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1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION COMMISSION
4	IN THE MATTER OF THE HEARING CALLED
5	BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:
6	PROPOSED AMENDMENT OF 19.15.39 NMAC TO ADD CASE NO. 14255 TWO NEW SECTIONS SETTING OUT SPECIAL
7	PROVISIONS FOR SANTA FE COUNTY AND THE GALISTEO BASIN; PROPOSED AMENDMENT
8	19.15.39.9 NMAC, AND PROPOSED AMENDMENT 19.15.39.10 NMAC.
9	
10	CASE NO. 14163; CONTINUED TO JANUARY 2009 CASE NO. 14106; CONTINUED TO JANUARY 2009 CASE NO. 13957; CONTINUED TO JANUARY 2009
11	CASE NO. 14134; CONTINUED TO FEBRUARY 2009
12	CASE NO. 14141; CONTINUED TO FEBRUARY 2009 CASE NO. 14122; CONTINUED TO JANUARY 2009
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14	
15	REPORTER'S TRANSCRIPT OF PROCEEDINGS
16	COMMISSIONER HEARING
17	BEFORE: MARK E. FESMIRE, CHAIRMAN
	JAMI BAILEY, COMMISSIONER
18	WILLIAM C. OLSON, COMMISSIONER
19	December 11, 2008
20	Santa Fe, New Mexico
21	This matter came on for hearing before the New Mexico Oil Conservation Commission, MARK E. FESMIRE, Chairman, on
22	Thursday, December 11, 2008, at the New Mexico Energy, Minerals
23	and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico.
24	REPORTED BY: JOYCE D. CALVERT, P-03 Paul Baca Court Reporters
25	500 Fourth Street, NW, Suite 105 Albuquerque, New Mexico 87102

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CHAIRMAN FESMIRE: At this time, we'll go on the 1 2 record and call to order the Thursday, December 11, 2008, 3 meeting of the Oil Conservation Commission. The record should reflect commissioners Bailey, Olson and Fesmire are all 4 5 present. We, therefore, have a quorum and can conduct business. 6 7 The first item on the docket today is the adoption of 8 minutes from the November 6th and November 7th meetings of the 9 Commission. Have the Commissioners had the opportunity to look 10 at the minutes as presented by the secretary? 11 COMMISSIONER BAILEY: Yes, I have, and I move that we 12 adopt them. 13 CHAIRMAN FESMIRE: Both November 6th and 14 November 7th? 15 COMMISSIONER BAILEY: Both. 16 COMMISSIONER JONES: I'll second that. I have 17 reviewed them, and I believe they accurately reflect the 18 actions taken. 19 CHAIRMAN FESMIRE: I've also reviewed them. A11 20 those in favor of signing the minutes as presented by the 21 secretary, signify by saying "aye." 22 COMMISSIONER BAILEY: Aye. 23 COMMISSIONER OLSON: Aye. 24 CHAIRMAN FESMIRE: Aye. The record shall reflect 25 that the minutes were unanimously adopted by the Commission for

1	both November 6th and November 7th, signed by the chairman and
2	conveyed to the secretary.
3	The next item before the Commission is not on the
4	docket, but it's a continuation of Case No. 14122: In the
5	Matter of the Application of Pecos Operating Company for
6	Approval of a Non-Commercial Saltwater Disposal Well in Lea
7	County, New Mexico.
8	Have the Commissioners had the chance to review the
9	order as presented by counsel?
10	COMMISSIONER BAILEY: Yes, I have, and I believe that
11	it accurately reflects the decisions that we made.
12	COMMISSIONER JONES: I'll second that.
13	CHAIRMAN FESMIRE: Okay. All those in favor of
14	adopting the order as presented by counsel signify by saying
15	"aye."
16	COMMISSIONER BAILEY: Aye.
17	COMMISSIONER OLSON: Aye.
18	CHAIRMAN FESMIRE: Aye. Let the record reflect that
19	the order was unanimously adopted by the Commission, signed by
20	the Chairman, and transmitted to the other two members for
21	signature, and that the order was transmitted to the secretary.
22	The next item before the Commission is Case
23	No. 14255. This case concerns the proposed amendment of
24	19.15.39 NMAC to add two new sections setting out special
25	provisions for Santa Fe County and the Galisteo Basin which
19 20 21 22 23 24	<pre>the order was unanimously adopted by the Commission, signed by the Chairman, and transmitted to the other two members for signature, and that the order was transmitted to the secretary The next item before the Commission is Case No. 14255. This case concerns the proposed amendment of 19.15.39 NMAC to add two new sections setting out special</pre>

extends into portions of San Miguel and Sandoval Counties. 1 2 Proposed Section 19.15.39.9 NMAC, which requires the 3 operators to obtain approval of the Oil Conservation Division for an Exploration and Development Plan prior to drilling, 4 5 re-entering or deepening a well in Santa Fe County in the 6 Galisteo Basin and requires the operator to review the plan 7 every five years.

The development -- the plan also calls for a proposed Section 19.15.39.10 NMAC, which sets out conditions that will be applied to applications for permits to drill, re-enter or deepen a well covered by an Exploration and Development Plan. These conditions will apply unless the operator's approval of 13 the Exploration and Development Plan recognizes an exception.

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Are there attorneys present in that case?

MS. MACQUESTEN: Yes, Mr. Chairman, my name is Gail 15 16 I represent the Oil Conservation Division in this MacQuesten. 17 matter.

MR. HALL: Mr. Chairman, Commissioners, Scott Hall with the Montgomery & Andrews law firm of Santa Fe, appearing on behalf of Approach Operating, LLC.

21 Commissioners, Karin Foster, on behalf MS. FOSTER: 22 of the Independent Petroleum Association of New Mexico. Mv law 23 firm is actually Chatham Partners, for the record.

24 CHAIRMAN FESMIRE: Are there any other attorneys 25 present in the case? Okay.

Ms. MacQuesten, I guess since you're the proposer, 1 2 you can start. Do you wish to give an opening statement? MS. MACQUESTEN: Yes, Mr. Chairman. But before I do, 3 we also have a notice issue in this case, and I would like to 4 5 ask the Commission whether they would prefer to consider the 6 notice issue before I do the opening statement or at the close 7 of the opening statement. CHAIRMAN FESMIRE: Is there a preference from the 8 Commissioners? Since it is a notice issue, why don't we 9 10 address it up front? 11 MS. MACQUESTEN: Commissioners, this case presents 12 notice issues that need to be addressed. They're outlined in 13 our pre-hearing statement. 14 Our rules require that notice be published one time in a newspaper of general circulation in the counties that the 15 16 proposed rule changes affect no less than 20 days prior to the 17 scheduled hearing date. The proposed rule changes in this case 18 affect Santa Fe, Sandoval and San Miguel Counties. 19 The OCD issued its original notice on November 20 10, 2008. There was a problem in the notice regarding the 21 deadline for filing recommended modifications to the proposed 22 rule. Everything else in the notice was accurate. On the issue of recommended modifications, the original notice clearly 23 24 and correctly stated any person recommending modifications to a 25 proposed rule change shall, no later than Monday,

November 24th, 2008, file a notice of recommended modifications with Ms. Davidson, including the text of the recommended modifications and explanation of the modifications impact, and the reason for adopting the modifications.

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However, the original notice also contained the follow sentences: Written comments on the proposed amendment, pre-hearing statements, and notices of recommended modifications must be received no later than 5:00 p.m. on Wednesday, December 3rd, 2008. So a reader would have seen two 10 dates for filing requested recommended modifications.

To clarify the due date or recommended modifications, the OCD issued a revised rule-making on November 17th removing notices of recommended modifications from a list of filings that needed to be filed by December 3rd.

The Santa Fe New Mexican, a newspaper of general 16 circulation in Santa Fe County, published the revised notice on November 19, 2008, meeting the requirement of our rules that 17 notice be published no less than 20 days prior to the hearing. 19 The notice problems we have today are with the two other 20 counties.

21 As you can see from the map that we have on the 22 screen, a small portion of the Galisteo Basin extends into 23 Sandoval County and San Miguel County. For San Miguel County, 24 the OCD published notice in the Las Vegas Optic. Now, the 25 Optic posted the original notice, the one that was not clear on

the date for filing represented modifications.

