

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

4 March, 1987

EXAMINER HEARING

IN THE MATTER OF:

Case 8798 being reopened pursuant to CASE  
the provisions of Order No. R-8182, 8798  
which promulgated temporary special  
rules and regulations for the Casey-  
Strawn Pool in Lea County, including  
a provision for 80-acre spacing units.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Commission:

Jeff Taylor  
Legal Counsel for the Division  
Oil Conservation Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For Amerind:

W. Perry Pearce  
Attorney at Law  
MONTGOMERY & ANDREWS  
P. O. Box 2307  
Santa Fe, New Mexico 87501

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## I N D E X

STATEMENT BY MR. STOGNER

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ROBERT C. LEIBROCK

Direct Examination by Mr. Pearce

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Cross Examination by Mr. Stogner

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## E X H I B I T S

Amerind Exhibit One, Map

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Amerind Exhibit Two, Land Map

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MR. STOGNER: Call next Case  
Number 8798.

MR. TAYLOR: In the matter of  
Case 8798 being reopened pursuant to the provisions of Order  
No. R-8182, which promulgated temporary special rules and  
regulations for the Casey Strawn Pool in Lea County, includ-  
ing a provision for 80-acre spacing units.

Operators in said pool may ap-  
pear and show cause why said pool should not be developed on  
40-acre spacing units.

MR. STOGNER: We're prepared to  
go ahead and hear this case today; however, it will be read-  
vertised for March 18th, 1987. That should read the West  
Casey Strawn Pool.

We'll call for appearances.

MR. PEARCE: May it please the  
Examiner, I am W. Perry Pearce of the Santa Fe law firm of  
Montgomery & Andrews, appearing in this matter on behalf of  
Amerind Oil Company.

I have one witness.

MR. STOGNER: Are there any  
other appearances in this matter?

Will the witness please stand  
to be sworn at this time?

(Witness sworn.)

1

2

MR. STOGNER: You may be seated.

3

Mr. Pearce?

4

MR. PEARCE: Thank you.

5

MR. STOGNER: You're appearing

6

on behalf of Amerind?

7

MR. PEARCE: Yes, that's cor-

8

rect, Mr. Examiner.

9

10

ROBERT C. LEIBROCK,

11

being called as a witness and being duly sworn upon his

12

oath, testified as follows, to-wit:

13

14

DIRECT EXAMINATION

15

BY MR. PEARCE:

16

Q

For the record, sir, would you please

17

state your name and position?

18

A

My name is Robert C. Leibrock, Vice Pres-

19

ident of Amerind Oil Company, Midland, Texas.

20

Q

Mr. Leibrock, have you previously ap-

21

peared before the Division or one of its examiners and had

22

your qualifications made a matter of record?

23

A

Yes, I have.

24

Q

And in what field were you qualified as

25

an expert witness?

1           A           In petroleum engineering.

2           Q           And are you familiar with the West Casey  
3 Strawn Pool, which is the subject of the hearing today?

4           A           Yes, I am.

5           Q           Would you briefly describe for the Exam-  
6 iner and those in attendance your purpose in appearing to-  
7 day?

8           A           If you would, please first refer to Exhi-  
9 bit One, which is the large Map.

10                   Exhibit One is a map showing the location  
11 of the Amerind Shipp No. 1 Well, noted by the red arrow in  
12 the northwest quarter of the northeast quarter of Section  
13 33, Township 16 South, Range 37 East.

14                   On this map Strawn tests are indicated by  
15 the larger well symbols while the shallow production is in-  
16 dicated by small symbols.

17                   About a year ago I appeared here to tes-  
18 tify that the Amerind Shipp No. 1 Well represented the dis-  
19 covery of a new reservoir in the Lovington Strawn trend,  
20 dsignated by the large circle on Exhibit One, and that this  
21 new reservoir should be designated as a new field discovery.

22                   The OCD confirmed this by designating it  
23 the West Casey Strawn Field.

24                   The West Casey Strawn Field proration  
25 units are highlighted in Figure 1.

1           The Amerind Shipp discovery well was com-  
2 pleted in December, 1985, flowing 553 barrels of oil per day  
3 with a cumulative production of 119,290 barrels of oil  
4 through January, 1987.

