

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

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

CASE NO. 15959

APPLICATION OF THE NEW MEXICO OIL  
CONSERVATION DIVISION TO REPEAL AND  
REPLACE RULE 19.15.29 NMAC, STATEWIDE.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSIONER HEARING

JUNE 6, 2018

VOLUME 2 OF 3

Santa Fe, New Mexico

BEFORE: HEATHER RILEY, CHAIRWOMAN  
ED MARTIN, COMMISSIONER  
DR. ROBERT S. BALCH, COMMISSIONER  
BILL BRANCARD, ESQ.

This matter came on for hearing before the  
New Mexico Oil Conservation Commission on Tuesday,  
June 5 through Thursday, June 7, 2018, at the New  
Mexico Energy, Minerals and Natural Resources  
Department, Wendell Chino Building, 120 South St.  
Francis Drive, Porter Hall, Room 102, Santa Fe, New  
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1	INDEX	
2	Case No. 14949 Called	
3	New Mexico Oil Conservation Division's Case-in-Chief	
4	Witnesses:	Page:
5	JAMES MCDANIEL	
6	Direct Examination by Mr. Feldewert.....	5
7	Cross-Examination by Mr. Herrmann.....	48
8	Examination by the Commission.....	57
9	Redirect Examination.....	73
10	Recross-Examination.....	80
11	BRETT FULKS	
12	Direct Examination by Mr. Feldewert.....	81
13	Examination by the Commission.....	100
14	CELEY KEENE	
15	Direct Examination by Ms. Callahan.....	105
16	Cross-Examination by Mr. Herrmann.....	125
17	Examination by the Commission.....	126
18	JACOB MILLER	
19	Direct Examination by Ms. Callahan.....	134
20	Cross-Examination by Mr. Feldewert.....	142
21	Examination by the Commission.....	144
22		
23		
24		
25		

1	INDEX CONTINUED	
2	Witnesses:	Page:
3	BRANDON POWELL	
4	Direct Examination by Mr. Herrmann.....	147
5	Examination by the Commission.....	147
6	Cross-Examination by Mr. Feldewert.....	157
7	Redirect Examination by Mr. Herrmann...	159
8		
9	CLOSING STATEMENTS.....	181
10	REPORTER'S CERTIFICATE.....	192
11		
12		
13	EXHIBITS OFFERED AND ADMITTED	
14	NMOGA EXHIBITS	PAGE
15	A - E	48
16	G.	99
17		
18	CARDINAL LABORATORIES EXHIBITS	
19	1 - 7.	125
20		
21		
22		
23		
24		
25		

1 (Note: In session at 9:00)

2 CHAIRWOMAN RILEY: Good morning,  
3 everybody. I know we're in Day 2 of this hearing,  
4 but I believe we are at NMOGA's presentation now, so  
5 Mr. Feldewert, if you would like to go forward.

6 MR. FELDEWERT: Certainly. We will call  
7 our first witness. I don't recall whether they were  
8 sworn yesterday or not.

9 CHAIRWOMAN RILEY: They were not. In  
10 fact, if you would like, if both witnesses are here,  
11 we can swear both in at once and save some time.

12 (Note: All witnesses sworn.)

13 JAMES MCDANIEL  
14 after having been first duly sworn under oath,  
15 was questioned and testified as follows:

16 MR. FELDEWERT: Madam Chair, Commission,  
17 we will be using the NMOGA Exhibit D as in dog, and  
18 then we will also be at times referring to what was  
19 previously submitted as NMOGA Exhibit B as in boy.  
20 It's going to be a challenge to keep those straight  
21 but that's what we will be referring to during the  
22 testimony.

23 DIRECT EXAMINATION

24 BY MR. FELDEWERT

25 Q. Will you please state your name and

1     **identify by whom are you employed and tell us your**  
2     **occupation?**

3           A.     Yeah. My name is James McDaniel. I'm  
4     with Enduring Resources and I'm the HSE supervisor.

5           **Q.     HSE stands for?**

6           A.     Health, safety and environmental.

7           **Q.     And how long have you been a HSE**  
8     **supervisor for Enduring Resources?**

9           A.     For Enduring I've been the HSE supervisor  
10    since January of 2018, but prior to that I was the  
11    EH and S supervisor for XTO Energy from 2010 to  
12    2018, and then prior to that I was a project manager  
13    with Envirotech from 2008 to 2010.

14          **Q.     Now, you were saying you were with XTO in**  
15    **what capacity?**

16          A.     I was an EH and S manager, environmental  
17    health and safety manager. Supervisor, I should  
18    say.

19          **Q.     And then what did you do with Envirotech?**

20          A.     I was a project manager and it was  
21    overseeing spill cleanups, emergency response,  
22    sampling, groundwater sampling, a whole bunch of  
23    different remediation projects.

24          **Q.     Now, that was with Envirotech as the EHS**  
25    **supervisor. For XTO you had the same basic**

1     **capacity, dealing with remediation?**

2           A.     Yes.  At XTO it was regulatory compliance,  
3     groundwater sampling, soil sampling, remediation,  
4     project management for environmental cleanups and  
5     things like that.

6           Q.     Did you continue that type of work in your  
7     **employment currently with Enduring?**

8           A.     Yes.

9           Q.     Did you participate in the work group that  
10    **resulted in this proposed rule?**

11          A.     Yes.

12          Q.     What do you intend to address here with  
13    **the Commission today?**

14          A.     We're going to go over some of the changes  
15    that we have put in in Exhibit D and we're going to  
16    go over some of the goals of the committee and  
17    whether or not we met those objectives.

18          Q.     Have you previously testified before this  
19    **body?**

20          A.     No.

21          Q.     **What's your educational background?**

22          A.     My educational background?  I have a  
23    bachelor's of science from Ohio State University in  
24    2005 in natural resources majoring in environmental  
25    sciences and a associate's of science in

1 occupational safety from San Juan College. I'm  
2 working on an industrial hygiene master's degree at  
3 Montana Tech University. Estimated graduation 2019.

4 **Q. Do you hold any additional certifications?**

5 A. Yes, I'm a certified safety professional,  
6 CSP, and a certified hazardous material manager,  
7 CHMM.

8 **Q. How long have you been a certified safety**  
9 **professional?**

10 A. A certified safety professional, I  
11 received that certification in 2015.

12 **Q. That a national certification?**

13 A. Yes.

14 **Q. Is there testing requirements and**  
15 **educational components to it?**

16 A. Yes, there are. For CSP and CHMM both you  
17 have educational and experience requirements and  
18 then an examination to gauge your knowledge of the  
19 subject matter that you are certifying in.

20 **Q. You mentioned the remediation work that**  
21 **you have been doing and overseeing all these years.**  
22 **What's been the area of focus for that type of work?**

23 A. My focus has been primarily in northwest  
24 New Mexico. All of my experience over the last ten  
25 years has been in northwest New Mexico but I have



1     helped out in southeast New Mexico for remediation  
2     projects on an as-needed basis when I was at XTO  
3     Energy.

4           **Q.     Are you familiar with the state regulatory**  
5     **requirements for that type of remediation and**  
6     **analysis?**

7           A.     Yes.

8           MR. FELDEWERT:   I want to tender  
9     Mr. McDaniel as an expert witness in managing  
10    surface releases from oil and gas operations and on  
11    state and federal regulations applicable in these  
12    types of releases.

13           CHAIRWOMAN RILEY:   He is accepted as an  
14    expert witness.   Thank you.

15           **Q     (By Mr. Feldewert) Mr. McDaniel, how long**  
16     **did this group work on developing the proposed rule?**

17           A.     I believe we started in late 2016 and  
18    we've been periodically having meetings and  
19    conference calls and back and forth e-mails since  
20    that time.

21           **Q.     And did you participate throughout that**  
22     **entire time?**

23           A.     Yes.

24           **Q.     Did you miss any meetings?**

25           A.     Not that I'm aware of.

1           Q.     Did you miss any phone calls?

2           A.     Not that I'm aware of.

3           Q.     Now, you were an active participant.  What  
4   was your role?  What did you pay particular  
5   attention to?

6           A.     So one of my roles was doing research and  
7   data management to bring to the group and then  
8   providing more field expertise for how the new rule  
9   would possibly affect doing the work in the field.  
10   You know, how it would actually affect cleanup  
11   beyond the, you know, the verbiage and what not in  
12   the actual rule, how it would hit the ground in the  
13   field.

14          Q.     Now, you mentioned there were goals of the  
15   committee?

16          A.     Yes.

17          Q.     And we saw a slide from the Division  
18   previously that outlined those goals, correct?

19          A.     Yes, we did.

20          Q.     Also if you look at -- let's just go to  
21   NMOGA Exhibit B as in boy 1.  And you put forth the  
22   goals of the committee from your perspective,  
23   correct?

24          A.     Yes.

25          Q.     One of the goals here was to create

1 consistency with other division rules, and you  
2 specifically referenced the pit rule, which is Rule  
3 17, right?

4 A. Yes.

5 Q. And then the produced water rule, which is  
6 Rule 34?

7 A. That is correct.

8 Q. Why is it important to have consistency  
9 with other division rules, particularly when they  
10 deal with sampling, testing and remediation  
11 requirements?

12 A. So in the field it provides a lot more  
13 ease of understanding for operators. As has been  
14 said throughout the hearing yesterday, not every  
15 operator has an environmental staff that they can  
16 lean on, so outlining the specific requirements  
17 across the rules and having them kind of jive and go  
18 together provides a lot more ease of actually using  
19 the rules in the field so you're not trying to think  
20 well, is it a pit closure or is it a spill, and  
21 bouncing back and forth.

22 That's one of the things that was  
23 difficult about the current pit rule and spill  
24 guidelines was you had the Rule 17 that used Table  
25 1, and then when you confirmed that a release

1 occurred you had a completely different set of  
2 guidelines to go with. So one of the major goals  
3 was to bring those two tables together for those two  
4 rules and have them have the exact same requirements  
5 in both rules, especially across all three.

6 Q. In your opinion, does it assist in  
7 implementing goals of the rules when there is some  
8 consistency among them?

9 A. Yes.

10 Q. And in your opinion, does it avoid  
11 confusion when you have -- on both sides -- when you  
12 have consistency among rules that deal with sampling  
13 and testing and remediation?

14 A. Yeah, it provides a lot more consistency  
15 and eases understanding in the field for the  
16 different situations.

17 Q. Now, if we turn to NMOGA Exhibit D as in  
18 dog, there was some discussion yesterday about the  
19 definitional section. Were you here for that?

20 A. Yes.

21 Q. They talked about essentially the clerical  
22 change in 29.7, right?

23 A. Yes, that's correct.

24 Q. Do you have anything to add to this?

25 A. No.

1           Q.     Then we have the release notification in  
2     29.8. Were you here for that testimony yesterday?

3           A.     Yes, I was.

4           Q.     And was it the decision of the committee  
5     to keep the notification requirements to the major  
6     or minor release thresholds?

7           A.     Yes, it was. And as I recall, there  
8     wasn't a whole lot of discussion around changing  
9     them at any time.

10          Q.     So based on your participation in the  
11     committee and also based on your experience, do you  
12     agree with the proposition that there's no evidence  
13     or need for change with respect to the major or  
14     minor release thresholds that exist for notification  
15     and action?

16          A.     Yes, I would agree with that.

17          Q.     When I look at 29.8, Subpart 29.8, Release  
18     Notification, there's a whole list of oil field  
19     waste and going to 29.8A, and included with that is  
20     the term "NORM."

21          A.     Yes.

22          Q.     What does NORM stand for?

23          A.     Naturally occurring radioactive material.

24          Q.     There has been a comment filed by one of  
25     the groups here that suggested that there was a need

1     to add "TENORM," T-E-N-O-R-M, to this list. What is  
2     TENORM?

3         A.     TENORM is technically enhanced NORM.

4         Q.     And in your opinion, is there any need to  
5     add that to the list of constituents we see in 29.8?

6         A.     No, I don't believe so, because the rule  
7     that the OCD has is that, you know, NORM is  
8     considered above their threshold at 30 picocuries  
9     per gram. So whether it's technically enhanced or  
10    not, it doesn't really affect whether it's going to  
11    be above or below 30 picocuries. Either it is or it  
12    isn't, regardless of whether it's TENORM or not  
13    TENORM.

14        Q.     In your opinion is the term "NORM" as used  
15    in here, is there any reason to expand or add  
16    "TENORM" to the list?

17        A.     No. In my opinion the term "NORM"  
18    adequately covers what they are trying to accomplish  
19    here with the 30 picocuries per gram limit.

20        Q.     I'm skipping through stuff here.

21        A.     Of course.

22        Q.     Then in 29.9, this was some work that was  
23    done here within this rule and merged in prior  
24    sections of the rule, correct?

25        A.     That's correct.

1           Q.     And you were here for the testimony on  
2     that?

3           A.     Yes, I was.

4           Q.     Anything to add to that?

5           A.     No, I don't have anything to add.

6           Q.     Okay. Then let's go to 29.10, which is on  
7     Page 2 of NMOGA Exhibit D. Now, we have the major  
8     or minor release reporting application, correct?

9           A.     Correct.

10          Q.     Is it your understanding, as was discussed  
11     yesterday, that 29.10 is intended to apply to all  
12     releases no matter what the volume?

13          A.     Yes, that is the intention of Part 10.

14          Q.     And in your opinion does this adequately  
15     address the concerns that would rise from release  
16     volumes that are below the major or minor release  
17     thresholds?

18          A.     Yes. For this part the initial response  
19     to get to it and stabilize it to make sure it  
20     doesn't get worse, this adequately covers that. And  
21     then as was mentioned yesterday in 12, it requires  
22     remediation of all releases which doesn't have a  
23     volume quantifier on it.

24          Q.     So in particular here when I look at  
25     29.10C, Site Stabilization, part of that requirement

1 is that you remove the free liquids and then any of  
2 the product that can be physically removed, correct?

3 A. That's correct.

4 Q. And then does it require you to deliver  
5 that material to a division-approved facility for  
6 disposal?

7 A. Yes.

8 Q. Then when we get to more extensive  
9 releases that fall into the major or minor category,  
10 we have some additional requirements then that  
11 apply, correct?

12 A. That is correct.

13 Q. And those began in 29.11?

14 A. Yes.

15 Q. If I look at NMOGA Exhibit B as in boy 7,  
16 does NMOGA B7 capture on your slide the extensive  
17 requirements that arise when you have a major or  
18 minor release containing liquids?

19 A. Yes.

20 Q. B7?

21 A. Yes. It gives a basic outline of what  
22 Part 11 requires.

23 Q. And would you discuss with the Division  
24 just briefly what all that is that you have to go  
25 through?



1           A.     Sure.  So if you've got a release that  
2     requires this type of delineation, so you're going  
3     to have to determine your depth to groundwater and  
4     that will aid you in determining what your closure  
5     standard is for Table 1.  You're going to have to  
6     find your distance to wellhead protection area, and  
7     in the rule we have that quarter mile as we  
8     discussed yesterday around the horizontal extents.  
9     Or half mile, I should say.

10           And then same with the significant water  
11     course, and then you've got to determine the  
12     horizontal and vertical extents and that's most  
13     likely going to be through some kind of hand auger  
14     or potentially a drill rig if you need to go deep.

15           **Q.     Now, you mentioned that half-mile**  
16     **examination area for wellhead protection areas and**  
17     **then the nearest significant water course?**

18           A.     Yes.

19           **Q.     And in your opinion, does that provide a**  
20     **reasonable geographic area for review of these**  
21     **sensitive areas?**

22           A.     Yes, I believe so.  Especially considering  
23     that it's significantly larger than the distance  
24     that we've identified in the other section that  
25     would require more stringent standards.  For

1 instance, the distance to surface water in that one  
2 is 300 feet and we're going out a half mile, so it's  
3 more for informational purposes than anything else.

4 Q. Now, you were also here -- if I then look  
5 at NMOGA Exhibit D on Page 3, you were here  
6 yesterday for the discussion about the additional  
7 delineation and requirements that arise if the  
8 conditions in Subpart C on Page 3 exist?

9 A. Yes.

10 Q. Really, in general what's the purpose of  
11 that? What was the committee accomplishing there?

12 A. Sure. So the thought was there was some  
13 discussion around releases in that zone of 50 to 100  
14 feet to groundwater. So for less than 50 feet  
15 you've got a 600 part per million closure standard  
16 so we have to remove all soil above the 600. But  
17 the 50 to 100, in theory you could have that 51 feet  
18 10,000 parts per million chloride. So this portion  
19 was added to provide additional protection for  
20 larger spills or unknown quantities that would pose  
21 a bigger risk to getting to groundwater.

22 So if you meet both of these requirements,  
23 the 10,000 milligrams per liter of chloride and the  
24 unknown volume or over 200 barrels lost, then it  
25 would require additional delineation beyond the

1     simple closure at 10,000 parts per million chloride.  
2     That way you could ensure, theoretically ensure that  
3     you didn't get to groundwater. And then if you did,  
4     as was mentioned yesterday it would kick over to  
5     Rule 30 for abatement.

6           Q.     And just so we're clear, there's the 600  
7     milligram per kilogram standard there?

8           A.     Yes.

9           Q.     Do you see that? If I look over a few  
10    pages to Page 6 where we have Table 1?

11          A.     Yes.

12          Q.     Is that where that 600 milligram per  
13    kilogram standard came from?

14          A.     It is.

15          Q.     And essentially, if I'm understanding it,  
16    you're taking the chloride standard for groundwater  
17    that's less than 50 feet, applying that to the  
18    unique release circumstances that would be  
19    identified in Subparagraph C on Page 3.

20          A.     That is correct. But for delineation  
21    purposes only, not necessarily closure of the  
22    release.

23          Q.     Okay.

24          A.     You could still close the release at  
25    10,000 but you would be required to delineate the

1 horizontal extents or the vertical extents, I should  
2 say, to 600.

3 Q. And the committee determined it was the  
4 appropriate way to go with this, given the unique  
5 circumstance presented as outlined in Subparagraph  
6 C?

7 A. That's correct.

8 Q. In your opinion, is that appropriate?

9 A. Yes.

10 Q. Now, when I look at Subparagraph C, there  
11 is a discussion about whether release occurred  
12 outside of a lined containment area, correct?

13 A. Yes.

14 Q. And there was a concern, a comment raised  
15 by, I believe it was OGAP or EDF, suggesting that we  
16 need the language to address a liner that did not  
17 have integrity. Do you remember that comment?

18 A. Yes, I reviewed the comments.

19 Q. What do you understand to be OGAP or EDF's  
20 concern with the comment?

21 A. We had a hard time understanding it at  
22 first, but when you review the actual document that  
23 they reference, it's referring to the liner itself,  
24 not necessarily the soil beneath the liner. It was  
25 a letter or something sent out by that EPA region

1 referring to the liner. And after review, it  
2 doesn't really fit into what this rule is doing.  
3 The OCD has specific regulations regarding disposal  
4 of liner material in their waste disposal  
5 requirements.

6 Q. Okay. So you read their comments as being  
7 concerned about the liner itself and what you do  
8 with the liner without integrity?

9 A. That's the idea of the document that they  
10 were referencing for RCRA. It didn't have anything  
11 to do with the soil. It was for the liner itself.

12 Q. Okay. And you're aware then that the  
13 division rule, being particularly Rule 19.15.35.8  
14 already deals with what you do with liners that no  
15 longer have integrity, or liners, period, that you  
16 are disposing of?

17 A. Right. Those rules don't speculate  
18 whether it's lost integrity or not. It's still a  
19 piece of plastic liner and it needs to be disposed  
20 of per the regulations regardless of whether it's  
21 lost integrity or not.

22 Q. Okay. Then let's move over to 29.12  
23 because I think everything else was covered  
24 yesterday and discussed. Again, it was pointed out  
25 yesterday you have in Subparagraph A the requirement

1     **that a party must remediate all releases?**

2           A.     Yes, that's correct.

3           Q.     And take those actions that are laid out  
4     **in 29.12?**

5           A.     Yes.

6           Q.     And you were here yesterday for the  
7     **testimony where the decision was made subsequent to**  
8     **the initial publication of this rule to remove the**  
9     **restoration or remediation language that we see**  
10    **there in C2 and 3 to 29.13 so that it's all in one**  
11    **section?**

12          A.     Yes.

13          Q.     And does that make it easier for someone  
14    **like yourself who is dealing with these rules to**  
15    **have one section that deals -- that contains the**  
16    **remediation requirements that would be applicable?**

17          A.     Yeah, we just thought it flowed better.  
18    It's included in the restoration and remediation or  
19    revegetation section. Instead of basically  
20    including the language twice in two different  
21    sections. So we just changed it to reference the  
22    restoration section. After you've completed the  
23    cleanup then you would just move to Part 13.

24          Q.     One of the changes that are highlighted on  
25    **Page 4 of NMOGA Exhibit D is that very section where**

1     it directs the reader to go examine for the  
2     restoration and reclamation requirements?

3           A.     Yeah, that's correct.

4           Q.     Now, there's some discussion here about  
5     Subpart C4 on Page 4 of this Exhibit D.

6           A.     Yes.

7           Q.     And were you here yesterday for the  
8     testimony where it was pointed out that this imposes  
9     some additional requirements where the release is in  
10    proximity to certain sensitive areas?

11          A.     Yes.

12          Q.     Do you recall or did you examine, in terms  
13    of these siting requirements, where they came from?

14          A.     Yes, these are pulled out of the pit rule  
15    for the setback requirements for high chloride or  
16    not low -- high concentration chloride pit. But  
17    it's worded differently.

18          Q.     Yes, so let's make it a little bit easier.

19          A.     Not low chloride.

20          Q.     If you go to NMOGA Exhibit B as in boy 9.  
21    Does NMOGA Exhibit B9 contain a copy of the  
22    requirements from Rule 17 that apply when you have a  
23    temporary pit containing fluids that are not low  
24    chloride fluids?

25          A.     Yes.

1 Q. And that's the title of that section?

2 A. That is correct.

3 Q. Okay. And the distances and requirements  
4 come from this provision in Rule 17?

5 A. Yes, they do.

6 Q. And after this was published and everyone  
7 was going through this rule, did they note that  
8 there was one typo here with respect to the distance  
9 from wetlands?

10 A. Yes. That was noted and then we proposed  
11 to increase it to 300 to match the setting criteria  
12 on B9.

13 Q. Okay. So then if I'm on NMOGA Exhibit D  
14 as in dog, that would be reflected on Page 5 or that  
15 was the reason for the change from 100 to 300?

16 A. That's correct.

17 Q. Now we have consistency throughout this  
18 rule with respect to these setback requirements?

19 A. That's correct.

20 Q. Okay. And in your opinion, Mr. McDaniel,  
21 are these standards appropriate to use in this  
22 subpart in dealing with your treatment of releases  
23 within these sensitive areas?

24 A. Yes. Release in these areas would be  
25 cleaned up to the most stringent requirements that



1 we have listed in Table 1 regardless of the depth to  
2 groundwater.

3 Q. Looking at Page 5 of NMOGA Exhibit B,  
4 there was discussion yesterday about these Subparts  
5 D and E dealing with the closure requirements and  
6 the closure reporting requirements when you have a  
7 release that meets the major or minor requirements,  
8 correct?

9 A. That's correct.

10 Q. And the one change, and I don't recall if  
11 it was extensively discussed yesterday but it was  
12 down there in what is now Subparagraph E2.

13 A. Okay.

14 Q. We see language was added to address what  
15 occurs if the Division does not act on a closure  
16 report within 60 days?

17 A. Yes.

18 Q. Where did that language come from?

19 A. That language is consistent with other  
20 language throughout the rule that if we don't have a  
21 consensus within 60 days, if it hasn't been approved  
22 or denied then it meets the 60 days so it's  
23 automatically denied.

24 Q. So if I stay on the same Page 5 and  
25 instead of looking at E2 I move up and look at the

1     little Subparagraph 5 at the top of the page?

2           A.     Yes.

3           Q.     Does that same 60-day provision exist  
4     within that section?

5           A.     Yes, it does.

6           Q.     And that is where the Division is to  
7     approve or deny a remediation plan?

8           A.     Yes, that's correct.

9           Q.     All right. Then let's discuss the  
10    language here that is at issue on Page 5 in Subpart  
11    D1B, okay?

