

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

8 June 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of J. R. Cone for deter- CASE
mination of permanent allocation of 9408
downhole commingled production and
for the amendment of Division Admin-
istrative Order DHC-473, Lea County,
New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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I N D E X

JOHN C. BYERS

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1 MR. STOGNER: Okay, this
2 hearing will come to order.

3 I'm Michael E. Stogner,
4 Alternate Examiner for today's case. David Catanach, who is
5 Examiner today for today's docket, was somewhat involved in
6 this case and he has recused himself from the particular
7 matter, and I will therefore hear it.

8 We will now call Case Number
9 9408.

10 MR. STOVALL: Application of
11 J. R. Cone for determination of permanent allocation of
12 downhole commingled production and for the amendment of
13 Division Administrative Order 473, Lea County, New
14 Mexico.

15 MR. STOGNER: Call for ap-
16 pearances.

17 MR. KELLAHIN: If the Exa-
18 miner please, I'm Tom Kellahin from the Santa Fe law firm
19 of Kellahin, Kellahin & Aubrey, appearing on behalf of the
20 applicant, and I have one witness to be sworn.

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

23 Would the witness please stand
24 and be sworn at this time?
25

1 (Witness sworn.)

2
3 MR. STOGNER: Mr. Kellahin?

4 MR. KELLAHIN: Thank you, Mr.
5 Stogner.

6 Our witness is Mr. John C.
7 Byers. He's a petroleum engineer. Mr. Byers spells his
8 last name, B-Y-E-R-S.

9 Mr. Byers has appeared before
10 the Division on a number of occasions on behalf of Mr. Cone
11 and others.

12 The subject matter of today's
13 case is to hopefully straighten out for the last time the
14 allocation of production on commingled formations, the
15 Blinebry, the Tubb, and the Drinkard on one of Mr. Cone's
16 wells called the Eubanks 2-L Well.

17 Mr. Catanach of the Division
18 has reviewed this matter with us on a previous occasion and
19 you should find in the case file copies of the prior
20 orders, the well test information, and correspondence from
21 Mr. Byers with the Division on this subject.

22 MR. STOGNER: Mr. Kellahin,
23 are you referring to Administrative Order DHC-473 and the
24 letter of May 30th, 198 -- I'm sorry, May 30th, 1984?

25 MR. KELLAHIN: Yes, sir, and

1 there should be an additional letter dated February 13th,
2 1988.

3 MR. STOGNER: I have one May
4 16th, 1988.

5 MR. KELLAHIN: Let me provide
6 you with another one so that your file that you're working
7 with is complete. There is a letter of February 17th,
8 1988, in which Mr. Byers places in chronological order the
9 various actions taken for the commingled production on this
10 lease.

11 MR. STOGNER: Let the record
12 show that we'll take everything in Administrative Order
13 DHC-473 file into consideration.

14 Mr. Kellahin.

15 MR. KELLAHIN: What we'd like
16 to do, Mr. Examiner, is provide you with three exhibits.
17 The third exhibit is the notice for hearing that we've
18 circulated.

19 The first exhibit is Mr.
20 Byers' summary of the various changes made in the alloca-
21 tion as the well's production was commingled in various
22 combinations between the Blinbry, the Tubb, and the
23 Drinkard. That will be Exhibit Number One.

24 Exhibit Number Two is Mr.
25 Byers' reconciliation of that production in which he

1 tracks it with actual production, the allocation of com-
2 mingled production and show how he recommends we straighten
3 it out in terms of debits and credits. And that's shown on
4 Exhibit Number Two.

5 Those two exhibits will form
6 the principal portion of our discussion today, and I'll let
7 Mr. Byers lead you through the details of his explanation
8 and his solution.

9 However, the underlying docu-
10 ments, I think, are already in the case file and we'd
11 propose not to discuss them in length today, but certainly
12 have them there to refer to if there is anyone who has any
13 questions.

