

CASE 6270: ENSERCH EXPLORATION, INC.
FOR POOL CREATION AND SPECIAL POOL
RULES, ROOSEVELT COUNTY, NEW MEXICO

Continued to

July 25

CASE NO.

C270

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
25 July 1979

EXAMINER HEARING

IN THE MATTER OF:

In the matter of Case 6270 being reopened)
pursuant to the provisions of Order No.) CASE
R-5771 which order created the South) 6270
Peterson-Fusselman Pool, Roosevelt County,)
New Mexico.)

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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I N D E X

THOMAS E. BROWN

Direct Examination by Mr. Carr

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LEONARD KERSH

Direct Examination by Mr. Carr

13

Cross Examination by Mr. Nutter

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THOMAS E. BROWN RECALLED

Questions by Mr. Benischek

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WILLIAM J. MUELLER

Direct Examination by Mr. Kellahin

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Questions by Mr. Benischek

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EXHIBITS

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1 MR. NUTTER: The hearing will come to order
2 and we'll hear first this afternoon Case Number 6270.

3 MR. PADILLA: In the matter of Case 6270
4 being reopened pursuant to the provisions of Order No.
5 R-5771, which order created the South Peterson-Fusselman
6 Pool, Roosevelt County, New Mexico, and provided for 30-acre
7 spacing.

8 MR. CARR: May it please the Examiner,
9 I'm William F. Carr, Campbell and Black, P. A., appearing
10 on behalf of Enserch Exploration, Inc.

11 I have two witnesses.

12 MR. NUTTER: Call for other appearances.

13 MR. KELLAHIN: Tom Kellahin of Kellahin and
14 Kellahin, Santa Fe, New Mexico, appearing on behalf of
15 Phillips Petroleum Company, and I have one witness.

16 MR. NUTTER: Are there other appearances?

17 Mr. Carr?

18 MR. CARR: I'd call Mr. Tom Brown.

19
20 (Witnesses sworn.)
21
22
23
24
25

THOMAS E. BROWN

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

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your name and place of residence?

A Thomas E. Brown. I live in Midland, Texas.

Q Mr. Brown, by whom are you employed and in what capacity?

A I'm employed by Enserch Exploration, Incorporated, as a Senior Petroleum Geologist.

Q Have you previously testified before this Commission and had your credentials accepted and made a matter of record?

A No.

Q Would you briefly summarize for the Examiner your educational background and your work experience?

A I received a Bachelor of Science and a Master of Science degree from Baylor University in geology.

I've worked eleven years for four different companies as a petroleum geologist.

Q Are you familiar with the subject matter

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1 of this case?

2 A. Yes.

3 MR. CARR: Are the witness' qualifications
4 acceptable?

5 MR. NUTTER: Yes, they are.

6 Q (Mr. Carr continuing.) Mr. Brown, will
7 you refer to what has been marked for identification as
8 Exhibit Number One, and explain to the Examiner what it is
9 and what it shows?

10 A. Exhibit Number One is a lease plat. The
11 acreage colored yellow on the lease plat is acreage that
12 is joint ownership acreage, the Enserch and R. L. Burns
13 Company, or assigned by Phillips Petroleum to Enserch.

14 It shows the location of all the producing
15 wells in South Peterson Field.

16 Q And where is the Peterson Field in respect
17 to the South Peterson?

18 A It's north about two miles. You can just
19 barely see four of the producing wells at the very top part
20 of the plat.

21 Q And when we're talking about the South
22 Peterson-Fusselman, we're talking about the Fusselman wells
23 in Sections 30 and 31, is that correct?

24 A That's correct.

25 Q And are these wells separated from the

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1 Peterson-Penn by dry holes?

2 A. Yes.

3 Q. And where are they located?

4 A. One's in Section 29 and that's the Amoco
5 Peterson 1-B. In Section 30 there's a well that was a dry
6 hole but it did not penetrate the Fusselman. And they
7 have the other producers, as you can see, in Section 19 and
8 Section 20, produced out of the Penn.

9 Q. Are there --

10 A. Did not produce out of Fusselman.

11 Q. Are there other Fusselman pools in the area?

12 A. Yes. I don't know the section number. It
13 would be in the section immediately north of Section 19.
14 There is a Fusselman producer there, some two miles north
15 of the most northernmost producer which -- in South Peterson
16 Field, which is the Lamberth No. 7 Well in the southeast
17 corner of Section 30.

18 Q. Now, Mr. Brown, would you refer to what
19 has been marked for identification as Exhibit Number Two,
20 and explain to the Examiner what it is and what it shows?

21 A. There are two, actually, exhibits in one.
22 In this corner, the righthand corner, there's a map prepared
23 on the top of the Fusselman. On the cross section that's
24 this point right here, following this line, labeled top of
25 the Fusselman dolomite.

1 This is a structure map and really all
2 this is for, it shows all the producers on here, but the
3 cross section runs from the most northerly Fusselman well
4 to the most southerly producing well in the field, which
5 is not a Fusselman well.

6 This is mainly just a structure reference
7 point. It shows that it's not a closed structure as such.
8 The cross section goes from north, the No. 7 Well, which
9 is the only well present in Section 30, and it goes all the
10 way down to the Lamberth No. 4 Well, which is in the south-
11 east corner of Section 31.

12 What I wanted to show on this is that the
13 Fusselman -- incidentally, the little fluorescent dots you
14 see on here shows where these wells are presently producing;
15 it's the productive interval.

16 What I wanted to show with this section is
17 that the Fusselman dolomite for the area of the South
18 Peterson Field is continuous until it gets up on this granite
19 high. From there it's been scrubbed off where you've got
20 this pre-Penn unconformity.

21 MR. NUTTER: Okay, the discovery well for
22 the pool was the Lamberth No. 1.

23 A The No. 1 was the discovery.

24 MR. NUTTER: In K of 31. That's the second
25 well from the right on the cross section.

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1 A That's this one, that's correct.

2 It presently is the highest well at the top
3 of the Fusselman. Actually, the Fusselman here is not a
4 Fusselman top but -- and the No. 4 has a higher structural
5 point, but it's in the lower part of the Fusselman here.
6 It's -- actually the top of the Fusselman in the well is
7 not the top of the Fusselman in the field.

8 Q Mr. Brown, looking at the structure map,
9 the area colored in blue is what?

10 A That's where you expect anywhere within
11 this area, in fact, the Enserch A there in Section 32,
12 which should have been about straight in from this No. 1,
13 eastward almost nearly a full mile, encountered Montoya,
14 which is underneath the Fusselman dolomite. The Fusselman
15 dolomite was absent at that point.

16 So what I'm saying, within the area of
17 the blue that you see on here you would expect the well
18 drilled at those points to miss the Fusselman entirely.
19 It's gone; it's absent; missing.

20 The area in red, you would go into granite.

21 MR. NUTTER: At what depth?

22 A At the map depth. At the Penn level you
23 wouldn't expect, only a few places. It's much smaller.

24 Q And is it your testimony that from this
25 exhibit the Fusselman pay is continuous throughout the --

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1 this area?

2 A. That is correct.

3 Q. Now, is the field well defined at this
4 time? The limits of the field?

5 A. Not entirely.

6 Q. And where is the additional development
7 going on in this area?

8 A. Right now the only well that's presently
9 drilling is the Enserch No. 5 Lambirth in Section 1, which
10 is in the next township down from the producers, so it's
11 south of any production at present, and it's -- it's
12 drilling in the Wolfcamp at present.

13 MR. NUTTER: Well, Mr. Brown, on your Ex-
14 hibit Number One, how many of these wells in Sections 30
15 and 31 and so forth are completed in this South Peterson-
16 Fusselman Pool?

17 A. How many wells at present?

18 MR. NUTTER: Yeah. Which of these wells
19 on this exhibit are Fusselman wells?

20 A. All right. Starting at the north, the
21 No. 7 Lambirth.

22 MR. NUTTER: Okay.

23 A. The No. 6 Lambirth.

24 MR. NUTTER: That's in the northwest
northwest of 31?

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1 A. That's correct.
2 South from that point, the Phillips 2-A
3 Lambirth.

4 MR. NUTTER: That's a Fusselman well?

5 A. That's a Fusselman well, also.
6 The Enserch No. 1 Lambirth, discovery well.
7 And then east is the Phillips 1-A Lambirth.

8 So that would be one, two, three, four,
9 five at the present.

10 MR. NUTTER: And the two wells that are
11 there in the south half south half of 31 are neither one
12 Fusselman wells?

13 A. Phillips, of course they can testify on
14 this more, my information is a little bit delayed on their
15 on their well, but I understand they're attempting a com-
16 pletion in the Fusselman in the 3-A.

17 The No. 4, the pay section was missing,
18 and it's a Penn well.

19 MR. NUTTER: I see. And the No. 5 down in
20 Section 1, is it?

21 A. Section 1, that's correct.

22 MR. NUTTER: Is projected as a Fusselman
23 well, and --

24 A. That's correct.

25 MR. NUTTER: -- and is currently drilling.

1 Q (Mr. Carr continuing.) Now, Mr. Brown,
2 these logs show porosity, I understand.

3 A Yes. These are compensated neutron for-
4 mation density logs and they are porosity logs, and they
5 show the same porosity section that's been completed in
6 these Fusselman wells, although they don't have equal poro-
7 sity or permeability.

8 Q Based on this data alone could you assume
9 that these wells could drain 80 acres?

10 A Just on what we have here, yes.

11 MR. CARR: I have nothing further on
12 direct of Mr. Brown.

13 MR. NUTTER: Are there any questions of
14 Mr. Brown? He may be excused.

15 MR. CARR: Mr. Nutter, I have one more
16 question of Mr. Brown.

17 MR. NUTTER: Okay.

18 Q (Mr. Carr continuing.) Mr. Brown, were
19 Exhibits One and Two prepared by you or under your direction
20 and supervision?

21 A Yes.

22 MR. CARR: At this time I would offer En-
23 serch Exhibits One and Two.

24 MR. NUTTER: Enserch Exhibits One and Two
25 will be admitted in evidence.

1 MR. CARR: I would now call Mr. Leonard
2 Kersh.

3
4 LEONARD KERSH
5 being called as a witness and having been duly sworn upon
6 his oath, testified as follows, to-wit:

7
8 DIRECT EXAMINATION

9 BY MR. CARR:

10 Q Will you state your name and place of
11 residence?

12 A Leonard Kersh, Midland, Texas.

13 Q Mr. Kersh, by whom are you employed and
14 in what capacity?

15 A I'm employed by Enserch Exploration, Inc.,
16 as District Petroleum Engineer.

17 Q Have you previously testified before this
18 Commission, had your credentials accepted and made a matter
19 of record?

20 A No, I haven't.

21 Q Will you briefly summarize for the Examiner
22 your educational background and your work experience?

23 A Okay. I graduated from New Mexico Tech
24 in December, 1971, with a BS degree in petroleum engineering.
25 In January, 1972 I started to work for Shell Oil Company in

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1 Midland, Texas, with whom I was employed for five and a half
2 years; a year and a half as a well site evaluation engineer,
3 three and a half years as a reservoir engineer, and a half
4 a year as a production engineer.

5 I joined Enserch in May of 1977, and since
6 that time I've worked approximately one year as a Senior
7 Petroleum Engineer, Gulf Coast District, and as a District
8 Petroleum Engineer in the Mississippi District and in the
9 West Texas District.

10 Q Are you familiar with the subject matter
11 of this case?

12 A Yes.

13 MR. CARR: Are the witness' qualifications
14 acceptable?

15 MR. NUTTER: Yes, they are. How do you
16 spell your last name, Mr. Kersh?

17 A K-E-R-S-H.

18 Q Mr. Kersh, will you refer to what has been
19 marked for identification as Exhibit Number Three and re-
20 view it for the Examiner?

21 A Exhibit Number Three is entitled Individual
22 Well Completion and Production Data Sheets.

23 What we've done is gone through and taken
24 all the Fusselman -- well, the South Peterson-Fusselman
25 Pool tests, the wells that have tested to South Peterson-

1 Fusselman Pool at this time, and just summarize the perti-
2 nent data, such as completion dates, and so forth, and pre-
3 sented a graphical display of the production history of that
4 well.

5 The first well is the Enserch Exploration
6 Lambirth No. 1, the discovery well for the field. The well
7 was originally completed June 4th, 1978. Perforated inter-
8 val, 7,808 feet through 52. The well initially potentialed
9 638 barrels of oil, 703 Mcf gas, zero barrels of water,
10 with a flowing tubing pressure of 585 psi. The original
11 bottom hole pressure measured June 25th, 1978, was 2781
12 pounds at a depth of 7,830 feet, mid-perforations. The
13 current bottom hole pressure, measured July 18th, 1979,
14 indicated a reservoir pressure of 2703 psi at mid-perfora-
15 tions of 7,830 feet.

16 The cumulative production as of July 16th,
17 '79, was 91,050 stock tank barrels, which in turn indicated
18 the well has produced at the rate of approximately 1,167
19 stock tank barrels per one pound pressure drop, per psi.

20 MR. NUTTER: What was that figure again?

21 A. 1,167 stock tank barrels per psi.

22 The next well in question is the Enserch
23 Exploration Lambirth No. 3. This well was completed July
24 20th, 1978. Perforated interval was 7,840 feet to 49 feet.
25 It was acidized with 1500 gallons of acid. In initial test

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1 the well only recovered 81 barrels of oil plus 56 barrels
2 of water before being placed on pump, July 27th, '78.

3 The final pump rate, August 7th, 1978, was
4 9 barrels of oil per day plus 11 barrels of water, plus
5 45 Mcf gas.

6 Due to the low productivity of the well,
7 the well was recompleted in the Pennsylvanian zone.

8 MR. NUTTER: Is that the well that's north-
9 east of the discovery well?

10 MR. BROWN: Yes, it is.

11 MR. NUTTER: One diagonal location to the
12 northeast?

13 MR. BROWN: Right.

14 MR. NUTTER: Okay. Do you know how much
15 it made in the Fusselman before it was recompleted in the
16 Penn?

17 A. Yes, sir, it made 1,096 stock tank barrels.

18 MR. NUTTER: Go ahead.

19 A. The next well is the Enserch Exploration
20 Lambirth No. 6 Well. This well was originally completed
21 in, well, March 20th, 1979; however, the well had to be
22 squeezed four times in order to shut off water production
23 caused by a poor primary cement job.

24 The well was finally potentialed June 3rd,
25 1979, at the rate of 330 barrels of oil per day, 511 Mcf

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1 per day, plus 58 barrels of water.

2 Now the flowing tubing pressure at that
3 time was 175 psi. The original bottom hole pressure was
4 estimated to be 2794 psi at 7,836 feet mid-perforations.

5 The current bottom hole pressure measured
6 July 18th, '79 was 2,703 psi at 7,836 feet. The cumulative
7 production as of July 19th, 1979 was 7924 stock tank bar-
8 rels.

9 The next well is the Enserch Exploration
10 Lambirth No. 7. The well was completed June 6th, 1979.
11 The perforated interval was 7826 feet through 29.5 feet.

12 The well was initially place on pump and
13 it was potentialed June 16th, '79 at the rate of 117 bar-
14 rels of oil, 138 Mcf gas, 87 barrels of water. The origi-
15 nal bottom hole pressure was estimated to be 2783 psi at
16 7826 feet from a drill stem test conducted April 25th, 1979.

17 Current production tests as of July 19th,
18 1979 was 54 barrels of oil per day plus 22 barrels of
19 water. Cumulative production the same date, 3311 stock
20 tank barrels.

21 The next well in question is the Phillips
22 Petroleum Company Lambirth A-No. 1 Well.

23 The well was completed January 10th, 1979,
24 and the perforated interval was 7830 feet to 38 feet, and
25 also 7852 feet through 58 feet. The date of potential

1 was January 18, '79. The rate was 332 barrels of oil, 306
2 Mcf gas, zero barrels of water. The flowing tubing pres-
3 sure of 285 psi.

4 The cumulative production as of June 1st,
5 1979 was 22,234 stock tank barrels.

6 MR. NUTTER: Is this the well that's the
7 direct offset to the discovery well on the east?

8 A. Yes. Yes, it is.

9 The next well is the Phillips Petroleum
10 Company Lambirth A No. 2 Well. The well was completed
11 April 9th, 1979. The perforated interval is 7832 feet
12 through 38 feet. It was potentialed April 19th, 1979, at
13 the rate of 410 barrels of oil, 685 Mcf gas, with a trace
14 of water. The flowing tubing pressure was 675 psi. The
15 current bottom hole pressure as of July 18th, '79 was 2697
16 psi at 7835 feet mid-perforations.

17 The current production test July 16th, '79,
18 352 barrels of oil plus 313 Mcf gas. The flowing tubing
19 pressure, 530 pounds. Cumulative production as of June
20 1st, '79 was 9843 pounds.

21 MR. NUTTER: Now is that the direct off-
22 set to the north of the discovery well?

23 A. Right. It was the north offset.

24 The next well is the Phillips Petroleum
25 Company Lambirth A No. 3. This well was TD'ed in June

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1 and as to date I think completion is still in progress.

2 So we don't have any additional informa-
3 tion on it, insofar as production tests.

4 The last graph of this exhibit is the
5 production history for the South Peterson-Fusselman Pool,
6 indicating the monthly production -- monthly oil production
7 versus time, and the producing well count versus time;
8 as shown from the graph as of June 1st, 1979 the cumulative
9 production for the South Peterson-Fusselman Pool was
10 112,402 stock tank barrels.

11 Q Mr. Kersh, will you now refer to what has
12 been marked as Exhibit Number Four and review this for the
13 Examiner?

14 A Exhibit Number Four is a well data sheet
15 on which were presented all the pertinent petrophysical
16 data on all the Fusselman completions, such as the Enserch
17 Lambirth No. 1, No. 6, and NO. 7 Wells, and the Phillips
18 Lambirth A No. 1, No. 2, and No. 3 Wells.

19 Shown like the Enserch Lambirth No. 1
20 Well, the discovery well, got a net pay thickness of 44
21 feet; average porosity of 12.5 percent; average water sat-
22 uration of 21 percent; effect of permeability to oil was
23 559 milledarcies from buildup; and the productivity index
24 was 31.9 barrels per day per psi.

25 Enserch Lambirth No. 6, the net pay

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1 thickness of 28 feet; an average porosity of 16 percent;
2 an average water saturation of 26 percent; the productivity
3 index .2 barrels per day per psi.

4 The Enserch Lambirth No. 7, the only
5 thing we're showing here is the net pay thickness of 3.5
6 feet. Since we had hole problems on this, we had lost
7 circulation problems and the entire Fusselman section was
8 not penetrated: The well was prematurely TD'ed. So only
9 the top of the Fusselman was penetrated, due to hole condi-
10 tions, and open hole logs over the Fusselman were not ob-
11 tained because of insufficient rat holes.

12 MR. NUTTER: Was that the well on your
13 other exhibit -- no, it was the No. 6 that you said you
14 had trouble and had to re-cement it --

15 A. Right.

16 MR. NUTTER: -- in order to shut the water
17 off.

18 A. Right.

19 The next well is the Phillips Lambirth A
20 No. 1 Well, had a net pay thickness of 15 feet; average
21 porosity of 13.5 percent; average water saturation of 28
22 percent, with a productivity index of .266 barrels per day
23 per psi.

24 The Phillips Lambirth A No. 2 Well had
25 43 feet of pay; average porosity of 10.9 percent; average

1 water saturation of 18 percent; and a productivity index
2 of 35 barrels per day per psi.

3 And the Phillips Lambirth A No. 3 Well
4 had a net pay thickness of 18 feet; average porosity of
5 15.2 percent; and average water saturation of 20 percent.

6 These are all based on log calculations,
7 all this petrophysical data.

8 Q Mr. Kersh, now refer to Exhibit Number
9 Five and explain that to the Examiner.

10 A Exhibit Number Five is an extended draw-
11 down test and/or reservoir limits test on the Enserch Lam-
12 birth No. 1 Well, conducted June 19th through 22nd, 1978.

13 Our main concern here was that the Enserch
14 Lambirth No. 1 Well was a discovery well of the field; our
15 main concern was to try to determine the drainage area or
16 the reservoir size, the size of the reservoir.

17 Okay, so what we did, was we conducted
18 approximately a 66-hour extended drawdown, or reservoir
19 limits test, on the Enserch Lambirth No. 1, using a highly
20 sensitive gauge, a Hewlett-Packard pressure gauge,
21 and shown at semi-steady state. This would be on the con-
22 tinuation of the drawdown test, at semi-steady state.
23 ΔP_{DT} , which is equal to beta, is equal to .15 psi per hour.
24 And employing these -- this slope into our reservoir limits
25 test calculations, we calculated a contributing pore volume

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1 of 17.76 million reservoir barrels, which comes out to be
2 an equivalent drainage area of approximately 830 acres.

3 Q Now refer to what has been marked for
4 identification as Exhibit Number Six and review this for
5 the Examiner.

6 A Exhibit Number Six is titled Minimum
7 Permeability Required to Drain 80 Acres.

8 From our Enserch Lambirth No. 1, where we
9 had good buildup data, and so forth, we had a permeability
10 value of 559 millidarcies; however, the majority of the
11 Fusselman completions, we did not have pressure buildup
12 data -- well, pressure buildup data was not available.

13 So what we decided to do was use a pro-
14 ductivity index data, which was -- which we had on all the
15 wells, in order to determine our drainage area.

16 So what we decided to do was, we said,
17 okay, the well with the lowest -- if we could prove that
18 the well with the lowest productivity index could drain
19 80 acres, then we're assured that the rest of the wells
20 can drain 80 acres.

21 As it turned out, this turned out to be
22 the Lambirth No. 6 Well, which had a productivity index
23 of .2. So employing this into Darcy's Law, and assuming
24 80 acres, we came up with a permeability requirement of
25 four millidarcies would be required to drain 80 acres.

1 Now our next objective was to determine if
2 the permeability in the Lambirth 6 was greater than equal
3 to four millidarcies. Unfortunately, however, the initial
4 buildup in the Lambirth No. 6, we experienced phase separ-
5 ation during initial buildup.

6 So what we decided to do, we made some
7 assumptions here, was assume that the initial reservoir
8 pressure in the Lambirth No. 6 was the same as in the En-
9 serch Lambirth No. 1; however correcting to mid-perforations
10 we were looking at 2794 psi rather than 2781 psi.

11 So we have to turn to the next exhibit.
12 Well, this is a continuation.

13 Q Right.

14 A Okay. This is the buildup --

15 MR. NUTTER: Is that this exhibit here,
16 Mr. Kersh?

17 A Yes, yes, it is. We're showing bottom
18 hole pressure versus T plus Delta-T over Delta-T.

19 As shown, we're showing phase separation
20 here, and we're quite assured that it is phase separation
21 in the two of them, because the well was producing at a
22 rate of 147 barrels of oil plus 93 barrels of water, with
23 a GOR 2041 at the time we shut it in.

24 So after everything, everything was still
25 trying to reach equilibrium in the tubing, and so we're quite

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1 sure that it is phase separation rather than some other type
2 of interference.

3 So what I did was, I said, okay, my P*,
4 my initial pressure, will be 2794 psi. Okay, the maximum
5 pressure reached during the buildup test was 2760 psi and
6 after which we start experiencing phase separation. This
7 was a 72-hour test; however, at the end of the 72 hours the
8 pressure had started to come back up again.

9 So I drew my straight line portion of my
10 buildup curve through my highest point, my 2760 psi point,
11 to my P* point at 2794 psi, and in doing so I came up with
12 a slope of 18 psi per cycle. And employing this data into
13 our standard equation, we came up with the permeability
14 value of 26.4 millidarcies, which indicates that the Lam-
15 birth No. 6 is well capable of draining 80 acres.

16 Q. Mr. Kersh, would you summarize the data
17 that you have presented?

18 A. In summary, for the South Peterson-Fusselman
19 Pool, we could say that with the current data we have
20 available now, the average porosity is approximately 13 per-
21 cent. The average water saturation is around 22 percent.
22 The average net pay thickness, approximately 30 feet. The
23 average permeability we don't know. It ranges from 559
24 millidarcies to approximately 26 millidarcies.

25 The original reservoir pressure and temper-

1 ature, 2781 psi, 155 degrees.

2 And at present the reservoir drive mechanism,
3 it is believed that the reservoir drive mechanism is mainly
4 solution gas drive, possibly water drive. This would pro-
5 bably be a partial water drive, and this is based on the
6 fact that after producing 91,000 barrels out of our Enserch
7 Lambirth No. 1, we're looking at a pressure differential
8 of 78 pounds; however, it could be a very large reservoir,
9 as indicated by the reservoir limits test.

10 So, in summary, based on all this informa-
11 tion, it is recommended that the South Peterson-Fusselman
12 Pool be developed on 80-acre spacing with the wells being
13 located within 150 feet of a quarter quarter section in
14 order to effectively and efficiently drain said pool, and
15 thereby protect the co-equal and correlative rights of
16 all interested parties.

17 Q And it is your recommendation that the
18 wells be located within 150 feet of the center of any
19 quarter quarter section?

20 A Yes.

21 Q And these permanent poles would encompass
22 all of Section 31, which is now the limits of the pool?

23 A Yes.

24 Q Mr. Kersh, in your opinion would granting
25 this application avoid the drilling of unnecessary wells,

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1 and also reduce risk which would result from the drilling
2 of an excessive number of wells?

3 A. Yes.

4 Q. Do you believe granting this application
5 would be in the interests of conservation, the protection
6 of correlative rights, and prevention of waste?

7 A. Yes.

8 Q. Were Exhibits Three through Six prepared
9 by you?

10 A. Yes.

11 MR. CARR: At this time, Mr. Examiner, we
12 would offer into evidence Enserch Exploration, Inc., Ex-
13 hibits Three through Six, and I'd like to note so there's
14 no confusion, that Exhibit Number Five consists of three
15 pages; Exhibit Number Six consists of two pages, which is
16 a table and a graph.

17 MR. NUTTER: And Five was three pages?

18 MR. CARR: Yes, sir.

19 MR. NUTTER: Okay, it's two graphs.

20 MR. CARR: Two graphs and a --

21 MR. NUTTER: And a calculation.

22 MR. CARR: Calculation, yes, sir.

23 A. Yeah, it was the drawdown reservoir limits
24 test.
25

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Kersh, it would appear just by observation of your Exhibit Number Four and the basic data on the wells, that the Enserch Lambirth No. 1 and the Phillips Lambirth A No. 2 are the best wells insofar as the productivity index is concerned, yet those two wells are ones that have the least amount of porosity of all of the wells.

We've also got an effective permeability calculated to oil here of 559 millidarcies. On one of your other calculations you determined that you'd need 4 millidarcies, I believe it was, to drain 80 acres.

A Yes.

Q And then the calculation goes on to show that the effective permeability of the Lambirth No. 6 is 26.4, from your Exhibit Number Six.

A Yes.

Q How do you account for the low PI on this No. 6 when it has effective permeability of 26.4 millidarcies?

A I think the low PI is probably accounted for the water production during that test. See, like we were producing 147 barrels of oil plus 93 barrels of water. If we went on total fluid productivity index, it would pro-

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1 bably be higher, but I'm just going on strictly oil.

2 Q Well now, as you mentioned, the large
3 amount of production from the No. 1 compared to the small
4 drop in pressure would indicate that that's probably being
5 assisted by a partial water drive in that.

6 A It may be or --

7 Q To hold that pressure up.

8 A Yes.

9 Q Or, as you speculated, possibly a very
10 large reservoir.

11 A Right. We're in the process now of con-
12 ducting material balance calculations too.

13 Q Did any of these wells make water from the
14 very beginning?

15 A Yes, sir. I guess you'll notice on the
16 Lambirth No. 7, that was placed on pump initially. We had
17 to put a pump on that well initially.

18 Q And No. 6 made water on its original test.

19 A Right, it did.

20 Q Although the Lambirth No. 1 was water-
21 free production?

22 A Yes.

23 Q The other outstanding well, as far as
24 production is concerned, appears to be the Phillips No. 2-A.

25 A Uh-huh.

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1 Q Now, did it make water on its original
2 completion?

3 A I think it just made a trace.

4 Q A trace of water?

5 A Right. I don't think it's making any now.
6 Just a trace; it could have been just condensation.

7 Q Now, we have this anomolous break in this
8 decline curve on the Lambirth No. 1.

9 A Uh-huh.

10 Q At 1000 minutes.

11 A Right.

12 Q What do you attribute that break on the
13 reservoir limits test?

14 A I don't know. They had a lot of noise
15 interference during the test; however, as you'll probably
16 notice, you're only -- you're not looking at one pound of
17 pressure differential, although it did change the slope.
18 I mean it popped back up. You're only -- you're not looking
19 at one pound.

