

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

16 December 1987

EXAMINER HEARING

IN THE MATTER OF:

Application of Lewis B. Burleson,                   CASE  
Inc., for an unorthodox gas well                   9280  
location and simultaneous dedica-  
tion, Lea County, New Mexico.

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:

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For the Applicant:

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## I N D E X

## STEVE BURLESON

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## E X H I B I T S

Burleson Exhibit One, Plat 5

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MR. CATANACH: Call next Case  
9280.

MR. TAYLOR: The application of  
Lewis B. Burleson, Inc. for an unorthodox gas well location  
and simultaneous dedication, Lea County, New Mexico.

MR. CATANACH: Are there  
appearances in this case?

MR. KELLAHIN: Mr. Examiner,  
I'm Tom Kellahin appearing on behalf of the applicant and I  
have one witness to be sworn.

MR. CATANACH: Are there any  
other appearances?

Will the witness please stand  
and be sworn in?

(Witness sworn.)

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Burleson, would you please state your

1 name and occupation?

2 A Yes. My name is Steve Burleson and I'm  
3 the Vice President for Lewis Burleson, Incorporated.

4 I'm the Chief Geologist.

5 Q Mr. Burleson, have you previously testi-  
6 fied as a geologist before the Oil Conservation Division?

7 A No, I have not.

8 Q Would you summarize for the Examiner what  
9 has been your educational experience?

10 A Yes. I graduated in 1983 with a Bachelor  
11 of Science degree in geology from Texas Tech University and  
12 I went to work for Lewis Burleson, Incorporated, at that  
13 time.

14 Q Subsequent to graduation in '83, Mr. Bur-  
15 leson, would you describe and summarize your employment ex-  
16 perience as a geologist?

17 A Yes. I've primarily worked production  
18 geology in the Yates and Queen formations along the western  
19 edge of the Central Basin Platform, namely in Lea and Pecos  
20 Counties.

21 Q Are you familiar with the applicant's  
22 production and interest in the Eumont Gas Pool in Lea Coun-  
23 ty, New Mexico, that's the subject of this application?

24 A Yes, I am.

25 Q And what does the applicant propose to

1 accomplish?

2           A           Well, we purchased this lease from Conoco  
3 several months ago and we want -- we want to recomplete the  
4 No. 2 Well as a Eumont gas well in the Penrose section of  
5 the Queen formation.

6                       MR. KELLAHIN: Mr. Examiner, at  
7 this time we tender Mr. Burleson as an expert geologist.

8                       MR. CATANACH: He is so quali-  
9 fied.

10           Q           Mr. Burleson, let's take a moment and  
11 examine Exhibit Number One, which is this plat. Would you  
12 identify the row of four 40-acre tracts that constitute this  
13 nonstandard spacing unit?

14           A           Yes. Our nonstandard spacing unit con-  
15 sists of the north half of the south half of this Section 7,  
16 with the yellow hatch marks.

17           Q           Does this constitute all one, single,  
18 State of New Mexico oil and gas lease?

19           A           Yes, it does.

20           Q           Ignoring for a moment the No. 2 Well --

21           A           Okay.

22           Q           -- what is the well on that nonstandard  
23 unit which is the producing well dedicated to that unit?

24           A           The No. 1 Well was originally completed  
25 in this same Queen interval that we propose to complete in

1 the No. 2 Well; however, currently it is completed in the  
2 Yates formation and there's a bridge plug in between the  
3 Queen and the Yates, even though it is still in the Eumont  
4 Pool.

5 Q I misspoke. What I meant was the No. 1  
6 Well is dedicated to production from the Eumont Gas Pool.

7 A Yes, that's correct.

8 Q And that well and its nonstandard spacing  
9 unit were approved by the Division on February 14th, 1973,  
10 by Order R-4481 as a nonstandard unit?

11 A Yes, that's correct.

12 Q Tell us now what you want to do.

13 A Okay. Since this No. 1 Well has been re-  
14 completed in the Yates, we feel that there are additional  
15 reserves, which we estimate to be approximately 500,000 MCF,  
16 that can be recovered from a completion in the Penrose Sec-  
17 tion of the Queen formation in our No. 2 Well.

18 Q Is that production that would not other-  
19 wise be produced from the No. 1 Well?

20 A Yes, it is.

21 Q All right. Is the ownershp and the in-  
22 terest common for the spacing unit?

23 A Yes, it is.

24 Q What is the current status of the No. 2  
25 Well?

1           A           The No. 2 Well is currently, temporarily  
2 abandoned in the Eunice-Monument-Grayburg Oil Pool and we  
3 have not attempted a completion in the Eumont yet.

