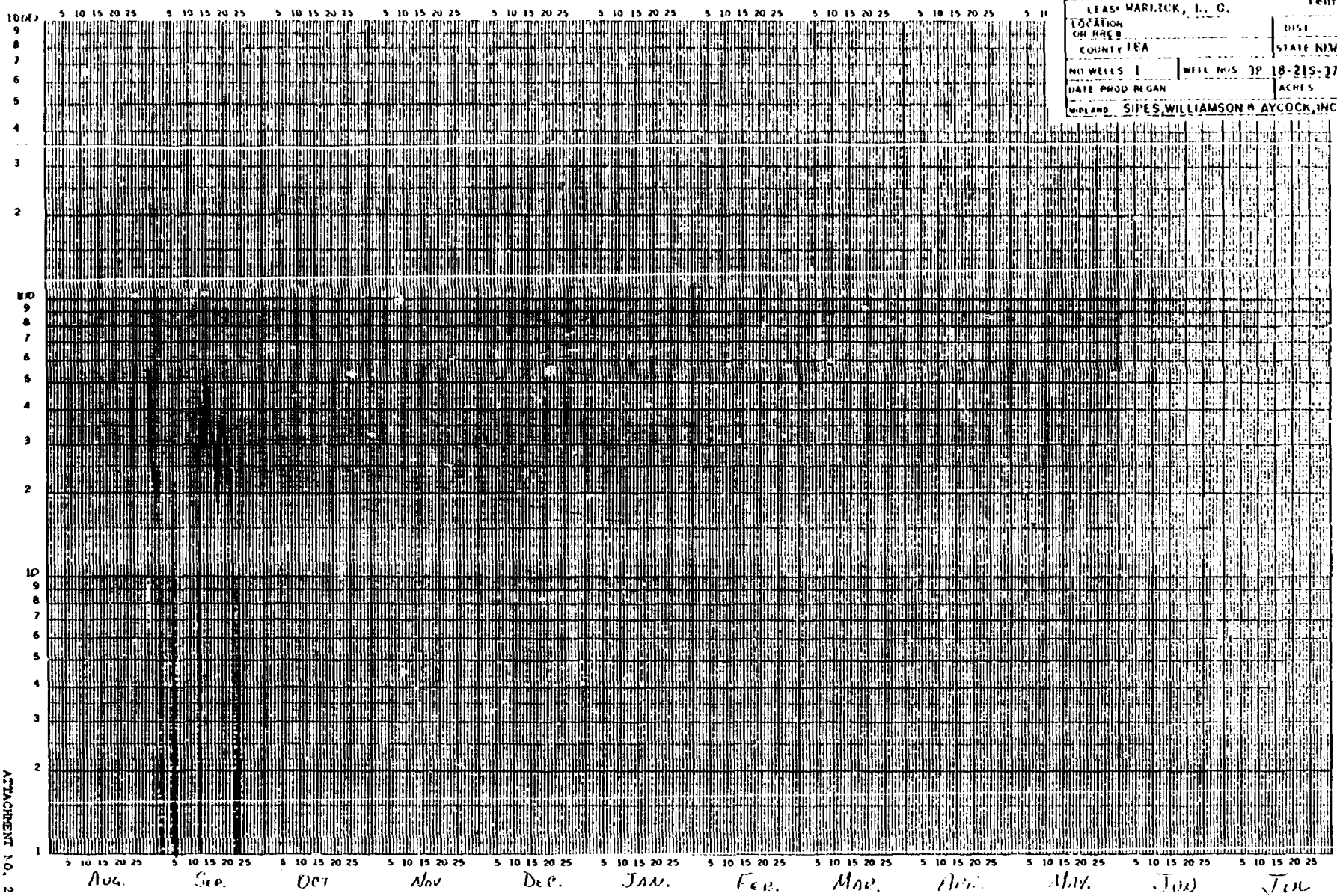
Current production from all zones equals 33.65 barrels of oil per day plus 39.00 barrels of water per day.

\* Penrose-Skelly-Grayburg produced 4 days in August.

