

NEW MEXICO OIL CONSERVATION DIVISION

COMMISSION HEARINGSANTA FE, NEW MEXICOHearing Date JANUARY 14, 1999 Time 9:00 A.M.

NAME	REPRESENTING	LOCATION
Melvin C. Lee	Engineering Bureau	Santa Fe
Alan, [unclear]	Beaumont Resources - [unclear]	Beaumont
Koby [unclear]	Millington Resources - [unclear]	Beaumont
William [unclear]	Temple's San Juan + El [unclear]	Santa Fe

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

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

CASE NO. 111

IN THE MATTER OF THE HEARING CALLED BY)
THE OIL CONSERVATION DIVISION TO AMEND)
19 NMAC 15.C 107.J AND K OF ITS RULES)
AND REGULATIONS PERTAINING TO TUBING AND)
CASING SIZES AND TO GIVING THE DISTRICTS)
AUTHORITY TO GRANT ADMINISTRATIVE)
EXCEPTIONS)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS
COMMISSION HEARING

BEFORE: LORI WROTENBERY, CHAIRMAN
WILLIAM J. LEMAY, COMMISSIONER
JAMI BAILEY, COMMISSIONER

January 14th, 1999
Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission, LORI WROTENBERY, Chairman, on Thursday, January 14th, 1999, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

STEVEN T. BRENNER, CCR
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January 14th, 1999
 Commission Hearing
 CASE NO. 12,117

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A P P E A R A N C E S

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By: W. THOMAS KELLAHIN

* * *

1 WHEREUPON, the following proceedings were had at
2 9:10 a.m.:

3 CHAIRMAN WROTENBERY: Next, we have a couple of
4 rulemaking matters on our agenda, and these rulemakings are
5 at various stages of development. I think we'll take up
6 first the ones that are furthest along in the process.

7 Let me ask Rand Carroll, the Division's legal
8 counsel, should we take the tubingless completion and the
9 multiple completions together, or do you want to take those
10 up separately?

11 MR. CARROLL: I prefer they be taken up
12 separately.

13 CHAIRMAN WROTENBERY: Okay. Then we'll start
14 with Case 12,117, the matter of the hearing called by the
15 Oil Conservation Division, to amend 19 NMAC 15.C 107.J and
16 K of its Rules pertaining to tubing and casing sizes and to
17 give the District Office authority to grant administrative
18 exceptions.

19 We circulated copies of a draft of the proposed
20 rule changes with the docket for this particular hearing.
21 I believe, Rand, you'll make an appearance in this
22 particular case today; is that right?

23 MR. CARROLL: Yes, may it please the Commission,
24 my name is Rand Carroll appearing on behalf of the Oil
25 Conservation Division. I'll have one witness in this case.

1 CHAIRMAN WROTENBERY: Okay. And are there any
2 other appearances in this particular case?

3 MR. KELLAHIN: May it please the Commission, I'm
4 Tom Kellahin of the Santa Fe law firm of Kellahin and
5 Kellahin, appearing on behalf of the New Mexico Oil and Gas
6 Association and Burlington Resources Oil and Gas Company.
7 We have one witness to be sworn.

8 CHAIRMAN WROTENBERY: Okay.

9 MR. KELLAHIN: We're here in support of the rule
10 change.

11 CHAIRMAN WROTENBERY: Thank you.

12 Would both witnesses stand and be sworn at this
13 time?

14 (Thereupon, the witnesses were sworn.)

15 CHAIRMAN WROTENBERY: Rand, would you like to go
16 first or --

17 MR. CARROLL: Madame Chair, with your permission
18 I'd like to defer to Burlington, which has a fairly
19 extensive presentation on 107. And it was at their urging
20 that the Division consider the amendments to Rule 107.

21 CHAIRMAN WROTENBERY: Okay, thank you.

22 Mr. Kellahin?

23 MR. KELLAHIN: Madame Chair, thank you.

24 May it please the Commission, back in the early
25 fall of last year, Burlington and the Association

1 approached the Division asking them to consider
2 modifications to Rule 107.

3 Rule 107 deals with the tubing requirements and
4 establishes a process where an Applicant can file an
5 Application with the District Supervisor and obtain
6 approval for tubingless completions if they comply with
7 certain requirements. We will show you the existing
8 requirements.

9 Those are found under Rule 107.K. They provide
10 that if the well is of a certain minimum depth, that if
11 it's not a wildcat well, if there's no known corrosion or
12 pressure problems, if it's not to be a dual completion, and
13 if the tubing to be substituted for the casing is not in
14 excess of 2 7/8 inch, then the District Supervisor can
15 approve it.

16 Under Rule 107.J, there is a procedure by which
17 the Division Director can approve other types of tubingless
18 completions.

19 Since 1996, Burlington has, in the San Juan
20 Basin, processed perhaps 80 or 90 such applications.
21 There's never been an example in which it has been opposed
22 or set for hearing, and it is a matter of such routine that
23 we have recommended to the Division that this process could
24 be accomplished by the District Supervisor.

25 And so, in principle, we are asking that instead

1 of having exceptions processed in Santa Fe -- Roy Johnson
2 is currently doing those -- that that entire activity be
3 processed by a District Supervisor. We think it's an
4 operational matter between the operator and the agency.
5 There has never been a notice procedure set forth in this
6 rule. We talked about it at the Association committee
7 meeting on Tuesday. No one is aware of any reason an
8 offset operator would care. It's an activity by that
9 operator with the approval of the Division.

10 In addition, Burlington has found that current
11 practice and technology, particularly for the Pictured
12 Cliff formation in the San Juan Basin, makes it very
13 feasible and suitable to use tubingless completions with a
14 casing size of 3 1/2 inch. So we have proposed to the
15 Division that the rule be relaxed so that we could have
16 tubingless completions for our gas wells, so long as the
17 casing size didn't exceed 3 1/2 inches.

