

Case Number

4869

Application
Transcripts.

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE ROOM, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

December 19, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Claude C. Kennedy
for the amendment of Order Number
R-4263, McKinley County, New
Mexico.

Case No. 4869

BEFORE: Daniel S. Nutter,
Examiner.

TRANSCRIPT OF HEARING

1 MR. NUTTER: Case 4869: Application of Claude
2 C. Kennedy for the amendment of Order Number R-4263,
3 McKinley County, New Mexico. This case was heard by the
4 Commission on November 29th, 1972. However, due to an error
5 in the advertisement of the case, the case was not properly
6 advertised in the McKinley County newspaper, we are now
7 calling the case, after proper notification.

8 Are there any appearances to be made in Case 4869?
9 (No response)

10 MR. NUTTER: The record of November 29th, 1972
11 will be included with the record made here today. We will
12 take the case under advisement.
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1 STATE OF NEW MEXICO)
2 COUNTY OF BERNALILLO } SS
3

4 I, RICHARD E. McCORMICK, a Certified Shorthand
5 Reporter, in and for the County of Bernalillo, State of
6 New Mexico, do hereby certify that the foregoing and attached
7 Transcript of Hearing before the New Mexico Oil Conservation
8 Commission was reported by me; and that the same is a true
9 and correct record of the said proceedings to the best of
10 my knowledge, skill and ability.
11

12 *Richard E. McCormick*
13 CERTIFIED SHORTHAND REPORTER
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I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 4869
dated by me on 12/19, 1972.

Donna Examiner
New Mexico Oil Conservation Commission

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
Wednesday, November 29, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Claude C. Kennedy for the
amendment of Order No. R-4263 and for
the revocation of Commission Order NSL-586,
McKinley County, New Mexico.

Case No. 4869

BEFORE: Richard L. Stamets,
Examiner

TRANSCRIPT OF HEARING

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1 MR. STAMETS: Call next case, Case 4869, being the
2 application of Claude C. Kennedy for the amendment of Order No.
3 R-4263 and for the revocation of Commission Order NSL-586,
4 McKinley County, New Mexico.

5 Call for appearances in Case 4869.

6 MR. COOLEY: William J. Cooley, Burr and Cooley,
7 Farmington, New Mexico, appearing on behalf of the applicant.
8 We have one witness.

9 MR. STAMETS: Are there other appearances in this
10 case?

11 MR. KELLEY: William Booker Kelley of White, Koch,
12 Kelley and McCarthy, Santa Fe, appearing on behalf of Tenneco
13 Oil Company. We have two witnesses.

14 MR. STAMETS: Will the witnesses stand and be sworn,
15 please.

16 Mr. Cooley, you may proceed.

17 MR. COOLEY: Mr. Examiner, at the outset I would like
18 to announce that the applicant has abandoned his request for
19 relief demanded in Paragraph 1, that is that all wells drilled
20 within the Lone Pine-Dakota "D" Unit be drilled on locations no
21 closer than 330 feet from the boundary of the quarter-quarter
22 section in which any such well is located, that request will be
23 abandoned and we request that it be dismissed.

24 MR. STAMETS: Okay. This section of the application
25 will be dismissed.

1 MR. COOLEY: We further abandon the requested
2 relief with respect to the revocation of Administrative Order
3 NSL-586, dated November 1, 1972.

4 MR. STAMETS: Okay. You do not wish NSL-586 to be
5 revoked now, is that correct?

6 MR. COOLEY: That is correct. This limits, then,
7 the application before the Examiner at this point to the request
8 for a prohibition of transfer of the allowables to any well
9 located closer than 1,320 feet from the outer boundary of the
10 Unit Area. Under the present existing rules, I believe it's
11 Rule 6, it permits the transfer of one additional allowable, of
12 a double allowable, from an offset well. It's this particular
13 provision of the existing rules that we seek to amend.

14 With that, we will proceed.

15 THOMAS A. DUGAN,
16 a witness, having been first duly sworn according to law, upon
17 his oath, testified as follows:

18 DIRECT EXAMINATION

19 BY MR. COOLEY:

20 Q Would you state your name, please?

21 A Thomas A. Dugan.

22 Q Where do you reside, Mr. Dugan?

23 A 907 Hallet Circle, Farmington, New Mexico.

24 Q And how are you employed?

25 A I'm a Consulting Petroleum Engineer, registered in the

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1 State of New Mexico.

2 Q Have you previously testified before this Commission and
3 had your qualifications accepted as a Petroleum Engineer?

4 A Yes.

5 Q Have you made a particular study with respect to the
6 Lone Pine-Dakota "D" Unit and the Lone Pine Field in
7 McKinley County, New Mexico?

8 A Yes.

9 MR. COOLEY: Are the witness' qualifications
10 acceptable?

11 MR. STAMETS: They are.

12 Q (By Mr. Cooley) Are you familiar with the relief that
13 the applicant requests in this case, Mr. Dugan?

14 A Yes.

15 Q Have you in your possession a map which Tenneco Oil
16 Company has prepared and submitted to this Commission in
17 connection with it's application for administrative
18 approval of the location of the LPDDU No. 29 Well?

19 A Yes, I've looked at this map.

20 Q That map has been identified as Exhibit 1. Referring to
21 Exhibit 1, Mr. Dugan, I would ask you whether, in your
22 opinion, the LPDDU No. 29 Well, if drilled by Tenneco,
23 will be situated in the same common source of supply as
24 is the applicant's BSK Edna No. 1 Well?

25 A Yes, it's structurally about the same position and should

1 make an oil well out of the same reservoir.

2 Q And if it does make an oil well out of the same reservoir
3 do you have an opinion as to whether there will be
4 effective communication as between these two wells?

5 MR. STAMETS: Mr. Cooley, may I let you look at this
6 one and have one of those for scribbling on in this case?

7 A Well, what work I've done in the Lone Pine Pool, there is
8 good communication between wells, it's a good porous
9 reservoir and wells produce very well without much
10 stimulation; so, no doubt, there will be communication
11 between the two wells.

12 Q In your opinion, is there effective communication between
13 the applicant's BSK Edna No. 1 Well and the Tesoro Well
14 to the west?

15 A Yes, I believe there is. What limited bottomhole pressure
16 information we have would indicate that there was, yes.

17 Q And have you calculated the distance that the LPDDU 29
18 Well, if drilled at it's proposed location, will be from
19 the boundary of the 80-acre tract on which the BSK Edna
20 No. 1 Well is?

21 A I believe it's 340 feet.

22 Q And have you calculated the distance with respect to the
23 Tesoro Well?

24 A No, I don't have that contact location, but it's about
25 330.

1 Q Is the Tesoro Well presently in the Lone Pine-Dakota "D"
2 Unit?

3 A No, it's not presently in the unit, but it's my
4 understanding that the Tesoro plans to join the unit with
5 the 80-acre tract.

6 Q And are you aware as to whether the applicant in this
7 case, Mr. Kennedy, has agreed to dedicate the 80 acres
8 that the Edna No. 1 Well is located on to the Lone Pine-
9 Dakota "D" Unit?

10 A Mr. Kennedy has informed me that he does not wish to join
11 the unit.

12 Q Once the Tesoro Well is brought into the Lone Pine-Dakota
13 "D" Unit, there will then be two unit wells offsetting the
14 Kennedy tract, assuming the drilling of the LPDDU 29
15 Well is closer than 660 feet?

16 A Well, I think both wells will be approximately 660 from
17 Kennedy's well and both would then be in the unit.

18 Q And one would be approximately 330 feet from the boundary
19 line of the Kennedy lease and the other 340 feet?

20 A Right.

21 Q Now, if both of these allowables, if we assume that both
22 of these unit wells were given double allowables and the
23 Kennedy well is restricted to a single allowable, what
24 effect, if any, will there occur, in your opinion, with
25 respect to the oil which is presently under the Kennedy

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tract?

A Well, if the two offset wells are given a double allowable and are capable of producing a double allowable they will undoubtedly drain oil from under the Kennedy 80-acre dedication to his well.

Q Will this drainage be offset by counterdrainage?

A Not if the Kennedy lease has a single allowable and the two offset wells have a double allowable.

Q Then, to whatever extent the Tesoro Well and the proposed LPDDU 29 Well are capable, or might be capable of producing in excess of the allowable allocated to the Kennedy well, there would be drainage, would there not?

A Yes, and put Mr. Kennedy's well in a very unfavorable situation.

Q The applicant has proposed that no allowables be transferred to wells closer than 1,320 feet from the outer boundary of the Unit Area. If this amendment were adopted and incorporated in the present rules with respect to the Lone Pine-Dakota "D" Unit, would this, in your opinion, adequately protect the correlative rights of the applicant and any other offset operator to the unit that might hereafter occur?

A Well, yes, if that's a transfer of the allowable. But then, Rule 6 also states that a double allowable can be produced from any well in the Lone Pine-Dakota "D" Unit.

1 Q Well, what I'm saying is, the only way that a well can
2 produce a double allowable is for transfer of allowable
3 to occur, and if a transfer of allowable to a well
4 within 1,320 feet from the outer boundary of the unit
5 were prohibited, would this then protect the overriding
6 royalty rights of the other operators offset?

7 A Yes, that would prohibit drainage.

8 MR. COOLEY: We have no further questions of this
9 witness. We offer into evidence Applicant's Exhibit Number 1.

10 MR. STAMETS: Will you have more exhibits, Mr.
11 Cooley?

12 MR. COOLEY: No, we do not.

13 MR. STAMETS: Without objection, Applicant's Exhibit
14 1 will be admitted into evidence.

15 Are there any questions of this witness?

16 MR. KELLEY: I'd like to ask some questions.

17 CROSS EXAMINATION

18 BY MR. KELLEY:

19 Q Mr. Dugan, are you aware of the percentage interest that
20 Mr. Kennedy has in the well that you are trying to
21 protect here?

22 A No, I'm not sure as to his exact ownership in the well.

23 Q Are you representing just Mr. Kennedy in this?

24 A No, we are representing working interest owners, according
25 to Mr. Kennedy, that was the desire of all interest owners.

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- 1 Q Did you advise Mr. Kennedy -- You said you have done some
2 work in this Lone Pine Field?
3 A Yes.
4 Q On whose behalf?
5 A I have worked down here for Kennedy and for Texas Oil and
6 Gas.
7 Q You are aware that Mr. Kennedy is both the working interest
8 owner and overriding royalty owner in the unit?
9 A Yes, I am aware of that.
10 Q And did you advise him as to his participation, giving
11 some expert opinion of the time the unit was formed that
12 he joined?
13 A We just discussed it. I don't know, I wasn't on a
14 retainer or anything to advise him.
15 Q But you are aware that he did join?
16 A Yes.
17 Q Are you also aware that he was present at the hearing
18 that established this unit?
19 A No, I wasn't aware of that.
20 Q Were you, by any chance?
21 A I don't recall. I don't believe so.
22 Q Now, this hearing that established the unit was held in
23 February of this year. At that time the Kennedy well was
24 in production, is that correct?
25 A Yes, that's correct, '72.

1 Q And at that time the rules were established that would
2 allow a well at the proposed location to produce twice
3 its allowable, is that correct?

4 A In the pool rules?

5 Q No, the unit rules.

6 A Unit rules, Case No. 4665, yes.

7 MR. KELLEY: Mr. Examiner, I would suggest that
8 this request is strictly a substitute for an appeal. This
9 particular applicant was present at the hearing, he is a member
10 of the unit involved. The rules were set out at that time
11 without any objections from him. He took no appeal, he did not
12 ask for a regular hearing. The potentiality that he is now
13 concerned with was very apparent at the time. It was well
14 within existence.

15 The rules were adopted with his consent allowing
16 this location and allowing a double allowable and I submit that
17 this is totally improper without some kind of a showing of
18 changed circumstance to come in and substitute for an appeal.

19 MR. COOLEY: Mr. Examiner, the change of circumstance
20 is quite apparent. This witness has testified with respect to
21 two wells, neither of which existed or were proposed at the
22 time these rules were imposed. The Tesoro tract was not in the
23 unit, still is not in the unit, but it is now announced that it
24 will be in the unit. There was a 1,320 foot buffer zone to the
25 west in the Tesoro tract at the time these rules were imposed,

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1 it was not proposed or anticipated that the LPDDU Well
2 would be drilled at the time these rules were imposed and
3 these are the two wells as to which the witness testifies
4 will particularly be damaging in terms of drainage and
5 violation of correlative rights of the applicant and the
6 other working interest owners in the BSK.

7 MR. STAMETS: Mr. Kelley, were you asking for
8 dismissal at that point?

9 MR. KELLEY: Yes, the point is that though this well
10 was not drilled, it certainly was allowed to be drilled under
11 the rules that Mr. Kennedy actually ratified and he was aware
12 of all this at the time. If there was any objection to any
13 potential invasion of his correlative rights, it should have
14 been straightened then. To say that there is a change of
15 circumstance because you implement the rule that you have
16 adopted, to me, is rather strange.

17 MR. COOLEY: Well, the Tesoro tract to the west
18 certainly was not in the unit and it was not anticipated that
19 it would be in the unit. At the time these rules were imposed,
20 the Tesoro Well had not been drilled.

21 MR. STAMETS: I think we will go ahead and deny your
22 request for dismissal at this time and continue with the
23 hearing, Mr. Kelley.

24 MR. KELLEY: All right, I have some additional
25 questions.

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- 1 Q (By Mr. Kelley) Now, in your analysis, you have given
2 us some rather bland statements without too much to back
3 them up, do you agree with that statement at least?
4 A I don't think I would agree that they were bland.
5 Q You are saying that because these wells, in your opinion,
6 have communication that if the Tesoro Well and the unit
7 well produce over the allowable that there will be
8 drainage and therefore --
9 A If they have the capability of producing over a single
10 allowable, they will drain oil from the Kennedy tract.
11 Q You are then assuming that the geology, the net effective
12 feet of pay under all wells, all three wells, is identical;
13 is that correct?
14 A I'm assuming that all three wells are in the same
15 reservoir and have approximately the same abilities to
16 produce.
17 Q What is your assumption based on?
18 A The locations of the wells, of the proposed Tenneco
19 Well, and the results of the Tesoro Well.
20 Q Have you made any analysis of the net productive feet
21 of pay under the three wells involved?
22 A No, just under the Kennedy well.
23 Q What does your analysis show there?
24 A I do not have that information available right now, at
25 my fingertips.

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1 Q If, in fact, the proposed unit well had a much larger
2 pay zone, don't you think that it would be entitled to
3 produce more oil?

4 MR. COOLEY: I object to that question. I object
5 to that question because it's contrary to any rule that I've
6 ever seen before this Oil Conservation Commission or the
7 present rules in this pool that allowables are not based on
8 net effective pay.

9 MR. KELLEY: The assumption is that there is going
10 to be drainage occurring and I'm trying to find out whether
11 he's talking about where this oil is coming from.

12 Q (By Mr. Kelley) You are saying that there is going to
13 be oil taken from your lease onto the unit, is that
14 correct?

15 A If the wells are capable of producing twice, or anything
16 over what the Kennedy well is producing, yes, which is
17 a rather simple and logical assumption, don't you think?

18 Q And it also assumes many things that you don't know, is
19 that correct?

20 A Certainly. The well is going to be drilled; I'm assuming
21 that it will make a well.

22 Q You are assuming that everything underground is identical?

23 A Until proven wrong, that's correct.

24 Q And, of course, you are assuming that the well to be
25 drilled will be capable of reaching this double allowable,

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1 is that correct?

2 A No, I'm not assuming that. I'm saying that if it is, it

3 will drain oil from the Kennedy well.

4 Q Then your application is a little premature, with that

5 assumption, isn't it?

6 A No, I don't believe so.

7 Q All right. Let me ask you this, what is this well that

8 you are trying to protect producing now?

9 A What it's capable of.

10 Q What is it capable of producing now?

11 A 100 per day, about.

12 Q What's it's allowable?

13 A 160.

14 Q All right. What about the Tesoro Well, what is it

15 producing?

16 A About 68 barrels a day.

17 Q Do you have any reason to believe, then, that this well

18 in the unit is going to produce anywhere near a double

19 allowable? Wouldn't you say that it's production will be

20 somewhere similar?

21 A It all depends on how it's treated and how it's stimulated.

22 It's very possible that it could produce a double

23 allowable. Kennedy's well was capable of producing

24 considerably more than the allowable when it was initially

25 completed, and probably is at the present time if he could

1 lower the back pressure on the well. And, the Tesoro
2 Well is still flowing, it was a single completion. They
3 haven't put pumping equipment on it, so it's very
4 possible that it, if completed properly and pumped
5 properly could produce over it's allowable.

6 Q So you are saying that even though the two wells that are
7 now existing are way below their allowable that it's
8 your opinion that it's probable that the other well that
9 you have testified is in direct communication will be
10 able to produce it's double allowable?

11 A I don't know if "probable" is the right word. Possible,
12 yes.

13 MR. STANETS: Excuse me, is the Kennedy well
14 pumping or flowing?

15 THE WITNESS: It's pumping.

16 Q (By Mr. Kelley) All right. Well, right now would you say
17 that there is drainage from the unit to the Kennedy well?

18 A I'd say that it's probably fairly close to balance in that
19 there is a unit well on the 80 acres offsetting the
20 Kennedy well.