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The timing of the publication met the deadline. The OCD asks the Commission to find that this notice was sufficient despite the inclusion of notice of recommended modifications in the list of filings that must be received from December 3rd because that sentence addressing the process for recommending modifications clearly stated that the deadline was November 24, 2008, and it doesn't appear that anyone was prejudiced.

9 We have no evidence that anyone from that county has 10 tried to file modifications and was denied the opportunity to 11 do so. The OCD is asking that because no prejudice has been 12 shown, that the notice be deemed sufficient in that case.

Now, we have a second notice issue and that has to do with the other county, Sandoval County. In this county, the OCD published notice in the <u>Rio Rancho Observer</u>. The <u>Observer</u> received our request to publish the revised notice on November 17 17th; however, it did not publish the notice until six days later on November 23rd.

19 So for Sandoval County, the notice was correct, but 20 the date was wrong. It was late. This publication did not 21 meet the rules requirement that notice be published no less 22 than 20 days prior to this hearing.

The OCD asks the Commission to find that the OCD substantially complied with the notice requirements as to Sandoval County based on the timely publication of the correct

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notice in the Santa Fe New Mexican.

I'd like to direct the Commission's attention to two New Mexico Supreme Court cases addressing publication of notice in a newspaper of general circulation in the county. Those case are N. H. Ranch Company v. Gan at 82 P.2nd 632; it's a 1938 case. The other case is State v. Vigil, 74 N.M. 766, 1965.

8 Both of these cases took a practical approach to 9 statutory notice requirements. They looked at statutes 10 requiring notice in the paper published in the affected county. 11 They interpreted the word "publish" to mean circulated, to mean 12 giving notice to. They did not interpret published to mean 13 printed physically in the affected county.

14 A correct, timely publication by the Santa Fe New 15 Mexican should be sufficient in this case. It is all actually 16 more likely that the publication in the Santa Fe New Mexican 17 reached affected individuals than publication in the Rio Rancho 18 Observer. In that connection, I asked our legal assistant, 19 Ms. Theresa Duran-Saenz to contact the newspapers and obtain information or their circulation and their nature of 20 21 publication.

I do have an affidavit that I would like to submit to the Commission at this time regarding what she found from those newspapers.

CHAIRMAN FESMIRE: Okay. Could you tell us basically

what the affidavit says and circulate a copy to opposing counsel?

MS. MACQUESTEN: Ms. Duran-Saenz contacted the three newspapers to find out more about how they were published, the timing of their publications and the extent of their circulation, particularly circulation in the two counties that we're dealing with on the notice issues.

8 The <u>Santa Fe New Mexican</u>, the newspaper we are 9 relying on for the notice requirement, is a major regional 10 newspaper published daily. It does have circulation in 11 Sandoval County. Ms. Duran-Saenz' affidavit contains 12 information from the circulation manager of that newspaper. 13 They report 491 a day in Sandoval County, or 3,437 a week.

14 If you'll look at the map of the Galisteo Basin on 15 the screen, the portion of Sandoval County that's affected by 16 the proposed rules is a small area on the I-25 corridor on the 17 border with Santa Fe County. It's actually more likely that 18 people affected by the proposed rules would receive notice 19 through the <u>New Mexican</u> than through the <u>Rio Rancho Observer</u>.

According to Ms. Duran-Saenz affidavit, the <u>Rio</u> <u>Rancho Observer</u> is a newspaper published only on Sundays. It's a free newspaper. It's distributed to people in the Rio Rancho area, specifically to people in two zip codes. Mr. Duran-Saenz used a computer search engine to find out where those zip codes were compared to the zip code for the area that is affected by

I'd like to point out also that the OCD took significant steps beyond what's required by our notice rules to get notice to potentially affected persons. The area we are talking about in Sandoval County is on or next to the Santo Domingo Pueblo. The OCD sent notice to the Governor of the pueblo and also to various organizations that serve the tribes and pueblo nations in New Mexico; specifically, the Indian Affairs Department, the All Indian Pueblo Council, the Eight Northern Indian Pueblos Council. In addition, the OCD sent notice directly to the county attorney for Sandoval County.

And finally, I would ask the Commission to consider that, again, there is no indication of prejudice in this case. We ask the Commission to find the timely publication of the correct notice in the <u>Santa Fe New Mexican</u> was sufficient to give notice to Sandoval County, and in particular to give notice to that portion of Sandoval County affected by the proposed rules.

CHAIRMAN FESMIRE: Ms. MacQuesten, how long has it

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1 been since notice was published in the two -- in the San Miguel and Sandoval County papers? 2 3 MS. MACOUESTEN: That's covered in Ms. Duran-Saenz' 4 original Affidavit of Notice, which is Exhibit 43. The Las Vegas Optic published notice on November 14. The Observer 5 6 published on November 23rd. 7 CHAIRMAN FESMIRE: So it's been more than 20 days on 8 both, right? 9 MS. MACQUESTEN: No, it's not been more than 20 days in the Sandoval County newspaper case, and that's why we're 10 11 presenting the additional evidence to support a finding that 12 publication by the Santa Fe New Mexican would be sufficient. 13 CHAIRMAN FESMIRE: Okay. And there has been --14 you've received no notice of concern or has anyone addressed 15 you after the deadline. 16 MS. MACQUESTEN: I have not. 17 CHAIRMAN FESMIRE: Do you know of any? 18 MS. MACQUESTEN: No. 19 MR. HALL: I have no objection to the notice issue. CHAIRMAN FESMIRE: Ms. Foster. 20 21 MS. FOSTER: Yes, Commissioner Fesmire. 22 CHAIRMAN FESMIRE: And what standing would you have 23 to raise notice for other people? MS. FOSTER: Well, excuse me, sir? 24 25 CHAIRMAN FESMIRE: What standing would you have to

raise notice issues for other than the parties you represent? MS. FOSTER: The parties that I represent could potentially be producing in Sandoval County in the future if they were to produce in the Galisteo Basin. I would just make the note, Mr. Commissioner, that

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this rule that we are talking about here does have notice provisions. And if we would like to change the standard on notice provisions to substantial compliance, then that would be fine. And I would like to get a transcript of this discussion or this very nice presentation Ms. MacQuesten just made so that my producers, when they have issues, particularly in Sandoval County, of trying to publish notice to comply with this rule should this rule pass.

I would like to just make that statement for the record. If you would like to change the standard to substantial compliance, then I would ask that this rule, on the notice provision, also includes that same standard.

CHAIRMAN FESMIRE: Commissioner Bailey?

COMMISSIONER BAILEY: I have no objection, but I do ask the question why the <u>Albuquerque Journal</u> was not used as a newspaper for notice in Sandoval County.

MS. MACQUESTEN: Our rules requiring notice provide that we use a statewide publication in cases where the rules have a statewide effect. But it specifically says that we are to publish in the affected counties where the rule is not a

statewide effect. So to try to comply with the intent of the 1 2 rule, we attempted to notify the specific county -- newspapers 3 in the specific counties, just as we do in an adjudicatory 4 hearing where it affects a particular well in a particular 5 county, we give notice in that county rather than using the 6 Albuquerque Journal. 7 COMMISSIONER BAILEY: Even though the Journal has a 8 much wider circulation within Sandoval County? 9 MS. MACOUESTEN: Yes. 10 COMMISSIONER BAILEY: Okay. 11 CHAIRMAN FESMIRE: Commissioner Olson? 12 COMMISSIONER OLSON: I guess from what you're saying, 13 the original publication was well in advance of the 20 days and 14 that occurred in Sandoval County? 15 MS. MACQUESTEN: The original publication of the 16 Santa Fe New Mexican's notice was correct on its terms, and it 17 was timely. The problem with Sandoval County was that it was 18 not timely. 19 Mr. Commissioner, I'd like to point out that I think 20 if you read those two New Mexico Supreme Court cases, you'll 21 see that they are much more concerned with substance than with 22 form, and they do consider substantial compliance in dealing with issues. 23 24 I'd also point out if you are not satisfied with the substantial compliance arguments, there are alternative ways of 25

looking at this issue. Our rules provide that the Commission Chairman may find in cases of emergency that he can shorten the notice requirements. That is an alternative in this case.

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Again, we do not have a finding or evidence of prejudice in this matter. We have the OCD going above and beyond the rules of requirements in attempting to get notice to the relevant parties. To leave this small portion of Sandoval County out of the rule-making would mean that we were approaching this piecemeal. It would also hamper the intent of this rule-making, which is to protect the Galisteo Basin and the environment in that area.