12          A.     Okay.

13          Q.     Now, this is language that, if I'm  
14    understanding, addresses sampling of areas that are  
15    impacted by a major or minor release, correct?

16          A.     Yes, addresses performing your final  
17    closure sampling when you feel like the excavated  
18    area or remediated area is ready to be closed.

19          Q.     Okay. Let's talk about -- this deals with  
20    the sampling requirement for that area that has been  
21    remediated?

22          A.     Yes.

23          Q.     Okay. So let's talk about the language  
24    over which there's no disagreement. So if I look at  
25    D1B it says there must be separate representative

1 wall and five-point composite samples. Do you see  
2 that?

3 A. Yes.

4 Q. What does that mean, five-point composite  
5 samples?

6 A. A composite sample, as was discussed a  
7 little yesterday, is five separate grab points on  
8 your wall or floor or surface, wherever you are  
9 collecting your the sample, and then those  
10 individual grabs are placed into a container and  
11 kind of homogenized together to make one composite  
12 sample and that is what would be analyzed in the  
13 laboratory for your official lab results.

14 MR. FELDEWERT: Do you have paper copies  
15 of division exhibits?

16 COMMISSIONER BALCH: Yes.

17 Q (By Mr. Feldewert) I would like to go to  
18 Slide 40, please. So if I'm at the division exhibit  
19 and I go to Division Exhibit 1 and I go to the Slide  
20 43, are you there Mr. McDaniel?

21 A. Yes, I am.

22 Q. Is that an example of a five-point  
23 composite sample?

24 A. Yes, it is.

25 Q. And that is in addition to -- when I look

1 at that phrase, it says -- it has the statement in  
2 there that there must be separate representative  
3 wall and base five-point composite samples.

4 A. That's correct.

5 Q. That term "representative," is that  
6 important?

7 A. Yes, it is. Representative kind of  
8 prevents you from taking all your samples maybe in  
9 one corner or one area. The composite sample has to  
10 be representative of the entire area that you're  
11 sampling. It can't just be five spots from one side  
12 of the excavation.

13 Q. So that term has meaning, right?

14 A. Yes, it does.

15 Q. And, in fact, like you said, you can't  
16 just cherry-pick and just put all your samples  
17 points in the left-hand side. It has to be  
18 representative of the wall, correct?

19 A. That's correct.

20 Q. What NMOGA then has suggested to add here  
21 to make it very clear is that there must be also  
22 then, in addition to these five-point composite  
23 samples, an individual grab sample from any wet or  
24 discolored area.

25 A. That's correct.

1           Q.     So, for example, if I go to what would be  
2     Slide 42 of the Division's exhibits, they have  
3     circled down there of a wet or discolored area.

4           A.     That's correct.

5           Q.     So under NMOGA's language, you would have  
6     to do a representative five-point grab sample of the  
7     rest of the wall, right?

8           A.     Yes.

9           Q.     And what would you do with the additional  
10    grab sample of the wet or discolored area?

11          A.     So under our language you would take an  
12    additional grab sample from only that wet or  
13    discolored area and run that individually along with  
14    your composite sample so you would have one sample  
15    of your composite for the entire wall and you would  
16    have one individual sample for that area of the  
17    impacted area ran individually at the laboratory.

18          Q.     So that would not be diluted by the other  
19    five grab samples?

20          A.     No, it would not.

21          Q.     You would have the five representative  
22    grab samples that would be sent to the laboratory  
23    for analysis, right?

24          A.     Yes.

25          Q.     And then you would have your individual

1 grab sample of the wet or discolored soil and that  
2 would be sent as a stand-alone sample for analysis?

3 A. That is correct.

4 Q. The Division has suggested that they need  
5 a requirement in here that would make it mandatory  
6 for -- that the representative five-point composite  
7 samples be restricted down to an area no greater  
8 than 200 square feet. Were you here for that  
9 testimony?

10 A. Yes, I was.

11 Q. First off, was this 200-square-foot  
12 requirement, was that discussed at any of the  
13 committee meetings?

14 A. Not to my recollection.

15 Q. When was the first time anyone who are  
16 members of that committee saw this particular  
17 language?

18 A. When the document had already been  
19 submitted for the rule in January.

20 Q. Are you aware of any source of this  
21 200-square-foot provision?

22 A. No, I am not.

23 Q. Is it in Rule 17?

24 A. No.

25 Q. Is it in Rule 34?

1           A.       No.

2           Q.       Since there wasn't any discussion, we  
3       didn't hear anything about having the opportunity to  
4       comment on the reasoning that was provided yesterday  
5       for this particular provision?

6           A.       That is correct.

7           Q.       Okay. Now, when I look at this suggestion  
8       that there should be a mandatory requirement that in  
9       every case the sampling five-point composite  
10      comprise no more than an area of 200 square feet,  
11      what's the problem with that?

12          A.       Well, for most situations, and as it was  
13      even discussed yesterday by Mr. Powell, in many  
14      situations it's going to be too many samples that's  
15      not going to provide you additional information but  
16      it is going to add to cost and difficulty in  
17      outlining where your samples were taken from. So in  
18      most cases it's going to reflect a much larger  
19      amount of samples than is required to adequately get  
20      a representative of that area.

21          Q.       In other words then, Mr. McDaniel, if I go  
22      to Slide 41, Division Slide 41 in their Exhibit 1,  
23      you understood this to be an example of what they  
24      would require in all circumstances, correct?

25          A.       Yes.

1           Q.     And in your opinion, when I look at that  
2 wall and it's homogeneous across there and we don't  
3 see any staining and we have a requirement in place  
4 that you do a representative five-point sample of  
5 that wall, do we need to do ten grab samples of this  
6 wall to be a representative?

7           A.     I do not believe so.

8           Q.     And, in fact, if we extended that wall  
9 down, whether you want to double or triple it, under  
10 their language you would be multiplying the grab  
11 samples?

12          A.     That is correct.

13          Q.     Exponentially, right?

14          A.     Yes.

15          Q.     If you had a homogeneous wall with no  
16 staining and it was all the same, is there any  
17 reason to have to do five, 10, 15, 20, 25, 30, 35,  
18 40, grab samples?

19          A.     I don't believe so.

20          Q.     Do you gain anything from that?

21          A.     You might gain a slight better  
22 understanding of each individual section, but if  
23 it's clean and all of them are clean and there's no  
24 individual areas that are wet or discolored, which  
25 we would have to sample individually, then I don't



1 believe you gain a lot of necessary information that  
2 is beyond what's really needed to close the spill,  
3 and it causes a lot of extra work.

4 Q. When it comes to 200 feet, did the  
5 Division offer any basis for where the square foot  
6 came from?

7 A. No.

8 Q. So right now what they are suggesting is  
9 to have in all circumstances a mandatory and what  
10 appears to be arbitrary 200-square-foot sampling  
11 requirement?

12 A. That is correct.

13 Q. Now, if a release occurred and the  
14 Division actually felt that you needed to do a grab  
15 point sampling for over 200 square feet, are there  
16 multiple opportunities for the Division to require  
17 that based on the facts of each particular spill?

18 A. I believe so.

19 Q. So what's the first opportunity for the  
20 Division to take a look at the facts and say, "Well,  
21 we need more than just a five-point representative  
22 wall based sampling"? What's the first opportunity  
23 for them to tell an operator that they think they  
24 need additional samples?

25 A. Sure. Under the site characterization and

1 remediation plan, that needs to be submitted to the  
2 Division for their approval prior to beginning  
3 remediation activities. So in that instance if it  
4 were a large delineated area, the Division would  
5 have the opportunity to require a more frequent  
6 sampling than just one composite for an entire wall  
7 at that time.

8 Q. Okay. So let's go to specific language.  
9 If I go to 29.12C on Page 4 of Exhibit D, this lays  
10 out the detailed description of the proposed  
11 remediation measures, correct?

12 A. Yes, it does.

13 Q. And as part of that process you have to  
14 provide them information about the type of the  
15 release, correct?

16 A. That is correct.

17 Q. Whether you're dealing with oil,  
18 chlorides, condensate, et cetera, right?

19 A. Yes, and you would also provide that  
20 information in the 15-day notice.

21 Q. And you are going to provide them  
22 information on the volume that's requested?

23 A. That is correct.

24 Q. And as part of this remediation plan  
25 process you will have already analyzed the lateral

1     **extent of that release?**

2           A.     That is correct.

3           Q.     And as part of this process you would have  
4     **already determined and identified the character of**  
5     **the impacted area, right?**

6           A.     That is correct.

7           Q.     **The proximity to sensitive areas?**

8           A.     Yes.

9           Q.     **Depth to groundwater?**

10          A.     Yes.

11          Q.     You would have facts about this particular  
12     **release?**

13          A.     That is correct.

14          Q.     **That is then provided to the Division for**  
15     **approval of your remediation plan?**

16          A.     Yes, that's correct.

17          Q.     And that approval that then puts some  
18     **language on it is in Subsection 12C5, correct?**

19          A.     Yes.

20          Q.     And they have 60 days to approve or deny  
21     **it or impose additional conditions?**

22          A.     That is correct.

23          Q.     And based on that factual information they  
24     **would have, if they felt like a standard five-point**  
25     **composite sample, representative sample, was not**

1     going to be sufficient, they could at that point say  
2     we think we need more sampling than what's been  
3     required under Rule 17 or Rule 34 or what we propose  
4     to say in this rule?

5           A.     That is correct.

6           Q.     Then do they have another opportunity to  
7     change what would otherwise be the normal  
8     five-based, five-point composite sampling method?

9           A.     Yes, they do.

10          Q.     Where is that?

11          A.     So in D1B, the last sentence of our  
12     language, after it says "individual grab samples  
13     from wet or discolored areas," the final sentence  
14     says, "The Division may add additional sampling  
15     requirements dependent on the nature of the material  
16     released and any risk to human health or the  
17     environment."

18          Q.     Okay. So there's some additional language  
19     for them to impose additional sampling requirements?

20          A.     That's correct.

21          Q.     And the Division being a Division doesn't  
22     have to go through the variance process. They say  
23     we looked at the facts and we think you need to do  
24     additional sampling.

25          A.     That's correct.

1           Q.     And if we happen to disagree, then we  
2     either have to go through the variance process or go  
3     to a hearing, right? But the Division has the  
4     opportunity to impose additional sampling  
5     requirements pretty much at any point in time,  
6     right?

7           A.     That's correct.

8           Q.     Then if they're on-site, if they happen to  
9     be on-site when you are doing this type of work, is  
10    there language in the rule that again allows them to  
11    impose additional sampling requirements based on the  
12    facts of this particular release?

13          A.     Yes.

14          Q.     And is that found within this Subparagraph  
15    B as well?

16          A.     Yes.

17          Q.     Where is that?

18          A.     In C.

19          Q.     In C? Where in particular are you  
20    looking?

21          A.     "Division inspectors are also authorized  
22    to verbally approve an alternate sampling plan based  
23    on site observations."

24          Q.     All right. Then you have to do a final  
25    closure report, right?

1           A.       That is correct.

2           Q.       And that is covered by Subparagraph E on  
3   Page 5?

4           A.       Yes.

5           Q.       And if I look at E1, does it contain the  
6   additional details that are sent to the Division as  
7   part of the closure reporting requirement?

8           A.       That is correct.

9           Q.       And in particular, if I look at E1A, do  
10   you have to provide then a scaled site and sampling  
11   diagram?

12          A.       That's correct.

13          Q.       What do they mean by a sampling diagram?

14          A.       I would take that to mean in conjunction  
15   with photos of the remediated site prior to  
16   backfill. You have pictures of the excavation so  
17   they could see if there were stained areas in  
18   addition to the regular wall, and you would also  
19   need to provide them a diagram of where you  
20   collected your samples from in your excavated area  
21   when you submitted your closure documentation.

22          Q.       And the Division has to approve the  
23   closure report, right?

24          A.       That's correct.

25          Q.       And now they have some additional facts

1 and they have concerns about the sampling based on  
2 the nature of the release or what was found  
3 throughout this process, they can again impose  
4 additional sampling requirements, correct?

5 A. They could.

6 Q. So given all these opportunities for the  
7 Division to tailor the sampling, if needed, to be  
8 more than the normal representative wall and base  
9 five-point composite samples, in your opinion is it  
10 necessary to place in this rule an arbitrary  
11 200-square-foot requirement that would be mandatory  
12 in all cases?

13 A. No, I do not.

14 Q. In your opinion, would the language that's  
15 in here that there must be a separate representative  
16 wall and five base composite sample along with  
17 individual grab samples from any wet or discolored  
18 areas, is that sufficient to address a majority of  
19 the release circumstances that you have come across?

20 A. I believe it is.

21 Q. Now, you referenced D1C, right?

22 A. Yes.

23 Q. And I think the Division pointed it out  
24 and said, "Don't worry about this because you can  
25 get an exception. You can get a variance," okay?

1 "Or we can have an inspector come out and he can  
2 give you verbal approval where you don't have to do  
3 this mandatory arbitrary 200-square-foot sample,"  
4 okay?

5 A. Yes.

6 Q. Okay. Now, the Division has limited  
7 staff, correct?

8 A. Correct.

9 Q. In your opinion are they pretty busy?

10 A. They are.

11 Q. Now, I want you to put your regulatory hat  
12 on for me. Put yourself in their shoes.

13 A. Sure.

14 Q. I am a busy division employee. I have a  
15 lot of things that I have to do. If somebody calls  
16 me to ask me to come out to a site to give them  
17 verbal approval to depart from the arbitrary  
18 mandatory requirement, how difficult is it going to  
19 be to get them out?

20 A. It just depends on the workload. But  
21 there's no guarantee that they will have the  
22 opportunity to make it out to every event based on  
23 our timelines for when we are ready to take closure  
24 samples.

25 Q. If you are busy, in terms of importance,



1 things that you have to do, in the scale of things  
2 where is a request to come out and verbally approve  
3 a variance or exception, where is that going to fall  
4 with respect to the list of everything else that  
5 they got to do?

6 A. It would fall fairly low since there would  
7 already be requirements. If I can't make it out to  
8 give you a variance it's not going to be high on the  
9 list of things to do.

10 Q. What's the safest thing for you to do as a  
11 regulator? You're busy and you don't really want to  
12 go out there. What's the safest thing to do?

13 A. Just say there's a 200-square-foot minimum  
14 and I'm not going to approve any variances.

15 Q. And isn't it one of the goals of this  
16 committee to come up with methodologies and  
17 requirements that apply to the majority of  
18 circumstances that exist?

19 A. That is correct.

20 Q. And does NMOGA's proposed language cover  
21 the majority of the circumstances that are going to  
22 exist with respect to these releases?

23 A. I believe it does.

24 Q. Now, if I take a look at what's been  
25 marked as NMOGA Exhibit E, that's a separate

1 document we provided to you --

2 A. Okay.

3 Q. -- prior to the hearing. Does NMOGA  
4 Exhibit E capture the sampling requirements that  
5 were adopted by the Commission in Rule 17 and in  
6 Rule 34?

7 A. It does.

8 Q. And it includes a requirement that not  
9 only do you do the five-point composite sampling but  
10 you have to include sampling of any wet or  
11 discolored area?

12 A. It does, and additionally the language  
13 that we put in is beyond that, as that just says a  
14 composite must include wet or discolored areas,  
15 where our language requires an additional grab  
16 sample of wet or discolored areas, not just to  
17 include it in the five-point.

18 Q. In your experience, and based on your  
19 participation in the committee, is there any  
20 evidence that this language that was adopted by the  
21 Commission for Rule 17 or for Rule 34, is there any  
22 language that that -- any evidence that language has  
23 caused any issues or concerns?

24 A. Not in my experience.

25 Q. Are operators familiar with these

1 requirements?

2 A. Yes, they are.

3 Q. And under NMOGA's proposed language will  
4 the Division still retain authority to require more  
5 extensive sampling when appropriate on a  
6 case-by-case basis when they have all the facts we  
7 just discussed?

8 A. Yes, at multiple times throughout the  
9 rule.

10 Q. In your opinion, does NMOGA's proposed  
11 language result in consistencies among these rules?

12 A. It results in a lot more consistency than  
13 the 200-square-foot.

14 Q. And in your opinion will eliminating the  
15 proposed mandatory and I would suggest arbitrary  
16 200-square-foot requirement, if we eliminate that,  
17 in your opinion is that going to result in less  
18 protection to groundwater, to public health and the  
19 environment?

20 A. I don't believe it will.

21 Q. I may be close to finishing. Turn to  
22 NMOGA Exhibit D which has all the changes.

23 A. Okay.

24 Q. I want to go to Subpart 29.13.

25 A. Okay.

1           Q.     Before we get there, the next witness is  
2 going to talk about Table 1, right?

3           A.     That's correct.

4           Q.     So let's go to 29.13. When I look at  
5 29.13D1 it sets forth the reclamation of areas no  
6 longer in use, right?

7           A.     That's correct.

8           Q.     And there's been some language changes in  
9 here that have already been discussed and then there  
10 was a brief discussion yesterday about Subparagraph  
11 E on Page 7.

12          A.     Yes.

13          Q.     This Subparagraph E on Page 7, is that  
14 also found in Rule 17 and Rule 34?

15          A.     Yes.

16          Q.     Now, there has been a suggestion by OGAP  
17 that private surface use agreements should be added  
18 to Subpart E, okay?

19          A.     Okay.

20          Q.     Now, were you aware that OGAP was a party  
21 to the proceedings under Rule 17?

22          A.     I'm aware of that, yes.

23          Q.     Back in 2012?

24          A.     Yes.

25          Q.     And did the Commission adopt, after OGAP

1 participated in that, did they adopt a suggestion  
2 that you impose -- that you add private surface use  
3 agreements in Subpart E?

4 A. No, they did not.

5 Q. And when the Commission examined Rule 34  
6 did they add private surface use agreements to  
7 Subpart E?

8 A. No.

9 Q. In your opinion or in your experience does  
10 the Commission or the Division involve itself in  
11 enforcing the provisions of private surface use  
12 agreements?

13 A. No.

14 Q. And in your opinion is it appropriate or  
15 necessary for the Commission to enforce private  
16 surface use agreements between operators and  
17 landowners?

18 A. No.

19 Q. Putting aside any legal limitations under  
20 the statute.

21 A. Right.

22 Q. Okay. And why is that?

23 A. Because we have got individual surface use  
24 agreements with our landowners that detail what we  
25 will do in certain situations, details reporting and

1     those kind of things. I mean, they are very  
2     individualized to that specific surface. It's a  
3     literal contract between you and that surface owner.  
4     We have thousands of them in the cases that we have  
5     thousands of wells and each is very, very different.  
6     So it's our responsibility to ensure that we meet  
7     the requirement of the surface use agreements.

8           **Q.     Unlike regulatory agreements, the surface**  
9     **use agreements are voluntary agreements, correct?**

10          A.     They are. They are between us and the  
11     landowner for the use of the property where the  
12     facility or well is located.

13          **Q.     If either party thinks those requirements**  
14     **have been breached, you have the opportunity to go**  
15     **to court and enforce the agreements, correct?**

16          A.     Absolutely.

17          **Q.     Unlike regulatory requirements, there's no**  
18     **reason for the Commission or Division to involve**  
19     **itself in those types of agreements?**

20          A.     No.

21          **Q.     Then let's go to -- Mr. McDaniel, I have**  
22     **up here Slide 13 and Slide 14 from the Division's**  
23     **exhibit. I'm not sure which it is, but these lay**  
24     **out the objectives, from the Division's perspective,**  
25     **of what the rule is intended to accomplish, correct?**

1           A.       Correct.

2           Q.       And in your opinion does the proposed rule  
3       with the NMOGA's modifications accomplish these  
4       goals?

5           A.       I believe it does.

6           Q.       Does it provide clear guidelines to both  
7       operators and the Division about what to do, when to  
8       do it and what must be submitted when you have a  
9       release?

10          A.       Yes, it does.

11          Q.       And with NMOGA's modifications does the  
12       proposed rule maintain consistency with Rule 17 and  
13       Rule 34 that have been adopted by a prior  
14       commission?

15          A.       I believe it does.

16          Q.       And in your opinion does this rule with  
17       NMOGA's modifications support a reasonable level of  
18       protection to freshwater supplies and public health  
19       and the environment?

20          A.       Yes.

21               MR. FELDEWERT:  Madam Chair, Members of  
22       the Commission, I move the admission into evidence  
23       of NMOGA -- I think A, B and C were already filed,  
24       so we move the admission of those as well as NMOGA  
25       Exhibit D, which contains the red lines, and then

1 NMOGA Exhibit E, which contains the comparison of  
2 the pullouts of Rule 17 and Rule 34.

3 MS. HERRMANN: No objection.

4 MR. LARSON: No objection.

5 MS. CALLAHAN: No objection.

6 CHAIRWOMAN RILEY: Those exhibits are  
7 accepted.

8 (Note: NMOGA Exhibits A - E admitted.)

9 MR. FELDEWERT: That includes my  
10 examination of the witness.

11 CHAIRWOMAN RILEY: Thank you. We can go  
12 to cross-examination. Do you want to start?

13 MS. HERRMANN: I want to request a brief  
14 break to confer with my client.

15 CHAIRWOMAN RILEY: We can take a  
16 ten-minute break.

17 (Note: The hearing stood in recess at  
18 10:00 to 10:20)

19 CHAIRWOMAN RILEY: We are ready for  
20 cross-examination?

21 MS. HERRMANN: Yes.

22 CROSS-EXAMINATION

23 BY MS. HERRMANN

24 Q. Mr. McDaniel, I wanted to revisit some of  
25 your testimony on 29.11, Site Assessment and



1     **Characterization.**

2           A.     Okay.

3           **Q.     There's specifically a 90-day deadline to**  
4     **characterize a release. In your opinion is that**  
5     **sufficient time to accomplish that?**

6           A.     To characterize a release?

7           **Q.     Yes.**

8           A.     Yes, I believe it is.

9           **Q.     Do you think that would be a good example**  
10    **of a best management practice to put that timeline**  
11    **on an operator?**

12          A.     I think it's a good practice for both the  
13    operator and the Division so you have a definite  
14    amount of time, yes.

15          **Q.     And also to require immediate attention to**  
16    **a release?**

17          A.     Yeah. In Part 10 we have the immediate  
18    attention and from there you go to the rest of the  
19    rule.

20          **Q.     So going into the point of contention in**  
21    **29.10, the sampling requirements. 29.12, what is**  
22    **now under B, in your experience what's the largest**  
23    **release you have ever worked on?**

24          A.     I can't tell you the largest in footage  
25    because you would catch me making up numbers, but

1 the largest I have ever worked on was close to, I  
2 want to say, 10,000 cubic yards.

3 Q. Of excavation?

4 A. Yes.

5 Q. And do you know approximately the  
6 dimensions of that excavation?

7 A. I don't. I know it was close to 15 feet  
8 deep, but I couldn't tell you the length and width.

9 Q. But if it were 15 feet deep divided by  
10 10,000 cubic yards, do you have any idea what linear  
11 footage that would put us at?

12 A. No, I don't. It was a large excavation.

13 Q. Did you do any composite samples on that  
14 release?

15 A. We did.

16 Q. How many?

17 A. I don't know the answer to that.

18 Q. Was it more than one?

19 A. Yes, it was more than one composite  
20 sample.

21 Q. Have you ever in your experience had a  
22 sample fail requirements where you thought it would  
23 pass?

24 A. Yes.

25 Q. And is all contamination visually evident?

1           A.     No, it is not.

2           Q.     Going to 12 -- what is now marked as C1 in  
3     the NMOGA Exhibit D as in dog.

4           A.     Remediation Plan Requirements?

5           Q.     Yes. That remediation plan is required to  
6     be approved by the Division, correct?

7           A.     Yes.

8           Q.     Under the requirements, is a sampling plan  
9     required?

10          A.     Not necessarily a sampling plan but your  
11     remediation technique and the Division at that time  
12     could request a sampling plan based on the  
13     delineation that you got and the size of the  
14     theoretical remediated area. They will have that  
15     ability.

16          Q.     Jumping forward to what is now 12E,  
17     Closure Reporting, is a sampling plan required to be  
18     included there?

19          A.     Not a sampling plan but a sampling  
20     diagram, which would give you where the samples were  
21     taken. So they would have the opportunity to  
22     approve or deny the samples that were collected.

23          Q.     So the sampling diagram is only going to  
24     be sent to the Division in the closure phase?

25          A.     That is correct.

1           Q.     Now, one of the goals of this proceeding  
2     was to provide clarity and certainty to the  
3     operator, correct?

4           A.     That's correct.

5           Q.     Do you think allowing that denial to occur  
6     at the closure phase provides certainty to the  
7     operator instead of allowing the preliminary  
8     approval by the Division so the operator doesn't go  
9     through an entire remediation plan only to have it  
10    kicked back on sampling requirements?

11          A.     The Division would still have the  
12    opportunity to deny the sampling at that time  
13    regardless of whether the 200 is in there or not.

14          Q.     Where would they have --

15          A.     Because it says, "The Division may require  
16    additional sampling as they deem necessary based on  
17    threat to human health and the environment." So the  
18    Division could -- you don't have -- whether there's  
19    a 200, a 500 or anything, you don't have guaranteed  
20    approval of your sampling regardless. The Division  
21    can always impose additional sampling based on the  
22    language that's already in here.

23          Q.     So the Division would have to inspect a  
24    site to determine the risks?

25          A.     I'm not sure what the question is.

1           **Q.     The language you cited, that would require**  
2           **the Division to review and approve the sampling**  
3           **plan?**

4           A.     To review the sampling plan? I guess I'm  
5           not following you.

6           **Q.     If the Division would like to impose**  
7           **additional conditions, it would have to review the**  
8           **remediation?**

9           A.     It also gives -- I guess yes, they could,  
10          at that point. But they also could, right  
11          afterwards where it says, "The Division may add  
12          additional sampling requirements depending on the  
13          material released and risk to human health and the  
14          environment."

15          **Q.     And how do you propose that the Division**  
16          **would determine those risks to human health and the**  
17          **environment?**

18          A.     Based on testimony, the Division plans on  
19          being at all of our spills so I'm assuming their  
20          inspector would do it at that time.

21          **Q.     And then you also testified that you were**  
22          **afraid that the Division would not be there.**

23          A.     Yes, but I'm not -- yes, that's correct.

24          **Q.     So that burden is on the Division**  
25          **regardless?**

1           A.       It is.

2           Q.       Is there a minimum of representative area  
3           that you feel would be applicable in every  
4           situation?

5           A.       No, I don't believe that there is one that  
6           would be applicable in every situation.

7           Q.       So that would be a judgment call based on  
8           every release?

9           A.       Could be. Each release has a potential to  
10          be different based on site circumstances.

11          Q.       Now, releases are generally unplanned,  
12          correct?

13          A.       Correct.

14          Q.       Whereas the difference between a pit or a  
15          surface waste management facility that you cited in  
16          NMOGA Exhibit E, those are all design, correct?

17          A.       They are, but the contaminants of concern  
18          are the same.

19          Q.       However, wouldn't the area of impact be  
20          much more unknown?

21          A.       Could be, depending on the type of  
22          release.

23          Q.       And again, it's not visually evident?

24          A.       It's not always going to be visually  
25          evident but usually wet or discolored areas are

1 pretty standard when you have a spill.

2 Q. One more point of clarification I would  
3 like on the proposed language. Regarding the  
4 five-point composite samples, is it NMOGA's  
5 intention that the sample from the wet or discolored  
6 area be included in those composite samples?

7 A. Yes, I believe it is.

8 Q. Would that be a six-point or would one of  
9 the five points be the discolored areas?

10 A. One of the five points should be in the  
11 discolored area for a composite and then you would  
12 take an individual grab of the impacted area as  
13 well. So you would have a composite of the entire  
14 wall, including that discolored area, but then you  
15 would also have an individual of the area to give  
16 you a better idea of, by itself, what that impacted  
17 area would be. Whereas your composite may pass even  
18 with that impacted part in there, the potential for  
19 your grab sample to not pass is greater since you  
20 are taking it completely of that stained area.

21 Q. Do you think that would be representative  
22 of the entire wall if the grab sample were to cause  
23 the whole composite sample to exceed limits?

24 A. No, but that's why you would take the  
25 individual grab sample of the stained area, so you

1 would know that this is how high the stained area is  
2 and you could compare it to the composite results.

3 **Q. Is it a concern of yours that that**  
4 **composite sample might cause an entire wall to fail**  
5 **where it could only be a small area?**

6 A. Not really, because you are taking that  
7 individual sample of that stained area, and so if I  
8 was going to attack that spill further I would focus  
9 my efforts on the stained area and if there was no  
10 longer a stain, resample at that time as a composite  
11 and then that would give you an idea of if the  
12 entire wall was bad or if it was just that stained  
13 area that was driving your analysis higher.

14 **Q. Which would be resampled?**

15 A. Yes. You would have to resample for  
16 closure. If you had a failure you would need to  
17 resample after additional remediation activity  
18 occurred. Closure samples are designed when you are  
19 completely finished so when you feel you are  
20 completely finished take your closure samples; if  
21 they are not below the standards additional work  
22 would go in and you would have to take additional  
23 closure samples at that time.

24 **Q. Nothing further. Thank you.**

25 CHAIRWOMAN RILEY: Mr. Larson?



1 MR. LARSON: No questions.

2 CHAIRWOMAN RILEY: We will take it to the  
3 Commission. Mr. Balch, do you have questions?

4 COMMISSIONER BALCH: Just a couple. Kind  
5 of following up on that point of difference between  
6 Rule 17, 34 and this rule. So 17, you are dealing  
7 primarily with pits or berms under tanks, things  
8 like that, that are relatively contained.

9 THE WITNESS: Uh-huh.

10 COMMISSIONER BALCH: Then you will do the  
11 same, one five-point sample for what could be a  
12 40-acre pond in Rule 34, right?

13 THE WITNESS: That's correct.

14 COMMISSIONER BALCH: Do you think that's  
15 enough for one 40-acre pond?

16 THE WITNESS: With the stipulation that  
17 you individually sample any wet or discolored areas  
18 additionally, I think it would give you an idea. If  
19 you have a wet or discolored area that would give  
20 you an idea. And then as the operator, it's our  
21 responsibility to get it into closure so it would  
22 behoove me to take additional samples unless I want  
23 to dig out that entire area. Because if it's one  
24 sample or ten, if it fails it's up to me to  
25 remediate to the point at which it will pass.

1                   COMMISSIONER BALCH:   Keep sampling until  
2   you're positive it passes?

3                   THE WITNESS:   Yeah, after the acre or  
4   whatever with that wet area.

5                   COMMISSIONER BALCH:   When you have that  
6   large of an area, assuming you get rid of all your  
7   wet or discolored areas, you can pretty much sample  
8   anywhere in the five or how would you do that?   How  
9   would you go out and sample that?

10                  THE WITNESS:   How would I go out and  
11   sample that?   If it were me, so for a pond, for  
12   instance, most of your liquid is going to be -- the  
13   best potential for a leak would be on the bottom.  
14   So if I pulled the liner back and there was a wet  
15   area, I would personally take an individual sample  
16   of the wet area to see exactly what it is.   If it  
17   failed then we would jump over to the spill rule and  
18   remediate as a release at that time.

19                  COMMISSIONER BALCH:   So the word  
20   "representative" in the proposed rule language,  
21   "representative sample" --

22                  THE WITNESS:   Yes.

23                  COMMISSIONER BALCH:   What does  
24   "representative" mean to you?

25                  THE WITNESS:   To me it means you need a

1 sample that represents the entire face of the -- in  
2 terms of an excavation the entire area. So on a  
3 wall what I typically do is kind of a dice pattern.  
4 So two on the top, two sides, one in the middle and  
5 two on the bottom so it gives you samples along the  
6 entire vertical and the horizontal in different  
7 areas to make sure you capture the whole wall.

8 COMMISSIONER BALCH: And somebody else  
9 working for a different company may have a different  
10 procedure or a different idea of what's  
11 representative?

12 THE WITNESS: They could but that's a  
13 pretty general industry practice for a composite  
14 sample.

15 COMMISSIONER BALCH: Part of your  
16 certification?

17 THE WITNESS: Not necessarily, but part of  
18 education in sampling, and then some of that  
19 language is included in some of the sampling  
20 mechanisms that were included in the rule on how to  
21 collect composite samples and things like that for  
22 best practices.

23 COMMISSIONER BALCH: If you take you and  
24 nine other of your contemporaries and other  
25 companies, you're probably sampling roughly the same

1     soils?   Roughly similar?

2                 THE WITNESS:   It would probably be  
3     generally the same.   The example that was on Slide  
4     43 is another good example kind of where it zigzags  
5     up and down the wall.   That's another good  
6     representative but I would say most people would  
7     consider a five-point.   They would have some kind of  
8     a representative sample across the entire wall at  
9     varying heights and along the length.   They wouldn't  
10    just take them from one area.

11                COMMISSIONER BALCH:   So there's a fair  
12    amount of production in New Mexico that's attributed  
13    to smaller producers?

14                THE WITNESS:   Yes.

15                COMMISSIONER BALCH:   Not companies your  
16    size, companies that may not have an HSE supervise  
17    or even a HSE staff.   Might just be their engineer  
18    that does that if it comes up.   So they might not  
19    have that level of background experience to know how  
20    to go out there and acquire a pattern.   What kind of  
21    guidance should the rule be giving those people for  
22    sampling?

23                THE WITNESS:   Sure.   For that kind of  
24    guidance, that's why we kind of wanted to include  
25    those federal and, you know, generally approved

1 sampling techniques and stuff that are included in  
2 the section with the EPA method and all that in  
3 there because it gives you a general basis of how to  
4 collect samples and how to put them in a jar and  
5 that kind of stuff. Gives you the basics on how to  
6 do that if you don't know how.

7 COMMISSIONER BALCH: Does it go into the  
8 cross pattern with the two up and two down?

9 THE WITNESS: I have personally not  
10 reviewed each of those documents in their full  
11 length so I can't attest to whether they do or not,  
12 but from what I understand they have that kind of  
13 information in them.

14 COMMISSIONER BALCH: It seems like the  
15 intent of the rule as proposed is that any release,  
16 regardless of size, has to be remediated and  
17 reclaimed pretty much in the same way.

18 THE WITNESS: That is correct.

19 COMMISSIONER BALCH: The only difference  
20 being if it's a major or minor release there would  
21 be some reporting and some forms and some  
22 verification of those steps.

23 THE WITNESS: Yes.

24 COMMISSIONER BALCH: So what appears to be  
25 lacking in here from my reading of it is that if you

1 have an unreportable release, less than five  
2 barrels, it's clear you are supposed to go out  
3 immediately, stop the source of the leak, pick up  
4 any free liquids that you can, right? At some point  
5 in there you make a determination how big the leak  
6 was. If it's less than five then you are just  
7 supposed to clean it up but there's no guidance on  
8 that. All the guidance here for 29.11 refers to  
9 major or minor spills.

10 THE WITNESS: Uh-huh.

11 COMMISSIONER BALCH: When you go to  
12 remediation and restoration, they don't specifically  
13 say major or minor spills. They just say release.  
14 So the step that is missing for just the  
15 unreportable releases, how do you determine the best  
16 way to remediate and restore?

17 THE WITNESS: Sure. Like Mr. Powell  
18 testified yesterday, there are several different  
19 ways you can remediate a small spill. Some people  
20 use a chemical called Microblaze that breaks down  
21 the material. Some people use little bioremediation  
22 bacteria that are popular that you can buy, but most  
23 people are going to just shovel it up and dispose of  
24 it. You know, I feel like the language that's in  
25 here, I believe, that responsible party must

1 remediate all releases, I believe that's pretty  
2 explanatory in the industry that we would all  
3 understand what that meant.

4 COMMISSIONER BALCH: But if I'm a small  
5 producer down in Hobbs and I have gone out to my  
6 wellhead and the water tank in the separator has a  
7 leak. I fix it, I look at it and I determine it  
8 must be 4.99 barrels, not 5.01. The next step in  
9 the rule is site characterization, which says major  
10 or minor release, you must do this. Doesn't say  
11 anything about any other release. I might just stop  
12 reading right there and not go on to remediation  
13 where it says all leaks must be remediated. So I'm  
14 just wondering if the language needs to be cleared  
15 up a little bit to make it explicit that all  
16 releases need to be treated essentially the same.  
17 It's just the reporting and monitoring requirements  
18 that are different for the size of the spill.

19 THE WITNESS: I see what you're saying,  
20 but I believe that the way the language is  
21 currently, I think if you were to review it I think  
22 you would gain the knowledge that you do need to  
23 remediate it. And I would argue that operators,  
24 regardless of what is in the rule, if they don't  
25 want to comply with the rule, we can write whatever

1 we want in here and if they're not going to do it  
2 with what's in here currently....

3 COMMISSIONER BALCH: Of course that's  
4 understood. For your company, you go out there and  
5 you spill three barrels, scrape up two of them.  
6 Suck up two of them and do something else with the  
7 other one. Is there some level in there where you  
8 would feel like you need a characterization?

9 THE WITNESS: Yes.

10 COMMISSIONER BALCH: A plan to deal with  
11 even a small spill like that?

12 THE WITNESS: Yes, there is. It depends.  
13 A good example is if you had a small spill in an  
14 area, you went to, you know, hand shovels and then  
15 started digging, and I believe like was mentioned  
16 before he had a two barrel release that went 20  
17 feet, right? So if you started digging it up a  
18 little bit and you started getting into some more  
19 stained soil, started thinking that doesn't seem  
20 right, at that point then we would probably do some  
21 kind of characterization to see how deep was, how  
22 wide, what we were dealing with, because it just  
23 doesn't fit the mold for what was reported, right?

24 COMMISSIONER BALCH: You scrape off the  
25 two inches and everything looks clean, then you're



1 thinking you don't need a plan? You can just walk  
2 away from it once you're done with that?

3 THE WITNESS: That's correct.

4 COMMISSIONER BALCH: Thank you very much.

5 CHAIRWOMAN RILEY: Mr. Martin?

6 COMMISSIONER MARTIN: Under Closure  
7 Requirements, is it your interpretation that the  
8 five-points composite sample can be made up of the  
9 base and the wall samples or does it mean you take  
10 separate five-point composite samples, one on the  
11 base and one on the wall?

12 THE WITNESS: My interpretation is  
13 individual composite samples from the base and each  
14 of the walls.

15 COMMISSIONER MARTIN: Two separate ones?

16 THE WITNESS: Five. So for the case of  
17 the square excavation you would have one sample for  
18 the south wall, the east wall, the west wall, four  
19 on the walls and then one on the bottom. So each  
20 excavation would comprise five samples basically.

21 COMMISSIONER MARTIN: Okay. That answered  
22 my question. Let me ask you one more.

23 THE WITNESS: Sure.

24 COMMISSIONER MARTIN: On the Division's  
25 Exhibit 1/41, you would combine that sample, the

1 grab sample from the bottom, with the four on the  
2 wall per that rule, to follow that rule?

3 THE WITNESS: Could you repeat the  
4 question, please?

5 COMMISSIONER MARTIN: Would you take four  
6 from the wall or three from the wall and two from  
7 the base including the stained area?

8 THE WITNESS: No. In my interpretation,  
9 the way NMOGA's rule is outlined, where the red area  
10 is on the bottom it would be exactly the same. We  
11 would have collected composite exactly the way that  
12 that's outlined. We would have taken an individual  
13 grab sample of the wet or discolored area. The only  
14 area where we would be different on this is the  
15 yellow and green area. Instead of being two  
16 separate composites it would be one composite  
17 consisting of five individual points that are  
18 representative of that wall.

19 COMMISSIONER MARTIN: That's all I've got.

20 COMMISSIONER BALCH: May I follow up on  
21 that? So if you go to the regular pit rule pit,  
22 maybe the wall is 30 or 40 feet long. You go to  
23 40-acre produced water pit and maybe the wall is a  
24 couple hundred feet long, right? 1,000 feet long?  
25 You go to a release that occurred down some kind of

1 a tertiary drainage and you could have a half mile  
2 long wall on each side. In each of those cases  
3 you're talking about one five-point sample  
4 representing the entire wall?

5 THE WITNESS: Not necessarily. I mean,  
6 what we're discussing is more of your typical  
7 release and excavation. Things where it might  
8 travel down a wash are a little different. You  
9 know, I would anticipate that the OCD when we called  
10 in a release into a waterway, it would be a major  
11 release, that we would be in discussion. And when I  
12 would be on the phone with the inspector I would  
13 say, "Hey, it's a mile down the wash," and they  
14 would say, "We are going to need more than just your  
15 one sample."

16 That's typically how it's been handled in  
17 my area with my experience. They would at that  
18 point guide you to require additional samples based  
19 on that type of release.

20 COMMISSIONER BALCH: As a health safety  
21 professional you're going to make sure the sampling  
22 is adequate enough to protect your company?

23 THE WITNESS: Absolutely. The way we have  
24 it currently written, it would add an additional  
25 grab sample for any wet or discolored areas beyond

1 the usually composite that we would take, which is  
2 not currently in the regulation.

3 COMMISSIONER BALCH: Thank you.

4 CHAIRWOMAN RILEY: I don't have any  
5 questions.

6 MR. BRANCARD: I have one or two.  
7 Mr. McDaniel, I believe you testified that you were  
8 present at all these committee meetings.

9 THE WITNESS: Yes, I believe so.

10 MR. BRANCARD: At these committee meetings  
11 were there participating in these representatives of  
12 landowner organizations?

13 THE WITNESS: No, I don't believe so.

14 MR. BRANCARD: So you testified you were  
15 familiar with these surface use agreements?

16 THE WITNESS: I'm familiar with them in  
17 the sense that I know that they exist and I have had  
18 to deal with them in some cases where we have had a  
19 release on a property and we have had to get the  
20 surface use agreement to see what exactly our  
21 agreement is with that particular landowner.

22 MR. BRANCARD: So in that situation you're  
23 looking to see whether the agreement has its own  
24 standards for requiring cleanups?

25 THE WITNESS: No, it won't have its own

1 standards for requiring cleanup but there will be  
2 points that were brought up during the agreement.  
3 If the landowner wanted to know any time you moved a  
4 rock on location, I mean, that would be in there and  
5 things like that. So to make sure we don't do  
6 anything we're not supposed by the surface use  
7 agreement, if we had a release with my company we  
8 would check that first to make sure that we are  
9 meeting all the requirements that are in that  
10 particular agreement. A lot of times they are not  
11 that specific but, you know, it varies greatly from  
12 one landowner to another.

13 MR. BRANCARD: Sure. But in your  
14 experience with these agreements do they normally  
15 require the landowner be informed if there is a  
16 spill?

17 THE WITNESS: Not normally in New Mexico,  
18 no, they don't.

19 MR. BRANCARD: Because we do have the  
20 testimony yesterday of the landowner and the  
21 proposals that were submitted by the environmental  
22 defense and other groups a question of whether the  
23 notice that comes to us of reporting a spill should  
24 also go to the landowner. Do you have an opinion on  
25 that?

1           THE WITNESS: My opinion on that is the  
2   OCD has the responsibility to enforce their own  
3   rules and regulations and not necessarily whether or  
4   not we comply with other industry or surface use  
5   agreement type agreements.

6           MR. BRANCARD: But you are saying the  
7   surface use agreements don't normally require notice  
8   so this would be something beyond?

9           THE WITNESS: They may not, but I don't  
10   believe it's the job of the OCD to imply additional  
11   regulations beyond what we have agreed on with our  
12   surface owners. If the surface owner wanted to be  
13   notified of releases on their property they would  
14   have stipulated it in the surface use agreement.

15          MR. BRANCARD: So just to switch gears a  
16   second here, on the process for each of these plans,  
17   we have the site characterization plan, we have a  
18   remediation plan, which as I read it is part of the  
19   site characterization plan.

20          THE WITNESS: Yes.

21          MR. BRANCARD: Separate document but part  
22   of the site characterization submitted.

23          THE WITNESS: Yes and no. It's a separate  
24   requirement but, I mean, they could be the same  
25   document but it would have different -- so the site

1     characterization you would have the samples and  
2     where you took them and how big the area is and you  
3     would have a separate portion of how you are going  
4     to remediate it now that you know what the site is  
5     and what the contaminants are. So it could be the  
6     same document but it would be two distinctly  
7     different parts covering two distinctly different  
8     things.

9                 MR. BRANCARD: Then there's a closure  
10    plan?

11                THE WITNESS: Yes or closure report.

12                MR. BRANCARD: If I read this correctly,  
13    the rules require the Division to approve/deny the  
14    remediation plan and the closure report.

15                THE WITNESS: That is correct.

16                MR. BRANCARD: There's no decision  
17    required on the site characterization; is that  
18    correct?

19                THE WITNESS: Yeah, I guess I'm not sure.  
20    I believe that they have the ability to approve the  
21    characterization/remediation plan and if they didn't  
22    feel that there was adequate characterization or  
23    delineation they couldn't really approve your  
24    remediation plan because you hadn't adequately  
25    characterized the site.

1           So I feel like they would have the ability  
2   to deny it in that way. They would say, "Hey, we  
3   can't approve this remediation plan because you  
4   didn't take samples of this side of the well pad and  
5   we don't know what's over there."

6           MR. BRANCARD: But there is a provision in  
7   the characterization that within 30 days the  
8   Division can request additional information?

9           THE WITNESS: Yes.

10          MR. BRANCARD: But then within 60 days  
11   they have to make a decision on the remediation.

12          THE WITNESS: That is correct.

13          MR. BRANCARD: So 30 days, and then you  
14   get 14 days to respond to the information request  
15   and then decision within 60 days.

16          THE WITNESS: Yes.

17          MR. BRANCARD: Upon you getting that  
18   decision, if the decision requires either a denial  
19   or in the case of a remediation plan adds  
20   conditions, you have the ability to request a  
21   hearing?

22          THE WITNESS: That's correct.

23          MR. BRANCARD: Then it says in each of  
24   these situations, "Request a hearing or consult with  
25   the Division." Can you give me your understanding



1 of what that means?

2 THE WITNESS: Sure. If there was a denial  
3 and I didn't necessarily agree with why it was  
4 denied, instead of just immediately going to hearing  
5 I might call up Brandon or Cory with the Aztec  
6 office and try to discuss our differences and if we  
7 couldn't come to agreement then at that time maybe  
8 if we just couldn't compromise at all, then maybe I  
9 would go to hearing at that point. But I would  
10 first want to try to negotiate or discuss our  
11 differences of opinions with the OCD before I took  
12 it to the level of a hearing.

13 MR. BRANCARD: Thank you.

14 CHAIRWOMAN RILEY: Do we have any  
15 redirect?

16 REDIRECT EXAMINATION

17 BY MR. FELDEWERT

18 Q. Mr. McDaniel, first off, on Mr. Brancard's  
19 question, let's put language to it. If I go to  
20 29.11C.

21 A. Okay.

22 Q. So now I'm in the provisions dealing with  
23 site assessment and characterization, right?

24 A. Yes.

25 Q. That's where I have to do the site map,

1 the depth to groundwater, distance from wellhead  
2 protection area and nearest significant  
3 watercourses. I've got to demonstrate liner and  
4 delineate the release horizontally and vertically,  
5 right?

6 A. That's correct.

7 Q. I have to develop the remediation plan?

8 A. Yes.

9 Q. As part of that, Submission C sets forth  
10 that the Division has the opportunity at times to  
11 determine whether more information is needed to  
12 understand the character of release and the  
13 potential impact on freshwater, public health or the  
14 environment, right?

15 A. That is correct.

16 Q. And as part of that delineation there is a  
17 sampling methodology requirement, correct?

18 A. Sampling. I guess I'm --

19 Q. So if I -- I'm on Page 3 and I go up to  
20 Subparagraph B.

21 A. Okay, yes.

22 Q. Right? If the responsible party is unable  
23 to demonstrate liner integrity. So I'm outside of  
24 the lined area.

25 A. Right.

1           Q.     You must delineate the release  
2 horizontally and vertically.

3           A.     Yes.

4           Q.     Then provides sampling methods.

5           A.     That's correct.

6           Q.     There was discussion about those and we  
7 are going to address those with another witness, but  
8 those certainly deal with -- when you look at these  
9 guidelines they discuss representative samples, do  
10 they not?

11          A.     They do. That's my understanding.

12          Q.     All right. So if the Division feels that  
13 there's additional information that's needed,  
14 perhaps additional sampling with delineation, they  
15 can require a hearing.

16          A.     They can.

17          Q.     Okay. Or again, as we talked about  
18 earlier, they can require the party discuss the  
19 remediation plan.

20          A.     Yes.

21          Q.     Or if they decided -- or at the closure  
22 plan stage?

23          A.     Yes.

24          Q.     Or any time in between, right?

25          A.     That's correct.

1           Q.     Now I want to get to what you had the  
2     discussion about with Mr. Herrmann. If I go to Page  
3     5 and those closure requirements and I go to that  
4     area of disagreement, D1D, there's a last sentence  
5     there that says, "The Division may add additional  
6     sampling requirements dependent on the material  
7     release and any risk to human health or the  
8     environment," right?

9           A.     Yes.

10          Q.     There's no caveat there. It doesn't say  
11     that they have to be on-site to do that, does it?

12          A.     No.

13          Q.     Doesn't say when that can be done?

14          A.     No.

15          Q.     So is it your understanding that can be  
16     done any time throughout this entire process?

17          A.     That's correct.

18          Q.     And if I then look at Subparagraph C, last  
19     sentence, there it says, "If a Division inspector is  
20     witnessing the samples, that inspector is authorized  
21     to verbally approve it." So the verbal approval can  
22     only exist if they are witnessing, the way it is  
23     written?

24          A.     The way it's written, that's correct.

25          Q.     But the other sampling requirements are

1 conditional requirements that don't require them to  
2 be witnessed?

3 A. No.

4 Q. They can be done at any time?

5 A. That's correct.

6 Q. Then while we're here, and I want to make  
7 sure we all understand what that language means by  
8 separate -- and I think we need to look at it  
9 carefully, D1B. There must be separate  
10 representative wall and base five-point composite  
11 samples.

12 A. That's correct.

13 Q. So if I go here, we have one wall.

14 A. Uh-huh.

15 Q. Your point was under the language that's  
16 being proposed by NMOGA, you got to take five grab  
17 samples from that wall?

18 A. That's correct.

19 Q. Do you also have to take five grab samples  
20 from any other wall?

21 A. Yes, from each of the other walls.

22 Q. So five, ten, 15, 20?

23 A. That's correct.

24 Q. Individual grab samples?

25 A. Yes.

1           Q.     And then you take each of the five and  
2     combine them together and that's the sample you send  
3     off to the lab for analysis?

4           A.     That's correct.

5           Q.     In addition to that, you have to take the  
6     five samples on the floor?

7           A.     Yes.

8           Q.     Combine those?

9           A.     Yes.

10          Q.     Send them off to the lab?

11          A.     Yes.

12          Q.     Under NMOGA's language you have the little  
13     blue circle because we have a wet area there.

14          A.     Yes.

15          Q.     You take a sample of that, correct?

16          A.     That's correct.

17          Q.     That stand-alone sample then goes to the  
18     lab?

19          A.     That's correct.

20          Q.     That's what this language means?

21          A.     That's correct.

22          Q.     And there was a lot of scenarios brought  
23     up. Maybe we've got a release that goes down a  
24     wash.

25          A.     Uh-huh.

1           Q.     Maybe we got a release that encompasses a  
2     very large area.  Maybe we got a release that  
3     includes chlorides or condensate or a release where  
4     the Division or even the operator is concerned that  
5     you may not be able to see the release.  All these  
6     points that we just talked about, the Division can  
7     require additional sampling.  They would have the  
8     information necessary to make that determination,  
9     correct?

10          A.     Yes.

11          Q.     So if we had a very large release and they  
12     were concerned about these five-point composite  
13     samples not being enough, they would have the  
14     information to say, "We think in this particular  
15     circumstance you need to do additional sampling"?

16          A.     Yes.

17          Q.     Okay.  Or if we had a constituent that  
18     maybe they were concerned about wouldn't show up as  
19     a stain, they could use that as a reason to require  
20     additional sampling?

21          A.     Yes, I believe they could.

22          Q.     And the difference here, though, is if we  
23     make this arbitrary 200-square-foot obligation  
24     mandatory in every single case, then for you to  
25     depart from that as an operator in those

1     circumstances you would have to go get some kind of  
2     variance?

3           A.     That's correct.

4           Q.     Right? We would have to be inundating the  
5     Division with variances or requests for exceptions  
6     because of the 200-square-foot requirement?

7           A.     That's correct.

8           Q.     Is it your testimony, Mr. McDaniel, in  
9     most circumstances you don't need a representative  
10    sample every 200 square feet?

11          A.     In most circumstances, no.

12          Q.     That's all I have.

13                   MS. CALLAHAN: No questions.

14                               RECROSS-EXAMINATION

15    BY MR. HERRMANN:

16          Q.     One brief question. When you witness a  
17    release, you are looking for wet or discolored  
18    areas, is it possible in that 90 days that's  
19    required by this rule a wet area could dry?

20          A.     Absolutely. But you wouldn't wait 90 days  
21    to collect the sample.

22          Q.     You wouldn't or all operators wouldn't?

23          A.     Well, I wouldn't. I can't say all  
24    operators wouldn't but I personally would not. I  
25    would want to get a sample as quickly as possible to



1     determine what my contaminant levels are in order to  
2     be able to address what we have.

3           **Q.     I think that's all I have.**

4           MS. HERRMANN: I would like to recall Mr.  
5     Powell to rebut some specific testimony based on  
6     whether or not the change was discussed with NMOGA  
7     after NMOGA's presentation.

8           MR. FELDEWERT: I have one more witness.

9           CHAIRWOMAN RILEY: So we will do it at the  
10    end?

11          MR. BRANCARD: Yes.

12          CHAIRWOMAN RILEY: Are you done with the  
13    witness?

14          MR. FELDEWERT: Yes, ma'am.

15          CHAIRWOMAN RILEY: Call your next witness,  
16    please.

17          MR. FELDEWERT:

18                       BRETT FULKS

19                (being duly sworn, testified as follows:)

20                       DIRECT EXAMINATION

21           BY MR. FELDEWERT

22           **Q.     Would you please state your name and**  
23     **identify by whom are you employed and what you do as**  
24     **an occupation?**

25           A.     Brett Fulks. I work for Devon Energy

1 currently and I'm the environmental health and  
2 safety professional for them.

3 Q. How long have you been held that position?

4 A. Six years.

5 Q. What are your job responsibilities as an  
6 environmental public safety representative?

7 A. Managing initial response and remediation  
8 for releases, managing engine testing and general  
9 compliance with other federal and state rules, air  
10 compliance and things of that nature.

11 Q. So are you familiar with state and federal  
12 regulations that govern, for example, releases from  
13 oil and gas operations?

14 A. Yes, sir.

15 Q. Did you participate in a work group that  
16 resulted in this proposed rule?

17 A. Yes.

18 Q. Have you testified previously before  
19 either the Commission or the Division?

20 A. No, sir.

21 Q. What's your education level?

22 A. I received my bachelor in science from  
23 Texas A & M University in environmental science in  
24 2011.

25 Q. As part of that what type of training is

1     **involved?**

2           A.     Coursework such as environmental rules and  
3     regulations at a general level as well as soil  
4     science and soil microbiology.

5           Q.     What has been -- you mentioned your work  
6     experience deals with managing and coordinating  
7     releases from oil and gas operations?

8           A.     Yes.

9           Q.     Do you have experience then in the  
10    notifications, the response, the sampling, the  
11    testing and the remediation that's involved?

12          A.     Yes, sir.

13          Q.     How long have you been working on dealing  
14    with releases in New Mexico?

15          A.     Three years.

16          Q.     And throughout that time do you have  
17    experience implementing the Table 1 standards that  
18    were adopted by the Commission for Rule 17?

19          A.     Yes.

20          Q.     And also the Table 1 standards that were  
21    adopted by the Division for Rule 34?

22          A.     Yes.

23          Q.     And as a result of your experience were  
24    you also familiar with the testing methods?

25          A.     Yes.

1           Q.     And that would be for determining  
2     inorganic compounds and hydrocarbon constituents in  
3     soils?

4           A.     Yes.

5           Q.     Did I say that right?

6           A.     Yes.

7                   MR. FELDEWERT: I would tender Mr. Fulks  
8     as an expert witness in the testing methods, the  
9     standards and the New Mexico regulations addressing  
10    surface releases from oil and gas operations.

11                  CHAIRWOMAN RILEY: Thank you for providing  
12    us the background on Mr. Fulks. It will help the  
13    Commission understand what his testimony is going to  
14    be about, but I have been instructed by the  
15    commission counsel that we don't have to tender him  
16    as an expert.

17                  MR. FELDEWERT: I am going to have him  
18    offer opinions so I would like him tendered as an  
19    expert.

20                  MR. BRANCARD: Mr. Feldewert, anybody can  
21    offer an opinion.

22                  MR. FELDEWERT: Okay. Anybody?

23                  COMMISSIONER BALCH: If they sign the  
24    sheet in the back of the room.

25                  MR. FELDEWERT: Comments are one thing,

1    opinions are another, particularly if we have an  
2    appellate review.  So I'm not as worried about that  
3    here.  I would worry if we were looking at  
4    circumstances where there may be appellate review  
5    which is the only reason I bring this up.

6           Q.        **(By Mr. Feldewert)  Take a look at NMOGA**  
7    **Exhibit C.  Now, there are three pages to this**  
8    **exhibit, Mr. Fulks?**

9           A.        Yes.

10          Q.        **If I look at NMOGA Exhibit C1 and C2, does**  
11    **that contain the Table 1 standards and the methods**  
12    **that you have been working with since they were**  
13    **enacted in 2013?**

14          A.        Yes, sir.

15          Q.        **And C1 contains the initial Table 1 that**  
16    **was adopted by the Commission in 2013 for pits and**  
17    **surface facility closure, correct?**

18          A.        That is correct.

19          Q.        **And NMOGA Exhibit C2 contains the Table 1**  
20    **that was adopted by the Commission in 2015 following**  
21    **a hearing for closure of produced water recycling**  
22    **containment?**

23          A.        That is correct.

24          Q.        **And at that time isn't it true that the**  
25    **Commission modified the EPA testing methods for TPH**

1     **and benzene?**

2           A.     Correct.

3           Q.     And finally if I look at NMOGA Exhibit C3,  
4     **does that contain the Table 1 for the proposed rule**  
5     **governing release?**

6           A.     Yes.

7           Q.     Now, there has been some changes made to  
8     **this initially filed table, correct?**

9           A.     Correct.

10          Q.     And those changes are reflected in NMOGA  
11     **Exhibit B at Page 6?**

12          A.     That is correct.   Exceptions.

13          Q.     There were no changes made to the Limit  
14     **column?**

15          A.     Correct.

16          Q.     Now, before we get into this too deep,  
17     **just generally how is Table 1 used in this proposed**  
18     **rule?**

19          A.     In the proposed rule Table 1 would be used  
20     for characterization, as we discussed yesterday and  
21     in the testimony today.   For initial  
22     characterization and then also for closure.   And so  
23     just walking through the columns, based on depth to  
24     groundwater, from the horizontal extents of the  
25     release you would first identify what your depth to

1 groundwater was. Next you would be looking under  
2 the Constituent column. You would then begin  
3 sampling in accordance with that. The analytic  
4 methods are outlined in the Methods section and then  
5 the limits would apply for both characterization and  
6 closure.

7 Q. I want to focus then on the Limit column.

8 A. Okay.

9 Q. On either C3 or Page 6 of NMOGA Exhibit D.  
10 Does that proposed Table 1 carry forward the same  
11 cleanup or closure standards that were adopted by  
12 the Commission for Rule 17 and Rule 34?

13 A. It does.

14 Q. Now, there were some written comments that  
15 were filed by EDF, NRDC, Earthworks and OGAP stating  
16 that they, as a group, advocate science-based  
17 safeguards for clean air, water and the environment,  
18 okay? Were the standards that we see here in Table  
19 1 the result of extensive science-based testimony  
20 garnered by the Commission in 2012?

21 A. Yes.

22 Q. And groups like Earthworks and OGAP  
23 actively participated and presented evidence in 2012  
24 that assisted in adopting the science-based  
25 standards?

1           A.       Yes, they did.

2           Q.       If I turn to what's been marked as NMOGA  
3   Exhibit G, which is a separate handout, does NMOGA  
4   Exhibit G contain a copy of the Division's order  
5   that was issued following receipt of that extensive  
6   science-based evidence in 2012?

7           A.       Yes, it does.

8           Q.       And in particular, what we have included  
9   here, just for the purposes of this exhibit, are  
10   certain findings that begin on Page 41 of that  
11   order?

12          A.       Yes.

13          Q.       And do these findings demonstrate the  
14   extent of the science-based evidence and summarize  
15   the science-based evidence that was presented to the  
16   Commission at that time which resulted in the  
17   adoption of these limits in Table 1?

18          A.       Yes, they do.

19          Q.       In your opinion, Mr. Fulks, is there,  
20   based on your experience, is there any evidence or  
21   any reason to depart from these science-based  
22   standards that were adopted by the Commission  
23   following receipt of that extensive evidence in  
24   2012?

25          A.       No.



1           Q.     And would the use of these same standards  
2 promote understanding, efficiency and consistency by  
3 the Division and the operators in addressing surface  
4 releases?

5           A.     Yes.

6           Q.     Now, the proposed Table 1 then, if we then  
7 move over one column and go to the Method column,  
8 does this proposed Table 1 carry forward the updated  
9 testing methods adopted by the Commission in Rule 34  
10 in 2015?

11          A.     Yes.

12          Q.     And when the Commission looked at the  
13 table and these methods in 2015, did they replace  
14 the method utilized for TPH and chlorides?

15          A.     For TPH, yes.

16          Q.     What was the change that was made?

17          A.     They removed a method that is considered  
18 outdated. That method utilized Freon and they  
19 replaced that with the 8015.

20          Q.     8015M?

21          A.     Yes, sir.

22          Q.     And was that method that they removed, was  
23 that method 4.18.1?

24          A.     Yes, sir.

25          Q.     And, in fact, as garnered at the time of

1 the hearing, does the EPA normally recommend use of  
2 4.18.1?

3 A. That's correct.

4 Q. Now, one of the things I noticed in  
5 looking through this table is I see a GRO plus DRO  
6 constituent line under the constituent row or  
7 column.

8 A. That's correct.

9 Q. And I see that in 51 feet to 100 feet and  
10 I see it in greater than 100 feet but I do not see  
11 the same line in less than 50 feet.

12 A. Yes.

13 Q. Can you explain the reason for that?

14 A. Yes. If you look at the limits section  
15 for TPH for less than 50 feet, that limit is 100  
16 milligrams per kilogram. It is very conservative  
17 and there would be no need to break out between GRO  
18 and DRO specifically.

19 Q. For groundwater less than 50 feet?

20 A. Absolutely.

21 Q. And we see that same thing if we look at  
22 Table 1 that was adopted in Rule 17, right?

23 A. Absolutely.

24 Q. Now, if I look at Page 6 which contains  
25 the modifications to this table since it was filed,

1     **you see what's been added is GRO plus DRO plus MRO?**

2           A.     That's correct.

3           **Q.     And that's exactly what the Commission did**  
4 **when they adopted Table 1 under Rule 34, correct?**

5           A.     That's correct.

6           **Q.     Why was that done?**

7           A.     When conducting 8015M in the lab, you will  
8 get all the ranges of carbons, so it was intended to  
9 limit that range that you are actually looking for  
10 to the constituents of concern for hydrocarbon-based  
11 releases.

12          **Q.     So does that provide an organic range, C**  
13 **something to C something else?**

14          A.     Yes. It provides a range and then it also  
15 -- so the entire incentive was consistency. And one  
16 thing that has been a topic of discussion under the  
17 rule as-is in the past is you submit your GRO and  
18 your DRO and you may hear back that that's  
19 insufficient, they want you to go look for this or  
20 that or extend the ranges. The intent here was to  
21 follow in the footsteps of 34 and make sure that  
22 range was limited to exactly the constituents of  
23 concern in our releases.

24          **Q.     By providing the range, does that provide,**  
25 **I would call them, false positives or areas of**

1 concern because without this range you would pick up  
2 organics that have nothing to do with petroleum  
3 production?

4 A. That's exactly correct.

5 Q. And in your opinion, does this language  
6 under TPH in Table 1 provide a sufficient  
7 description or the carbon range to be tested under  
8 Method 8015M?

9 A. Yes.

10 Q. Now, the other change we see here is that  
11 there's some strikeouts of 8015M for benzene in  
12 favor of 8260B.

13 A. Correct. If you -- we did that because it  
14 appeared that that was a typo. If you look at the  
15 51 to 100-foot area, it was not included there, and  
16 if you look at Rule 34 it specifically utilizes  
17 8260, not 8015.

18 Q. Why do you use 8260B rather than 8015M?

19 A. That's what was determined in previous  
20 hearings as the appropriate method for the Rule 17  
21 and Rule 34. One potential reason might be that  
22 under 8015M you can get interference through gas  
23 chromatography between some of the organic compounds  
24 and your benzene, and so you would have to add to  
25 8015M as it is to get that clarity. Whereas 8260B

1 is already prescriptive to identify benzene.

2 Q. So that's a method that's actually  
3 designed to identify benzene?

4 A. Yes.

5 Q. And is that a method that also identifies  
6 BTEX?

7 A. Yes.

8 Q. What does BTEX stand for?

9 A. Benzene, toluene, ethylbenzene xylene.

10 Q. So it makes sense to have the same method  
11 used for BTEX as well as benzene?

12 A. Yes.

13 Q. Now, the other thing I have a question  
14 about is when I look at this table here for using  
15 the 8015M method for TPH and GRO plus DRO, but we  
16 then use 8260M for BTEX and benzene, correct?

17 A. Correct.

18 Q. Why?

19 A. At the time of the hearings it was  
20 determined that 8015M is reliable for determining  
21 TPH, but it's my understanding based on the  
22 testimony given during 17 and 34 that it's  
23 inappropriate to use that for benzene.

24 Q. Are they different boiling points for the  
25 test methods?

1           A.       There are different boiling points.  
2   Again, I mentioned this earlier but when you are  
3   doing the gas chromatography under 8015M you can  
4   have interference between other organic carbons, as  
5   mentioned earlier.

6           Q.       In your opinion, will the use of these  
7   updated testing methods in Table 1 promote  
8   understanding, efficiency and consistency by the  
9   Division and the operators in addressing surface  
10   releases?

11          A.       Yes.

12          Q.       And are these testing methods ones that  
13   are familiar with and can be utilized by  
14   laboratories?

15          A.       Yes.

16          Q.       Now, there's been, if I look at Page 6 of  
17   NMOGA Exhibit D, there's been a change made to the  
18   upper left-hand corner?

19          A.       Yes.

20          Q.       Where we struck "bottom" and it was  
21   replaced with "the horizontal extents." Do you see  
22   that?

23          A.       Yes.

24          Q.       Briefly, what was the reason for that  
25   change? Why didn't we just continue with bottom?

1           A.     The intent there was to make sure that we  
2     stayed consistent with the intent of Rule 17 and  
3     Rule 34. So in those rules if you find a release  
4     underneath that pit you're starting at the bottom of  
5     the pit. If you apply the same thing to a release  
6     you would constantly be changing your depths to  
7     groundwater if you use that term "bottom." It was  
8     to maintain an apples-to-apples comparison.

9           Q.     And in your opinion, will this proposed  
10    change degrade in any way the standards adopted by  
11    the Commission in Table 1 following extensive  
12    hearings?

13          A.     No.

14          Q.     I want you to turn to Page in NMOGA  
15    Exhibit D, going to 29.11A5E on Page 3. You were  
16    here for the discussions yesterday about this  
17    subsection?

18          A.     Yes.

19          Q.     And you were here with respect to the  
20    purpose of that subsection?

21          A.     Yes.

22          Q.     And how it was implemented?

23          A.     Yes.

24          Q.     In your opinion -- have you worked with  
25    these tables and these CFRs that we see in

1     **Subsection E?**

2           A.     Yes.

3           Q.     And in your opinion, does this subpart  
4     provide appropriate testing methods and standards to  
5     address non-wellspring releases in the majority of  
6     the circumstances?

7           A.     Yes.

8           Q.     And if there was a release out there that  
9     contains constituents not addressed by these public  
10    sources, does the Division have the authority to  
11    determine the appropriate response?

12          A.     Yes, under Triple I they have that  
13    authority.

14          Q.     So 29.11.A5B Triple I?

15          A.     Yes, sir.

16          Q.     Okay. Then staying on this page, if I  
17    move up above, I'm in 29.11A5B and it talks about  
18    what you do if the release is outside the lined  
19    containment area, right?

20          A.     Yes.

21          Q.     Now, explain -- this is for  
22    characterization and delineation?

23          A.     Yes.

24          Q.     And it references various soil sampling  
25    methods for characterization in that subsection.



1           A.       Yes, sir.

2           **Q.       Would you please explain to us why these**  
3           **methods are in here and why they were chosen?**

4           A.       Yes, sir. Those methods were chosen  
5           because of the some of the concerns that were  
6           brought up today actually. When you discuss an  
7           operator that may not have the staff appropriate to  
8           be knowledgeable on what adequate sampling may or  
9           may not look like, these methods are here to provide  
10          that sort of guidance. So specifically, you know,  
11          it says the operator may, or other approved methods,  
12          correct? So the idea was to provide several options  
13          to operators.

14                 So yesterday in testimony there was a  
15          question specifically on this that came up which was  
16          are these documents available to the public. So one  
17          that I would point out is EPA SW846 is available to  
18          the public and very clearly in Chapter 9 of that  
19          method extensively outlines how to conduct three  
20          different strategies of randomized sampling across  
21          an area of unknown hazardous waste constituents. So  
22          it clearly outlines, and it's based on your  
23          regulatory thresholds.

24                 So we have regulatory thresholds in this  
25          rule, in 17 and 34, and that method can be utilized

1 by a layman to read through and determine how he  
2 would randomly sample that area, he or she, to  
3 verify constituents of concern levels.

4 Q. If I'm an operator not sophisticated and I  
5 don't know what sampling means, are these the types  
6 of documents that provide guidelines on what that  
7 means and how it's to be done?

8 A. Yes, absolutely. Again, specifically  
9 under EPA SW846, it very clearly almost goes through  
10 a stats course on what is specifically relevant and  
11 specifically defines how to accomplish a confidence  
12 interval of 80 percent you would conduct  
13 representative sampling in a given area.

14 Q. And in your opinion does this provide  
15 sufficient guidance to operators?

16 A. Yes.

17 Q. With respect to both delineation and how  
18 to conduct representative sampling?

19 A. Yes.

20 Q. In your opinion does this proposed rule  
21 with NMOGA's changes provide the Division and  
22 operators an efficient and effective procedure for  
23 addressing releases from oil and gas operations?

24 A. Yes.

25 Q. Does this rule with NMOGA's proposed

1 changes provide flexibility where needed to  
2 efficiently and effectively address releases from  
3 oil and gas operations?

4 A. Absolutely.

5 Q. In your opinion, does this proposed rule  
6 with NMOGA's changes contain standards and  
7 requirements that afford a reasonable level of  
8 protection to the freshwater supplies, public health  
9 and the environment?

10 A. Yes.

11 MR. FELDEWERT: Madam Chair, I move the  
12 admission into evidence of NMOGA Exhibit G.

13 CHAIRWOMAN RILEY: Are there any  
14 objections?

15 MS. CALLAHAN: No objection.

16 MS. HERRMANN: No objection.

17 (Note: NMOGA Exhibit G admitted.)

18 MR. FELDEWERT: That concludes my  
19 examination of the witness.

20 CHAIRWOMAN RILEY: Do we have  
21 cross-examination?

22 MS. HERRMANN: No.

23 MR. LARSON: No questions.

24 MS. CALLAHAN: No questions.

25 CHAIRWOMAN RILEY: Commissioners?

1                   COMMISSIONER MARTIN: Table 1. We include  
2   specific methods for analyzing these, and as we have  
3   seen today or heard today, the standards or  
4   standardly accepted methods change all the time.

5                   THE WITNESS: Correct.

6                   COMMISSIONER MARTIN: Do you consider that  
7   problematic if we stipulate certain ones in a rule  
8   like this and at some point in time we might have to  
9   go and get alternative methods approved by the  
10   Division?

11                  THE WITNESS: No, sir. Numerous states do  
12   the exact same thing. Specifically the reason I'm  
13   not concerned in our specific rule is under Method  
14   there's an asterisk, a single asterisk up there that  
15   says, "Or other test methods approved by the  
16   Division." So when I say that other states do that,  
17   they usually simply do a list of other methods that  
18   are approved.

19                  So specifically, I believe part of the  
20   testimony coming in today from the labs, from  
21   Cardinal, is going to be to a specific chloride  
22   method that is regularly used today in cleaning up  
23   our releases that I don't think the Division is  
24   going to have any issue with because today they  
25   currently approve that method.

1 COMMISSIONER MARTIN: That's all I have.

2 COMMISSIONER BALCH: Staying with Table 1,  
3 the far top left corner, depth below the horizontal  
4 extents of release to groundwater?

5 THE WITNESS: Yes, sir.

6 COMMISSIONER BALCH: Is the intent of that  
7 to be if in anywhere under the horizontal extent you  
8 would take the minimum depth to apply the table?

9 THE WITNESS: Yes. One specific example  
10 that came up when defining that is if you have a  
11 release from a wellhead at surface level, that is  
12 where your horizontal extent would begin. But if  
13 you have a ten-foot buried pipeline it would begin  
14 at that ten-foot.

15 COMMISSIONER BALCH: That was not exactly  
16 my question.

17 THE WITNESS: Sorry.

18 COMMISSIONER BALCH: If you have a 40-acre  
19 surface spill and you have a contour map of  
20 groundwater depth underneath that area, do you  
21 measure the minimum depth under any part of that  
22 extent?

23 THE WITNESS: Yes.

24 COMMISSIONER BALCH: That would be what  
25 you apply the tables to?

1 THE WITNESS: Yes, sir.

2 COMMISSIONER BALCH: That's the intent?

3 THE WITNESS: That is the intent.

4 COMMISSIONER BALCH: Thank you.

5 MR. BRANCARD: Mr. Fulks, on those  
6 sampling methods, that's supposed to be the  
7 exclusive list. In other words, that's the  
8 question. Is this the exclusive list, these four or  
9 something the Division approves?

10 THE WITNESS: Yes, sir. Something the  
11 Division approves is, I think, pretty open.

12 MR. BRANCARD: Right. So wouldn't it be  
13 better to have a sentence that leads in that says  
14 the operator shall use one of the following?

15 THE WITNESS: I see what you're saying.  
16 Yeah.

17 MR. BRANCARD: And then in the next  
18 section under Closure Requirements where again you  
19 are doing soil sampling, is the intent then that the  
20 soil sampling methods you used for closure would be  
21 the same as that are listed here in 11?

22 THE WITNESS: No, sir. As described in  
23 the existing rule, that is a five-point composite  
24 sample for closure of the bag there.

25 MR. BRANCARD: Okay. So it would not be

1 one of these methods listed in 11?

2 THE WITNESS: It could be. You could be  
3 using that method as your foundation for how you  
4 conducted your sampling and it would make sense that  
5 you were.

6 MR. BRANCARD: In other words, for 12 for  
7 soil sampling you're not limited to these methods?

8 THE WITNESS: Come again:

9 MR. BRANCARD: So this list you have for  
10 the delineation of soil sampling, that's what the  
11 universe is for soil sampling delineation?

12 THE WITNESS: Correct.

13 MR. BRANCARD: But for closure you can do  
14 our methods other than those four?

15 THE WITNESS: So delineation results  
16 including laboratory analysis under 19.15.29.12C1  
17 little A are included as part of that. Those  
18 delineation results are part of the characterization  
19 report so you are using the methods outlined in the  
20 other section.

21 MR. BRANCARD: Right. But then you are  
22 taking new samples for the closure?

23 THE WITNESS: Correct, yes.

24 MR. BRANCARD: So again, are those soil  
25 sampling methods delineations the ones you should be

1 using for the closure?

2 THE WITNESS: I believe currently you are  
3 using the composite sample; is that correct?

4 MR. BRANCARD: Yes. That's different  
5 then?

6 THE WITNESS: That is different.

7 CHAIRWOMAN RILEY: Redirect?

8 MR. FELDEWERT: No.

9 CHAIRWOMAN RILEY: Are you done with the  
10 witness?

11 MR. FELDEWERT: Yes. Madam Chair,  
12 Commissioners. That concludes our presentation.

13 CHAIRWOMAN RILEY: Thank you. So that  
14 leads us to our next party which is Cardinal Labs.

15 COMMISSIONER BALCH: Was there a request  
16 for a rebuttal witness?

17 CHAIRWOMAN RILEY: There is. Do you want  
18 to do it now or after?

19 MR. BRANCARD: I think we should save the  
20 rebuttal until after the direct testimony.

21 CHAIRWOMAN RILEY: Would you like to get  
22 started now?

23 MS. CALLAHAN: Can we take a quick break?

24 CHAIRWOMAN RILEY: Sure.

25 (Note: The hearing stood in recess at



1 11:31 to 12:50.)

2 CHAIRWOMAN RILEY: Good afternoon. Let's  
3 start back up. We are on the record and we are  
4 going to start with Cardinal Labs.

5 MS. CALLAHAN: Thank you Madam Chair. I  
6 would like to call Ms. Keene.

7 CELEY KEENE

8 (being duly sworn, testified as follows:)

9 DIRECT EXAMINATION

10 BY MS. CALLAHAN

11 Q. Ms. Keene, would you please state for the  
12 record your name, and identify whom you are employed  
13 by?

14 A. My name is Celey Keene. I'm employed by  
15 Cardinal Laboratories.

16 Q. In what capacity?

17 A. I am the lab director and quality manager.

18 Q. How long have you been employed by  
19 Cardinal?

20 A. Eleven years.

21 Q. And what kind of service does Cardinal  
22 provide?

23 A. We are an environmental laboratory. We  
24 are located in Hobbs, New Mexico and we also have a  
25 receiving station in Farmington, New Mexico and a

1     sister laboratory in Durango, Colorado which is  
2     Green Analytical. We perform analysis organics,  
3     inorganics, metals such as found in soil and water,  
4     and also we do analysis based on the OCD regulations  
5     for spills in oil and gas operations.

6           **Q.     And one of those contaminants is chloride?**

7           A.     Correct.

8           **Q.     How long has Cardinal been in business?**

9           A.     Since 1992.

10          **Q.     And what are your responsibilities as lab**  
11     **director?**

12          A.     My responsibilities include ensuring that  
13     the quality system is implemented and followed,  
14     overseeing all quality control data, conducting  
15     internal audits, monitoring corrective actions,  
16     revisions of all documents, conducting  
17     demonstrations of capabilities of all my analysts,  
18     signing all reports, supervision of analysts on  
19     day-to-day operations of the laboratory, monitoring  
20     and implementing new and current certification  
21     programs, maintaining turn-around times of analysis,  
22     client relations, hiring new employees, and also I'm  
23     responsible for monitoring expenses and revenues of  
24     the laboratory.

25          **Q.     Generally for whom do you provide your**

1     **services?**

2           A.     Mostly it's oil and gas companies,  
3     environmental consultants, public utilities,  
4     regulatory agencies, dairies and private landowners.

5           **Q.     And does Cardinal's service extend to**  
6     **states other than New Mexico?**

7           A.     Yes. We also do work in Colorado and  
8     Texas.

9           **Q.     What certifications does Cardinal hold?**

10          A.     We are NELAC certified, which is a  
11     national environmental laboratory accreditation  
12     program through the state of Texas. We also have  
13     drinking water certification through the state of  
14     New Mexico, Colorado and Texas.

15          **Q.     Are copies of those certifications posted**  
16     **on Cardinal's website?**

17          A.     Yes.

18          **Q.     Have you previously testified before the**  
19     **Division?**

20          A.     No.

21          **Q.     Would you please outline your educational**  
22     **background?**

23          A.     I have a bachelor's in chemistry from the  
24     University of Texas of the Permian Basin. I got  
25     that in 1998. I have got over 22 years of

1 laboratory experience as either an analyst, an  
2 organic or inorganic technical director, quality  
3 manager or lab director.

4 **Q. And you had work prior to Cardinal where?**

5 A. I started out with Maxim Technologies and  
6 I worked there from 1995 to 1999. I was an analyst  
7 doing organics, inorganics and petroleum. Then I  
8 went to work at Environmental Labs of Texas, which  
9 is now Xenco, and I worked there 1999 to 2007. I  
10 was an analyst and also the organic technical  
11 director. And then I have been at Cardinal Labs  
12 since 2007.

13 **Q. Do you hold any professional**  
14 **certifications?**

15 A. I'm a NELAC-accredited technical director  
16 for organics, inorganics and microbiology.

17 **Q. Are you familiar with the application that**  
18 **has been filed by the OCD in this case?**

19 A. Yes.

20 **Q. Are you familiar with Rule 19.15.29 as**  
21 **it's currently in effect as well as how it's been**  
22 **proposed?**

23 A. Yes.

24 MS. CALLAHAN: I understand you are not  
25 accepting experts but I wanted her to give her

1 background.

2 CHAIRWOMAN RILEY: Thank you.

3 Q. Is chloride a common contaminant  
4 associated with unauthorized releases in oil and gas  
5 operations in New Mexico?

6 A. Yes. In New Mexico it's one of the most  
7 common contaminants that we see.

8 Q. What are the most common methods used for  
9 soil chloride analysis in New Mexico?

10 A. That would be EPA300 and Standard Method  
11 4500 Cl B are the two most common ones used in New  
12 Mexico.

13 Q. For ease of reference I'm going to refer  
14 to them as Method 300 and Method 4500. So what  
15 method do you typically use in your analysis for  
16 chloride in soil sampling?

17 A. At Cardinal we normally use the Standard  
18 Method 4500.

19 Q. How long have you been using that method?

20 A. For over 25 years.

21 Q. You're speaking for Cardinal, since you  
22 have not been there for 25 years?

23 A. Yes.

24 Q. Cardinal has been doing it for 25 years?

25 A. Correct.

1           **Q.     And can you explain why you've chosen to**  
2           **use 4500 for chloride testing and soil rather than**  
3           **EPA300?**

4           A.     The Standard Method 4500 is a tried and  
5           true method. In practice I found that it's the most  
6           practical and a very robust methodology for the  
7           varying and challenging soil matrices that we see on  
8           a day-to-day basis. It's just as reliable as the  
9           EPA300 method. Standard Method 4500 is also a  
10          NELAC-approved method and it has been routinely used  
11          and allowed by regulatory bodies such as BLM.

12          **Q.     And we're speaking specifically about its**  
13          **use in analyzing chloride and soil; is that right?**

14          A.     Correct.

15                 MS. CALLAHAN: So Madam Chairwoman, in the  
16          interest of time we have submitted written testimony  
17          of Ms. Keene that goes into very specific detail of  
18          both the 4500 and 300 methods. In the interest of  
19          conservation of time I thought we would just offer  
20          this written testimony rather than going through the  
21          very detailed specifics, which I personally don't  
22          understand.

23                 CHAIRWOMAN RILEY: I'm good with that.  
24          I'm like you, I don't know that I would understand  
25          the detail of it. Dr. Balch and Mr. Martin?

1 COMMISSIONER MARTIN: No objection.

2 MR. BRANCARD: This is Exhibit 7, Counsel?

3 MS. CALLAHAN: Yes, it is. It's the only  
4 exhibit that is in addition to the others that were  
5 in the prehearing statement.

6 COMMISSIONER BALCH: I don't know how much  
7 time it would take to go through the exhibit, but I  
8 guess I would be concerned that anybody that would  
9 like to cross-examine the witness on that testimony  
10 would not have as much opportunity if the evidence  
11 is not presented.

12 MS. CALLAHAN: Could we perhaps ask of the  
13 other counsel if they have witnesses who would be  
14 interested in doing that?

15 CHAIRWOMAN RILEY: For clarification, are  
16 you just wanting to add this 4500 method to the  
17 table? Is that the goal?

18 MS. CALLAHAN: Yes, that is the goal.

19 CHAIRWOMAN RILEY: So do the attorneys for  
20 the other parties have questions for the witness?

21 MS. HERRMANN: This is the first time I  
22 have seen Exhibit 7. It wasn't submitted with the  
23 prehearing statement so I can't say yes or no to  
24 that question.

25 CHAIRWOMAN RILEY: It doesn't seem like

1     it's all that long so maybe --

2                 MS. CALLAHAN: Have her just read it into  
3     the record? Is that your preference?

4                 CHAIRWOMAN RILEY: Would you be  
5     comfortable with having it read and that way it's in  
6     the record and then we can have questions and deal  
7     with it at that time?

8                 COMMISSIONER BALCH: I'm sure  
9     Mr. Feldewert will have questions.

10                MR. FELDEWERT: Actually, we do not have  
11     any questions for this witness, so I don't know if  
12     you necessarily need to read it into the record.

13                COMMISSIONER BALCH: Maybe a summary.

14                CHAIRWOMAN RILEY: I was trying to catch  
15     her eye.

16                COMMISSIONER BALCH: Maybe a summary of  
17     the testimony and the relevance if you are asking  
18     for it to be added into the rule.

19                MS. CALLAHAN: She does plan to give an  
20     overview of these methods. She just doesn't want to  
21     go into the specifics of them so I don't know if you  
22     want to wait until we give the overview and then  
23     maybe supplement it?

24                COMMISSIONER BALCH: Probably that would  
25     be fine. The purpose of the standard method is that



1     they are standard and accepted already.

2                 MS. CALLAHAN:   Yes.

3                 **Q     (By Ms. Callahan) So just for point of**  
4     **reference, in the event that we decide to put it in**  
5     **the record as an affidavit, does the affidavit**  
6     **accurately describe or give a technical description**  
7     **of both the 4500 and the 300 method as employed by**  
8     **Cardinal and Green respectively?**

9                 A.     Yes, it does.

10                **Q.     Can you give us an overview of the 4500**  
11     **method?**

12                A.     The Standard Method 4500 is a modified  
13     water method.  We're using a deionized water  
14     extraction to get the chloride out of the soil.  We  
15     perform the chloride soil analysis with a classical  
16     wet chemistry method.  It's just a basic color  
17     change.  And that's all described in more detail in  
18     the affidavit.

19                    The 4500 method has very few interferences  
20     which can easily be taken care of with either  
21     dilution or a simple pH adjustment.  Unlike other  
22     methods, dilution does not affect the reporting  
23     limit of the Standard Method 4500.

24                **Q.     What do you mean when you refer to**  
25     **interference?  Can you give us an example?**

1           A.       The interference basically refers to the  
2       efficiency of the method. The most common ones that  
3       we see, they will prevent like the correct color  
4       change that you're looking for, so you just may see  
5       a different color and then you know that you need to  
6       go adjust for that.

7                   That's for the Standard Method 4500. For  
8       the 300, the general interference is you see that  
9       something masks the peak that you're looking for or  
10      comes out at the same time. A general one, one of  
11      the most common ones we see for the Standard Method  
12      4500 is sulfide, and that one, whenever you are  
13      doing the titration you will see like a black color  
14      instead of a salmon color is what you're normally  
15      looking for. So you just use hydrogen peroxide to  
16      off-gas the sulfide and then you can go about your  
17      business titrating.

18                  The EPA300, one of the common  
19      interferences would be another peak, say sulfate.  
20      So you may have a real low chloride that you're  
21      looking for, maybe 50 parts per million, but your  
22      sulfate is extremely high, like 2000. So in that  
23      case it would cause interference with the chloride  
24      peak and you would actually have to go back and  
25      dilute the sample in order to see the chloride

1 clearly. And that definitely raises the detection  
2 level of your chloride.

3 **Q. So what is the significance of there being**  
4 **fewer interferences with the 4500 method?**

5 A. What it means is the method is more  
6 efficient, so analysis by the 4500 method can be run  
7 quickly, efficiently and is just as accurate as the  
8 EPA300. Using this method we are able to provide  
9 our clients with reliable, defensible data in a very  
10 timely manner.

11 **Q. Can you give us an overview of the 300**  
12 **method?**

13 A. The EPA300 is actually a NELAC-approved  
14 method. What it is, it's used in anion  
15 chromatograph so it separates the anions in their  
16 acidic form and measures them chromatographically  
17 based on the conductivity.

18 **Q. Would you give us an example of an anion?**

19 A. Anion?

20 **Q. Anion.**

21 A. So the anions that you can see via the IC  
22 or the 300 method would be chloride, fluoride,  
23 sulfate, nitrate, nitrite, orthophosphate and  
24 bromide.

25 **Q. Is it fair to say if you want to measure**

1 more than chloride the 300 method might be the  
2 preferred method?

3 A. Yes.

4 Q. Is that typically so when you're dealing  
5 with water?

6 A. Yes.

7 Q. As opposed to soil?

8 A. Yes.

9 Q. So what are the main challenges of the  
10 EPA300 method?

11 A. The main challenges of the EPA300 method  
12 would be -- the biggest one is the soil itself. The  
13 soil matrices. Also color, turbidity, any  
14 unseparable solids. They must be completely  
15 removed from the extract before you can put it on  
16 the IC. Otherwise, any particulates will clog up  
17 the instrument in the sample port or in the column  
18 that's used for analysis. This requires instrument  
19 maintenance and a loss of instrument downtime if you  
20 do have particulates that get through. But this is  
21 normally taken care of with centrifuging the sample  
22 and extensive filtering or dilution, and those  
23 usually ultimately account for the interferences.

24 Q. So the EPA300 method is performed by --  
25 not by Cardinal but by your sister lab?

1           A.       Correct.

2           Q.       And Jacob Miller will be testifying more  
3 specifically about the EPA300 method since he uses  
4 it more frequently. You have had experience with  
5 the EPA300, have you not?

6           A.       Yes, I have.

7           Q.       So could we turn now to Cardinal's Exhibit  
8 1 through 5. Maybe could we run through those and  
9 would you explain those?

10          A.       Exhibit 1 is just the basic outline  
11 comparison of the quality control parameters that  
12 are required by EPA300 and the Standard Method 4500.  
13 They are very similar in what's required. And this  
14 is also run every 20 samples. So all of this QC is.

15          Q.       Exhibit 2?

16          A.       Exhibit 2 is an independent lab study that  
17 we did in a NEMAC-accredited laboratory which is  
18 Alamo Analytical, and they performed the EPA300 and  
19 the Standard Method 4500 on a wide range of samples,  
20 different chloride levels that we would normally  
21 see. And it shows the reproducibility between the  
22 two methods. And then the graph shows the same  
23 thing, the results in the graphic form.

24                   Exhibit 3 is a semi-independent study.

25          No, this one actually is a low level chloride

1 comparison data of the EPA300 and the 4500 showing  
2 that the most variation that we see between the two  
3 methods is around 100 parts per million or less, and  
4 that's usually because of the different  
5 sensitivities in the two methods. Also the  
6 homogenous nature -- the non-homogenous nature of  
7 the soils, they do require two different extraction.

8 Exhibit 4 is a semi-independent study  
9 comparison between the EPA300 and the Standard  
10 Method 4500. We, at Cardinal, did the Standard  
11 Method 4500 on these samples and we sent out the  
12 EPA300 to an independent laboratory, Permian Basin  
13 Environmental Laboratory. And it shows the  
14 variation between the two methods. It does also  
15 include the quality control data of the two methods.

16 And then Exhibit 5 is an internal method  
17 comparison study that we did between Cardinal and  
18 Green showing the difference between the two methods  
19 and variations.

20 **Q. So overall, what does the data reflected**  
21 **in Exhibit 1 through 5 tell us?**

22 A. Overall, it shows that the most variation  
23 that you're going to see between the two methods is  
24 below 100 parts per million at the low levels. And  
25 as I explained, this is mainly because of the

1 difference in the sensitivities of the two methods  
2 as well as the non-homogenous nature of the soils.  
3 And these are well below the regulatory limits that  
4 are set forth in Rule 29 which is 600.

5 Q. So the limit in the rule would have to be  
6 a lot lower before the EPA300 would test as more  
7 reliable?

8 A. Not necessarily more reliable, but you  
9 would definitely see more variation between the two  
10 methods at the low levels.

11 Q. Okay. So in a sense, both these  
12 methods -- would the results of the data show us  
13 that both are equally reliable?

14 A. Yes.

15 Q. Historically has the Division routinely  
16 administratively approved the use of the 4500 method  
17 for chloride analysis in soil?

18 A. Yes.

19 Q. However, have there been times in the  
20 recent past, the past year or so, that testing has  
21 been delayed pending division approval of the 4500  
22 method?

23 A. Yes.

24 Q. But at times it is approved and other  
25 times it is not approved?

1           A.       Correct.

2           **Q.       It's inconsistent?**

3           A.       Whenever we receive samples we don't  
4 necessarily know where they are coming from. We  
5 don't know if it's a pit closure or delineation  
6 unless a client, you know, explicitly tell us that.  
7 So we just start analyzing the samples that they  
8 bring in.

9           **Q.       Let's look at Exhibit 6 now, please.**

10          **Would you tell us what is reflected by this exhibit?**

11          A.       So Exhibit 6 is a memo issued by the OCD  
12 whenever the pit rule came out in 2008. We started  
13 having a lot of calls from clients because listed in  
14 the pit rule it says EPA Method 300.1 for chlorides,  
15 so that was not a method that was used in the state  
16 at that time and many people were like, what is this  
17 method?

18                   So we made some calls to the OCD along  
19 with many clients and industry personnel, and the  
20 OCD issued this memo saying that EPA300 and the  
21 Standard Method 4500 were to be accepted in lieu of  
22 the EPA300.1.

23          **Q.       So in addition to Rule 17, the pit rule,**  
24 **this memo also applies to Rule 34; is that right?**

25          A.       Correct.



1           Q.     Okay. And do all three rules address the  
2     same contaminants and standards for remediation,  
3     protection of the environment and groundwater?

4           A.     Yes, they all ask for BTEX and chloride.

5           Q.     And as it is proposed, and I guess in the  
6     past, Table 1 has reflected more than one approved  
7     method for other contaminants; is that right?

8           A.     Yes.

9           Q.     Alternative methods given?

10          A.     Yes.

11          Q.     And are those two methods given because  
12     they both provide reliable and comparable value?

13          A.     Correct. And in this instance it would be  
14     the method used for BTEX or benzene, which is Method  
15     8021B and 8260B, so they both provide reliable data.  
16     They are two different methods but you will get the  
17     same comparable data.

18          Q.     So that's true for the EPA300 and the  
19     Standard Method 4500?

20          A.     Correct.

21          Q.     The 4500 rule is not specifically  
22     expressly listed in Table 1; is that right?

23          A.     No, it's not.

24          Q.     Is it your understanding that the 2008  
25     division memo reflected in Exhibit 6 has been the

1     **basis for division personnel approving Cardinal's**  
2     **use of the 4500 method for chloride soil analysis**  
3     **for your clients?**

4           A.     Yes.

5           Q.     Have you been able to locate another copy  
6     **of this memo anywhere?**

7           A.     No.

8           Q.     So this copy came from where?

9           A.     This copy was actually sent to us from one  
10    of our clients back in 2008 that they received from  
11    the OCD. I have never been able to find it anywhere  
12    else so we keep a copy on file.

13          Q.     Why do you keep a copy on file? What use  
14    do you have for it now?

15          A.     Every once in a while over the years we  
16    have gotten a call. You know, somebody coming in to  
17    do remediation and they read the rules and it lists  
18    EPA300.1 or EPA300 and we don't provide that method  
19    on a regular basis so they ask or they may say,  
20    "Well, you ran the wrong method." And we say, "No,  
21    it's actually accepted based on this memo," and so  
22    we just e-mail them the memo and we're able to use  
23    that.

24          Q.     Were you present yesterday at the hearing  
25    **when the Division testified regarding the variance,**

1 Mr. Griswald testified regarding the variance rule?

2 A. Yes.

3 Q. And we heard that it would be neutral for  
4 obtaining division approval of a method other than  
5 those listed in the table; is that correct?

6 A. Yes.

7 Q. So as an independent laboratory whose role  
8 requires a complete absence of bias, would Cardinal  
9 be able to request a variance on behalf of a  
10 responsible party under the rule?

11 A. No, we would not be able to do that. Only  
12 an operator would be able to do that.

13 Q. It would impinge on your appearance of  
14 being an unbiased, disinterested third party, would  
15 it not?

16 A. Correct.

17 Q. So that variance would have to be  
18 requested by an operator or the operator's agent?

19 A. Correct.

20 Q. Is it practical or realistic to expect  
21 that each of your clients would take it upon  
22 themselves to seek a variance that wouldn't  
23 necessarily apply to other cases either for itself  
24 or an operator?

25 A. No.

1           Q.     Is it your opinion that expressly  
2     including the 4500 method in the new release rule  
3     would, in addition to adding it to the table in  
4     addition to the EPA300 rule, would avoid confusion  
5     and clearly confirm for the responsible parties, the  
6     operators, the reliability of the 4500 and the  
7     acceptance by the Division of the 4500?

8           A.     Yes.

9           Q.     Then no need would exist for the  
10    responsible party to ask the Division for approval?

11          A.     Correct.

12          Q.     Would it also allow more timely reporting  
13    of chloride releases?

14          A.     Yes, it would.

15                 MS. CALLAHAN: I am offering Exhibits 1  
16    through 7 into the record.

17                 CHAIRWOMAN RILEY: Is there any  
18    objections?

19                 MR. FELDEWERT: No objection.

20                 MS. HERRMANN: No objection.

21                 MR. LARSON: No objection.

22                 CHAIRWOMAN RILEY: Do you have any  
23    objection?

24                 MR. BRANCARD: No, but I will note that we  
25    will accept Exhibit 7 because nobody objected to it,

1 but normally it's a bigger deal when we accept a  
2 technical exhibit not presented in the prehearing  
3 statement. So in this case nobody's objected to it.

4 CHAIRWOMAN RILEY: So accepted.

5 (Note: Exhibits 1 through 7 admitted.)

6 MS. CALLAHAN: That concludes our  
7 presentation with this witness.

8 CHAIRWOMAN RILEY: Can we go ahead and get  
9 direct or cross?

10 CROSS-EXAMINATION

11 BY MS. HERRMANN

12 Q. I have a couple questions. Ms. Keene,  
13 thank you for your testimony today. Does Cardinal  
14 Labs also run any of the other EPA methods listed in  
15 Table 1?

16 A. Yes, all of them.

17 Q. Is there any overlap between the EPA300  
18 and some of the other methods?

19 A. No.

20 Q. So there's no added benefit by keeping  
21 everything standard with the EPA?

22 A. No.

23 Q. That's my only question.

24 MR. FELDEWERT: I have no questions.

25 MR. LARSON: No questions.

1                   CHAIRWOMAN RILEY:   How about the  
2   Commission?

3                   COMMISSIONER BALCH:   I have a couple.   We  
4   have been through Exhibits 1 through 7.   I noticed a  
5   lot of the comparison tables.   There's not like a  
6   full statistical workup on them but it looks like  
7   4500 is higher than EPA300 at lower numbers and  
8   lower than EPA300 once you get above a couple  
9   thousand milligrams per kilogram.   Is there some  
10   reason for that shift?

11                  THE WITNESS:   Not necessarily.   You know,  
12   you can run one sample multiple times and get  
13   different numbers.   You may run it one time and get  
14   580.   The next time you may get 600.   The next time  
15   610.

16                  COMMISSIONER BALCH:   That's with either/or  
17   both methods?

18                  THE WITNESS:   Yes.   That's correct.  
19   That's just the nature of the soil and it's also  
20   because soil is not homogenous.   It's very difficult  
21   to make it completely homogenous across the board.

22                  COMMISSIONER BALCH:   How big is a typical  
23   grab sample?

24                  THE WITNESS:   Usually it's a four-ounce  
25   jar.

1                   COMMISSIONER BALCH: How much of that do  
2 you use for an individual test?

3                   THE WITNESS: So for the EPA300 we use ten  
4 grams and then for the standard method we use 25  
5 grams.

6                   COMMISSIONER BALCH: And you do several  
7 and average them or just take one and call it good?

8                   THE WITNESS: You take one.

9                   COMMISSIONER BALCH: So Standard Method  
10 4500 has been used by Cardinal for 25 years? I  
11 believe that was the testimony?

12                  THE WITNESS: Yes.

13                  COMMISSIONER BALCH: Everybody knows what  
14 EPA is. So with the EPA300 you know where you might  
15 be able to find it. Where does Standard Method 45  
16 comes from?

17                  THE WITNESS: Standard Method comes from  
18 standard methods of water and wastewater  
19 examination. It's also an EPA-approved method.  
20 We're certified for that method through NELAC, so  
21 it's used very widely. It's probably what you would  
22 say is one of the bibles of environmental chemistry.  
23 So between EPA SW846 methods, standard methods,  
24 those are the most common methods that are used in  
25 laboratories.

1                   COMMISSIONER BALCH: Okay. So my next  
2 question is answered already, but that is in your  
3 other jurisdictions, so you have federal, people  
4 might have reporting requirements through a federal  
5 agency. Also you work in Texas and Colorado. So  
6 all of those locations will accept SM4500 in lieu  
7 of --

8                   THE WITNESS: Yes.

9                   COMMISSIONER BALCH: -- EPA300?

10                  THE WITNESS: Yes.

11                  COMMISSIONER BALCH: You said 4500 is best  
12 for just chlorides. 300 is when you are analyzing  
13 for multiple constituents?

14                  THE WITNESS: Originally EPA300 was  
15 designed for waters and it's been adapted to soils.  
16 So, you know, it's for multiple anions. So whenever  
17 you are looking at a water you want to see kind of a  
18 gamut of what's in the water. In soil, for the most  
19 part we're looking for just chloride. So using a  
20 method that is just ion selective such as just a  
21 chloride method is much more efficient for these  
22 purposes.

23                  COMMISSIONER BALCH: Rule 17, specifically  
24 we use chloride as a marker for whatever else might  
25 be in there?



1 THE WITNESS: Correct.

2 COMMISSIONER BALCH: You mention the speed  
3 of the method, the speeds were different, 4500  
4 versus 300?

5 THE WITNESS: Extremely different.

6 COMMISSIONER BALCH: What's the  
7 approximate time to run each of those?

8 THE WITNESS: For Standard Method 4500 a  
9 sample can be run in a matter of minutes. Depending  
10 on if it's really high or low we may have to go back  
11 and rerun and do a dilution and that kind of thing.  
12 For EPA300, for every sample the run time is 21  
13 minutes. That's not counting the prep time. So in  
14 order to get it on the instrument it has to look  
15 like this.

16 COMMISSIONER BALCH: The centrifuging  
17 takes --

18 THE WITNESS: Centrifuging -- so first we  
19 have to take conductivity of the sample. Then we  
20 centrifuge the sample. It has to go through two  
21 different types of filtration because the sample  
22 ports on the instrument are extremely small so we  
23 are filtering down to a .2 mikron to put it on the  
24 instrument.

25 COMMISSIONER BALCH: So several orders of

1 magnitude of difference?

2 THE WITNESS: Correct.

3 COMMISSIONER BALCH: What about cost?

4 THE WITNESS: The cost is the same and  
5 that's just because of competitors, their cost.

6 COMMISSIONER BALCH: The going rate for  
7 the chloride sample and how it's done?

8 THE WITNESS: Yes.

9 COMMISSIONER BALCH: You also mentioned --  
10 this is in your Exhibit 7 testimony. Dilution does  
11 not affect testing limits with SM4500?

12 THE WITNESS: Correct.

13 COMMISSIONER BALCH: Why is that?

14 THE WITNESS: With the SM4500 you are able  
15 to use less sample, but however much deionized water  
16 you add to that does not make a difference. So you  
17 are just titrating chloride that is in what you have  
18 taken out of that sample. So say we have a sample  
19 that's 10,000 parts per million of chloride. We  
20 wouldn't be able to run that as a straight 25  
21 milliliter sample because it would be too high so we  
22 would have to dilute that. So we would maybe take  
23 one mill of that sample into the flask and add some  
24 deionized water, which has no chloride, and then we  
25 would just titrate that amount.

1           So it does not affect -- because your  
2   reporting limit is based on how much you titrate and  
3   what your burette can see so the increments on the  
4   burette. On the EPA300 you actually have a  
5   calibration range that you have to work with. And  
6   on that instrument we are able to calibrate from  
7   usually zero to 50 parts per million so you have to  
8   dilute that sample to get it within that range to  
9   put it on the instrument.

10           COMMISSIONER BALCH: You can't dilute it  
11   out of that range or it won't work either?

12           THE WITNESS: Right. Or else you won't be  
13   able to see it because the peak will be so high and  
14   you just blow out the instrument. So you have to  
15   dilute it to be within that. And it's based on --  
16   you have to do MDL studies, all of those kinds of  
17   things. And your reporting limit is adjusted based  
18   on the dilution factor that you use. So if you  
19   did -- if you had 10,000 parts per million chloride,  
20   you would have to do a significant dilution. So if  
21   you had to do a 500X dilution, you would also have  
22   to adjust your reporting limit based on that.

23           COMMISSIONER BALCH: So what passes for  
24   soil, I imagine you see some pretty interesting  
25   things come in, right? There could be a rock in

1 your jar?

2 THE WITNESS: Correct.

3 COMMISSIONER BALCH: Or it could be gravel  
4 or caliche or mud or who knows what?

5 THE WITNESS: Right.

6 COMMISSIONER BALCH: Are any of these  
7 methods more or less affected by that? How do  
8 process a sample of, say, caliche chunks?

9 THE WITNESS: No, that's all taken care of  
10 in sample prep. We actually have to grind the  
11 sample down to a certain size and then we proceed  
12 with extraction from there. So that's done on both  
13 methods equally.

14 COMMISSIONER BALCH: So it sounds like  
15 this has really been an ongoing informal practice  
16 for some time, ever since at least since 2008.

17 THE WITNESS: Correct.

18 COMMISSIONER BALCH: To allow this method  
19 for a variety of purposes?

20 THE WITNESS: Correct.

21 COMMISSIONER BALCH: For OCD Rules 17 and  
22 34. I'm losing track of all of them. So what  
23 you're really asking for is just this method to be  
24 recognized and in the table and usable as a  
25 specified method and not always have the shadow of

1 getting your one copy of the memo lost in a fire  
2 hanging over your head.

3 THE WITNESS: Correct. Not to mention  
4 that we have, you know, lots of new people that come  
5 into Southeast New Mexico to do work, new  
6 consultants, that kind of thing. They're from out  
7 of state and they don't know about this. They don't  
8 know that our method is included in the asterisk of  
9 other approved methods by the Division. And  
10 sometimes with new personnel they don't know about  
11 the memo. They just see what's in the rules and,  
12 you know, we start to have issues again.

13 COMMISSIONER BALCH: So A lot of the  
14 methods have sub methods, 300, 300.1. I saw 4500,  
15 SM4500B. What is the exact precise designation you  
16 would like in the table?

17 THE WITNESS: We would like SM4500CLB,  
18 because there are several.

19 COMMISSIONER BALCH: SM4500 --

20 THE WITNESS: Cl B.

21 CHAIRWOMAN RILEY: C as in cat?

22 THE WITNESS: Yes. Cl stands for  
23 chloride.

24 COMMISSIONER BALCH: I see.

25 THE WITNESS: And B is the part that we

1 would like.

2 COMMISSIONER BALCH: Thank you very much  
3 for your testimony.

4 THE WITNESS: Thank you.

5 CHAIRWOMAN RILEY: Mr. Brancard?

6 MR. BRANCARD: No questions.

7 CHAIRWOMAN RILEY: Redirect?

8 MS. CALLAHAN: In light of the question  
9 about the use of the 4500 in Colorado and Texas, I  
10 just wanted to ask Ms. Keene whether the BLM also  
11 accepts this method?

12 THE WITNESS: Yes, they do.

13 MS. CALLAHAN: That's it.

14 CHAIRWOMAN RILEY: Okay. Are you done  
15 with the witness?

16 MS. CALLAHAN: I am.

17 CHAIRWOMAN RILEY: Thank you. Call your  
18 next witness.

19 MS. CALLAHAN: I would call Jacob Miller.

20 JACOB MILLER

21 after having been first duly sworn under oath,  
22 was questioned and testified as follows:

23 DIRECT EXAMINATION

24 BY MS. CALLAHAN

25 Q. Mr. Miller, for the record, would you

1     **please state your name and identify by whom you are**  
2     **employed and in what capacity?**

3           A.     Sure. My name is Jacob Miller and I am  
4     the technical director of Green Analytical  
5     Laboratories in Durango.

6           **Q.     What do you do as technical director?**

7           A.     Very similar to what you heard from Celey.  
8     Method validation, technical oversight, data review,  
9     training new analysts, things of that nature.

10          **Q.     And does Green also provide the same types**  
11       **of services as Cardinal?**

12          A.     Yes. We are sister labs. Same type of  
13     methodology. We test water and soil, environmental  
14     work, largely oil and gas, but we do work for  
15     federal agencies and the same list as Celey.

16          **Q.     Does Green also hold the same**  
17       **certifications?**

18          A.     Same certifications. NELAC.

19          **Q.     You're also on the website?**

20          A.     Yes, also on the website.

21          **Q.     Have you previously testified before the**  
22       **Division?**

23          A.     No.

24          **Q.     Would you please outline your educational**  
25       **background?**

1           A.       Sure. I have a B.S. in chemistry from Ft.  
2       Lewis College up in Durango that I received in 2006.

3           **Q.       So how long have you worked for Green**  
4       **Analytical?**

5           A.       Between ten and eleven years.

6           **Q.       And do you hold personal certification?**

7           A.       Yes, same as Celey. I'm a lead technical  
8       director from the lab, which allows me to run a  
9       facility like Cardinal.

10          **Q.       Are you familiar with the application**  
11       **that's been filed by the OCD in this case?**

12          A.       I am.

13          **Q.       And are you also familiar with the rule,**  
14       **both as proposed and as it currently exists?**

15          A.       Yes.

16               MS. CALLAHAN: I would say the same thing  
17       about this witness as I said about Ms. Keene in  
18       terms of offering a basis for his opinions.

19               CHAIRWOMAN RILEY: Thank you.

20          **Q.       (By Ms. Callahan) So Ms. Keene has**  
21       **testified that Green performs the EPA300 method for**  
22       **Cardinal's clients.**

23          A.       Correct.

24          **Q.       That is correct?**

25          A.       Yes.



1           **Q.       Can you explain what the Cardinal/Green**  
2   **relationship is?**

3           A.       Sure.   So we are a little bit more than a  
4   traditional sub lab relationship.   We are relatively  
5   small laboratories.   We share in ownership and  
6   management and so when we are required to do a new  
7   methodology that we currently don't support,  
8   oftentimes only one of the two facilities will pick  
9   it up.   So Green Analytical in Durango specializes  
10   more in metals, inorganic type analysis, and then  
11   Cardinal down in Hobbs specializes more in organic  
12   analysis.

13                So the two facilities are second sending  
14   samples back and forth to each other.   It allows us  
15   to have a presence in both markets and also really  
16   focus in on our own area of expertise while still  
17   offering clients a whole spectrum of services.

18           **Q.       But you are familiar with the 4500 and the**  
19   **300 method?**

20           A.       Yes.

21           **Q.       Would you look at Cardinal's Exhibit 7,**  
22   **please.**

23           A.       Yep.

24           **Q.       So have you had a chance to read through**  
25   **this?**

1           A.       I have.

2           Q.       And is it an accurate description of the  
3   technique involved in those methods?

4           A.       It is, yes.

5           Q.       In your experience, what is the best use  
6   of the EPA300 method?

7           A.       Sure. So yeah, it's a perfectly fine  
8   technique. It certainly has its place. It's really  
9   designed to be special in two ways. One, it is  
10   quite a sensitive technique. It has low detection  
11   limits so unprecedented accuracy at a low  
12   concentration. However, I would note that it's not  
13   really relevant to these particular samples. The  
14   type of application that it could be used for is  
15   irrelevant when you are talking about soil  
16   chlorides.

17                   And then the second piece it offers is  
18   simultaneous analysis of multiple anions. So the  
19   beauty of the instrumentation is that you  
20   theoretically can run a sample through a single pass  
21   and receive seven different anion concentrations all  
22   at once, not just one. Again, not super relevant if  
23   you are looking at just chloride.

24                   Also, on these particular samples we have  
25   been discussing here they are relatively dirty by

1     our standards. There's high salt content, high TDS.  
2     And you lose a lot of that simultaneous analysis.  
3     The dirtier the sample, the more different dilutions  
4     you have to reanalyze the sample at so you lose a  
5     little bit of the multi-analyte ability.

6           **Q.       So it's not always possible?**

7           A.       No. It all depends on the nature of the  
8     sample. And the technique was originally developed  
9     as a clean water technique and it works beautifully  
10    in that capacity but it loses those benefits with  
11    those soils.

12          **Q.       In your opinion, what are the drawbacks of**  
13    **the EPA300 method in soil analysis of chloride?**

14          A.       The real reason why we are here and the  
15    issue is efficiency of the laboratories. You know,  
16    21 minutes per position with the EPA300, per  
17    position means every calibration point, every QC  
18    standard, every blank check. So if Green Analytical  
19    receives 20, 30 chlorides to run post a fairly  
20    lengthy extraction process, that actual analytical  
21    batch will take six, seven, eight, nine hours and  
22    then there will be reruns. Whereas, a well trained  
23    analyst in 4500 can sit down and titrate 20  
24    chlorides via 4500 in a matter of a couple hours and  
25    produce data that's just as accurate.

1           So yeah, it's slow. It's a bit  
2   cumbersome. It's a more sophisticated technique.  
3   We're not really getting the pros and we are having  
4   to deal with some of the cons.

5           **Q.     Do both methods provide comparable,**  
6   **reliable data for analyzing chloride in soils?**

7           A.     Absolutely.

8           **Q.     And in your opinion is there a need to**  
9   **expressively include SM4500 Cl B in the table?**

10          A.     Yes. It just alleviates a lot of  
11   confusion. It doesn't only save us time, it saves  
12   OCD time, it saves oil and gas companies time. As  
13   you can imagine, people come in the lab. They are  
14   looking for guidance. They kind of want us to tell  
15   them what to do and we can't always offer that, but  
16   when a method that we use routinely isn't listed in  
17   a table all kinds of red flags go up for people and  
18   they worry that either we don't know what we're  
19   doing or -- you know, there is just complications.

20                So in this case where Cardinal doesn't  
21   just do one or two chlorides a week, this is a major  
22   test for them. A relatively high volume. It would  
23   alleviate a lot of headaches to have both methods  
24   clearly listed.

25           **Q.     Thank you. That concludes my witness'**

1     **direct testimony.**

2                   CHAIRWOMAN RILEY:   Cross?

3                                   CROSS-EXAMINATION

4           BY MS. HERRMANN

5           **Q.     Mr. Miller, earlier in your testimony you**  
6     **were saying, I believe, EPA Method 300 is better for**  
7     **lower levels of chlorides?**

8           A.     Sure. It can be. It has more  
9     sensitivity, right? So we can achieve a lower  
10    detection limit, which means on a clean, raw,  
11    undiluted sample this method can see a lower number  
12    more accurately. That is one of the benefits.

13          **Q.     Now, the lowest number of chlorides on**  
14    **Table 1 is 600 milligrams per kilogram.**

15          A.     Correct.

16          **Q.     Would you consider that a lower level, the**  
17    **EPA Method 300?**

18          A.     No, what you are talking about with EPA300  
19    is if you had two samples and you were trying to  
20    accurately determine whether the chloride  
21    concentration was five or ten, if those were  
22    necessary differences, then the EPA300 would be a  
23    superior technique. But when you get up even into  
24    100, 200, 300, you are well above the sensitivity of  
25    either of the methods.

1           Q.     That's all I have.

2                               CROSS-EXAMINATION

3           BY MR. FELDEWERT

4           Q.     Mr. Miller, if I'm understanding, given  
5     the limits set forth in Table 1, from a detection  
6     standpoint it really makes no difference whether you  
7     use EPA300 or SM4500 C1 B?

8           A.     That is correct. You are an order of  
9     magnitude higher for either method.

10          Q.     So the only real distinction here then is  
11     the fact that you mentioned EPA300 would take how  
12     many hours?

13          A.     So 21 minutes per position, and a position  
14     is defined as any time an auto-sampler probe has to  
15     go in and test a sample. And that sample could be a  
16     client sample, the submitted soil for chloride  
17     analysis, or it could be -- you know, we run --  
18     about 50 percent of the samples that we run at the  
19     laboratory are quality control samples to prove that  
20     our data is valid, so when we run 20 soil chlorides  
21     we run approximately 30 positions. So a 20-sample  
22     batch has about 30 actual positions analyzed, and  
23     with 21 minutes a position, you can do the math but  
24     it's an all-day process.

25          Q.     SM4500 allows it to be done, you said, in

1     **a couple hours?**

2           A.     Yes.

3           **Q.     So why would you ever do -- if you had**  
4     **your choice you would always do SM4500?**

5           A.     That's correct. We deal with a lot of  
6     industries, a lot of other types of monitoring. So  
7     we analyze a lot of clean water samples for  
8     chloride, fluoride, sulfate, nitrate, nitrite, all  
9     five of those perimeters.

10          **Q.     But for soils?**

11          A.     For soils it's very rare that we're doing  
12     a full suite of anions like that. And for those  
13     soils it's debatable. Even if you wanted to analyze  
14     five anions in the soil, it's still debatable which  
15     would be the faster technique because of the  
16     multiple different extraction ratios and dilutions  
17     that might be required.

18          **Q.     I think you answered my question. If you**  
19     **had your choice?**

20          A.     If I had my choice on soil chlorides, 4500  
21     everyday.

22          **Q.     Okay. Thanks.**

23                   CHAIRWOMAN RILEY: Ms. Callahan?

24                   MS. CALLAHAN: No.

25                   CHAIRWOMAN RILEY: Commissioners?

1                   COMMISSIONER BALCH: Good afternoon, Mr.  
2 Miller.

3                   THE WITNESS: Good afternoon.

4                   COMMISSIONER BALCH: What's the cited  
5 accuracy of both of those methods?

6                   THE WITNESS: Sure. So it's determined on  
7 annual studies. So it's something that does  
8 fluctuate slightly. But currently at Green  
9 Analytical we're using a report limit for EPA300 of  
10 one part per million and for 4500 Cl B, I think  
11 theirs is going to be between five and ten. Four.

12           **Q. Four?**

13           A. Yes.

14           **Q. So plus or minus four?**

15           A. It's actually not plus or minus. So  
16 that's the lowest concentration we can see with  
17 guaranteed accuracy.

18                   COMMISSIONER BALCH: That's the accuracy  
19 of detection.

20                   THE WITNESS: Yes.

21                   COMMISSIONER BALCH: You mentioned the QC  
22 samples, so you put in some samples of known  
23 chloride concentration to make sure the instruments  
24 are calibrated?

25                   THE WITNESS: Correct.



1           COMMISSIONER BALCH:  If you've put in a  
2   known sample, what is the --

3           THE WITNESS:  Sure.  So there are  
4   different types of knowns we run that have different  
5   acceptance windows, but in summary it's either 90 to  
6   110 or 85 to 115 depending on the QC parameter.  So  
7   90 to 110 percent recovery would be the tightest  
8   window, and something like 80 to 120 I think would  
9   be the widest window on a matrix spike.  But your  
10   traditional, true second source known calibration  
11   verification QC parameters are either going to be 90  
12   to 110 or 85 to 115 both methods.

13         **Q.     Okay.  Thank you.**

14           MR. BRANCARD:  No questions.

15           CHAIRWOMAN RILEY:  Redirect?

16           MS. CALLAHAN:  No.

17           CHAIRWOMAN RILEY:  Are you done with the  
18   witness?

19           MR. BRANCARD:  We are.

20           CHAIRWOMAN RILEY:  At this time I would  
21   ask if you have any rebuttal witnesses you would  
22   like to call?

23           MS. HERRMANN:  Yes, I would like to call  
24   Mr. Brandon Powell.

25           MR. FELDEWERT:  May I request a short

1 recess?

2 (Note: The hearing stood in recess at  
3 1:42 to 1:50.)

4 CHAIRWOMAN RILEY: Back to where we were?

5 MS. HERRMANN: Yes. We would recall  
6 Mr. Powell. I don't know if his previous swearing  
7 in from yesterday is still valid? We have a thumbs  
8 up from Mr. Brancard so he was previously sworn in.

9 BRANDON POWELL  
10 after having been previously sworn under oath,  
11 was questioned and testified as follows:

12 DIRECT EXAMINATION

13 BY MS. HERRMANN

14 Q. Mr. Powell, were you involved in all the  
15 committee meetings?

16 A. Yes, I was.

17 Q. Are you aware of the 200-square-foot  
18 language that was submitted to NMOGA and when it was  
19 submitted?

20 A. Yes I am. That language originated from  
21 the Division in approximately November of 2017.  
22 That was part of revised language that we prepared  
23 and sent to NMOGA through the cabinet secretary's  
24 office. After it was presented to NMOGA through the  
25 cabinet secretary's office we received a draft back

1 through the cabinet secretary's office which I  
2 received on December 1, 2017 where they provided  
3 comments on several different items that was in the  
4 revised language, but that portion did not contain  
5 comments.

6 **Q. Do you recall specifically speaking to**  
7 **NMOGA about the language?**

8 A. I do in a subsequent meeting. After that  
9 we sat down to discuss some of the changes that were  
10 in the draft, and I remember specifically bringing  
11 that up to representatives of NMOGA in that meeting  
12 and explaining what the intent of it was, and at  
13 that time there was no objections.

14 **Q. No further questions.**

15 CHAIRWOMAN RILEY: Mr. Feldewert?

16 MR. FELDEWERT: No questions.

17 MS. CALLAHAN: No questions.

18 MR. LARSON: No questions.

19 CHAIRWOMAN RILEY: No questions from the  
20 Commission?

21 COMMISSIONER BALCH: One. Where did the  
22 number 200 square feet come from? I know it came  
23 from the secretary's office but what is the basis  
24 for it?

25 THE WITNESS: No, it actually came from

1 the Division itself. I was part of the drafting of  
2 that. What that was was based my field experience  
3 and then I also got with some of our field  
4 inspectors to try to find an actual, in-the-field  
5 acceptable rate that would apply across the board.  
6 As we were looking at something that could be  
7 universally applied, that's what we did based on  
8 field experience.

9 COMMISSIONER BALCH: So the intent of 200  
10 square feet is to do what?

11 THE WITNESS: The intent of every 200  
12 square feet was to allow a preapproved area that  
13 could be applied either to side wall excavations,  
14 which are relatively simple, or to waterway  
15 drainages, which become more complex. It was to  
16 allow the expedience of a universal number where  
17 there wasn't a debate between industry and the OCD  
18 on what was acceptable and what wasn't.

19 COMMISSIONER BALCH: So the two other  
20 places where this sampling is applied in the  
21 existing regulation is 17 and 34. In 17 you're  
22 looking at something -- I mean, everything is going  
23 to be bigger than 200 square feet that you would be  
24 sampling, but that's only requiring one sample for  
25 an excavated pit, right?

1 THE WITNESS: Correct.

2 COMMISSIONER BALCH: And then in 34 with  
3 produced water, you could have a truly immense,  
4 many-acre pit of water that you would also only  
5 require one sample from. So it's a little bit of a  
6 dichotomy in how this is being applied across the  
7 different parts of the code. So really the -- go  
8 ahead and address that.

9 THE WITNESS: So in 17 you're typically  
10 talking about a pit. It's a pit that as the  
11 operator uses it, the material in it is usually very  
12 homogenous. So if you do have a release underneath  
13 it, it should be consistent with what's in the pit  
14 and what areas you're looking at. If a pit is  
15 dark-colored you know what you're looking for.

16 In Part 34, that is also for a large area.  
17 A couple things in Part 34 that isn't addressed in  
18 either 29 or 17 is most of those have secondary  
19 containment. So it really is an ultimate safeguard  
20 at the end, where in 34 your initial releases should  
21 be detected through the secondary containment.

22 And again, the material in Part 34 should  
23 be homogenous. So if it does leak, it should all  
24 leak in the same place and flow in the same rough  
25 area. Whereas a spill, you don't have those

1     engineering controls. It could flow following  
2     different soil types. It can move separately. You  
3     don't always have the control of what kind of  
4     release occurs, whether it be produced water, as in  
5     34, or pit contents from drilling as in 17. It can  
6     provide the full spectrum of any type of release.

7                 COMMISSIONER BALCH: So sort of the  
8     compromise between what the OCD is requesting and  
9     what NMOGA is proposing is which scenario is going  
10    to lead to more variance requests or more oversight  
11    from the OCD?

12                THE WITNESS: I think depending on how you  
13    look at it, depending on the release type, your  
14    small releases I really think are going to follow --  
15    it could fall under both of them and be acceptable.  
16    That's the majority of your releases, your  
17    five-barrel releases. They're not going to  
18    contaminate areas where it's going to be to a  
19    greater level where either one are going to be  
20    applicable.

21                Your larger releases is where there's  
22    going to be variation, the major releases. All the  
23    200 was to give up-front guidance on how that was to  
24    be handled if they didn't want to risk coming back  
25    later and the Division telling them their samples

1 weren't sufficient.

2           The difference in the way the rule is  
3 written is the closure sampling is provided in a  
4 report. It's not a preapproved sampling area unless  
5 you go with the Division's version where it's an  
6 alternative to that. It's not part of the  
7 remediation plan requirements so it really doesn't  
8 get a chance for approval of the samples themselves  
9 until the very end.

10           NMOGA pointed out that the Division does  
11 have the powers to add sampling throughout the  
12 process. One of the complications with that would  
13 be on a sampling that NMOGA has within the first --  
14 that wants to address within the first 90 days.  
15 That doesn't require approval as long as -- and it  
16 doesn't require site characterization if they feel  
17 they can complete it. So if they follow that  
18 process all the way through to closure,  
19 theoretically we wouldn't get the information until  
20 it was closed.

21           COMMISSIONER BALCH: Okay. So kind of  
22 after the fact, this is how we sampled it?

23           THE WITNESS: Right.

24           COMMISSIONER BALCH: But you would still  
25 have to give the final approval of that.

1 THE WITNESS: We would.

2 COMMISSIONER BALCH: Except it may already  
3 be closed.

4 THE WITNESS: It may already be closed.  
5 We have had that concern in the existing rule where  
6 the operator felt it was clean and submitted the  
7 closure. They thought it was clean, they took their  
8 samples, they backfilled, and it ended up exceeding  
9 the samples or we felt it wasn't sampled enough.  
10 And it's a fight getting an operator back out on a  
11 site that's already backfilled to take additional  
12 samples.

13 COMMISSIONER BALCH: Pretty much have to  
14 go out with a borehole?

15 THE WITNESS: You either have to borehole  
16 it. If it comes back that it's contaminated you  
17 have to re-excavate it, and it could be an area as  
18 small as ten yards. So then you are re-mobilizing  
19 out to take ten yards out of the hole to show that  
20 you fully cleaned it up.

21 COMMISSIONER BALCH: So of these larger  
22 spills, one or two a week I think is the number that  
23 I heard in testimony yesterday?

24 THE WITNESS: The larger spills, yes.

25 COMMISSIONER BALCH: Out of those, how



1 many of those would be someplace where you would  
2 want to step in with specialized sampling plan?

3 THE WITNESS: If they are larger spill  
4 that's simply an excavation, probably a majority of  
5 those you would want a larger area. It's the -- and  
6 that's really what we were looking at the 200 feet  
7 was a universal to try to catch the small caveats.  
8 We weren't really trying to use that as a mandatory  
9 number. Maybe that wasn't phrased properly in the  
10 rule but that was the intent, that that was the  
11 preapproved amount. However, if you have a larger  
12 excavation that is simple and you want a larger  
13 area, we want to at least have the ability to say  
14 yes, what you are doing is good on the up-front end.

15 COMMISSIONER BALCH: So for the majority  
16 of sites, either way would probably be sufficient?  
17 A reasonable sample or the every 200 square feet?

18 THE WITNESS: Yes, on a majority of the  
19 sites.

20 COMMISSIONER BALCH: It's the larger ones  
21 where you might need to have a more specific  
22 sampling plan?

23 THE WITNESS: That's correct.

24 COMMISSIONER BALCH: Maybe the way to put  
25 it into the rule would be to allow NMOGA's language

1 for the minor spills and require a sampling plan to  
2 be approved for larger spills.

3 THE WITNESS: Right. And that's what we  
4 were trying to at least give some guidance on is for  
5 the larger spills. If they really didn't want to  
6 give a preplan approval for the larger sites they  
7 could do this sampling, but if they wanted something  
8 greater they would have to submit it to the Division  
9 or get an on-site approval.

10 COMMISSIONER BALCH: Thank you.

11 CHAIRWOMAN RILEY: Anything else?

12 COMMISSIONER MARTIN: Nothing.

13 CHAIRWOMAN RILEY: I just have one  
14 question for you. After listening to the testimony  
15 for the last two days, do you have any level of  
16 comfort of changing the language in here?

17 THE WITNESS: Well, I think there was some  
18 clarifications made by NMOGA that I don't think we  
19 were looking at the same as far as their intent was  
20 to sample each side wall separately. Because one of  
21 the things we looked at on a small release was say  
22 you have a release that's ten foot deep with a  
23 ten-foot side wall. Then in your 200 square feet  
24 you could combine two of the side walls together.  
25 Because the representation of both side walls was

1 still below 200 square feet. So if it had an  
2 exceedance, you would go back to the two side walls  
3 and further delineate or remediate as necessary.

4 CHAIRWOMAN RILEY: That was eye opening  
5 for me as well that that was the plan to get each  
6 wall and the base. It seems to me that's quite a  
7 bit of sampling regardless.

8 THE WITNESS: Right.

9 COMMISSIONER MARTIN: I do have a  
10 question. Since the Division didn't mean this to be  
11 mandatory -- is that what you testified to?

12 THE WITNESS: That is.

13 COMMISSIONER MARTIN: Do you have some  
14 suggested language to make it voluntary?

15 THE WITNESS: I don't know if maybe help  
16 reorganizing the area would be more beneficial to  
17 maybe put the sampling plan has to be preapproved  
18 and will include this information. However -- and  
19 put in B that if you don't want to get preapproval  
20 then the 200 feet is acceptable. I'm not sure quite  
21 how that wording would go, but the overall intent  
22 wasn't for it to be mandatory. It was really to  
23 give the operator the option of moving forward with  
24 the sampling that they could come to the Division  
25 and say, "You automatically are okay with this."

1 We're not going to fight you about it. By rule you  
2 can't fight us on this." Just to provide that  
3 clarity. Because that's why the closure sampling  
4 was just provided in a closure report instead of as  
5 part of the remediation plan itself.

6 CHAIRWOMAN RILEY: So if they were to do  
7 the 200 square feet then there would be no question  
8 at the end of the day and they closed it?

9 THE WITNESS: Correct.

10 CHAIRWOMAN RILEY: You wouldn't go back  
11 and say you want more sampling?

12 THE WITNESS: We wouldn't go back and say  
13 we want more sampling.

14 COMMISSIONER BALCH: So it's not a  
15 requirement, but if they do that they won't be  
16 questioned?

17 THE WITNESS: Exactly.

18 CHAIRWOMAN RILEY: It doesn't say that.

19 COMMISSIONER BALCH: It doesn't say that.

20 THE WITNESS: In the language the way it  
21 was drafted, maybe it was drafted wrong, but that  
22 was truly the intent was to give the operator that  
23 option.

24 CHAIRWOMAN RILEY: I think this one needs  
25 worked on. I think you guys need to sit at a table

1 and hammer this out.

2 THE WITNESS: I don't know if all sides  
3 are willing to do that. I can't say.

4 COMMISSIONER BALCH: We'll lock you in the  
5 room and don't give you dinner until it's done.

6 CHAIRWOMAN RILEY: It's only 2:00.

7 MR. FELDEWERT: I have questions.

8 CROSS-EXAMINATION

9 BY MR. FELDEWERT

10 Q. Okay. So Mr. Powell, I hear everything  
11 you're saying but I think what I understood didn't  
12 quite square up with what you were saying.

13 A. That's correct. The interpretation seems  
14 to be misinterpreted.

15 Q. When I look at, for example, B1B, and if  
16 there's a sentence in there that says, "Each  
17 composite sample must not be representative of more  
18 than 200 square feet," the very next sentence says,  
19 "The Division may add additional sampling  
20 requirements depending on the material." Number  
21 one. And number two, it is written, you would  
22 agree, as if it's mandatory?

23 A. For that specific section, yes.

24 Q. Now, a couple other things I want to make  
25 sure I understand as with the current, and that is

1 if I am in D and I'm conducting my sampling, one  
2 paragraph really we haven't looked at at all was  
3 D1A. Can you get that out in front of you?

4 As I see that, one of the things that is  
5 required is that the Division is given notice of  
6 when sampling is to occur and afforded the  
7 opportunity to come two days before or come out  
8 during that sampling, correct?

9 A. That is correct.

10 Q. Okay. And it was written that if they are  
11 out there at that time they can, as written, require  
12 additional sampling, correct?

13 A. That is correct.

14 Q. Even under the current language?

15 A. Even under the current.

16 Q. And even if we accept NMOGA's language?

17 A. Yes.

18 Q. Then the other point that someone made was  
19 the closure reporting. First off, when they submit  
20 their closure report, the operator, for final  
21 sign-off, they at least have some assurance that  
22 it's going to be done within 60 days, right?

23 A. That's correct.

24 Q. So if an operator does sampling and  
25 decides on their own just to go ahead and backfill

1     it, fill it up and hope to goodness they did it  
2     right, that's their risk, isn't it?

3           A.     That is their risk but it's not a risk  
4     typically taken because they have costs associated  
5     with the methods on-site.

6           Q.     But they run a risk, don't they? Because  
7     even under your language, your 200-square-foot  
8     language, if I do that as an operator and I backfill  
9     it up and I send in my sampling diagram and I send  
10    in my photographs and I send in my lab analysis and  
11    do everything it talks about in this rule, even if I  
12    did 200 square feet you would have the option under  
13    E within that 60 days to say, "No, we do not approve  
14    the closure report. There's other things you need  
15    to do."

16          A.     That's correct.

17          Q.     All right. That's all the questions I  
18    have.

19                 CHAIRWOMAN RILEY: Are there any other  
20    questions for this witness?

21                 MS. HERRMANN: Just one to clarify.

22                         REDIRECT EXAMINATION

23                 BY MR. HERRMANN

24           Q.     On closure reporting there are other  
25    reasons beyond sampling that the Division could or

1     **should deny a closure report, correct?**

2           A.     Yes.  If it doesn't meet any of the other  
3     requirements it could be denied as well.

4           **Q.     So you think that language is still**  
5     **important to have in the closure report section?**

6           A.     Yes.

7           **Q.     And if we do deny something or if the**  
8     **Division denies a closure report, are they required**  
9     **to provide a reason?**

10          A.     Yes, they are.

11                 MR. FELDEWERT:  Under the current  
12     language?

13                 MS. HERRMANN:  I believe so.

14                 MR. FELDEWERT:  Okay.  You and I are going  
15     to change that.

16                 MS. HERRMANN:  That might be a good one to  
17     bring up.

18          A.     Actually, after looking at it, the reason  
19     is not required in this portion.

20                 MR. FELDEWERT:  Let me ask you -- well, go  
21     ahead.  It's my understanding prior to now that the  
22     parties agreed that independent of this debate we  
23     have about the 200-square-foot, that this Subpart E2  
24     should have the same language as we see up top on  
25     Page 5 under Subparagraph 5 where it says approve or



1 deny within 60 days and if deny you give your  
2 reasons for your denials so everybody understands  
3 why it was denied.

4 A. I can answer that. I think it's been the  
5 Division's intent through the rule making in this  
6 one, 34 and 17, if something is denied to provide  
7 that reasoning so the responsible party has approved  
8 the reason of why the denial is in place so they can  
9 take the appropriate action to correct the denial.  
10 If they don't know why it's denied they don't know  
11 where to start to correct the denial.

12 MR. FELDEWERT: Madam Chair, following up  
13 on your suggestion, NMOGA is more than happy to sit  
14 down and talk with them about this provision now  
15 that we all have a better understanding about it.  
16 And, you know, I think I don't dispute Mr. Powell's  
17 recollection of events, although I can tell you that  
18 when we talked about this at lunch nobody remembers  
19 really talking about this. So I think they are on  
20 board that if you want us to take the time here at  
21 the end to sit down and see if we can figure it out,  
22 it makes sense to me.

23 CHAIRWOMAN RILEY: It would make our jobs  
24 easier if we had a clean set of language.

25 COMMISSIONER MARTIN: I agree.

1                   CHAIRWOMAN RILEY: Much better if you guys  
2 figure it out than for us. Look at all the smart  
3 people here in this room.

4                   MR. BRANCARD: Madam Chair, Commissioner  
5 Balch during discussions raised the possibility, and  
6 we just did this in the horizontal well rule of  
7 trying to reorganize a little bit the sections to  
8 make it sort of clear up front what the requirements  
9 to the parties are. And what he was suggesting was  
10 taking the first step, which is the initial response  
11 and putting that up front. Perhaps also clarifying  
12 right up front what is the responsibility for all  
13 releases.

14                   So I have a quick rewrite here which moves  
15 Section 10 into the slot for Section 8 and then  
16 moves 8 and 9 to 9 and 10. But also provides a new  
17 Subsection A which states -- and if the Commission  
18 wants to consider this we can announce it to the  
19 parties. If you don't want to consider it, you  
20 don't have to worry about it.

21                   It states, "For all releases, regardless  
22 of volume, the responsible party shall comply with  
23 19.15.29.8," which is the initial response section,  
24 "and shall remediate the release to meet at minimum  
25 the standards in Table 1 of 19.15.29.12. Then it

1 says, "For major and minor releases, the responsible  
2 party shall also comply with 29.9," 10, 11, 12 and  
3 13 which is the release reporting, the remediation  
4 plan, closure sections. That's not what everybody  
5 intended, but I think the Commission was sort of  
6 struggling with what's required of just releases  
7 that are not major or minor and try to get that out  
8 in the open and then everything else sort of  
9 afterwards for the major or minor releases, which is  
10 the focus of this rule is the major and minor  
11 releases, as the exhibit was submitted by NMOGA  
12 tries to focus those later sections on the major and  
13 minor releases.

14 CHAIRWOMAN RILEY: I like it. I was  
15 hoping to see something that would give us that  
16 clarification and this is pretty clear. A  
17 suggestion I was going to make is in other agency  
18 rules they have kind of a table as well that you can  
19 look through and if it's this, this notice applies.  
20 If it's this, you have to fill out a form. And a  
21 table with a yes/no, which could still be  
22 incorporated but this is really clean.

23 COMMISSIONER MARTIN: If these are  
24 reported how is the Division going to verify it?

25 COMMISSIONER BALCH: It's more for

1 enforcement after the fact or if there's some issue  
2 with reporting. It really just tells the operator.  
3 Doesn't make them do it.

4 CHAIRWOMAN RILEY: Right.

5 COMMISSIONER BALCH: But it does give them  
6 accountability.

7 CHAIRWOMAN RILEY: And instructs them on  
8 what is required. You don't get to just ignore it  
9 because it's not major and minor.

10 COMMISSIONER MARTIN: If the rule is this,  
11 it doesn't say you can ignore it.

12 CHAIRWOMAN RILEY: True.

13 COMMISSIONER BALCH: It's not clear what  
14 you are supposed to do either.

15 COMMISSIONER MARTIN: I don't have an  
16 alternative.

17 MR. FELDEWERT: I would submit that  
18 it's -- we're talking about minor -- we're talking  
19 about releases that fall below the threshold of  
20 major and minor. So we're talking about anything  
21 from a slight drip to anything below five barrels.  
22 And what I'm hearing is if there is a stain this big  
23 on soil, that all the sudden they're going to have  
24 to do whatever is necessary, depending on what that  
25 is, to demonstrate that it complies with Table 1

1 standards. And there is no way that Table 1 was  
2 meant to apply to a spot that's this big  
3 (indicating). No way. And it makes no sense and  
4 there's no evidence to support that.

5 Now, what do you do with a spot this big  
6 or this big or a spot this big or a spot as big as  
7 the table? You have to stop the leak. You have to  
8 contain the leak and you got to clean it up. That  
9 means I got to remove the soils. Now, if you  
10 wanted -- if you don't think that's clear in here  
11 for whatever reason, perhaps you can make that  
12 clarification. But everybody in here has told you  
13 that is what is meant by remediate, that you got to  
14 remove that contaminated material.

15 We're talking about a volume that small  
16 with no head, no nothing. There is no reason to go  
17 through the Table 1 requirements and the only way  
18 you get to the Table 1 requirements is you do all  
19 that stuff that is laid out in 29.11 and 29.20 and  
20 29 -- and that makes absolutely no sense in my  
21 opinion and there's no evidence to support it  
22 whatsoever. No historical evidence, no historical  
23 problems and no evidence presented here today.

24 MR. HERRMANN: Are you providing  
25 testimony, Mr. Feldewert?

1                   MR. FELDEWERT: I am providing argument.

2                   MS. HERRMANN: You might need to sign in  
3 on the comment sheet.

4                   COMMISSIONER BALCH: Come on. That's all  
5 right. I think it's useful discussion.

6                   CHAIRWOMAN RILEY: I don't know that Table  
7 1 -- my comments related more to the organization.  
8 And you're not looking at this, right?

9                   MR. FELDEWERT: Well, the organization was  
10 fine. Where I thought it went off the rails was  
11 wait a minute, then you have to do something to  
12 Table 1.

13                   COMMISSIONER BALCH: That's what this says  
14 now.

15                   MR. FELDEWERT: That's where it went off  
16 the rails. The reorganization totally makes sense  
17 to me.

18                   COMMISSIONER MARTIN: I agree with the  
19 order this is in but I don't agree with the  
20 application of Table 1 to --

21                   CHAIRWOMAN RILEY: Yeah.

22                   COMMISSIONER BALCH: But then you do need  
23 to have something in here that says, "Hey, haul it  
24 away. Scrape it up and haul it away." And there's  
25 nothing in the existing version, nothing in the

1 current versions that does that.

2 MR. FELDEWERT: Well, I think if you look  
3 at 29.10C, that can be physically removed from the  
4 surface within the containment area and you got to  
5 have the material removed from the site to a  
6 division-approved facility. I understand that to  
7 mean I got to scrape all that stuff up or do  
8 remediation. That's stuff I don't understand.

9 MR. GRISWALD: If I could make a comment?

10 MR. BRANCARD: No.

11 MR. GRISWALD: Only an attorney can?

12 MR. BRANCARD: Yes.

13 CHAIRWOMAN RILEY: Take the rest of the  
14 sentence out because then initial response applies  
15 and you get site stabilization.

16 COMMISSIONER BALCH: Maybe we can strike  
17 the language in what is now 10B3 or what would be  
18 8B3, strengthen that a little bit.

19 COMMISSIONER MARTIN: How would you strike  
20 it?

21 COMMISSIONER BALCH: This doesn't say suck  
22 up the oil and scrape up the oil that you can't suck  
23 up and then you're done. It doesn't talk about  
24 moving the soil or anything like that.

25 CHAIRWOMAN RILEY: It says deliver

1 material removed from the site to Division-approved  
2 --

3 COMMISSIONER BALCH: It says free liquids  
4 and recoverable product. Product is what?

5 COMMISSIONER MARTIN: Do we want to add  
6 standard soil? I mean, I kind of see what you're  
7 saying.

8 COMMISSIONER BALCH: Maybe instead of  
9 saying recoverable product.

10 COMMISSIONER MARTIN: I see what you're  
11 saying. I think that was the intent.

12 CHAIRWOMAN RILEY: Recover any liquids.  
13 Recoverable products. That leaves it kind of wide  
14 open. It needs to be physically removed.

15 COMMISSIONER BALCH: It can be physically  
16 removed.

17 MS. HERRMANN: I do have a comment about  
18 the physically remove language. Putting it in what  
19 is now under 29.10 and 29.A would make it a dig a  
20 hole rule and it seems to me that would apply to a  
21 major release of massive volumes, and that was not  
22 our intent and we do want to include other  
23 remediation which I have been informed does happen  
24 on a fairly regular basis for minor releases.

25 MR. FELDEWERT: You're talking about



1     having --

2                   CHAIRWOMAN RILEY:  This is under initial  
3     response?

4                   MS. HERRMANN:  Initial response.

5                   CHAIRWOMAN RILEY:  So I think the initial  
6     response was intended to be the initial emergency  
7     response to contain the problem.

8                   COMMISSIONER BALCH:  Under the intent of  
9     reformatizing this way is that the initial response  
10    for a very small spill or release would be clean up  
11    what you can see and you're done.  You don't have to  
12    go through all the other stuff in the process.

13                  COMMISSIONER MARTIN:  I agree.  I think  
14    something like that.  But that's the extent of it.

15                  CHAIRWOMAN RILEY:  And under  
16    requirements -- you guys need a copy.

17                  MR. BRANCARD:  The point that I would  
18    make, and I think it's the same point Mr. Herrmann  
19    makes, is that initial response applies to all  
20    releases.

21                  CHAIRWOMAN RILEY:  I think we want to go  
22    off the record and allow you to hammer stuff out.  
23    Take what Mr. Brancard prepared and see if you can't  
24    clean up the language.

25                  COMMISSIONER BALCH:  I think we're

1 comfortable with taking out "to meet at minimum the  
2 standards in Table 1" from that first sentence.

3 MR. FELDEWERT: Okay.

4 MR. BRANCARD: The Commission meeting can  
5 be recessed, and do you want to give the parties  
6 time? You can give the parties until tomorrow  
7 morning, frankly.

8 MR. FELDEWERT: Let us walk out in the  
9 hall and see where we're at.

10 CHAIRWOMAN RILEY: We're off the record.

11 (Note: The hearing stood in recess at  
12 2:26 to 2:32.)

13 CHAIRWOMAN RILEY: So did the parties come  
14 to an agreement on language?

15 MR. FELDEWERT: Yes, Madam Chair.

16 CHAIRWOMAN RILEY: What would that be?

17 MR. FELDEWERT: With respect to what was  
18 handed to us, which is labeled 19.15.29.8, Releases,  
19 we have an A and a B underneath that. Under 29.8A,  
20 Requirements, if the language in the first sentence  
21 beginning with "to meet" and continuing on to the  
22 period after NMAC, if that is deleted then the  
23 parties agree this makes a lot of sense and provides  
24 the flexibility needed to deal with small  
25 unreportable releases.

1           CHAIRWOMAN RILEY: Did you have  
2 suggestions for site stabilization?

3           MR. FELDEWERT: No. I think that was the  
4 language the Committee talked about earlier.

5           COMMISSIONER BALCH: Did you happen to  
6 solve sampling while you were out there, too?

7           CHAIRWOMAN RILEY: No wonder you were so  
8 fast.

9           MR. FELDEWERT: One bite at a time. We  
10 certainly engaged that. That might take a little  
11 bit longer. I don't know.

12          CHAIRWOMAN RILEY: I would like to see you  
13 guys to come together on sampling.

14          MR. FELDEWERT: I think that would allow  
15 you to use your time as you see fit while we engage  
16 in what perhaps may be a more extensive effort.

17          CHAIRWOMAN RILEY: I think that needs to  
18 be looked at, and if you could come up with some  
19 wording on silent stabilization that --

20          COMMISSIONER BALCH: We could probably do  
21 that.

22          MR. BRANCARD: I think what we're looking  
23 at for site stabilization is there is the flow chart  
24 that we never saw --

25          MR. GRISWALD: Because it doesn't exist.

1           MR. BRANCARD:  -- in Section 11 indicates  
2   that you do a delineation within 90 days unless you  
3   already remediated the site within 90 days.  So,  
4   therefore, perhaps under that little Section C, Site  
5   Stabilization, you can create the segue to allow an  
6   operator to begin work immediately on remediating  
7   the site if it is of a scale that can be done  
8   immediately.

9           MR. FELDEWERT:  I'm looking at A and I'm  
10   reading, "The responsible party must submit  
11   information characterizing the release to the  
12   appropriate division district office within 90 days  
13   of discovery of the release.  Or characterize the  
14   site by submitting a final closure report within 90  
15   days of discovery of the release in accordance with  
16   this rule."  If you choose the second option, then  
17   that throws them into the approval of the closure  
18   report, does it not?

19          MS. HERRMANN:  Yes.  And the site  
20   assessment and characterization was intended only to  
21   apply for major and minor releases.

22          MR. BRANCARD:  But I think what we're  
23   simply suggesting is simply allowing someone to  
24   begin reclamation work if it's at a suitable scale.  
25   Whether that triggers a final closure report will

1     depend on whether it's a major or minor release.

2                 MS. HERRMANN:   So a reference to what is  
3     currently 11 and 12 is applicable?

4                 MR. BRANCARD:   No.

5                 COMMISSIONER BALCH:  We could just put a 4  
6     that says, "Remediation efforts may begin  
7     immediately, if appropriate" or something like that.  
8     I don't know.

9                 MR. BRANCARD:   Yeah.  Because we're simply  
10    allowing that under 11A.

11                COMMISSIONER BALCH:  It's in the spirit of  
12    telling them what to do right away.  And basically  
13    maybe we want to encourage them to begin their  
14    remediation as soon as practicable even if they are  
15    waiting for their permits or approvals or something  
16    of that form.

17                MS. HERRMANN:   As part of the initial  
18    response?

19                COMMISSIONER BALCH:  As part of the  
20    initial response they start the remediation.

21                MS. HERRMANN:   So 4 that says start  
22    remediation as required based on the release?

23                MR. GRISWALD:   It's not required, it's an  
24    option.

25                MR. BRANCARD:   It's not required, it's an

1 option.

2 COMMISSIONER BALCH: I think we can come  
3 back on this one, though.

4 CHAIRWOMAN RILEY: Is that just for those  
5 that are non-reportable?

6 COMMISSIONER BALCH: Any. Anything.

7 MR. BRANCARD: So I guess if you're coming  
8 back at some point you should indicate what version  
9 of the rule changes you're all agreeable with. It  
10 would be good to know whether the other three  
11 parties are okay with Cardinal's proposed change,  
12 just so the Commission sort of knows where all the  
13 parties sit at the end of the hearing. And if you  
14 have remaining disagreements, that's fine. Just  
15 indicate to the Commission what they are.

16 MR. FELDEWERT: Okay.

17 MS. HERRMANN: All right. Should we --

18 CHAIRWOMAN RILEY: How much time do you  
19 need?

20 MS. HERRMANN: Do you want to say meet  
21 back at the top of the hour? Will that be enough  
22 time?

23 CHAIRWOMAN RILEY: Twenty minutes?

24 MR. FELDEWERT: We can give you an update.

25 CHAIRWOMAN RILEY: Sure. Okay.

1                   (Note: The hearing stood in recess at  
2   2:37 to 3:31.)

3                   CHAIRWOMAN RILEY: Back on the record.

4                   MS. HERRMANN: If I may submit to the  
5 Commission what I've marked as Oil Conservation  
6 Division Exhibit 4. This specifically has language  
7 under the closure requirements, Section D, that has  
8 been agreed to by the Oil Conservation Division,  
9 NMOGA, and IPANM. It's not red-lined but we  
10 reorganized and reworded the language requiring  
11 sampling requirements. We started in Section A  
12 identifying that the responsible party must verbally  
13 notify the appropriate division district office two  
14 days prior to conducting final sampling, so we  
15 provided the notice requirement.

16                   Then in Section B we explicitly said that  
17 "The responsible party may submit a composite and  
18 grab sample plan for the Division's review and  
19 approval separately or with the remediation plan."  
20 Then subsection C, alternatively, "Without Division  
21 approval, the responsible party may elect to perform  
22 a composite and grab sample plan of the remediated  
23 area where each composite sample is not  
24 representative of more than 200 square feet."

25                   We moved wall and base up to Section 1, or

1 walls and base to be inclusive of more than one wall  
2 and the base separately, and still require the  
3 individual grab samples from any wet or discolored  
4 areas.

5 MR. FELDEWERT: Madam Chair, Commission, I  
6 think that addresses your first task for us. The  
7 second task is to ascertain if anybody has any  
8 objection to the method proposed by Cardinal Labs by  
9 the parties, and I did a poll and nobody objects.  
10 Third task was, as I understand it, to take what has  
11 been handed to us on the reorganization and place  
12 something within what had been considered as 29.8B  
13 but add a Subsection 4, and the thought was quite  
14 simply we could put something in there that --  
15 Subparagraph 4 would be entitled Remediation,  
16 period, and then say that the responsible party may  
17 commence remediation immediately.

18 COMMISSIONER BALCH: I think there are a  
19 lot of good reasons for that. The more you wait the  
20 larger the spill might get.

21 MR. BRANCARD: Mr. Feldewert,  
22 Mr. Herrmann, Mr. Larson, one of the corrections was  
23 do the parties otherwise agree to changes in NMOGA  
24 Exhibit D?

25 MR. FELDEWERT: We do.



1                   COMMISSIONER BALCH: You mean the parts  
2 highlighted yellow?

3                   MS. HERRMANN: We do. There was one  
4 change I wanted to recall the Commission's attention  
5 to. On Page 4, 12B2, the removal of the  
6 language "could cause safety issues or." So it  
7 would read, "If contamination is located in areas  
8 immediately under or around production equipment,  
9 such as production tanks, wellheads and pipelines  
10 where remediation could cause a major facility  
11 deconstruction, the remediation, restoration or  
12 reclamation may be deferred" and so forth.

13                  CHAIRWOMAN RILEY: So we're taking out  
14 Safety Issues?

15                  MS. HERRMANN: Starting at Safety Issues  
16 through "or", removing that language. I don't think  
17 there's an objection.

18                  MR. FELDEWERT: No, other than we might  
19 end up with two causes. Take out one of the causes.

20                  CHAIRWOMAN RILEY: The other change I  
21 recall, too, was to make E2 match the language  
22 above. Were we going to add that in?

23                  MR. FELDEWERT: Yes.

24                  CHAIRWOMAN RILEY: I don't see it.

25                  MR. FELDEWERT: No, just take that

1 sentence and move it into E2. And then I think on  
2 Page 3 while you're on Exhibit E, there's a  
3 reference up there in 29.11.A5B at the top, Table 1,  
4 I think, there's a consensus we need to say Table 1,  
5 19.15.29.12.

6 MS. HERRMANN: And also correct the  
7 citation in the sentence below that.

8 MR. FELDEWERT: Where it says 29.11?

9 MR. BRANCARD: Mr. Herrmann, you're okay,  
10 then, with E2 having the same language as C5?

11 MS. HERRMANN: Yes.

12 MR. BRANCARD: Except that E2 does not  
13 have conditions. E2 is just a straight-up approve  
14 or deny.

15 MS. HERRMANN: Yes. Whatever language  
16 necessary to make it consistent with closure  
17 reporting. Commissioners, there was one more change  
18 we agreed to on Page 2 of NMOGA Exhibit D under  
19 29.11A where the language says, "Within 90 days of  
20 discovery of the release or characterize the  
21 site," we wanted to change the word "site" to  
22 "release."

23 COMMISSIONER BALCH: I had that in my  
24 notes.

25 MS. HERRMANN: I was going through my

1 notes and I found that in there.

2 CHAIRWOMAN RILEY: Was there going to be a  
3 change to 29.15.29.11A5 in the yellow within a half  
4 mile of the horizontal extents of the release? We  
5 talked about changing that word "extents" to  
6 something else like "boundaries."

7 MR. FELDEWERT: I think it goes by  
8 boundary.

9 MS. HERRMANN: Yes, that's referred to  
10 several times in the rule so if we do change it  
11 there we will have to change it in other areas.

12 CHAIRWOMAN RILEY: Other changes or  
13 clarifications?

14 MR. BRANCARD: There was one change that I  
15 requested of a witness and the witness agreed and I  
16 don't know if the parties agree to it. That's on  
17 Page 3. It's 11A5B. It says, "The operator may use  
18 one of the following sample methods." I think I  
19 said should that be the operator shall use? And it  
20 could be one of the following. The drafters of the  
21 rule change don't seem to like the word "shall" so  
22 we can be consistent and use "must."

23 MS. HERRMANN: Do you have an objection to  
24 that?

25 MR. LARSON: It's on the table.

1                   COMMISSIONER BALCH: We can do that among  
2 ourselves.

3                   MS. HERRMANN: We do not have consensus on  
4 that. The Division does not have any objection to  
5 the language of "must" or "shall." However, IPANM  
6 has indicated their objection. NMOGA?

7                   MR. FELDEWERT: We're neutral.

8                   COMMISSIONER MARTIN: Did the Division  
9 mean for it to be that prescriptive when it came up  
10 with "may"?

11                  MS. HERRMANN: Well, we do provide for  
12 other Division-approved methods, but I think it's  
13 the Division's intent that the sampling methods and  
14 characterizations be limited to those five  
15 identified, and by five identified, I mean another  
16 method that the Division might approve.

17                  MR. FELDEWERT: If I may comment on that.  
18 Nevermind. I have no comment.

19                  CHAIRWOMAN RILEY: So it would be -- yeah,  
20 it's time for deliberation. It would be really nice  
21 to have a clean copy of this.

22                  COMMISSIONER BALCH: We need closing  
23 statements.

24                  MR. FELDEWERT: I do have one issue that  
25 was raised by one of the parties that filed comments

1 based on similar discussions today I would like to  
2 briefly address it at the appropriate time.

3 CHAIRWOMAN RILEY: Do you want to do that  
4 in a closing argument? Do you guys want to close?  
5 Do you have those?

6 MR. FELDEWERT: I didn't really anticipate  
7 closing argument beyond addressing this one issue  
8 because I'm looking at all my notes that I made and  
9 we addressed every one of them except the last one  
10 so I don't have anything else to say.

11 CHAIRWOMAN RILEY: Mr. Herrmann, do you  
12 have anything to say?

13 MS. HERRMANN: I would just care to take a  
14 moment to reiterate the testimony that we have  
15 provided and state that we're all in, I would say,  
16 99 percent consensus right now. I would also like  
17 to release my witness from the witness stand. He's  
18 been there for some time.

19 CHAIRWOMAN RILEY: I thought we did that  
20 already. You may be excused.

21 COMMISSIONER BALCH: It's probably a more  
22 comfortable seat than the red chairs.

23 CHAIRWOMAN RILEY: Why don't you go ahead,  
24 Mr. Herrmann.

25 MS. HERRMANN: All right. So in the

1 Division's application we presented our version of  
2 this rule. We have general consensus on all our  
3 changes. We feel that this rule does obtain our  
4 objectives of clarifying and -- of clarifying how a  
5 release should be responded to. It implements best  
6 management practices, it removes unnecessary  
7 approvals and explicitly states what the Division  
8 will require.

9 This rule meets our goals and we believe  
10 that the Commission should implement it as  
11 presented.

12 CHAIRWOMAN RILEY: Thank you. NMOGA?

13 MR. FELDEWERT: Yeah. I think we agree  
14 with what was said by the Division. I believe with  
15 the changes we talked about here today, I think the  
16 parties made a tremendous effort coming up with a  
17 rule that is workable, understandable and consistent  
18 with other rules addressing similar topics, and when  
19 you think about where you started and where you  
20 ended, I know it doesn't look like a lot on a piece  
21 of paper, but just dealing with what we dealt with  
22 during this hearing represents how much work has to  
23 go into something like this. And to have consensus  
24 upon that, more importantly, among the various  
25 parties affected by this is quite remarkable in my

1 opinion. I think it gives testament to the effort  
2 that was put into this.

3 Now, we had a number of parties that  
4 submitted comments/modifications. Sometimes at the  
5 last minute. Certainly without providing notice  
6 that that was going to be done. I again object to  
7 any modifications, for example, specific changes  
8 that they suggest should be made to the language,  
9 because I don't view these as prehearing statements  
10 and I don't view them as meeting the requirements of  
11 prehearing statements. But that's my opinion.

12 But more importantly, there's one comment  
13 that was made and one suggestion that was made that  
14 I think was discussed briefly today that I want to  
15 address. That is, the question of whether a  
16 landowner should receive notice of a release.

17 Now, first thing I think of is what do you  
18 mean by a landowner? Are we talking about a grazing  
19 lessee, are we talking about a business lessee? Who  
20 are we talking about in terms of landowner?

21 The second thing I'm concerned about is  
22 when you begin to require notice to a particular  
23 group, then there is an argument that you have now  
24 afforded them party status. And I would argue that  
25 you've now afforded them party status to participate

1     then in proceedings or issues arising out of that  
2     release.

3                   And my question would be, for what  
4     purpose?  What's the purpose?  Because the Division,  
5     not a landowner, controls what is required from a  
6     release with these regulations.  And there are  
7     certain other agencies that have regulations that  
8     control what is required by a release.  But a  
9     private landowner does not control that.  That is a  
10    regulatory matter, and a private landowner at most  
11    has perhaps a surface use agreement that has been  
12    voluntarily entered into by the parties that may or  
13    may not have its own notice requirements.

14                  But the point is that those private  
15    surface use agreements and that relationship there  
16    is governed by contract.  It's not governed by a  
17    regulation.  It's not enforceable by a regulation or  
18    even by this body.  It's enforceable by a court.

19                  So I don't see what regulatory purpose is  
20    fostered or served by mandating notice of a release  
21    to a landowner.  That is the Division that controls  
22    the matter, not landowners from a regulatory  
23    standpoint.

24                  It makes sense to notify, as Mr. Powell  
25    said, other agencies that may have similar



1 regulations and regulatory requirements, but I don't  
2 understand why you would provide notice to a  
3 landowner of a release. Because like I said, I  
4 think it's fraught with problems. I think it grants  
5 a status that does not foster the regulatory purpose  
6 and if it's for purposes of surface use agreements  
7 it's not something this division does, it's not  
8 something that they enforce and it's not something  
9 they should embroil themselves in. That's a matter  
10 between the parties.

11 CHAIRWOMAN RILEY: Thank you. Mr. Larson?

12 MR. LARSON: Thank you. IPANM was also an  
13 active participant in the work group that formulated  
14 the rule proposed by the Division, and IPANM thanks  
15 both the Division and NMOGA for their time, effort  
16 and energy. And because a significant number of  
17 IPANM's members are small operators, IPANM had and  
18 continues to have a particular concern about  
19 potentially unnecessary and financially burdensome  
20 delineation and remediation requirements.

21 In that regard, I would strongly reinforce  
22 Mr. Feldewert's comments yesterday about the lack of  
23 a need for any specific standards to address  
24 releases of less than five barrels. I agree with  
25 him there's been no historical evidence of problems

1 of what we have been calling non-reportable  
2 releases. Throughout the study group process and  
3 during the hearing the Division hasn't asked for  
4 requirements for that.

5 I think the reality has been the operators  
6 address them, do what's necessary, whether it's  
7 scraping, whatever. I think the new rule does give  
8 some teeth to the Division because it requires  
9 remediation of those releases, and if the operator  
10 disregards that obligation they do it at their own  
11 peril.

12 Overall, IPANM's position is that the  
13 collective efforts of the work group and the parties  
14 during this hearing have created a balanced and  
15 workable rule. For example, based on the testimony  
16 the Division's witnesses, IPANM is comfortable that  
17 the Division will consider alternative modes of  
18 remediation, other forms other than digging and  
19 hauling.

20 In sum, IPANM requests the Commission  
21 adopt the proposed rule including the modifications  
22 that the parties have agreed to today.

23 CHAIRWOMAN RILEY: Thank you. Where did  
24 Ms. Callahan go?

25 COMMISSIONER BALCH: She left.

1 MR. BRANCARD: Do you want --

2 MS. HERRMANN: I would like to move to  
3 admit OCD Exhibit 4 into the record.

4 CHAIRWOMAN RILEY: Any objections?

5 MR. FELDEWERT: No objections.

6 MR. LARSON: No.

7 CHAIRWOMAN RILEY: Exhibit 4 is accepted  
8 into the record.

9 (Note: Exhibit 4 admitted.)

10 CHAIRWOMAN RILEY: Any other matter of  
11 business we need to take care of before we go into  
12 deliberation?

13 MR. FELDEWERT: No. Thank you.

14 MS. HERRMANN: I would also like to thank  
15 the Commission for listening to our presentation and  
16 we thank NMOGA and IPANM for their cooperation and  
17 collaboration.

18 CHAIRWOMAN RILEY: Well, I want to  
19 reiterate that. I know that the spill rule has been  
20 something that you all have worked on for a long  
21 time and there were times, from what I heard, that  
22 everybody was far apart on coming to independent  
23 consensus. And for you all to get to a place where  
24 we are sitting in the room together and you've  
25 provided us with something that we can work with and

1 not have to make those really difficult decisions  
2 that are going to impact so many different groups,  
3 we are able to look at a nice, concise document that  
4 might need some tweaking here and there, but to know  
5 that you all are in agreement was very, very  
6 helpful, I think. So thank you for the work that  
7 you all did.

8 At this point it's 4:00 o'clock. Again, I  
9 would love to see a clean version of this to look at  
10 but we could start. Do you guys want to start  
11 deliberations tonight and then could we look forward  
12 to a clean copy by tomorrow?

13 COMMISSIONER BALCH: I wonder if we give  
14 Mr. Brancard an hour now and an hour in the morning  
15 he might be able to provide us a clean copy.

16 MR. BRANCARD: Somebody will have to give  
17 me a Word version.

18 MS. HERRMANN: I can do that.

19 COMMISSIONER BALCH: You might want  
20 NMOGA's Exhibit 4.

21 MS. HERRMANN: I have that on my computer.  
22 We worked on it upstairs.

23 COMMISSIONER BALCH: I wouldn't mind  
24 leaving the yellow highlights in because my notes  
25 related to a lot of that.

1                   MS. HERRMANN:   Okay.   Just to note that  
2   the changes we submitted on Exhibit 4 weren't  
3   highlighted or marked because leaving track changes  
4   on that section would have made it almost illegible.

5                   MR. BRANCARD:   I can highlight that.

6                   COMMISSIONER BALCH:   Okay.

7                   MR. BRANCARD:   It's just those two  
8   subparagraphs.

9                   CHAIRWOMAN RILEY:   I like how you did it  
10   in the last hearing where you had the highlights.  
11   Just the yellow.   It didn't have to be red but, you  
12   know, highlighted so we can see it.

13                  MR. BRANCARD:   But I think there's not a  
14   lot to do here.   It's highlighting the changes.  
15   It's taking Exhibit D and highlighting the changes  
16   that we see which include -- well, we have to  
17   incorporate the restructure and I'll just highlight  
18   the new language, not the fact that it everything  
19   has been restructured.

20                  And then there's this change, the Cardinal  
21   Labs change.   And then about the Division needing to  
22   provide a written summary of deficiencies with a  
23   closure plan denial, and then the last sentence  
24   added to the beginning section about beginning  
25   reclamation.   Commence remediation immediately.   I

1 think that's it.

2 COMMISSIONER BALCH: Plenty of time for  
3 you to do that before 9:00 a.m.?

4 MR. BRANCARD: Yes.

5 MS. HERRMANN: And the safety issues.

6 MR. BRANCARD: Yeah.

7 COMMISSIONER BALCH: At this point it  
8 might be better just to wait for the clean copy.

9 CHAIRWOMAN RILEY: I would prefer that.

10 COMMISSIONER BALCH: We will come up with  
11 a couple drafts tomorrow.

12 COMMISSIONER MARTIN: Sure.

13 MR. BRANCARD: You want the highlighting  
14 to stay?

15 COMMISSIONER BALCH: Yes, just because all  
16 my notes are easier to track it.

17 CHAIRWOMAN RILEY: How much time would you  
18 like to have?

19 MR. BRANCARD: It will be ready by  
20 tomorrow morning.

21 CHAIRWOMAN RILEY: By 9:00?

22 COMMISSIONER MARTIN: 9:00 o'clock?

23 CHAIRWOMAN RILEY: So we are adjourned  
24 until 9:00 o'clock tomorrow morning. We are  
25 officially off the record.

1 (Note: The hearing was adjourned at  
2 4:05).  
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REPORTER'S CERTIFICATE

I, JAN GIBSON, Certified Court Reporter for the State of New Mexico, do hereby certify that I reported the foregoing proceedings in stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings and was reduced to printed form under my direct supervision.

I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or attorneys in this case and that I have no interest in the final disposition of this case.

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