18 We discussed that at the meeting on Tuesday, and
19 we found that Amoco and others had obtained approval for
20 tubingless completions using casing sizes as large as 5 1/2
21 inches. So you may decide that there is no reason to limit
22 it to 3 1/2 inches. That's your choice. We don't have a
23 strong urgency to limit it to 3 1/2 inches.

24 My witness is an engineer. His name is Koby
25 Killion. His last name rhymes with "million", it's

1 K-i-l-l-i-o-n. His first name is spelled with a K,
2 K-o-b-y.

3 Mr. Killion is an expert in these matters. He
4 has been involved in almost all of these for Burlington.
5 And with your permission, then, we'll walk through some of
6 his examples so that you have some visual references to see
7 some schematics and see how this activity takes place.

8 It is my understanding that the operators in
9 southeastern New Mexico seldom avail themselves of
10 exceptions from this rule, largely because production of
11 gas wells in southeastern New Mexico, in many instances,
12 has some liquids associated with it. And so it is their
13 custom and practice to have tubing in their wells there,
14 simply to aid in the lifting of those liquids.

15 In the San Juan Basin, particularly for the dry
16 gas pools, and extensively in the Pictured Cliff, tubing is
17 eliminated. That elimination of tubing, as Mr. Killion
18 will testify, is of significance. It saves them, per well,
19 almost \$30,000. It also improves the efficiency of lifting
20 the dry gas hydrocarbons in wellbores configured in this
21 fashion, and Mr. Killion can describe that for you.

22 So with your permission and that introduction,
23 we'll turn to his exhibit book and show you the specifics.

24 CHAIRMAN WROTENBERY: Could I ask you to repeat
25 one thing that you said, about the numbers of these

1 applications that are submitted? You said 80 to 90, but I
2 didn't catch the period.

3 MR. KELLAHIN: Mr. Killion has the specifics --

4 CHAIRMAN WROTENBERY: Okay.

5 MR. KELLAHIN: -- he'll show those to you behind
6 Exhibit Tab Number 3 --

7 CHAIRMAN WROTENBERY: Okay.

8 MR. KELLAHIN: -- in fact, he's listed all of
9 them.

10 CHAIRMAN WROTENBERY: Thank you.

11 MR. KELLAHIN: They are tubingless completions
12 processed for the Pictured Cliff reservoir since 1996. I
13 forgot the exact number. There's more than 80 of them, I
14 think.

15 KOBY KILLION,

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

18 DIRECT EXAMINATION

19 BY MR. KELLAHIN:

20 Q. For the record, sir, would you please state your
21 name and occupation?

22 A. Koby Killion, reservoir engineer for Burlington
23 Resources.

24 Q. Mr. Killion, you'll have to speak up. The
25 microphone does not amplify your voice. It's for the court

1 reporter, and there's a fan overhead that has a background
2 hum to it, so if you'll speak up, sir.

3 On prior occasions have you ever testified before
4 the Division?

5 A. No, I have not.

6 Q. Summarize for us your education.

7 A. I graduated in 1995 from Texas Tech University in
8 Lubbock, Texas.

9 Q. And your current position with Burlington is in
10 what activity, sir?

11 A. I am currently the reservoir engineer for the
12 Pictured Cliffs restimulation team in Farmington.

13 Q. As part of that team, are you involved on a
14 regular basis with the Rule 107 of the Division rulebook?

15 A. Yes, I am.

16 Q. How long have you been involved with looking at
17 tubingless completions for the Pictured Cliff reservoir in
18 the San Juan Basin?

19 A. I've personally been involved with the process
20 since 1996, when the Pictured Cliffs restimulation team was
21 formed, and this was our first attempt at reducing costs in
22 this tight reservoir to make them more economical to
23 produce their existing reserves in place.

24 Q. As a consequence of that effort, have you and
25 representatives of Burlington filed applications before the

1 Division for exceptions from Rule 107?

2 A. Yes, we have.

3 MR. KELLAHIN: We tender Mr. Killion as an expert
4 witness.

5 CHAIRMAN WROTENBERY: So qualified.

6 Q. (By Mr. Kellahin) Let's turn to the exhibit
7 book, Mr. Killion, and let's start -- We're going to skip
8 around just a little bit. Let's pass Exhibit 1, which is
9 simply a cop of the draft rule changes, and turn to the
10 first foldout behind Exhibit Number 2. When we look at
11 this plat, what are we looking at?

12 A. This map shows the locations of 135 Pictured
13 Cliffs projects submitted and approved for tubingless
14 completion orders since 1996.

15 The heavy outlines represent the current field
16 boundaries in the Pictured Cliffs formations in the San
17 Juan Basin, and you can see that our activity has been
18 confined primarily to Ballard, Fulcher-Kutz and Aztec PC
19 fields.

20 Q. Turn behind Exhibit Tab Number 2 and identify for
21 us what is shown behind Exhibit Tab Number 3.

22 A. This is a simple tabular listing of those same
23 projects, along with the tubingless completion order that
24 we have received. This listing shows the location of the
25 projects, the project top. We're principally involved with

1 redrills and restimulations in the Pictured Cliffs. It
2 shows the project year and then the field that the project
3 occurred in.

4 Q. How many wells are listed here, Mr. Killion?

5 A. There are 135 projects in this listing. 111 of
6 those are restimulations, and 24 are redrills.

7 Q. Have all of these been approved by the Division?

8 A. Yes, they have.

9 Q. Has the Division ever denied any of your
10 applications for tubingless completions?

11 A. No, they have not.

12 Q. Let's turn to Exhibit Tab Number 4, and let's
13 talk about some of the reasons for the rule change.

14 Does Burlington support changing this rule?

15 A. Yes.

16 Q. Does Burlington support allowing approval of this
17 activity and the exceptions from this rule to take place at
18 the District level?