12 A final alternative; if you choose to go this far, 13 would be if you don't find notice sufficient in the two counties where we have notice issues, a third alternative --14 15 which I would not recommend, but is available to the 16 Commission -- would be to continue -- proceed with the hearing 17 as to Santa Fe County where notice was sufficient and amend the 18 rule so that it doesn't cover the portions of Sandoval County 19 and San Miguel County.

Again, I think that would be a disservice to the rule in its attempt to protect the environment of the Galisteo Basin.

CHAIRMAN FESMIRE: And, Ms. MacQuesten, the <u>Santa Fe</u> <u>New Mexican</u>, according to Ms. Duran-Saenz' affidavit, has circulation in both Sandoval and San Miguel Counties?

MS. MACQUESTEN: Yes. 1 CHAIRMAN FESMIRE: And we know of no party that has 2 contacted us in the intervening 18, 19 days? 3 MS. MACOUESTEN: That's right. 4 5 CHAIRMAN FESMIRE: What would be the pleasure of the 6 Commission? COMMISSIONER OLSON: Well, just a question: It's 7 obvious we're not going to be done here today. Just looking at 8 the crowd here, I would expect we're not going to be. 9 Ιf that's the case, if we are re-noticing again for a subsequent 10 date, does that meet the requirements? 11 12 MS. MACQUESTEN: It is commonly done in adjudicatory 13 procedures before the Division. I don't know if it has been 14 challenged. 15 CHAIRMAN FESMIRE: Okay. Well, I hate to open the 16 Pandora's box of substantial compliance, but it looks to me 17 like anybody who had an interest in this would have a 18 reasonable opportunity for notice in the facts as they exist. 19 MS. MACQUESTEN: The real question is whether there's a desperate need to publish in a weekly free newspaper that 20 serves the Rio Rancho community in order to proceed with this 21 22 hearing. 23 CHAIRMAN FESMIRE: Well -- go ahead, Mr. Smith. 24 MR. SMITH: Ms. MacQuesten, the rule requires publication in a newspaper of general circulation in the 25

1 county; is that correct? 2 MS. MACOUESTEN: Yes. 3 MR. SMITH: Does it say that the newspaper has to be 4 published -- printed in that particular county? MS. MACQUESTEN: Actually, that was the specific 5 issue in the Supreme Court cases that I cited. And the Supreme 6 7 Court looked at the language about publication and asked, does that mean that it has to be physically printed in the county, 8 and they concluded no. 9 10 MR. SMITH: So the issue is whether it's distributed. 11 MS. MACQUESTEN: Whether it's distributed, whether it 12 gave notice to the people who would be affected in that county. 13 CHAIRMAN FESMIRE: Counsel, the Commission has 14 indicated that we don't need to worry about substantial 15 compliance, that the circulation in the county satisfies the rule and, therefore, the notice was adequate. 16 With that, we'll proceed. 17 Ms. MacQuesten, you indicated you had an opening 18 19 statement. MS. MACQUESTEN: Yes. Before I get there, though, I 20 21 would move for the admission of Ms. Duran-Saenz' original Affidavit of Notice, Exhibit 43, and her supplemental affidavit 22 that was presented today, Exhibit 44. 23 CHAIRMAN FESMIRE: Is there any objection to the 24 admission of Exhibits 43 and 44? 25

MR. HALL: No objection. 1 2 MS. FOSTER: No objection. CHAIRMAN FESMIRE: There being no objection, Exhibits 3 43 and 44 will be admitted to the record. 4 5 [Applicant's Exhibits 43 & 44 admitted into evidence.] 6 7 CHAIRMAN FESMIRE: Ms. MacQuesten? 8 MS. MACQUESTEN: Mr. Chairman, Commissioners, the OCD 9 is before the Commission to propose the adoption of two new sections that will apply to Santa Fe County and the Galisteo 10 11 Basin. 12 As you will hear from the testimony today, the proposed sections were developed in response to two executive 13 14 orders. The first order imposed a moratorium on new oil and gas drilling and exploration activities in Santa Fe County and 15 the Galisteo Basin to allow the relevant executive agencies 16 17 time to evaluate existing laws and regulations concerning the 18 environmental, economic, cultural, archeological and other 19 impacts of drilling. The result was the Galisteo Basin Report, 20 a collection of reports and recommendations from nine executive 21 agencies. 22 That led to a second executive order, this one with 23 specific directives to each of the nine executive agencies. The OCD was specifically directed to investigate and begin 24 drafting rules, including permitting by area, the allowance of 25

notice and public input for all applications for permits to drill and the adoption of special rules concerning the Galisteo Basin. That is what brings us here today.

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The OCD is proposing a new review process for oil and gas development in Santa Fe County and the Galisteo Basin. You will hear about that process in more detail from the witnesses today, but to summarize, we have two proposed sections:

Proposed Section 9 requires operators to obtain approval of an Exploration and Development Plan before they can drill. The process includes public notice and the opportunity for comment and a public hearing on the initial application. The OCD will evaluate the operator's plan to determine if granting the plan is consistent with the OCD's statutory mandates to prevent waste, protect correlative rights, and to protect fresh water, human health and the environment.

The plan will be reviewed at least every five years and changes to the plan will require an amendment. Renewals and amendments will also be subject to public notice and the opportunity for comment, and those matters may be set for public hearing.

21 Section 9 also establishes a process for the operator 22 to replace it with a special pool order, but replacement is only possible after the operator has established a proven track 23 record with its Exploration and Development Plan and after 25 public notice and the opportunity for hearing on whether that

plan can be replaced.

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Т	plan can be replaced.
2	Section 10 is a companion rule to Section 9. It
3	provides that wells subject to an Exploration and Development
4	Plan will have certain default conditions attached to any
5	permit to drill. Those conditions are designed to protect the
6	environment with particular attention to protecting water.
7	The OCD has five witnesses. Mr. Daniel Sanchez of
8	the OCD will give a brief history of oil and gas development in
9	Santa Fe County and the Galisteo Basin and will discuss the
10	events leading up to the proposed rules.
11	Tom Morrison, a hydrogeologist working with the
12	Office of the State Engineer, will testify on the geology,
13	surface water and ground waters of Santa Fe County and the
14	Galisteo Basin.
15	Brad Jones, an environmental engineer with the OCD
16	who works closely with the OCD's environmental regulations,
17	will review the proposed rules and their structures.
18	Will Jones, a petroleum engineer with the OCD, will
19	describe some of the requirements under the rules that address
20	drilling issues.
21	Glenn von Gonten, an OCD hydrologist, will discuss
22	some of the requirements for an Exploration and Development
23	Plan that are relevant to the protection of the water.
24	Thank you.
25	CHAIRMAN FESMIRE: Mr. Hall, would you like to give

an opening statement or reserve your statement?

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MR. HALL: Very briefly, Mr. Chairman, Commissioners: As we understand the charge by the Governor's Office to the Division, it is to determine the propriety drafting of new rules and regulations, potential statutory changes that will create a new process for permitting by area, allowance of public notice and input to the permitting process, and the adoption of special rules for Santa Fe County and the Galisteo Basin area.

And as the Division's own application sets forth, it's clear that the standards, the benchmark, for determining the propriety of these new rules are set forth in the Oil and Gas Act and the Water Quality Act, and those are to protect water, human health and the environment.

In addition to that, as we pointed out in our hearing memorandum to the Commission, the Commission must make a determination that the new rules and regulations also serve to prevent waste and protect correlative rights.

Our purpose in appearing here today is to explore with the Commission with the Division's witnesses whether those goals are accomplished by this proposed rule-making. Representing an operator in New Mexico, we are also here to gain an understanding of the application and administration of such rules and the requirements for regulatory compliance. We appreciate the opportunity to participate today.