14
15 JOHN C. BYERS,
16 being called as a witness and being duly sworn upon his
17 oath, testified as follows, to-wit:

18
19 DIRECT EXAMINATION

20 BY MR. KELLAHIN:

21 Q All right, Mr. Byers, let me begin, sir,
22 with your testimony and have you for the record identify
23 yourself and tell us your occupation.

24 A John C. Byers. I reside in Lubbock,
25 Texas. I'm a petroleum engineer.

1 Q Mr. Byers, are you employed by J. R.
2 Cone?

3 A Yes, I am.

4 Q And in that capacity have you made an
5 examination and come to certain conclusions and recommend-
6 ations concerning the commingled production from Mr. Cone's
7 Eubanks Well?

8 A We have.

9 MR. KELLAHIN: We tender Mr.
10 Byers as an expert petroleum engineer.

11 MR. STOGNER: Mr. Byers is so
12 qualified.

13 Q Mr. Byers, would you start off, sir,
14 with Exhibit Number One, and before we get into an explan-
15 ation, simply identify what that exhibit contains.

16 A Exhibit Number One is a synopsis of the
17 history of allocation of production from Cone Eubanks No.
18 2, Unit L, Section 14, 21 South, 37 East, Blinbry-Drinkard
19 Pool since the issuance of commingling Order R-5841.

20 Q Let's start with that point, Mr. Byers,
21 and have you first of all tell us the date at which com-
22 mingling Order R-5481 was issued.

23 A 5841 was issued June 28, 1977.

24 Q Prior to the issuance of the order in
25 1977, what formations were produced in the well?

1 The Tubb and Drinkard as a dual
2 completion.

3 Q With the comingling order, then, on what
4 particular day did the Blinebry and Tubb become commingled?

5 A They became commingled shortly after
6 June of '77.

7 Q As a result of that hearing what was the
8 allocation of gas and oil between the Blinebry and the
9 Tubb?

10 A Oil -- Blinebry was allocated 71 percent
11 of the oil; Tubb was 29 percent.

12 Blinebry 58 percent of the gas and 42
13 percent to the Tubb.

14 Q What happened to the Drinkard produc-
15 tion?

16 A Drinkard was isolated with a bridge
17 plug.

18 Q So there was no Drinkard production
19 after that date.

20 A No, Drinkard, that is correct.

21 Q Until what happened?

22 A It produced in that manner until we
23 applied in May of 1984 for additional downhole comingling
24 between the Blinebry, Tubb, and Drinkard, which resulted in
25 the Commission Order DHC-473, issued on June 27th, 1984.

1 Q The temporary allocation pursuant to the
2 administrative downhole commingling Order 473, resulted in
3 what allocation of production among the three zones?

4 Is that what you've tabulated there?

5 A Yes, yes. Blinebry, the oil was allo-
6 cated 33 percent to Blinebry; 17 percent to Tubb; and 50
7 percent to Drinkard.

8 Gas, 54 percent, Blinebry; 40 percent to
9 Tubb; and 6 percent, Drinkard.

10 Q What then is the next thing that occur-
11 red in the sequence?

12 A Order 473 was issued, received in the
13 office. We continued to produce -- produce this well, and
14 some Form 116's were filed.

15 Production, reflecting production, com-
16 mingled production, and also production from the Drinkard
17 when they isolated behind packers.

18 Q Is it your position that the temporary
19 allocation set forth in this column was in fact in error?

20 A It was in error in that it did not take
21 into consideration the relationship of gas/oil ratios
22 authorized and allocated under R-5841.

23 Q The temporary allocation, then, did not
24 reflect the actual ratio between deliverabilities or actual
25 production taking place in the well?

1 A No, it did not, in that it -- it failed
2 to pick up the gas/oil ratio as indicated by last known
3 production from the Drinkard prior to the time the bridge
4 plug was set and it was isolated.

5 Q When was it corrected, Mr. Byers?

6 A It has not been corrected. We filed
7 Form C-116 and in our office did correct it on our reports
8 on Form C-115. It was never corrected by the Commission or
9 by El Paso, who purchases the gas from this well.