20 Q Kept the same slope but it just jumped
21 up a little.

22 A Right, uh-huh.

23 Q And you don't think, since that's a magni-
24 tude of about a pound, that that's any serious flaw in the
25 test?

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1 A. No, sir.

2 Q. Okay.

3 MR. NUTTER: Are there any further ques-
4 tions of this witness?

5 MR. CARR: No further questions.

6 MR. NUTTER: He may be excused.

7 MR. CARR: That concludes the case of
8 Enserch.

9 MR. NUTTER: Mr. Kellahin?

10 MR. KELLAHIN: Yes, sir, I have one wit-
11 ness.

12 MR. NUTTER: The witness may be excused.

13 MR. BENISCHEK: Mr. Examiner, may I ask
14 a question after the balance of this hearing of Enserch?

15 MR. NUTTER: Who are you going to direct
16 the question to, Mr. Benischek?

17 MR. BENISCHEK: Mr. Brown.

18 MR. NUTTER: Why don't you ask it now
19 while he's on the stand?

20 MR. CARR: He said Mr. Brown.

21 MR. NUTTER: Mr. Brown, oh, Mr. Brown.

22 Well, we usually don't recall the witnesses. Mr. Brown,
23 would you resume the stand? And answer a question or two,
24 please?
25

THOMAS E. BROWN

resuming the stand, testified as follows, to-wit:

QUESTIONS BY MR. BENISCHEK:

Q. This is a carbonate reservoir, I assume.

A. Yes.

Q. Fractured carbonate.

A. I don't know that.

MR. KELLAHIN: May the record reflect who's asking the questions?

MR. CARR: Yes, would you identify yourself, please?

MR. BENISCHEK: I'm Benischek, an independent petroleum engineer, who is a major royalty owner in the area, and I have been in these hearings before in connection with the Peterson Field.

Q. Now, according to your Mr. Wilcox, during previous testimony, the Lambirth No. 6 would have been in the oil -- I mean the water zone, the oil/water contact was on that line.

Now, I can't see from here the oil/water contact, which is in Section 31 and that's what you're confining your discussion to. If it has moved or if you have a new line on this map, I don't know whether you do or not.

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1 But what I'm leading up to is, assuming
2 it must have moved, as far as your drawing is concerned,
3 or as far as your sub-surface is concerned, because you
4 have a good producing 330-barrel well in No. 6, which is
5 on Wilcox's water line.

6 So something doesn't add up, I mean, it's
7 not -- it's not concise. The information doesn't agree.

8 Okay. Now, you also said that the well
9 to the north out of Section 31, Amoco's well, is dry,
10 (inaudible), which did have a lot of oil on drillstem test.
11 Okay, but just to the north of that, you were asked a ques-
12 tion whether or not there was any Fusselman, and you kind
13 of hazed over that.

14 There is a Fusselman well in the carbonate
15 in the Peterson Field on 40 acres per well, and Amoco says
16 that it takes 40 acres per well to drain and be economic.

17 I wonder if you had any commentary on
18 that line.

19 A Well, of course, I can't make any commentary
20 on Fred Wilcox's work. He was an engineer and I'm a geolo-
21 gist, and I've had nothing to do with his work, so I don't
22 want to get into a position of making a comment on his work.

23 To my knowledge we haven't established a
24 firm water line in the field at present. Now, the No. 6
25 where we established water when we drilled it, was obviously

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1 below the top of the Fusselman.

2 As to the other Fusselman producer up
3 there, what I indicated, that Fusselman producer was off
4 that plat, but the four producing wells in there did not
5 produce in the Fusselman, that are shown on the land plat,
6 which is the in-issue exhibit we had, and so there are
7 wells that were drilled to that depth that aren't producing,
8 and that one lone Fusselman producer is off the scope of
9 that map and some two miles north of th most northerly
10 Fusselman producer in the South Peterson Field.

11 And there are wells in between that did
12 not produce from the Fusselman.

13 MR. NUTTER: I believe, Mr. Brown, that
14 you stated that the Fusselman well in the north end there
15 was in the section to the north of Section 19.

16 A That's correct.

17 MR. NUTTER: Which would be Section 18 up
18 there, I believe.

19 MR. BENISCHEK: It's in Section 18.

20 A It's clear off the map so I didn't have
21 a section number on it.

22 Q But it is a carbonate, the same as what
23 you have.

24 A Oh, that's correct.

25 Q Fractured.

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1 A. I don't know that it's fractured. You
2 might talk to the engineers.

3 Q. In your Section 31.

4 A. Yeah, I don't know that it's fractured.
5 I don't have any evidence of such, but Leonard might could
6 tell you due to the testing if it is or not.

7 Q. Previous testimony indicated that the for-
8 mations up there were fractured.

9 You said that the limits of the field had
10 not been defined, and then Mr. Kersh made a statement based
11 I don't recall if it was drawdown data or -- I've forgotten
12 who he referenced, but he said the limits of the field
13 might extend over about 830 acres, but you said it wasn't
14 defined at this time.

15 A. That's correct. We're still drilling
16 extensions to the field. I hope it's not defined yet.

17 Q. Okay.

18 MR. BENISCHEK: Thank you, Mr. Examiner.

19 MR. NUTTER: All right.

20 Are there any other questions of Mr. Brown?

21 He may be excused.

22 MR. KELLAHIN: I'd like to call Mr.
23 Mueller.
24
25

1 WILLIAM J. MUELLER

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

4
5 DIRECT EXAMINATION

6 BY MR. KELLAHIN:

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

9 A William J. Mueller. I'm employed by
10 Phillips Petroleum Company as a Reservoir Engineering Super-
11 visor in the Odessa area, and my responsibilities encompass
12 the Hobbs District of southeastern New Mexico.

13 Q Mr. Mueller, have you previously testified
14 before the Oil Conservation Division and had your qualifi-
15 cations as an expert petroleum engineer accepted and made
16 a matter of record?

17 A Yes, sir.

18 Q Have you made a study of Phillips interest
19 in this particular application?

20 A Yes, sir.

21 MR. KELLAHIN: We tender Mr. Mueller as an
22 expert witness.

23 MR. NUTTER: Mr. Mueller is qualified.

24 Q (Mr. Kellahin continuing.) Would you please
25 refer to what we've marked as Phillips Exhibit Number One,

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1 and identify that for us?

2 A. Exhibit Number One is an acreage plat of
3 the current South Peterson-Fusselman Pool, and the north
4 part of the plat shows the Peterson-Fusselman Pool.

5 The South Peterson-Fusselman Pool encom-
6 passes currently the major acreage in Section 31 with one
7 completion in the Unit P of Section 30.

8 Phillips has drilled three wells in the
9 South Peterson-Fusselman Pool, these being our Lambirth
10 A No. 1 in Unit J, our Lambirth A No. 2 in Unit F, and we
11 have drilled the Lambirth A No. 3 in Unit N. The A No. 3
12 has not been potentialized yet. It encountered the Fusselman
13 pay and some nice looking logs but the well would not flow,
14 and on last swab test it did 80 barrels of oil in 10 hours,
15 and it's been shut-in now for three weeks waiting for in-
16 stallation of pumping equipment.

17 Q. What's the status of the well located in
18 the northeast corner of Section 31 indicated as a 4 on the
19 plat?

20 A. That is a location that we will drill
21 when the rig becomes available, and it's now currently
22 drilling the Enserch Lambirth 5.

23 Q. Acreage shaded in pink, I assume is acreage
24 under the operations of Phillips?

25 A. That's right.

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1 Q Please refer to Exhibit Number Two and
2 identify that.

3 A Exhibit Number Two is a dual-lateral log,
4 Rxo log, of the Fusselman pay in the Lambirth A No. 1.
5 It shows our two perforated intervals from 7830 to 38 and
6 from 7852 to 56.

7 This colored here in pink is to show the
8 permeability that's indicated by the resistivity curve
9 separation between the deep investigating curves and the
10 shallow investigating curves. It's just some relative or
11 quality measure type of permeability.

12 Q A1- right, sir, and Exhibit Number Three.

13 A Exhibit Number Three is a compensated
14 neutron formation density log of the same well, and this
15 is the type log that's on Enserch's cross section up here,
16 and this log is scaled in limestone matrix porosity, and
17 the little red dots I've spotted between the two curves
18 is what you get when you cross plot these two curves to get
19 to a dolomite porosity.

20 You can see our porosity here in this
21 field is -- is good but not exceptional. Our porosity runs
22 anywhere from 12 to 14, 16, percent.

23 It's the permeability here that is ex-
24 ceptional, not the porosity.

25 Q Exhibit Number Four.

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1 A Exhibit Number Four is just a monthly oil,
2 gas, and water production plot of the Phillips Lambirth A
3 No. 1, and is essentially identical to the exhibit used in
4 the previous -- by Enserch.

5 Q Exhibit Number Five.

6 A All right. I will, let me state here, for
7 the Lambirth A No. 1, you notice there was considerable
8 production increase between May and June.

9 We lowered a packer and acidized both zones
10 individually and got a production increase, but then it
11 shortly died and pumping equipment has now been installed
12 in that well in the month of July, and it is making about
13 100 barrels of water a day along with some 200 barrels of
14 oil.

15 MR. NUTTER: So when you lowered the
16 packer and acidized it, you restored that decline that had
17 been going on for several months.

18 A Right, but that's also --

19 MR. NUTTER: But then it was very temporary
20 and now you've installed a pumping unit.

21 A Right, and now it's on -- it's making sub-
22 stantial water.

23 Q Exhibit Number Five.

24 A Okay. Exhibit Number Five is the bottom
25 hole pressure work we did in the Lambirth A No. 1, and in

1 January 15th of this year. The accentuated colors show
2 that at 7850 we had a measured bottom hole pressure of
3 2750 psi per 44 hours of shutin.

4 But in April this year we ran a flowing
5 bottom hole pressure and at a depth of 7858 we measured a
6 flowing bottom hole pressure of 1813, which would give us
7 a productivity index of approximately .266 barrels per day
8 per psi drop in bottom hole pressure, based on the 24-hour
9 flow rate wells at that time.

10 I would like to point that our productivity
11 index of .266 is really not bad. If you take that times
12 that 2750 bottom hole pressure, you know, that's a 750
13 barrel a day well.

14 We've got a lot better ones out there but
15 you know, .26 ain't bad.

16 Q Exhibit Number Six, Mr. Mueller.

17 A Exhibit Number Six is a core band computer-
18 ized log that was run in the Lambirth A No. 2, and you can
19 see that the Fusselman interval occurs in here from about
20 7830 to 7880, and the area here, I've colored it in pink,
21 is what is referred to as the move to hydrocarbons, and it
22 also is indicative of the permeability that's exhibited by
23 the formation.

24 We have only perforated this well the top
25 6 to 8 feet, from 7830 to 38.

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1 Relative to this computer analysis on this
2 Lambirth A No. 2, I'd like to state if you take the interval
3 from 7832 down to 7868, to where you see the water saturation
4 starting to increase about from 18 percent on up to 40, like
5 you're in a transition zone, the computer log analysis
6 gives it about 3.4 hydrocarbon porosity feet in that inter-
7 val, which would roughly indicate that in this well there
8 is approximately 16,500 stock tank barrels per acre, and if
9 this well or this pay was consistent over the whole 80 acres
10 the whole 80 acres would only have 1.3 million barrels of
11 oil in place, and a recovery factor of roughly 40 percent
12 would indicate that this well could recover approximately
13 half a million barrels of oil.

14 We think overall, overall in this field,
15 that the average recovery is going to be less than a quarter
16 of a million barrels per well, and then we got a thin pay
17 section, we got good permeability but low porosity.

18 Q Exhibit Number Seven.

19 A Exhibit Number Seven is the production
20 curve for our Lambirth A No. 2, and it is identical with
21 the one submitted by Enserch.

22 It shows that we are making top allowable,
23 that it's water free, and is by far the best well we have.

24 Q Exhibit Number Eight.

25 A Exhibit Number Eight is a core description.

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1 We cored the Fusselman in the Lambirth A No. 2 and I'd like
2 to accentuate here the type of porosity that the geologist
3 indicated when he visually described this core.

4 Like from 7823 to 26 he describes it as
5 clean with fair crystalline-to-vuggy-fractured porosity.

6 Then the next interval from 7826 to 31,
7 he calls it dolomite the same but with large vertical frac-
8 tures.

9 Then we get from the 7831 to 49, we get
10 finely crystalline, clean with good crystalline vugular
11 porosity. Many thin vertical fractures.

12 So that probably accounts for why we have
13 such exceptional permeability in this but the porosities
14 are really low -- not low, but just medium --

15 MR. NUTTER: That accounts for why you've
16 been able to get good production from this A No. 2, although
17 you've perforated just eight feet --

18 A. That's right.

19 MR. NUTTER: -- from the top of the pay.

20 A. Yeah, but we're anticipating there will
21 probably be a bottom water-drive reservoir is why we stayed
22 right to the top.

23 And the actual core data on the --

24 Q. That's Exhibit Number Nine?

25 A. -- Exhibit Number Nine. I would like to

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1 point out is the -- some of the accentuated variances that
2 go on through this core.

3 You can see that sometimes the porosity
4 can be 9 or 12 percent and the permeability .1. Or you
5 can have porosity like in this first zone of about 13 per-
6 cent porosity and a permeability as high as 92 millidarcies.
7 And then right below that is a 2-foot zone with a porosity
8 of 8.3 and a permeability of 12 millidarcies. Then there's
9 about a 4-foot zone here you can see how porosity varies
10 from like 7.7 up to 10 and the permeability from 12 to 38.

11 But the big surprise is when you turn the
12 page and you see over here we've got some zones that are
13 8 percent porosity with 566 millidarcies and one zone with
14 4 percent porosity and 204 millidarcies.

15 So the permeability is excellent.

16 Q Exhibit Number Ten.

17 A Exhibit Number Ten is the bottom hole pres-
18 sure work that Phillips Petroleum Company has done on the
19 Lambirth A No. 2, and on April the 12th of '79 we ran a
20 flowing bottom hole pressure at -- and measured it at 7675,
21 of 2620 pounds flowing, and at that time in the 3-1/2 hours
22 the bomb was on the bottom, the well was flowing at a rate
23 of 1474 barrels per day, and we -- this calculates to be
24 a productivity index of 35.96 barrels per day per psi, or
25 if you'd like to take that to a calculated open flow, that

1 would be like 96,000 barrels a day.

2 Let's see, shortly after that we shut the
3 well -- or we did shut the well in then and took a pressure
4 buildup, but you can see that instantaneously the bottom
5 hole pressure went from 2620 to 2658, and we had a 38 pound
6 jump in bottom hole pressure and over in the hours column
7 it's called initial because they couldn't even measure any
8 time on that, and then after 14 hours of shutin the bottom
9 hole pressure built up to 2661 at our depth of 7675, or the
10 next 14 hours all we essentially had was 3 more pounds of
11 bottom hole pressure buildup, and that probably occurred
12 in the second there.

13 On July 16th of this month we ran -- con-
14 tracted with Tefteller to do some -- a PI and pressure --

15 Q That's Exhibit Number Eleven?

16 A No, I'm just referring to what -- yes,
17 that's Exhibit Number Eleven. That's right.

18 And that date is posted here on our pressure
19 sheet to show that at 7850 feet we had a measured flowing
20 bottom hole pressure of 2694 and at that time the well was
21 flowing at a rate of 346 barrels of oil per day, no water,
22 with a gas/oil ratio of 892, and that indicates a productivity
23 index of 43 barrels per day per pound drop in bottom hole
24 pressure.

25 The well was then shut in and pulled some

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1 40.5 hours later. The bomb was pulled and we had measured
2 bottom hole pressure of 2702, which is essentially 8 pounds
3 higher than what our flowing bottom hole pressure was.

4 Q Exhibit Number Eleven.

5 A Exhibit Number Eleven, I would like to
6 show you the data obtained by Tefteller in their running
7 the bottom hole pressure work on the Lambirth A No. 2, and
8 this is pointed out in accentuated colors there on the
9 second page where you can see that after pulling at 10
10 hours essentially our bottom hole pressure was stabilized
11 flowing from the time he took his first reading after 2
12 hours. The bottom hole pressure flowing remained constant.

13 And then you can see he says he shuts the
14 well in and goes back to a lapsed time of zero. His first
15 reading six minutes later is 2687, and that's the same
16 pressure he records 40 hours later.

17 Q What does that tell you about the capabi-
18 lity of this well to drain an area of more than 80 acres?

19 A Very excellent. And then another part of
20 the service you get is the little buildup curve, which of
21 course is flat on this well since the whole buildup occurred
22 in prior to the 6-minute reading, and then the gradients
23 in and out of the hole.

24 Q Mr. Mueller, do you have an opinion with
25 regards to whether or not each of the producing wells in

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1 the South Peterson-Fusselman Pool is capable of draining
2 a spacing or proration unit consisting of 80 acres?

3 A. I think that each of the wells currently
4 completed in the South Peterson-Fusselman Pool are capable
5 of draining 80 acres, and some of them capable of draining
6 much more than that, the two very best wells, the Enserch
7 1 and our Lambirth A-2.

8 Q. In your opinion is it in the best interests
9 of conservation, the prevention of waste, and the protection
10 of correlative rights, and the avoidance of drilling un-
11 necessary wells, for the Division to continue the well
12 spacing for the South Peterson-Fusselman Pool on 80 acres?

13 A. Yes.

14 Q. Were Exhibits One through Eleven either
15 compiled by you directly or prepared under your direction
16 and supervision?

17 A. Yes, sir.

18 MR. KELLAHIN: We move the introduction
19 of Exhibits one through Eleven.

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

22 MR. KELLAHIN: That concludes our examin-
23 ation of Mr. Mueller.

24 MR. NUTTER: I suppose all of these pages
25 together by Tefteller are --

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3028 Plaza Blanca (506) 471-3462
Santa Fe, New Mexico 87501

1 MR. KELLAHIN: Were Exhibit Eleven.

2 MR. NUTTER: -- Exhibit Eleven. All right.

3 Does anyone have any questions of Mr.

4 Mueller?

5 MR. BENISCHEK: Mr. Examiner, may I ask
6 a question?

7 MR. NUTTER: Mr. Benischek.

8
9 QUESTIONS BY MR. BENISCHEK:

10 Q Mr. Mueller, is that about \$15.00 oil?

11 A That would be upper tier oil, yes, I
12 think it's about \$13.80.

13 Q About \$13.00, so a quarter of a million,
14 that would make a little under \$3-million less royalties
15 and taxes, so it would pay out about 6-1/2, 7 times.

16 A Possibly, yes, if you got the quarter of
17 a million, right, uh-huh.

18 Q Got what?

19 A I said if -- on a quarter of a million
20 barrels of oil recovery you would have a number of times
21 investment return of around 6 to 7, yes.

22 Q Thank you.

23 MR. NUTTER: Are there any other questions
24 of the witness? He may be excused.

25 Do you have anything further, Mr. Kellahin?

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MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone have anything
they wish to offer in Case Number 6270?

If there is nothing further, we'll take
the case under advisement, and the hearing is adjourned.

(Hearing concluded.)

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Court Reporter, DO HEREBY
 CERTIFY that the foregoing and attached Transcript of
 Hearing before the Oil Conservation Division was reported
 by me; that said transcript is a full, true, and correct
 record of the hearing, prepared by me to the best of my
 ability, knowledge, and skill, 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 record of the proceedings in
 the Examiner hearing of Case No. 6270
 heard by me on 7/25 1979.
[Signature] Examiner
 Oil Conservation Division

SALLY WALTON BOYD
 CERTIFIED SHORTHAND REPORTER
 3030 Plaza Blanca (606) 471-2442
 Santa Fe, New Mexico 87501

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BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

August 17, 1979

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

Mr. William F. Carr
Campbell & Black
Attorneys at Law
Post Office Box 2208
Santa Fe, New Mexico

Re: CASE NO. 6270
ORDER NO. R-8771-A

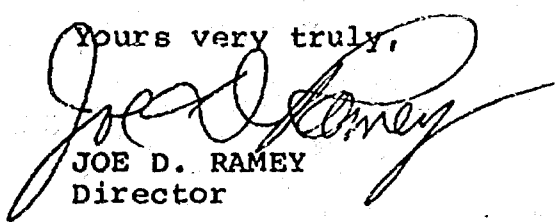
Applicant:

OCD (Enserch Exploration Inc.)

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 Thomas Kellahin

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. 6270
Order No. R-5771-A

IN THE MATTER OF CASE 6270 BEING
REOPENED PURSUANT TO THE PROVISIONS
OF ORDER NO. R-5771, WHICH ORDER
CREATED THE SOUTH PETERSON-FUSSELMAN
POOL, ROOSEVELT COUNTY, NEW MEXICO,
AND PROVIDED FOR 80-ACRE SPACING.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 25, 1979,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 16th day of August, 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 by Order No. R-5771, dated July 17, 1978, tempo-
rary special rules and regulations were promulgated for the
South Peterson-Fusselman Pool, Roosevelt County, New Mexico,
establishing temporary 80-acre spacing units.
- (3) That pursuant to the provisions of Order No. R-5771,
this case was reopened to allow the operators in the subject pool
to appear and show cause why the South Peterson-Fusselman Pool
should not be developed on 40-acre spacing units.
- (4) That the evidence establishes that one well in the
South Peterson-Fusselman Pool can efficiently and economically
drain and develop 80 acres.
- (5) That the Special Rules and Regulations promulgated by
Order No. R-5771 have afforded and will afford to the owner of

-2-

Case No. 6270

Order No. R-5771-A

each property in the pool the opportunity to produce his just and equitable share of the oil and gas in the pool.

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-5771 should be continued in full force and effect until further order of the Division.

IT IS THEREFORE ORDERED:

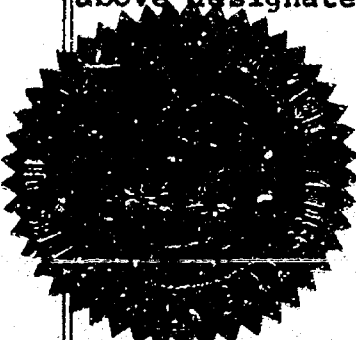
(1) That the Special Rules and Regulations governing the South Peterson-Fusselman Pool, Roosevelt County, New Mexico, promulgated by Order No. R-5771, are hereby continued in full force and effect until further order of the Division.

(2) 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director


S E A L

fd/

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Exhibit 1
Case 6270

SOUTH PETERSON AREA
ROOSEVELT COUNTY, NEW MEXICO

Date: 7-19-79

South Peterson Fusselman Field
Roosevelt County, New Mexico

Individual Well Completion
&
Production Data Sheets

Exhibit 3
Case 6270

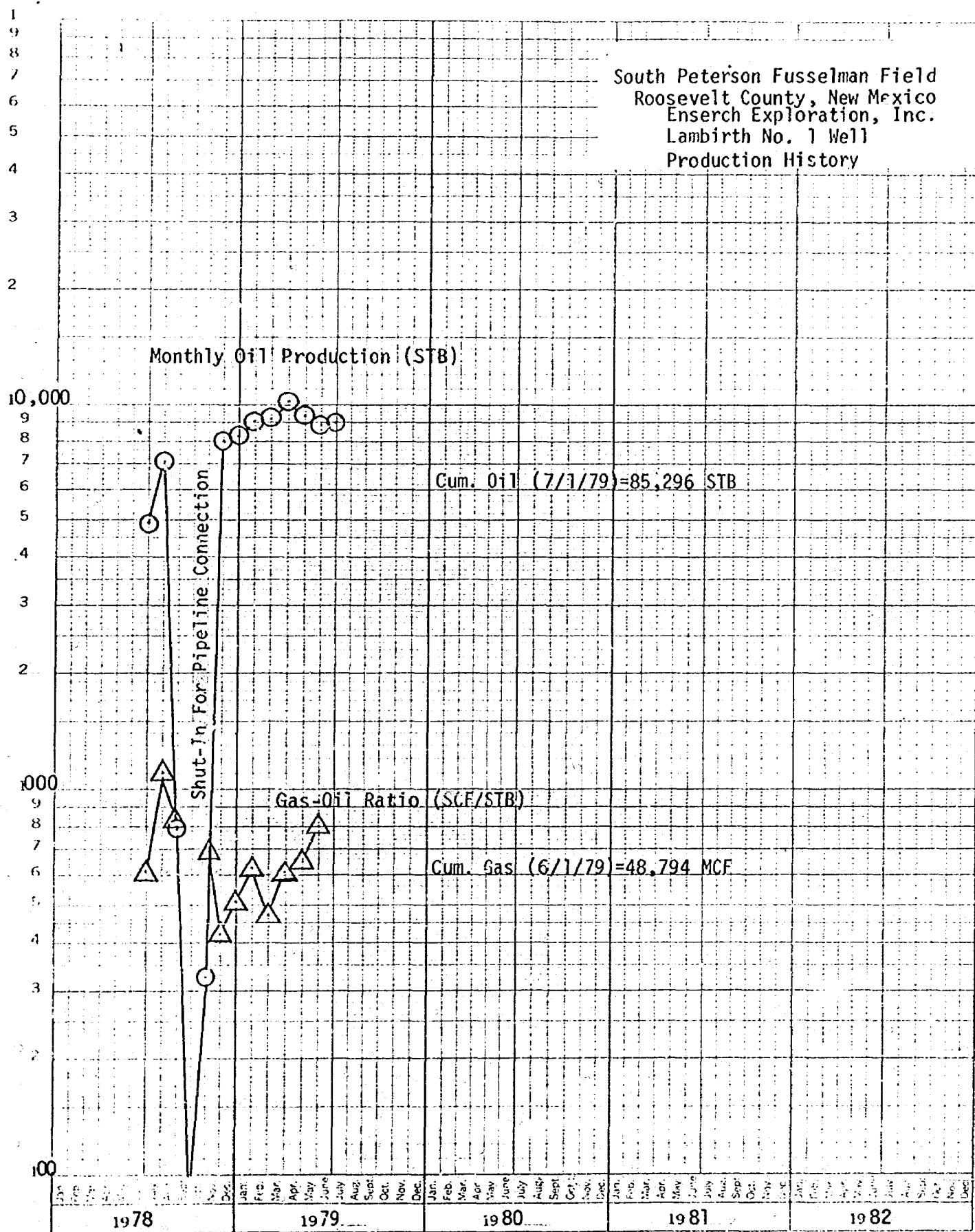
Enserch Exploration, Inc.

Lambirth No. 1

Date of Completion:	6-4-78
Elevation (Gr.):	4413.8'
Perforated Interval:	7808' - 52' (-3394' - 3438')
Date of Potential:	6-4-78
Initial Potential:	638 BO + 703MCF + 0 BW, GOR= 1102, FTP = 585 psi
Original Bottom Hole Pressure:	2700 psi @ 7830' (-3416') 6-25-78
Current Bottom Hole Pressure:	2703 psi @ 7830' (-3416') 7-18-79
Current Production Test:	490 BO + 224 MCF + 0 BW, 7-16-79 GOR= 457, FTP= 520 psi
Cumulative Production:	91,050 STB 7-16-79

5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



Enserch Exploration, Inc.