CHAIRMAN FESMIRE: Mr. Hall, you indicated in your 1 pre-hearing statement that you had no witnesses. Do you 2 3 anticipate any rebuttal witnesses? MR. HALL: It's possible we may present rebuttal 4 5 witnesses, but no district witnesses, correct. 6 CHAIRMAN FESMIRE: Ms. Foster? 7 MS. FOSTER: Thank you, Mr. Chairman. I'm here today 8 representing the Independent Petroleum Association of New Mexico. The Independent Petroleum Association represents 9 10 200 very small producers in the State. On average, the company 11 size of my small producers is 25 or less employees. We are the 12 small independent producers of the State. 13 I also work very closely with NMOGA, New Mexico Oil 14 and Gas Association, who represents the larger companies, but 15 we do have a lot of crossover membership. 16 This rule that we're talking about today, this 17 potential rule, will impact the entirety of Santa Fe County, 18 not just the Galisteo Basin. It will also, as discussed 19 earlier, impact part of San Miguel County as well as Sandoval 20 County. 21 And we are here, I would submit, just because of 22 political pressure. We are here because the Governor has 23 decided to do two executive orders on the issue pertaining to 24 Santa Fe County. I would submit that the executive orders were 25 as a result of pressure from the community who is very

emotionally attached to the Galisteo Basin. Looking through the pre-hearing testimony, there were a lot of statements that the Galisteo Basin is beautiful, that people would like to maintain its beauty and protect its natural resources. And I would agree with that. As an oil and gas representative, I would agree the Galisteo Basin is a beautiful place.

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But Galisteo Basin also potentially -- and I say potentially because we don't know whether it has natural resources -- in other words, oil and gas in the Galisteo Basin. And we have an operator, Tecton, who has actually spent the money and purchased the right to drill in the Santa Fe Basin -in the Galisteo Basin in Santa Fe County. We would ask that that company be allowed to exercise its right with reasonable protection to the environment, okay?

15 I don't think that this rule, this special rule for 16 Santa Fe County, is something that is needed in Santa Fe County. As you know, we went through 18 days of testimony on 17 the Pit Rule. The Commission deliberated long and hard on the Pit Rule. You came down with over 200 findings on the Pit 19 20 Rule. We discussed everything there was to discuss on the Pit 21 Rule from the hydrology and the geology and migration of the 22 constituents, et cetera. And you, as a Commission, came to a very reasoned decision on the Pit Rule. 23

And I ask you, why is it that the Pit Rule would not be enforced in Santa Fe County? What is it about Santa Fe

1 County other than the political pressure and the public 2 pressure that is different than other parts of the State? 3 I would like to see the OCD in their case demonstrate 4 that there is a special reason why Santa Fe County, based on 5 the science, the geology, the hydrology -- the science, okay -under the statutory mandates of the OCD, why it is that the OCD 6 7 feels that there needs to be a special rule for Santa Fe 8 County. 9 I would ask the Commission to also push the OCD to 10 meet its statutory requirements to balance the need for a 11 prevention of waste and protection of correlative rights with 12 protection of the environment and human health and groundwater, 13 protection of groundwater. That balance is necessary. You 14 can't -- the Division cannot take one or two of those 15 responsibilities or statutory mandates to the exclusion of the 16 others. 17 As you know, I do represent small producers, so the 18 Small Business Regulatory Relief Act and advisory from the 19 Small Business Advisory Commission is something that is very 20 important to my producers and to me as an attorney. I note 21 that Ms. MacQuesten did give notice to the Small Business 22 Advisory Council, and she did note that this rule will have a 23 financial impact on operators. I would like to see if the 24 Division actually can articulate what those impacts are, and we will discuss that, I hope, during this proceeding. 25

1 I would ask this Commission again, and this is the 2 same request that I made in the Pit Rule, that your findings be 3 based on the science and the evidence presented before you. 4 And please don't fall to the speculative discussions of some of 5 the citizens who, again, are very emotionally attached to this 6 area, but it's speculation as to whether there are cultural 7 resources there. And granted, it's speculation as to whether 8 there are mineral resources there. There's even speculation as 9 to what is the depth of the groundwater in the Galisteo Basin. 10 All of this is speculative. And is it proper at this time for 11 this Commission to pass through a rule, a special rule, just for one county out of thirty-three in the State based on 12 13 political and public pressure? Thank you. 14CHAIRMAN FESMIRE: Ms. Foster, can I ask a quick 15 question about your opening statement? 16 You indicated things like the Pit Rule were -- well, what I heard was "all that was necessary." Is that correct? 17 18 MS. FOSTER: Well, you have rules, Mr. Commissioner, 19 and I would ask that you enforce the rules. The assumption 20 that I'm making, Mr. Commissioner, is that when you rendered 21 the decision on the Pit Rule that you did consider, you know, 22 the evidence that was before you and that you made and rendered 23 a proper decision in that case. 24 CHAIRMAN FESMIRE: Aren't four of your members 25 currently appealing the Pit Rule?

Including the Independent Petroleum 1 MS. FOSTER: 2 Association; yes, we are appealing it. 3 CHAIRMAN FESMIRE: You indicated that you --4 MS. FOSTER: I'm sorry. I didn't mean to interrupt you, sir, but the gist of my brief -- I don't know if you've 5 6 had the opportunity to read my brief -- but the gist of my 7 brief is the adherence to the statutory requirements of the 8 Small Business Regulatory Relief Act. The other discussions 9 are made by other companies concerning the adequacy of 10 findings, et cetera, et cetera. 11 CHAIRMAN FESMIRE: If I remember correctly, you 12 indicated you didn't have any witnesses; is that correct? 13 MS. FOSTER: That is correct. CHAIRMAN FESMIRE: All right. Do you anticipate a 14 15 rebuttal witness yet? 16 MS. FOSTER: Very possibly, yes. 17 CHAIRMAN FESMIRE: Okay. Ms. MacQuesten, are you 18 prepared to call your first witness? MS. MACOUESTEN: Yes. The OCD calls Daniel Sanchez. 19 CHAIRMAN FESMIRE: Mr. Sanchez, before we start, I 20 21 would ask that the reporter be allowed to swear all the 22 witnesses that are present -- your witnesses so far. 23 MS. FOSTER: Mr. Commission, if I might make a 24 statement, actually, I noticed that Ms. MacQuesten noted that 25 there was a witness, Tom Morrison, who I was not familiar with.

I did not see any documentation about him in the pre-hearing 1 2 statement. I might have missed it. Was it actually --MS. MACQUESTEN: Actually, Ms. Foster, he is listed. 3 4 In addition to describing what he's going to testify to, we 5 also listed his qualifications. And you may note that he will 6 be testifying as to two hydrologist reports, and those reports 7 are exhibits in the exhibit packet you received with the pre-hearing statement. 8 9 MS. FOSTER: Okay. Thank you. 10 CHAIRMAN FESMIRE: Thank you, Ms. MacQuesten. Will 11 the witnesses stand and be sworn, please? 12 [Witnesses sworn.] 13 CHAIRMAN FESMIRE: Let the record reflect the 14 witnesses have been sworn. Ms. MacQuesten, are you ready? 15 MS. MACQUESTEN: Yes, I am. DANTEL SANCHEZ 16 after having been first duly sworn under oath, 17 18 was questioned and testified as follows: 19 DIRECT EXAMINATION BY MS. MACQUESTEN: 20 21 Would you please state your name for the record? Q. 22 Α. Daniel Sanchez. 23 Where are you employed? Q. 24 Α. With the Oil Conservation Division. 25 Q. What is your title?

I am the Compliance and Enforcement Manager. 1 Α. 2 0. Were you involved in responding to the executive 3 order regarding oil and gas development in Santa Fe County and 4 the Galisteo Basin? 5 A. Yes, I was. 6 Ο. How is the Galisteo Basin defined? 7 The extent of the Galisteo Basin is defined by Α. the Office of the State Engineer as the Galisteo surface water 8 9 drainage boundary. And that boundary is presented in OCD 10 Exhibit 13. 11 MS. MACQUESTEN: Ms. Duran-Saenz, I'd ask that you please put Exhibit 13 on the screen so that people in the 12 13 audience can see it as well as the folks who actually have 14 exhibit packets. 15 Q. (By Ms. MacQuesten): What counties does the 16 Galisteo Basin cover? A. It covers all of Santa Fe County and parts of San 17 18 Miguel County, this section of San Miguel County and this section here of Sandoval County. 19 Q. When you say it covers all of Santa Fe County --20 I meant that it's mostly within Santa Fe County 21 Α. 22 except for those two sections right over there. 23 Q. Are there parts of Santa Fe County that are not 24 included in the Galisteo Basin? 25 A. Yes.