10 El Paso did not allocate any of their
11 production to the Drinkard.

12 The Commission picked up the allocation
13 as set forth in the temporary and it has been carried that
14 way through this time, resulting in a substantial error in
15 allocation, particularly as to gas into this well.

16 Q Without getting into the specifics just
17 yet, has the District Office of the Oil Conservation
18 Division made some adjustments in the allocation of produc-
19 tion among the three zones?

20 A Yes. We found, and the Commission
21 found, that there had been no -- all gas from this well and
22 a companion well in the same proration unit, had been allo-
23 cated or dedicated to the Blinebry. They removed a portion
24 of that from the Blinebry dedication and rededicated it to
25 the Drinkard. That was for the year 1987.

1 Q In reconciling the actual production and
2 the test information along with the allocations of produc-
3 tion among the three zones, do you have a recommendation to
4 the Examiner as to what is the correct allocation to make
5 for the well?

6 A The correct allocation -- the correct
7 temporary allocation that should have been employed in this
8 well from June 27, 1984, actually the well went on stream
9 commingled in September of 1984, and that proper allocation
10 should have been 33 percent Blinebry oil, 17 percent Tubb
11 oil, and 50 percent Drinkard oil.

12 This is based on the last known pro-
13 duction and the last known test of the Blinebry, Drinkard,
14 and Tubb.

15 Similarly, the allocation should have
16 been 54 percent of the gas to Blinebry, 40 percent of the
17 gas to Tubb, -- I beg your pardon, reading the wrong column
18 --

19 Q Yes, sir, let's -- let's get everybody
20 on the same exhibit. Let's turn to Exhibit Number Two, Mr.
21 Byers.

22 A All right.

23 Q When we look at the top portion of
24 Exhibit Number Two, you have summarized for us the Bline-
25 bry, Tubb and Drinkard allocations.

1 A Yes.

2 Q What is -- what is shown in the first
3 column?

4 A The pre -- the allocation, Blinebry and
5 Tubb, prior to DHC-473.

6 Q What does that mean?

7 A That means that was the -- that was the
8 allocation equation that was used in reporting production
9 from this well through Form C-115 prior to the time the
10 well was commingled by -- under Order DHC-473, allowing the
11 simultaneous production of Blinebry, Tubb and Drinkard.

12 Q All right, production at that point, in
13 your opinion, is properly allocated?

14 A It was.

15 Q All right, so that takes us up until the
16 date of the -- up until what date?

17 A To the date of the temporary DHC-473
18 allocation, issued on 6-27-84.

19 Q 6-27-84, okay. When we look at the
20 rest of the display, prior to 1-1-85 --

21 A That's right.

22 Q -- and post June 27th of '84 --

23 A Yes.

24 Q -- there is the period in which a
25 portion of the production in your opinion has been

1 improperly or incorrectly allocated.

2 A Yes, it has been incorrectly allocated
3 and that allocation as shown in this top column as correct
4 DHC-473 should have been 35.5 percent oil to the Blinebry,
5 14.5 percent oil to the Tubb, 50 percent oil to the Drink-
6 ard.

7 Q All right. When we look at the tempo-
8 rary one in between the pre-order and the corrected date --

9 A Yes.

10 Q -- the first column says 33 percent oil,
11 54 percent gas, those are the ones being used by the admin-
12 istrative order during this period and which you believe
13 are incorrect.

14 A That is correct.

15 Q All right. The third column, then, is
16 how you would correct the allocation between those two
17 dates.

18 A During that -- during that period.

19 Q All right. The last column, then, is
20 1-1-85.

21 A That is correct.

22 Q What happened then?

23 A By the end of 1984 production had
24 stabilized in this well. The net gas/oil ratio had in-
25 creased. It is our opinion that the relationship between

1 gas/oil ratio of the Blinebry and the Tubb should be
2 respected as set forth and reported, under 5841 until the
3 Drinkard was introduced into this wellbore.