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

11/20 10/22/77

|                                                         |                         |
|---------------------------------------------------------|-------------------------|
| FIELD BLINEBRY OIL AND GAS                              |                         |
| OPERATOR PETRO-LEWIS CORPORATION (Formerly Pentose PTO) |                         |
| LEAS: WARTICK, L. G.                                    |                         |
| LOCATION OR RICE                                        | DIST: HONOLULU          |
| COUNTY: IEA                                             | STATE: NEW MEXICO       |
| NO. WELLS: 1                                            | WELL NOS: 1P 18-215-37E |
| DATE PROD BEGAN                                         | ACRES                   |
| MIDLAND SIPS, WILLIAMSON & AYCOCK, INC. HOUSTON         |                         |



47 6540

1-1 YEAR BY DAY, 1.1 LOG CYCLES  
10/20 10/22/77

ATTACHMENT NO. 2  
PAGE 1 of 5

191 11 COM 322 50

REPORTED  
TODAY 7/27 BY PLO

10.8.72

10 000

FIELD BLINERY OIL AND GAS  
OPERATOR PETRO-LEWIS CORPORATION (100% OIL CO. INC.)  
LEASE WARLICK, J. G.  
LOCATION OFFICE W  
COUNTY LEA STATE NEW MEXICO  
WELL NO. 1 WELL DEPT. 3P 18-21S-37E  
DATE PROD. BEGAN  
MIDLAND SIPUS WILLIAMSON & AYCOCK, INC.

1000

OIL PRODUCTION - Bbl / MONTH

100

10

19 62 19 66 19 77 19 75 19 77 19 79 19 57 19 82 19 83 19 85 19 86 19 87 19 88 19 89 19 90 19 91 19 92 19 93 19 94 19 95 19 96 19 97 19 98 19 99 19 00

SWA-T-11

SWA TR 27

92719

|           |                         |                  |
|-----------|-------------------------|------------------|
| FIELD     | BLINEBRY OIL AND GAS    |                  |
| OPERATOR  | PETRO-LEWIS CORPORATION |                  |
| LEAS      | WARLICK, L. G.          |                  |
| PRC NO    |                         | DIST             |
| COUNTY    | LEA                     | STATE NEW MEXICO |
| NO WELLS  | 1                       | WELL NOS 3       |
| DATE PROD | P-18-21S-37E            |                  |

|        |    |          |        |              |
|--------|----|----------|--------|--------------|
| SOURCE | PI | DWIGHT'S | CLIENT | OTHER        |
|        |    |          | * 1979 | NM Sholistic |

| CURVES | RATE / TIME | P/B / CUM | RATE / CUM |          | CUM / CUM | OTHER |
|--------|-------------|-----------|------------|----------|-----------|-------|
|        |             |           | (W.P.)     | (S.Q.M.) |           |       |
|        |             |           |            |          |           |       |

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| D     |  |  |  |  |  |  |  |  |
| ANNEX |  |  |  |  |  |  |  |  |

|       |      |     |      |     |      |     |      |     |      |
|-------|------|-----|------|-----|------|-----|------|-----|------|
| JOB   | TRNo | JOB | TRNo | JOB | TRNo | JOB | TRNo | JOB | TRNo |
| 9.229 | 21   |     |      |     |      |     |      |     |      |

1-1-77 CUM 19,155.53 DATED 1-1-77 BY P-1

10 000

FIELD DRINKARD  
 OPERATOR PETRO-LEWIS CORPORATION  
 LEASE WARLICK, L. G.  
 LOCATION  
 COUNTY IEA  
 NO. WELLS 1  
 DATE PROD BEGAN  
 WELL NO. 3P-18-21S-37E  
 ACRES  
 LAND SUPPL. WILLIAMSON & AYCOCK, INC.