Lambirth No. 3

Date of Completion: 7-20-78

Elevation (Gr.) 4393.5'

Perforated Interval: 7840' - 49' acidized w/1500 gallons
(-3446' - 55')

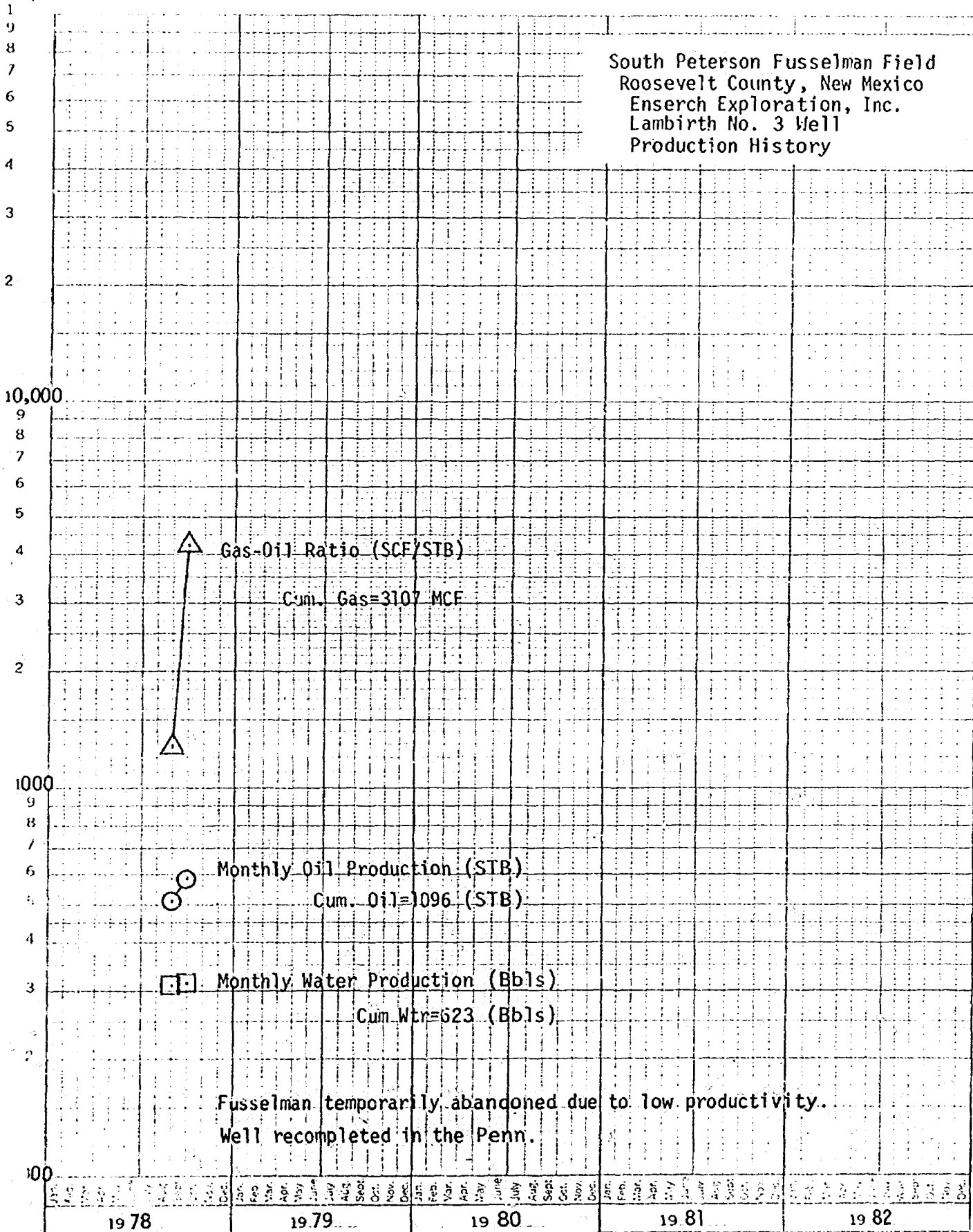
Initial Test: Well recovered 81 Bbls of oil + 56 Bbls
of water before being placed on pump,
7-27-78.

Final Pump Rate: 980PD + 11 BWPD + 45 MCF
(8-7-78)

Comments: Well recompleted in Penn. due to low
productivity of Fusselman.

KE 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



Enserch Exploration, Inc.

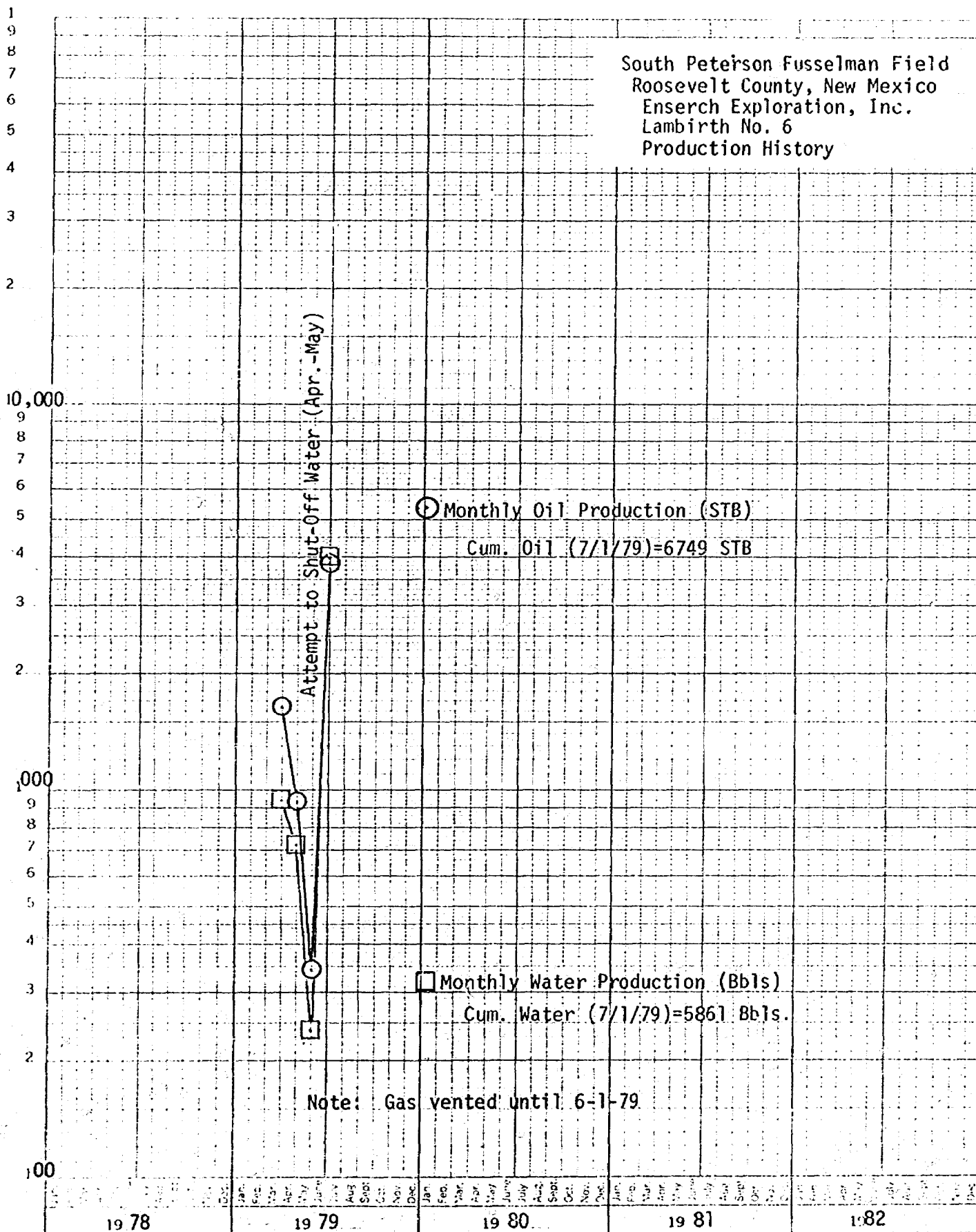
Lambirth No. 6

Date of Completion:	3-20-79 ⁽¹⁾
Elevation (Gr.)	4381.4'
Perforated Interval:	7830' - 42' (-3449'-61')
Date of Potential:	6-3-79
Initial Potential:	330 BO + 511 MCF + 158 BW, GOR= 1548, FTP = 175 psi
Original Bottom Hole Pressure:	2794 psi @ 7836' (-3455) estimated
Current Bottom Hole Pressure:	2703 @ 7836' (-3455)
7-18-79	
Current Production Test:	N/A
Cumulative Production:	7924 STB
7-19-79	

(1) Well originally completed in March, 1979. However, well was squeezed four (4) times in order to shut-off water production caused by a poor primary cement job.

K-E 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



Enserch Exploration, Inc.

Lambirth No. 7

Date of Completion: 6-6-79

Elevation (Gr.): 4376.5'

Perforated Interval: 7826' - 29.5'
(-3449' - 52.5')

Date of Potential: 6-16-79 (pumping) /

Initial Potential: 117 BO + 138 MCF + 87 BW, GOR =
1180

Original Bottom Hole Pressure: 2783 psi @ 7826' (-3449')
4-25-79

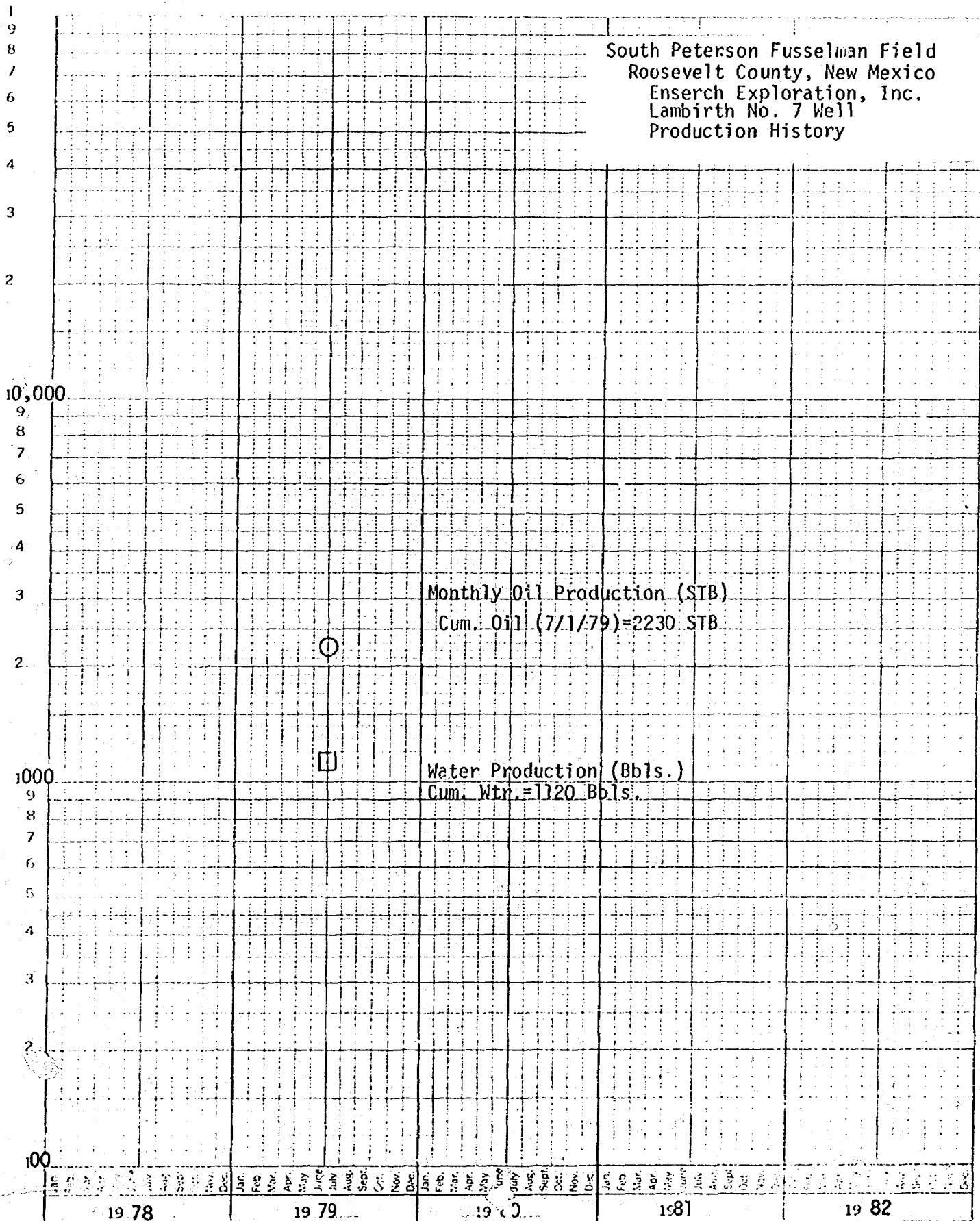
Current Bottom Hole Pressure: N/A

Current Production Test: 54BOPD + 22BW
7-19-79

Cumulative Production: 3311 STB
7-19-79

5 YEARS BY MONTHS X 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690

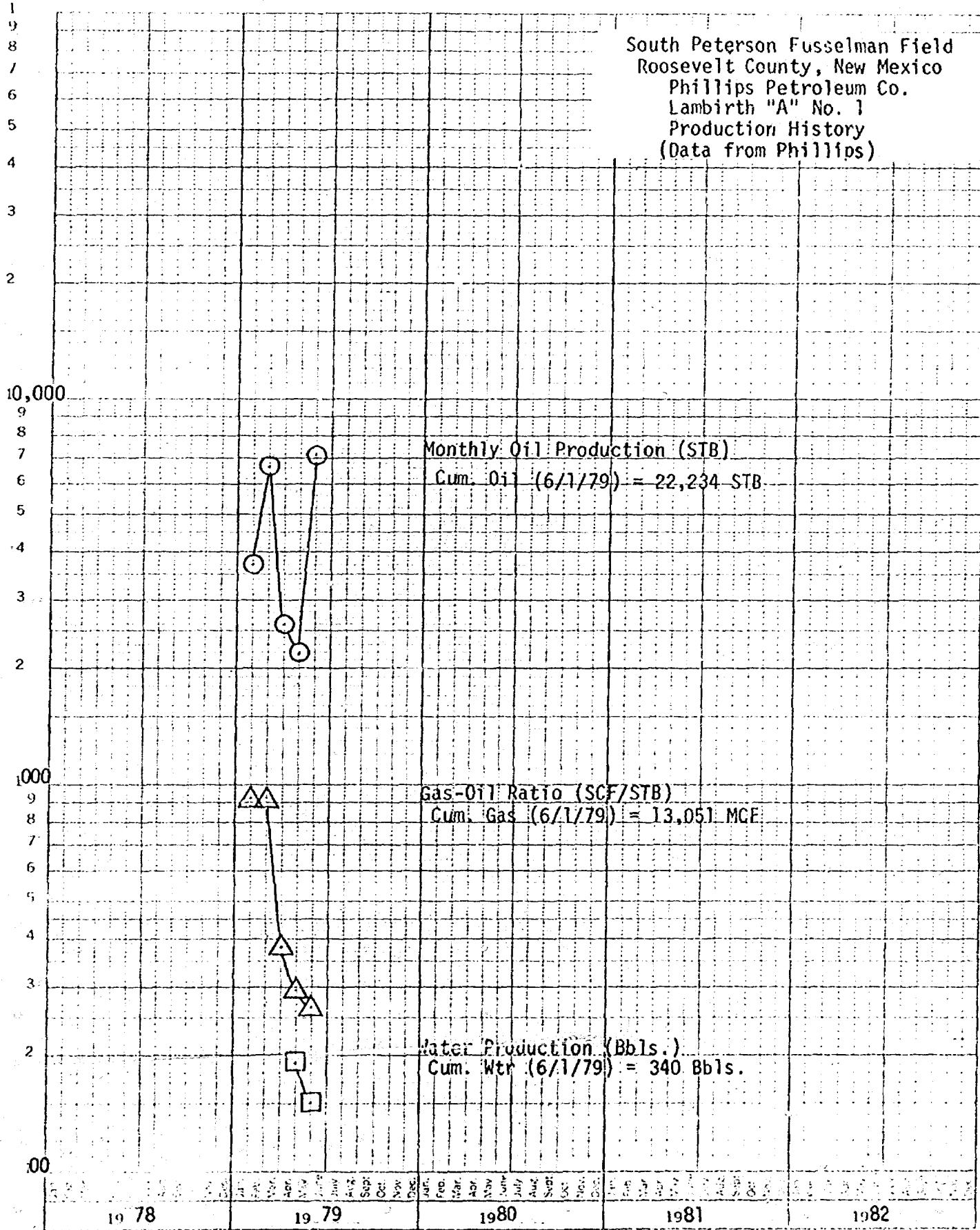


Phillips Petroleum Co.

Lambirth "A" No. 1

Date of Completion:	1-10-79
Elevation (Gr.):	4405'
Perforated Interval:	7830'-38, 7852'-58' (-3425'-53')
Date of Potential:	1-18-79
Initial Potential:	332 BO + 306 MCF + OBW, GOR= 922, FTP= 285 psi
Original Bottom Hole Pressure:	N/A
Current Bottom Hole Pressure:	N/A
Current Production Test:	N/A
Cumulative Production: (6-1-79)	22,234

46 6690
K&E 5 YEARS BY MONTHS X 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.



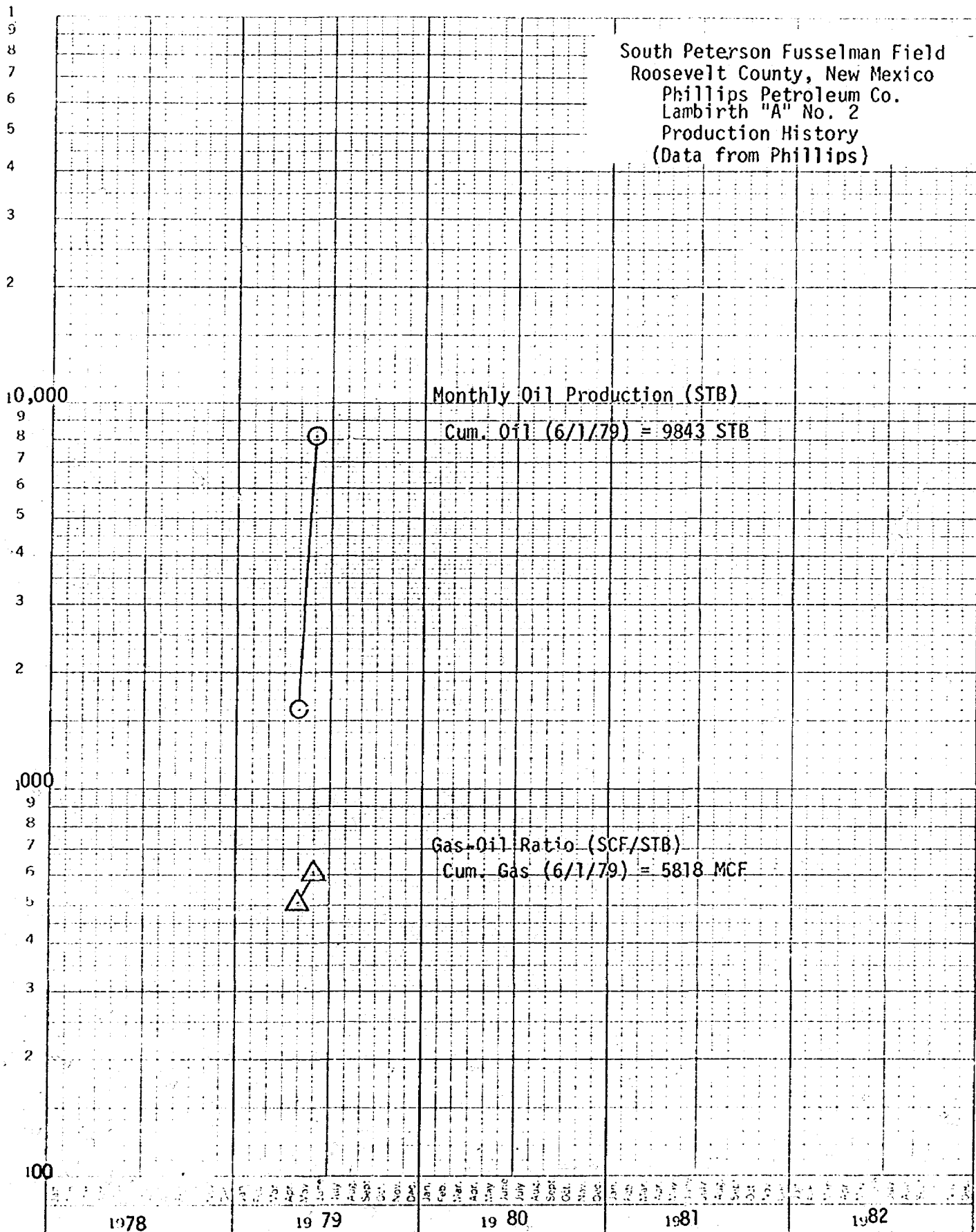
Phillips Petroleum Co.

Lambirth "A" No. 2

Date of Completion:	4-9-79
Elevation (Gr.):	4396.8'
Perforated Interval:	7832'-38' (-3435'-41')
Date of Potential:	4-19-79
Initial Potential:	410 BO + 685 MCF + tr wtr, GOR 1671, FTP= 675 psi
Original Bottom Hole Pressure:	N/A
Current Bottom Hole Pressure:	2697 psi @ 7835' (-3438')
	7-18-79
Current Production Test:	352 BO + 313 MCF, GOR=
	7-16-79 889, FTP= 530 psi
Cumulative Production:	9843
	6-1-79

K&E 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



Phillips Petroleum Co.

Lambirth "A" No. 3

Date of Completion: N/A
Well TD'ed in June

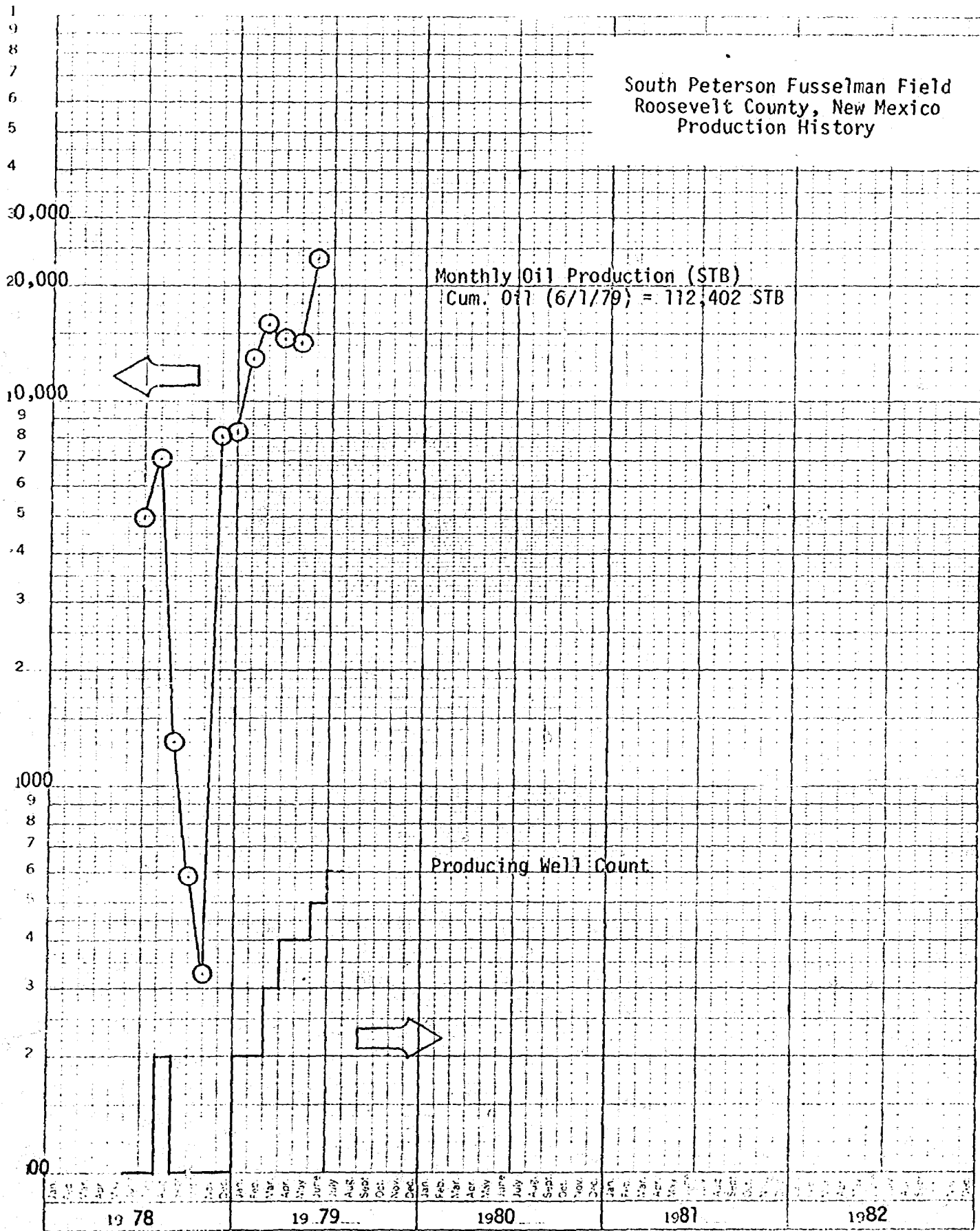
Elevation (Gr): 4425'

Perforated Interval: 7814'-18', 30'-40' & 42'-46'
(-3389'-3421')

Comments: Completion is still in progress

KE 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



WELL DATA SHEET

SOUTH PETERSON FUSSELMAN FIELD
ROOSEVELT COUNTY, NEW MEXICO

	<u>ENSERCH LAMBIRTH</u>			<u>PHILLIPS LAMBIRTH</u>		
Well Name	<u>NO. 1</u>	<u>NO. 6</u>	<u>NO. 7</u>	<u>A NO. 1</u>	<u>A NO. 2</u>	<u>A NO. 3</u>
*Net Pay	44'	28'	3.5' (1)	15'	43'	18'
*Average Porosity	12.5%	16.0%	N/A	13.5%	10.9%	15.2%
*Average Water Saturation	21.0%	26.0%	N/A	28.0%	18.0%	20%
Effective Permeability to Oil (md)	559 md (BU)					
Productivity Index (Bbls/Day/psi)	31.9	.2	5.0 (DST)	.266	35.0	N/A

(1) Only the top of the Fusselman was penetrated due to hole conditions. Open-hole logs over the Fusselman were not obtained because of insufficient "rat hole".

* Log calculations

*Exhibit 4
Case 6270*

Minimum Permeability Required
to drain 80 acres

Since pressure build-up data was not available on the majority of the Fusselman completions, we decided to use productivity index data in order to determine if the well with the lowest productivity index could drain 80 acres.

Keywords:

J= Productivity Index = Bbl/Day/psi
k= permeability (darcies)
h= net pay thickness (feet)
 ϕ = porosity (decimal)
Bo= Formation Volume factor (Res Bbl/STB)
re= effective drainage area (ft)
rw= wellbore radius (ft)

Lambirth No. 6

$$J = \frac{7.08 \text{ kh}}{\mu B_o \ln(re/rw)}$$

$$\begin{aligned} J &= .2 \text{ Bbl/Day/psi} \\ \mu &= .359 \text{ cp} \\ B_o &= 1.55 \text{ Res Bbl/STB} \\ h &= 28' \quad re = 80 \text{ acres} = 1053', \quad rw = 5.5' = .458' \end{aligned}$$

$$k = \frac{J \mu B_o \ln(re/rw)}{7.08 h}$$

$$k = \frac{(.2)(.359)(1.55)\ln(1053'/.458')}{(7.08)(28)}$$

$$k = .004 \text{ darcies or 4 md}$$

Therefore, 4 md are required to drain 80 acres.

Our next objective was to determine if the permeability in the Lambirth 6 was greater than or equal to 4 md. Unfortunately the initial build-up on the Lambirth 6 experienced phase separation in the tubing during the build-up survey. However, in assuming the initial pressure in Lambirth 6 was equal to the initial pressure in the Lambirth No. 1, we calculated the following:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
11 July 1979

EXAMINER HEARING

IN THE MATTER OF:

In the matter of Case 6270 being reopened
pursuant to the provisions of Order No. R-5771 which order created the South
Peterson-Fusselman Pool, Roosevelt County,
New Mexico.) CASE
6270

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 for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3010 Plaza Blanca (SSE) 471-2482
Santa Fe, New Mexico 87501

1 MR. STAMETS: We'll call next Case 6270.

2 MR. PADILLA: In the matter of Case 6270
3 being reopened pursuant to Order Number R-5771, which order
4 created the South Peterson-Fusselman Pool, Roosevelt County,
5 New Mexico, and provided for 80-acre spacing.

6 MR. STAMETS: One of the operators in this
7 pool has requested this case be continued to the July 25th
8 Examiner Hearing, and it will be so continued.