5           It is currently flowing about 300 barrels  
6 of oil per day.

7           The Amerind Meyers No. 1 was completed in  
8 February, 1986, flowing 415 barrels of oil per day with a  
9 cumulative production of 61,733 barrels of oil through Jan-  
10 uary of this year.

11           It was put on pump in December, 1986, and  
12 is now pumping about 100 barrels of oil per day.

13           The Shipp No. 1 and Meyers No. 1 was the  
14 only two wells in the field. Attempts to extend the field  
15 east and south resulted in Amerind's Shipp No. 2 and Meyers  
16 No. 2 Strawn dry holes.

17           Also please note that the field is flan-  
18 ked by six other Strawn dry holes; three in the south half  
19 of Section 28 to the north; two in the east half of the east  
20 half of Section 33; one if the northwest quarter of the  
21 southwest quarter of 33.

22           These dry holes indicate the maximum pos-  
23 sible extent of the field. Pressure history of the field,  
24 however, indicates that its extent is actually much smaller  
25 and in fact probably does not cover much more than 80 acres.

1                   A 168-hour bottom hole pressure build-up  
2 test was run in the Shipp No. 1 in the period ending July  
3 1st, 1986. At that time the well had produced a total of  
4 92,000 barrels of oil.

5                   A material balance was done to estimate  
6 total original oil in place of some 1,250,000 stock tank  
7 barrels in a reservoir area of 87 acres.

8                   A recovery factor of 35 percent is as-  
9 sumed because this appears to be the approximate ultimate  
10 recovery factor in the nearby, nearly depleted, Casey Strawn  
11 Field in Sections 34 and 27, one mile east.

12                   Applying this factor to the original oil  
13 in place figure of 1.25-million stock tank barrels, gives an  
14 estimated ultimate recovery of 438,000 barrels of oil for  
15 the West Casey Strawn Field, or an average of 219,000 bar-  
16 rels for each of the two wells.

17                   Therefore, if the spacing were reduced to  
18 40 acres and two more productive wells were drilled, each  
19 well would recover an average of a little over 100,000 bar-  
20 rels of oil.

21                   I think it is clear that no prudent  
22 operator would drill an 11,500-foot well today expecting to  
23 only recover 100,000 barrels of oil per well, particularly  
24 in the Lovington-Strawn trend where the success ratio is  
25 well under 50 percent.

1                   Now I'd like to direct your attention to  
2 Figure Two, which is a land map on the scale of one inch  
3 equals 1000 feet, again highlighting the two proration units  
4 in the yellow.

5                   Now that I've presented some details on  
6 the West Casey Strawn Field, I would like to make a state-  
7 ment regarding the spacing rules on this trend as a whole.

8                   First I would again direct your attention  
9 to Exhibit One, which shows all of the Lovington-Strawn  
10 trend. Note that the West Casey Strawn Field is in the very  
11 heart of the trend which extends about five miles to the  
12 northeast, near the City of Lovington, as well as about five  
13 miles southwest to the South Humble City-Strawn Field.

14                   This trend consists of a total of about  
15 100 producing and formerly producing Strawn wells in several  
16 fields, including the Northeast Lovington, Casey, West  
17 Casey, Shipp, Humble City, and South Humble City.

18                   In all of these fields the spacing is 80  
19 acres. An extensive amount of testimony has been given by  
20 numerous operators in support of 80-acre spacing in all of  
21 these fields; therefore, without regard to the specific data  
22 I have presented here on the West Casey Strawn Field, the  
23 fact that this field lies in the heart of this well estab-  
24 lished trend should of itself confirm the correctness of  
25 maintaining 80-acre spacing.



1                   Q           Do you have anything further at this  
2 time, Mr. Leibrock?

3                   A           No, I don't.

4                               MR. PEARCE:   Mr. Examiner, we  
5 have nothing further. If you have questions of the witness,  
6 he is available.

7  
8                               CROSS EXAMINATION

9 BY MR. STOGNER:

10                  Q           Mr. Leibrock, when you appeared here, oh,  
11 at the January 9th, 1986 hearing for the initial reservoir  
12 special pool rules, had the Well No. -- which well had been  
13 drilled first, the Shipp No. 1 or the Meyers No. 1?