OIL PRODUCTION - bbl./MONTH

1000

100

10

SWA-T-11

SWA TR 2-1

7777



NEW MEXICO OIL CONSERVATION COMMISSION  
POST OFFICE BOX 2088  
SANTA FE, NEW MEXICO 87501

1972 MAR 6 10:05  
COMMINGLING ORDER PC-435

Company Amerada Hess Corporation  
Address Drawer 817  
City, State, Zip Seminole, Texas 79360  
Attention: Mr. G. F. Dewhurst  
Lease Name: State "DC" Lease  
Description: S/2 NW/4, Sec. 19, T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry Gas Pool and Drinkard, Paddock, and Penrose Skelly Oil Pools

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

\_\_\_\_\_ separately metering the production from each pool prior to commingling

\_\_\_\_\_ separately metering the production from

and determining the production by the subtraction method

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

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

REMARKS:

DONE at Santa Fe, New Mexico, on this 6th day of March 1972.

*A. L. Porter, Jr.*  
A. L. PORTER, JR., Secretary-Director

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

ATTACHMENT NO. 3

Xerox copies mailed 3-11-72  
P.A. Lyons (Texas-New Mexico Pipeline) Midland  
V.C. Willis (Atlantic Richfield) Midland  
B.R. Sessions - Galena Park  
A.J. Troop - Monument



SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

Gentlemen:

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

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

Thank you for your cooperation.

Yours very truly,

Original Signed By

ROY C. WILLIAMSON, JR.

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

- I. Warlick No. 3 - I do ( ) do not ( ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( ) object to  
commingling request for this well.

Signed \_\_\_\_\_

Date \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS LIST  
(Alphabetical Order)

OFFSET OPERATORS\*

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

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

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

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

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

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

Attn Mr. R. C. Anderson,  
Production Manager  
(505) 393-4121

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

(915) 684-4651

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

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

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

Attn Mr. Don Wright  
(405) 848-8551

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

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

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

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

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

ATTACHMENT NO. 4  
PAGE 2 of 2

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

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

*Case 6749*

Dear Sir:

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

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

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

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

Warlick No. 3, 330 feet FEL and 660 feet FSL, Section 18,  
T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry perforations 5,679-5,873 feet and Drinkard per-  
forations 6,630-6,693 feet dual completion - Order No.  
MC 1984. Penrose-Skelly-Grayburg completion through  
perforations 3,723-3,784 feet. First production August  
28, 1979. (Blinebry and Drinkard under bridge plug  
during testing of Penrose-Skelly-Grayburg zone).  
Bottom perforations, lowermost pool - 6,000-6,999 feet  
equals 40 barrels per day allowable total daily produc-  
tion under commingled operations.

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

See Attachment No. 1.

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

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

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

Estimated BHP -

All zones on pump:

|                         |          |
|-------------------------|----------|
| Drinkard                | 50 psig  |
| Blinebry                | 50 psig  |
| Penrose-Skelly-Grayburg | 50 psig. |

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

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

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

Blinebry - sweet crude - 1.4 Barrels per Day - \$28.96  
per barrel current price  
Drinkard - sweet crude - 3.25 Barrels per Day - \$28.96  
per barrel current price  
Penrose-Skelly-Grayburg sour crude - 29 Barrels per Day -  
\$26.28 per barrel current price.

The Division Director  
New Mexico Oil Conservation Commission  
October 22, 1979  
Page 3

The operational problems of a triple completion would be immense due to the fact that all three zones require artificial lift. The Blinebry zone produces enough gas that pumping below a packer would be impossible unless a vent string was added. This would mean that four strings of tubing would be necessary to complete the well as a triple. No attempt will be made to complete the well in this manner.

Although commingling the sour Penrose-Skelly-Grayburg oil with the sweet Blinebry and Drinkard oil would lower the value of the sweet oil, the low volume of the sweet oil in relation to the volume of sour oil makes the total value reduction small and prevents underground waste by allowing low productivity zones to be produced. Precedent is set by Commingling Order DHC-206, dated October 1, 1976, for Sun's Elliot B-1 Lease, NW/4 NW/4, Section 20, T-21-S, R-37-E, Lea County, New Mexico, for the Penrose-Skelly-Grayburg Pool and the Blinebry Oil and Gas Pool.