21 Q Where is that well?

22 A It's the well right here (indicating), I believe it's
23 the No. 1.

24 Q And what is that location to the north boundary of the
25 unit?

- 1 A It's, it would appear that it's probably 1,900 feet from
2 it's proration unit boundary.
- 3 Q And you are saying that that creates an equilibrium
4 situation?
- 5 A Well, say if there is a well producing on that proration
6 unit and it might not be completely equilibrium, but it's --
- 7 Q Well, if there is communication between the proposed
8 well and the unit well, it works both ways, doesn't it?
- 9 A Yes, it's very possible. Of course, this well was drilled
10 and completed quite a long time before Kennedy's well.
11 I don't have the exact date, but I'd say at least a year.
- 12 Q But you have no objection, as I understand it, to the
13 location of the proposed well?
- 14 A Of the new Tenneco Well?
- 15 Q Yes.
- 16 A No, that is correct, we do not.
- 17 Q So you would accept that counterdrainage?
- 18 A Yes.
- 19 Q Now, what is the purpose of the double allowable in the
20 unit?
- 21 A Well, I don't know just what Tenneco had in mind, but to
22 drain the reservoir.
- 23 Q Wouldn't you say that it's to pick up the oil as it's
24 pushed in the location of the well?
- 25 A To more adequately drain the reservoir, probably.

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1 Q Let's assume that this Tenneco Well doesn't get up to
2 this double allowable, but that it is in the same area of
3 completion, the same productive rate as the other two
4 wells and then sometime in the future there is response
5 and a lot more oil is capable of being reached from that
6 well. Don't you think that some of that oil is going to
7 go to your well?

8 A I certainly doubt it with two wells on that 80 acres.

9 Q You think it's going to trap all that oil?

10 A It's hard to say, but there is going to be very little.

11 Q Isn't it just as probable that the Kennedy well is going
12 to share in this pressure maintenance project and the
13 fruits of it as they are going to be adversely affected
14 by any possible drainage? They are both assumptions,
15 aren't they?

16 A Of course that would all depend on how the two offset
17 wells are handled and if they are kept at the equal
18 allowable or the similar allowable to the Kennedy well.
19 I think that they are going to prevent any major movement
20 of oil in the direction of the Kennedy lease because you
21 can see that those two wells are pretty much of a barrier
22 between the field and the Kennedy well and if they are
23 both producing an equal allowable to the Kennedy, there is
24 very little chance of the Kennedy reaping any benefit
25 from the unit.

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1 Q What would you say the productive life of the Kennedy
2 well is?
3 A The economic productive life?
4 Q Yes.
5 A I don't know, probably eight, ten years.
6 Q And as these wells get a response, don't you think that
7 the life will be extended as a result?
8 A It's very doubtful, assuming that the proposed Tenneco
9 Well is successful and is produced at the current allowable.
10 Q But if it was limited as you are suggesting, then oil
11 could move there?
12 A No, I'm not suggesting that you limit it below the current
13 allowable, below one allowable.
14 Q You are saying that it should be limited to something less
15 than the well is capable of producing when it starts
16 getting response, aren't you?
17 A We are saying that the well should not be allowed to
18 produce at a greater allowable than the Kennedy well.
19 Q You want to get some of the oil from the unit, that's
20 basically it, isn't it?
21 A No, that's not right. What we want to do is get the oil
22 under Mr. Kennedy's tract.
23 Q You are here to protect, I assume, not Mr. Kennedy's oil,
24 but you are concerned with all of the offset operators,
25 is that correct?

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1 A Well, our basic concern today is Mr. Kennedy, but it's
2 very possible that there could be other situations like
3 this in the unit.

4 Q But Mr. Kennedy does happen to be the only offset
5 operator to this unit now?

6 A Well, yes.

7 Q Now, you stated that the Tesoro was going to come in
8 with 80 acres, is that correct?

9 A No, I understand it's 40 acres.

MR. KELLEY: I see. That's all I have.

CROSS EXAMINATION

12 BY MR. TRAYWICK:

13 MR. TRAYWICK: Carl Traywick, Geology Surveyor,
14 Roswell.

15 Q (By Mr. Traywick) Mr. Dugan, you mentioned some limited
16 bottomhole pressure data on which you based communication.
17 Could you be a little more specific about that?

18 A I didn't bring that information along. In fact, Mr.
19 Kennedy ran the bottomhole pressure on this well when it
20 was originally drilled and found it, the bottomhole
21 pressure to be somewhat lower than the original bottomhole
22 pressure in the Lone Pine Pool. But I do not have the
23 specific information, I just remember Kennedy speaking to
24 me of this.

25 Q What about the Tesoro Well?

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1 A I don't have any information on that.
2 Q Or the nearest unit well, the No. 1?
3 A I don't have any current information, no, sir.
4 Q So we really don't know that pressure differential that
5 exists in this portion of the field at this time?
6 A Today, no, sir, we don't. All I know is that from
7 conversation I had with Mr. Kennedy that his bottomhole
8 pressure was lower by 150 pounds or so than when his
9 well was originally drilled and the original unit
10 pressure, which would indicate that they were in the same
11 reservoir.
12 MR. TRAYWICK: Thank you, Mr. Dugan.
13 CROSS EXAMINATION
14 BY MR. STAMETS:
15 Q Mr. Dugan, what is the drive mechanism in this pool, gas?
16 A Mainly solution gas is my opinion.
17 Q Now, what is being done with the gas in the pool at the
18 present time?
19 A Well, it's my understanding that Tenneco is reinjecting
20 it back into the reservoir, plus buying gas from the
21 outside and repressuring the reservoir.
22 Q Is it your understanding that by giving more than or up
23 to two allowables for wells in the pool that the overall
24 allowable for wells in the unit is being increased?
25 A Well, I don't believe so.

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1 Q In other words, the unit isn't getting anymore allowable
2 than it's share would be under the normal circumstances?

3 A Well, there is a transfer of the allowable from
4 producing wells.

5 Q And I believe you stated that Kennedy's well is marginal
6 now, the offset well is also marginal?

7 A Not marginal, I don't believe that it is.
8 Q Not top allowable?

9 A It's currently not producing at the top allowable.
10 Q And so if the Kennedy well remains marginal and the

11 offset wells are capable of producing two top allowables,
12 it's your contention that oil would be drained from the
13 Kennedy well to the wells capable of producing two top
14 allowables?

15 A If they were capable of producing, that's correct.
16 Q Under what sort of mechanical situation would this work?

17 A Well, it's simple logic that if two wells that close to
18 the producing boundaries of the proration unit was
19 producing twice what the well on the unit was producing,
20 there would be some drainage, some movement in that
21 direction.

22 Q The application here is that no well closer than 1,320
23 feet to the outer boundary of the unit could receive more
24 than one top allowable. Is there a potential for waste
25 of oil on the south side of this unit, on the east side,

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1 and on the west side if that application is approved; if
2 the wells on the margins of the unit began to be able to
3 produce more than one top allowable, without this relief,
4 couldn't oil be wasted by being pushed down-dip?

5 A It's doubtful. I haven't studied it that thoroughly to
6 say that absolutely there would be no waste, but in my
7 opinion it's doubtful that there would be.

8 Q But you haven't studied the situation?

9 A Not that thoroughly, no.

10 MR. STAMETS: That's all the questions I have.

11 Are there any other questions of the witness?

12 MR. COOLEY: Yes, I have a question or two on

13 Redirect.

14 REDIRECT EXAMINATION

15 BY MR. COOLEY:

16 Q Mr. Dugan, the Examiner has referred to the BSK Edna No.
17 1 Well as being marginal. Under Oil Conservation
18 Commission concepts, a well which is not capable of
19 producing it's allowable is marginal. Would you explain
20 to the Examiner why the BSK Edna No. 1 Well is not now
21 producing top allowable?

22 A Well, it's my opinion that the well would be able to
23 produce top allowable if the back pressure held on the
24 well was reduced.

25 Q What is that back pressure?

1 A 120 pounds, and the reason for that is that Kennedy is
2 seeping gas to Tenneco, or to the unit, from the well and
3 the line pressure is in the neighborhood of 120 pounds and
4 he doesn't have compression equipment to lower that
5 pressure; and so, until he is able to lower the pressure,
6 the well will probably continue to produce in the
7 neighborhood of 100 barrels a day.

8 Q In your opinion, is the well capable of producing top
9 allowable against the normal back pressure of 10 to 25
10 pounds?

11 A In my opinion, it is. It certainly was when it was
12 completed last January.

13 Q Is this an excessively high back pressure, in your
14 opinion?

15 A Well, for a pumping oil well it is, yes.

16 Q And this is necessitated by the fact that in order to
17 force the gas produced into the Tenneco line, some
18 several thousand feet distant, the back pressure has to
19 be kept excessively high on the well?

20 A Yes. Without compression equipment, that's correct.

21 Q Do you know whether Mr. Kennedy is considering
22 installation of compression equipment?

23 A He's considering it, yes. I don't know when he plans to
24 implement it.

25 Q But with the installation of compression equipment to

1 lower the back pressure, you feel that the oil well is
2 capable of producing top allowable?

3 A I do, yes.

4 Q When you participated in the drilling and completion of
5 the Maxwell wells, did you observe pressure communication
6 in the pool at that time?

7 A Well, the two Maxwell wells were very good wells.

8 Q Had there been a pressure drop in the pool at the time
9 the Maxwell wells were drilled?

10 A These wells are in the southwest quarter of Section 18.

11 Q Do you recall that the reservoir pressure had dropped
12 approximately a hundred pounds at the time these wells
13 were drilled?

14 A I knew that there was some bottomhole pressure taken and
15 that indicated that it had dropped, although I don't
16 believe I stated the pressures.

17 MR. COOLEY: No further questions.

18 MR. STAMETS: Are there any other questions of the
19 witness?

20 MR. KELLEY: Yes, I have a couple.

21 RECROSS EXAMINATION

22 BY MR. KELLEY:

23 Q Do you know whether any productive tests have been run on
24 your well to see whether it is capable of producing, with
25 back pressure?

1 A I didn't run the test, but, yes, he did run one a short
2 time ago.

3 Q Are you aware that, in June and July, what your barrels
4 per day production was?

5 A Yes, I have a decline curve here, it looks like --

6 Q It gets 85 barrels for June and 93 for July?

7 A Yes, that's about right.

8 Q At that time you had 160 allowable, is that right?

9 A Yes.

10 Q And at that time you weren't selling any gas, right?

11 A No, I believe the drop occurred when they started selling
12 gas. It's possible that there was a time in there when
13 we got the pumping unit going.

14 Q If I were to put on a witness who would contradict that
15 and say that there were no gas sales until after that
16 time --

17 A I haven't worked with the well that close. I certainly
18 didn't say, but just in my conversation with Mr. Kennedy
19 they had some lag time between the time that the well
20 ceased to flow and that they got the well on the pump and
21 then when they started selling gas.

22 Q But if your information were incorrect, this would be
23 quite convincing evidence, isn't it, that it was not
24 capable of this allowable?

25 MR. COOLEY: What information?

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1 MR. KELLEY: Can I conduct my Cross Examination
2 without being harrassed.

3 MR. COOLEY: I object to your question because it's
4 vague.

5 MR. KELLEY: You can direct your remarks to the
6 Examiner.

7 MR. STAMETS: Mr. Cooley, do you have an objection
8 to the question?

9 MR. COOLEY: I do, and I expressed it.

10 Q (By Mr. Kelley) My question is that if, in fact, there
11 was no back pressure on this line in June or July, it
12 would indicate that that well was not capable of making
13 160?

14 A No, that's not true. There are a lot of things that
15 could keep the wells from performing up to it's
16 capabilities, such as faulty bottomhole pump, down-time,
17 which is probably the case, and lots of things.

18 Q Including it's inability to make it's allowable, that
19 would be one possibility, wouldn't it?

20 A It would be one possibility, although it's obvious from
21 the decline curve that the well did have a couple of bad
22 months there and it is coming back; and, also, the test
23 that Mr. Kennedy reported to me that was taken that the
24 well is capable of production, and I certainly know the
25 well was capable of producing far in excess of the current

allowable when it was completed because I did personally work on the completion.

Q Are you aware that the pressures under this unit have been returning because of the pressure maintenance project?

A Under this particular unit?

Q Yes.

A Under the Tenneco Unit or this proration unit?

Q The Tenneco Unit.

A I know that the unit forecast hasn't lived up to what was estimated, but just in the last two months, I believe that they have been getting an increase.

Q And that would also probably increase the pressure in your well, is that right?

A It's possible, since the offset Tenneco Well hasn't been drilled.

Q Now, this back pressure that you say is limiting your production, this is the same back pressure that every well in the unit is facing, isn't it?

A I think that's right, yes.

Q So it's a limitation that every one has?

A I think that's correct, yes.

MR. KELLEY: That's all I have.

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RE CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Dugan, there is a fault line just north of the Edna No. 1 Well, is that fault the northern productive limits of the pool?

A At this particular time, I believe that's correct, yes.

Q Would the Kennedy well benefit by any oil pushed off the unit to the north and east as the pressure in the unit increases?

A If there was oil pushed off the unit, I'm sure that in that direction he would benefit, that's, of course, a supposition.

MR. STAMETS: Are there any other questions?

REDIRECT EXAMINATION

BY MR. COOLEY:

Q In your opinion, will any oil be pushed off if the LPDDU No. 29 is drilled?

A If it is drilled and is a successful well, and if the Tesoro Well is put on the pump after performance as I think it probably will, it is very doubtful.

Q What is the normal method of protecting against lease-line drainage and ownerships, isn't it to drill an offset well?

A Yes.

Q With equal allowable?

A That would be my opinion.

1 MR. STAMETS: If there are no further questions of
2 the witness, he may be excused.

3 Do you have any other witnesses?

4 MR. COOLEY: No.

5 MR. KELLEY: Well, I renew my motion to dismiss. I
6 think the witness here is much more qualified than I am, but
7 his testimony in this case is reduced to the same kind of
8 testimony that I would give. There is no showing of any change
9 in this situation; this is a situation that was geared right
10 from the beginning, that they could see right down the road and
11 the whole purpose of a pressure maintenance project is to be
12 able to trap the oil as it goes by; and I submit that this case
13 is a substitute for an appeal and should be dismissed.

14 MR. COOLEY: As I have already expressed the very
15 obvious change of circumstance, and that is that the Tesoro to
16 the west of this well, which I have stated creates a 120-foot
17 buffer zone between the unit and the Kennedy well, is still not
18 in the unit, but it is proposed, and this is an extreme change
19 of circumstances as it constitutes half of the direct drainage
20 that we are speaking of.

21 MR. KELLEY: The application is not directed against
22 the Tesoro Well. They are not asking that it not be included
23 in the unit, they are asking that the unit rules be changed,
24 the unit rules were set out and this particular unit is a
25 member of the unit, ratified it and he was present when this

1 hearing was held.

2 MR. STAMETS: The application is for total change
3 of the unit rules, not in this one particular instance, but
4 over the entire length and breadth of the unit.

5 MR. COOLEY: It's within the power of the Commission,
6 certainly, to grant less than what is applied for. It's very
7 obvious what we are asking. We are asking for the BSK Edna No.
8 1 Well, if the Commission, in it's wisdom, sees fit to limit
9 the productivity of offset wells to this well; and we would be
10 happy to limit our application to that.

11 MR. KELLEY: That, of course, isn't the point. These
12 wells were in existence at the time the unit rules were set up
13 and he didn't object to it at the time.

14 MR. COOLEY: The Tesoro Well wasn't in existence, and
15 it was not contemplated as being included in the unit, was not
16 described as a part of the unit in the order in question. The
17 order in question will have to be amended to include the Tesoro
18 acreage.

19 MR. STAMETS: What we are dealing with here is the
20 protection of correlative rights, is that correct?

21 MR. COOLEY: Correct. That's all that's at issue
22 here.

23 MR. STAMETS: Mr. Kelley, I'm going to overrule your
24 motion for dismissal and would appreciate testimony showing the
25 approval of those wells and the approval of two allowables will

1 not be harmful to correlative rights.

2 MR. KELLEY: As I, understand it, the case is now
3 limited to the transfer of allowables and 1,320 feet being the
4 allowable on that area?

5 MR. STAMETS: Yes, the only thing under question at
6 the time.

7 WILLIAM E. BABYAK,
8 a witness, having been first duly sworn according to law, upon
9 his oath, testified as follows:

10 DIRECT EXAMINATION

11 BY MR. KELLEY:

12 Q Would you state your name and position and employer,
13 please?

14 A My name is William E. Babyak, I'm a Petroleum Engineer
15 employed by Tenneco Oil Company.

16 Q And you have previously been qualified as an expert
17 witness in that field before this Commission?

18 A Yes, I have.

19 MR. KELLEY: Are the witness' qualifications
20 acceptable?

21 MR. STAMETS: Mr. Kelley, I'm very sorry, we were
22 having a conversation at the head of the table.

23 MR. KELLEY: Well, I had just pointed out the witness
24 had previously qualified as an expert witness before this
25 Commission and asked if they were acceptable.

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1 MR. STAMETS: Would you review that, please.

2 Q (By Mr. Kelley) You have previously qualified as an
3 expert witness before the Commission?

4 A Yes, I have.

5 MR. STAMETS: The witness' qualifications are
6 acceptable.

7 Q (By Mr. Kelley) Now, can you give this Commission a
8 brief history of the Lone Pine and the unit that we are
9 concerned with here today?

10 A Yes. The Lone Pine-Dakota "D" Unit was formed effective
11 April 1, 1972. The main purpose of forming this unit was
12 to permit the formation of a gas and water pressure
13 maintenance project. In this project, we were going to
14 inject gas in up-dip wells and inject produced water in
15 down-dip wells, which are initially water productive. The
16 project was designed to restore initial bottomhole pressure
17 back up to 992 pounds and recover an additional 25 per cent
18 of the oil in-place.

