

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING)
CALLED BY THE OIL CONSERVATION)
DIVISION FOR THE PURPOSE OF)
CONSIDERING:)
)
APPLICATION OF AMOCO PRODUCTION)
COMPANY)
)

CASE NO. 11,096

ORIGINAL

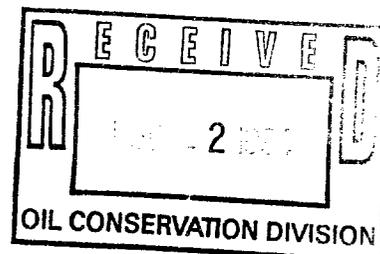
REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

October 27th, 1994

Santa Fe, New Mexico



This matter came on for hearing before the Oil Conservation Division on Thursday, October 27th, 1994, at Morgan Hall, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

STEVEN T. BRENNER, CCR
(505) 989-9317

I N D E X

October 27th, 1994
 Examiner Hearing
 CASE NO. 11,096

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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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P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 9:06 a.m.:

3 EXAMINER STOGNER: Call next case, Number 11,096

4 MR. CARROLL: Application of Amoco Production
5 Company for downhole commingling, San Juan County, New
6 Mexico.

7 EXAMINER STOGNER: Call for appearances.

8 MR. CARR: May it please the Examiner, my name is
9 William F. Carr with the Santa Fe law firm Campbell, Carr,
10 Berge and Sheridan.

11 I represent Amoco Production Company, and I have
12 two witnesses.

13 EXAMINER STOGNER: Are there any other
14 appearances?

15 There being none, will the witnesses please stand
16 to be sworn?

17 (Thereupon, the witnesses were sworn.)

18 EXAMINER STOGNER: Mr. Carr?

19 JULIE TALBOT,

20 the witness herein, after having been first duly sworn upon
21 her oath, was examined and testified as follows:

22 DIRECT EXAMINATION

23 BY MR. CARR:

24 Q. Will you state your name for the record, please.

25 A. My name is Julie Talbot.

1 Q. Where do you reside?

2 A. Denver, Colorado.

3 Q. By whom are you employed?

4 A. Amoco Production company.

5 Q. What is your current position with Amoco
6 Production Company?

7 A. I'm a petroleum land negotiator.

8 Q. Ms. Talbot, have you previously testified before
9 this Division?

10 A. Yes, I have.

11 Q. At the time of that testimony, were your
12 credentials as a petroleum land negotiator accepted and
13 made a matter of record?

14 A. Yes, they were.

15 Q. Are you familiar with the Application filed in
16 this case?

17 A. I am.

18 Q. And are you familiar with the subject well?

19 A. Yes, sir.

20 MR. CARR: Are the witness's qualifications
21 acceptable?

22 EXAMINER STOGNER: They are.

23 This is the first time I've heard of a petroleum
24 land negotiator.

25 Q. (By Mr. Carr) Ms. Talbot, since you've been

1 qualified, I guess, as one --

2 A. It's politically correct.

3 Q. -- could you review for the Examiner what is a
4 petroleum land negotiator?

5 A. A petroleum land negotiator is also known as a
6 petroleum landman.

7 EXAMINER STOGNER: Okay, I didn't know if there
8 was any other --

9 THE WITNESS: There's no distinction.

10 EXAMINER STOGNER: Okay.

11 Q. (By Mr. Carr) And this what you are called at
12 Amoco?

13 A. That's the official title at Amoco.

14 EXAMINER STOGNER: Actually, I like that, I like
15 that. Thanks for explaining that.

16 Mr. Carr, Ms. Talbot is so qualified.

17 MR. CARR: Thank you, Mr. Stogner.

18 Q. (By Mr. Carr) Could you briefly summarize for
19 the Examiner what Amoco seeks in this case?

20 A. Yes, sir, we're seeking approval to downhole
21 commingle the Basin Dakota Pool gas production with the
22 Flora Vista-Gallup Pool gas production in the wellbore of
23 the L.C. Kelly Well Number 3-E, which is in Section 4 of
24 Township 30 North, 12 West, in San Juan County, New Mexico.

25 Q. Have you prepared, or has there been prepared

1 under your direction, certain exhibits for presentation in
2 this case?