9 (Hearing concluded.)
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SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (SOS) 471-3462
Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

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

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

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 6270,
 heard by me on 7-11 1977.
Richard R. [Signature], Examiner
 Oil Conservation Division

SALLY WALTON BOYD
 CERTIFIED SHORTHAND REPORTER
 2020 Plaza Blanca (605) 711-5462
 Santa Fe, New Mexico 87501

Docket No. 27-79

Dockets Nos. 29-79 and 31-79 are tentatively set for hearing on August 8 and 22, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - TUESDAY - JULY 24, 1979

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

CASE 6596: Application of Harvey E. Yates Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Upper Pennsylvanian gas pool to be designated as the Southeast Indian Basin-Upper Pennsylvanian Gas Pool for its Southeast Indian Basin Well No. 1 located in Unit A of Section 23, Township 22 South, Range 23 East, and special pool rules therefor including 320-acre gas well spacing.

CASE 6597: Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Southeast Indian Basin Well No. 2, an Upper Pennsylvanian well to be drilled 660 feet from the North and West lines of Section 24, Township 22 South, Range 23 East, with the N/2 or all of said Section 24 to be dedicated to the well, depending on the outcome of Case No. 6596.

Docket No. 28-79

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 25, 1979

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

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

CASE 6545: (Continued from June 27, 1979, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Corinne Grace, Travelers Indemnity Company, and all other interested parties to appear and show cause why the Kuklah Baby Well No. 1 located in Unit G of Section 24, Township 22 South, Range 26 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6598: Application of Gulf Oil Corporation for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Otero-Gallup and Basin-Dakota production in the wellbores of its Apache Federal Wells No. 8 located in Unit C of Section 8 and No. 9 located in Unit D of Section 17, both in Township 24 North, Range 5 West.

CASE 6599: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fussell and Montoya production, North Justis Field, in the wellbore of its W. A. Ramsay Well No. 4 located in Unit M of Section 36, Township 24 South, Range 37 East.

CASE 6600: Application of Mesa Petroleum Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the E/2 of Section 10, Township 16 South, Range 27 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 6601: Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Mississippian formations underlying the E/2 of Section 8, Township 14 South, Range 36 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 6602: Application of Tenneco Oil Company for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 33 C No. 2 Well 1010 feet from the North line and 1710 feet from the West line of Section 33, Township 17 South, Range 29 East, South Empire-Wolfcamp Pool, the E/2 NW/4 of said Section 33 to be dedicated to the well.

CASE 6603: (This case will be continued to the August 8 hearing.)

Application of Conoco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Penrose Skelly and Eumont production in the wellbore of its Hawk B-1 Well No. 12 located in Unit O of Section 8, Township 21 South, Range 37 East.

CASE 6604: Application of Cities Service Company for rescission of Division Order No. R-5921, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the rescission of Order No. R-5921 which order provided for the compulsory pooling of all of the mineral interests in the Pennsylvanian formation underlying the S/2 of Section 8, Township 23 South, Range 28 East.

CASE 6605: Application of Estoril Producing Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the W/2 of Section 15, Township 20 South, Range 34 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the North and West lines of said Section 15. 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 6564: (Continued and Readvertised)

Application of Herndon Oil & Gas Co. for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its O. A. Woody Well No. 1 to be drilled 2310 feet from the North line and 330 feet from the West line of Section 35, Township 16 South, Range 38 East, Knowles-Devonian Pool.

CASE 6606: Application of Getty Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Yates formation in the open-hole interval from 3810 feet to 4169 feet in its State "AA" Well No. 1 located in Unit 1 of Section 35, Township 21 South, Range 34 East.

CASE 6607: Application of Getty Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Getty 36 State Well No. 1 located in Unit F of Section 36, Township 21 South, Range 34 East, to produce oil from the Wolfcamp formation and gas from the Morrow formation through parallel strings of tubing.

CASE 6608: Application of Getty Oil Company for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolfcamp oil pool for its Getty 36 State Well No. 1 located in Unit F of Section 36, Township 21 South, Range 34 East, and special rules therefor, including 160-acre oil well spacing.

CASE 6609: Application of Napeco Inc. for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn oil pool for its Benson Deep Unit Well No. 1 located in Unit O of Section 33, Township 18 South, Range 30 East, and special rules therefor, including 160-acre spacing and standard well locations.

CASE 6610: Application of Koch Industries, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Rustler formation through the perforated interval from 1190 feet to 1210 feet in its Wills "A" Well No. 7 located in Unit E of Section 35, Township 26 South, Range 37 East, Rhodes Field.

CASE 6611: Application of Cabot Corp. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the disposal of produced salt water in the Devonian formation through the perforated interval from 12,156 feet to 12,574 feet in its Reed Well No. 1 located in Unit H of Section 35, Township 13 South, Range 37 East, King Field.

CASE 6487: (Continued from May 23, 1979, Examiner Hearing)

Application of El Paso Natural Gas Company for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Shell E State Com Well No. 2 located in Unit N of Section 6, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6471: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Freeman Well No. 1-A to be located in Unit C of Section 11, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6472: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Jenny Well No. 1-A to be located in Unit P of Section 13, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6473: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its McIntyre Well No. 1-A to be located in Unit K of Section 11, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6474: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Williams Well No. 1-A to be located in Unit C of Section 24, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6475: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Montoya Well No. 1-A to be located in Unit I of Section 35, Township 32 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6535: (Continued from June 13, 1979, Examiner Hearing)

Application of Torreon Oil Company for a waterflood project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the San Luis-Mesaverde Pool by the injection of water into the Menefee formation through two wells located in Section 21, Township 18 North, Range 3 West, Sandoval County, New Mexico.

CASE 6579: (Continued from June 27, 1979, Examiner Hearing)

Application of R. N. Hillin for an unorthodox well location and approval of infill drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well spacing requirements and a finding that the drilling of a Morrow gas well at an unorthodox location 800 feet from the South line and 2000 feet from the East line of Section 34, Township 19 South, Range 28 East, is necessary to effectively and efficiently drain that portion of the E/2 of said Section 34 which cannot be so drained by the existing well.

CASE 6580: (Continued from June 27, 1979, Examiner Hearing) (This case will be continued to the August 12 hearing.)

Application of Continental Oil Company for a carbon dioxide injection project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to initiate a pilot carbon dioxide injection project in the Grayburg-San Andres formation in Units H and I of Section 20, Township 17 South, Range 32 East, Maljamar Pool, for tertiary recovery purposes.

CASE 6270: (Continued from July 11, 1979, Examiner Hearing)

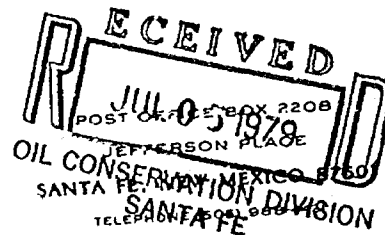
In the matter of Case 6270 being reopened pursuant to the provisions of Order No. R-5771 which order created the South Peterson-Fusselman Pool, Roosevelt County, New Mexico, and provided for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 6590: (Continued from July 11, 1979, Examiner Hearing)

Application of Grace Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Lots 9, 10, 15, and 16 and the SE/4 of Section 6, Township 21 South, Range 32 East, to be dedicated to a well to be drilled at an unorthodox location 4650 feet from the South line and 660 feet from the East line of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the costs 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.

CAMPBELL AND BLACK, P.A.
LAWYERS

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
PAUL R. CALDWELL



July 2, 1979

Rfl
Mr. Joe D. Ramey
State Petroleum Engineer
Post Office Box 2088
Santa Fe, New Mexico 87501

RE: Oil Conservation Division Case 6270.

Dear Mr. Ramey:

Enserch Exploration Inc. hereby requests that Case 6270 be continued to the Examiner Hearing scheduled for July 25, 1979.

Very truly yours,

William F. Carr
William F. Carr

WFC/tn

cc: Mr. Leonard Kersch

Docket No. 25-79

Dockets Nos. 27-79 and 28-79 are tentatively set for hearing on July 25 and August 8, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 11, 1979

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

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

CASE 6583: Application of Amoco Production Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of B.S. Mesa-Gallup and Basin-Dakota production in the wellbore of its Jicarilla Apache 102 Well No. 13 located in Unit B of Section 10, Township 26 North, Range 4 West.

CASE 6584: Application of Texas Oil & Gas Corp. for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Shugart State Com. Well No. 2 660 feet from the South line and 1930 feet from the East line of Section 16, Township 18 South, Range 31 East, to test the Wolfcamp through Mississippian formations, the E/2 of said Section 16 to be dedicated to the well.

CASE 6574: (Continued from June 13, 1979, Examiner Hearing)

Application of Texas Oil & Gas Corp. for an unorthodox gas well location and compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Morrow formations underlying the E/2 of Section 6, Township 17 South, Range 35 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South and East lines of said Section 6. 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 6563: (Continued from June 27, 1979, Examiner Hearing)

Application of Roy L. McKay for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for his North Woolworth Ranch Unit Area, comprising 1,280 acres, more or less, of State lands in Township 23 South, Range 35 East.

CASE 6585: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated Fruitland and West Kutz-Pictured Cliffs production in the wellbores of its Paul Wells Nos. 1 and 2 located in Units G and C of Section 19, Township 27 North, Range 11 West.

CASE 6586: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Conner-Fruitland and undesignated Pictured Cliffs production in the wellbores of the following wells: Big Field Well No. 2 in Unit C of Section 3; Big Field Well No. 5 in Unit P of Section 10; Dinero Well No. 1 in Unit H of Section 13; and Molly Pitcher Well No. 2 in Unit H of Section 14, all in Township 30 North, Range 14 West.

CASE 6587: Application of Caribou Four Corners, Inc., for three unorthodox well locations, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox locations of the following wells in the Cha Cha-Gallup Pool: Kirtland Wells Nos. 3 and 4 located 730 feet from the North line and 2250 feet from the East line and 1450 feet from the North line and 595 feet from the East line, respectively, of Section 18, Township 29 North, Range 14 West; and Kirtland Well No. 2 260 feet from the North line and 2100 feet from the East line of Section 13, Township 29 North, Range 15 West.

CASE 6588: Application of Caribou Four Corners, Inc., for a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 64.32-acre non-standard oil proration unit comprising the NW/4 NW/4 and that part of Lot 5 lying north of the San Juan River, all in Section 18, Township 29 North, Range 14 West, Cha Cha-Gallup Oil Pool.

CASE 6589: Application of Atlantic Richfield Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its State "BV" No. 2 Well 2109 feet from the North line and 1778 feet from the West line of Section 25, Township 17 South, Range 28 East, to test the Morrow formation, the N/2 of said Section 25 to be dedicated to the well.

CASE 6590: Application of Grace Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Lots 9, 10, 15, and 16 and the SE/4 of Section 6, Township 21 South, Range 32 East, to be dedicated to a well to be drilled at an unorthodox location 4650 feet from the South line and 660 feet from the East line of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the costs 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 6591: Application of Exxon Corporation for vertical pool limit redefinition, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order extending the vertical limits of the Langlie Mattir Pool to include the lowermost 165 feet of the Seven Rivers formation and the concomitant contraction of the vertical limits of the Jalmat Gas Pool underlying the NE/4 of Section 2, Township 24 South, Range 36 East.

CASE 6592: Application of Maddox Energy Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Malaga Well No. 1 located in Unit G of Section 3, Township 24 South, Range 28 East, to produce gas from the Atoka and Morrow formations through parallel strings of tubing.

CASE 6593: Application of Dyco Petroleum Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the San Andres, Glorieta and Tubb formations in the open-hole interval from 4894 feet to 8725 feet in its C. S. Stone Well No. 3 located in Unit F of Section 22, Township 15 South, Range 38 East, Medicine Rock-Devonian Pool.

CASE 6594: Application of Flag-Redfern Oil Co. for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221 to permit disposal of produced brine in an unlined surface pit located in Unit K, Section 2, Township 19 South, Range 31 East, Shugart Field.

CASE 6595: Application of Stevens Oil Company for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the NW/4 SW/4 of Section 30, Township 8 South, Range 29 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 6270: (Reopened and Readvertised)

In the matter of Case 6270 being reopened pursuant to the provisions of Order No. R-5771 which order created the South Peterson-Fusselman Pool, Roosevelt County, New Mexico, and provided for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

Docket No. 26-79

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 18, 1979

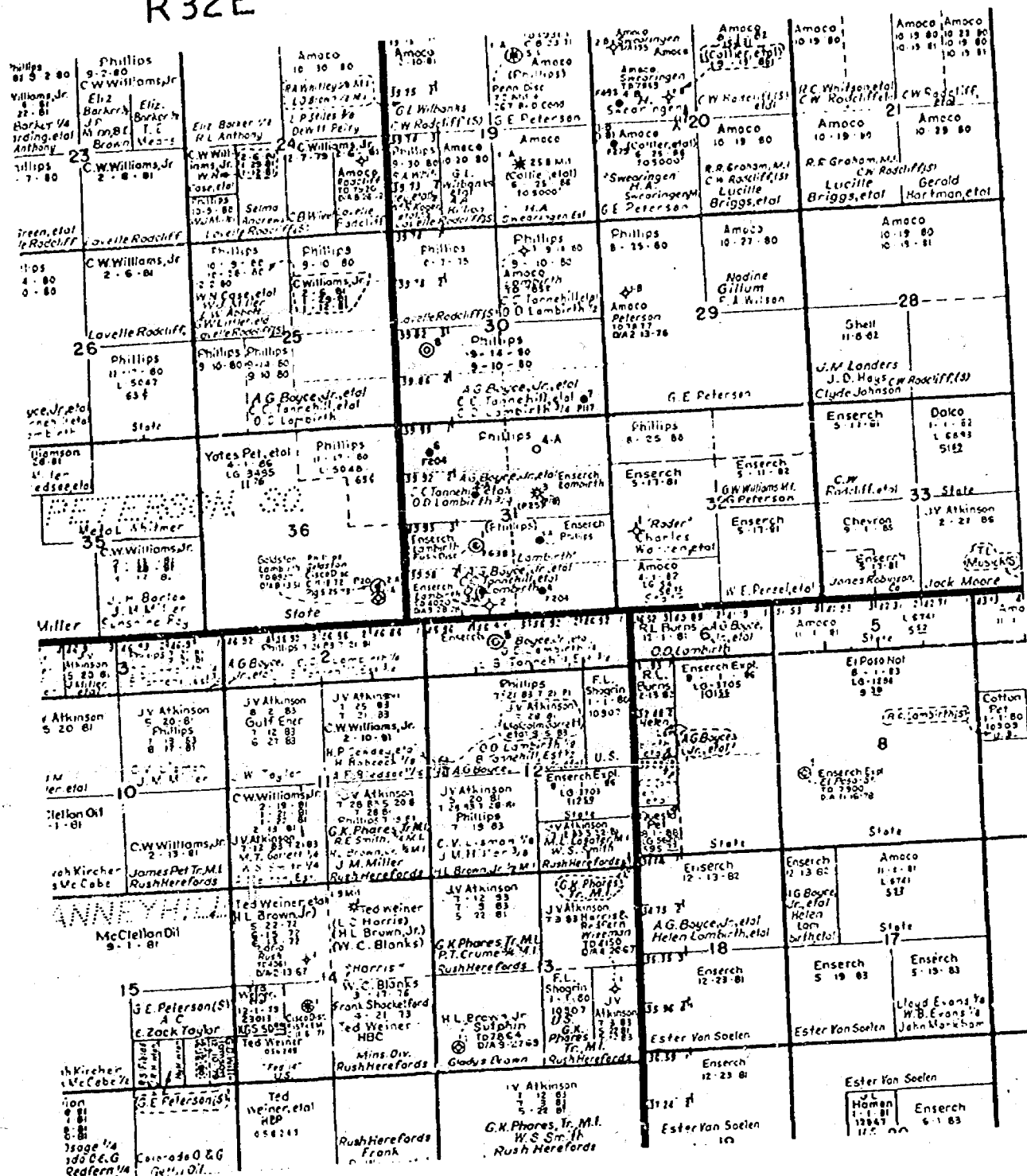
9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

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

- ALLOWABLE:
- (1) Consideration of the allowable production of gas for August, 1979, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for August, 1979, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

R32E

R33E



BEFORE EXAMINER NUTTER
SOUTH PETERSON AREA
OIL CONSERVATION DIVISION
ENSERCH EXHIBIT NO. ROOSEVELT COUNTY, NEW MEXICO
CASE NO. 6270
Date: 7-19-79

Scale 1" = 4,000'

South Peterson Fusselman Field
Roosevelt County, New Mexico

Individual Well Completion
&
Production Data Sheets

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

~~ENERGY~~ EXHIBIT NO. 3

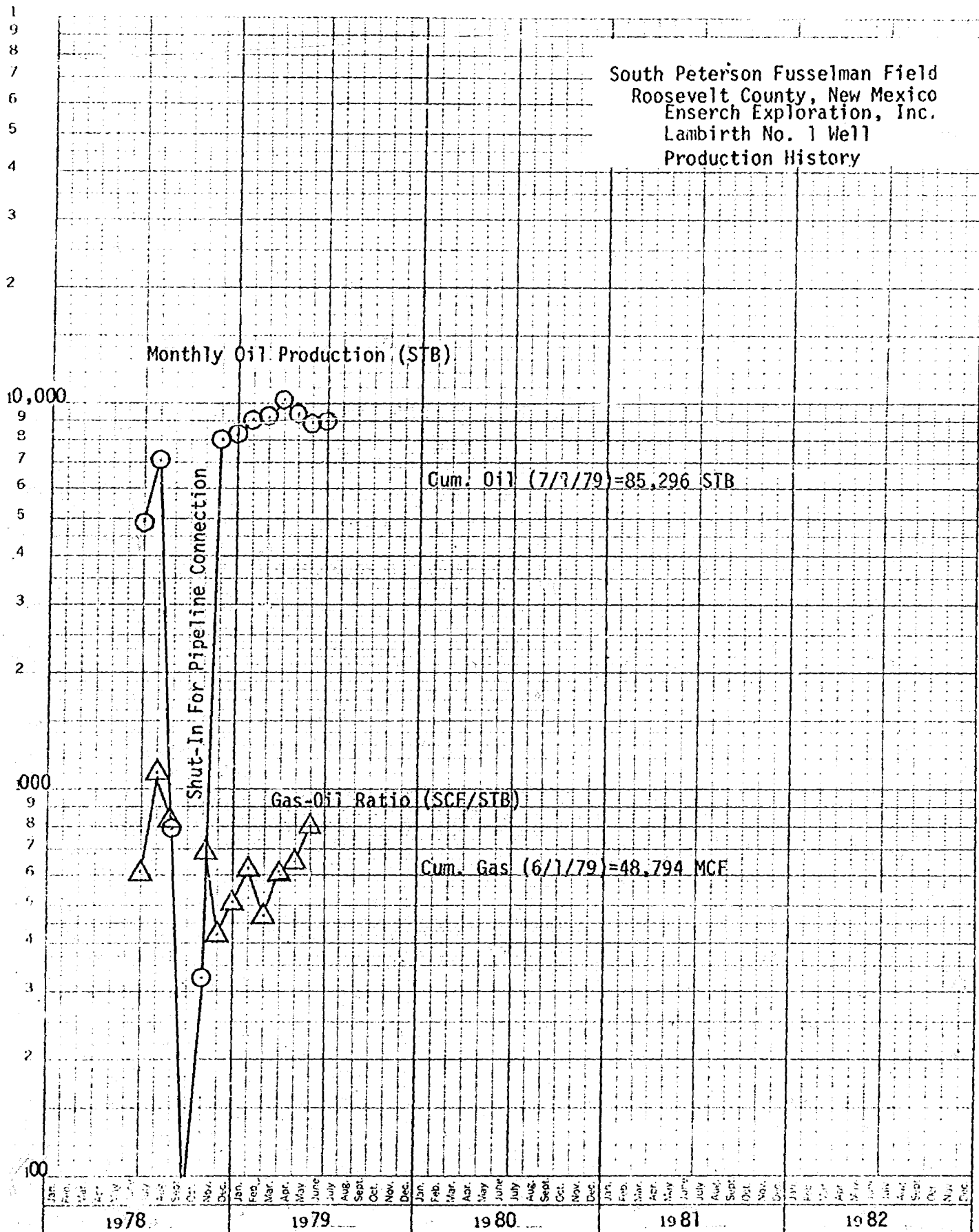
CASE NO. 6270

Enserch Exploration, Inc.

Lambirth No. 1

Date of Completion:	6-4-78
Elevation (Gr.):	4413.8'
Perforated Interval:	7808' - 52' (-3394' - 3438')
Date of Potential:	6-4-78
Initial Potential:	638 BO + 703MCF + 0 BW, GOR= 1102, FTP = 585 psi
Original Bottom Hole Pressure:	2781 psi @ 7830' (-3416')
6-25-78	
Current Bottom Hole Pressure:	2703 psi @ 7830' (-3416)
7-18-79	
Current Production Test:	490 BO + 224 MCF + 0 BW,
7-16-79	GOR= 457, FTP= 520 psi
Cumulative Production:	91,050 STB
7-16-79	

46 6690
K-E 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.



Enserch Exploration, Inc.

Lambirth No. 3

Date of Completion: 7-20-78

Elevation (Gr.) 4393.5'

Perforated Interval: 7840' - 49' acidized w/1500 gallons
(-3446'-55')

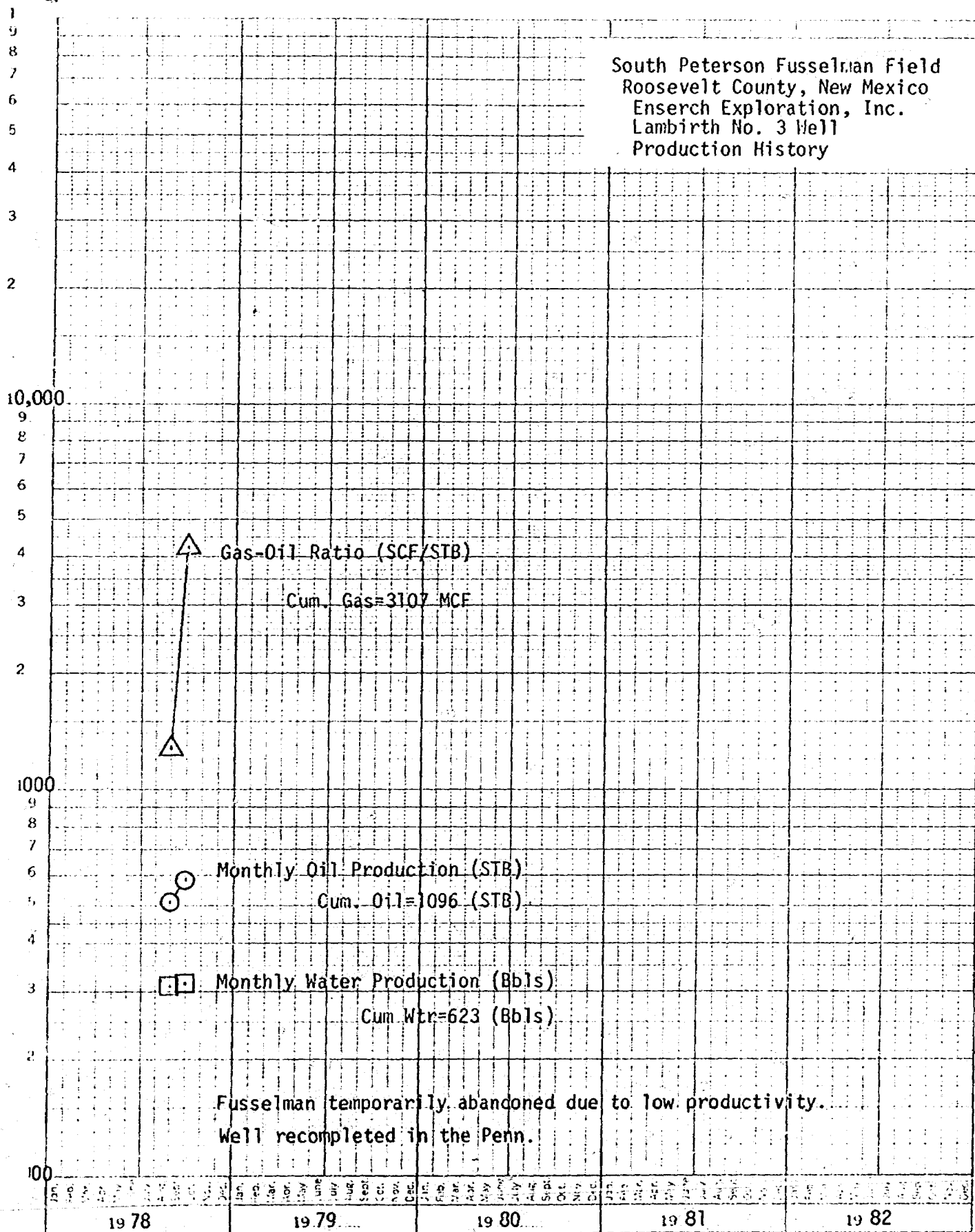
Initial Test: Well recovered 81 Bbls of oil +56 Bbls
of water before being placed on pump,
7-27-78.

Final Pump Rate: 9BOPD + 11 BWPD + 45 MCF
(8-7-78)

Comments: Well recompleted in Penn. due to low
productivity of Fusselman.

KE 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



Enserch Exploration, Inc.

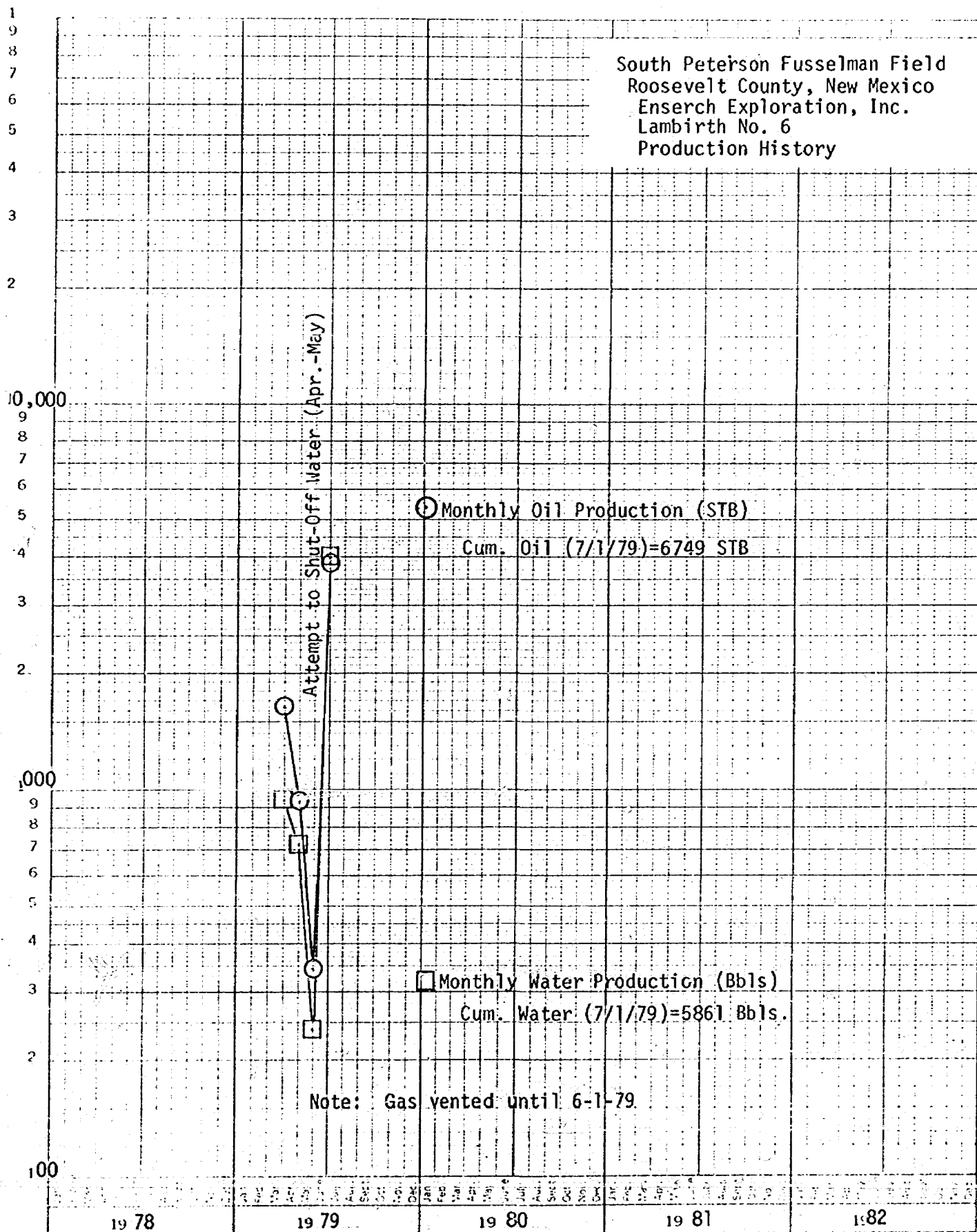
Lambirth No. 6

Date of Completion:	3-20-79 ⁽¹⁾
Elevation (Gr.)	4381.4'
Perforated Interval:	7830' - 42' (-3449'-61')
Date of Potential:	6-3-79
Initial Potential:	330 BO + 511 MCF + 158 BW, GOR= 1548, FTP = 175 psi
Original Bottom Hole Pressure:	2794 psi @ 7836' (-3455) estimated
Current Bottom Hole Pressure:	2703 @ 7836' (-3455) 7-18-79
Current Production Test:	N/A
Cumulative Production:	7924 STB 7-19-79

(1) Well originally completed in March, 1979. However, well was squeezed four (4) times in order to shut-off water production caused by a poor primary cement job.