19 A. Yes.

20 Q. Let's talk about the first item here -- the
21 second item. It says "Why Tubingless" completion? Let's
22 talk about your opinions concerning the advantages of
23 tubingless completions in the reservoirs that you're
24 working.

25 A. Well, most importantly, tubingless completions

1 allow us to complete these projects much more economically
2 than tube completions. We have averaged a cost savings of
3 just over \$29,000 per well with tubingless completions in
4 the Pictured Cliffs.

5 We also feel that we have lessened our risk
6 during future workovers, since there will be no tubing in
7 the well to become stuck over time.

8 We also have seen significant flow-rate increases
9 during production, due to the larger diameter tubulars.

10 Q. Let's go down to the bottom, it says "Economic
11 Summary". Describe for us your example here that supports
12 your conclusion about the magnitude of economic savings.

13 A. This is -- basically, the four columns -- the
14 column on the far left, the first column, is a list of our
15 economic indicators that we as a company use to identify
16 and support projects.

17 The second column shows the cost and those
18 associated indicators without running tubing, or a
19 tubingless instance.

20 The third column shows the associated economics
21 with running tubing in these projects.

22 And then the final column, then, is just a simple
23 difference between the two.

24 And as you can see, in every instance our
25 projects are more economical when we eliminate running

1 tubing strings. For instance, we're able to lessen the
2 payout after restimulation by two years, from seven years
3 down to five years, without running the tubing.

4 And most important to Burlington is the profit-
5 to-investment ratio that you see the fifth line down. You
6 can see that our PI, as it's called, increases almost 100
7 percent, from a .23 to a .4, which in many cases allows us
8 to receive funding for those projects, which otherwise may
9 not have been funded.

10 Q. This economic summary is based upon your analysis
11 of the Pictured Cliff wells that you've worked on?

12 A. Yes.

13 Q. Let's go to the top heading and talk about the
14 specific advantages of the change in size in the rule.
15 Current rule limits tubingless completion sizes to 2 7/8
16 inch?

17 A. Yes, sir.

18 Q. You're requesting that it be increased at least
19 to 3 1/2 inch?

20 A. Yes, sir.

21 Q. Describe for us what that matters.

22 A. Well, there are several advantages to running
23 3-1/2-inch casing tubingless over 2-7/8-inch casing.
24 First, we feel that the larger wellbore, larger 3-1/2-inch
25 wellbore, offers more flexibility to the operator in both

1 completion production practices now and long term, as more
2 slimhole technology advances occur.

3 We've also seen improved success during fishing
4 operations in 3-1/2-inch casing.

5 We've found that the 3-1/2-inch wellbore is
6 easier to clean up after stimulation, which results in a
7 reduced project cost.

8 There are currently more completion and workover
9 tools available in 3-1/2-inch casing.

10 We're able to run larger tubing if fluid
11 production does indeed occur in the future, to help
12 minimize waste.

13 We've also seen reduced stimulation costs, due to
14 less friction pressure during interval treatment.

15 And the final point there is that there are
16 currently more options available if artificial lift does
17 become necessary to prevent waste in the future.

18 Q. Are you aware of any kind of waste issue if this
19 rule is changed? Is there any compromise in your ability
20 to produce the hydrocarbons in the reservoir if this rule
21 is changed?

22 A. In the dry portions of the Pictured Cliff
23 reservoir I feel that there is no harm of waste. Our
24 current practice in the more wet areas is to, indeed, run
25 tubing strings to help produce those liquids.

1 Q. So the operator decision by Burlington and
2 others, to the best of your knowledge, is to make a choice
3 about whether or not they have dry gas or liquids
4 associated. If it's dry gas production, then there's a
5 significant advantage to the tubingless completions?

6 A. Yes.

7 Q. Do you see any reason that -- Under the current
8 procedure, are you required to notify anyone if you ask for
9 a tubingless completion?

10 A. No, we are not.

11 Q. Do you see any reason to provide notice to
12 anyone?

13 A. No, I do not.

14 Q. If Amoco is an offset operator during this
15 process, would it be of interest to you to know about it?

16 A. No, it would not.

17 Q. In the final portion of your summary you said,
18 "Why should the rule be revised?" You can summarize those
19 for us. I think you've covered some of them.

20 A. The first point there is that it would eliminate
21 the tubingless completion application for wells with 3-1/2-
22 inch casing or smaller. The significance of that would be
23 that it would reduce the amount of paperwork completed and
24 reviewed by both the operator and the regulatory agency on
25 qualified wells.

1 It would help to streamline and improve the
2 process by eliminating the 30-day approval period that
3 we're currently averaging on qualified wells.

4 And finally, it removes -- or moves
5 responsibility from the Directors and Examiners to the
6 District Supervisors on tubingless completion applications
7 with casing in excess of 3 1/2 inch.

8 Q. Let me talk about the processing period. This
9 period is associated with the time between the date the
10 information is submitted to the Division and, on average,
11 the time it takes to get the approval back?

12 A. Yes.

13 Q. All right. Let's turn to an example of what
14 those look like. If you'll look behind Exhibit Tab Number
15 5, what is the first document we see?

16 A. The first document is the actual administrative
17 order that we received after application.

18 Q. All right. My copy doesn't have the signature
19 page attached to it, but the first page, in fact, is the
20 kind of approval you get back?

21 A. Yes.

22 Q. It's assigned administrative order number, it's a
23 TX number, and then you get a letter back?

24 A. Yes.

25 Q. All right. What type of information is

1 submitted? If you'll turn to the next cover sheet,
2 describe for us what Burlington submits to the Division.

3 A. This is a copy of our application. In this
4 instance there's several redrill wells that we have
5 submitted for tubingless completion approval.