1 Okay. Responding to the executive orders on Q. 2 Santa Fe County and the Galisteo Basin, did you research OCD 3 records on the history of oil and gas development in these 4 areas? 5 A. Yes, I did. 6 Q. And did you have a map prepared showing the wells 7 that have been drilled? A. Yes. It's OCD Exhibit 6. 8 How many wells total have been drilled in 9 Ο. 10 Santa Fe County in the Galisteo Basin? 11 Α. Thirty-two total: Twenty-nine of those wells 12 within Galisteo Basin and Santa Fe County; two wells within 13 San Miguel County; and, one in Sandoval County. 14 Q. Of the wells that are in Santa Fe County, are any 15 of them outside of the Galisteo Basin? 16 A. Yes. There are seven wells that are not within the Galisteo Basin. 17 18 Q. Now, you mentioned 32 wells, and in looking at 19 that screen, if each yellow dot represents a well, it doesn't 20 look as though there are 32 wells there. Can you explain that? 21 A. Yes. Some of the coordinates were fairly close, 22 so some of the dots may actually indicate more than one well. 23 Q. Is OCD Exhibit 5 a list of each of those 32 wells 24 with the exact location information? 25 A. Yes, it is.

1 Q. Over what period of time were these wells 2 drilled? 3 Α. They were drilled from 1944 all the way up to 1986. 4 5 What is the current status of these wells? Ο. 6 Α. All of them except for one have been plugged. 7 Which well has not been plugged? 0. The Black Ferrell #001. 8 Α. 9 Ο. Where is that located? 10 A. If I may -- about -- right in this area right 11 over here. The three red diamonds indicate the proposed wells 12 by Tecton Energy, LLC. The Black Farrell is pretty much in 13 between the upper right-hand diamond and the lower left-hand 14 diamond, in that general area. 15 Q. You said the Black Ferrell has not been plugged. 16 Is it actually producing today? 17 Not today. It's been shut-in. Α. 18 Ο. When was it drilled? 19 A. Originally it was spud in 1984, October of 1984, and then it was re-entered in October of 1985. 20 21 Q. Is Exhibit 7 a document from the well file 22 showing those dates? 23 A. Yes, it is. 24 Q. What production has been reported for the Black 25 Ferrell?

What we got from our records manager, OCD 1 Α. 2 Exhibit 8, shows from the Black Ferrell #001, 882 barrels of 3 oil have been produced, 179 barrels produced water, and no gas. 4 Ο. What's the operator -- what's the history of 5 operators on this well? 6 Α. The well was originally drilled by Black Energy, 7 or Black Oil Company. It was transferred to Tecton 8 Energy, LLC, in September of 2006, and then on August of 2008, it was transferred from Tecton Energy, LLC, to Tecton Energy 9 Operating, LLC. 10 11 Q. Is Exhibit 12 a copy of the two Change of 12 Operator forms showing these transfers? 13 A. Yes, it is. Now, you mentioned that there are three proposed 14 Q. 15 wells. Does the OCD have pending applications for permits to drill those wells? 16 17 A. Yes, we do. 18 Q. Are Exhibits 9, 10 and 11 copies of those 19 applications? 20 A. Yes, they are. These are the applications 21 submitted by Tecton Energy on December 13, 2007. 22 Q. What happened after Tecton Energy filed these 23 APDs? 24 Α. There was a moratorium placed on drilling by the 25 County.

Is Exhibit 14 a copy of that ordinance declaring 1 Ο. 2 a moratorium? A. Yes, it is. This is the Ordinance No. 2007-14 3 that was submitted by the Board of County Commissioners of 4 5 Santa Fe County, and it's an ordinance declaring a three-month moratorium on applications to drill an oil or natural gas well. 6 Q. Did the County take further action? 7 Yes, they did. On February 26, 2008, Santa Fe 8 Α. 9 County issued Ordinance No. 2009-03, and that's an emergency interim development ordinance for a 12-month period prohibiting 10 11 development approvals or issuance of permits for zoning and subdivision maps, nonconforming uses and area variances for oil 12 and gas and geothermal drilling and extraction within the 13 Galisteo Basin. 14 Is Exhibit 15 a copy of that ordinance? 15 0. 16 Α. Yes, it is. 17 Ο. What other actions has the County taken, if you 18 could summarize it for us. There were a number of public meetings that were 19 Α. held from the time of the first moratorium, and those are 20 21 listed on Exhibit -- OCD Exhibit 16 -- and it indicates a 22 number of meetings that were held from November of 2007 to the present. And those meetings were meant to be informative on 23 24 the oil and gas drilling aspect of Tecton Energy and to take 25 comments, public comments, on the Galisteo Basin oil drilling.

Excuse me. Again, on OCD Exhibit 17, this is also 1 another copy of a status report that was taken off the County's 2 3 website, and this is a report of the County's proposed 4 ordinance and general plan, which was recently issued. 5 Q. What is the status of the County ordinance? A. At this time, on December 9th, it was passed 6 7 unanimously by the County Commission. O. After Tecton filed its APD, were actions taken at 8 the State level? 9 A. Yes. The Governor's Office issued Executive 10 Order 2008-004. This was issued on January 24, 2008. It was 11 12 imposing a six-month moratorium on oil and gas drilling in 13 Santa Fe County and the Galisteo Basin. Q. Is that Exhibit 18? 14 15 Α. Yes, it is. 16 Did that executive order contain any directives Ο. 17 to executive agencies? 18 Α. Yes. The order also -- well, it directed the various State agencies to work together to review laws and 19 20 regulations to make sure that the State was doing everything 21 possible to ensure that no oil or gas drilling activity occurs in Santa Fe County or the Galisteo Basin that would be contrary 22 to the interests of the State of New Mexico. 23 24 Q. Were the agencies to report back? 25 Α. Yes. The report was to be put together. I went

ahead and coordinated that effort with the various State 1 2 agencies and the report was put together and sent to the Governor's Office. 3 O. So you participated in carrying out the 4 directives of the first executive order? 5 A. Yes, I did. 6 Could you tell us what actions were taken to 7 Q. carry out those directives? 8 9 Well, to begin with, there was a link set up on Α. 10 ENMRD's website to take public comment. Shortly after that, an open house was scheduled at the Santa Fe Community College, and 11 12 that involved most of the State agencies that were 13 participating in the report. And what they did was each agency had information on 14 15 the Galisteo Basin that affected each one of those individual 16 agencies. And at that time, they were also taking public 17 comment. Q. Is Exhibit 19 a copy of the written public 18 comments that were submitted to the Energy, Minerals, and 19 20 Natural Resources Department? A. Yes, it is. 21 22 Ο. And how many comments did this agency receive? 23 Α. ENMRD received 126 comments, but there were a 24 total of 671 public comments that were submitted throughout the 25 process.

1 Q. To all the participating agencies? 2 To all the participating agencies, yes. Α. 3 Can you tell us about the Galisteo Basin Report? Q. It was compiled through the participation of nine 4 Α. State agencies. And well, Exhibit No. 20 is a copy of that 5 6 report, and basically contains a description of the Galisteo 7 Basin process utilized in preparing that report and the individual reports from the participating agencies. 8 Q. Was further action taken by the Governor's Office 9 after the issuance of the Galisteo Basin Report? 10 11 A. Yes. After that report was submitted, the Governor's Office issued a second executive order, that was 12 13 2008-038, and that was extending the moratorium on any oil and 14 gas drilling in Santa Fe County and the Galisteo Basin, and it 15 was issued on July 14, 2008. Exhibit 21 is a copy of that executive order? 16 Q. Yes, it is. 17 Α. 18 And did the order contain any directives to the Q. 19 State agencies? 20 A. Yes, it did. It extended the moratorium an 21 additional six months to January 24, 2009, and it directed the 22 non-participating agencies to submit additional information if they had any to supplement the original report. 23 24 Q. Was there a specific directive to the OCD? 25 Α. Yes, there was, and that was the Oil Conservation

Division shall investigate and begin drafting appropriate rules 1 2 and regulations and statutory changes, including but not 3 limited to, permitting by area the allowance of notice and public input for all applications for permits to drill and the 4 5 adoption of special rules concerning the Galisteo Basin, all in an effort to protect this ecologically sensitive area. 6 7 Q. Let's talk about some of the terms used in the directive to the OCD. 8 Permitting by area: Currently, are permits to drill 9 reviewed and approved individually or by area? 10 They are approved individually. 11 Α. 12 Notice and public input on applications for Ο. permits to drill: Under current rules, what notice is required 13 14 for an Application for Permit to Drill? 15 A. The only notice required at this time under Rule 19.15.14.9 NMAC, is if a well is to be drilled in corporate 16 17 limits of a city, town or village, notice is to be given to 18 that governing body. Notice is given to operators of existing wells that are going to be in the same quarter/quarter section 19 20 or notice will be given to operators of existing wells in the 21 same spacing or proration unit. 22 Q. So if a proposed well is to be drilled outside 23 the corporate limits of a city, town or village, the only 24 notice given is to other oil and gas operators? 25 A. Yes.