19 We commenced gas injection operations on April 3,
20 1972, and water injection commenced during May of 1972.
21 As I mentioned before, the gas was injected up-dip and
22 was extended to intentionally gas out wells as it
23 migrated down-dip. The ultimate benefit to the reservoir
24 would be in higher pressures and increased production
25 rates in down-dip wells.

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1 To give an indication of the success of this
2 project, I'd like to introduce Exhibit 1, which is the
3 current status of the Lone Pine-Dakota "D" Unit. These
4 numbers are based on actual production and injection.
5 As you can see, our current daily production for October
6 was right at about 2,100 barrels of oil per day. Our
7 gas production was about four and a quarter million cubic
8 feet per day, water, 588 barrels, and our GOR was 2,000
9 to 1. At the same time we are reinjecting five and a
10 half million cubic feet of gas per day and 588 barrels of
11 water.

12 Here, I'd like to point out, as you can see, the gas
13 injected against our gas production, we are using
14 considerably more gas than we are producing. Our
15 cumulative production for the unit, in terms of barrels
16 of oil, is 1,408,000 barrels. Our gas we estimate to be
17 1,700,000 and water is estimated to be 600,000 barrels.

18 Our cumulative injection, and this would be from
19 April 1st to November 1st, was 933,000,000 cubic feet of
20 gas, and 88,000 barrels of water. Down at the bottom you
21 see that we have 16 producing wells, three gas-injection
22 wells, two water-injection wells for a total of 21 active
23 wells.

24 In addition, I might point out that we have five
25 inactive wells, four of which we have lost to gas

1 production. We have essentially gassed them out already.
2 These were up-dip locations, very near the Gascap.
3 They are on the western part of the field and they had
4 initially had gas in the wellbore itself.

5 Q Go to Exhibit Number 2.

6 A Exhibit Number 2 is a graph which shows exactly what we
7 are doing. You can see this is versus time, and the top
8 curve, the dashed line, the scale right off to the right
9 is bottomhole pressure in terms of PSIA.

10 As you can see, to the time of unitization our
11 bottomhole pressure was encountering a steady decline and
12 since then we have turned this picture around. We are
13 increasing bottomhole pressure.

14 I would like to also stress the next curve, which is
15 the daily oil production within thousands of barrels per
16 day. You can read the scale off to the left and I think
17 you can see after we formed the unit we did get some
18 flush production, this was mainly because we had wells
19 being limited with one allowable. However, this was
20 short-lived and we feel that we are now starting to get
21 what we term as a "production kick." We are starting to
22 see response. We believe we saw it last month and we
23 believe we are seeing it now, based on the daily
24 production.

25 The next curve on down, well, the two curves are

1 gas production and gas injection. The top curve, the
2 dashed line, is our gas injection; the bottom curve is
3 our gas production. As you can see, we are injecting
4 considerably more than we are producing.

5 Then, the next curve on down shows what our water
6 production and injection picture looks like. As you can
7 see, our water production is going down and this is to
8 be expected in this type project. We just more or less
9 push the water out as the pressure comes up. And, you can
10 see from September on, we were reinjecting all produced
11 water.

12 And the bottom curve, as you can see here, is a
13 gas-oil ratio, which might be expected in this type
14 project, is increasing.

15 I would like to further go on to stress that this
16 project is working, it is turning out quite well for us.

17 Exhibit 3 is a tabulation of production and
18 injection follow-ups, and this is for only the time of
19 unitization; and essentially what this represents is a
20 monthly tabulation of reservoir barrels produced versus
21 reservoir barrels injected; and also we have means by
22 various reservoir calculations that we can tie the
23 amount of excess injection to pressure increase.

24 As you can see, we have the months in the first
25 column. Our June oil production in barrels is the next

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1 column, and our production in gas and water are the
2 next columns. As you can see, our reservoir barrels
3 produced, say, for October was 353,000 reservoir barrels.
4 This is all the reservoir conditions, we've taken
5 everything from the surface and put it back in the
6 reservoir.

7 Our injection, in terms of gas and water, is shown
8 in the next two columns and our reservoir barrels
9 injected, as you can see, is 548,000 barrels, the
10 difference for the month of October, injection minus
11 production, is 195,000 reservoir barrels. This means,
12 very simply, we put in 195,000 barrels more into the
13 reservoir than we produced. This should result in a
14 reservoir pressure increase of 19.2 PSIA.

15 Since the start of this pressure maintenance project,
16 we have reinjected one and a quarter million reservoir
17 barrels over and above what was necessary to maintain
18 reservoir pressure. And, this should accordingly add
19 about 100 PSIA. I've got 116.8 for our bottomhole
20 pressure. Based on actual measuring of which we have
21 taken on this schedule throughout the field, this agrees
22 very closely with what we have seen, with what we have
23 observed.

24 Q What was your original pressure?

25 A Our original pressure in the reservoir?

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1 Q Yes.

2 A Was 992 PSI.

3 Q And what did you calculate it to be built up to now?

4 A At the start of the pressure maintenance project we

5 estimated our bottomhole pressure was about 685 PSI and

6 we are to 785, approximately 100 pounds.

7 Q The object of the project is to bring it back to

8 original pressures, is that right?

9 A Yes.

10 Q And is that what you have been experiencing?

11 A Yes.

12 Q What about Mr. Kennedy's wells, what effect does that

13 have?

14 A Exhibit 4 is a tabulation showing what Mr. Kennedy's

15 gas sales to the unit have been and these have been

16 converted to reservoir barrels. This volume has been

17 sold to the unit and reinjected.

18 As you can see, he's only been selling gas to the

19 unit for three months. The Mcf gas sales in August were

20 586, in September were 300, and in October were 91 Mcf.

21 As of the 1st of November, he had only sold the unit

22 977 Mcf gas, not quite a million cubic feet.

23 The next column is gas and oil in terms of the

24 reservoir. We have come up with reservoir barrels

25 injected and this is for gas from Mr. Kennedy's tract.

1 As you can see, in August we have 2,051 barrels and in
2 September, 999 and in October, 292 for a total reinjection
3 of 3,342 barrels.

4 The next column is Mr. Kennedy's oil sales. I
5 noted that in October we didn't know his sales, we assume
6 a hundred barrels a day, 31 days, 3,100 barrels for the
7 month of October. As you can see, he has produced
8 8,744 barrels August through October.

9 The next column is Bo, which is the oil performance
10 volume figure.

11 The next column is reservoir barrels produced. And,
12 as you can see, in August he produced 4,115 barrels, in
13 September, 4,634, in October, 4,836 for a total of
14 13,585 barrels.

15 Now, the difference between the gas that Mr. Kennedy
16 has supplied to the unit and we are injecting and the
17 voidage which he is responsible for is shown in the last
18 column. This is what we would call net voidage in the
19 reservoir and in the three months he has resulted in a
20 net voidage for this tract in excess of 10,000 reservoir
21 barrels.

22 What this points up is that while the unit is
23 injecting more reservoir barrels than it's producing,
24 Mr. Kennedy is offsetting the unit and being net voidage
25 for the unit.

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1 Q He is prolonging your pressure build-up to some extent?
2 A Yes, he is, and I would also like to stress that April
3 through July, that while Mr. Kennedy was not selling the
4 unit any gas, I have not calculated what the reservoir-
5 barrel voidage is, but it's still a voidage.
6 Q Is there any doubt in your mind that he was not selling
7 gas during that period?
8 A In the period through July?
9 Yes.
10 Q No doubt whatsoever in my mind.
11 A What was he doing with that gas?
12 Q At that time he had arrears from a no-flaring order.
13 A So there was no back pressure?
14 Q Right.
15 A Would you agree with Mr. Dugan's contention that this
16 well is capable of being a top-allowable well at the
17 present time, except for that back pressure?
18 A No, I wouldn't.
19 Q Would you agree with his contention that the fault that is
20 immediately north is an effective barrier to keep him
21 from having a full 80-acre production?
22 A Yes.
23 Q Now, have you made a calculation of the oil that would be
24 under Mr. Kennedy's tract?
25 A Yes, I have, based on 168-acre feet.

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1 Q Do you have an exhibit marked for that?

2 Now, handing you what has been marked as Exhibit 4-a,

3 would you explain how you reached your calculation?

4 A Yes.

5 Q And what your calculation is.

6 A We have calculated, based on our geologic evidence, that
7 there are 168 net oil-acre feet under the Kennedy tract.

8 Now, utilizing the same permeability material as
9 were used for the unit, as far as porosity, water
10 saturation, and so forth, we have ascertained that by
11 the 168-acre feet, the Kennedy tract has recovered
12 24,142 barrels, or 30 per cent of oil in-place under that
13 tract, as recoverable Phase I oil. In addition, recoverable
14 Phase II oil, another 25 per cent, is 20,118 barrels.

15 Therefore, the total ultimate recovery from the Kennedy
16 tract, based on this, is 44,260 barrels.

17 Q Now, what is his production to date?

18 A His cumulative production to date, as of the 1st of
19 November, we estimate to be 32,238 barrels. In terms of
20 primary recovery, he has already recovered 133 and a half
21 per cent of his primary oil. In terms of total oil
22 recovered under his tract, he has already recovered 72.8
23 per cent of his oil in-place.

24 Q Referring to Exhibit Number 5, how does this compare to
25 the unit?

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1 A Exhibit 5 is a comparison of the Kennedy tract performance
2 with the Lone Pine-Dakota "D" Unit. The first column
3 refers to the unit, the second column to the Kennedy
4 tract.

5 Recoverable Phase I for the unit is 3,180,000
6 barrels of oil. Recoverable Phase II is 2,650,000
7 barrels, for a total ultimate recovery of 5,830,000
8 barrels of oil. The cumulative unit production as of
9 the 1st of November was 1,408,517 barrels of oil. The
10 unit has recovered 44.3 per cent of it's primary
11 recovery, under it's tract, for it's net acre feet, while
12 Mr. Kennedy has recovered 133.5 per cent of his primary
13 oil. The percentage of total recovery of the unit is
14 24.2 per cent of the oil underlying it while Mr. Kennedy
15 has recovered 72.8 per cent of the oil underlying his
16 tract.

17 This clearly shows that the Kennedy oil is
18 out-performing the unit and if this is occurring, then the
19 unit definitely is not draining Mr. Kennedy, to the
20 contrary, the unit is being drained by Mr. Kennedy.

21 Q Now, the parameters that you have based this analysis on,
22 were the ones that were used to setup the unit, isn't that
23 correct?

24 A Yes.

25 Q And Mr. Kennedy is a member of that unit, both as a working-

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1 interest owner and the overrider of the owner?

2 A Yes.

3 Q And if those parameters are correct, then they would
4 equally apply to a well 330 feet outside the unit, wouldn't
5 it?

6 A Yes.

7 Q Is there any reason that you know of why those parameters
8 would not apply to the Kennedy well?

9 A No.

10 Q What is the importance to the success of this unit to
11 have the right to transfer allowables, why is that so
12 important?

13 A Well, just owing to the nature of the pressure maintenance
14 project, the facts that we were injecting gas up-dip and
15 the fact that we are pushing oil down-dip, we should have
16 the ability to produce this oil before it bypasses our
17 down-dip productive wells.

18 Q Do you have an exhibit that shows a particular well, how
19 effective it has been?

20 A Yes. We have Exhibit 6. I'd like to point out that this
21 is a monthly well test for the Lone Pine-Dakota "D" Unit
22 Well No. 21 and this is one well which we have seen
23 response in.

24 All right. As you can see, our June well test for
25 this well was about 140 barrels of oil per day, by October

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1 this well was up to about 360 barrels of oil per day.
2 We have seen around a 200 barrel of oil per day increase
3 in this well.

4 Now, if this well could not produce this oil, it
5 would either bypass the wellbore and would have to be
6 recovered further on down-dip.

7 MR. STAMETS: What's the location of Well No. 21?

8 THE WITNESS: It is in the southwest quarter of

9 Section 18.

10 Q (By Mr. Kelley) All right. Now, do you expect that this
11 oil will eventually, the oil that you are pushing, will
12 eventually reach the proposed well?

13 A Yes.

14 Q Would you expect that the proposed well would be able to
15 produce, say, 160 barrels, a regular allowable?

16 A You mean as soon as we drill the well? No, I don't
17 anticipate it would make 160 barrels.

18 Q But you do feel that it will eventually be able to produce
19 more than it's allowable?

20 A Yes.

21 Q And that will be strictly from response?

22 A Yes.

23 Q And if it is not allowed to produce all the oil that comes
24 to the wellbore, what will happen to that oil?

25 A The oil will bypass the wellbore and it could conceivably,

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- 1 probably, will move on to the Kennedy tract.
- 2 Q Now, in your opinion, would the granting of this
- 3 application of Mr. Kennedy to limit your transfer of
- 4 allowables and to limit the production rate on the edges
- 5 of this unit have any adverse effect on the unit?
- 6 A Yes, I feel that it would. As I said before, the
- 7 structure of the project is such as to push oil down-dip.
- 8 If we couldn't recover it whenever the response took
- 9 place, then it would cause us to drill additional wells
- 10 down-dip.
- 11 Q What actual effect will it have on the unit, as far as
- 12 your ability to transfer allowable?
- 13 A The rule, as asked for, would take away approximately 50
- 14 per cent of the Unit Area, as far as transfer of
- 15 allowable is concerned.
- 16 Q And how many offset operators are there?
- 17 A Right now there are two, Tesoro and Kennedy, and Tesoro
- 18 has agreed to come into the unit.
- 19 Q And the rule, as presently stated, does that limit you
- 20 in any way as far as the area that you can transfer
- 21 allowables in?
- 22 A The rule as it is now?
- 23 Q Yes.
- 24 A No.
- 25 Q Now, would the granting of this application, in your

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1 opinion, have the effect of causing waste and mean that
2 no one is going to be able to produce some of the oil
3 that you are driving by this pressure maintenance project?

4 A Yes.

5 Q Can you explain how that would happen?

6 A Well, as I've said, the oil would bypass these wells and
7 we would have to go further down-dip past the wells
8 where we can recover it whenever we get the pressure
9 response, and therefore, drill what are now unnecessary
10 wells.

11 Q So, the only effect that the application will have, then,
12 would be to hurt the whole unit, cause waste of oil, but
13 allow Mr. Kennedy to produce some of your oil, is that
14 correct?

15 A Yes.

16 Q Do you see that the application, that the rules as
17 presently designed, are going to adversely affect Mr.
18 Kennedy's right to produce the oil under his tract?

19 A No.

20 Q Were Exhibits 1 through 6 prepared by you or under your
21 supervision?

22 A Yes, they were.

23 MR. KELLEY: I would move for the introduction of
24 the exhibits at this time.

25 MR. STAMETS: Without objection, Exhibits 1 through 6

1 will be admitted into evidence.

2 MR. KELLEY: I have no further Direct Examination of
3 this witness.

4 CROSS EXAMINATION

5 BY MR. STAMETS:

6 Q Mr. Babyak, just to say, for instance, you had made a
7 mistake here and actually there was twice as much oil
8 under the Kennedy tract as you have calculated, going
9 to Exhibit 5, the Kennedy tract would still have
10 recovered a greater percentage of the oil in-place than
11 the unit has up to this time?

12 A Yes, I've calculated that the Kennedy tract would require
13 somewhat in excess of three times the acre feet which we
14 can give it, geologically, to be on a par with the unit.

15 Q Can you conceive of any set of circumstances where oil
16 would be drained from the Kennedy tract to the unit tract?

17 A No, I don't, for the simple reason that our wells, I
18 think Mr. Dugan testified to the fact that there is
19 excellent communication in this reservoir and if our
20 wells are affected by this pressure maintenance project,
21 the Kennedy well will also be affected by this in a
22 positive manner.

23 Q Is it possible that oil moving down-dip past the
24 productive well could be wasted and lost in the reservoir?

25 A It is possible, yes.

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1 MR. STAMETS: Are there other questions of the
2 witness?

3 MR. COOLEY: Yes, please, Mr. Examiner.

4 CROSS EXAMINATION

5 BY MR. COOLEY:

6 Q Mr. Babyak, the basic disagreement with respect to how
7 many productive acres of feet of oil there is under the
8 Kennedy tract is the very reason why Mr. Kennedy has not
9 joined the unit, is it not?

10 A I do not know what the reason is.

11 Q Has he advised your company by letter to this effect, not
12 once, but several times?

13 A Mr. Kennedy in the letter that I read just said that he
14 thought that he could recover more oil by not coming into
15 the unit.

16 Q Are you saying that he has never advised your company that
17 he has a basic disagreement with the number of productive
18 oil-acre feet under the BSK Edna Well, do you deny that?