4           Q           Is the No. 2 Well at an unorthodox loca-  
5 tion for the Eumont Gas Pool rules?

6           A           Yes, it is.

7           Q           And what is the footage location for the  
8 well?

9           A           It is 1650 from the south and 1650 from  
10 the east lines of that said Section 7.

11          Q           Are you also seeking approval from the  
12 Examiner as to the unorthodox gas well location?

13          A           Yes, we are.

14          Q           Can you approximate for us, Mr. Burleson,  
15 what has been the cumulative production out of the No. 1  
16 Well?

17          A           Out of the Queen formation it has pro-  
18 duced a little over 2 BCF of gas.

19          Q           Let me turn your attention to Exhibit  
20 Number Two.

21                       Would you identify Exhibit Number Two?

22          A           Yes, this is a log of our State A-7 No. 2  
23 Well, which was originally drilled by John M. Kelly in 1957,  
24 and that is the reason that it is on a nonstandard location,  
25 is because it was drilled as a Eumont -- I mean a Eunice-

1 Monument-Grayburg oil well.

2 Q And this is renamed as your State A-7 No.  
3 2 Well?

4 A That is correct.

5 Q Let's look at where you have located the  
6 perforations on the log, starting with the proposed perfora-  
7 tions.

8 A Okay. Our proposed perforations are in  
9 the basal Queen or Penrose formation from 3570 to 3761, and  
10 we feel that there's approximately 56 feet of pay in this  
11 well.

12 Q How does that correspond to the perfor-  
13 ated interval in the No. 1 Well?

14 A Conoco did complete in this zone origin-  
15 ally. It's -- it's basically the same, same interval.

16 Q Okay. Where do you propose to set your  
17 bridge plug?

18 A Well, we're going to put a bridge plug at  
19 3950 to seal off the lower Grayburg perforations from the  
20 Eumont section.

21 Q Above the top of the bridge plug, then, I  
22 don't see any indication of existing perforations in the  
23 Queen or in the top section of the Grayburg.

24 A No, there are none.

25 Q Do you have an opinion, Mr. Burleson,



1 whether or not approval of this application by the Examiner  
2 will allow the operator to recover additional Eumont gas re-  
3 serves out of the Queen that it might not otherwise re-  
4 cover?

5 A Yes, we do. We believe, as I stated ear-  
6 lier, that there are approximately 500,000 MCF worth of re-  
7 serves in this No. 2 Well that it would not be economical --  
8 economical to capture in any other way.

9 Q Are there sufficient reserves to support  
10 the drilling of a new well?

11 A Not at current pricing, at current price  
12 levels.

13 Q The best and most efficient means, then,  
14 to recover the additional reserves that are not otherwise  
15 recoverable is the recompletion of the existing wellbore in  
16 the Queen section?

17 A Yes, that is correct.

18 MR. KELLAHIN: Mr. Examiner,  
19 Exhibit Number Three is simply a photocopy of the return re-  
20 ceipt cards to the offset operators. I'll have Mr. Burleson  
21 identify for us those offset operators.

22 Q There were four companies we notified as  
23 of the date we filed the original application, Mr. Burleson.  
24 Would you aid the Examiner in locating those other operators  
25 on your Exhibit Number One?

1           A           Yes, Conoco is -- their acreage is out-  
2 lined in red in Section 12, and the well that's dedicated to  
3 their proration unit is circled also in red.

4           Q           To the south of you?

5           A           Yeah, to the southwest.

6           Q           To the south of you is Gulf, now Chevron?

7           A           Yeah. Chevron is all -- has all the ac-  
8 reage outlined in orange. Due south of us in the southwest  
9 of the southwest, their No. 3 Kite Well has that 80 acres  
10 dedicated to it that's outlined in orange.

11                   East of that their No. 2 Kite Well, also  
12 80 acres outlined in orange.

13                   And also their, I think they call it the  
14 Shipp Com No. 2 Well in Section 8 to the east is dedicated  
15 to that 320 acres.

16           Q           Are there any other offset operators to  
17 be notified?

18           A           Well, Tierra Exploration, which is due  
19 north of our two wells, were notified, and their well is de-  
20 dicated to the proration unit that is circled in blue.

21           Q           All right, then finally in the northwest  
22 we have Phillips?

23           A           Phillips is in dark blue and their well  
24 si also circled in Section 12.

25           Q           Have you received any objection from any

1 of those offset operators, Mr. Burleson?

2 A No, we have not, and as a matter of fact,  
3 Phillips and Continental both signed their waivers approving  
4 this unit.

5 MR. KELLAHIN: I have nothing  
6 further of the witness, Mr. Examiner.

7 We move the introduction of Ex-  
8 hibits One, Two, and Three.

9 MR. CATANACH: Exhibits One  
10 through Three will be admitted into evidence.

11

12 CROSS EXAMINATION

13 BY MR. CATANACH:

14 Q Mr. Burleson, what is the vertical extent  
15 of the Eumont Pool?

16 A The vertical extent? It goes from the  
17 base of the Queen through the Yates. I think it even in-  
18 cludes the Tansill. I'm not sure about the Tansill because  
19 it's not completed very much, but I think all the way up to  
20 the Yates, or Tansill. I'm not sure.

21 Q So on your -- on your log what would be  
22 the --

23 A What depth would be the top of the Eu-  
24 mont? Is that what you're asking?

25 Q The bottom of the Eumont.

1           A           Okay, it would be right there, see where  
2 that line says "Top of the Grayburg"?

3           Q           That's -- that would be the bottom of the  
4 Eumont?

5           A           That would be the base of the Eumont.

6           Q           Okay.

7           A           Generally considered to be the first pri-  
8 marily dolomitic formation underneath the primarily sand-  
9 stone Queen formation.

10          Q           Okay. As I understand it, the No. 2 Well  
11 was previously completed in the Eumont -- I mean in the Eu-  
12 nice-Monument-Grayburg?

13          A           Yes. If you'll look below 3950 on that  
14 log you'll see those little -- the little rectangular  
15 colored in areas? Those were the original perforations.

16          Q           Okay. Has the well depleted the Grayburg  
17 in that interval?

18          A           Yes. Last production from the Grayburg  
19 was about, oh, 3 barrels of oil a day and 20 barrels of  
20 water, which under current price was just not economical.

21          Q           And as I understand it, the No. 1 Well is  
22 perforated in the approximately same interval in the Pen-  
23 rose?

24          A           Yes. Originally they had a -- that well  
25 was a dual completion. They had -- they had -- they were

1 pumping the Grayburg and producing the Penrose or Queen up  
2 the annulus.

3 Subsequently, they went in and put a  
4 bridge plug above the Queen perforations, I want to say ap-  
5 proximately 3350, and perforated the Yates formation, which  
6 is what they're currently producing out of now, and we -- we  
7 felt like that it would not be economical to go in there and  
8 clean that well back out into the Queen, because they had  
9 already fractured the Queen formation, and we feel like that  
10 we can get a much better completion by using more modern  
11 fracture techniques than were available when they first com-  
12 pleted that No. 1 Well.

13 Q But the two wells will be producing ap-  
14 proximately from the same interval, is that correct?

15 A Well, they're both -- well, they're both  
16 in the Eumont Gas Pool.

17 Q Right.

18 A But they're going to be -- they're pro-  
19 ducing out of different formations which are not vertically  
20 connected. In other words, they're not draining the same  
21 areas.

22 Q Okay, the No. 2 Well is going to be pro-  
23 ducing from the Penrose.

24 A Correct.

25 Q And the No. 1 is producing from the Yates.

1           A           In the Yates, which is -- the Yates is up  
2 here at about 2600 feet. I didn't show -- I didn't show it  
3 on this log.

4           Q           Has a completion attempt been made in the  
5 No. 1 Well in the Penrose?

6           A           Yes. That's what I stated earlier. The  
7 No. 1 Well has produced over 2 BCF of gas out of the Pen-  
8 rose.

9           Q           I see. How did you arrive at your calcu-  
10 lation of 500,000 MCF reserves in that No. 2 Well?

11          A           Well, based on the amount of pay in here,  
12 which is approximately 56 feet, and an extrapolated bottom  
13 hole pressure from the surrounding wells, what they reported  
14 their shut-in pressures were. We feel that that's a reason-  
15 able number for the Queen formation.

16          Q           And those reserves would not otherwise be  
17 produced if they were not produced from the No. 2 Well, is  
18 that right?

19          A           That is correct, because currently gas  
20 prices do not allow for drilling of another well in this  
21 area or even re-entering the other well in this proration  
22 unit would still not be economical.

23                      When I say other well, I mean the one,  
24 the one that's marked 1-C in the northeast of the southwest,  
25 which has been plugged and abandoned.

1                   So we feel like this is the best alterna-  
2 tive.

3                   MR. CATANACH: I think that's  
4 all the questions I have of the witness at this time.

5                   He may be excused.

6                   Is there anything further in  
7 Case 9280?

8                   MR. KELLAHIN: No.

9                   MR. CATANACH: It will be taken  
10 under advisement and this hearing is adjourned.

11

12                   (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 that 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 the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 9240  
heard by me on December 16 1987  
David R. Caland, Examiner  
Oil Conservation Division