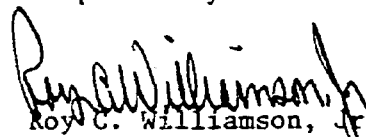
- (i) A statement that all offset operators and, in the case of a well on Federal land, the United States Geological Survey, have been notified in writing of the proposed commingling.

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

COMMENT:

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

Respectfully submitted,



Roy C. Williamson, Jr., P.E.

Consultant for Petro-Lewis Corporation

/djs

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

Petro-Lewis Corporation

Attachment No. 1

(d) Production History (Warlick No. 3)

| Year<br>Month | Blinebry Zone |             |            |               | Drinkard Zone |             |            |               | Penrose-Skelly-Grayburg Zone |             |            |               |
|---------------|---------------|-------------|------------|---------------|---------------|-------------|------------|---------------|------------------------------|-------------|------------|---------------|
|               | BBL<br>OIL    | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL    | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO | BBL<br>OIL                   | BBL<br>WTR. | MCF<br>GAS | GOR<br>MCF/BO |
| 1979          |               |             |            |               |               |             |            |               |                              |             |            |               |
| June          | 46            | 330         | 1,299      | 28.2          | 126           | 240         | 177        | 1.4           | -                            | -           | -          | -             |
| July          | 61            | 372         | 1,426      | 23.4          | 131           | 279         | 195        | 1.5           | -                            | -           | -          | -             |
| August        | 22            | NA          | NA         | -             | 42            | NA          | NA         | -             | 34/D                         | 38/D        | NA         | - *           |
| Sept.         | -----CI-----  |             |            |               | -----CI-----  |             |            |               | 29/D                         | 19/D        | 97/D       | 3.34          |
| Average for)  |               |             |            |               |               |             |            |               |                              |             |            |               |
| June, July )  | 1.4           | 11.5        |            | 25.5          | 3.25          | 8.5         |            | 1.45          |                              |             |            |               |
| & August )    | BO/D          | BW/D        |            | MCF/BO        | BO/D          | BW/D        |            | MCF/BO        |                              |             |            |               |
| Average for)  |               |             |            |               |               |             |            |               | 29                           | 19          | 97         |               |
| September )   |               |             |            |               |               |             |            |               | BO/D                         | BW/D        | MCF/D      | 3.34          |