19 A Not to my knowledge, I have never seen any correspondence
20 to that effect.

21 Q In your opinion, has the BSK Edna No. 1 Well been affected
22 at all by your pressure maintenance project to date?

23 A We have some evidence that while pressure is not increasing
24 in the general area, the eastern portion of the reservoir,
25 we have some evidence to indicate that it is not decreasing;

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- 1 it is being maintained to a degree, and this is based
- 2 on the last pressure survey run in the Lone Pine-Dakota
- 3 "D" Unit Well No. 2, which is a shut-in gas-injection
- 4 well. We saw a pressure increase in that wellbore during
- 5 our last pressure survey.
- 6 Q Well, do you think there is any beneficial effect that has
- 7 been realized by the BSK No. 1 Well to date?
- 8 A To date, no.
- 9 Q Where is your nearest injection well to the BSK Edna?
- 10 A Are you asking water injection or gas injection?
- 11 Q Any injection.
- 12 A I believe that the Lone Pine-Dakota "D" Unit No. 17 was
- 13 a water-injection well directly south of the well in
- 14 question.
- 15 Q Locate that well, please.
- 16 A That well is in Section 17.
- 17 Q That's in the northwest quarter of the southwest quarter
- 18 of Section 17?
- 19 A Yes.
- 20 Q Now, where is your nearest gas-injection well?
- 21 A Our nearest gas-injection well is in the southeast
- 22 corner of Section 12, Range 9 West. It would be the
- 23 Lone Pine-Dakota "D" Unit No. 5.
- 24 Q That's in the southeast quarter of the southeast quarter
- 25 of 12?

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1 A Yes, sir.

2 Q Now, where are your other gas-injection wells?

3 A Okay. Right south in Section 13 we have the Lone Pine-

4 Dakota "D" Unit No. 12 and 14, and those are both

5 situated in the northeast corner of Section 13, 12 and

6 14.

7 Q Are those the only three gas-injection wells at the

8 present time?

9 A Those are the only three gas-injection wells at present.

10 Q How far distant are they from the BSK Edna No. 1?

11 A I believe you can see from the map that they are a little

12 over a mile, mile and a quarter, from the BSK Edna.

13 Q Now, is it down-dip all the way from those wells to the

14 BSK Edna?

15 A Yes, sir.

16 Q And it was your testimony that the purpose of this

17 gas injection was to push the oil down-dip, is that

18 correct?

19 A Correct.

20 Q How many producing wells does the unit have to intercept

21 that oil before it would reach the BSK Edna?

22 A In that area we have three, not counting the Tesoro Well.

23 Q Well, in the northwest quarter of Section 18, would you

24 consider either of those wells to be intercepting wells?

25 There is a well in the northwest, is there not?

- 1 A The No. 1, you are referring to?
- 2 Q Yes, is that a producing well?
- 3 A Yes, it is.
- 4 Q Has it enjoined any benefits from gas injection to date?
- 5 A Yes, the bottomhole pressure has come up over 120 pounds
- 6 in that well.
- 7 Q Now, the well to which you referred as the No. 21 Well
- 8 in the southwest quarter of 18 has had 200 barrels increase
- 9 in productivity, you testified?
- 10 A Yes.
- 11 Q So there is a southeasterly effect occurring?
- 12 A Yes, we have seen some response in certain wells such as
- 13 the Lone Pine-Dakota "D" No. 23 in the south half of
- 14 Section 13. I believe that well went from a pumping
- 15 status to a flowing status just on the basis of increased
- 16 bottomhole pressure.
- 17 Q In 13?
- 18 A In Section 13, yes, the Lone Pine No. 23. And there has
- 19 been one other well gone from a pumping to a flowing
- 20 status, but right at this time I can't think of what the
- 21 number is.
- 22 Q Mr. Babyak, getting back to my question about the number
- 23 of wells that are in the unit that would intercept oil
- 24 being pushed to the northeast by the gas-injection wells,
- 25 would not the wells in the southwest quarter of Section 7

1 be interception wells, so to speak? Would they intercept
2 any oil being driven to that direction?

3 A We do have Fault C, separating the eastern portion of
4 the reservoir from these wells; however, we have proven
5 in previous testimony that there is pressure communication
6 in this area across Fault C. So the status of the
7 No. 4 and the No. 6 Wells in that unit, right now, are
8 that one well is completely gassed-out and the other well
9 is producing about 15 barrels a day.

10 Q Is that because of gas injection?

11 A Yes.

12 Q All right. Let's move on to the southeast quarter of
13 Section 7.

14 A Okay. The No. 7 Well will definitely shield, or catch,
15 oil going in that direction; the No. 3 Well is another
16 well that is producing nothing right now with a very
17 high gas-oil ratio and it's not making a surprising
18 amount of oil.

19 Q But nonetheless it would be an interception well, would
20 it not?

21 A Well, as I stated, it's already gone to high gas-oil
22 ratio, so it's making some oil.

23 Q Do you expect it to make more oil?

24 A No, I would expect it to gas-out.

25 Q Well, will this movement change any?

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1 A No, it's just a movement down-dip, a piston-like
2 displacement down structure.

3 Q But that gas, then, apparently has crossed Fault C?

4 A Yes. I have stated that Fault C is not a sealing barrier
5 as far as pressure communication is concerned.

6 Q What about the wells in the southwest quarter of Section 7,
7 are they interception wells, the 4 and the 6?

8 A I previously stated that one of those wells is completely
9 gassed-out and the other one is at a high gas-oil ratio,
10 making about 15 barrels of oil.

11 Q What about the wells in the northeast quarter of Section
12 18, the No. 10 and 16?

13 A If we go on the supposition that the gas moves down in
14 a piston-like manner, those wells will not block oil
15 from the Edna No. 1; they are not in a direct line with
16 the piston-like displacement in that direction.

17 Q Have you experienced any increase in production or any
18 kind of kick in 10 or 16?

19 A 10 may be in the process of going back to a flowing
20 status, we haven't put it there yet, it will flow;
21 however, the rates are so slow owing to this back pressure
22 that we keep it on.

23 Q You have realized a beneficial effect, then?

24 A Yes.

25 Q Then, your assumption that the piston-like effect is

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1 in a direct line is not correct in that particular
2 instance, is it?
3 A Why wouldn't it be?
4 Q Well, has the 10 been completely bypassed by the fact of
5 the gas injection or not?
6 A As I say, to the best of my knowledge, we are starting to
7 see a response.
8 Q Then, would it not be reasonable to assume that if you
9 got a response that it would also be an interception for
10 any oil being swept to the northeast?
11 A Well, the oil would be swept down-dip and from this well
12 it would be swept in a northeastern direction, it would
13 be swept from the 10 to the 16. The oil would be swept
14 in that direction.
15 Q What about the oil between injection wells in the 10, if
16 it swept to the 10?
17 A We anticipate that it will be.
18 Q All right. So, then, you would classify it as an
19 interception well, wouldn't you?
20 I'm assuming that oil is being swept in the
21 northeasterly direction from the three gas-injection wells
22 as per your testimony, is that incorrect?
23 A No.
24 Q What I'm getting at is what wells are in the unit that are
25 available to intercept this oil that's being swept to the

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- 1 northeast and that's what we are after?
- 2 A As I have stated previously, the Hanson 2 Well would
- 3 definitely intercept oil.
- 4 Q The oil, then, flows to the injection wells and go
- 5 northeast?
- 6 A From the gas-injection wells, if we take a straight line
- 7 to the east right in the direction of the Edna Well, I
- 8 can see four wells, including the Tesoro Well, which would
- 9 definitely get oil prior to getting to the Edna Well.
- 10 Q Which are those?
- 11 A The LP No. 7.
- 12 Q Where is this?
- 13 A That's in Section 7.
- 14 Q All right.
- 15 A The No. 1, which is in Section 8; the Tesoro No. 22,
- 16 directly offsetting it would have a response right prior
- 17 to the Edna; and, of course, our Lone Pine 29 would get a
- 18 response at approximately the same time the Edna did.
- 19 Q Well, if the oil is moving in that direction, it would
- 20 get a response before?
- 21 A Slightly, it's about a foot or two up-dip of it; but
- 22 then, you have to recall that this well would eventually
- 23 gas-out and that the oil would bypass it to the Edna Well.
- 24 Q Now, in your proposal to the operators of the Lone Pine-
- 25 Dakota "D" Unit, with respect to drilling the LPDDU No.

1 29, was there any reference of the possibility of
2 converting that well into a water-injection well?

3 A Yes, there was.

4 Q What was the purpose of that, if it ever became necessary?

5 A The purpose of it, as a unit operator we are obligated
6 by terms of the Unit Agreement to protect the unit
7 against drainage and if we felt that the LPDDU No. 29,
8 as a producer, was not adequately protecting the unit
9 against drainage -- and by drainage, I mean the Edna
10 Well -- we did say in the letter that we would convert
11 it to water injection.

12 Q Now, how would this physically occur, how would this
13 create protection for you?

14 A Well, essentially what we would do, whenever we put
15 water in there is we would effectively shut off the
16 Edna Well from drainage, we would probably water it out.

17 Q This would create a water barrier between the Edna and the
18 rest of the reservoir, is that correct?

19 A Yes.

20 Q And this is definitely in your mind?

21 A No, it's not definitely in our mind.

22 Q It was definitely contemplated at the time of the
23 proposed drilling of this well?

24 A I think the letter stated that while we do not see the
25 necessity for this at this time, we said in the letter that

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1 we felt that the Lone Pine 29, as a producer, would
2 adequately protect the unit; however, we would monitor
3 it.

4 Q Now, in your letter to the producers and the operators in
5 the unit proposing a \$60,000.00 expenditure, you
6 represented that no additional oil would be discovered or
7 reserves added to the unit, but that it would protect
8 approximately 55,000 barrels that would otherwise be
9 drained by an offset well, is that right?

10 A That's exactly right.

11 Q And at the time you made this proposal, you felt that the
12 drilling of this well at this offset location would
13 adequately protect the unit against the BSK Edna No. 1
14 Well?

15 A Yes.

16 Q But failing in this, you could make sure that the unit
17 was protected by injecting water into that well?

18 A Yes.

19 Q And you are still of that opinion today?

20 A Yes, sir.

21 Q So, this is the normal method by which an offset
22 operator protects himself against drainage, is it not,
23 that you drill offset wells?

24 A Yes.

25 Q But under the normal situations, though, offset wells in

- 1 a prorated pool have the same allowable, do they not?
- 2 A In a normal situation.
- 3 Q Yes, have offset protection, lease-line protection, in
- 4 a pool where there is diverse ownership, you've
- 5 testified that the normal way of protection is an offset
- 6 well, is that right?
- 7 A Yes.
- 8 Q And that under normal situations, those offset wells would
- 9 have the same allowable, would they not?
- 10 A Right, but these are not normal conditions here.
- 11 Q But the unit can be protected from drainage by the BSK
- 12 Edna by injection of water into the LPDDU 29?
- 13 A Yes, that would form an effective barrier.
- 14 Q You said your average GOR for the unit is approximately
- 15 2,000 to 1, is that correct?
- 16 A Yes.
- 17 Q What's been the producing GOR for the Kennedy well during
- 18 the past three months during which you purchased gas?
- 19 A The report, as I've seen turned into the State, and I
- 20 haven't seen the October report, was, I believe, 330
- 21 GOR, which was turned in.
- 22 Q That's based on the gas which you purchased, is it not?
- 23 A No, it's not.
- 24 Q Will you multiply it out?
- 25 A 300 GOR at 100 barrels a day, although 30,000 cubic feet

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1 of gas per 30 days would be 900 Mcf and last month we
2 only purchased 981 Mcf, so it would not be born out.

3 Q So, either there is an error in the amount of gas that
4 you purchased, or the GOR is very, very low in October?

5 A Right, or there may be some flaring occurring.

6 Q Well, you are not testifying that to your knowledge there
7 is any violation of Commission rules with respect to
8 flaring, you do not intend to imply that?

9 A No.

10 Q Now, you've testified that you think that the BSK Edna
11 No. 1 Well is marginal. Have you tested this well?

12 A No, I did not say that it was marginal, I think.

13 Q Not capable of producing the allowable?

14 A No, I do not think it is capable of producing the
15 allowable.

16 Q And on what do you base this?

17 A I base that primarily on June and July production. The
18 fact that Mr. Dugan testified to the fact that down-time
19 Tenneco, being a prudent operator, we seldom have down-
20 time which would limit the production, or the capability
21 of a well, by 50 per cent of it's allowable that month.
22 This is judging Mr. Kennedy's operations by our own.

23 Q Well, are you aware of the fact that the well had to be
24 put on the pump?

25 A Yes, I am very much aware of that.

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1 Q At the same period of time?

2 A Right.

3 Q And are you aware of the fact that the downhole pump that
4 was installed in the well was defective?

5 A No, I wasn't aware of that.

6 Q Are you aware of the fact that the engine on the pump was
7 defective?

8 A No, I was not.

9 Q And that another engine was purchased?

10 MR. STAMETS: Mr. Cooley, has this been testified to?

11 MR. KELLEY: This is strictly outside, there is no
12 testimony on this point.

13 MR. COOLEY: He may be aware of this, he may not,
14 I'm just asking.

15 MR. STAMETS: You are just asking if he is aware of
16 this?

17 MR. COOLEY: That's right.

18 Q (By Mr. Cooley) So, if there were mechanical problems
19 in connection with the installation in the operation of
20 the pump, this would explain the inordinantly low
21 production during the months of June and July, would it
22 not?

23 A If, for those two months, you were off production for
24 physically half of the month, which includes a down-time
25 of 50 per cent, then, yes.

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- 1 Q You've testified that you do not think that the BSK Edna
- 2 has been, thus far, affected by your pressure maintenance
- 3 project; is that correct?
- 4 A Yes.
- 5 Q All right. Well, then, if there is no beneficial effect
- 6 that has occurred as a result of the pressure maintenance
- 7 project, how do you explain the substantial increase in
- 8 production since June and July?
- 9 A For the unit?
- 10 Q No, for the BSK Edna No. 1 Well. You say you based your
- 11 opinion on production in June and July. Subsequent
- 12 production has been much higher, has it not?
- 13 A Not much higher, 100 barrels a day; in July, it was 93,
- 14 not significantly higher.
- 15 Q Are you aware of the back pressure that the BSK Edna No.
- 16 1 is presently producing against?
- 17 A Yes.
- 18 Q What is that?
- 19 A It's about 120 pounds.
- 20 Q Now, absent prohibition of flaring and assuming this gas
- 21 was being flared, or put into a flow line, what would be
- 22 the normal back pressure for a pumping well like that?
- 23 A Between 20 and 30 pounds.
- 24 Q What adverse effect does this 190 to 200 pounds
- 25 differential have on a well's productivity?

- 1 A It adversely affect it's increase in the bottomhole
2 pressure, it decreases the amount of draw-down that the
3 well has, and lowers the flow rate.
- 4 Q So, if the back pressure were reduced, this well would be
5 capable of producing more oil than it's producing now?
- 6 A I would say so, yes.
- 7 Q Do you have any estimate as to how much more?
- 8 A No.
- 9 Q Mr. Babyak, on your Exhibit 5, you referred to Phase I
10 and Phase II type of recoveries?
- 11 A Yes.
- 12 Q These are simply contractual mechanisms whereby the
13 various working interest owners in the unit could come
14 to an agreement as to how the total production of the unit
15 is to be shared, is that correct?
- 16 A Actually there is a two-fold purpose to this. Phase I
17 is essentially primary production, this is primary
18 production had we not installed the secondary recovery
19 phase, then we would have recovered this much oil; Phase
20 I participation is based more on a drainage aspect, how
21 much oil you can recover; whereas, the Phase II is a
22 secondary recovery type of formula and this is based on
23 oil, this is based on how much actual volume you had
24 under your tract.
- 25 Q Well, now, if the Kennedy well has not been affected by

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1 your pressure maintenance, then how is it possible that
2 it can produce 133 per cent more than it would have
3 produced had there not been pressure maintenance?

4 A It has been draining the unit, it has been draining
5 across the unit boundary.

6 Q Now, how does an operator ordinarily protect himself
7 against offsetting drainage?

8 A Drills an offset well.

9 MR. COOLEY: No further questions, thank you.

10 MR. STAMETS: Mr. Kelley, how much questioning do
11 you think you will have?

12 MR. KELLEY: I think I have approximately another
13 10 to 15 minutes of Direct.

14 MR. STAMETS: We will take a 15-minute break.

15 (Whereupon, a brief 15-minute recess was held.)

16 MR. STAMETS: Hearing will come to order, please.

17 Mr. Babyak will be temporarily excused from the
18 witness stand and may be recalled for additional questions.

19 Mr. Kelley, do you have a witness?

20 MR. KELLEY: Yes, I have one more witness.

21 A. D. RIAL,

22 a witness, having been first duly sworn according to law, upon
23 his oath, testified as follows:
24
25

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DIRECT EXAMINATION

BY MR. KELLEY:

Q Would you state your name and position and employer?

A My name is A. D. Rial, I'm District Geological Engineer for Tenneco Oil Company in Denver, Colorado.

Q Now, Mr. Rial, have you previously qualified as an expert witness in your field before this Commission?

A Yes, sir, I have.

MR. KELLEY: Are his qualifications acceptable?

MR. STAMETS: Yes, they are.

Q (By Mr. Kelley) Mr. Rial, would you confine your testimony to the background information to substantiate the testimony of Mr. Babyak on the estimate of productive acre feet of 168 under the Kennedy lease?

A With reference to Exhibit No. 7, this is a structure map drawn on the top of the 16 per cent porosity of the Dakota "D" sand. Shown here are the locations of all wells drilled in the area and production zones are keyed as noted in the legend. The dashed line is a configuration of the existing unit boundary.

Shown in red is the position of the oil-water contact within reference to the Lone Pine-Dakota "D" Pool. This map illustrates and defines the boundaries existing. The east boundary is, of course, the oil-water contact which has been established by the Tenneco Lily No. 1, which is

1 shown in position, I believe it's the northwest of the
2 southwest of the northeast of Section 18, 17 North, and
3 8 West.