5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN USA

46 6590



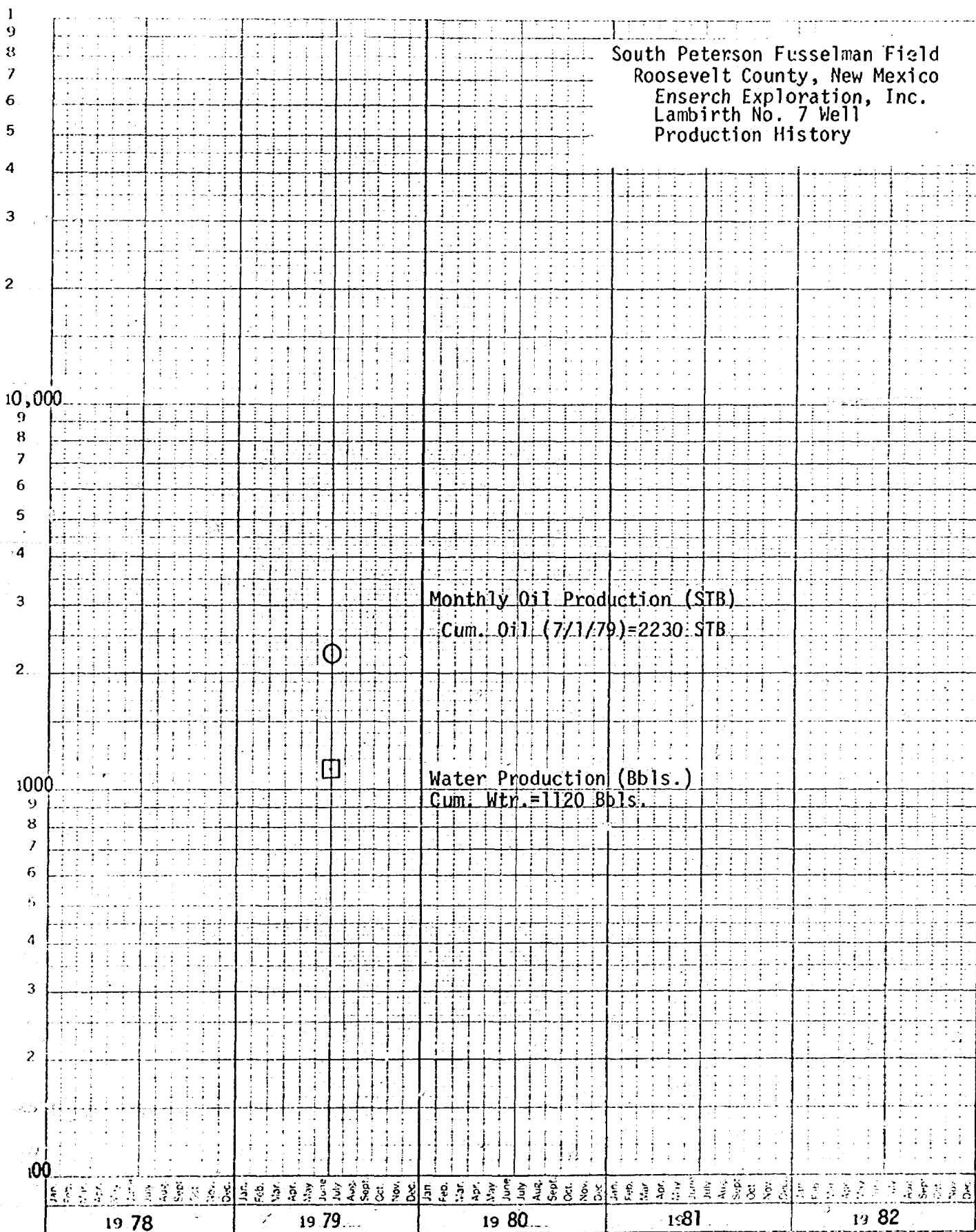
Enserch Exploration, Inc.

Lambirth No. 7

Date of Completion:	6-6-79
Elevation (Gr.):	4376.5'
Perforated Interval:	7826' - 29.5' (-3449' - 52.5')
Date of Potential:	6-16-79 (pumping)
Initial Potential:	117 BO + 138 MCF + 87 BW, GOR = 1180
Original Bottom Hole Pressure:	2783 psi @ 7826' (-3449')
	4-25-79
Current Bottom Hole Pressure:	N/A
Current Production Test:	54BOPD + 22BW
	7-19-79
Cumulative Production:	3311 STB
	7-19-79

K&E 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



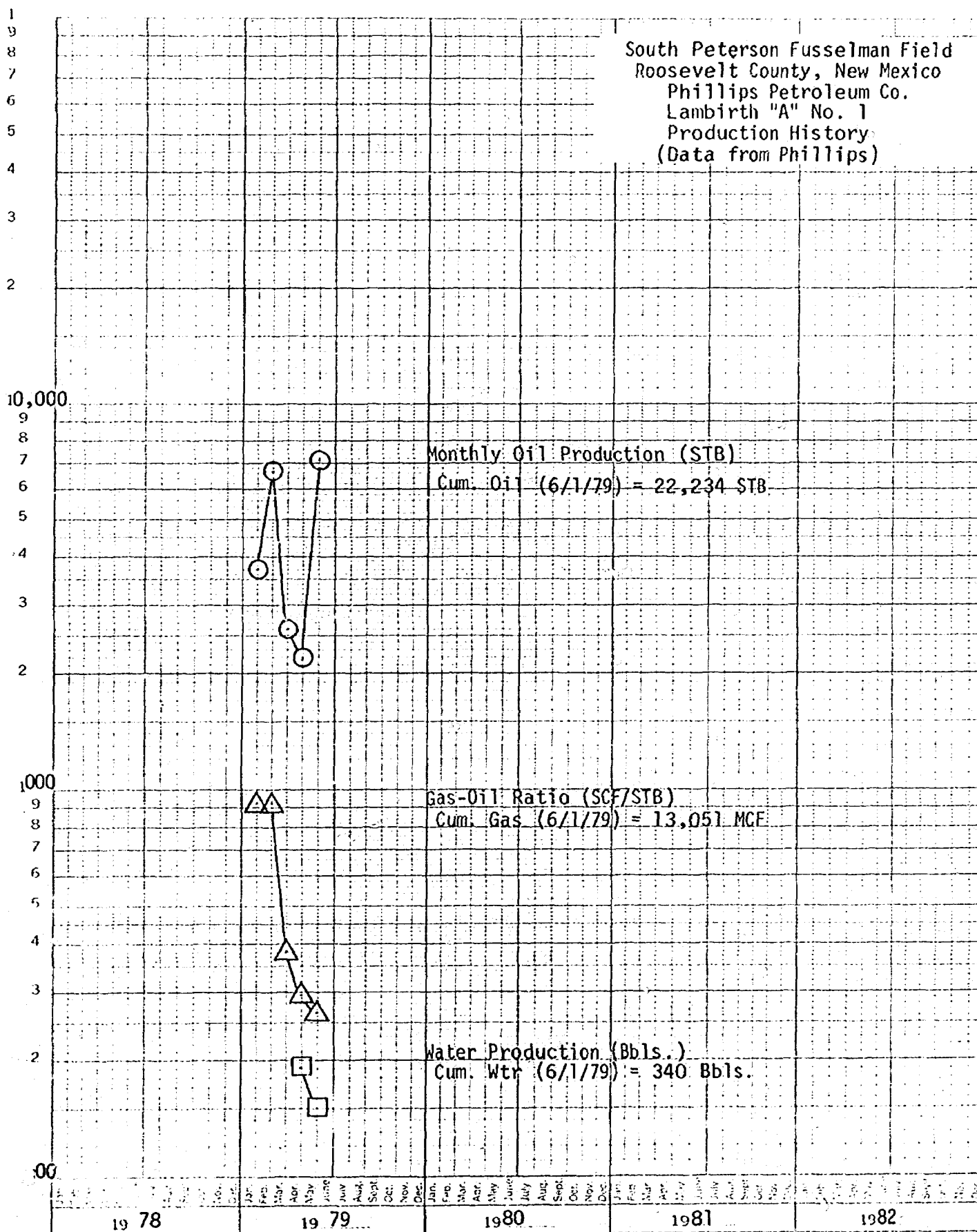
Phillips Petroleum Co.

Lambirth "A" No. 1

Date of Completion:	1-10-79
Elevation (Gr.):	4405'
Perforated Interval:	7830'-38, 7852'-58' (-3425'-53')
Date of Potential:	1-18-79
Initial Potential:	332 BO + 306 MCF + OBW, GOR= 922, FTP= 285 psi
Original Bottom Hole Pressure:	N/A
Current Bottom Hole Pressure:	N/A
Current Production Test:	N/A
Cumulative Production: (6-1-79)	22,234

K&E 5 YEARS BY MONTHS X 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



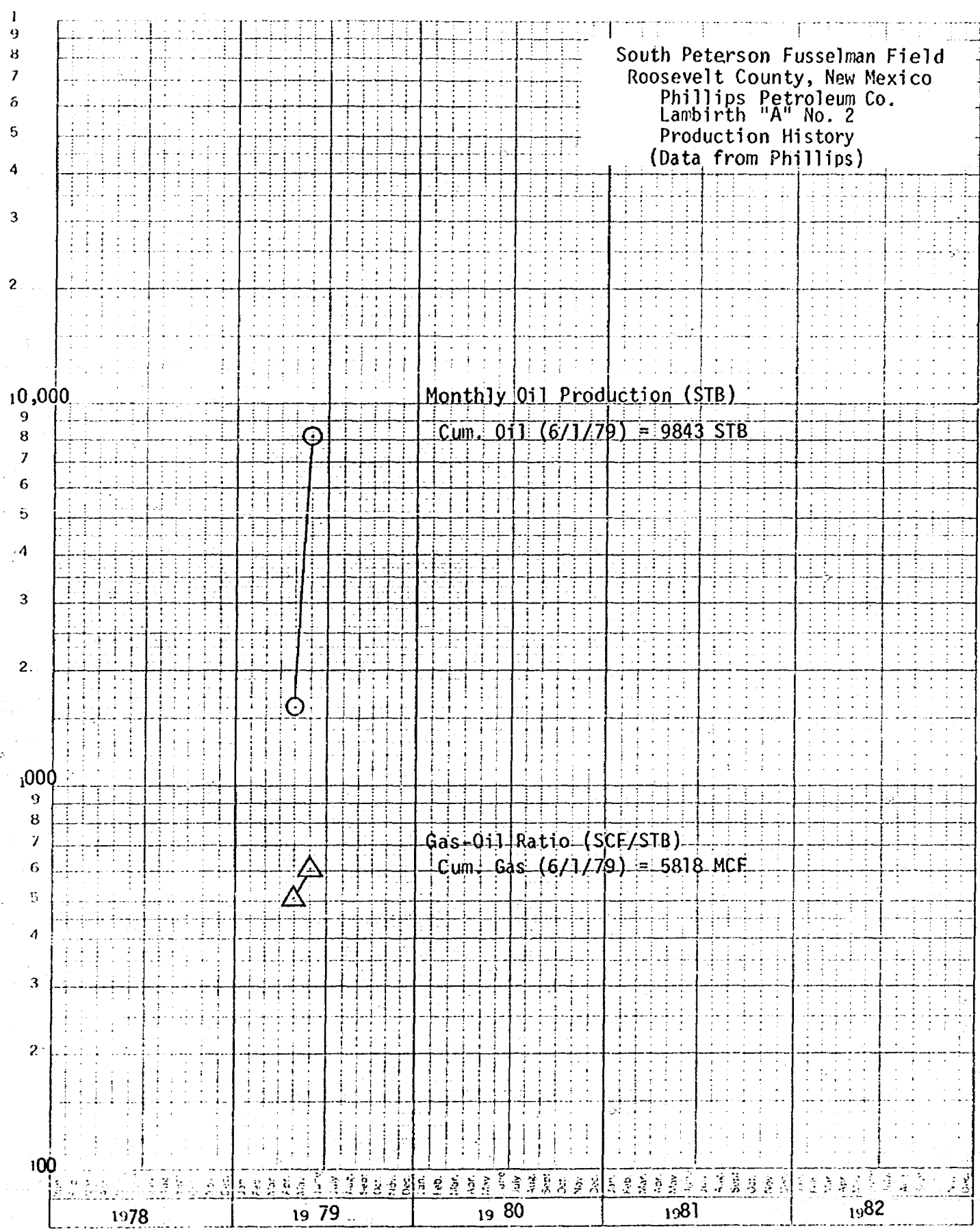
Phillips Petroleum Co.

Lambirth "A" No. 2

Date of Completion:	4-9-79
Elevation (Gr.):	4396.8'
Perforated Interval:	7832'-38' (-3435'-41')
Date of Potential:	4-19-79
Initial Potential:	410 BO + 685 MCF + tr wtr, GOR 1671, FTP= 675 psi
Original Bottom Hole Pressure:	N/A
Current Bottom Hole Pressure:	2697 psi @ 7835' (-3438') 7-18-79
Current Production Test:	352 BO + 313 MCF, GOR= 7-16-79 889, FTP= 530 psi
Cumulative Production:	9843 6-1-79

K&E 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



Phillips Petroleum Co.

Lambirth "A" No. 3

Date of Completion: N/A
Well TD'ed in June

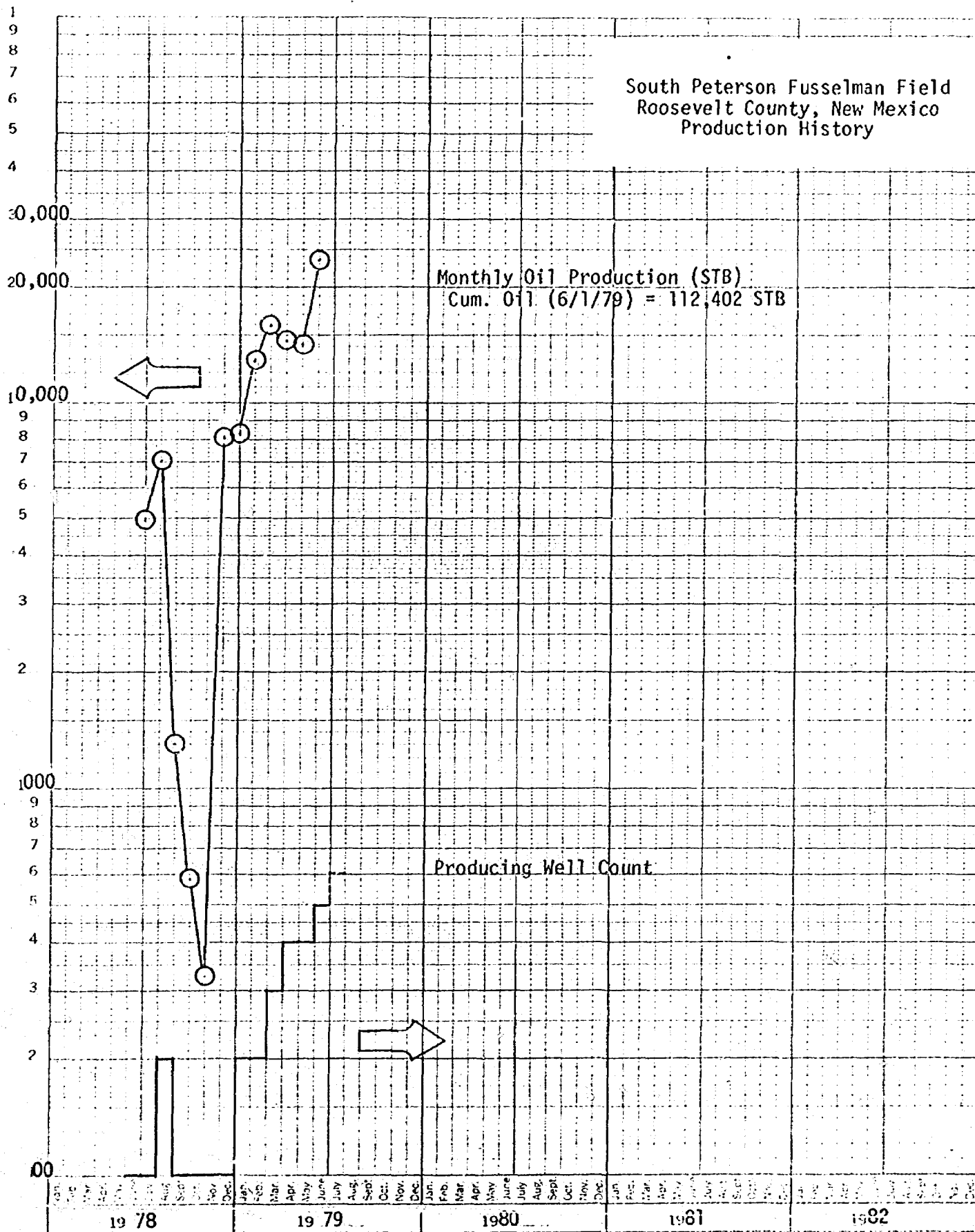
Elevation (Gr): 4425'

Perforated Interval: 7814'-18', 30'-40' & 42'-46'
(-3389'-3421')

Comments: Completion is still in progress

K-E 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6690



WELL DATA SHEET
SOUTH PETERSON FUSSELMAN FIELD
ROOSEVELT COUNTY, NEW MEXICO

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
ENSERCH EXHIBIT NO. 4
CASE NO. 6270

	<u>ENSERCH LAMBIRTH</u>			<u>PHILLIPS LAMBIRTH</u>		
Well Name	<u>NO. 1</u>	<u>NO. 6</u>	<u>NO. 7</u>	<u>A NO. 1</u>	<u>A NO. 2</u>	<u>A NO. 3</u>
*Net Pay	44'	28'	3.5' (1)	15'	43'	18'
*Average Porosity	12.5%	16.0%	N/A	13.5%	10.9%	15.2%
*Average Water Saturation	21.0%	26.0%	N/A	28.0%	18.0%	20%
Effective Permeability to Oil (md)	559 md (BU)					
Productivity Index (Bbls/Day/psi)	31.9	.2	5.0 (DST)	.266	35.0	N/A

(1) Only the top of the Fusselman was penetrated due to hole conditions. Open-hole logs over the Fusselman were not obtained because of insufficient "rat hole".

* Log calculations

South Peterson Fusselman Field
 Roosevelt County, New Mexico
 Enserch Exploration, Inc.
 Lambirth No. 1

Calculations & Results of Reservoir Limit Test

$$\beta L = .15 \text{ psi/hour}$$

$$Vp = .0418 \frac{qB}{\beta L C}$$

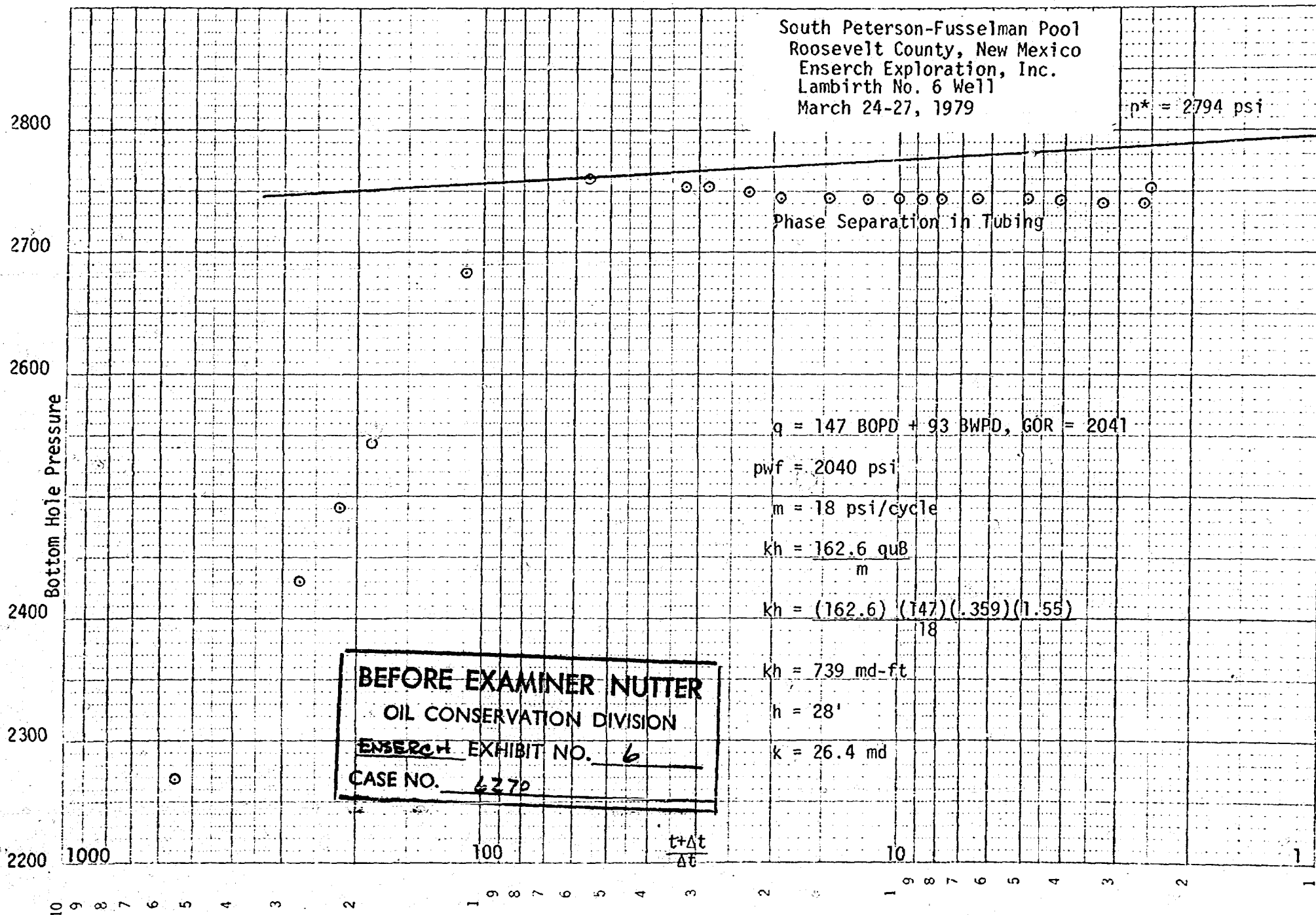
$$Vp = (.0418) (647) (1.539) \frac{(.15) (15.62 \times 10^{-6})}{-6}$$

$$Vp = 17.76 \times 10^6 \text{ reservoir bbls}$$

$$\approx 830 \text{ acres drainage area}$$

South Peterson-Fusselman Pool
Roosevelt County, New Mexico
Enserch Exploration, Inc.
Lambirth No. 6 Well
March 24-27, 1979

$p^* = 2794$ psi



0649 94

K&E SEMI-LOGARITHMIC PLOTTER
REUFFEL & ESSER CO. WILMINGTON, DE.

Minimum Permeability Required
to drain 80 acres

Since pressure build-up data was not available on the majority of the Fusselman completions, we decided to use productivity index data in order to determine if the well with the lowest productivity index could drain 80 acres.

Keywords:

J= Productivity Index = Bbl/Day/psi
k= permeability (darcies)
h= net pay thickness (feet)
 ϕ = porosity (decimal)
Bo= Formation Volume factor (Res Bbl/STB)
re= effective drainage area (ft)
rw= wellbore radius (ft)

Lambirth No. 6

$$J = \frac{7.08 kh}{\mu B_o \ln(re/rw)}$$

$$J = .2 \text{ Bbl/Day/psi}$$

$$\mu = .359 \text{ cp}$$

$$B_o = 1.55 \text{ Res Bbl/STB}$$

$$h = 28' \quad re = 80 \text{ acres} = 1053', \quad rw = 5.5" = .458'$$

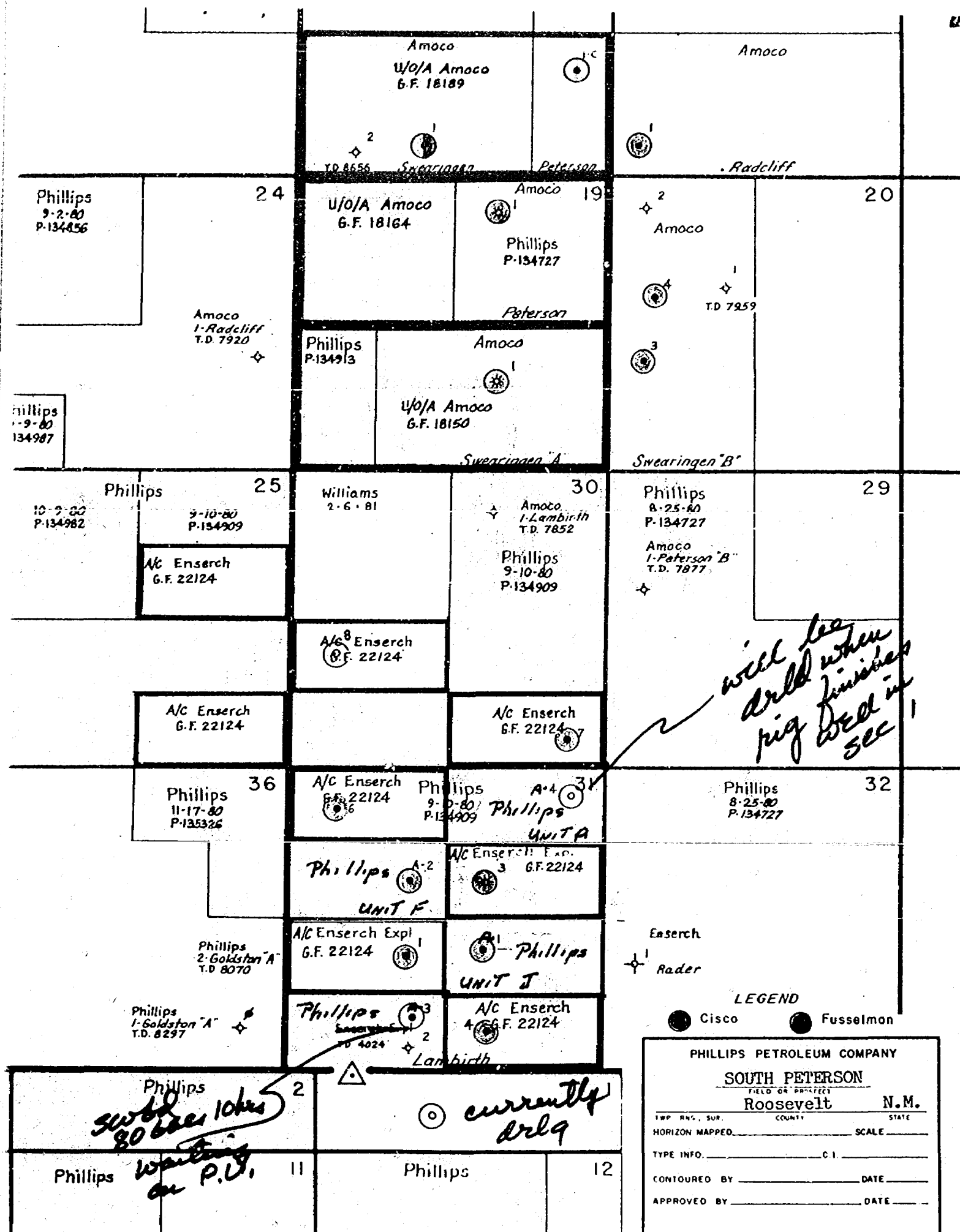
$$k = \frac{J \mu B_o \ln(re/rw)}{7.08 h}$$

$$k = \frac{(.2)(.359)(1.55)\ln(1053'/.458')}{(7.08)(28)}$$

$$k = .004 \text{ darcies or } 4 \text{ md}$$

Therefore, 4 md are required to drain 80 acres.