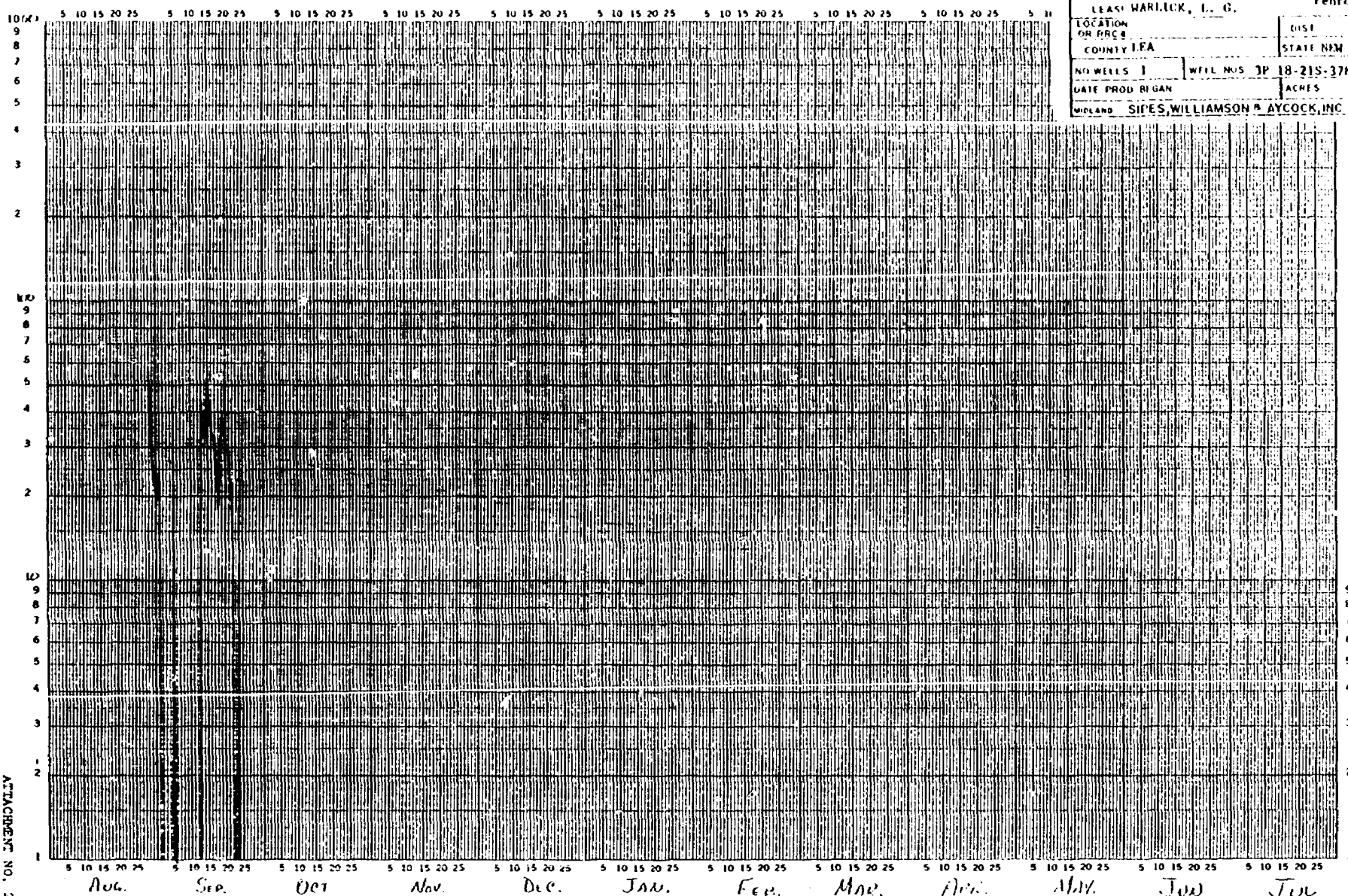
Current production from all zones equals 33.65 barrels of oil per day plus 39.00 barrels of water per day.

\* Penrose-Skelly-Grayburg produced 4 days in August.

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

11th 7.31 97/00 10 22 77

|                                                      |                         |
|------------------------------------------------------|-------------------------|
| FIELD BLINBRY OIL AND GAS                            |                         |
| OPERATOR PETRO-LUIS CORPORATION (Formerly Petro-Log) |                         |
| LEASE WARLUK, L. G.                                  |                         |
| LOCATION OR AREA                                     | COUNTY LEA              |
| STATE NEW MEXICO                                     | WELL NOS. 1P 18-21S-37P |
| DATE PROD. RIGAN                                     | ACRES                   |
| WELAND SIPS, WILLIAMSON & AYCOCK, INC.               |                         |