4 To the north, the north limits and boundaries of the
5 reservoir is the position of Fault C. Now, under each
6 well you will note that there is a fault designation or
7 fault information, and this is illustrated in the legend.
8 The first number is the Throw of the fault, the next one
9 is the Subsea Datum of the fault, and then the fault
10 designation of which one.

11 We see here that we have control on Fault C based on
12 five wells, one of which is being the BSK Edna No. 1, and
13 the offset Tesoro Hanson No. 22. Since this Fault C, in
14 this position, provides the boundary of the productive
15 area, I'd like to move to Exhibit No. 8.

16 This is a fault contour map, or structure contour
17 map on the Fault C. The scale here in one inch equals
18 500 feet and it covers basically the same base as we were
19 looking at one Exhibit 7. The same fault data is entered
20 underneath each one of the wells and we have contoured the
21 position of this fault. This technique is important to
22 establishing the fact that the fault is the same, the
23 geometry and the lineation of the fault is in the position
24 shown.

25 I'd like to make reference to Exhibit Number 9, which

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1 is an Isopack map of the net Dakota "D" Oil sand. Now,
2 this is the oil zone of the Dakota "D" reservoir. We
3 have not shown the gas primarily because the Gascap is
4 not affected, or the Edna Well is not affected in
5 relation to the Gascap. Shown underneath each well is
6 the net effective oil pay based on porosity greater than
7 16 per cent and above a Subsea Datum or oil-water contact.
8 Here, we note that the Edna has eight-feet porosity,
9 greater than 16 per cent. This parameter was used and is
10 consistent with the picks that we see on the map, and in
11 the Lone Pine Unit itself.

12 The 0 line to the north is a position of Fault C and
13 of course, by calculating the volume of net productive
14 sand underneath the tract, it comes out to be that we've
15 probably got an average of 6.2 feet of pay and 27 acres.
16 This totals to be the 168 feet previously testified.
17 Q Now, what is your estimate of the net feet of pay for the
18 proposed well in the unit?

19 A The proposed well is shown on this map and it looks like
20 we are probably going to have about 13 feet of net pay.

21 Q You estimated eight for the Kennedy well?

22 A Yes.

23 Q What would your opinion be as to the capability of that
24 well to produce, if drilled initially?

25 A I think that we are dealing here with a reservoir pressure

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1 being approximately the same, the only difference being
2 that we've probably got just a little thicker pay, but
3 this may not be too significant. I believe that this well
4 would be capable of producing, say, 120 to 130 barrels a
5 day.

6 Q At that rate, will it have any adverse effects at all on
7 the correlative rights of Mr. Kennedy's well?

8 A No, it will not.

9 Q If the well should, over a period of time, experience a
10 higher rate of production, if it should go up, what could
11 cause that?

12 A The only thing that would cause the rate to increase in
13 the Lone Pine Unit 29 Well is an increase in pressure as
14 the result of our gas injection.

15 Q So if this well comes in something under it's normal
16 allowable, then there will be no adverse effect on
17 correlative rights, is that correct?

18 A That's right.

19 Q And if the well is not allowed to produce when it does
20 get response, not allowed to produce that response, what
21 effect will that have on the correlative rights of the
22 unit?

23 A The unit will suffer damage to our correlative rights.

24 Q And wouldn't it be probable that some of the oil would go
25 to Mr. Kennedy's oil?

- 1 A Yes.
- 2 Q In fact, isn't it true that it's almost probable that Mr.
- 3 Kennedy will get benefit of this pressure maintenance
- 4 project?
- 5 A There is no question that he will.
- 6 Q Would you say, based on the structure here, that Mr.
- 7 Kennedy's well will be one of the last to gas-out?
- 8 A It will be one of the last, yes.
- 9 Q So he will be getting, even under the rules that are set
- 10 up now, he will be getting a secondary recovery without
- 11 participating in the unit?
- 12 A That's right.
- 13 Q Now, I didn't ask Mr. Babyak this, but are you aware of
- 14 whether only 40 acres is dedicated to the Tesoro Well?
- 15 A We anticipate that only 40 acres will be brought into the
- 16 unit, and that 40 acres will consist of the southwest of
- 17 the northwest of Section 8.
- 18 Q All right.
- 19 A And, of course, the allowable for this well will be a
- 20 40-acre allowable, or at this time, will be 80 barrels
- 21 a day.
- 22 Q 80 barrels a day, is that, are you talking about a double
- 23 allowable?
- 24 A No, that is the allowable, the normal allowable for 80
- 25 acres is 160 barrels a day.

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1 Q This being 40 acres --

2 A It's normal allowable would be 80 barrels a day.

3 Q So, it could produce, if it gets response, up to 160?

4 A Yes.

5 Q Where the proposed unit well, since 80 acres are dedicated
6 to it, could go to 320?

7 A Yes, that's correct.

8 Q Were Exhibits 7, 8, and 9 prepared by you or under your
9 supervision?

10 A Yes, they are.

11 MR. KELLEY: I move the introduction of Exhibits 7,
12 8, and 9 at this time, Mr. Examiner.

13 MR. STAMETS: Without objection, Tenneco's Exhibits
14 7, 8, and 9 will be admitted.

15 MR. KELLEY: I have no further Direct Examination.

16 MR. STAMETS: Mr. Cooley?

17 CROSS EXAMINATION

18 BY MR. COOLEY:

19 Q Mr. Rial, was it your geological testimony that Fault C
20 is the northern productive limits of the pool?

21 A No, in clarification, they are the northern productive
22 limits of the Kennedy-Edna tract.

23 Q There is production within the unit north of Fault C?

24 A Yes.

25 Q And in Section 7?

1 A That's right.

2 Q And the fault is fading out to the east, according to one
3 of your exhibits, is that correct?

4 A Yes.

5 Q Becoming less defined?

6 A Yes.

7 Q Well, then, why is it your opinion as it goes to the east
8 that if it's becoming less defined and less a barrier,
9 it is the productive limits with respect to the Edna tract?

10 A The well is not becoming -- If we look at the fault cuts
11 that are exhibited under each of the wells, we see that
12 the fault apparently is losing throw. In other words,
13 we see that the Hanson 22 has 55 feet, where we see the
14 Edna has 40 feet, and we see that the Lily Well has 30
15 feet. I consider these defined. It is not unusual for
16 a fault, in this complex, to lose magnitude of throw.

17 However, as far as defining, as we move just to the north
18 of this fault, we are in a separate part of the total
19 fault complex defined by Fault A to the north, which is
20 down to the south; and then Fault C is down to the north,
21 more or less. The oil course for this graben area is
22 still estimated to be 4212, and the position, structural
23 position, lying along that red mark contour line in Section
24 7. Therefore, the area and the graben, or just north
25 of Fault C, is non-productive; therefore, Fault C is a

- 1 boundary at this point.
- 2 Q Have there been any wells drilled in between Fault C and
- 3 Fault A in the northwest quarter of 8?
- 4 A No.
- 5 Q You have no control in that area?
- 6 A Yes.
- 7 Q What is your control?
- 8 A All right. Let's make reference to, I believe it's the
- 9 Santa Fe Tesoro No. 28, which is located approximately in
- 10 the southeast of the northeast of Section 7. The datum
- 11 on that well is plus 4193. It was non-productive, it was
- 12 wet; it had good sand, but it was wet. It was not cut by
- 13 a fault, as noted by no fault notations in there.
- 14 Q You have control as to what direction Fault C might take
- 15 across the northwest quarter of Section 8, do you?
- 16 A Yes.
- 17 Q What is that?
- 18 A Let's make reference to Exhibit 8 and the entire purpose
- 19 of this exhibit was to actually contour the fault plane
- 20 using the existing control that we have in the five wells
- 21 there. The position of the fault is very limited by the
- 22 cut in the Edna No. 1 and in the Tesoro, leaving almost
- 23 very little latitude in the position of this fault.
- 24 Q It's not possible for it to bow in the northwest quarter
- 25 of 8 as it does in the south half of 7?

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1 A Not possible.

2 Q It is not possible?

3 A Well, dealing with faults, I would say it's not consistent
4 with reasonable interpretation. Anything is possible,
5 but not probable.

6 Q Now, why is it that Fault C does not constitute an
7 effective barrier and there is production north of it in
8 7 and there is, in your opinion, no production north of
9 it in the northwest of the northwest quarter of 8?

10 A All right. Let's make reference to Exhibit No. 7. Fault
11 C is not necessarily a sealing fault. We do look at this
12 the position of Fault C in the south half of Section 7,
13 we see that when we go across in the fault from north to
14 south we are still in the productive area. All right, we
15 are definitely communicating pressure between these two
16 areas. When we go north of Fault C in the Edna Well, we
17 go from a productive area to a non-productive area, as
18 established by existing well controls.

19 Q There is nothing in that area to indicate that there is
20 no dry hole in that northwest quarter of 8, is there?

21 A No, there is no dry hole in the northwest quarter of 8.

22 Q Now, you say that there would be drainage, in your opinion,
23 across from the unit to the Kennedy tract, in your
24 Direct testimony, if some protective measures are not taken,
25 is that correct?

1 A That is correct.

2 Q Now, you do recall the testimony of Mr. Babyak, don't

3 you?

4 A Yes.

5 Q And his testimony is, that it is the opinion, now, of

6 Tenneco that the offset location of the proposed No. 29

7 Well will adequately protect against this drainage, is

8 that correct?

9 A It is our position right now.

10 Q Was this Mr. Babyak's testimony?

11 A To the best of my knowledge.

12 Q And the position taken by Tenneco in the letter to the

13 unit operators?

14 A To the best of my knowledge, that's what he said.

15 Q And if you are incorrect in that present assumption, that

16 water injection and the creation of a water barrier through

17 the 29 Well would most certainly adequately protect the

18 unit, that was also the position of a company in the letter

19 in question and the testimony of Mr. Babyak, is that

20 correct?

21 MR. KELLEY: I would object to the line of

22 questioning. I don't think it has any relevance to the issue.

23 They are now attempting to change the rules as far as the

24 location of injection wells.

25 MR. COOLEY: We haven't attempted to change the rules

1 with reference to injection wells. The whole issue in this
 2 case is whether there is going to be oil pushed across the
 3 unit boundary to the Kennedy tract. It is the testimony of the
 4 expert engineer Mr. Babyak, testifying on behalf of Tenneco,
 5 that it is the present opinion of the Engineering Department,
 6 at least, that the offset drainage created by the 29 Well will
 7 adequately protect the unit. Failing in this, they would then
 8 inject water into that well and the creation of a water barrier
 9 in between the Kennedy tract and the balance of the unit would
 10 most assuredly create this protection.

11 I simply want to ask this witness if he agrees with
 12 that.

13 MR. KELLEY: I don't see that it has any relevance
 14 to the application. We are not certain that this well can be
 15 used as a water-injection well, we are only concerned with
 16 whether it can have a double allowable.

17 MR. STAMETS: I tend to agree, the question seems to
 18 be inappropriate at the time since we are not considering any
 19 injection well at this time; we are considering a producing well
 20 under the unit rules.

21 Q (By Mr. Cooley) Well, you have testified, Mr. Rial, that
 22 there will be drainage off the unit onto the Kennedy tract
 23 unless something is done to protect against this, is that
 24 correct?

25 A That is correct.

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1 Q Do you feel that the No. 29 Well will adequately protect
2 against this?

3 A I believe, under the conditions right now, and under the
4 conditions as they exist, the pressure conditions, the
5 reservoir conditions in this area, that we will protect
6 the unit from drainage at this point.

7 I do not feel that if we are allowed, restricted to
8 just one single allowable, when the pressure increases
9 and our capacity of that well increases as a result of the
10 secondary recovery and the pressure maintenance, that we
11 can protect the unit.

12 MR. COOLEY: Now, in light of this answer, Mr.
13 Examiner, his testimony is that the unit can now be protected
14 at that point. In light of this answer, I want to redirect the
15 question to him, would not water injection at that time
16 effectively protect the unit as Mr. Babyak has testified.

17 MR. KELLEY: I still don't see how it has any bearing
18 on the application.

19 MR. COOLEY: Well, Mr. Examiner, they testify that
20 the unit is going to be drained, and I'm not allowed to question
21 as to how the unit can protect itself.

22 MR. KELLEY: Would you prefer a water-injection well
23 at that location, Mr. Cooley?

24 MR. COOLEY: I'm simply asking if the unit can be
25 protected and I want to ask the question of this witness.

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1 MR. STAMETS: Mr. Cooley, I think that the basic
2 question here is whether or not, if this well is approved at
3 this location, and if the well is allowed two allowables at this
4 location, whether or not there will be drainage from the
5 Kennedy tract into the unit; and I don't think the question on
6 the injection of water if appropriate at this time.

7 Q (By Mr. Cooley) Mr. Rial, are you aware of the basic
8 disagreement between Mr. Kennedy and yourself with
9 respect to the number of productive oil acres of feet
10 under the BSK Edna tract?

11 A Mr. Kennedy has expressed in conversation with me that he
12 does not agree, necessarily. However, he has never
13 expressed to us whether he thought it was too much or
14 too little, to me, personally; and I have read no
15 correspondence with reference to this. I've seen nothing
16 he showed us nothing, no interpretation as far as what
17 he thinks, other than there is, yes, there is some
18 disagreement.

19 Q All right. Under the proposal that you made with respect
20 to these oil acre of feet, the percentage of participation
21 of the Edna Well in the unit in Phase II would be reduced
22 to about one-tenth of Phase I, would it not?

23 A Mr. Cooley, I have no specific knowledge of the formula.

24 Q You don't know the proposal that was made?

25 A No, I do not.

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1 Q In your experience as a geologist for Tenneco Oil
2 Company, have you previously encountered the problem of
3 protecting your company's interest against offset
4 drainage?

5 A Yes.

6 Q And what normally has been your relationship with respect
7 to accomplishment of such protection?

8 MR. STAMETS: Mr. Cooley, I think we are wasting time
9 with the question. The only question is whether or not there
10 will be drainage if they are allowed to drill the well and if
11 it is allowed to have two allowables.

12 Q (By Mr. Cooley) Mr. Rial, if you have two offsetting wells
13 producing at different rates, one at twice the rate of the
14 other, would you not normally expect that the one
15 producing at the higher rate would be draining the well
16 producing at the lower rate?

17 A I think that in order to answer that question, you've got
18 to, if both the wells were in a common source of supply
19 that are in excellent communication, there had to be a
20 significant difference between the two wells in order for
21 one to achieve a rate much greater than the other.

22 Q A rate of drainage?

23 A No, a producing rate.

24 Q If the rates were artificially restricted by prorationing,
25 is what my question is, if one well is restricted, and the

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1 other well is permitted to produce twice the other,
2 wouldn't you ordinarily expect drainage to occur?
3 A Not necessarily. I think there are a lot of conditions
4 that exist that make your example here not relevant.
5 Q First of all let me ask you, do you consider that the
6 northeast area of the Lone Pine Dakota "D" Unit, wherein
7 the Edna well and the Baird wells and the Tesoro well are
8 all in communication?
9 A Do I what?
10 Q Do you consider that they are in communication?
11 A That they are draining the same, common source of
12 supply, yes.
13 Q The question is this, in magnitude, is this communication
14 average, below average, or above average for the San Juan
15 Basin?
16 A It's above average.
17 Q Above average? It's extremely highly permeable, isn't it?
18 A Yes.
19 Q Is it not true that when each well was drilled in the pool
20 that the initial pressures discovered in the well as they
21 were drilled very quickly adapted to the overall pool
22 pressure existing at the time?
23 A Yes, closely, yes, within some reason.
24 Q There was an extremely great degree of pressure
25 communication?

1 A Yes.

2 Q When was the Baird #1 well, located in the northwest
3 quarter of the southwest quarter of Section 8, drilled?

4 A I have no specific date. I don't have that available.

5 MR. COOLEY: I would request the Commission to take
6 notice of its record that the date that this well was drilled.

7 Q (By Mr. Cooley) Do you know whether it was drilled before
8 the Edna well and the Tesoro well?

9 A I believe that is correct.

10 Q Isn't it true that it was drilled approximately a year and
11 a half before they were drilled?

12 A I don't know. I don't know whether that's true or not.

13 Q During the period of time that this was the only well in
14 the area that was producing from the northwest of the
15 northeast quadrant of the pool, is it your opinion that
16 that well drained oil from the Tesoro tract as well as the
17 Edna tract, the Kennedy tract?

18 A Not necessarily.

19 Q Are you aware of the initial pressure encountered in the
20 Edna well?

21 A Not to the exact number, no.

22 Q You are aware that it was more than 150 pounds below
23 initial reservoir pressure?

24 A I was aware that it was lower than the original.

25 Q Considerably lower?

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1 MR. STAMETS: Mr. Cooley, you are not supposing that
2 the last well in the pool should be recompensed for the
3 production by the other wells in the pool, are you?

4 MR. COOLEY: Counter drainage is a concept that is
5 recognized in the field.

6 MR. STAMETS: I think counter drainage depends on
7 having a well that can drain and you are speaking of a case here
8 where there was no well to be drained at the time.

9 MR. COOLEY: Subsequently there was a well there and
10 encountered drainage is a recognizable concept in oil and gas
11 fields.

12 MR. KELLEY: Mr. Examiner, I'm going to object to this
13 further questioning. I don't think there is any dispute that
14 there is good communication in this area. Obviously there is
15 going to be drainage back and forth, we have already shown that
16 there has been drainage. The point is that unless this well
17 that Tennaco plans to drill comes in above its allowable, there
18 can't be any drainage, and the whole purpose of the unit, the
19 whole purpose of the pressure maintenance project, is to allow
20 them to get the oil anywhere in the unit; and everything is
21 premature at this point. There is no evidence here that there
22 is any drainage.

23 MR. STAMETS: Specifically what were you objecting to?

24 MR. KELLEY: I'm just objecting to, I think we've
25 already established that there is good communication, and I'm

1 just objecting to this repetitious line of testimony, or to a
2 repetition of line of questioning.

3 MR. COOLEY: I don't recall any previous questions
4 with respect to whether there has been drainage and counter
5 drainage to date.

6 MR. STAMETS: Mr. Cooley, I would prefer that the
7 questioning not get around wells which existed prior to the
8 drilling of the Edna well. I don't think it's appropriate to
9 discuss drainage that occurred prior to the drilling of the Edna
10 well.

11 MR. COOLEY: Well, I'm going to pose that question as
12 to whether there was drainage prior to the drilling of the Edna
13 well, and if counsel objects to it and if the Examiner moves to
14 overrule or sustain objection, we will have established a record
15 at least.

16 MR. STAMETS: Proceed.

17 Q (By Mr. Cooley) In your opinion, does a pressure decline,
18 or in the initial pressure of the Edna well, approximately 150
19 pounds below the original pressure of the Lone Pine Dakota Pool,
20 indicate that there was oil drainage from under that tract prior
21 to the drilling of the other wells in the unit?

22 MR. KELLEY: I would object to the question as
23 irrelevant and as repetitious.

24 MR. STAMETS: I will sustain the objection.

25 MR. COOLEY: No further questions.

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1 MR. STAMETS: Are there any other questions of the
2 witness?

3 (No response.)

4 MR. STAMETS: He may be excused.
5 Do you have any other witnesses, Mr. Kelley?

6 MR. KELLEY: No, I don't, Mr. Examiner.

7 MR. STAMETS: Is there any other testimony in this
8 case?

9 (No response.)

10 MR. STAMETS: I will take closing statements if there
11 are any.

12 MR. COOLEY: Mr. Examiner, the question of what the
13 offset wells will or won't produce is a matter that will not be
14 resolved until possibly remedial work is done on the Tesoro
15 well and certainly until the LPDDU 29 is drilled. The testimony
16 is that that well has some 5 feet, I believe, difference
17 between 8 feet and 13 feet of additional pay that they are
18 anticipating. If this be the case and this be the test as
19 contended by Tenneco of what a well should be allowed to
20 produce, certainly it should be expected to produce some 40 to
21 50 per cent better than did the Edna well; and I again ask the
22 Commission to take notice of its records reflecting that the
23 Edna well was capable of producing substantially in excess of
24 current allowables at the time it was drilled, and that is the
25 testimony of Mr. Dugan that that well is capable of producing

1 in excess of its allowable today if compression equipment is
2 installed as contemplated by Mr. Kennedy with respect to
3 getting rid of the slight amount of casing head gas that's
4 being produced there.

5 I would think it's probably the most obvious basic
6 element of petroleum engineering that if two offsetting wells
7 are permitted to produce at different rates that the one
8 allowed to produce at a higher rate is going to have an
9 advantage over the offset well.

10 It is traditional throughout the history of the oil
11 industry, and it's been recognized by both bodies, this one as
12 well as the courts, that oil and gas are fugacious matters
13 and they belong to the operator to whose well bore they travel
14 and that the manner in which offsetting operators with diverse
15 interest have historically protected themselves is through the
16 drilling of an offset well, which according to Mr. Babyak,
17 and the letter of Tenneco Oil Company, will adequately protect
18 the unit against any drainage from the BSK Edna well, that is,
19 assuming that the wells produce at the same allowable, at the
20 same rate, are permitted to produce at the same rate.

21 If, on the other hand, the #29 well and or the Tesoro well
22 are allowed to produce at rates higher than the BSK Edna well
23 is permitted to produce, there can be no question as to what
24 there will be drainage from the Edna tract onto the unit.

25 Thank you, and that concludes argument.

dearnley, meier & mc cormick reporting service, inc.

200 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

1 MR. KELLEY: Mr. Examiner, a pressure maintenance
2 project is designed to treat a whole area as one proration
3 unit. You are going to be moving your hydrocarbons from one
4 location to another. I think the Commission recognizes this
5 when they set up the transfer of allowables. As far as I know,
6 this is standard in all pressure maintenance or secondary
7 recovery projects.

8 I think the Commission also recognizes that those people
9 that are outside the boundary are going to get some benefit
10 because you cannot arbitrarily define where this gas or oil is
11 going to move and then attempt to balance this properly. So,
12 the Commission, in this case, as it has in many others, limited
13 the amount of transferability to those unit line wells; in this
14 case, the double allowable. This is an attempt to balance this
15 effect, both the beneficial effect that Mr. Kennedy's well will
16 get from being outside the unit, but right on the edge, and
17 any possible detriment of counter drainage.

18 This was all done with Mr. Kennedy's cooperation and
19 consent, and to come in now and put on this kind of a case
20 where there is absolutely no evidence to support their
21 contention, to me, is totally improper. If the Commission
22 were to grant this kind of relief, they would be jeopardizing
23 the whole unit against the exact terms of the unit because the
24 unit puts a responsibility on the operator to take all
25 responsible measures to protect the unit. Mr. Kennedy is a

1 member of this unit. We have shown that the way this area
2 will be developed that Mr. Kennedy cannot help but benefit.
3 He is going to be the last well to gas out. Certainly,
4 everything is probably going to be to his advantage rather
5 than his disadvantage and I also suggest, even though I don't
6 think it makes any difference, that everything is premature at
7 this time. He doesn't have any idea whether he's going to be
8 hurt.

9 If this well comes in at less than its allowable and then
10 response comes later, obviously, that response is going to be
11 pressure buildup which would be to the benefit of Mr. Kennedy
12 because they have all claimed how good communication there is,
13 so as the pressure buildup in the unit is going to build up in
14 Mr. Kennedy's well also.

15 I would submit that the granting of this application would
16 do great harm to the reservoir and great harm to correlative
17 rights.

18 MR. STAMETS: Are there any other statements in this
19 case? If not, Case 4869 will be taken under advisement.
20
21
22
23
24
25

dearnley, meier & mc cormick reporting service inc.

209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST, ALBUQUERQUE, NEW MEXICO 87108

STATE OF NEW MEXICO)
) SS.
COUNTY OF BERNALILLO)

I, JOHN DE LA ROSA, a Court Reporter, in and for the
County of Bernalillo, State of New Mexico, do hereby certify
that the foregoing and attached Transcript of Hearing before
the New Mexico Oil Conservation Commission was reported by me;
and that the same is a true and correct record of the said
proceedings to the best of my knowledge, skill and ability.

John De La Rosa
COURT REPORTER

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. H869,
heard by me on Nov 29, 1972.

Richard J. Stone, Examiner
New Mexico Oil Conservation Commission

dearnley, meier & mc cormick reporting services, inc.

209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST, ALBUQUERQUE, NEW MEXICO 87108

I N D E X

WITNESS

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13	Applicant's	9	9

WILLIAM E. BABYAK

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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P.O. BOX 2088 - SANTA FE
87501

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

January 4, 1973

Mr. William J. Cooley
Burr & Cooley
Attorneys at Law
152 Petroleum Center Building
Farmington, New Mexico 87401

Re: Case No. 4869
Order No. R-4454
Applicant:
Claude C. Kennedy

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC X

Artesia OCC

Aztec OCC X

Other Mr. Booker Kelly



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

March 6, 1973

GOVERNOR
BRUCE KING
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMUJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

Re: Case No. 4869

Order No. R-4454-A

Applicant:

Mr. Jack Cooley
Burr & Cooley
Attorneys at Law
152 Petroleum Center Building
Farmington, New Mexico 87401

Claude C. Kennedy

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC x

OTHER Mr. Booker Kelly

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4869 (DE NOVO)
Order No. R-4454-A

APPLICATION OF CLAUDE C. KENNEDY
FOR THE AMENDMENT OF ORDER NO.
R-4263, MCKINLEY COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 7, 1973,
at Santa Fe, New Mexico, before the Oil Conservation Commission
of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 6th day of March, 1973, the Commission,
a quorum being present, having considered the testimony presented
and the exhibits received at said hearing, and being fully
advised in the premises,

FINDS:

(1) That the applicant's request for dismissal should be
granted.

IT IS THEREFORE ORDERED:

That Case No. 4869 (de novo) is hereby dismissed.

DONE at Santa Fe, New Mexico, on the day and year hereinabove
designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


Bruce King
BRUCE KING, Chairman

Alex J. Armijs
ALEX J. ARMIJO, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4869
Order No. R-4454

APPLICATION OF CLAUDE C. KENNEDY
FOR THE AMENDMENT OF ORDER NO.
R-4263, MCKINLEY COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 19, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 4th day of January, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Claude C. Kennedy, is the owner-operator of the BSK Edna Well No. 1, located in Unit F of Section 8, Township 17 North, Range 8 West, NMPM, Lone Pine-Dakota "D" Pool, McKinley County, New Mexico.

(3) That applicant's BSK Edna Well is offset by the Tenneco Oil Company Lone Pine Dakota "D" Pressure Maintenance Project.

(4) That Commission Order No. R-4263 permitted the transfer of allowables between wells in said pressure maintenance project.

(5) That the applicant seeks an amendment of said Commission Order to prohibit the transfer of allowable to any well located closer than 1320 feet to the outer boundary of the Lone Pine Dakota "D" Unit.

(6) That the applicant failed to establish that the transfer of allowables to wells within 1320 feet of the outer boundary of the Unit and the assignment of up to two top unit allowables for the Lone Pine Dakota "D" Pool to project wells offsetting non-unitized wells will cause waste or violate correlative rights.

-2-
Case No. 4869
Order No. R-4454

(7) That the assignment of not more than two top unit allowables for the Lone Pine-Dakota "D" Pool to any project proration unit offsetting non-unitized acreage will not cause waste or violate correlative rights.

(8) That assignment and production of more than two top unit allowables for the Lone Pine-Dakota "D" Pool from any standard project proration unit offsetting non-unitized wells producing from the same pool should be prohibited unless after notice and hearing it is established that such limitation is causing waste or violating correlative rights.

(9) That the application should be denied.

IT IS THEREFORE ORDERED:

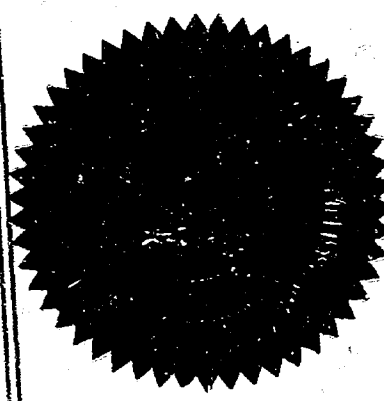
(1) That the subject application is hereby denied.

(2) That the limitation of production of no more than two times the top unit allowable, for the Lone Pine-Dakota "D" Pool, by any standard proration unit in the Tenneco Lone Pine Dakota "D" Pressure Maintenance Project offsetting non-unitized wells producing from the same pool, is hereby continued.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


Bruce King
BRUCE KING, Chairman

Alex J. Armiijo
ALEX J. ARMIJO, Member

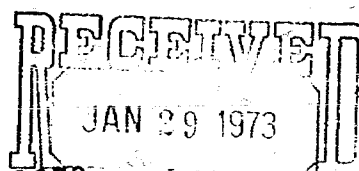
A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

BURR & COOLEY
ATTORNEYS AND COUNSELORS AT LAW
SUITE 152 PETROLEUM CENTER BUILDING
FARMINGTON, NEW MEXICO
87401

JOEL B. BURR, JR.
WM. J. COOLEY



TELEPHONE 325-1702
AREA CODE 505

January 26, 1973 CONSERVATION COMM
Santa Fe

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Please be advised that we are hereby withdrawing the
application of Claude C. Kennedy for a de novo hearing in
case no. 4869.

Very truly yours,

BURR & COOLEY

BY *William J. Cooley*
William J. Cooley

WJC:jjh

cc: White, Koch & Kelly
P. O. Box 787
Santa Fe, New Mexico 87501

Examiner Hearing - Wednesday - January 31, 1973

Docket No. 3-73

-2-

(Case 4902 continued from page 1)

New Mexico, in such a manner as to produce gas from the Strawn and Morrow formations, Los Medanos Field Area, through parallel strings of tubing.

Docket No. 4-73

DOCKET: REGULAR HEARING - WEDNESDAY - FEBRUARY 7, 1973

OIL CONSERVATION COMMISSION - 9 A.M. - MORGAN HALL,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

CASE 4796: (Continued from the November 21, 1972 Regular Hearing)

Application of Michael P. Grace II and Corinne Grace for capacity allowable, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an exception to the General Rules and Regulations governing the prorated gas pools of Southeast New Mexico, promulgated by Order No. R-1670, as amended, to produce their City of Carlsbad "COM" Well No. 1, located in Unit O of Section 25, Township 22 South, Range 26 East, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico, at full capacity.

(THIS CASE WILL BE CONTINUED TO AN INDEFINITE DATE AND WILL BE READVERTISED BEFORE BEING HEARD.)

CASE 4869: (De Novo)

Application of Claude C. Kennedy for the amendment of Order No. R-4263, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4263 to prohibit the transfer of allowable to any well located closer than 1320 feet from the outer boundary of the Lone Pine Dakota "D" Unit Area, Lone Pine-Dakota "D" Pool, McKinley County, New Mexico. Upon application of Claude C. Kennedy, this case will be heard de novo under the provisions of Rule 1220.

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 31, 1973

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4897: Application of Coastal States Gas Producing Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Gonzales Federal 31 Well No. 1 located 660 feet from the South line and 760 feet from the East line of Section 31, Township 9 South, Range 33 East, Flying "M"-San Andres Pool, Lea County, New Mexico, said well being located nearer than 330 feet to another well capable of producing from the same pool.

CASE 4898: Application of Eastern Petroleum Company for salt water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Dakota formation in the open-hole interval from 1385 feet to 1446 feet in its Navajo Well No. 21 in Unit C of Section 3, Township 27 North, Range 17 West, Table Mesa-Dakota Pool, San Juan County, New Mexico.

CASE 4899: Application of Skelly Oil Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Morrow gas pool for its well located in Unit P of Section 9, Township 24 South, Range 29 East, Eddy County, New Mexico. Applicant further seeks the promulgation of temporary special rules therefor, including a provision for 640-acre spacing units.

CASE 4900: Application of Skelly Oil Company for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Fusselman gas pool for its well located in Unit H of Section 20, Township 25 South, Range 36 East, Lea County, New Mexico. Applicant further seeks the promulgation of temporary special rules therefor, including a provision for 640-acre spacing units.

CASE 4901: Application of Belco Petroleum Corporation for two dual completions, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Union Mead Well No. 1 located in Unit H of Section 8, and its Union Mead Com Well No. 2 located in Unit N of Section 4, both in Township 22 South, Range 27 East, Eddy County, New Mexico, to produce gas from undesignated Strawn and Morrow gas pools through the casing-tubing annulus and through tubing, respectively.

CASE 4902: Application of Belco Petroleum Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its James Ranch Unit Well No. 3 located in Unit J of Section 1, Township 23 South, Range 30 East, Eddy County,

Telegram **WU** western union **Telegra**

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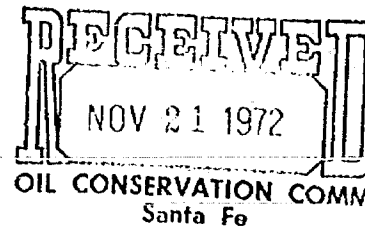
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02065 FARMINGTON NMEX 6612-18 404P MST
PMS NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE NMEX
RE CASE NO 4869
GENTLEMEN I INTER MY APPEARANCE ON BEHALF OF THE APPLICATION
THE ABOVE REFERRED CASE I ASK THAT THE TESTIMONY RECEIVED BY THE
COMMISSION AT THE NOV 29 HEARING BE INCORPORATED INTO THE RECORD
OF THE DEC 19 HEARING
IT IS MY UNDERSTANDING THAT NO ADDITIONAL TESTIMONY WILL BE
OFFERED PLEASE ADVISE IF YOU BECOME AWARE OF ANY PARTY WISHING TO
SUBMIT TESTIMONY
WILLIAM J COOLEY

2003 EST

IPMFEKA SANA

RECEIVED
DEC 19 1972
OIL CONSERVATION COMM
Santa Fe

WHITE,
KOCH, KELLY
&
McCARTHY



November 20, 1972

Joel B. Burr
Burr & Cooley
Attorneys at Law
Suite 152
Petroleum Center Building
Farmington, New Mexico

Case 4869

Dear Mr. Burr:

I have been asked by Tenneco to represent them in the hearing scheduled before the Oil Conservation Commission brought by your client, Mr. Kennedy to change the Unit Rules in the Loan Pine Field, McKinley County New Mexico. As you know, that is scheduled for November 29, 1972. Due to a scheduling problem I would appreciate your concurrence in a request I have made to the Oil Conservation Commission to have this matter moved up to the top of the docket so that it would be heard first thing Wednesday morning, November 29. If you have no objection to this change would you kindly let the commission know as they have advised me that they have no objection and wish to cooperate with me if possible.

Sincerely,

W. B. KELLY

WBK/sr

cc: Richard L. Stamets

L.C. White
Sumner S. Koch
William Booker Kelly
John F. McCarthy, Jr.
Kenneth Bateman
Benjamin Phillips
William W. Gilbert (Of Counsel)

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 29, 1972

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Elvis A. Utz, Alternate Examiner:

CASE 4854: (Continued from the November 1, 1972 Examiner Hearing)

Application of Dugan Production Corporation to commingle gas production prior to metering, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle gas produced from wells located in Sections 25, 26, 35, and 36, Township 28 North, Range 15 West, undesignated Pictured Cliffs gas pool, San Juan County, New Mexico, prior to metering said gas, as an exception to Rule 403 of the Commission Rules and Regulations.

CASE 4860: (Continued from the November 14, 1972 Examiner Hearing)

Application of Craig Foleon for an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well to test the Queen formation at an unorthodox oil well location 1340 feet from the South line and 1300 feet from the East line of Section 12, Township 13 South, Range 31 East, Caprock-Queen Pool, Chaves County, New Mexico.

CASE 4857: (Continued to November 29, 1972 Examiner Hearing)

Application of Perry R. Bass for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox gas well location for his Big Eddy Well No. 7 located 660 feet from the South line and 1980 feet from the East line of Section 19, Township 20 South, Range 31 East, Maroon Cliffs-Morrow Gas Pool, Eddy County, New Mexico, with the E/2 of said Section 19 to be dedicated to the well.

CASE 4866: Application of Roger C. Hanks for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Devonian formation through perforations between 13,000 to 13,300 feet in his Graham Well No. 1 located in Unit F of Section 29, Township 16 South, Range 36 East, East Shoe Bar-Devonian Pool, Lea County, New Mexico.

CASE 4867: Application of Superior Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the S/2 of Section 7, Township 23 South, Range 27 East, South Carlsbad Field, Eddy County, New Mexico, to be dedicated to a

(Case 4867 continued from page 1)

well to be drilled 810 feet from the South line and 1980 feet from the West line of said Section 7. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4868: Application of The Wiser Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Drinkard formation through its Downes "D" Well No. 1 located in Unit K of Section 32, Township 21 South, Range 37 East, Drinkard Pool, Lea County, New Mexico.

CASE 4869: Application of Claude C. Kennedy for the amendment of Order No. R-4263 and for the revocation of Commission Order NSL-586, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4263 to require that all wells drilled within the Lone Pine Dakota "D" Unit be drilled on locations no closer than 330 feet from the boundary of the quarter-quarter section in which any such well is located, and to prohibit the transfer of allowable to any well located closer than 1320 feet from the outer boundary of the unit area. Applicant further requests the revocation of Commission Order No. NSL-586 dated November 1, 1972, which order authorized Tenneco Oil Company to drill its proposed Lone Pine Dakota "D" Unit No. 29 well at a location 2300 feet from the South line and 1450 feet from the West line of Section 8, Township 17 North, Range 8 West, Lone Pine-Dakota "D" Oil Pool, McKinley County, New Mexico.

CASE 4835: (Continued and readvertised)

Application of Texas Oil & Gas Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Pennsylvanian formation underlying the S/2 of Section 13, Township 22 South, Range 26 East, South Carlsbad Field area, Eddy County, New Mexico, to be dedicated to a well to be drilled 660 feet from the South line and 1980 feet from the East line of said Section 13. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4870: Application of Sun Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its proposed U. D. Sawyer Well No. 10 at an unorthodox location 986 feet from the South line and 1000.5 feet from the East line of Section 27, Township 9 South, Range 36 East, Crossroads-Devonian Pool, Lea County, New Mexico.

CASE 4871: Application of Samedan Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Langlie-Mattix "B-4" Penrose (Queen) Unit Area, comprising 240 acres, more or less, of Federal lands in Sections 17 and 18, Township 23 South, Range 37 East, Lea County, New Mexico.

CASE 4872: Application of Samedan Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation through two wells in its Langlie-Mattix "B-4" Unit Area, Langlie-Mattix Pool, Lea County, New Mexico.

CASE 4862: (Continued and readvertised)

Application of Adobe Oil Company for a non-standard gas proration unit and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 520-acre non-standard gas proration unit comprising the NE/4, SE/4, E/2 SW/4, N/2 NW/4, and SE/4 NW/4 of Section 11, Township 23 South, Range 24 East, Rock Tank-Upper Morrow and Rock Tank-Lower Morrow Gas Pools, Eddy County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South line and 330 feet from the East line of said Section 11.

CASE 4863: (Continued and readvertised)

Application of C & K Petroleum Inc. for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be located 660 feet from the South and West lines, or in the alternative, 990 feet from the South line and 660 feet from the West line of Section 18, Township 18 South, Range 26 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, to be dedicated to a standard proration unit comprising the S/2 of said Section 18.

CASE 4873: Application of Mountain States Petroleum Corporation for gas prorationing, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the institution of gas prorationing in the West Atoka-Morrow Gas Pool, Eddy County, New Mexico.

DOCKET: EXAMINER HEARING - TUESDAY - DECEMBER 19, 1972

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for January, 1973, from seventeen prorated pools in Lea, Eddy, Roosevelt, and Chaves Counties, New Mexico;
- (2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico for January, 1973.

CASE 4608: (Reopened) (Continued from November 14, 1972)

In the matter of Case 4608 being reopened pursuant to the provisions of Order No. R-4213 which order established special rules and regulations for the Haystack Siluro-Devonian Pool, Chaves County, New Mexico, including a provision for 80-acre spacing units. All interested persons may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 4860: (Continued from the November 29, 1972 Examiner Hearing)

Application of Craig Folsom for an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well to test the Queen formation at an unorthodox oil well location 1340 feet from the South line and 1300 feet from the East line of Section 12, Township 13 South, Range 31 East, Caprock-Queen Pool, Chaves County, New Mexico.

CASE 4869: (Continued and Readvertised)

Application of Claude C. Kennedy for the amendment of Order No. R-4263, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4263 to prohibit the transfer of allowable to any well located closer than 1320 feet from the outer boundary of the Lone Pine Dakota "D" Unit Area, Lone Pine Dakota "D" Pool, McKinley County, New Mexico.

CASE 4874: Application of Skelly Oil Company for a dual completion and water injection well, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Skelly Waterflood Unit Well No. 3 located in Unit D of Section 22, Township 17 South, Range 31 East, Eddy County, New Mexico, in such a manner as to permit the production of oil from the Fren-Seven Rivers Pool and the injection of water into the Grayburg-Jackson Pool through parallel strings of tubing.

- CASE 4875: Application of ESH Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Lower San Andres formation in the perforated interval from 5144 feet to 5170 feet in its Hobbs State Well No. 5 located in Unit F of Section 29, Township 18 South, Range 38 East, Hobbs Field, Lea County, New Mexico.
- CASE 4876: Application of Gulf Oil Corporation for an unorthodox oil well location and amendment of Order No. R-2248, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its West Dollarhide Devonian Unit Well No. 118 at an unorthodox location 2540 feet from the South line and 1420 feet from the West line of Section 33, Township 24 South, Range 38 East, West Dollarhide-Devonian Pool, Lea County, New Mexico. Applicant further seeks the amendment of Order No. R-2248 to provide for administrative approval of additional production and injection wells in the aforesaid unit at unorthodox locations.
- CASE 4877: Application of Texas Pacific Oil Company, Inc. for two non-standard oil proration units and a non-standard location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard proration unit comprising the NE/4 NW/4 and NW/4 NE/4 of Section 2 to be dedicated to its State "C" Well No. 1 located in Unit B and a 40-acre non-standard proration unit comprising the SE/4 NW/4 of Section 2 to be dedicated to its State "C" Well No. 2 located in Unit F of Section 2 and an 80-acre standard proration unit comprising the E/2 NE/4 of Section 2 to be dedicated to its State "D" Well No. 1 at an unorthodox location in Unit A of Section 2, Township 12 South, Range 33 East, Bagley Siluro-Devonian Pool, Lea County, New Mexico.
- CASE 4878: Application of Harding Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Strawn and Atoka formations underlying the E/2 SE/4 of Section 10, Township 17 South, Range 37 East, Lea County, New Mexico, to be dedicated to a Humble City Field extension well to be drilled at a standard location for said pools; also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.
- CASE 4879: Application of Atlantic Richfield Company for gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard proration unit comprising the N/2 of Section 30, Township 23 South, Range 37 East, to be dedicated to its Eva Blinbry Wells Nos. 2 and 7 located in Units D and G, respectively, of said Section 30; a 320-acre non-standard proration unit comprising the E/2 of Section 26, Township 22 South, Range 36 East to be dedicated to its McDonald State Wells Nos. 8 and 9 located in

(Case 4879 continued from page 2)

Units P and G, respectively, of said Section 26, and a 640-acre standard gas proration unit comprising all of Section 15, same township, to be dedicated to its McDonald State Wells Nos. 13, 14, and 15 located in Units P, G, and L, respectively, of said Section 15, Jalmat Gas Pool, Lea County, New Mexico.

CASE 4880: Application of Jake L. Hamon for the amendment of Order No. R-638-C, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-638-C which established 150 barrels of oil per day as the maximum allowable for the South Knowles-Devonian Pool. Applicant proposes that the regular 80-acre depth bracket allowable be applied to said pool.

CASE 4881: Application of Anadarko Production Company for two unorthodox oil well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill two wells at unorthodox locations 1980 feet from the South line and 1310 feet from the West line of Section 9 and 1310 feet from the North line and 1980 feet from the East line of Section 16, both in Township 18 South, Range 29 East, Loco Hills Pool, Eddy County, New Mexico.

Applicant further seeks the adoption of a procedure for administrative approval of additional production and injection wells in its Far West Loco Hills Sand Unit at unorthodox locations.

CASE 4882: Application of Shell Oil Company for a waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the San Andres formation through the following five wells in the Cato-San Andres Pool, Chaves County, New Mexico: Amoco Federal Wells Nos. 4, 6, 7, and 8 in Units G, O, E, and M, respectively, of Section 33 and Hodges Federal B Well No. 4 in Unit M of Section 34, all in Township 8 South, Range 30 East.

CASE 4883: Application of El Paso Natural Gas Company for non-standard gas spacing units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the following non-standard gas spacing units adjacent to the Blanco-Pictured Cliffs Pool in Township 31 North, Range 9 West, San Juan County, New Mexico:

A 145.6-acre unit comprising lots 9 and 10 and 15 through 18 of Section 31;

A 153.5-acre unit comprising lots 14 through 17 of Section 30 and lots 7 and 8 of Section 31;

A 156.5-acre unit comprising lots 17 and 18 of Section 19 and lots 6 through 9 of Section 30;

A 152.6-acre unit comprising lots 7 through 10 and 15 and 16 of Section 19.

CASE 4853: (Continued and Readvertised)

Application of El Paso Natural Gas Company for amendment of gas well testing procedures, San Juan Basin, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the gas well testing procedures for the San Juan Basin, New Mexico, promulgated by Order No. R-333-F, as amended, to remove the requirement for annual deliverability and shut-in pressure tests for marginal wells.

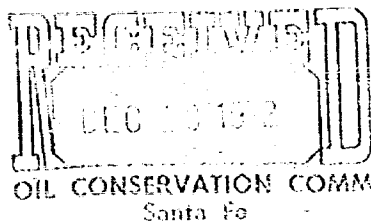
Applicant further requests the Commission to consider:

1. Other means of avoiding or minimizing the loss of pipeline availability attributable to the period wells in prorated pools are shut in in order to conduct the annually required deliverability and shut-in pressure tests;
2. Exempting wells in non-prorated pools from the annual deliverability and shut-in pressure requirements; and,
3. Exempting all wells in the San Juan Basin from the requirement for annual shut-in pressure tests as provided in the General Rules and Regulations.

CASE 4884: Application of Colorado Plateau Geological Services, Inc., for an extension of Order No. R-4227, McKinley County, New Mexico. Applicant, in the above-styled cause, as managing agent for oil and gas for the Henry Birdseye Estate, seeks a one-year extension to certain provisions of Order No. R-4227 which, as amended by Order No. R-4227-A, required that certain of the Birdseye wells in the Chaco Wash Mesaverde Oil Pool be placed on active production or water injection by December 31, 1972, or be plugged and abandoned. Applicant, or United States Fidelity and Guaranty Company, or any other interested party will be permitted to show cause why the effective date of the aforesaid order should not be enforced.

CASE 4885: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit John Lemley and Juanita Franks and Aetna Casualty and Surety Company and all other interested parties to appear and show cause why the Lemley and Franks Greathouse Well No. 1, located in Unit F of Section 10, Township 23 North, Range 1 West, Rio Arriba County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

WHITE,
KOCH, KELLY
&
McCARTHY



December 11, 1972

New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

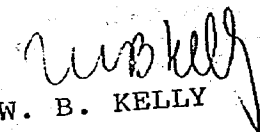
Re: Case number 4869

Gentlemen:

By this letter I enter my appearance on behalf of Tenneco Oil Company in opposition to the application referred to above. I ask that the testimony received by the commission at the November 29th hearing be incorporated into the record of the December 19th hearing.

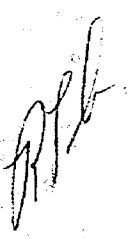
It is my understanding that no additional testimony will be offered by the applicant, Mr. Kennedy. Please advise if you become aware of any other party wishing to submit testimony.

Sincerely,


W. B. KELLY

WBK/sr

cc: Burr and Cooley
Mr. Babayak



L.C. White
Sumner S. Koch
William Booker Kelly
John F. McCarthy, Jr.
Kenneth Bateman
Benjamin Phillips
Ronald M. Friedman

Attorneys and Counselors at Law

220 Otero St., P.O. Box 787, (505)982-4374, Santa Fe, N.M. 87501 — P.O. Drawer E, (505)758-4338, Taos, N.M. 87571

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1

CURRENT STATUS
LONE PINE DAKOTA "D" UNIT
November 1, 1972

CASE NO. 4869

Filed by Tenneco

Date 11/29

Current Daily Production

Oil - 2,094 BO
Gas - 4,254 MCF
Water - 588 BW
GOR - 2,031

Current Daily Injection

Gas - 5,508 MCF
Water - 588 BW

Cumulative Production

Oil - 1,408,437 Barrels
Gas - 1,700 MMCF (est)
Water - 600,000 Barrels (est)

Cumulative Injection

Gas - 932,818 MCF
Water - 88,112 Barrels

No. of Producing Wells

16

No. of Gas Inj. Wells

3

No. of Wtr Inj. Wells

2

Total Active Wells

21

5 inactive
wells
not gas producing

BEFORE EXAMINER STAMPS
OIL CONSERVATION COMMISSION

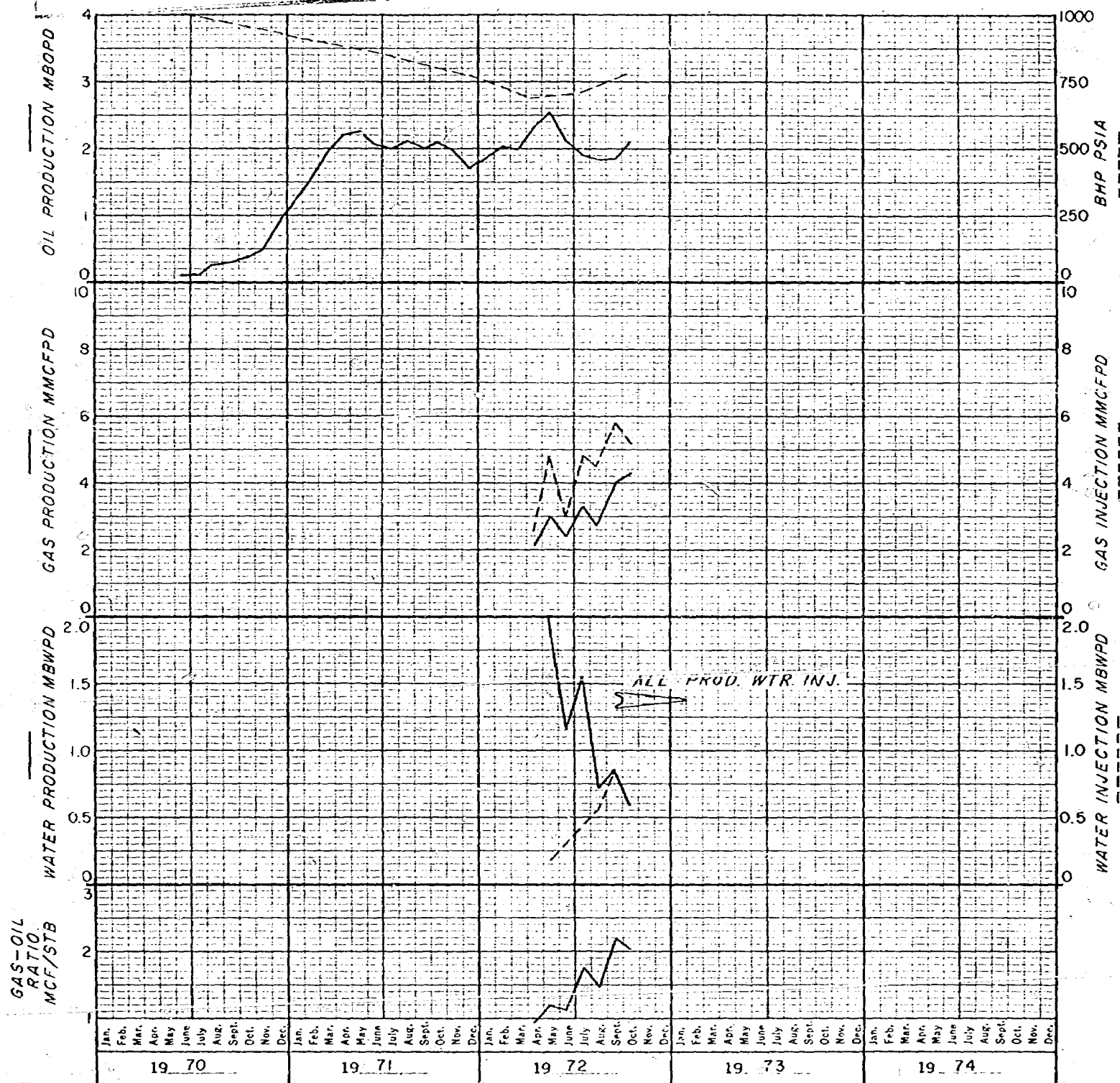
EXHIBIT NO. 2

CASE NO. 4869

Submitted by Tenneco

Filing Date 11/29/72

TENNECO OIL COMPANY
SUBSIDIARY OF TENNECO INC.
LONE PINE DAKOTA "D" UNIT
Mc KINLEY COUNTY, NEW MEXICO
PRESSURE, PRODUCTION AND
INJECTION HISTORY
W.E.B. 11-9-72



~~TABLE 4~~
 LONE PINE DAKOTA "D" UNIT
 PRODUCTION/INJECTION VOLUMES
 4/1/72 to 10/1/72

Month	Oil	Production		Res. Barrels Prod.	Injection		Res. Barrels Inj.	Diff. Res. bbls Inj.-Prod.	Psi
		Gas	Wtr		Gas	Wtr			
April	70805	64157	63000	198450	67051		239370	40920	+4
May	78525	93909	64878	291803	146687	5736	525140	233337	+2.05
June	64029	71985	34500	206550	89417	8790	340110	133560	+2.05
July	60019	103926	48344	325655	148087	12807	519777	194122	+17.5
August	57560	85288	22155	231973	139217	17066	487289	255316	+ 23
September	55676	121636	25491	343770	171620	25491	571500	227730	+21.6
October	64920	131879	18222	353028	170733	18222	548111	195083	+19.2
									<u>+116.8</u>

TOTAL

1,280,068

ENGINE EXAMINER STAFF'S
 OIL CONSERVATION CO. ION

EXHIBIT NO. 3

CASE NO. 4869

Inspected by Tenneco

Issuing Date 11/29/72

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

EXHIBIT NO. 4

CASE NO. 4869

Submitted by Tenneco

Hearing Date 11/29/72

BSK Edna Tract
Gas Sales/Voidage Calculation

Month	MCF Gas Sales	Bg RB/SCF	Reservoir Bbls injected	Oil Sales	Bo	Reservoir Bbls Prod.	Diff Prod-Inj.
Aug.	586	.0035	2051	2662	1.546	4115	2064
Sept.	300	.00333	999	2982	1.554	4634	3635
Oct.	91	.00321	292	3100 (e)	1.56	4836	4544
	—	—	—	—	—	—	—
TO 11/1/72	977		3342	8744		13585	10243

* - gas sales to Unit commenced in August, 1972

(e) - estimated

NEW YORK STATE
OIL CONSERVATION COMMISSION

EXHIBIT NO. 4a

CASE NO. 4869

Submitted by Kenneco

Hearing Date 11/29/72

Kennedy Tract
Oil In Place by Phase

Acre feet - 168

Oil in Place - 479 B0/Ac-ft x 168 Ac-ft = 80,472 B0

Phase 1 Recovery - 30% = 24,142 B0

Phase 2 Recovery - 25% = 20,118 B0

Total 55% 44,260 B0

Estimated Production to 11-1-72 = 32,238 B0

Remaining Tract Oil 12,022

Percentage of Tract Oil Recovered - 72.8 %

Percentage of Phase 1 Recovered - 133.5%

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

EXHIBIT NO. 5

CASE NO. 4869

Submitted by Tenneco

Hearing Date 11/29/72

Comparison of Kennedy Tract
Performance with LPDDU

	<u>Unit</u>	<u>Kennedy</u>
Rec Phase 1	3,180,000	24,142
Rec Phase 2	<u>2,650,000</u>	<u>20,118</u>
Total	5,830,000	44,260
Cum Prod to 11/1/72	1,408,517	32,238
% of Prim Recovered	44.3	133.5
% of Total Recovered	24.2	72.8

No reason unit
parameters should
not apply to
Kennedy well

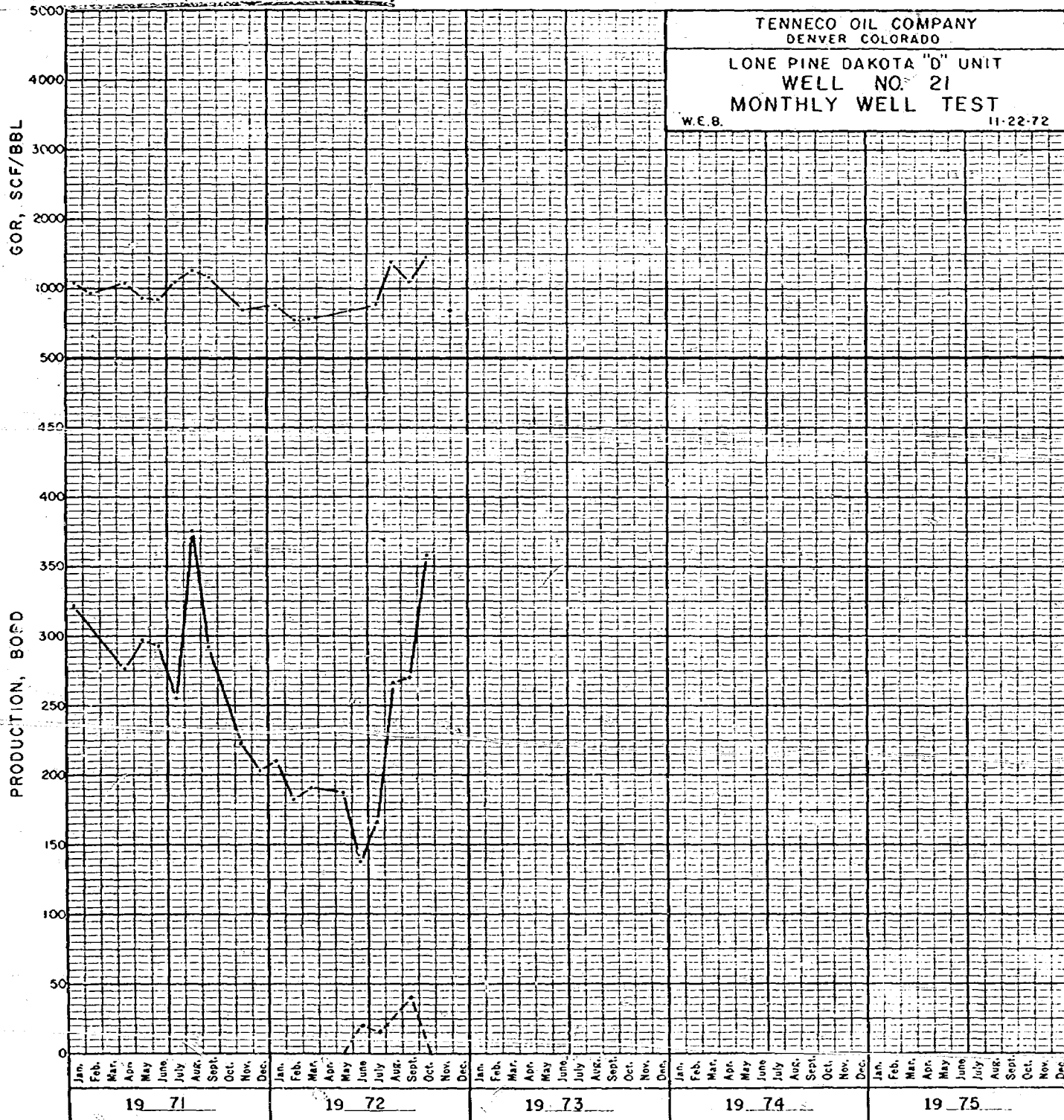
UNITED MINER STAMETS
OIL PRODUCTION COMMISSION

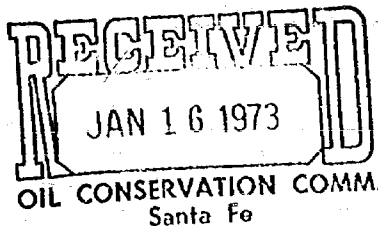
EXHIBIT NO. 6

CASE NO. 4869

Submitted by Tenneco

Filing Date 11/29/72





BURR & COOLEY
ATTORNEYS AND COUNSELORS AT LAW
SUITE 152 PETROLEUM CENTER BUILDING
FARMINGTON, NEW MEXICO
87401

JDEL B. BURR, JR.
WM. J. COOLEY

TELEPHONE 325-1702
AREA CODE 505

January 15, 1973

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Enclosed herewith are original and two copies of Application for Hearing De Novo in Case No. 4869.

Very truly yours,

BURR & COOLEY

By

[Signature]
William J. Cooley

WJC:jjh
Encls.

cc: White, Koch & Kelly
P. O. Box 787
Santa Fe, New Mexico 87501

DOCKET MAILED

Date 1-18-73

*for Feb. 7d
Reg. hearing*



BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO
IN THE MATTER OF THE APPLICATION
OF

CASE NO. 4869
Order No. R-4454

CLAUDE C. KENNEDY

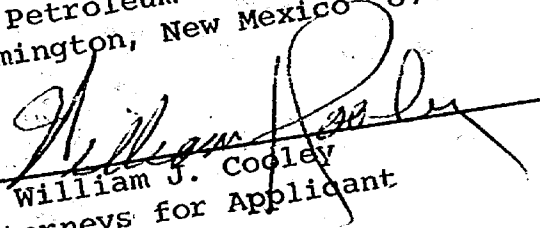
FOR THE AMENDMENT OF ORDER NO.
R-4263, MCKINLEY COUNTY, NEW
MEXICO.

APPLICATION FOR HEARING DE NOVO

COMES NOW the Applicant, Claude C. Kennedy, by and through his
attorneys, BURR & COOLEY, 152 Petroleum Center Building, Farmington,
New Mexico, and would show the Commission that he has been adversely
affected by Commission Order No. R-4454 issued after the examiner
hearing in Case No. 4869.

For the foregoing reason, Applicant hereby respectfully requests
the Commission for a hearing de novo in Case No. 4869, pursuant to
applicable rules and regulations of the Oil Conservation Commission
and statutes of the State of New Mexico.

BURR & COOLEY
152 Petroleum Center Building
Farmington, New Mexico 87401

BY 
William J. Cooley
Attorneys for Applicant

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

November 6, 1972

Case 4869

Burr and Cooley
Suite 152 Petroleum Center Building
Farmington, New Mexico 87401

Attention: Mr. Joel B. Burr, Jr.

DOCKET MAILED

Gentlemen:

Date: 11-17-72

We hereby acknowledge receipt of your application to amend Commission Order No. R-4263 as follows:

1. To require that all wells drilled within the Lone Pine Dakota "D" Unit be drilled on locations no closer than 330 feet from the boundary of the quarter-quarter section in which any such well is located.

2. To prohibit the transfer of allowable to any well located closer than 1320 feet from the outer boundary of the unit area.

Further, to revoke Administrative Order No. NSL-586, dated November 1, 1972, which order authorized Tenneco Oil Company to drill its proposed Lone Pine Dakota "D" Unit No. 29 Well at a location 2300 feet from the south line and 1450 feet from the west line of Section 8, Township 17 North, Range 8 West.

Your application for the above-described three items will be docketed for hearing at the examiner hearing scheduled to be held at 9:00 o'clock a.m., November 29, 1972.

However, the Commission will take no action at this time with respect to the effectiveness of Administrative Order No. NSL-586.

Yours very truly,

A. L. PORTER, Jr.
Secretary-Director

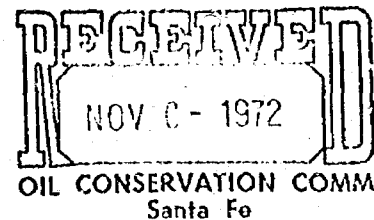
ALP/dr

cc: U. S. Geological Survey - Roswell
Tenneco Oil - Denver, Colorado
Attention: Mr. R. A. Williford

DOCKET MAILED

Date: 11-17-72

C
O
P
Y



BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION

OF

CLAUDE C. KENNEDY

For Amendment of Order No. R-4263
and for Revocation of Administrative
Order No. N.S.L. 586

Cas 4869

APPLICATION

COMES NOW the Applicant Claude C. Kennedy and respectfully
makes application to the Oil Conservation Commission of New
Mexico to amend Order No. R-4263 as follows:

1. To require that all wells drilled within the Lone Pine
Dakota "D" Unit be drilled on locations no closer than 330 feet
from the boundary of the quarter-quarter section in which any
such well is located, and

To prohibit the transfer of allowable to any well located
closer than 1320 feet from the outer boundary of the unit area.

Applicant further requests that the Commission revoke
Administrative Order No. N.S.L. 586 dated November 1, 1972,
which order authorized Tenneco Oil Company to drill its proposed
Lone Pine Dakota "D" Unit No. 29 well at a location 2300 feet
from the south line and 1450 feet from the west line of Section
8, Township 17 North, Range 8 West, Lone Pine Dakota "D" Oil

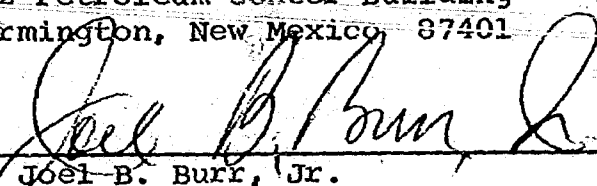
Applicant further requests the Commission to immediately
stay Administrative Order No. N.S.L. 586 until such time as this
application can be heard and finally adjudicated.

In support of the foregoing application, Applicant alleges that the correlative rights of the working interest owners, as well as the royalty owners under the East Half of the Northwest Quarter (E/2 NW/4), Section 8, Township 17 North, Range 8 West, N.M.P.M., will be irreparably damaged if Tenneco is permitted to drill its proposed L.P.D.D.U. No. 29 well at the above stated location under the present rules governing the pressure maintenance project in the Lone Pine Dakota "D" Unit as set forth in Order No. R-4263.

WHEREFORE, the Applicant prays that this matter be set down for hearing at the examiner's hearing scheduled on November 29, 1972, and that the above requested relief be granted.

BURR & COOLEY
152 Petroleum Center Building
Farmington, New Mexico, 87401

By


Joel B. Burr, Jr.
Attorneys for Applicant

DRAFT

WFC/dr

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4869 (DE NOVO)

Order No. R- 4454-A

APPLICATION OF CLAUDE C. KENNEDY
FOR THE AMENDMENT OF ORDER NO.
R-4263, MCKINLEY COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 7, 1973,
at Santa Fe, New Mexico, before the Oil Conservation Commission
of New Mexico, hereinafter referred to as the "Commission."

NOW, on this _____ day of February, 1973, the Commission,
a quorum being present, having considered the testimony presented
and the exhibits received at said hearing, and being fully advised
in the premises,

FINDS:

(1) That the applicant's request for dismissal should be
granted.

IT IS THEREFORE ORDERED:

That Case No. 4869 (de novo) is hereby dismissed.

DONE at Santa Fe, New Mexico, on the day and year hereinabove
designated.

DRAFT

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

RLS/dr

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4869

Order No. R-4454

APPLICATION OF CLAUDE C. KENNEDY
FOR THE AMENDMENT OF ORDER NO.
R-4263, MCKINLEY COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 19, 1972,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of Dec, 1972, the Commission,
a quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Claude C. Kennedy, is the owner-
operator of the BSK Edna Well No. 1, located in Unit F of
Section ⁸ 21, Township 17 North, Range 8 West, NMPM, Lone Pine-
Dakota "D" Pool, McKinley Coun ty, New Mexico.

(3) That applicant's BSK Edna Well is offset by the Tenneco Oil Company Lone Pine Dakota "D" Pressure Maintenance Project.

(4) That Commission Order No. R-4263 permitted the transfer of allowables between wells in said pressure maintenance project.

(5) That the applicant seeks an amendment of said Commission Order to prohibit the transfer of allowable to any well located closer than 1320 feet to the outer boundary of the Lone Pine Dakota "D" Unit.

(6) That the applicant failed to establish that the transfer of allowables to wells within 1320 feet of the outer boundary of the ^Uunit and the assignment of up to two top unit allowables for the Lone Pine Dakota "D" Pool to project wells offsetting non-unitized wells ^{will not} will cause waste or violate correlative rights.

(7) That the assignment of not more than two top unit allowables for the Lone Pine-Dakota "D" Pool to any project proration unit offsetting non-unitized acreage ^{will not} could cause waste or violate correlative rights.

(8) That assignment and production of more than two top unit allowables for the Lone Pine-Dakota "D" Pool from any standard project proration unit offsetting non-unitized wells ^{producing from the same pool} should be ^{it is established} prohibited unless shown after notice and hearing that such limitation is causing waste or violating correlative rights.

(9) That the application should be denied.

IT IS THEREFORE ORDERED:

(1) That the subject application is hereby denied.

(2) That the limitation of production of no more than two times the top unit allowable for the Lone Pine-Dakota "D" Pool by any standard proration unit in the Tenneco Lone Pine Dakota "D" Pressure Maintenance Project offsetting non-unitized wells ^{producing from the same pool} is hereby continued.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.