Our next objective was to determine if the permeability in the Lambirth 6 was greater than or equal to 4 md. Unfortunately the initial build-up on the Lambirth 6 experienced phase separation in the tubing during the build-up survey. However, in assuming the initial pressure in Lambirth 6 was equal to the initial pressure in the Lambirth No. 1, we calculated the following:



Schlumberger

DUAL LATEROLOG
MICRO-SFLCOUNTY ROOSEVELT
FIELD SOUTH PETERSONLOCATION LAMBIRTH A #1
WELL

COMPANY PHILLIPS PETROLEUM CO.

COMPANY PHILLIPS PETROLEUM COMPANY

WELL LAMBIRTH A #1

FIELD SOUTH PETERSON

COUNTY ROOSEVELT STATE NEW MEXICO

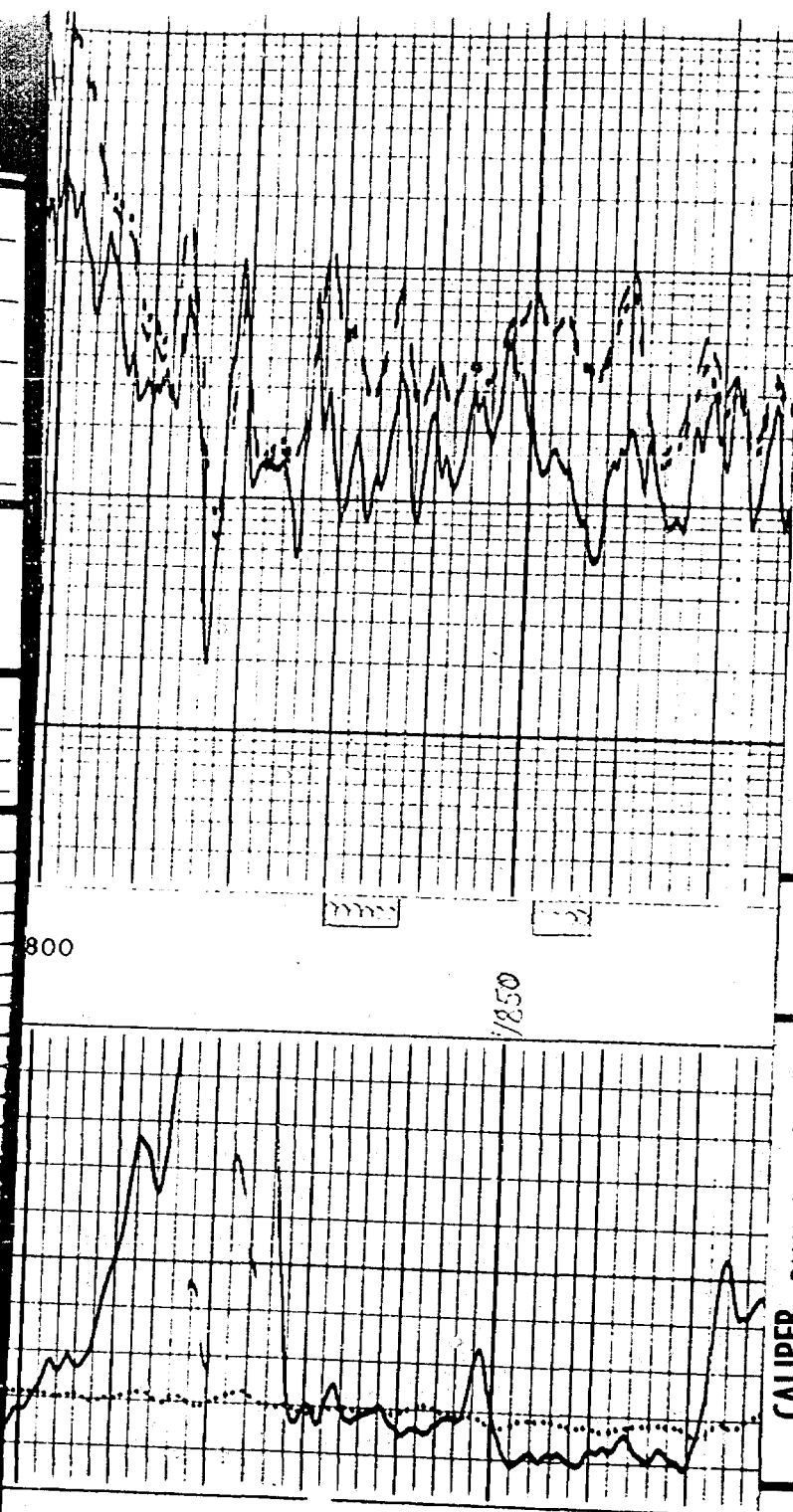
LOCATION 2055' FSL & 1980' FEL

Other Services:

CNL-FDC

API SERIAL NO SEC. TWP RANGE
31 5-S 33-EPermanent Datum: G.L. , Elev.: 4405
Log Measured From K.B. 17 Ft. Above Perm. Datum
Drilling Measured From K.B.Elev.: K.B. 4422
D.F. 4405
G.L. 4405

Date	12-12-78				
Run No.	ONE				
Depth-Driller	7995				
Depth-Logger (Schl.)	7999				
Btm. Log Interval	7998				
Top Log Interval	3500				
Casing-Driller	8 57 @ 3500	@	@	@	@
Casing-Logger	3500				
Bit Size	7 778				
Type Fluid in Hole	SW GEL, STARCH, OIL (6.5%)				
Dens.	10.2	58			
Visc.					
pH	8.5	ml	ml	ml	ml
Fluid Loss					
Source of Sample	CIRC.				
Rm @ Meas. Temp.	.10 @ 57 °F	@ °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	.076 @ 56 °F	@ °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	.149 @ 56 °F	@ °F	@ °F	@ °F	@ °F
Source: Rmf	M				
Rmc	C				
Rm @ BHT	.04 @ 144 °F	@ °F	@ °F	@ °F	@ °F
Circulation Stopped	1500 12-1				
Logger on Bottom	0330 12-12				
Max. Rec. Temp.	144 °F	°F	°F	°F	°F
Equip. Location	7732 LVLD				
Recorded By	SCHILTGEN				



CALIPER DIAM. IN INCHES

6 16

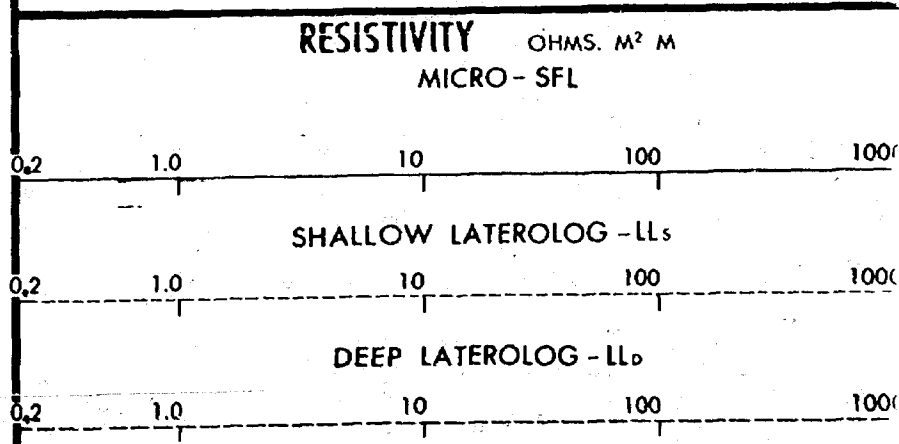
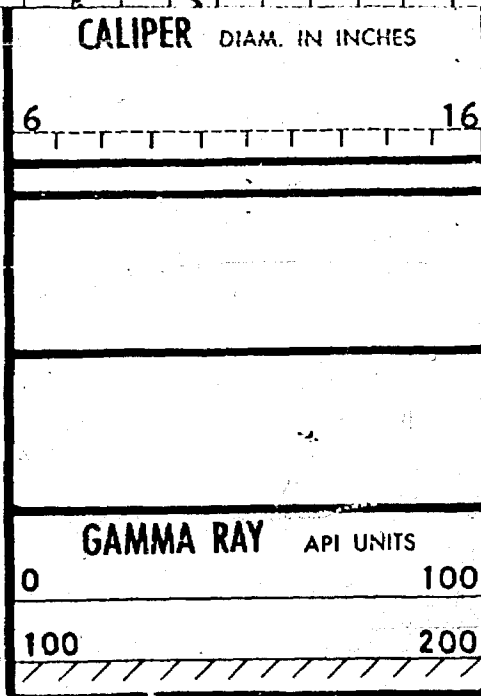
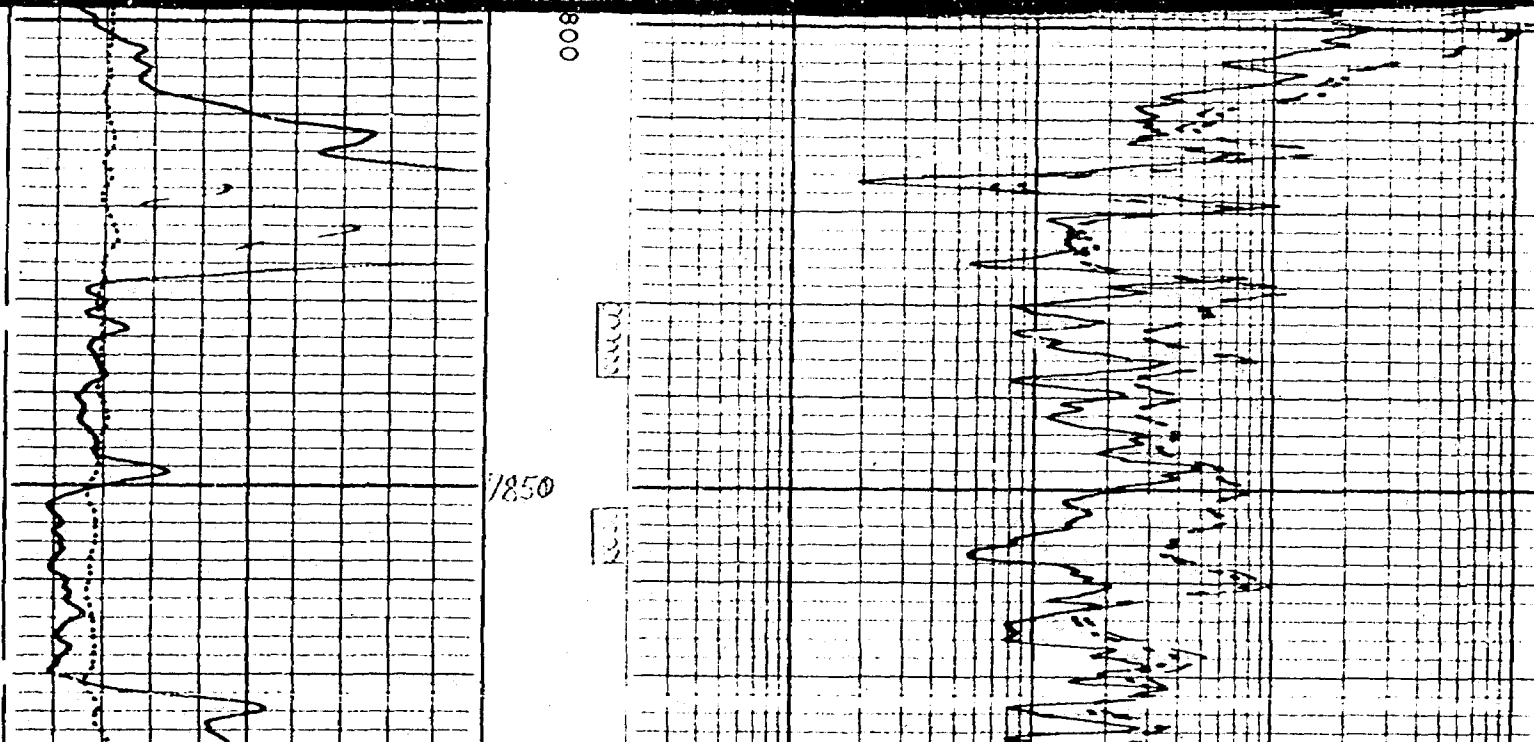
RESISTIVITY OHMS. M² M

Schlumberger

DUAL LATEROLOG
MICRO-SFL

COUNTY	ROOSEVELT
FIELD	SOUTH PETERSON
LOCATION	LAMBIRTH A #1
WELL	
COMPANY	PHILLIPS PETROLEUM CO.
WELL	LAMBIRTH A #1
FIELD	SOUTH PETERSON
COUNTY	ROOSEVELT
STATE	NEW MEXICO
LOCATION	2055' FSL & 1980' FEL
AP SERIAL NO	31
SEC	5-S
TWP	33-E
RANGE	
Other Services:	CNL-FDC
Permanent Datum:	G.L. 4405
Log Measured From	K.B. 17
Drilling Measured From	K.B.
Elev.: 4405	
Elev.: K.B. 4422	
D.F. 4405	
G.L. 4405	

Date	12-12-78
Run No.	ONE
Depth-Driller	7995
Depth-Logger (Schl.)	7999
Bm. Log Interval	7998
Top Log Interval	3500
Casing-Driller	8 5/8 @ 3500
Casing-Logger	3500
Bit Size	7 7/8
Type Fluid in Hole	SW GEL, STARCH, OIL (6.5%)
Dens.	10.2
Visc.	58
pH	8.5
Fluid Loss	8.5 ml
Source of Sample	CIRC.
Rm @ Meas. Temp.	.10 @ 57 °F
Rmf @ Meas. Temp.	.076 @ 56 °F
Rmc @ Meas. Temp.	.149 @ 56 °F
Source: Rmf Rmc	M C
Rm @ BHT	.04 @ 144 °F
Circulation Stopped	1500 12-11
Logger on Bottom	0330 12-12
Max. Rec. Temp.	144 °F
Equip. location	7732 LVLD
Recorded By	SCHILTGEN



Schlumberger

**COMPENSATED NEUTRON
FORMATION DENSITY**

ROOSEVELT
COUNTY SOUTH PETERSON
FIELD
LOCATION LAMBIRTH A #1
WELL
COMPANY PHILLIPS PETROLEUM
CO.

COMPANY PHILLIPS PETROLEUM COMPANY

WELL LAMBIRTH A #1

FIELD SOUTH PETERSON

COUNTY ROOSEVELT STATE NEW MEXICO

LOCATION 2055' FSL & 1980' FEL

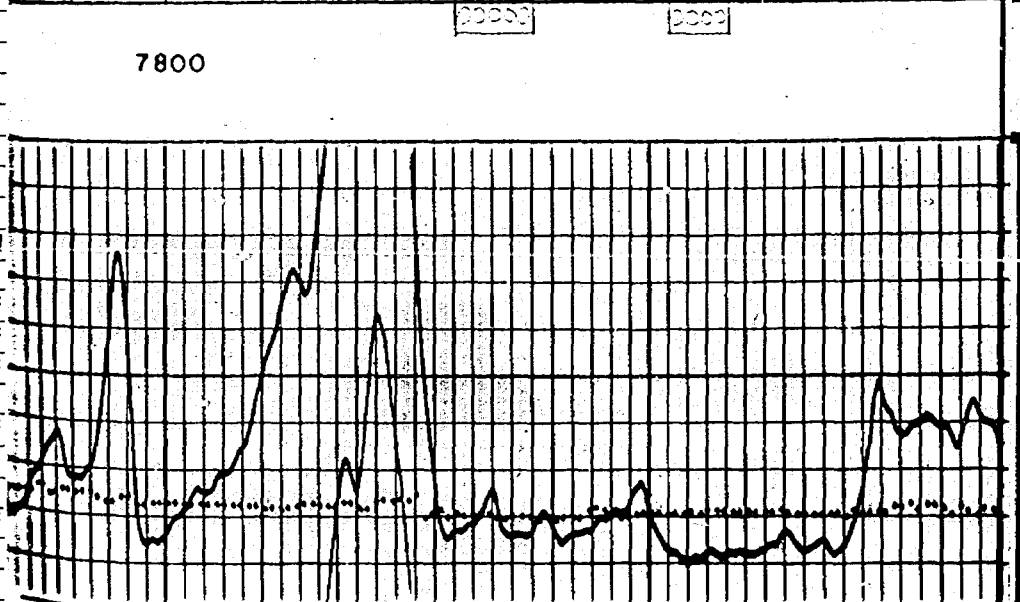
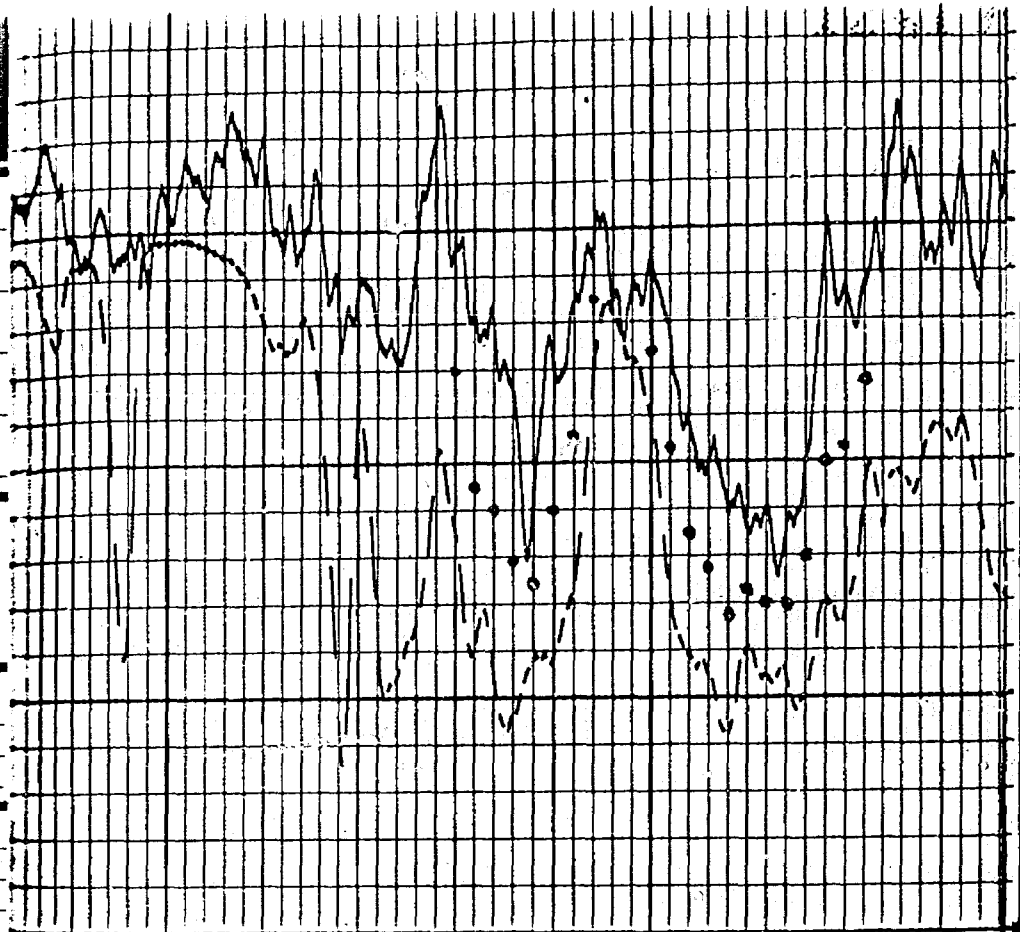
Other Services:
DLL

API SERIAL NO. SEC. TWP. RANGE
31 5-S 33-E

Permanent Datum: G.L. ; Elev.: 4405
Log Measured From K.B. 17 Ft. Above Perm. Datum
Drilling Measured From K.B.

Elev.: K.B. 4422
D.F.
G.L. 4405

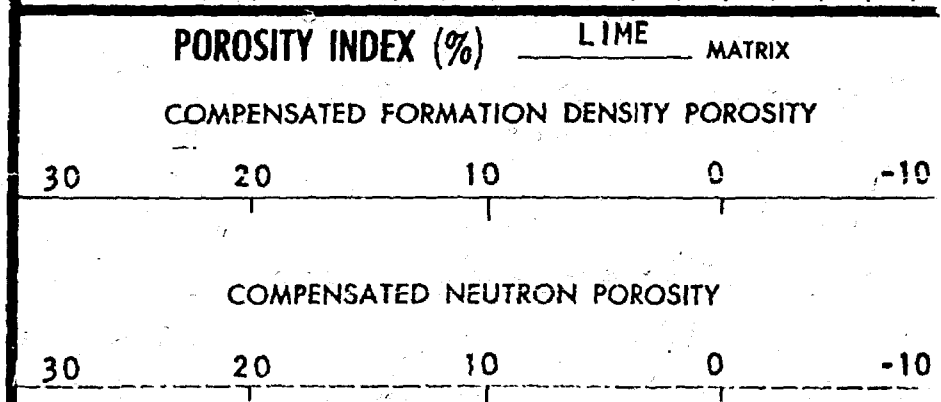
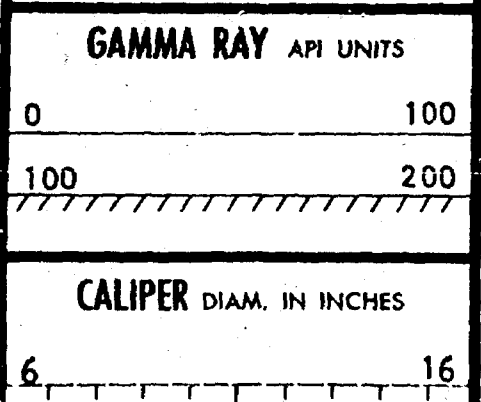
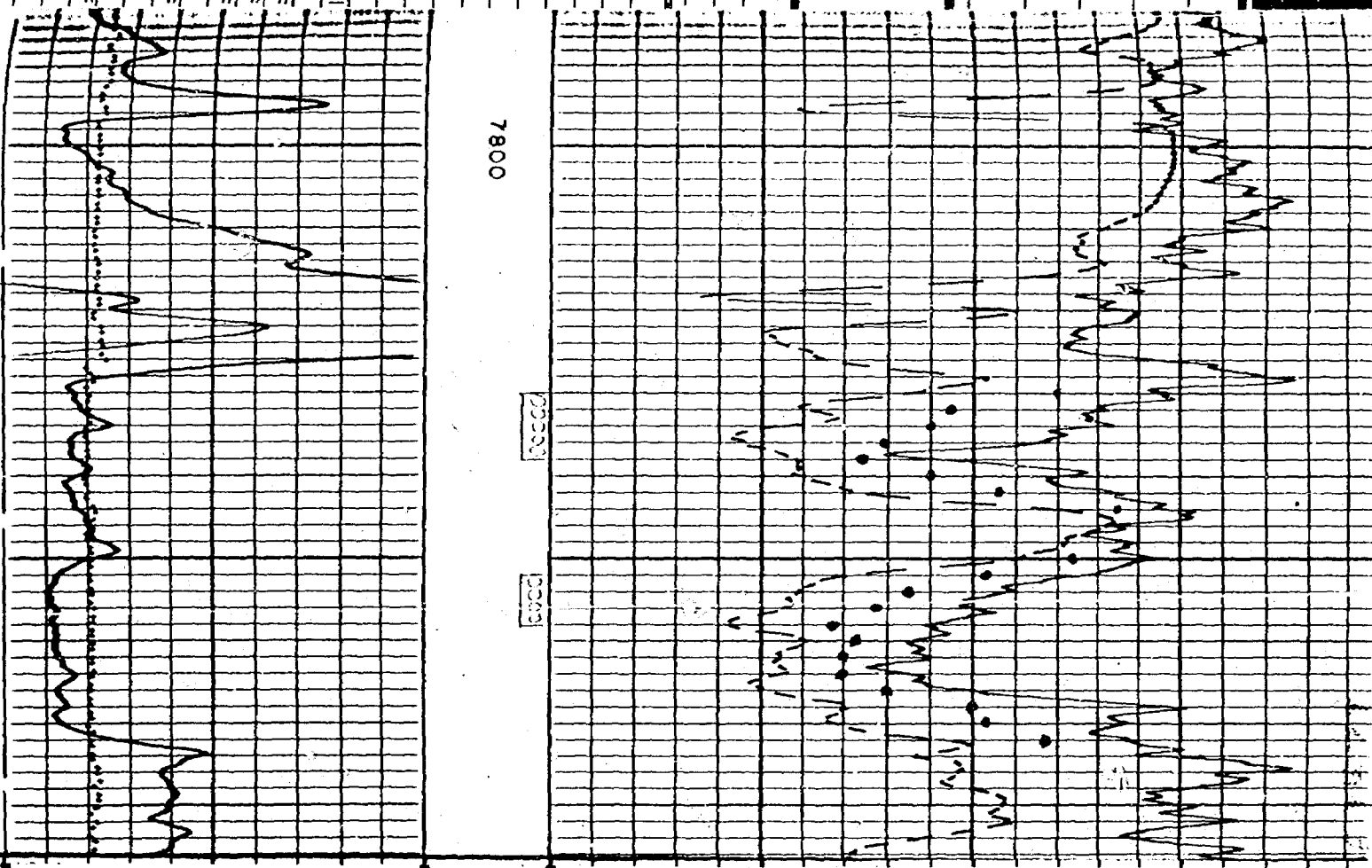
Date	12-12-78				
Run No.	ONE				
Depth-Driller	7995				
Depth-Logger	7998				
Btm. Log Interval	7997				
Top Log Interval	SURF				
Casing-Driller	8.578@ 3500	@	@	@	@
Casing-Logger	3500				
Bit Size	U 7/8				
Type Fluid in Hole	SW GEL, STARCH, OIL (6.5%)				
Dens.	10.2	58			
Visc.					
pH	8.5	ml	ml	ml	ml
Fluid Loss					
Source of Sample	CIRC.				
Rm @ Meas. Temp.	.10 @ 57 F	@ °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	.076 @ 56 F	@ °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	.149 @ 56 F	@ °F	@ °F	@ °F	@ °F
Source: Rmf Rmc	M C				
Rm @ BHT	.04 @ 144 F	@ °F	@ °F	@ °F	@ °F
Circulation Stopped	1500 12-11				
Logger on Bottom	0830 12-12				
Max. Rec. Temp.	144 °F	°F	°F	°F	°F
Equip. Location	7732 LVLD				
Recorded By	SCHILTGEN				



Schlumberger

COMPENSATED NEUTRON
FORMATION DENSITY

COUNTY <u>ROOSEVELT</u>		FIELD <u>SOUTH PETERSON</u>	
LOCATION <u>LAMBIRTH A #1</u>		WELL <u>LAMBIRTH A #1</u>	
COMPANY <u>PHILLIPS PETROLEUM CO.</u>		COUNTY <u>ROOSEVELT</u> STATE <u>NEW MEXICO</u>	
LOCATION <u>2055' FSL & 1980' FEL</u>		Other Services: <u>DLL</u>	
API SERIAL NO. <u>31</u>	SEC <u>5-S</u>	TWP <u>33-E</u>	RANGE
Permanent Datum: <u>G.L.</u> ; Elev.: <u>4405</u>			
Log Measured From <u>K.B.</u> <u>17</u> ft. Above Perm. Datum			
Drilling Measured From <u>K.B.</u>			
Date <u>12-12-78</u>	Run No. <u>ONE</u>	Elev.: <u>K.B. 4422</u> D.F. <u>4405</u> G.L. <u>4405</u>	
Depth-Driller <u>7995</u>	Depth-Logger <u>7998</u>		
Bm. log interval <u>7997</u>	Top log interval <u>SURF</u>		
Casing-Driller <u>8 578@ 3500</u>	Casing-Logger <u>3500</u>		
Bit Size <u>U 7/8</u>	Type Fluid in Hole <u>SW GEL, STARCH, OIL (5.5%)</u>		
Dens. Visc. <u>10.2</u> <u>58</u>	pH <u>8.5</u>		
Source of Sample <u>CIRC.</u>	Rm @ Meas. Temp. <u>.10 @ 57 F</u>		
Rmf @ Meas. Temp. <u>.076 @ 56 F</u>	Rmc @ Meas. Temp. <u>.149 @ 56 F</u>		
Source: Rmf <u>M</u> Rmc <u>C</u>	Rm @ BHT <u>.04 @ 144 F</u>		
Circulation Stopped <u>1500</u> <u>12-11</u>	Logger on Bottom <u>0830</u> <u>12-12</u>		
Max. Rec. Temp. <u>144</u> <u>F</u>	Equip. Location <u>7732</u> <u>LVL D</u>		
Recorded By <u>SCHILTGEN</u>			



BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

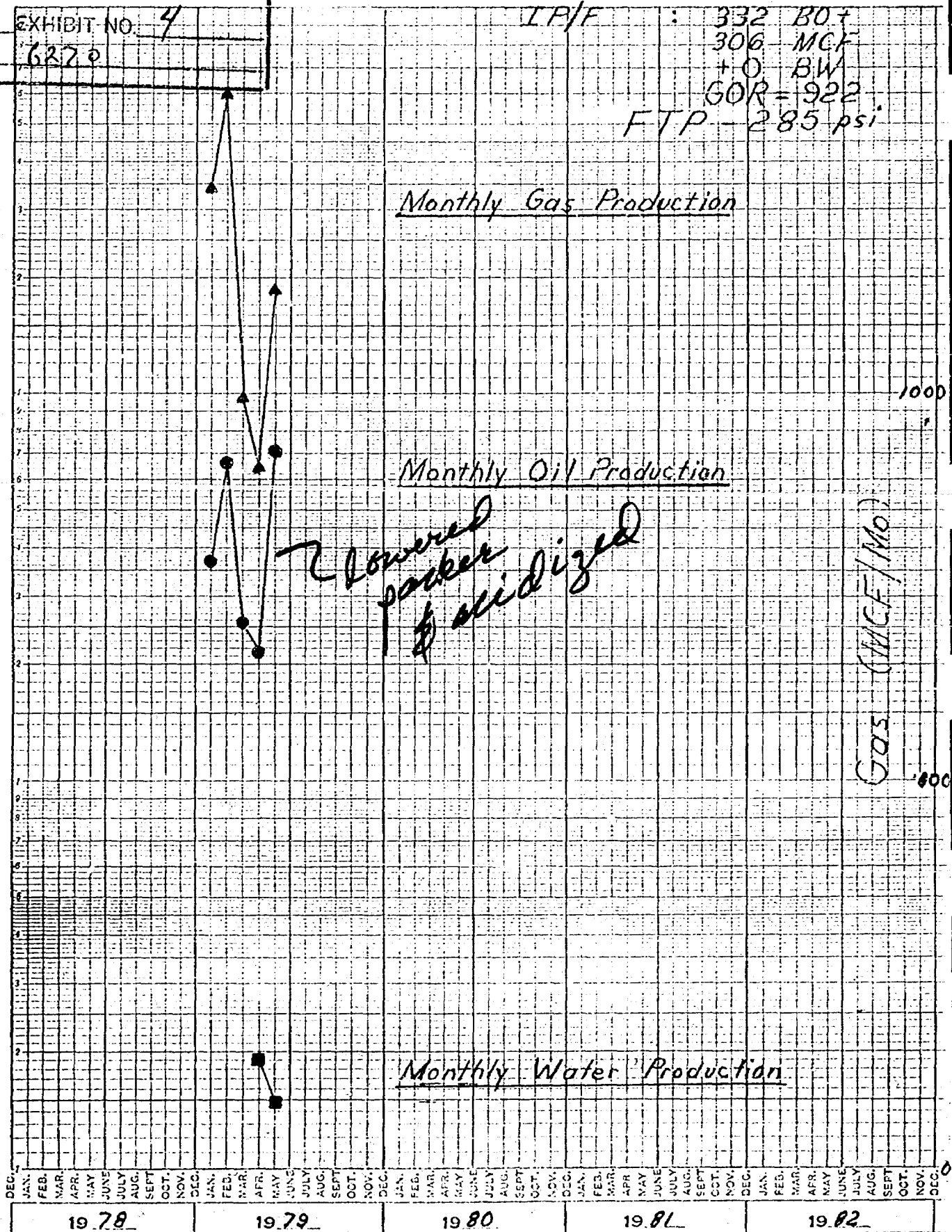
Phillips
CASE NO. 6270

EXHIBIT NO. 4

Phillips Lambirth, A-1
Perforations: 7830'-38'
7852'-52'

IP/F : 332 BO+
306 MCF
+ 0 BW
GOR = 922
FTP = 285 psi

FLUIDS (Bbls./Mo.)
10,000
1000
100



Form 884 4-49

BOTTOM HOLE PRESSURE AND PRODUCTIVITY INDEX TESTS

LEASE Lambirth "A"
 WELL NO. 1
 FIELD Peterson Fusselman

RKB ELEVATION 4422
 REFERENCE POINT RKB, ELEV. 4422
 DATUM -3428 SUBSEA, OR 7850 FROM RKB

PRODUCING ZONE Fusselman
 TOP 7827
 BOTTOM 7950

South Oil Pool

Date	Depth	B.H.P.	Liquid Level	B.H. Temp.	Surface Pressures		Hours S. I.	PRODUCTION TEST					Prod. Index B/D/Lb. or Ft.	REMARKS
					Tbg.	Csg.		Hrs.	Choke	Oil B/D	Wtr. B/D	GOR CF/D		
1-15-79	Surf		Grad.		704		44							
	7040'	2512	.257											
	7440'	2631	.298											
	7540'	2664	.330											
	7640'	2691	.270											
	7740'	2719	.280											
	7850'	2750	@ Datum											
4-24-79	Surf		Grad.		151									
	4000	680	.132											
	4858	890	.245											
	5858	1171	.281											
	6858	1485	.314											
	7858	1813	.328				24		20/64"	231	19	1329	.266	Flowing BHP Test

BEFORE EXAMINER NUTTER
 OIL CONSERVATION DIVISION

Phillips EXHIBIT NO. 5
 CASE NO. 6270

Schlumberger

PROCESSED LOG

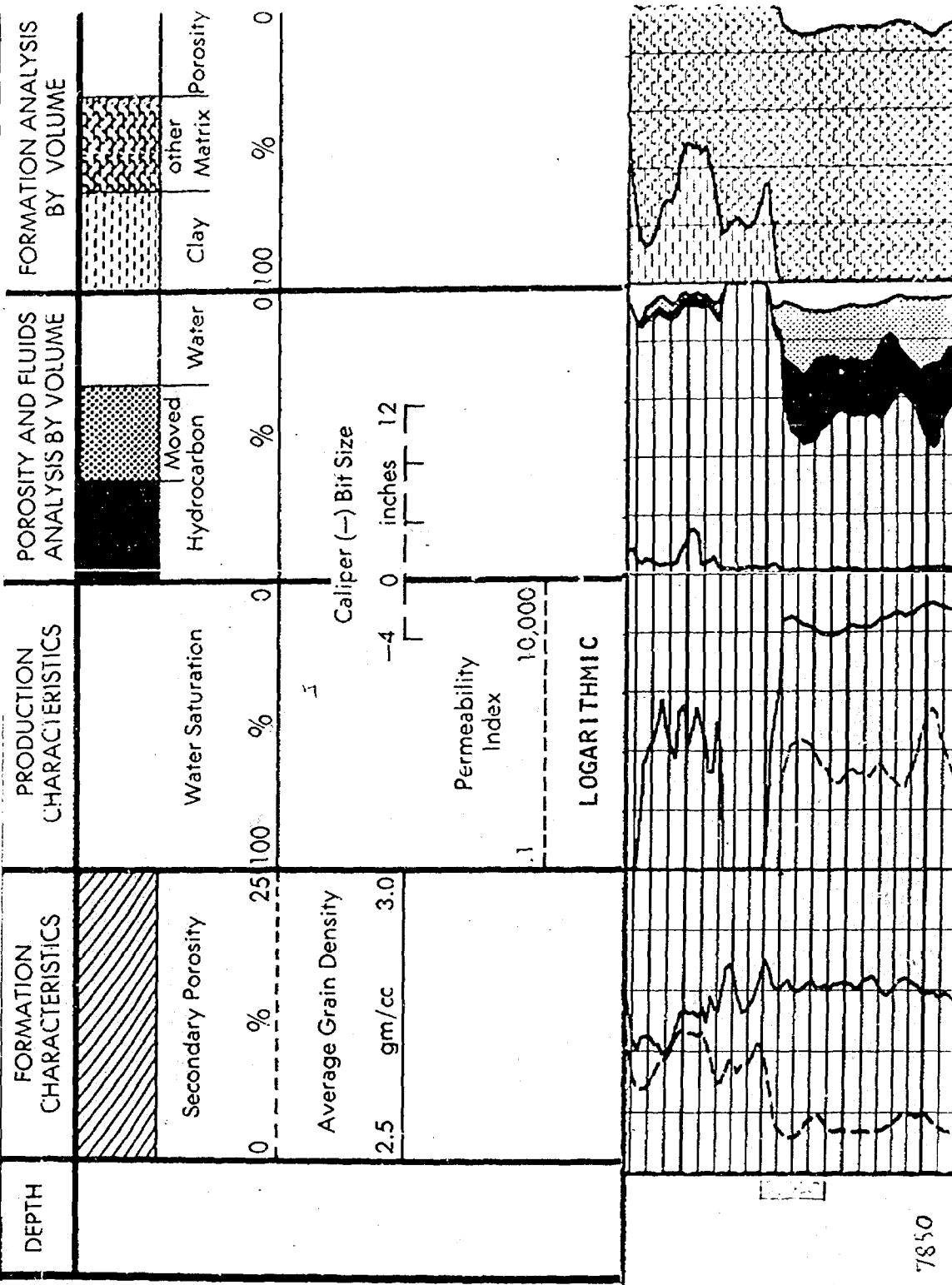
An Advanced
Synergetic Log
System

CORIBAND*

Using the following logs:

CNL/FDC-GR, DLL/MSFL

COMPANY PHILLIPS PETROLEUM COMPANY
WELL LAMBIRTH A #2
FIELD SOUTH PETERSON
COUNTY ROOSEVELT
STATE NEW MEXICO
DATE LOGGED 3-30-79 DATE COMPUTED 4-3-79
LOCATION 1980'FNL & 1980'FWL, SEC. 31, T-5-S, R-33-E
ELEVATION KB 4413 DF 4412 GL 4397



Schlumberger

PROCESSED
LOG

An Advanced
Synergetic Log
System
CORIBAND*

Using the following logs:

CNL/FDC-GR, DLL/MSFL

COMPANY PHILLIPS PETROLEUM COMPANY

WELL LAMBIRTH A #2

FIELD SOUTH PETERSON


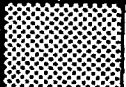

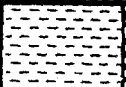


COUNTY ROOSEVELT

STATE NEW MEXICO

DATE LOGGED 3-30-79 DATE COMPUTED 4-3-79

LOCATION 1980'FNL & 1980'FWL, SEC. 31, T-5-S, R-33-E

ELEVATION KB 4413 DF 4412 GL 4397

DEPTH	FORMATION CHARACTERISTICS	PRODUCTION CHARACTERISTICS	POROSITY AND FLUIDS ANALYSIS BY VOLUME		FORMATION ANALYSIS BY VOLUME		
							
	Secondary Porosity	Water Saturation	Moved Hydrocarbon	Water	Clay	other Matrix	Porosity
	0 % 25	100 % 0	%	0	100	%	0
	Average Grain Density		Caliper (—) Bit Size				
	2.5 gm/cc 3.0		-4 0 inches 12				
		Permeability Index					
		.1 10,000					
		LOGARITHMIC					

7850

Phillips Lambirth A-2
 Perforations: 7832'-38'
 I.P.F. : 410 60+

685 MCF
 + Tr. Wtr.
 GOR 1671
 FTP-675

NO. 4157 TEN YEARS BY MONTHS X 3 1/2 INCH CYCLES RATIO RULING.
 IN STOCK DIRECT FROM CODEX BOOK CO., NORWOOD, MASS. 02062
 PRINTED IN U.S.A.

GRAPH PAPER

FLUIDS (Bbls./Mo.)

10,000

1000

100

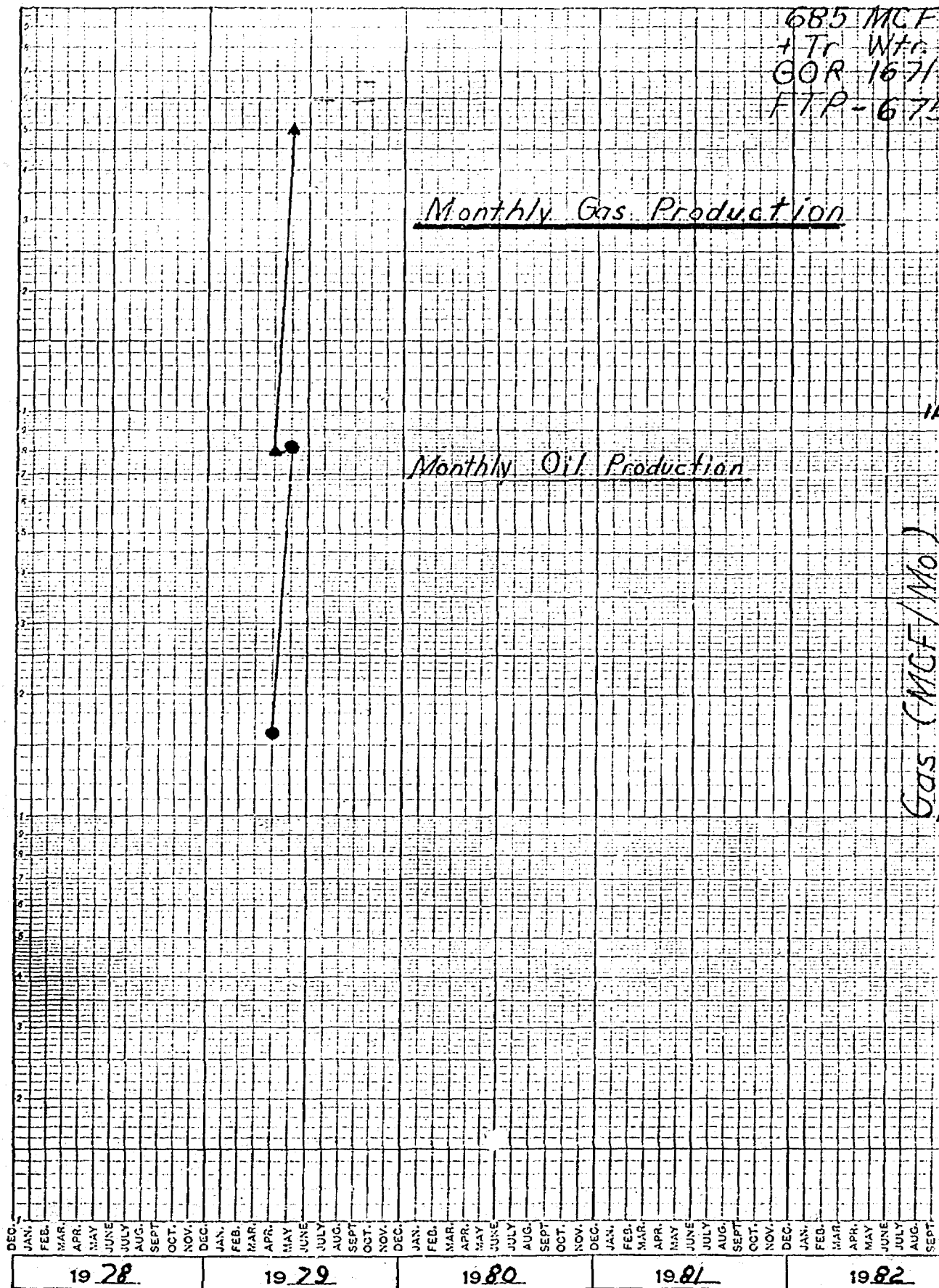
Monthly Gas Production

Monthly Oil Production

Gas (MCF/Mo.)

1000

100



Form 2069 4-53

DEPTH

COLUMNAR CORE RECORD

DESCRIPTION AND REMARKS

(X: Interval of estimated last core)

Phillips Petroleum Company
#2 Lambirth-A, Roosevelt County,
New Mexico.

P. B. Drisko
3-28-79

7810-13

Core #1: 7810-7819', recovered 9'. Fusselman.
Shale, dark, green, mottled, hard, with tan to red
finely crystalline, hard dolomite and light chert
pebble inclusions. No show.

7813-15

Dolomite, tan to red, finely crystalline, mottled,
hard, with much green shale and white to grey chert
inclusions. No show.

7815-17.5

Dolomite, tan to red, finely crystalline, mottled,
hard, shaley, with white and grey chert inclusions.
No show.

7817.5-18

Shale, very dark green, mottled, with tan dolomite
inclusions.

7818-19

Dolomite, tan to red, finely crystalline, mottled,
shaley, hard, with many grey to white chert pebble
inclusions. No show.

7819-23

Core #2: 7819-7850'. recovered 30'. Fusselman.
Dolomite, tan-pink, finely crystalline, mottled,
shaley, hard with grey-white chert inclusions.

7823-26

Dolomite, brown, finely crystalline, clean with
fair crystalline-vugular-fractured porosity. Heavy
stain, good odor. Scattered bleeding gas and oil.

7826-31

Dolomite, same as above with large vertical fractures.
Heavy stain. Fair bleeding gas and oil.

7831-49

Dolomite, brown, finely crystalline, clean with good
crystalline vugular porosity. Many thin vertical
fractures. Fair bleeding gas, oil and water.

7849-59

Lost.

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

Phillips EXHIBIT NO. 8
CASE NO. 6270

DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
LAMBERT NO. A-2
S. PETERSON FUSSELMAN FIELD
ROOSEVELT COUNTY, TEXAS

DATE : 3-28-79
FORMATION : FUSSELMAN
DRLG. FLUID: SALT GEL
LOCATION : 1980' FNL & 1980' FWL, SEC. 31, T-5-S, R-33-E

FILE NO : 3202-11088
ANALYSTS : MORSE
ELEVATION: 4396.8' GL

WHOLE CORE ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD) MAXIMUM 90 DEG	POR. FLD	FLUID SATS. OIL WTR	DESCRIPTION
------------------	-------	-------------------------------------	-------------	------------------------	-------------

CORE NO. 1 7811.0-7819.0 CUT 8' REC 8'

7811.0-19.0

CONG, DNS

CORE NO. 2 7819.0-7850.0 CUT 31' REC 29'

	7819.0-23.0						CONG, SHY, DNS
1	7823.0-24.0	1.4	0.6	4.6	12.2	41.9	LM, CHT, F
2	7824.0-25.0	0.2	*	11.3	10.6	33.1	DOL, LMY, SHY, CHT, F
3	7825.0-26.0	33.	18.	13.5	12.7	33.1	DOL, CHT, V/F
4	7826.0-27.0	20.	9.9	13.0	22.0	24.4	DOL, SL/V, SL/F
5	7827.0-28.0	92.	17.	13.3	15.3	30.7	DOL, V/F
6	7828.0-29.0	0.1	*	9.7	17.0	35.8	LM, SHY, F
7	7829.0-30.0	0.1	*	9.9	14.4	38.8	DOL, SHY, V/F
8	7830.0-31.0	0.1	*	8.3	17.3	39.6	DOL, V/F
9	7831.0-32.0	0.3	*	12.5	14.1	43.3	DOL, F, SL/V
10	7832.0-33.0	48.	26.	10.0	15.1	35.9	DOL, F
11	7833.0-34.0	12.	10.	8.3	19.0	33.1	DOL, SL/F
12	7834.0-35.0	0.2	*	10.8	17.2	34.9	DOL, V, SL/F
13	7835.0-36.0	38.	25.	9.3	12.0	29.0	DOL, SHY, SL/V, SL/F
14	7836.0-37.0	32.	29.	10.1	16.0	23.9	DOL, CHT, SL/V
15	7837.0-38.0	15.	8.2	7.7	12.6	22.1	DOL, CHT, V/F
16	7838.0-39.0	12.	11.	8.8	18.9	21.0	DOL
17	7839.0-40.0	<0.1	*	5.7	13.6	30.2	DOL, CHT, V
18	7840.0-41.0	0.5	*	13.3	21.0	23.3	DOL, V/F, V
19	7841.0-42.0	0.4	*	11.5	16.7	25.1	DOL, V, F
20	7842.0-43.0	0.2	*	9.7	16.7	27.8	DOL, F

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

Phillips EXHIBIT NO. 9
CASE NO. 6270

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

PAGE 2

PHILLIPS PETROLEUM COMPANY
LAMBERT NO. A-2

DATE : 3-28-79
FORMATION : FUSSELMAN

FILE NO : 3202-11086
ANALYSTS : MORSE

WHOLE CORE ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD) MAXIMUM	90 DEG	POR. FLD	FLUID OIL	SATS. WTR	DESCRIPTION
21	7843.0-44.0	42.	35.	8.6	20.6	26.0	DOL, F
22	7844.0-45.0	566.	40.	8.1	8.7	35.6	DOL, V/F
23	7845.0-46.0	204.	4.3	4.1	22.1	51.2	DOL, V/F
24	7846.0-47.0	29.	15.	7.3	12.2	33.8	DOL, CHT, V/F, SL/V
25	7847.0-48.0	4.0	2.8	4.7	12.3	41.1	DOL, SL/V, F
	7848.0-50.0						LOST CORE

* INDICATES PLUG PERM

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

Form 884 4-49

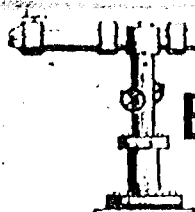
BOTTOM HOLE PRESSURE AND PRODUCTIVITY INDEX TESTS

LEASE Lambirth "A"WELL NO. 2FIELD Peterson Fusselman
South Oil PoolRXB ELEVATION 4422REFERENCE POINT RKB, ELEV. 4422DATUM -3428 SUBSEA, OR 7850 FROM RKBPRODUCING ZONE FusselmanTOP 7832 perfs.BOTTOM 7838 perfs.

Date	Depth	B. H. P.	Liquid Level	B. H. Temp.	Surface Pressures		Hours S. I.	PRODUCTION TEST					Prod. Index B/D/Lb. or Ft.	REMARKS
					Tbg.	Csg.		Hrs.	Choke	Oil B/D	Wtr. B/D	GOR CF/B		
4-12-79	Surf. 7675 7675	2620 2658	Grad. .280		472		Flowing Flowing Initial	3-1/2 1/4"		1474	0	291	35.96	
4-13-79	7850 7675 6675 5675 4675 3600	2709 2661 2386 2093 1796 1476	@ Datum .275 .293 .297 .298 ---				14 Hours							
7-16-79	16 3000 6000 7000 7800 7850	530 1268 2154 2444 2679 2694	.247 .295 .290 .293 .293		156	530	Flowing 10 14/64"		346	0	892	43		
7-18-79	16 1000 3000 5000 7000 7400 7600 7800 7850	604 675 1282 1871 2457 2572 2629 2687 2702	.072 .303 .294 .293 .287 .285 .290 .290		156	604	40.5 hours							

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISIONPhillips EXHIBIT NO. 10
CASE NO. 6270



TEFTELLER, INC.

reservoir engineering data

MIDLAND, TEXAS / FARMINGTON, NEW MEXICO

P. O. Box 5247
Midland, Texas 79701

July 19, 1979

Phillips Petroleum Corporation
4001 Penbrook
Odessa, Texas 79762

Attention: Mr. John Weichbroet

Subject: Build Up Measurement
Lambrith No. A-2
So. Peterson Field
Roosevelt County, New Mexico
Our File No. 3-9546-BU

Gentlemen:

Attached hereto are the results of a build up measurement which was made on the above captioned well July 16 thru July 18, 1979.

The data presented are in tabular and graphical form.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please call us at any time.

Respectfully submitted,

TEFTELLER, INC.

D. A. Warren, Jr.
D.A. Warren, Jr.
Operations Manager

DAW/js

Tcc: Enserch Exploration, Inc.
P.O. Box 4815
Midland, Texas 79701
Attn: Mr. Horace Burnett

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

Phillips EXHIBIT NO. 11
CASE NO. 6270

Serving the Permian Basin & Rocky Mountain Area

TEFTELLER, INC.
RESERVOIR ENGINEERING DATA
Midland, Texas

Well : LAMBRITH NO. A-2

Page 1 of 4

Field : SO. PETERSON

File 3-9546-BU

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

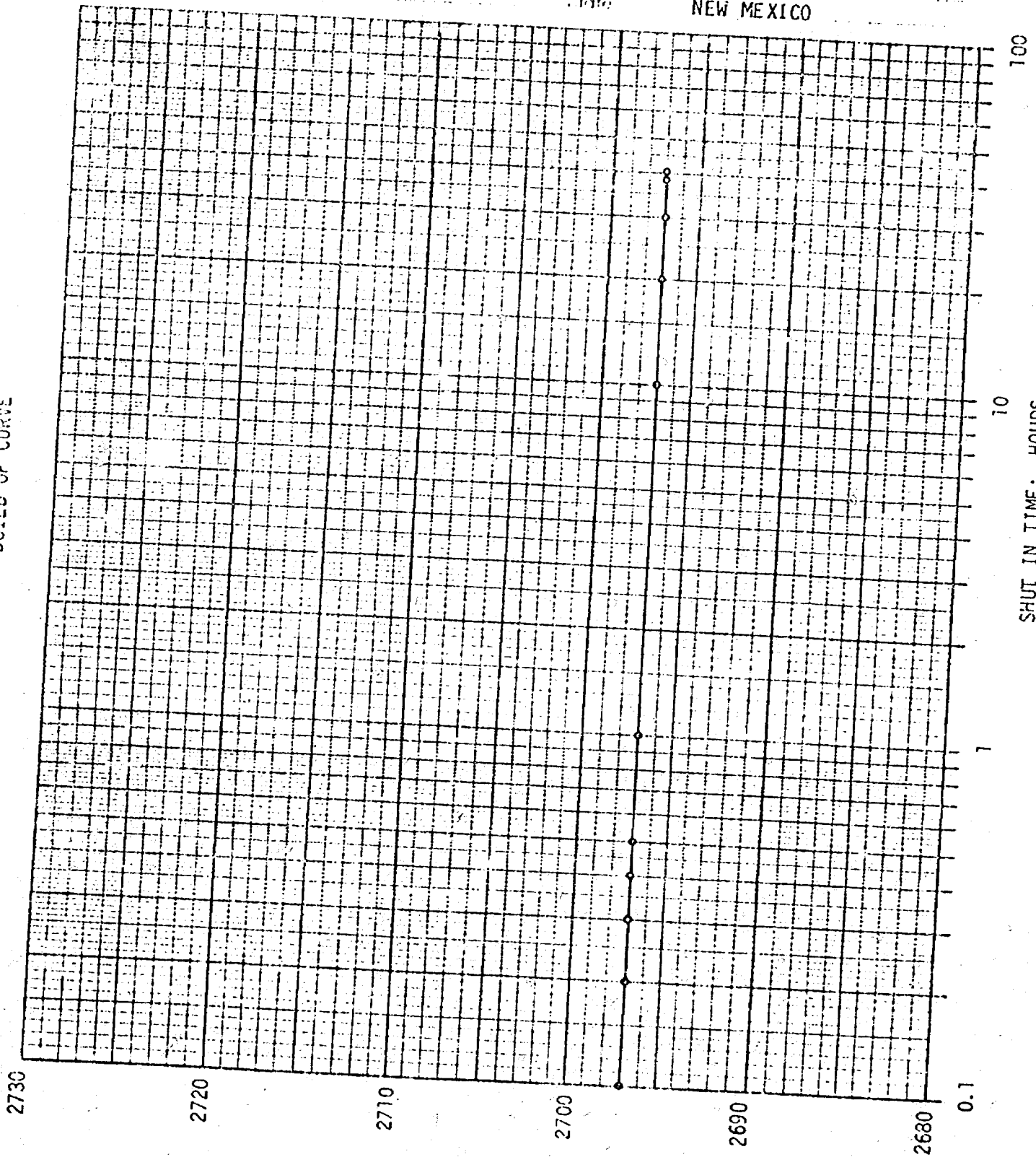
1979 Date	Status of Well	Time	Elapsed Time		Daily Rate		Wellhead Pressure Tubing	BHP @ 7800' Psig	BHP @ 7835' Psig
			Hrs.	Min.	Oil B/D	Gas MCF/D			
7-16	Arrived on loc. Well								
"	flowing 14/64" ck.	05:30					530		
"	Dummy run	06:00	0	00					
"	Inst. in lubricator								
"	Gradient Traverse	08:00	2	00	284.63	291.52	530		
"	Inst. @ 7800'	08:30	2	30				2679	2689
"	"	10:00	4	00	346.5	314.00	530	2679	2689
"	"	12:00	6	00	400.13	313.18	530	2679	2689
"	"	14:00	8	00	347.76	312.31	530	2679	2689
"	"	16:00	10	00	351.9	312.89	530	2679	2689
"	Shut in for build up	16:00	0	00					
"	"	16:06	0	06				2687	2697
"	"	16:12	0	12				2687	2697
"	"	16:18	0	18				2687	2697
"	"	16:24	0	24				2687	2697
"	"	16:30	0	30				2687	2697
"	"	17:00	1	00				2687	2697
7-17	"	02:00	10	00				2687	2697
"	"	12:00	20	00				2687	2697
"	"	22:00	30	00				2687	2697
7-18	"	06:30	38	30				2687	2697
"	Gradient Traverse	08:30	40	30			604	2687	2697