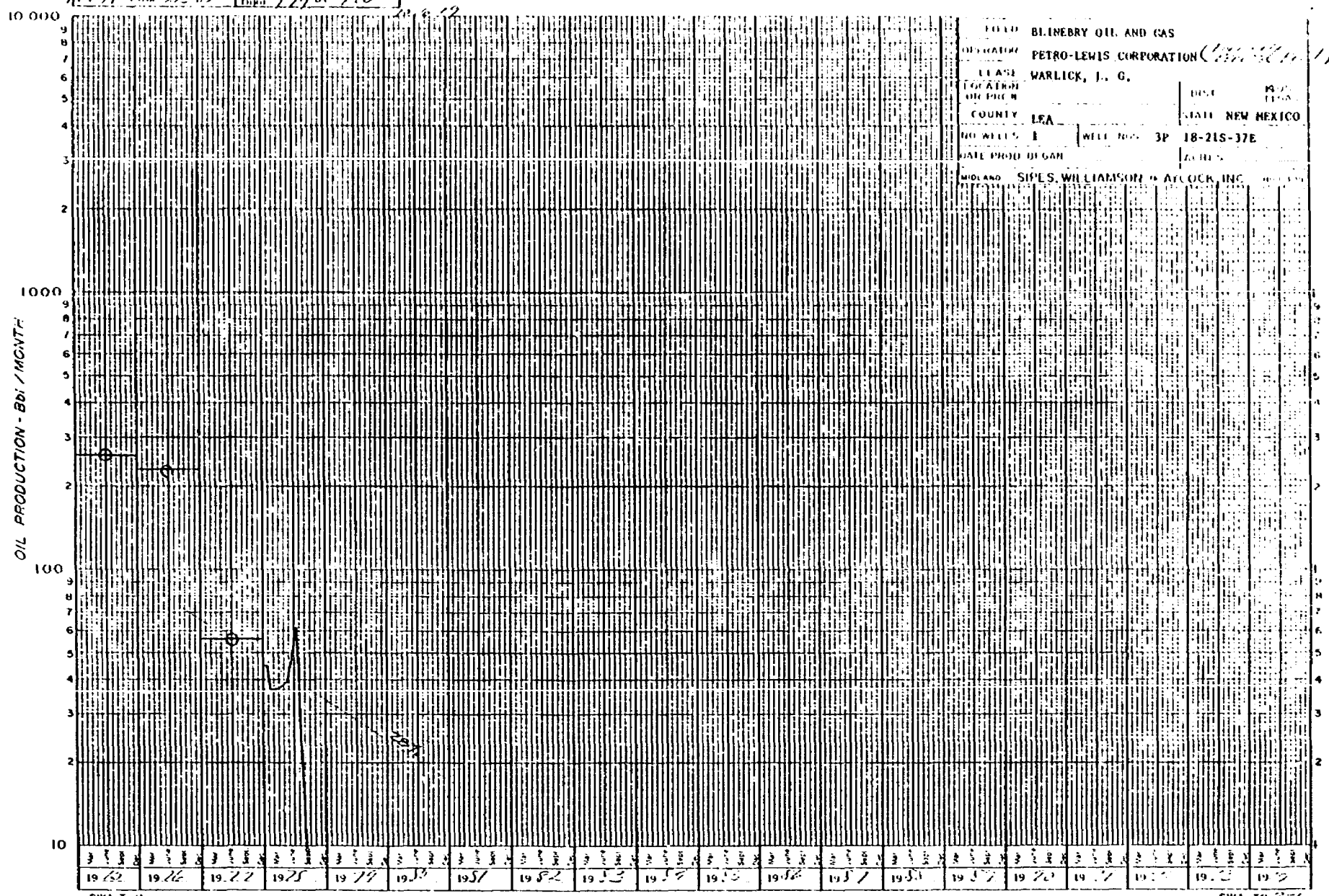
Aug. 1977 Sep. Oct. Nov. Dec. Jan. 1980 Feb. Mar. Apr. May Jun. Jul.

47 6340

W-E 1 YEAR BY DATE 3 LOG CYCLES

ATTACHMENT NO. 2  
PAGE 1 OF 5

121 27 LIMA 502 65 UPDATED 2/27 BY 140



FIELD BLINBRY OIL AND GAS  
 OPERATOR PETRO-LEWIS CORPORATION  
 LEASE WARLICK, J. G.  
 LOCATION OF FIELD  
 COUNTY LEA STATE NEW MEXICO  
 NO. WELLS 1 WELL NO. 3P 18-21S-37E  
 DATE PROD. BEGAN  
 MIDLAND SIPS, WILLIAMSON & ATLOCK, INC.