14                  A           Yes, sir, at that time only the Shipp No.  
15 1 had been drilled.

16                  Q           Okay, and what was its cumulative produc-  
17 tion at that time?

18                  A           Let's see, I need to check, but it would  
19 only have been on the order of 25,000, or less.

20                  Q           I show two other wells within your yellow  
21 area. I assume those are shallower oil wells.

22                  A           Right. In the northwest of the north-  
23 west, that's a Paddock well by another operator, and also  
24 the -- in the south half of the other unit is also a Paddock  
25 well.

1 Q Paddock being at 6000, 5-or-6000?

2 A Yes, 6 -- 6200.

3 Q I show a No. 1 dry hole within this area,  
4 too, that's down in the --

5 A Right, that was a shallow well that was  
6 abandoned due to a lost hole.

7 Q Okay, and directly to the east of that  
8 dry hole --

9 A Uh-huh.

10 Q -- down in the southwest quarter of the  
11 northeast quarter, --

12 A Uh-huh.

13 Q -- I show a Texaco Carter Well No. 1,  
14 which shows to be an injection well.

15 A Okay. Actually the history of that is it  
16 was initially completed in the Strawn and produced a total  
17 of some 600 barrels from the Strawn and was plugged back to  
18 the Drinkard where it's now producing.

19 Q Were you able to determine in looking at  
20 the logs on that particular well that this was part of your  
21 West Casey Strawn?

22 A No. The Texaco Carter Well just has a  
23 few feet of porosity that did not appear to correlate with  
24 any of the other wells.

25 Q So this well, I mean this pool has yet to

1 be drilled back to the west of the proposed -- back to the  
2 west of the present day pool, is that correct?

3 A Yes, that's correct.

4 Well, if I could just say one thing in  
5 that regard, that's true, it has not been tested immediately  
6 west; however, to the northwest in 28 you have the Shell  
7 Homestake Strawn dry hole, and to the southeast you have the  
8 Tidwater Meyers dry hole, to the southwest.

9 Q Is this a water drive?

10 A No, it's totally gas expansion. In fact  
11 these two wells do not produce any water at all.

12 Q Which way is the formation dipping in  
13 this area?

14 A It's dipping regionally to the northeast.

15 Q What's the closest Strawn production back  
16 to the west of the -- this pool?

17 A To the west, really, there is none. The  
18 Strawn is thinning in that direction is the primary reason  
19 there is not.

20 Q Do the perforated intervals between the  
21 Meyers No. 1 and the Shipp No. 1, to they correlate pretty  
22 muchly together, or do you have any --

23 A No, they do appear to correlate pretty  
24 well.

25 MR. STOGNER: Are there any

1 other questions of this witness?

2 There being none, he may be ex-  
3 cused.

4 Mr. Pearce, do you have any-  
5 thing further in this case?

6 MR. PEARCE: Nothing further,  
7 Mr. Examiner.

8 MR. STOGNER: Does anybody else  
9 have anything further in Case Number 8798?

10 This case will then be taken  
11 under advisement.

12 MR. PEARCE: Thank you, Mr. Ex-  
13 aminer.

14

15 (Hearing concluded.)

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## C E R T I F I C A T E

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

Sally W. Boyd CSR

I hereby certify that the foregoing is  
a true and correct copy of the transcript of the  
hearing before the Oil Conservation Division (Commission)  
held by me on 4 March 1987  
Michael J. Rogers  
Oil Conservation Division

## NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date MARCH 4, 1987 Time: 8:15 A.M.

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J. Ray Graham		Santa Fe
William A. Fay	Campbell and Black	Santa Fe
H.R. Baker Kendrick	El Paso Natural Gas Co	El Paso, TX
Robert C. Leibrock	Amerind Oil Co.	Midland
Robin Hughes	BTA Oil Producers	Midland
Star Spelman	BTA Oil Producers	Midland
AR Kendrick	various	Midland
S. Gray	OCD	Midland
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## NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date MARCH 4, 1987 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
George Broome	T. H. McElvain	Santa Fe
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Jack Cayis	✓	
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