5-21-70
JEFFRELLER, INC.
reservoir engineering data
MIDLAND, TEXAS

Page 2 of 4
File 3-9546-BU

Company PHILLIPS PETROLEUM CORPORATION Formation FUSSELMAN
Well LAMBRITH NO. A-2 County ROOSEVELT
Field SO. PETERSON State NEW MEXICO

BUILD UP CURVE



PRESSURE: PSIG @ 7835 FEET



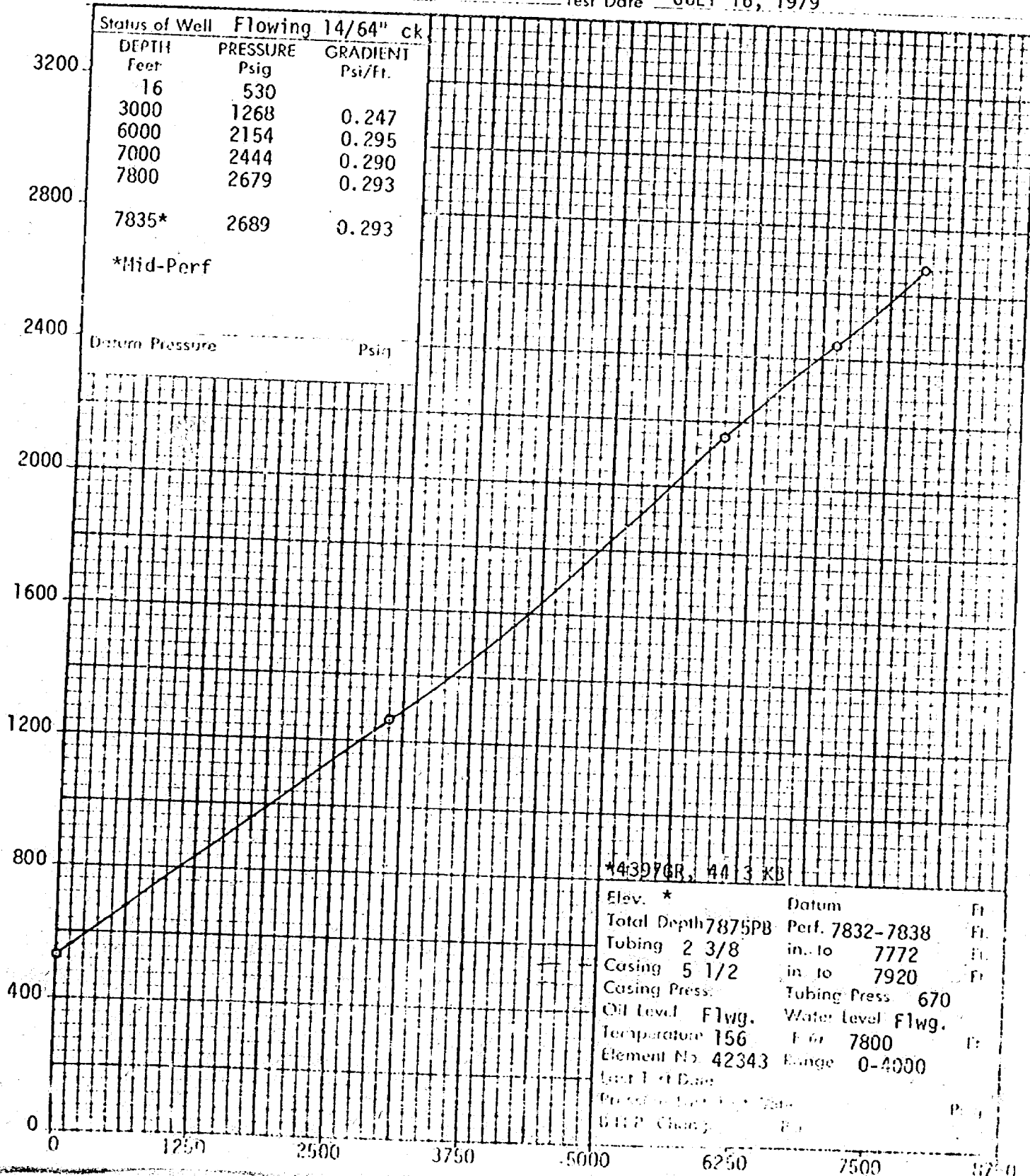
EFTELLER, INC.

reservoir engineering data

MIDLAND, TEXAS

Page 3 of 4
File 3-9546-BU

Company **PHILLIPS PETROLEUM CORPORATION** Lease **LAMBRITH** Well No. **A-2**
Field **SO. PETERSON** County **ROOSEVELT** State **NEW MEXICO**
Formation **FUSSELMAN** Test Date **JULY 16, 1979**

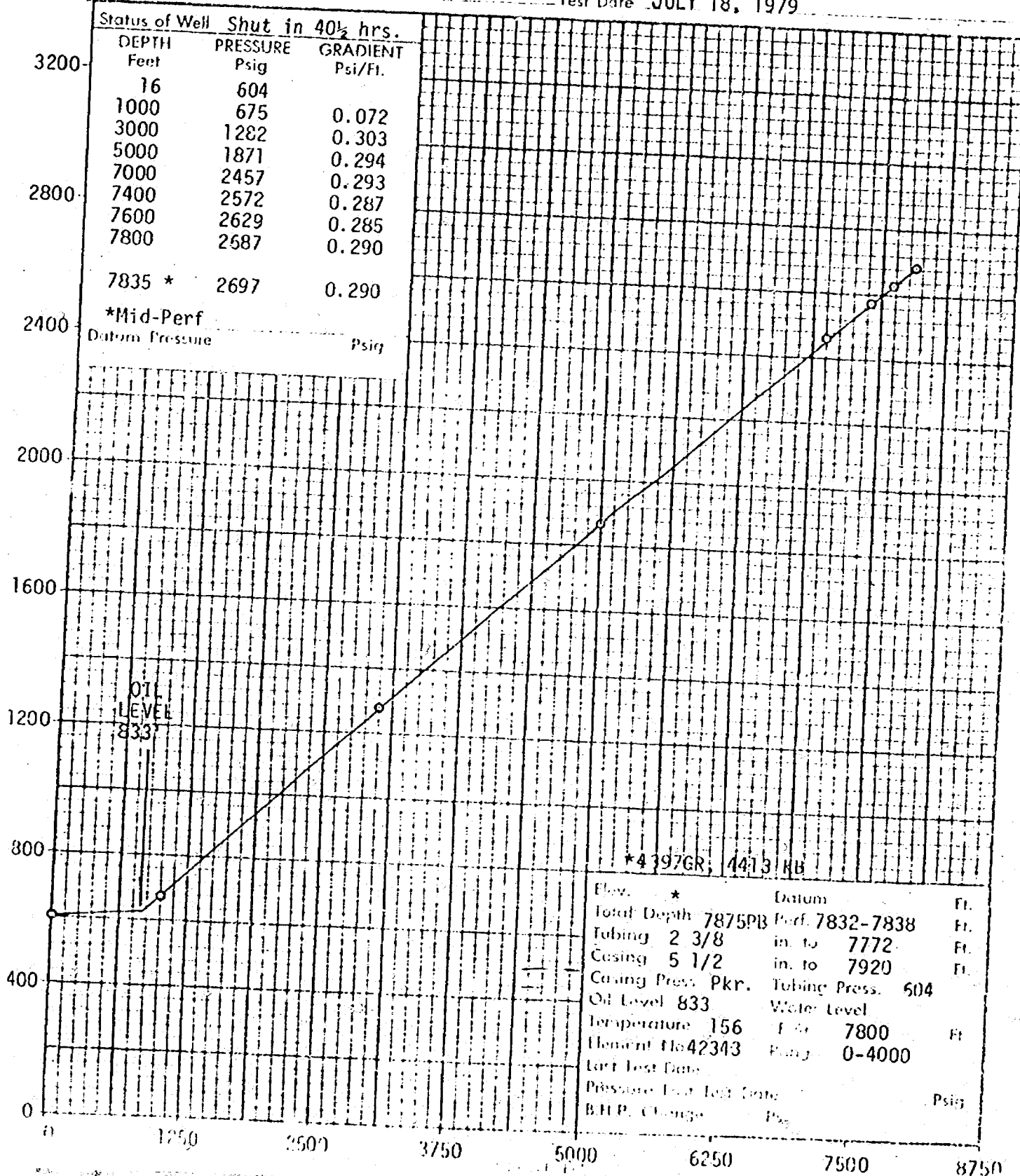




reservoir engineering data
MIDLAND, TEXAS

Page 4 of 4
File 3-9546-PU

Company PHILLIPS PETROLEUM CORPORATION Lease LAMBRITH Well No. A-2
Field SO. PETERSON County ROOSEVELT State NEW MEXICO
Formation FUSSELMAN Test Date JULY 18, 1979



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. 6270
Order No. R-5771

APPLICATION OF ENSERCH EXPLORATION,
INC., FOR POOL CREATION AND SPECIAL
POOL RULES, ROOSEVELT COUNTY, NEW
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 6, 1978,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 17th day of July, 1978, 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, Enserch Exploration, Inc., is the
owner and operator of the Lambirth Well No. 1, located in Unit
K of Section 31, Township 5 South, Range 33 East, NMPM, Roose-
velt County, New Mexico.

(3) That said well has discovered a separate common source
of supply in the Fusselman formation, and applicant seeks the
creation and designation of a new oil pool therefor and the
promulgation of special pool rules governing said pool, including
provision for 80-acre spacing and proration units and well loca-
tions.

(4) That the applicant seeks the dismissal of that portion
of this case relating to the establishment of a special gas-oil
ratio limitation for said pool.

(5) That the evidence presently available indicates that
a new pool should be created and designated the South Peterson-

-2-

Case No. 6270
Order No. R-5771

Fusselman Pool; that the vertical limits of said pool should be the Fusselman formation, and that the horizontal limits of said pool should comprise:

TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM
Section 31: SW/4

(6) That the evidence presently available indicates that the Fusselman formation encountered in the above-described Lambirth Well No. 1 is of high permeability, and that the drainage radius of the well will be in excess of 40 acres.

(7) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the South Peterson-Fusselman Pool.

(8) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(9) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(10) That this case should be reopened at an examiner hearing in July, 1979, at which time the operators in the subject pool should be prepared to appear and show cause why the South Peterson-Fusselman Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Roosevelt County, New Mexico, classified as an oil pool for Fusselman production, is hereby created and designated the South Peterson-Fusselman Pool, with vertical limits comprising the Fusselman formation, and horizontal limits comprising the following-described area:

TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM
Section 31: SW/4

-3-

Case No. 6270
Order No. R-5771

(2) That temporary Special Rules and Regulations for the South Peterson-Fusselman Pool, Roosevelt County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
SOUTH PETERSON-FUSSELMAN POOL

RULE 1. Each well completed or recompleted in the South Peterson-Fusselman Pool or in the Fusselman formation within one mile thereof, and not nearer to or within the limits of another designated Fusselman oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. The Division Director may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Division Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location

✓

-4-

Case No. 6270
Order No. R-5771

has been entered within 20 days after the Director has received the application.

RULE 6. Top unit allowable for a standard proration unit (79 through 81 acres) shall be based on a depth bracket allowable of 267 barrels per day, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the South Peterson-Fusselman Pool or in the Fusselman formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well on or before August 15, 1978.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the South Peterson-Fusselman Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the South Peterson-Fusselman Pool or in the Fusselman formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(3) That this case shall be reopened at an examiner hearing in July, 1979, at which time the operators in the subject pool should be prepared to appear and show cause why the South Peterson-Fusselman Pool should not be developed on 40-acre spacing units.

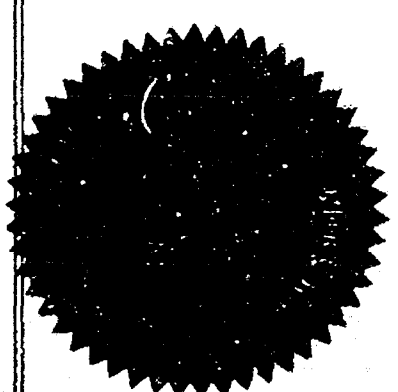
(4) That that portion of the application in this case dealing with the establishment of a special gas-oil ratio limitation for the South Peterson-Fusselman Pool is hereby dismissed.

-5-
Case No. 6270
Order No. R-5771

(5) 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



Joe D. Ramey
JOE D. RAMEY
Director

fd/

CATRON, CATRON & SAWTELL

ATTORNEYS AND COUNSELORS AT LAW

THE PLAZA

SANTA FE, NEW MEXICO 87501

POST OFFICE BOX 768
TELEPHONE 982-1947
AREA CODE 505

THOMAS B. CATRON, 1840-1921
FLETCHER A. CATRON, 1890-1934

THOMAS E. CATRON, III
JOHN S. CATRON
WILLIAM A. SAWTELL, JR.
FLETCHER R. CATRON

WILLIAM F. CARR
W. ANTHONY SAWTELL

June 15, 1978

Mr. Joe D. Ramey
Division Director
Oil Conservation Division
New Mexico Department of Energy and Minerals
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

Enclosed in triplicate is the application of Ensefch Explor-
ation, Inc. for a pool creation and special pool rules, Roosevelt
County, New Mexico.

I would appreciate this case being included on the docket for
the July 6, 1978 Examiner Hearing.

Sincerely,


William F. Carr

WFC:M
Enclosures

cc: Mr. Peter R. Thompson
Mr. Jim Wisen
Mr. Fred Wilcox

Dockets Nos. 23-78 and 24-78 are tentatively set for hearing on July 19 and August 2, 1978. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - THURSDAY - JULY 6, 1978

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

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

CASE 6265: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Bedk Producing Co. and all other interested parties to appear and show cause why the Cain State Well No. 1 located in Unit B of Section 16, Township 15 North, Range 33 East, Harding County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6266: Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of an Upper Pennsylvanian test well to be located 660 feet from the North and East lines or, in the alternative, 990 feet from the North and East lines of Section 23, Township 22 South, Range 23 East, Indian Basin-Upper Pennsylvanian Gas Field, Eddy County, New Mexico, all of said Section 23 to be dedicated to the well.

CASE 6267: Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the E/2 of Section 28, Township 17 South, Range 36 East, Kennedy Farms Field, Eddy County, New Mexico, 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 6268: Application of Southland Royalty Company for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Reid Well No. 25 to be drilled in the SE/4 of Section 19, Township 28 North, Range 9 West, Blanco Mesaverde Pool, San Juan County, New Mexico, said well being off-pattern for the first well on the proration unit, the S/2 of Section 19.

CASE 6269: Application of Marathon Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in all formations from the top of the San Andres thru the Abo underlying the NE/4 NW/4 of Section 25, Township 16 South, Range 38 East, Lea County, New Mexico, 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 6270: Application of Enserch Exploration, Inc., for pool creation and special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks an order creating a new oil pool in the Fusselman formation for its Lambirth Well No. 1 located in Unit K of Section 31, Township 5 South, Range 33 East, Roosevelt County, New Mexico, and for promulgation of special pool rules, including provision for 80-acre spacing, a gas-oil ratio limitation of 3,000 to 1, and special well location requirements.

CASE 6258: (Continued from June 21, 1978, Examiner Hearing)

Application of Atlantic Richfield Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Devonian, McKee, and Ellenburger formations underlying the S/2 of Section 21, Township 22 South, Range 36 East, Lea County, New Mexico, 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 6262: (Continued from June 21, 1978, Examiner Hearing)

Application of Adobe Oil & Gas Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mississippian formation underlying the SE/4 of Section 17, Township 14 South, Range 36 East, Austin Field, Lea County, New Mexico, 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 6263: (Continued from June 21, 1978, Examiner Hearing)

Application of Adobe Oil & Gas Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mississippian formation underlying the NE/4 of Section 17, Township 14 South, Range 36 East, Austin Field, Lea County, New Mexico, 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 6264: (Continued from June 21, 1978, Examiner Hearing)

Application of Doyle Hartman for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Jalmat Gas Pool underlying the W/2 NE/4 of Section 36, Township 24 South, Range 36 East, Lea County, New Mexico, to form a non-standard gas proration unit to be dedicated to a well to be drilled at an unorthodox location 330 feet from the North line and 2310 feet from the East line of said Section 36. 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 6271: Application of Doyle Hartman for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Queen formation underlying the S/2 SW/4 of Section 20 as a non-standard gas proration unit for a Jalmat gas well, or in the alternative, the SE/4 SW/4 of Section 20 for a Langlie Mattix oil well, all in Township 24 South, Range 37 East, Lea County, New Mexico, 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 6272: Application of Doyle Hartman for an exception to Rule 15 of Order No. R-1670, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 15 of Order No. R-1670, as amended, which will allow him to produce his overproduced Etz Well No. 1, located in Unit D of Section 7, Township 25 South, Range 37 East, NMPM, Jalmat Gas Pool, Lea County, New Mexico, at 60% of its allowable until such time as the overproduction has been made up.

CASE 6273: Application of Gulf Oil Corporation for creation of a new gas pool and special rules, including gas prorationing, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Morrow gas pool in Eddy County comprising all, or portions of, Sections 24 and 25, Township 18 South, Range 24 East, and Sections 18 thru 20, 28 thru 30, and 32 and 33, Township 18 South, Range 25 East; applicant further seeks the promulgation of special rules for said pool, including the prorationing of gas production on a straight acreage basis and the prohibition of more than one well to each 320-acre proration unit.

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

July 18, 1978

Mr. Clarence E. Hinkle
P. O. Box 2002
Roswell, New Mexico 88201

Dear Mr. Hinkle:

I've enclosed a copy of Order No. R-5771
entered in Case No. 6270.

Very truly yours,

LYNN TESCHENDORF
General Counsel

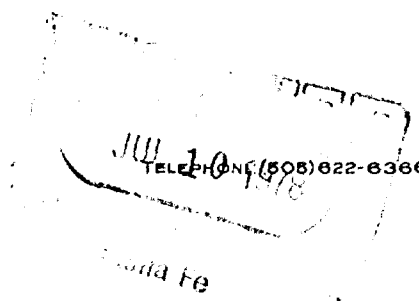
LT/fd
enc.

C
O
P
Y

POST OFFICE BOX 2002

CLARENCE E. HINKLE
555 HINKLE BUILDING
ROSWELL, NEW MEXICO 86201

July 6, 1978



Miss Lynn Teschendorf
General Counsel
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Lynn:

According to the examiner's docket for July 6, Case No. 6270 was to be heard. This is the application of Enserch Exploration, Inc. for special pool rules and creation of a new oil pool in the Fusselman formation for the Lambirth No. 1 Well. Since I have a royalty interest in connection with this pool, I would appreciate it if you would send me a copy of the order of the Commission when it is entered.

With best regards, I am

Yours sincerely,

A handwritten signature in cursive script, appearing to read "Clarence E. Hinkle".
Clarence E. Hinkle

CEH:cs



JERRY APODACA
GOVERNOR

NICK FRANKLIN
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

July 18, 1978

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

Mr. William F. Carr
Catron, Catron & Sawtell
Attorneys at Law
Post Office Box 788
Santa Fe, New Mexico

Re: CASE NO. 6270
ORDER NO. R-5771

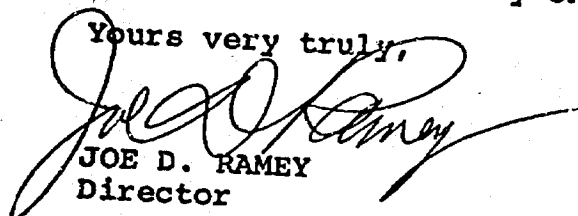
Applicant:

Enserch Exploration, Inc.

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

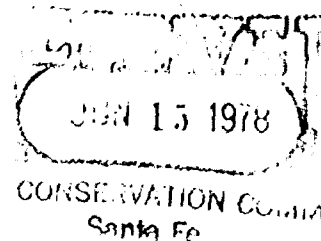
JDR/fd

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC

Other Jason Kellahin, H. W. Benischek

BEFORE THE
OIL CONSERVATION DIVISION
NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS



IN THE MATTER OF THE APPLICATION
OF ENSEARCH EXPLORATION, INC.
FOR POOL CREATION AND SPECIAL
POOL RULES, ROOSEVELT COUNTY,
NEW MEXICO.

Case 6270

APPLICATION

Comes now ENSEARCH EXPLORATION, INC., by their undersigned attorneys, and hereby makes application for an order designating a new pool as a result of the discovery of hydrocarbons in the Fusselman formation in its Lambirth No. 1 Well located in Unit K of Section 31, Township 5 South, Range 33 East, Roosevelt County, New Mexico and for promulgation of special pool rules, including (1) 80-acre spacing or proration units on a permanent basis or, in the alternative, on a temporary basis, (2) the dedication of all of the north half of the southwest quarter of said Section 31 to the Lambirth No. 1 Well, (3) a special gas-oil ratio of 3,000 to 1, and (4) special well location requirements, and in support of this application would show the Commission:

1. That applicant has recently completed its Lambirth No. 1 Well in the Fusselman formation capable of producing oil and gas in paying quantities located 1980 feet from the south and west lines of Section 31, Township 5 South, Range 33 East, Roosevelt County, New Mexico. Said well is producing through perforations from 7808 feet to 7852 feet and was potentialized as capable of producing 638 barrels of oil per day and 703 mcf of gas per day with no produced water.

2. Applicant believes that the following described lands are reasonably proven to be productive of oil and gas in paying quantities from the Fusselman formation and should be included in the original definition

of the new pool to be created because of said discovery:

Township 5 South, Range 33 East, N.M.P.M.

Section 31-N1/2 SW1/4

3. In order to prevent economic loss caused by the drilling of unnecessary wells, to avoid augmentation of risk arising from the drilling of an excessive number of wells and to otherwise prevent waste and protect correlative rights, special pool rules and regulations providing for 80-acre spacing units should be promulgated for the new pool.

4. Application respectfully requests that the special pool rules provide that each well should be located on a standard unit containing 80 acres more or less, consisting of two contiguous governmental quarter quarter sections and that the well may be located in either component of the 80-acre spacing unit. Applicant further requests that each well shall be located within 150 feet of the center of a governmental quarter quarter section or lot.

5. Applicant requests that a special gas-oil ratio limitation be set of 3,000 cubic feet of gas for each barrel of oil produced pursuant to Rule 506(d) of the Division's Rules and Regulations.

WHEREFORE, Ensearch Exploration, Inc. requests that this application be set for hearing before a duly appointed Examiner of the Oil Conservation Division on July 6, 1978, that notice be given as required by law and the rules of the Division, and that the application be approved.

Respectfully Submitted,

CATRON, CATRON & SAWTELL

By


William F. Carr

Attorney for Applicant

P. O. Box 788

Santa Fe, New Mexico 87501

ROUGH

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. 6270

Order No. R-5771

Rll
APPLICATION OF ENSERCH EXPLORATION,
INC., FOR POOL CREATION AND SPECIAL
POOL RULES, ROOSEVELT COUNTY, NEW
MEXICO

[Signature]
ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 6
19 78, at Santa Fe, New Mexico, before Examiner JSN

NOW, on this July day of July, 19 78, 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, Enserch Exploration,
Inc., is the owner and operator of the Lambirth
Well No. 1, located in Unit # of Section 31, Township
5 South, Range 33 East, NMPM, Roosevelt County, New
Mexico

(3) That said well has discovered a separate common source of supply in the Fusselman formation, and applicant seeks the creation and designation of a new oil pool therefor and the promulgation of special pool rules governing said pool, including provision for 80-acre spacing and proration units and well locations.

(4) That the applicant seeks the dismissal of that portion of this case relating to the establishment of a special gas-oil ratio limitation for said pool.

(5) That the evidence presently available indicates that a new pool should be created and designated the South Peterson-Fusselman Pool; that the vertical limits of said pool should be the Fusselman formation, and that the horizontal limits of said pool should comprise:

TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM
Section 31: SW/4

(6) That the evidence presently available indicates that the Fusselman formation encountered in the above-described Lambirth Well No. 1 is of high permeability, and that the drainage radius of the well will be in excess of 40 acres.

(7) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the South Peterson-Fusselman Pool.

(8) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(9) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(10) That this case should be reopened at an examiner hearing in July, 1979, at which time the operators in the subject pool should be prepared to appear and show cause why the South Peterson-Fusselman Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Roosevelt County, New Mexico, classified as an oil pool for Fusselman production, is hereby created and designated the South Peterson-Fusselman Pool, with vertical limits comprising the Fusselman formation, and horizontal limits comprising the following-described area:

TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM
Section 31: SW/4

(2) That temporary Special Rules and Regulations for the South Peterson-Fusselman Pool, Roosevelt County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
SOUTH PETERSON-FUSSELMAN POOL

RULE 1. Each well completed or recompleted in the South Peterson-Fusselman Pool or in the Fusselman formation within one mile thereof, and not nearer to or within the limits of another designated Fusselman oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided however,

that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. The Division Director may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Division Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

RULE 6. Top unit allowable for a standard proration unit (79 through 81 acres) shall be based on a depth bracket allowable of 267 barrels per day, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the South Peterson-Fusselman Pool or in the Fusselman formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well on or before August 15, 1978.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the South Peterson-Fusselman Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the South Peterson-Fusselman Pool or in the Fusselman formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(3) That this case shall be reopened at an examiner hearing in July, 1979, at which time the operators in the subject pool should be prepared to appear and show cause why the South Peterson-Fusselman Pool should not be developed on 40-acre spacing units.

(4) That that portion of the application in this case dealing with the establishment of a special gas-oil ratio limitation for the South Peterson-Fusselman Pool is hereby dismissed.

(5) 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.

ROUGH

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. 6270

Order No. R-5771-A

IN THE MATTER OF CASE 6270 BEING
REOPENED PURSUANT TO THE PROVISIONS OF
ORDER NO. R-5771, WHICH ORDER CREATED
~~ESTABLISHED SPECIAL RULES AND REGULATIONS~~
~~FOR THE SOUTH PETERSON-FUSSELMAN POOL,~~
~~GAS POOL, ROOSEVELT COUNTY, NEW MEXICO, AND PROVIDED~~
~~INCLUDING A PROVISION FOR 80 -ACRE SPACING.~~
~~PRODUCTION UNITS.~~

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 25
19 79, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of _____, 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 by Order No. R-5771, dated July 17
19 78, temporary special rules and regulations were promulgated
for the South Peterson-Fusselman ~~GAS~~ Pool, Roosevelt
County, New Mexico, establishing temporary 80 -acre spacing
units.

(3) That pursuant to the provisions of Order No. R-5771
this case was reopened to allow the operators in the subject pool
to appear and show cause why the South Peterson-Fusselman
~~GAS~~ Pool should not be developed on 40 -acre spacing units.

(4) That the evidence establishes that one well in the
South Peterson-Fusselman ~~GAS~~ Pool can efficiently and economically
drain and develop 80 acres.

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Case No. _____

Order No. R-_____

(5) That the Special Rules and Regulations promulgated by Order No. R-5771 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the ^{oil and} gas in the pool.

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-5771 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the South Peterson-Fusselman ~~Gas~~ Pool, Roosevelt County, New Mexico, promulgated by Order No. R-5771, are hereby continued in full force and effect until further order of the Division.

(2) 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.