4 Also, a similar proportioning should be
5 given consideration to the last test from the known pro-
6 duction from the Drinkard, which would result in an allo-
7 cation, a permanent allocation equation, which in our
8 opinion should have occurred about the -- January 1st of
9 1985, allocating oil, Blinebry 24 percent; Tubb 10 percent;
10 Drinkard 66 percent.

11 Similarly, Blinebry gas 25 percent; Tubb
12 gas 18 percent; and Drinkard gas 57 percent, and it should
13 have remained in that allocation since that period of time.

14 Q Without going through all the numbers,
15 Mr. Byers, take us through the rest of the Exhibit Number
16 Two and show us the method by which you have made an ad-
17 justment in the allocation of production.

18 A We have taken the annual, 1984 repre-
19 sents the last four months, really, is the period of time
20 during which the Drinkard was introduced into this well.

21 And we have summarized the allocation as
22 shows in the record under the temporary Order DHC-473. We
23 have corrected that to show what should have been reported
24 during those -- that period of time.

25 Similarly for 1985, '86 and '87, and the

1 net result is a transfer of oil from the Blinebry of 965 MC
2 -- barrels; also 73,584 MCF gas.

3 The Tubb has transferred out 805 bar-
4 rrels of oil, 55,837 MCF of gas.

5 The Drinkard has increased during this
6 five year -- four year period, 1770 barrels of oil and
7 129,421 MCF gas.

8 Q Okay. When we look at the last portion
9 of the display, under the words "allocation for purposes of
10 allowable.

11 A Yes.

12 Q You show a total adjustment --

13 A Yes.

14 Q -- whereby the Blinebry on the gas
15 column is carrying 89,000 --

16 A -- 121 MCF.

17 Q That shows that it has -- that's a defi-
18 ciency.

19 A That is a deficiency that should be re-
20 moved from its record.

21 @ Okay, because the Blinebry in fact did
22 not produce --

23 A Did not produce that much --

24 Q -- that gas.

25 A -- and it was reported as total produc-

1 tion.

2 Q All right, when we get to the Tubb we
3 have 55,000 MCF plus of gas --

4 A That's incorrect.

5 Q -- that was charged to the Tubb but not
6 produced by the Tubb.

7 A And it should have been credit charged
8 to the Drinkard.

9 Q All right, and when we look at the
10 Drinkard, then, we have 144,000 MCF, and what does that
11 represent?

12 A Well, that represents the increased gas
13 that was reported -- was not reported for the Drinkard.

14 Q The 144,000 MCF should have been charged
15 to the Drinkard and was not.

16 A And was not. Therefore we have a
17 balance of zero. What we're doing is transferring from the
18 Blinebry and Tubb into the Drinkard.

19 Q Okay, and if you add up the Blinebry and
20 Tubb that will leave the 144,000 MCF.

21 A Yes, That is correct.

22 Q What is the basis by which you have made
23 the adjustment in percentages of allocation in each year?
24 Is it done based upon actual production or is there tests
25 or what's done?

1 A They will well test the -- the well was
2 making three barrels per day from the Blinebry and Tubb
3 prior to commingling.

4 It was also making 41.4 MCF gas.

5 The last known production from the
6 Drinkard was 3 barrels of oil a day and 22.8 MCF gas for a
7 gas/oil ratio of 7633-to-1.

8 We have tried to carry this balance
9 between gas/oil ratio as between the Blinebry and Tubb and
10 the Drinkard throughout the remaining scenario, such that
11 we keep -- the gas/oil ratio from this well has changed
12 through time. It's increased and decreased. It's
13 increasing at this time; therefore, we attribute all the
14 increases in gas/oil ratio from this well equally or pro-
15 portionally among all the zones because we do not know
16 which one is considered is to be more.

17 Q Is the ownership of the royalty, over-
18 riding royalty, and working interest common for all three
19 zones?

20 A Yes, it is.

21 Q So the change, or the adjustment, or
22 correction in allocation is not going to affect the income
23 of these people.