6 After showing that they do meet the requirements
7 of sub-rule K, we then submit a pertinent data sheet and
8 wellbore schematic with each of those projects, along with
9 the application.

10 Q. In this case, the exception from the rule you're
11 seeking is the current limitation of the 2-7/8-inch?

12 A. Yes.

13 Q. All right. Let's turn to an example of the
14 schematics that are submitted so we can give them a visual
15 illustration of what you're doing, Mr. Killion. If you'll
16 turn to Exhibit 6, let's look at the schematic for the
17 Morris A 7 well. Start with the left side and show us the
18 current.

19 A. This is a wellbore schematic of a typical
20 Pictured Cliffs open hole completion, completed typically
21 in the 1950s era.

22 What you typically have in an open hole
23 completion is a surface string, which will cement to
24 surface, and a 7-inch or a 5-1/2-inch casing string that
25 was topset in the Pictured Cliffs reservoir. So the

1 Picture Cliffs, then, was capable of drilled out and
2 completed open hole with nitroglycerine or sandhole fracs,
3 which were popular in that period.

4 You also see that they have a tubing string,
5 which is typically a 1-inch string.

6 The diagram on the right is the actual
7 restimulation project. And during that project we will
8 pull the old one-inch tubing, we'll drill out the open hole
9 interval to expose the entire productive formation. We'll
10 then run and cement our 3 1/2 to bottom, or run and cement
11 our 3 1/2 inch back to surface, and perforate and stimulate
12 the Pictured Cliffs reservoir. And finally, we'll produce
13 the well with the aid of compression. In this particular
14 example we show a tubing string, and so this would be our
15 wellbore schematic in a wet area.

16 Q. All right, let's turn to an example of a wellbore
17 configuration that would require an exception from current
18 Rule 107. If you'll turn to the Huerfanito Unit Number 20
19 well.

20 A. The current diagram on the left is the same as
21 the previous diagram. The only thing that's changed here
22 is the elimination of the tubing string on the proposed
23 diagram. So it's essentially the same process.

24 Q. This will be an example of a recompletion?

25 A. Restimulation.

1 Q. Restimulation? What would you do for a new
2 drill?

3 A. For a new drill we would have a 7-inch surface
4 string, cemented back to surface, and then we would
5 eliminate, of course, the 5-1/2-inch or the 7-inch casing
6 string, and it would be replaced with a 3-1/2-inch casing
7 string to bottom, which again would be cemented to surface.

8 And the same would apply for tubing, whether or
9 not it was a wet or a dry area.

10 Q. Let's turn back now to the proposed rule change.
11 If you'll look at Exhibit 1, this current proposed rule
12 draft is dated December 29th and was prepared by Mr.
13 Stogner. Are you familiar with this draft, Mr. Killion?

14 A. Yes, I am.

15 Q. With the exception of numbered paragraph 5, are
16 you in support of these other changes that he is proposing
17 in Rule 107.J?

18 A. Yes, I am.

19 Q. And to accomplish the delegation of this
20 authority to the District, Mr. Stogner is suggesting the
21 repeal of 107.K. Do you see that?

22 A. Yes, I do.

23 Q. Are you in support of that?

24 A. Yes, I am.

25 Q. As to subparagraph (5), do you see any reason to

1 set up a notice procedure for this particular activity?

2 A. No, I do not.

3 MR. KELLAHIN: That concludes my examination of
4 Mr. Killion.

5 We would move the introduction of his Exhibits 1
6 through 6.

7 CHAIRMAN WROTENBERY: We will accept Exhibits 1
8 through 6 into the record.

9 Are there any questions of Mr. Killion?

10 COMMISSIONER LEMAY: I have one.

11 EXAMINATION

12 BY COMMISSIONER LEMAY:

13 Q. Do you know the purpose for approval? I'm just
14 trying to go back a little ways. Why not have the
15 application submitted with the type of completion you were
16 going to do on the well without approval? What's the
17 purpose of the approval?

18 A. I guess the purpose of the approval -- You mean
19 of the application that we actually send in?

20 Q. Yeah. I mean in contrast to just a normal
21 completion of a well, the extra step involved in getting
22 this approval. What's the purpose involved in that.

23 A. I think that the main purpose of the approval is
24 for the Examiners and the Commissioners to ensure that
25 there is no waste occurring. I guess that we would not

1 want to go out and just give free will to tubingless
2 completions on that account. I'm not real certain why the
3 rule was in place.

4 COMMISSIONER LEMAY: Okay.

5 CHAIRMAN WROTENBERY: Commissioner Bailey?

6 EXAMINATION

7 BY COMMISSIONER BAILEY:

8 Q. Could you enumerate advantages and disadvantages
9 for protection of fresh water in these areas?

10 A. We -- With the current configuration of the
11 redrill, cementing our casing back to surface, with the
12 better design, the better casing strings, we currently do
13 have coverage, and are required to have coverage, over all
14 freshwater zones. In a restimulation, we currently are
15 bringing those into compliance at the time of plug and
16 abandonment.

17 Does that answer your question? I mean --

18 Q. For deeper aquifers, below the 950, is there a
19 potential advantage to your new proposed new well drilling
20 schematic? Because you mentioned cementing all the way
21 back to surface on the production string.

22 A. We -- The technology is currently in place to
23 provide adequate cementing across all zones from depths, in
24 slimhole cases, in particular, as deep as 10,000 feet back
25 to surface. So I don't see any potential problems with

1 freshwater aquifers at deeper depths.

2 CHAIRMAN WROTENBERY: Do you have another? Go
3 ahead.

4 COMMISSIONER LEMAY: Just a quick one.

5 FURTHER EXAMINATION

6 BY COMMISSIONER LEMAY:

7 Q. Are you doing this to any other formations in the
8 PC? Are you doing it with coal-seam wells? Have you tried
9 it with coal-seam wells? They're dry.