SWA-T-11

SWA TR 27  
92719



CHMENT NO. 2  
Para 3 of 5

|        |       |     |       |     |       |     |       |     |       |
|--------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| JOB    | TRNo. | JOB | TRNo. | JOB | TRNo. | JOB | TRNo. | JOB | TRNo. |
| 9.2719 | 21    |     |       |     |       |     |       |     |       |





NEW MEXICO OIL CONSERVATION COMMISSION  
POST OFFICE BOX 2088  
SANTA FE, NEW MEXICO 87501

1972 MAR 6 11:05  
COMMINGLING ORDER PC-435

Company Amerada Hess Corporation  
Address Drawer 817  
City, State, Zip Seminole, Texas 79360  
Attention: Mr. G. F. Dewhurst  
Lease Name: State "DC" Lease  
Description: S/2 NW/4, Sec. 19, T-21-S, R-37-E, Lea County, New Mexico

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

Blinebry Gas Pool and Drinkard, Paddock, and Penrose Skelly Oil Pools

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

\_\_\_\_\_ separately metering the production from each pool prior to commingling

\_\_\_\_\_ separately metering the production from

and determining the production by the subtraction method

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

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

REMARKS:

DONE at Santa Fe, New Mexico, on this 6th day of March 1972.

*A. L. Porter, Jr.*  
A. L. PORTER, Jr., Secretary-Director

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

ATTACHMENT NO. 3

Xerox copies mailed 3-11-72  
P.A. Lyons (Texas-New Mexico Pipeline) Midland  
V.C. Willis (Atlantic Richfield) Midland  
B.R. Sessions - Galena Park  
A.J. Troop - Monument

SIPES, WILLIAMSON & AYCOCK, INC.  
CONSULTING ENGINEERS

Midland

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

October 22, 1979

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

TO: OFFSET OPERATORS  
(ADDRESS LIST ATTACHED)

Gentlemen:

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

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

Thank you for your cooperation.

Yours very truly,

Original Signed By

ROY C. WILLIAMSON, JR.

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

- I. Warlick No. 3 - I do ( ) do not ( ) object to  
commingling request for this well.
- II. Warlick "B" No. 1 - I do ( ) do not ( ) object to  
commingling request for this well.

Signed \_\_\_\_\_

Date \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS LIST  
(Alphabetical Order)

OFFSET OPERATORS\*

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

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

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

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

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

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

Attn Mr. R. C. Anderson,  
Production Manager  
(505) 393-4121

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

(915) 684-4651

Sun Oil Company  
P. O. Box 1861  
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Attn Mr. R. K. Beggs,  
District Manager  
(915) 685-0300

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

Attn Mr. Don Wright  
(405) 848-8551

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

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

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

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

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

ATTACHMENT NO. 4  
PAGE 2 of 2

dr/

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. 6749

Order No. R-6210

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 November 28,  
19 79, at Santa Fe, New Mexico, before Examiner Richard L.  
Stamets.

NOW, on this \_\_\_\_\_ day of \_\_\_\_\_, 19 79, the  
Division Director, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully  
advised in the premises,

FINDS:

(1) That due public notice having been given as required  
by law, the Division has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, Petro-Lewis Corporation, is  
the owner and operator of the Warlick Well No. 3,  
located in Unit P of Section 18, Township 21 South,  
Range 37 East, NMPM, Lea County, New Mexico.

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

<sup>Newly completed and</sup> (4) That from the Penrose Skelly zone, the subject well is <sup>moderate rates of</sup> capable of low marginal production ~~only~~.

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

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

<sup>6</sup> (6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

<sup>8</sup> (7) 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.

<sup>9</sup> (8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobbs district office of the Division any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production should be allocated to the Penrose Skelly zone, ~~and~~ \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production to the Blinebry zone, \_\_\_\_\_ percent of the commingled \_\_\_\_\_ production to the Drinkard zone.

(ALTERNATE)

<sup>10</sup> (9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Hobbs district office of the Division and determine an allocation formula for each of the production zones.



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 Warlick Well No. 3, located in Unit P of Section 18, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Hobbs district office of the Division and determine an allocation formula for the allocation of production to each zone in ~~each~~ of the subject wells.

(ALTERNATE)

(2) That \_\_\_\_\_ percent of the commingled production shall be allocated to the Penrose Skelly zone, ~~and~~ \_\_\_\_\_ percent of the commingled production shall be allocated to the Blinebry zone, and \_\_\_\_\_ percent of the commingled 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.

(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.