24 A No, it will not. It will not. I will
25 clarify the records of the Commission and our records.

1 Q This matter came to your attention
2 because at this point one of these zones is carried in an
3 overproduced status erroneously?

4 A That is the Blinebry, the Blinebry is
5 carried in an overproduced status. The wells are current-
6 ly shut in.

7 Q And how long have they been shut-in, Mr.
8 Byers.

9 MR. CONE: John, just -- just a
10 little over a month.

11 A About a month?

12 MR. STOGNER: I'm sorry, who
13 was that?

14 MR. KELLAHIN: That's Mr.
15 Cone. He indicated to us that this wells have been shut in
16 how long, Mr. Cone?

17 MR. CONE: Just about -- about
18 five weeks.

19 MR. STOGNER: Are you going to
20 swear him in, Mr. Kellahin?

21 MR. KELLAHIN: No, sir, but
22 I'll be happy to if there are questions of Mr. Cone direct-
23 ly.

24 Q The -- the over-production is
25 attributable to the Blinebry, Mr. Byers?

1 A It is attributable to allocation to the
2 Blinebry and also to the failure to allocate in -- into the
3 Drinkard.

4 Q Okay. Your recommendations to the
5 Examiner are to make the adjustments as you've shown on
6 Exhibit Number Two?

7 A I do.

8 Q And that will result in the allocation
9 of production tracking the actual volumes of production
10 that ought to be attributable to each zone?

11 A Each zone on an annual basis from the
12 last four months of 1984 through 1987.

13 MR. KELLAHIN: That concludes
14 my examination of Mr. Byers, Mr. Stogner.

15 We would move the introduction
16 of his Exhibits One and Two.

17 MR. STOGNER: Do you want to
18 offer Exhibit Number Three in evidence, Mr. Kellahin?

19 MR. KELLAHIN: Yes, sir, I
20 hadn't explained this to you, sir.

21 It's our affidavit from our
22 office showing that we have notified what we thought were
23 potentially interested parties in the area. We've notified
24 the offset operators and we've notified El Paso Natural
25 Gas. If it's appropriate, we'd like to also move that that

1 be introduced at this time.

2 MR. STOGNER: Okay, Exhibits
3 One, Two and Three will be admitted into evidence at this
4 time.

5
6 CROSS EXAMINATION

7 BY MR. STOGNER:

8 Q Mr. Byers, let's take a look at the
9 different production strings right now.

10 The Blinebry, is that considered oil or
11 gas at this time?

12 A It's -- this well is perforated both in
13 the oil column and the gas column.

14 Q Well, it can't be an oil and gas well.
15 Is it --

16 A Well, it was classified as a gas well.

17 Q Gas well, and what's the acreage dedi-
18 cation?

19 A It's a nonstandard 80-acre proration
20 unit to which this well and the 3-K are both dedicated.

21 Q Now as I understood your testimony, it's
22 overproduced in the Blinebry or the Drinkard?

23 A The Blinebry.

24 Q The Blinebry.

25 A The Drinkard is classified as oil.

1 Q Okay.

2 A The Blinebry is classified as gas.

3 Q How about the Tubb?

4 A The Tubb is gas.

5 Q The Tubb is gas.

6 A Yes.

7 Q And both the Tubb and the Blinebry are

8 both allocated or prorated gas pools, is that correct?

9 A As for the gas proration, the Blinebry is

10 the only one that's over produced.

11 Q Okay, now as far as the Tubb goes, is

12 that 160-acre spacing or --

13 A The Tubb is 160-acre. That's standard.

14 Q Is that the only well producing from the

15 Tubb?

16 A Yes, it is.

17 Q Is the No. 3-K Well that you alluded to

18 that's simultaneously dedicated to this nonstandard 80-acre

19 proration unit, for the record, this is the north half, do

20 you know otherwise?

21 A No, it is north half.

22 Q That's the north half of the southwest

23 quarter?

24 A Southwest, yes, sir.

25 Q How much production is the 3-K Well

1 being allocated?

2 A It has -- as far as the allocation is
3 concerned, we have been reporting it properly all this time
4 on the C-115's; however, El Paso has not picked any -- al-
5 located any of the production from it to the Drinkard.

6 We, working with Vic, we have -- I think
7 we can resolve all that by transfer from the Blinebry to
8 the Drinkard, without hearing.

9 Q Let me back up, this No. 3-K, is it a
10 Drinkard or Blinebry or both?

11 A It's commingled. It's downhole com-
12 mingled Blinebry and Drinkard.

13 Q Blinebry and Drinkard.

14 There is 64,000, as of January 1, '88,
15 there are 64,640 MCF should be transferred out of the
16 Blinebry into the Drinkard for the No. 3-K.

17 Q Well, how was that matter taken -- how
18 -- how was that taken care of?

19 A That will remove the overproduction
20 status of the Blinebry.

21 Q From the proration unit, not just the
22 3-K.

23 A Yes, yes. Well, the two wells combined.

24 Q Why can't this well be shut-in at this
25 time for a proper test, Mr. Byers?

1 A It is downhole commingled. We'll have
2 to run packers in the hole; isolate the various zones.

3 O Yeah.

4 | A And it's difficult.

5 0 Can it be done?

6 A It can be done.

7 Q What kind of dangers in doing this would
8 you encounter?

9 A The -- after long shut-in a differential
10 pressure appears to show up insofar as working in the well
11 as between the Blinebry and the Drinkard. We have to fight
12 lost circulation and kicks at the same time.

13 As long as we keep it on stream there
14 doesn't seem to be any differential.

15 Q Is there a chance of losing one of the
16 zones, if not all three doing a procedure such as this?

17 A Well, I think there is always a possi-
18 bility when you work with one like that.

19 We have not been in this hole in some
20 time, outside of pulling pumping equipment.

21 MR. STOGNER: I have no further
22 questions of this witness.

23 Are there any questions of Mr.
24 Byers?

25 MR. LYON: Let me ask him one.

1
2
3 QUESTIONS BY MR. LYON:

4 Q I'm Vic Lyon, Chief Engineer for the Com
5 mission, the Division.

6 Mr. Byers, you mentioned that in the 3-K
7 Well, that -- that that reallocation had been taken care
8 of. Have you caused or requested or caused El Paso to
9 submit corrected C-111's?

10 A No, I have not.

11 Q Will you do that?

12 A We will. We will.

13 Q And will you also ask them to submit
14 corrected C-111's on the No. 2 Well?

15 A Yes. Should those be submitted on an
16 annual basis or do they need to be submitted on a monthly
17 basis for this period?

18 Q It would -- it would be helpful if it
19 was on a monthly basis but I can see it would be a lot
20 easier for you if it's acceptable with Mr. Garcia --

21 A Yeah, all right.

22 Q -- to make the correction in his
23 computer records.

24 A All right.

25 Q And if you will -- I'll call you and

1 tell you --

2 A All right.

3 Q -- which way it needs to be.

4 A Okay, we will talk to El Paso and get
5 them to resubmit the 111's.

6 Q Right.

7 MR. LYON: That's all I have.

8 MR. STOGNER: Mr. Lyon, this
9 line of questioning, assuming that the order is approved,
10 is that correct?

11 MR. LYON: Yes.

12 A Yes.

13 MR. STOGNER: Okay. Are there
14 any other questions of Mr. Byers?

15 If not, he may be excused.

16 Mr. Kellahin, would you submit
17 me a rough draft order on this?

18 MR. KELLAHIN: Be happy to.

19 MR. STOGNER: Within, say,
20 seven days? Is that adequate?

21 MR. KELLAHIN: Sure.

22 MR. STOGNER: Is there any-
23 thing further in Case Number 8408?

24 Mr. Byers may be excused.

25 MR. BYERS: We thank you.

1 MR. STOGNER: And we'll take
2 Case Number 9408 under advisement.
3

4 (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. 9408
heard by me on 8 June 19 88.

Michael E. Stogger, Examiner
Oil Conservation Division 7/27/88