3 A. Yes, I have.

4 Q. And are those exhibits contained in the front
5 portion of the exhibit pamphlet which has been marked Amoco
6 Exhibit Number 1?

7 A. Yes, they are.

8 Q. Would you refer to that and identify what is the
9 first page in this exhibit?

10 A. The first page is simply a copy of the
11 Application for our case.

12 Q. And this is what was filed with the Oil
13 Conservation Division in this matter?

14 A. Yes, it is.

15 Q. And this is also the Application that was sent to
16 those individuals who are entitled to know this, and we'll
17 get to that letter?

18 A. That is correct.

19 Q. All right. Let's go to the second page in the
20 exhibit. Identify first what this is and then review the
21 information for Mr. Stogner.

22 A. This is simply a nine-section plat showing the
23 location of the spacing unit of the L.C. Kelly Number 3-E
24 well, which is in the north half of Section 4 of Township
25 30 North, Range 12 West, and also -- It's a spacing unit

1 for the Dakota formation and also all the offsetting 320-
2 acre spacing units for the Dakota formation.

3 Indicated with the letter 1, those offsetting
4 spacing units are where Amoco operates a Dakota well or
5 owns the operating rights in the Dakota formation.

6 Where the number 2 is indicated, that is where
7 Southland Royalty either operates a Dakota well or owns the
8 operating rights in the Dakota formation.

9 Q. The only other offsetting operator is Southland?

10 A. That's correct.

11 Q. And they were notified of the hearing?

12 A. Yes, they were.

13 Q. All right, let's go to the next plat, which shows
14 the spacing unit for the Gallup formation.

15 A. That's correct, in the northeast quarter of
16 Section 4 is the Gallup spacing unit. This plat shows the
17 offsetting operator of the Gallup formation.

18 And as you see, as indicated, 1 is where Amoco
19 operates or owns Gallup rights, and number 2 is where
20 Southland operates or owns Gallup rights.

21 Q. The X in the center of the dedicated acreage
22 shows the well location?

23 A. That's correct.

24 Q. And what is the actual footage location for the
25 well?

1 A. It's located 1710 feet from the north line and
2 880 feet from the east line of Section 4.

3 Q. All right. Behind that are some tables. Could
4 you explain to Mr. Stogner what these show?

5 A. Yes, this is simply a listing of all the interest
6 owners within the Gallup and the Dakota formation in the
7 L.C. Kelly Number 3-E. It's broken out by working interest
8 owners, royalty interest owners, and production payment or
9 overriding royalty interest owners.

10 Q. The royalty is all United States of America?

11 A. That's correct.

12 Q. And then all -- the holders of the production
13 payments and the overriding royalty interests are set forth
14 on the two pages following?

15 A. That is correct.

16 Q. Marked as Exhibit Number 2 -- it's tucked in the
17 back of the booklet -- is a document. Could you identify
18 this?

19 A. Yes, this is the U.S. Post Office certified mail
20 log, which gives a listing of all the interest owners
21 showing that they were sent certified mail.

22 Q. And the stamp on the right-hand side of the
23 exhibit shows the date of mailing being August 29, 1994?

24 A. That's correct.

25 Q. And these are the names and addresses of the

1 people that are shown on the preceding table?

2 A. That is correct.

3 Q. And I see you also provided notice to Amoco
4 Production Company. Is that customary?

5 A. No, that was inadvertent.

6 Q. Okay. Is there anything further that you need to
7 add to your testimony or your portion of the testimony
8 concerning the land issues involved in this Application?

9 A. No, sir.

10 Q. Were the portions of the exhibit which we have
11 reviewed prepared by you or compiled under your direction
12 and supervision?

13 A. Yes, they were.

14 Q. And the remainder of the exhibit booklet will be
15 explained by the engineering witness?

16 A. That's correct.

17 MR. CARR: Mr. Stogner, we have nothing further
18 of Ms. Talbot, and we will introduce the exhibits at the
19 conclusion of Mr. Hawkins' presentation.

20 EXAMINATION

21 BY EXAMINER STOGNER:

22 Q. Ms. Talbot, so that I'm certain on this, the
23 production payment or the overriding royalty interest
24 owners, those are common throughout both for the 160- and
25 320-acre proration unit?

1 A. That is correct.

2 Q. And the only variance is the working interest
3 owner, that seven-percent belonging to San Juan Partnership
4 in the Dakota Formation?