Is Exhibit No. 1 a copy of your testimony in 1 Q. written form, including more detail than you have provided to 2 3 today? A. Yes, it is. 4 5 Did you work with me in preparing this written Q. 6 testimony? 7 Α. Yes, I did. Have you reviewed it for accuracy? 8 Q. A. Yes, I did. I had two small minor typos on it 9 that I came up with. They're on page 3, and the first one is 10 on line 74. There is a P where there should be an A. And on 11 12 line 75, Ordinance 2007-004 should be 2007-014. Q. With those two corrections, is your written 13 14 testimony accurate? 15 A. Yes, it is. And do you adopt it today under oath? 16 Ο. A. Yes, I do. 17 MS. MACQUESTEN: I move for the admission of 18 19 Exhibit 1, Mr. Sanchez' written testimony. I also move for the admission of Exhibits 5 through 21. Those are the exhibits 20 21 that Mr. Sanchez has described in his testimony today, and they 22 are also described in his written testimony. 23 CHAIRMAN FESMIRE: Is there any objection to the 24 admission of Exhibit 1 and Exhibits 5 through 21? 25 MR. HALL: Mr. Chairman, I don't think there's been a

proper foundation laid for many of these exhibits, but we are particularly interested in Exhibits 18, 20 and 21. As it stands now, these are all hearsay.

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CHAIRMAN FESMIRE: The Governor's Executive Order?

MR. HALL: Eighteen, 20 and 21, Executive Order 2008 for the Galisteo Basin Report and Executive Order 2007.

CHAIRMAN FESMIRE: Ms. MacQuesten, would you like to lay a foundation for those exhibits?

9 MS. MACQUESTEN: Well, I'd argue that 18 and 21, the 10 two executive orders, are not hearsay. They are documents 11 provided by the Executive Branch. If Mr. Hall is contesting 12 that some of the content of those orders is hearsay, that's a 13 different matter. But the orders are not offered for the truth 14 of the matter asserted in them but for the fact that they have 15 been issued to us and directing us to do certain things.

Similarly, the Galisteo Basin Report contains a lot of factual matters but we are not offering the report for the content of the report but for -- as evidence of what was prepared in response to the executive orders and what was used to support our decision in coming forward with the proposed rule today.

We are not vouching for every statement made in the report by all the various agencies that submitted information in it.

CHAIRMAN FESMIRE: Okay. Given Ms. MacQuesten's

argument, Mr. Sanchez, did you compile Exhibit 20? 1 THE WITNESS: I assisted in that report, yes. 2 CHAIRMAN FESMIRE: And it is a compilation of reports 3 that you have received from the various agencies? 4 5 THE WITNESS: Yes, it is. COMMISSIONER BAILEY: Did OCD base any of its 6 recommendations on this report and the factual information that 7 is contained within it? 8 9 THE WITNESS: In the report itself? COMMISSIONER BAILEY: Yes. 10 11 THE WITNESS: Some of it was, yes. COMMISSIONER BAILEY: So if that information is 12 questionable, then the basis for your recommendation may be 13 14 guestionable; is that true? THE WITNESS: Well, I might have misspoke. 15 What I meant was during the investigation, I guess, or the study into 16 the Galisteo Basin, some of what I found through our records 17 18 were put in the report as background information. But actual recommendations within the OCD report I don't believe -- you 19 know, I didn't make those recommendations, so I really can't 20 21 say at that point, I guess. COMMISSIONER BAILEY: Does that mean I should ask the 22 other people who will be testifying? 23 24 THE WITNESS: That's probably a good statement, yes. 25 COMMISSIONER BAILEY: Thank you.

MS. MACQUESTEN: Commissioner Bailey, if I could 1 2 address that in part? We will be looking today at two hydrology reports 3 from the Office of the State Engineer, and those reports were 4 prepared in response to the executive order. One of them is 5 6 the part of this Galisteo Basin report. However, we do have a 7 witness today who will be testifying specifically to that matter. 8 9 The report was compiled to -- asking agencies to evaluate their rules, orders and statutes. So yes, we did look 10 at the rules, orders and statutes that those agencies placed in 11 12 the report. To hold that we can't do that would be to say that we can't consult with other agencies on the matters of law, 13 14 which I just don't think is what we're trying to do here. COMMISSIONER BAILEY: But that's not the question. 15 16 The question is: The points of asserted fact or opinions that 17 are expressed in those reports --18 MS. MACQUESTEN: Right. 19 COMMISSIONER BAILEY: -- are my areas of concern. 20 MS. MACQUESTEN: We are not relying on the Galisteo Basin Report, the facts asserted in that report today, for this 21 22 rule-making to the extent we're relying on facts we will be presenting today through our witnesses. 23 COMMISSIONER BAILEY: All right. Thank you. 24 CHAIRMAN FESMIRE: Mr. Hall, does that satisfy your 25

objection? Or would you like to --1 2 MR. HALL: Mr. Chairman, I don't intend on spending a lot of time on this. Let's talk about 18 and 21, though. 3 4 As I understand counsel's explanation, these qualify as an exception to the hearsay rule because they're simply 5 government documents. Well, I think the applicable rule is 6 7 11.8.03(h), that government documents must be more than just government documents. They must be produced pursuant to a 8 9 specifically prescribed statutory duty. I looked at those two exhibits. Statutory basis for 10those executive orders is not set forth on the face of those 11 12 exhibits. I researched the statute. I saw no basis for orders 13 of this type at all. 14 So that's what I'd like the Commission to address. 15 What's the statutory basis for executive orders in this case? 16 MS. MACQUESTEN: We are not here to defend the 17 executive orders or to argue about whether they are in effect. Ms. Foster has also raised issues about the executive order. 18 If the industry wants to challenge the executive order and the 19 20 moratorium imposed by the executive order, they can do so in a 21 separate action. That should be a mandamus action against the 22 OCD requiring us to act on those APDs. We are not here about 23 that today. What we are here today to discuss is whether we 24 25 should adopt some proposed rules. The way we are using

executive orders in this case is to explain the impetus for developing these rules. If you don't want to admit the actual exhibits, that's fine. What we have is the testimony of Mr. Sanchez that the OCD has taken certain action in response to a directive from the executive.

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As far as the hearsay rule goes, Mr. Hall has raised an issue, some very technical issues, about the hearsay rule. I would point out, again, this Commission is not bound by the hearsay rule. It may admit evidence that it feels is relevant.

An executive order telling the OCD to look at the adoption of rules is clearly something relevant to this case, and I would ask that they be admitted. However, if you choose not to admit them, the testimony that we are presenting in response to these executive orders and the directives in them should remain in the record.

16 CHAIRMAN FESMIRE: Mr. Hall, since you pulled out 17 your rule book, I assume you have further argument?

MR. HALL: Well, this is a rule-making proceeding, as counsel notes. I agree with that, that the Commission has prescribed evidentiary rules in its rule-making, and it's obliged to make a determination about the contents of the evidence.

CHAIRMAN FESMIRE: Mr. Hall, are you concerned that the two executive orders as presented in the exhibits might not be the executive orders issued by the Governor?

1 MR. HALL: We'd like to know the authority for them, 2 and I think maybe it's something we could explore with the 3 witness on cross-examination. 4 CHAIRMAN FESMIRE: Okav. 5 MR. HALL: As well as the Galisteo Basin Report. 6 CHAIRMAN FESMIRE: With that, I'll overrule the 7 objection, and we'll go ahead and ask Ms. Foster if she has any 8 concerns. 9 Thank you, Mr. Commissioner. I have an MS. FOSTER: objection to admitting the Galisteo Basin Report, Exhibit 20, 10 11 as well as No. 18, which is the comments received by the Energy 12 and Mineral Department. 13 Again, those starting with Exhibit 19, that exhibit 14 is clearly hearsay. I would also note that this is the 15 compilation of the comments that were received. And frankly, 16 there are quite a few mistakes in that compilation. There is some repetitiveness. Some comments are included three or four 17 18 times in that compilation. Some comments do not include the 19 author's name. 20 And, you know, looking at the basis of those 21 comments, those comments were issued in response to the 22 Governor's Executive Order and the public meetings that you had 23 concerning the Galisteo Basin. And frankly, those comments 24 concern only the Galisteo Basin and not the rest of Santa Fe

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County. I don't know if they're appropriate for this

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proceeding.

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This Commission should be considering public comments that are submitted pursuant to this rule-making proceeding that Ms. MacQuesten states there was a lengthy -- more than 20-day public comment period. And I don't know if she's received any public comment. I think I saw some that were posted on your website, and those are the ones that are relevant to this specific rule-making.

9 These comments in Exhibit 19 are just very 10 generalized comments in response to public meetings you had 11 concerning discussing the issue of a potential rule or concerns 12 around the Galisteo Basin issue. So I would object to 13 submitting those as part of the record in this case.

I also would submit that the report on the Galisteo Basin contains a lot of hearsay evidence. And although Ms. MacQuesten states that she is not putting it in the record for the truth of the matter asserted, if that is the case and we are here before your Commission -- and she also has witnesses from the Office of the State Engineer -- then I don't know why the report needs to come in at all.

The testimony of the witness is that he was directed to do this rule-making as a result of the Governor's Executive Orders and the Galisteo Basin Report, but the statements that are made in the Galisteo Basin Report are not verifiable. And, in fact, in the final rule, I would submit that there is a

provision in there talking about cultural resources and the responsibility of an operator to protect cultural resources. And the statement in the OCD report, in the Galisteo Basin portion, is a direct copy of the statement that was made by the Cultural Affairs Department.

So there was influence from other departments on this final rule, I would submit. So either those parts of the rule have to come out, and I would submit that we need to see those witnesses. And statements from the Cultural Affairs Department in the Galisteo Basin should not be sufficient evidence or science or factual findings for you as a Commission to rely upon.

CHAIRMAN FESMIRE: Given the arguments that Ms. MacQuesten has made that they are not being presented as assertions of fact, I'm going to go ahead and overrule the objections to Exhibits 18, 19, 20 and 21 and admit Exhibit 1 and Exhibits 5 through 21.

Ms. MacQuesten?

MS. MACQUESTEN: I have no further questions of Mr. Sanchez.

21 CHAIRMAN FESMIRE: Mr. Hall? 22 MR. HALL: Thank you, Mr. Chairman. 23 CROSS-EXAMINATION 24 BY MR. HALL: 25 Q. Mr. Sanchez, I understand you are appearing today

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1 as a fact witness; is that correct? 2 A. Yes, sir. Is it accurate to say that you were the project 3 0. 4 manager for the Division for this rule-making proceeding? 5 A. For the one currently? Yes, sir. 6 Q. To some extent. I helped with compliance, 7 Α. compiling some information, but I was not the main focus in the 8 9 actual writing of the rule. Q. Were you involved in laying out the process for 10 writing the rule and the events leading up to this hearing? 11 A. Other than gathering information from the other 12 agencies that were involved in the original executive order, 13 14 no. Q. Okay. Who led the effort for this rule-making in 15 16 the Division? Who was that? 17 A. I'm not really sure who actually initiated the rule-making. I wasn't involved in that part of it. I just 18 19 came in as it was being processed. 20 Q. In the course of preparing for this rule-making, 21 did the Division staff discuss employing a stakeholder in the 22 process at all? A. Not that I'm aware of, no. 23 Q. Are you satisfied with the process that was used 24 25 here?

1 Α. Personally, yes. 2 Okay. Do you know if the Division made any Q. 3 efforts to communicate with Tecton Energy or any other operator 4 in Santa Fe County? A. Not that I'm aware of, no. 5 6 Ο. Do you know why not? 7 I believe that from the Executive Order 2008-03, Α. 8 we were given specific direction on that and we followed that 9 direction and I don't believe we veered from that. 10 Q. All right. You viewed the executive order as a 11 directive not to communicate with operators? 12 No, I didn't read it as that, but I didn't read Α. 13 it as an essential, either, for us to do that. Q. Do you know, Mr. Sanchez, does the Division plan 14 15 on presenting a witness who will provide testimony or evidence 16 that the proposed rule will prevent waste or protect 17 correlative rights? 18 Yes, we do have a witness for that. Α. Who will that be? 19 Ο. 20 I believe it's going to be Mr. Brad Jones. Α. Okay. Can you tell us how the boundary areas of 21 0. 22 the rule-making area were determined? 23 Α. The boundaries were determined by the Office of 24 the State Engineer, and that is the Galisteo surface water 25 drainage basin for the boundary.

Ο. I see. And the area includes State, federal and 1 2 tribal lands; is that correct? 3 A. Yes, I believe it does. Is it the Division's view that the requirements 4 Ο. 5 into the new rule would apply for permits to drill on State, federal and tribal lands? 6 7 I believe it covers everything, yes. Α. 8 Q. Did you have any hand in drafting those 9 provisions of the rule that set forth the procedures for making 10 application, timing of notice, and the conduct of hearings? 11 Were you involved in that at all? 12 No. Α. 13 0. Do you have a witness that could explain that 14 process to us? 15 A. I'm not sure if one of our witnesses has gone 16 through that process or not. I'm not sure. 17 Q. In the course of the Division's planning and 18 drafting of the rule, was any consideration given at all to the cost of compliance? 19 20 A. I do not know that. 21 Okay. Are you the appropriate witness to explain Q. 22 to us how we convert an approved permit for an exploration 23 development area to a pool order, special pool order? A. No, I'm not. 24 25 Q. Okay. Do you have another witness that will

1 address that? I believe Mr. Will Jones will be able to address. 2 Α. 3 MR. HALL: No further questions, Mr. Chairman. 4 CHAIRMAN FESMIRE: Ms. Foster? 5 MS. FOSTER: Yes, thank you. 6 CROSS-EXAMINATION BY MS. FOSTER: 7 Good morning, Mr. Sanchez. 8 Ο. 9 Α. Good morning. I'd like you to look at Exhibit 13, if possible. 10 0. 11 I believe in your direct testimony you stated that it was the Office of the State Engineer that set the boundaries for the 12 Galisteo Basin? 13 14 A. Yes. And are those boundaries based on -- if you look 15 Ο. 16 at this map, there's Galisteo Creek, which is over here and the Galisteo River which is the one that goes right through the 17 18 middle of the boundary, correct? 19 Α. Yes. 20 Do you know if they set -- which Galisteo 0. 21 tributary did they set their basin to? 22 I do not know the answer to that question. Α. 23 Okay. If I could refer you to Exhibit 20. Q. The 24 section that's part of the Office of the State Engineer, which 25 I believe is on page 36 and goes through page 46. Are you

familiar with this section of the report? 1 I reviewed it when it was submitted, yes. 2 Α. 3 0. Okay. And do they talk about the Galisteo Basin? Yes, they do. 4 Α. 5 Ο. Okay. And the jurisdiction of the Office of the State Engineer is basically for declaration of the basin; is 6 that correct? 7 8 Α. I believe that to be true, yes. 9 Q. So they would be the one, like you said before, 10 that would declare this basin --A. Yes. 11 12 Q. -- based on a tributary? I'm not sure how they based it on. I don't have 13 Α. 14 that information. Q. Okay. And if you could just give me one moment. 15 Looking on page 37, the second paragraph, if you 16 17 could just read that paragraph starting with the Galisteo Basin watershed? 18 19 "The Galisteo Basin watershed lies in the central Α. portion of Santa Fe County about 18 miles south of Santa Fe, 20 21 New Mexico (Figure 1). The watershed covers an area of 22 approximately 730 square miles and is a sub-basin within the 23 Rio Grande Basin. It is also part of the Rio Grand Underground Water Basin as administered by the Office of the State Engineer 24 25 (OSE). Galisteo Creek is the primary surface water feature

within the basin; it flows from the southern end of the Sangre de Cristo Mountains to the Rio Grande near Santo Domingo Pueblo. The elevation of the watershed ranges from 10,500 to 5,200 feet."

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0. Thank you. Now, looking at page 43, the second paragraph down there, if you could just read that to yourself and tell me which portion of the basin is actually declared by the State Engineer.

MS. MACQUESTEN: Excuse me, Mr. Chairman. I have to object. Ms. Foster is cross-examining an OCD witness on a report prepared by a different agency and asking him to interpret it. We do have someone coming from the Office of the State Engineer today to discuss these matters.

CHAIRMAN FESMIRE: That having been said, Ms. Foster, you probably can get a better response from Mr. Morrison. But 16 since we did admit this, we will allow the line of questioning.

17 MS. MACQUESTEN: If I could point out, though, we're 18 admitting it as background information, but this is what was done as a result of a collaborative effort. Again, we are not 19 20 vouching for any particular information in this. As Ms. Foster 21 and Mr. Hall have pointed out, we need to present evidence of our own in this case, and we're prepared to do so. But we are 22 23 not prepared to walk through the Galisteo Basin Report and be questioned on every other agency's conclusions and 24 25 recommendations.

MS. FOSTER: If I may respond to that, Mr. Chairman? Since this report was admitted into evidence, and Mr. Sanchez is the witness concerning that piece of evidence, it would be my understanding that he would be knowledgeable of at least what the report states.

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And he did state in his testimony that this special rule is based on the information or recommendations made by the other agencies. So therefore, I would like to be able to explore what he, as an OCD representative, what his understanding is of the recommendations made by the other agencies, which is the basis of this rule.

CHAIRMAN FESMIRE: Why don't you limit the questions, then to what his understanding is.

MS. FOSTER: Okay. This line of questioning that I'm trying to follow right now is concerning the actual geologic basis for this basin.

CHAIRMAN FESMIRE: And you understand that the OCD has a hydrologist here to address those issues, and that Mr. Sanchez may not be the one to answer the question. But since we did admit it, I'll allow you to go over it with him. MS. FOSTER: Thank you.

Q. (By Ms. Foster): So did you have a change during that colloquy to review that paragraph on page 43?

A. No, I didn't. Could you please repeat whichparagraph you want me to read.

I'm sorry. It's the paragraph that begins with 1 Q. 2 "Regulation of Water Associated" --CHAIRMAN FESMIRE: Ms. Foster, before we go any 3 further, counsel has advised me of something that I didn't do. 4 5 But, you know, this was not admitted for the truth of the 6 facts. It was admitted purely as background. 7 MS. FOSTER: And again, Mr. Commissioner, I would make the arguments that yes, it was admitted for background --8 9 CHAIRMAN FESMIRE: It was admitted for background, 10 and we do have an expert here that can testify to that. I will allow you to make your point with Mr. Sanchez, but please make 11 it quickly. 12 13 MS. FOSTER: Okay. I would ask him, then, to read that paragraph -- which I believe he is doing right now -- sir, 14 15 and ask him which water tributary is actually declared by the 16 Office of the State Engineer concerning the Galisteo area. THE WITNESS: By just reading the two paragraphs, I 17 don't have the background to go ahead and determine what they 18 were tying to come out with here, and I wouldn't be comfortable 19 20 trying to translate that for you. 21 Q. (By Ms. Foster): This paragraph talks about the 22 Galisteo Creek tributary, correct? It seems to me, yes. 23 Α. And it was declared by the State Engineer, it 24 Ο. states here, in 1970? 25

1 Α. Yes. 2 Ο. Thank you. I have no further questions on that 3 issue. Okay. Looking at some of the other exhibits that 4 came in from you, Mr. Sanchez, let's talk about Tecton Energy, 5 6 LLC, which I believe is the basis for Exhibits 9 through 11. 7 A. Okay. Are we on the same page? 8 Ο. 9 Α. Okay. When were the Exhibits 9, 10, 11 -- are three APD 10 Q. applications submitted by Tecton Energy; is that correct? 11 12 A. Yes. They were received by the OCD on December 13, 2007. 13 December 13, 2007. Are you familiar with the Pit 14 0. 15 Rule proceedings that this Division had this time last year? 16 A. Yes, I am. And were we not in hearing during the month of 17 0. 18 December of 2007 on the Pit Rule? A. During that time, I'm not even sure exactly what 19 20 dates they were. It's been awhile. But yeah, in December. So these APD applications were basically 21 0. 22 submitted during the time frame that the Pit Rule we being considered by the Commission. Would that be a fair statement 23 24 to make? 25 A. Yes.

1 Q. Now, looking specifically at Exhibit 9, in the APD application, did Tecton specify what type of water system 2 3 they intended to use? I haven't reviewed the APDs. I don't review them 4 Α. 5 when they come in. They went to the district supervisor to 6 review, so I'm not really sure what they were proposing. So you're not familiar with this report at all? 7 Ο. 8 Α. No, not within the APD, itself, no. But did you not provide foundation for this 9 Q. 10 report? I testified that they did indeed have three APDs 11 Α. 12 submitted to the OCD. That was it. Not the content of those APDs. 13 14 And what is your title at the OCD? Q. Compliance and enforcement manager. 15 Α. 16 And as a compliance and enforcement manager, are Q. 17 you familiar with Applications for Permit to Drill? 18 I'm familiar with them, yes. Α. Okay. Well, then I would ask you to look at 19 Ο. 20 Exhibit 9 and tell me if you can tell from Exhibit 9 what type 21 of water system Tecton was proposing to use? MS. MACQUESTEN: Mr. Chairman, perhaps if Ms. Foster 22 23 could clarify what she means by water system. Is she talking 24 about how to deal with waste? Is she talking about the 25 drilling method? I'm not sure.

CHAIRMAN FESMIRE: Ms. Foster, could you clarify your 1 2 question, please? 3 MS. FOSTER: Certainly. (By Mr. Hall): Mr. Sanchez, directing you 4 0. 5 towards the middle of the application, there is a box that is entitled "pit" and then you have "liner." The operator is 6 required to check off what type of liner, what type of system, 7 8 he's intending to use and what type of drilling method. Do you 9 see that box? 10 A. Yes. 11 Okay. And is there a box checked in there that Ο. 12 states "freshwater"? 13 A. Yes, there is. He was intending to use -- what, you as an OCD 14 Ο. employee, would you interpret that as what, if that box is 15 16 checked? 17 A. Use of freshwater during drilling. 18 Fresh water drilling system? Okay. And then Ο. also in that box there's another X mark. What does that 19 20 indicate? Further to the left? To the left, closed loop system. 21 Α. 22 So this operator was intending to use a closed 0. loop system using freshwater -- according to this application. 23 24 According to this application, yes. Α. 25 Q. Okay. And then looking at the narrative section

1 below, does this operator state what type of surface he's 2 intending to impact or where his drill pad will be? 3 The same drill pad as the Black Ferrell #001, if Α. 4 that's what you're talking about. Q. Yes. So he's -- again, as an OCD employee -- I 5 6 don't want to put words in your mouth -- what does that mean to 7 you concerning surface disturbance? 8 A. That it would be minimal. It would be kept to 9 the original well pad of the Black Ferrell #001. 10 Q. Okay. Thank you. Now, you stated in your direct 11 testimony that you believe that this rule will impact 12 operations on State, federal and private lands; is that 13 correct? 14 A. Yes. 15 Q. Now, is there any BLM surface within this area 16 that we're talking about which would be the entirety of Santa Fe County and those two little portions of Sandoval County and 17 18 San Miguel County? 19 I don't recall, but I do believe there is a very Α. 20 small section of BLM land in there, but subject to check, yes. 21 So you're not certain? Q. 22 Not certain, no. Α. 23 Do you believe there's some? Ο. 24 Α. I believe if there is, it's a very small piece. 25 0. And is there any State trust lands there?

1 Α. I'm not aware of that. And are you aware of Public Law 108-208, which 2 0. was cited in the Galisteo Basin Report? 3 Α. No. Not off the top of my head, no. 4 Okay. Looking at Exhibit 20 of the Galisteo 5 Q. 6 Basin Report, you stated that you were responsible for compiling or participating in compiling this report? 7 8 Α. Yes. And which agency, if you know, wrote the 9 0. introductory section? 10 11 A The Oil Conservation Division did. