

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: Jeff Taylor
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For the Applicant: W. Thomas Kellahin
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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. Calamb, Examiner
Oil Conservation Division