10 A. Currently, this is the only formation in the San
11 Juan Basin that I'm aware of that Burlington submits for
12 tubingless completion applications. Certainly, there are
13 other applications of this process.

14 CHAIRMAN WROTENBERY: I had a couple of questions
15 as well.

16 EXAMINATION

17 BY CHAIRMAN WROTENBERY:

18 Q. You answered a couple questions from Mr. Kellahin
19 about waste implications of these changes, particularly the
20 increase from 2 7/8 to 3 1/2 inch of the threshold casing
21 size, and if I understood you correctly you didn't feel
22 like there were any waste implications for dry gas wells.
23 But I'm thinking, if I understood your testimony correctly,
24 you do think that tubing should be used in wet-gas wells?

25 A. Our current practice is to include tubing strings

1 in areas that have known fluid production, to minimize
2 liquid loading in the wellbore. So that is -- I believe
3 that all prudent operators would follow that same line of
4 thinking, so that -- The reserves, certainly, are more
5 economical to us, and they're worth more value to us out of
6 the ground and not left in the formation. So I'm not aware
7 of anyone, particularly in the San Juan Basin, that does
8 not include tubing in areas that are indeed wet.

9 Q. Would you suggest, then, perhaps making this
10 change only for dry-gas wells?

11 A. The boundaries of wet and dry are, even to this
12 day and time, still being tested. For instance, in Ballard
13 field, the entire Ballard field is not completed -- is not
14 considered completely dry. There are some areas along the
15 fringe that, indeed, do produce water. And so I'm not
16 aware of a way that you would be able to blanketly say,
17 this area is wet, this area is dry. I think that it is
18 definitely a formation-specific process, as well as a
19 field-specific process.

20 Q. And one other questions, to try to -- to clarify
21 the amendments that you would suggest we do make to the
22 rule. I think you concurred with the change in number (2)
23 that Mr. Stogner included in his draft of the proposed
24 rule, and with the change in number (4), and then also you
25 concurred with the repeal of 107.K. But you didn't agree

1 with number (5). Are you proposing alternative language
2 for number (5), or are you proposing the deletion of that
3 particular paragraph entirely?

4 MR. KELLAHIN: Our proposal is simply to delete
5 paragraph (5). We are not aware of a case ever coming to
6 hearing for a tubingless completion. We think it's an
7 activity that can be handled by the Supervisor. I think
8 it's one of the examples -- You know, it's like filing an
9 APD with the necessary information. There's no hearing
10 process for that. It's simply an approval of arrangement
11 between the operator and the agency, and we don't see the
12 need to put a hearing procedure in here.

13 CHAIRMAN WROTENBERY: Okay, I believe that's all
14 I have for Mr. Killion.

15 Any other questions at this stage?

16 Thank you, Mr. Killion.

17 THE WITNESS: Thank you.

18 CHAIRMAN WROTENBERY: Mr. Carroll?

19 MR. CARROLL: Thank you. We call Michael Stogner
20 to the stand.

21 Chairman Wrotenbery, fellow Commissioners, what I
22 have given you is what has been marked OCD Exhibits Number
23 1 and 2. I have stapled them together. They're only one
24 page each.

25 The first page is a further draft from the

1 Division. It's a cleaner version of Mr. Stogner's December
2 29th draft of our proposed Rule 107.J. There's nothing of
3 substance changed, it just makes it a little cleaner.

4 The second page is the rule as it is currently
5 stated.

6 MICHAEL E. STOGNER,
7 the witness herein, after having been first duly sworn upon
8 his oath, was examined and testified as follows:

9 DIRECT EXAMINATION

10 BY MR. CARROLL:

11 Q. Mr. Stogner, will you please state your name and
12 your occupation for the record?

13 A. Michael Stogner, I'm a petroleum engineer with
14 the Engineering Bureau at the OCD.

15 Q. And Mr. Stogner, how long have you been in that
16 position?

17 A. I've got seven and a half years to retire from
18 25, so whatever that comes out to be.

19 (Laughter)

20 Q. (By Mr. Carroll) Is that about seventeen and a
21 half years?

22 A. Yeah.

23 Q. And what are your duties as a petroleum engineer
24 with the OCD?

25 A. Hearing Examiner, review administrative

1 applications, and various other duties as far as
2 engineering and the regulatory aspect of the OCD duties go.

3 Q. And your duties include reviewing completion
4 techniques on wells in New Mexico?

5 A. When I'm called upon to, yes.

6 Q. Mr. Stogner, have you testified before the Oil
7 Conservation Commission before and had your qualifications
8 as an expert witness in petroleum engineering matters
9 accepted?

10 A. Yes, I have.

11 MR. CARROLL: I tender Mr. Stogner as an expert
12 witness in petroleum engineering.

13 CHAIRMAN WROTENBERY: He's so qualified.

14 Q. (By Mr. Carroll) Mr. Stogner, you have reviewed
15 Burlington's proposal today, and you heard Burlington when
16 they testified that they were open to expanding the
17 tubingless exception past 3 1/3 inches to diameters above
18 3 1/2; is that correct?

19 A. That's what I understand, yes.

20 Q. And what's your opinion of that?

21 A. Okay, in looking at their exhibits, I concur with
22 what they're doing, where they're at. This is dry gas in
23 Pictured Cliffs. 107.J applies statewide, and this is what
24 we've got to remember. And I'm really questioning if
25 Burlington is here representing their resources statewide,

1 or just the Pictured Cliffs.

2 We have situations where if we open it up to
3 5 1/2 o.d. -- and I can visualize some deep gas wells down
4 in the southeast, old ones, say, that were drilled back in
5 the 1950s, and for the sake of saving a few bucks an
6 operator chooses to pull the tubing, and we may have some
7 sour gas problems.

8 We're going to be in danger of perhaps opening up
9 maybe some leaky pipe into other formations, harming
10 groundwater contamination.

11 I can also see where these slimholes, by allowing
12 that, could be drilled, that there may be some examples
13 where the surface casing and the production casing being so
14 small, especially if you hit a high-pressure sour zone down
15 in the southeast -- not in this area; I concur with what
16 they're doing in this area; but not down there, I do not --
17 you may have some channeling between the two casing
18 strings. I would have a problem about that.

19 So I don't agree with opening it up to 5 1/2.
20 And besides I think the rules, as we're proposing today,
21 can follow up on some other items such as this, even in the
22 southeast, and to even protect Burlington from other
23 situations.

24 Q. Mr. Stogner, you do agree with opening up to
25 3-1/2-inch for gas wells?

1 A. Yes, I do agree with that.

2 Q. Mr. Stogner, you've reviewed the OCD draft of its
3 proposed rule. Will you please inform the Commission as to
4 the procedure that will be used under the OCD's proposed
5 rule?

6 A. Okay, what we're trying to do here when we go to
7 5 -- and it is designed to protect the Supervisors, the
8 Districts, even the operator, and here's the scenario on
9 this.

10 Let's say that an application comes in to -- And
11 what I mean by "application", it's really up to the
12 District Supervisor and the operator. I don't lay down any
13 guidelines. This is essentially what is turned in to them.
14 The operator and the Supervisor is going to determine what
15 is needed.

16 But after you have a new technique or a technique
17 that's questionable, and the Supervisor, is a little bit
18 leery about -- for some reason, maybe he's not an engineer,
19 or there's a new technique that comes up. He could then
20 request that the application come here for review. This is
21 a technique that we have used ever since these rules have
22 been adopted. Hear them first, make an administrative
23 process later, and then let the District Supervisor.

24 But this also -- This will allow for, if a new
25 technique comes up, the supervisor doesn't feel comfortable

1 with it, he requests that it comes up here.

2 The Director, then -- and this is what we mean by
3 unprotested applications. I'm sorry, let's go back up.

4 "The supervisor or an operator may request an application
5 be reviewed by the Director." And they "shall submit
6 information and give notice as requested by the Director."

7 It would be up to our review here and the
8 Director's review of, there's a problem here, let's in this
9 instance notify everybody around, or for whatever reason
10 it's determined at that time. And then, if it's
11 unprotested in 20 days, then we can issue a TX order like
12 we've always done. But this helps the District Supervisors
13 in laying down some frameworks.

14 Let's take another scenario. How about if you
15 bring an application in, and under the proposal the
16 Supervisor denies it? What recourse would you have? Yeah,
17 it's stipulated that the recourse -- or it's given in the
18 rules and regs that you could bring it up here. But this
19 also makes the supervisor accountable if he is to deny one.

20 It also gives due process to the operator. Well,
21 we have a disagreement. The operator then can bring it
22 here. We can either request it to go to hearing -- Who
23 knows what's going to happen in the future? I think these
24 rules allow for that. It allows for better working
25 relations between the operator and the supervisor. If our

1 input is needed here in any way, it is provided.

2 So I think that is a -- how would you say? A
3 safety mechanism or a safety valve, that I've tried to
4 incorporate in section (5), or portion (5).

5 Also, back to the 5 1/2, if Burlington thinks
6 that's an applicable situation in the Pictured Cliffs, they
7 can make whatever application between them and the present
8 supervisor, Frank, whatever he needs. Perhaps this would
9 suffice. And then they can refer back to it. They can
10 still get their approval through the District Supervisor.
11 So...

12 But I think that 3 1/2, if we go any larger,
13 we're just opening up some situations that we may not want
14 to. I think it's another safety valve that is built into
15 the rules and regs.

16 Q. Mr. Stogner, do you have anything else to add in
17 this case?

18 A. No, I do not.

19 MR. CARROLL: Chairman Wrottenbery, I move the
20 introduction of OCD Exhibits 1 and 2 into the record.

21 CHAIRMAN WROTENBERY: OCD Exhibits 1 and 2 are
22 accepted into the record.

23 MR. CARROLL: And that's all I have in this case.

24 CHAIRMAN WROTENBERY: Any questions for Mr.
25 Stogner?

EXAMINATION

BY COMMISSIONER LEMAY:

Q. Mr. Stogner, have you ever had a case concerning a tubingless completion at all, that you can recall, that's come to hearing? Where it's maybe protested, or there were some waste issues involved?

A. Not since I've been here, no. But when -- One of the questions that Mr. Kellahin asked his witness, I just happen to have here, when Rule 107 was initially -- came into being, effective January 1st, 1950, there's only three paragraphs. And now we're up to -- What is there? Around --

MR. CARROLL: Two paragraphs.

THE WITNESS: K. I mean, we're up to subparagraph K?

MR. CARROLL: Right.

THE WITNESS: But when tubingless completions or whatever -- There was some in the past, but not since I've been here. I haven't had a chance to review one. But back in ancient history, between 1950 and when I got here, there were some, but I don't know the particulars of them.

Q. (By Commissioner LeMay) This would apply to gas wells and oil wells, I take it? There's no distinction made in the rule itself?

A. Yeah, there is, actually. 107.J (1) and (2)

1 talks about flowing oil wells shall be put with -- And that
2 remains the same. And it's paragraph (2) that goes from
3 2-7/8-inch to 3-1/2-inch, if I understand your question.

4 Q. Well, I was curious to know whether tubingless
5 oil well completions were allowed at the District level
6 approval?

7 A. Not under the present form, other than the rules
8 that you have here, but --

9 Q. I don't have a lot of them. I remember
10 distinctly, though, that tubingless oil well completions
11 were, say, tried in the Vacuum field by Texaco, and they
12 had some problems with it where they set three sets of
13 tubing and they cemented all three sets in the hole. I
14 think they were 2 7/8. But they limited themselves on
15 workovers, and they really crippled their ability to do
16 much with the well after those were in there and --

17 A. Yes, those particular wells, and there were some
18 others like that, that had dual completions. And you
19 mentioned one triple completion. I don't remember the
20 particulars on that one. It also rendered that wellbore
21 useless.

22 Q. Okay.

23 A. And also that is the same situation I'm referring
24 to in -- God forbid we'll have to ever re-enter that well
25 and plug it, there's going to be some large cost just to

1 mill out that. And that is what I'm trying to stop or put
2 a safety mechanism on.

3 It can still be allowed. Let's say a shallow oil
4 zone is discovered somewhere. It allows for a cheap way to
5 complete it, but yet it leaves some safety mechanisms, and
6 it sets some standards. Entrada comes to mind. Perhaps
7 that might be a zone where the District Supervisor -- But I
8 feel confident our Supervisors in the District Offices, not
9 to allow for that situation. However, it's in here. But
10 there's still this other safety mechanism.

11 COMMISSIONER LEMAY: Thank you, that's all I
12 have.

13 CHAIRMAN WROTENBERY: Commissioner Bailey?

14 COMMISSIONER BAILEY: No questions.

15 EXAMINATION

16 BY CHAIRMAN WROTENBERY:

17 Q. Okay, Mr. Stogner, you feel comfortable with this
18 change from 2-7/8 to 3-1/2-inch throughout the Pictured
19 Cliffs, throughout Burlington's operations in the Pictured
20 Cliffs?

21 A. Yes, I do, and I even still feel comfortable with
22 it statewide.

23 Q. Okay, that was my next question. You don't have
24 any waste concerns about making that change on a statewide
25 basis?

1 A. No, I do not.

2 Q. And I wanted to follow up with you a little bit
3 on the notice question, because I'm still not quite clear
4 on what possible case we might want to require notice to
5 other parties, for this kind of an application, when you're
6 talking about how a particular wellbore is completed.

7 A. That's the reason I worded it like that, because
8 I can't think of one either.

9 Just off the cuff, perhaps if a well had received
10 an unorthodox-location request in a different horizon and
11 they want to come up and complete it in this manner. And
12 if it comes here perhaps the offset party may need to be
13 notified.

14 Or potash. Potash zone.

15 Q. Currently, though, the way the rule is written,
16 there is no notice required of this type of application?

17 A. No.

18 Q. And you're not aware of any circumstance where
19 that has been an issue or a problem in the past?

20 A. No.

21 COMMISSIONER LEMAY: Madame Chair --

22 CHAIRMAN WROTENBERY: Yes?

23 COMMISSIONER LEMAY: -- just to shed some light
24 on it, I might inject something.

25 CHAIRMAN WROTENBERY: Sure.

1 COMMISSIONER LEMAY: I think a lot of the
2 tubingless completion regulations in the past have been at
3 a time when you had allowable wars. If you had a gas well,
4 you could take the tubing out, produce at a higher rate
5 than your offset, you were competing for allowable in that
6 field, that was the purpose of notice and that was the
7 purpose for having regulations, so that it would tend to
8 equalize the production from those wells, if everyone had
9 to have two.

10 I don't think we're in that position today where
11 we have this competition in the reservoir for allowable,
12 and that should maybe be taken into consideration when
13 we're looking at the rules today as they were in the past.

14 Q. (By Chairman Wrotenbery) Okay. And in that
15 situation where the District Supervisor denied an
16 application or maybe put some conditions on it that the
17 operator felt were unacceptable, does that operator have
18 the right to appeal that decision to the Commission under
19 our general rules of practice and procedure?

20 A. Yeah, they do. Yes.

21 Q. Okay. So we don't need to address that
22 circumstance in this particular...

23 A. Oh, I think it's good to leave those reminders in
24 there to everybody.

25 MR. CARROLL: Chairman Wrotenbery, I think it

1 would come to the Division level if an operator disagreed
2 with the Supervisor's decision. They would make an
3 application before the Division.

4 CHAIRMAN WROTENBERY: Okay, and go up through
5 that process.

6 Okay, that's all I have of Mr. Stogner.

7 MR. CARROLL: That's all.

8 CHAIRMAN WROTENBERY: That's all you have.

9 I might ask, Mr. Kellahin, have you had a chance
10 to take a look at the latest draft of the revisions with
11 the editorial changes?

12 MR. KELLAHIN: Yes, ma'am. The editorial
13 changes, I think, are fine. They do improve upon the
14 earlier draft. We have no objection to Mr. Stogner's
15 additional changes, within the context of our comments that
16 we've already provided.

17 CHAIRMAN WROTENBERY: Yes, I understand.

18 Okay, thank you.

19 Mr. Carroll, where do we go from here?

20 MR. CARROLL: We will address Rule 112.A now.

21 CHAIRMAN WROTENBERY: Okay, on 107 the
22 Commission, if I understand the process correctly, and
23 correct me if I'm wrong, but the Commission will continue
24 this particular case to the February hearing in the
25 meantime.

1 The Division will circulate the revised draft of
2 the rule, or a revised draft of the rule, through the
3 docket?

4 MR. CARROLL: Right, this -- the latest draft
5 will be attached to the docket for the February 11th
6 hearing. At the February 11th hearing, you can take
7 additional comments or testimony and then adopt the rule,
8 and then we will submit it for publication in the *New*
9 *Mexico Register* by the 16th. So you could leave the record
10 open, even, a few days after the February 11th hearing.

11 CHAIRMAN WROTENBERY: Okay.

12 MR. CARROLL: And then it will be published
13 February 28th, and that will be the effective date of the
14 new rule.

15 CHAIRMAN WROTENBERY: Okay. What I might just
16 ask the Commission, whether it's comfortable with
17 publishing this latest draft of the rule as the proposal,
18 or would you like to consider making some changes to this
19 draft at this point in the proceeding before we circulate
20 it further?

21 In particular, the number (5), I was wondering if
22 you might want to discuss making some changes there.

23 COMMISSIONER LEMAY: Mr. Kellahin, how strong are
24 you at taking out (5)? I'm a little bit ambig- -- I'm not
25 sure how strong you feel about it.

1 MR. KELLAHIN: How strongly do I feel about (5)?

2 COMMISSIONER LEMAY: Yes.

3 MR. KELLAHIN: Well, I don't know. It doesn't
4 matter one way or another, quite frankly. I think your
5 comments were appropriate. There are means for Mr. Carr
6 and the other attorneys to get their clients to a Division
7 hearing if there's a supervisor that disagrees with them.

8 Mr. Stogner is correct, a lot of people can't
9 find those rules when they look for them; having it in the
10 order seems to work. It doesn't tell you who to send
11 notice to, but the Director could tell us who to send
12 notice to. As long as we don't have to send notice when we
13 file an application, and that's not --

14 CHAIRMAN WROTENBERY: That's not in this.

15 MR. KELLAHIN: So you can put it in or take it
16 out; it doesn't matter to us.

17 CHAIRMAN WROTENBERY: And is it the sense of the
18 Commission that we should publish it as --

19 COMMISSIONER LEMAY: Well, Madame Chair, if you
20 put it in the comments can always be such that you could
21 take it out. If you leave it out I don't think you'll get
22 any comments to put it in, because they don't know it's
23 there.

24 CHAIRMAN WROTENBERY: Well, that's right, that's
25 right.

1 Okay, then we will proceed to circulate this
2 latest draft of the Rule 107, and --

3 MR. CARROLL: And Sally Martinez has it on her
4 computer already, so...

5 CHAIRMAN WROTENBERY: Okay, so she will circulate
6 it with the docket for the Commission Hearing on February
7 11th, and we will plan to -- we'll take any additional
8 comment that people might want to offer up until that date,
9 and we'll plan to take final action on this rulemaking at
10 the February 11th hearing.

11 Anything else on that one?

12 Okay, thank you.

13 (Thereupon, these proceedings were concluded at
14 9:59 a.m.)

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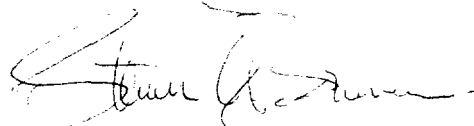
CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL January 15th, 1999.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002

107.J. Well Tubing Requirements

- (1) All flowing oil wells equipped with casing larger in size than 2 7/8-inch OD shall be tubed.
- (2) All gas wells equipped with casing larger in size than 3 1/2 inch OD shall be tubed.
- (3) Tubing shall be set as near the bottom as practical and tubing perforations shall not be more than 250 feet above top of pay zone.
- (4) The supervisor of the appropriate Division district office, upon application, may grant exceptions to these requirements, provided waste will not be caused.
- (5) The supervisor or an operator may request that an application be reviewed by the Director. The operator shall submit information and give notice as requested by the Director. Unprotested applications may be approved after 20 days of receipt of the application and supporting information. If the application is protested, or the Director so decides, the application shall be set for hearing.

107.K. REPEALED

BEFORE THE	
OIL CONSERVATION COMMISSION	
Santa Fe, New Mexico	
Case No. <u>12117</u>	Exhibit No. <u>1</u>
Submitted by <u>OCD</u>	
Hearing Date <u>1/14/99</u>	

~~(2) Casing strings in wells drilled with cable tools may be tested as outlined in sub-paragraph I. (1) above, or by bailing the well dry in which case the hole must remain satisfactorily dry for a period of at least one (1) hour before commencing any further operations on the well. [5-5-58...2-1-96]~~

107.J. Requirements for tubing of wells are as follows:

- (1) All flowing oil wells equipped with casing larger in size than 2 7/8-inch OD shall be tubed.
- (2) All gas wells equipped with casing larger in size than 2 7/8-inch OD shall be tubed.
- (3) Tubing shall be set as near the bottom as practical and tubing perforations shall not be more than 250 feet above the top of the pay.
- (4) The Division Director may, upon proper application, grant administrative exceptions to the provisions of sub-paragraphs (2) and (3) above, without notice and hearing, provided waste will not be caused thereby.

[6-26-59...2-1-96]

107.K. The Division's District Supervisors or their representatives shall have authority to approve tubingless completions without the necessity of administrative approval or notice and hearing when the following conditions exist:

- (1) The well is to be completed with a total depth of 5,000 feet or less,
- (2) The well is not a wildcat (it is not more than one mile from an existing well producing from the same common source of supply to which it is projected),
- (3) No known corrosive or pressure problems exist which might make the tubingless method of completion undesirable,
- (4) The well will not be a dual completion,
- (5) The tubing used as a substitute for casing will be either 2 3/8-inch OD or 2 7/8-inch OD.

[6-26-59...2-1-96]

108 DEFECTIVE CASING OR CEMENTING

~~If any well appears to have a defective casing program or faultily cemented or corroded casing which will permit or may create underground waste or contamination of fresh waters, the operator shall give written notice to the Division within five (5) working days and proceed with diligence to use the appropriate method and means to eliminate such hazard. If such hazard of waste or contamination of fresh water cannot be eliminated, the well shall be properly plugged and abandoned. [1-1-50...2-1-96]~~

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico	
Case No. <u>12117</u>	Exhibit No. <u>2</u>
Submitted by <u>OCD</u>	
Hearing Date <u>1/14/99</u>	