5 A. Yes, sir.

6 Q. And it's not there for the Gallup formation,
7 correct?

8 A. That's correct.

9 Q. So is it your understanding this is about the
10 only reason this matter has come to hearing, is because of
11 this?

12 A. Absolutely.

13 Q. There's an overriding royalty interest belonging
14 to Frederic Owen Hawkins. Is that any kin to any of
15 Amoco's employees in Denver?

16 A. Not that I'm aware of.

17 Q. Okay. The north half of this section, is that
18 one federal lease, or is that a common agreement?

19 A. It's one federal lease.

20 Q. One federal lease.

21 EXAMINER STOGNER: Mr. Carr, I have no further
22 questions of Ms. Talbot.

23 MR. CARR: We have nothing further of Ms. Talbot
24 and I would now call Bill Hawkins.

25 EXAMINER STOGNER: No kin to Frederic Owen

1 Hawkins?

2 MR. CARR: No kin to Frederic Owen Hawkins.

3 JAMES WILLIAM HAWKINS,

4 the witness herein, after having been first duly sworn upon
5 his oath, was examined and testified as follows:

6 DIRECT EXAMINATION

7 BY MR. CARR:

8 Q. Will you state your name for the record, please?

9 A. James William Hawkins.

10 Q. Are you related to Frederic Owen Hawkins?

11 A. Not that I'm aware of.

12 Q. Where do you reside?

13 A. Denver, Colorado.

14 Q. By whom are you employed?

15 A. Amoco Production Company.

16 Q. What is your current position with Amoco?

17 A. Petroleum engineer.

18 Q. Have you previously testified before this
19 Division?

20 A. Yes, I have.

21 Q. At the time of that testimony, were your
22 credentials as a petroleum engineer accepted and made a
23 matter of record?

24 A. Yes.

25 Q. Are you familiar with the Application filed in

1 this case on behalf of Amoco Production Company?

2 A. Yes, I am.

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

5 EXAMINER STOGNER: They are.

6 Q. (By Mr. Carr) Mr. Hawkins, have you prepared
7 portions of what has been marked Amoco Exhibit Number 1?

8 A. Yes.

9 Q. Would you go to the plat which is marked "Plat
10 Map"?

11 A. Yes the plat map. We had a discussion yesterday
12 whether this was a plat or a map.

13 Q. Or both.

14 A. We think it is a plat.

15 Q. Anyway, would you refer to this exhibit and would
16 you review the information on the exhibit for the Examiner,
17 please?

18 A. Yes, this is a nine-section plat that shows the
19 location of the wells in the vicinity that are completed in
20 the Dakota or Gallup.

21 The black dot with the arrow is the location for
22 the L.C. Kelly Number 3-E well, which is the well we're
23 requesting to downhole commingle in the Dakota and Gallup.

24 Also shown, I'd like to bring your attention to
25 the L.C. Kelly Number 3, immediately to the west in that

1 north half. That well has already been downhole commingled
2 in the Dakota and the Gallup, and that work was done back
3 in 1972 under Order R-4335, Case Number 4740.

4 And to the immediate east of the L.C. Kelly 3-E
5 is the L.C. Kelly Number 4-E. That well has also been
6 downhole commingled in the Gallup and the Dakota, and that
7 was approved under Administrative Order DHC-475.

8 And those are the only other two Gallup producers
9 that are in this general vicinity. The other wells that
10 you see on here are Dakota producers.

11 Q. Mr. Hawkins, the wells, the two wells you've just
12 described for which Gallup and Dakota downhole commingling
13 has been approved, are they both operated by Amoco?

14 A. Yes, they are.

15 Q. Have you experienced any problems with the
16 compatibilities of the fluids that are being commingled?

17 A. No, we have not.

18 Q. All right. Let's go to the next exhibit, the
19 schematic of the well, and I'd ask you to review this for
20 the Examiner.

21 A. This is a wellbore diagram for the L.C. Kelly
22 Number 3, showing how the well is currently completed.

23 In July of 1994 we attempted a dual completion
24 with the Gallup and Dakota in this well.

25 The well is cased with 4-1/2-inch casing to

1 bottom, and the well is perforated from 6754 to 6796. The
2 Gallup was perforated a 6030 to 6060 and then completed
3 with the Model B packer that isolates the two zones.

4 We produced this well for a period of about a
5 month and have been flowing the Gallup up the back side of
6 the tubing in the tubing casing annulus. The well has
7 died, and we're unable to lift the fluids out of the
8 Gallup.

9 Q. The result of the downhole commingling
10 Application would be that you can now produce the Gallup
11 interval, which currently will not produce?

12 A. That's correct.

13 Q. Is there any alternative available to Amoco, as
14 opposed to downhole commingling the production from these
15 two zones?

16 A. We don't really see any viable alternative. We
17 did -- you know, have looked at the alternative of drilling
18 a new well for the Gallup, but that is not economic.

19 We view this as the only viable alternative to
20 the current completion, and that is to downhole commingle
21 and produce the Gallup zone, commingled with the Dakota.

22 Q. Approval of the Application and downhole
23 commingling will result in a recovery of hydrocarbons that
24 otherwise would be left in the ground?

25 A. That's correct.

1 Q. Let's go now to the next page of Exhibit Number
2 1. Would you identify that, please?

3 A. The next page is a production history for the
4 Dakota completion in this L.C. Kelly 3-E.

5 It shows we've been producing in the Dakota since
6 1983, and although this plot goes up just to the end of
7 1993, it's actually still producing into 1994. And it
8 shows a general decline down to an end-of-1993 rate of
9 about 80 MCFD.

10 We estimate the current pressure for this zone to
11 be about 780 p.s.i.

12 Q. What is the pressure that you calculate for the
13 Gallup interval?

14 A. We calculate that to be 1143 p.s.i.

15 Q. With this pressure differential, would you
16 anticipate any crossflow between the downhole commingled
17 zones?

18 A. No, we would not.

19 Q. All right, let's go to the next page, which is
20 the curve for the Gallup interval in the L.C. Kelly Number
21 3-E.

22 A. Correct. We really only have -- This looks like
23 a big plot, but it only covers about two weeks of time.

24 It shows that when we did bring the Gallup test
25 -- the Gallup well on, we were able to flow the well for a

1 period of about five days at rates of approximately 150 to
2 250 MCFD.

3 We then had some problems with the well and had
4 to shut it in, opened the well back up on August 23rd and
5 again flowed it at rates of 100 to up to 300 MCFD for one
6 day, and it generally declined down to about 90 MCFD and
7 has logged off.

8 Subsequent to that, we went in and did a Sonolog
9 test to determine fluid level, and there appears to be 3200
10 feet of condensate loading up the zone, which has killed
11 the well, and we're unable to get it to flow.

12 Q. How does Amoco propose to allocate production
13 between the zones?

14 A. We would propose to get a stabilized rate from
15 the Dakota prior to commingling, and then go ahead and take
16 out our -- pull our tubing and take out the packer and flow
17 the two zones commingled and fix the percentage of that
18 total rate, with the percentage that the Dakota represents
19 of that total.

20 Q. And you propose to work out the actual allocation
21 by zone with the Aztec District Office of the Oil
22 Conservation Division?

23 A. That's correct.

24 Q. Mr. Hawkins, in your opinion, will approval of
25 this Application and downhole commingling Gallup and the

1 Dakota production in the L.C. Kelly Number 3-E well be in
2 the best interests of conservation, the prevention of waste
3 and the protection of correlative rights?

4 A. Yes, it will.

5 Q. And as you've testified, it will result in the
6 recovery of hydrocarbons that otherwise will not be
7 recovered?

8 A. That's correct.

9 Q. Were the portions of Exhibit 1 that you have
10 reviewed then prepared by you?

11 A. Yes.

12 MR. CARR: At this time, Mr. Stogner, we would
13 move the admission into evidence of Amoco Exhibits 1 and 2.

14 EXAMINER STOGNER: Exhibits 1 and 2 will be
15 admitted into evidence.

16 MR. CARR: And that concludes my direct
17 examination of Mr. Hawkins.

18 EXAMINATION

19 BY EXAMINER STOGNER:

20 Q. Mr. Hawkins, what rate of fluids, that you know,
21 loaded up the Gallup before it logged off?

22 A. I do not know the rate of the fluid. I take it
23 that we were not getting very much fluid at the surface and
24 it was building up in the annulus there.

25 We don't really have a good estimate at this

1 point of what those -- what that rate of fluid would be,
2 although I would anticipate it to be probably on the order
3 of maybe 40 barrels a day or so, initially, and probably
4 decline somewhat with time.

5 Q. After this well is commingled, what kind of a
6 completion will it have? Are you going to have a pump on
7 it or anything?

8 A. We're hoping that we'll be able to flow the well
9 with just the pressure from the Gallup and the Dakota.

10 Q. You said your Gallup pressure was 1143?

11 A. That's correct. That's based on the estimated
12 fluid level of condensate in the wellbore.

13 Q. And then your Dakota had less, 780 p.s.i.; is
14 that correct?

15 A. That's correct.

16 Q. Are you suspecting that the additional gas load
17 designated by -- or provided by the Dakota is going to be
18 able to lift the fluid?

19 A. Well, we're hoping that with the two rates
20 combined we'll get a little better velocity up the tubing
21 and that will help lift the fluids out.

22 Q. If that isn't the case, what would Amoco then do
23 to this well?

24 A. I think we would have to consider putting some
25 type of artificial lift in there, if necessary.

1 Q. What kind of rates are you seeing on the other
2 two wells that are presently commingled, to the west and to
3 the east of this well?

4 A. The L.C. Kelly Number 3 well, producing
5 approximately 25 to 30 MCFD out of the Gallup with only a
6 couple barrels of fluid, of oil at this point. And then
7 the Dakota is producing -- it looks like about 40 MCFD with
8 four or five barrels of oil a day, condensate a day. At
9 least that's what our *Dwight's* information indicates.

10 The L.C. Kelly Number 4-E well is producing
11 approximately 60 to 70 MCFD in the Dakota and basically
12 no -- you know, a very small amount of gas being allocated
13 back to the Gallup.

14 Q. Did either one of the Well 4-E or 3, were they
15 producing at the fluid levels as you're anticipating, or
16 have you recorded in the Number 3-E from the Gallup?

17 A. I'm sorry, I didn't understand your --

18 Q. As far as the fluid levels in either the 3 or
19 4-E, have they ever been up to the levels of the Number 3-
20 E?

21 A. I don't know that.

22 We went in and checked this one because the well
23 died, so we knew it was loaded up with something and, you
24 know, we assumed it was condensate and just checked to see
25 how much fluid was in the wellbore.

1 Q. And artificial lift can only be utilized with one
2 string of tubing; you wouldn't be able to still keep them
3 separated; is that correct?

4 A. That's correct. And I think the other thing we
5 could do is attempt to put these on compression. That
6 might help us lower the surface pressure and get the wells
7 to flow a little better, so that might be beneficial as
8 well.

9 Q. Do you know if the Dakota zone is fluid-sensitive
10 in case a backflow occurs or the well is shut in for some
11 time --

12 A. Well, I --

13 Q. -- the condensate would do any harm to the
14 Dakota?

15 A. I don't believe the condensate would do any harm
16 to the Dakota.

17 If we had a large volume of water, that might
18 cause some concern. But the condensate should be
19 relatively compatible.

20 Q. Is there any water production from the Gallup?

21 A. Not that I'm aware of.

22 EXAMINER STOGNER: Any other questions of the
23 witness?

24 MR. CARR: We have no further questions of Mr.
25 Hawkins.

1 EXAMINER STOGNER: He may be excused.

2 MR. CARR: We have nothing further in this case,
3 Mr. Stogner.

4 Does anybody else have anything further in Case
5 11,096?

6 This case will be taken under advisement.

7 (Thereupon, these proceedings were concluded at
8 9:28 a.m.)

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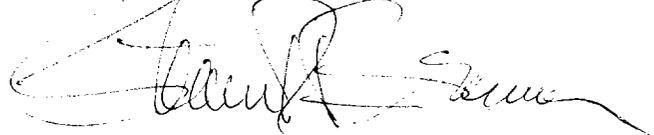
CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) SS.
 COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

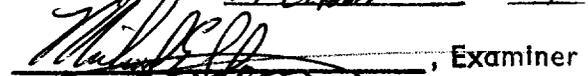
WITNESS MY HAND AND SEAL October 29th, 1994.



STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in the examiner hearing of Case No. 11096, heard by me on 27 October 1994.



, Examiner
 Oil Conservation Division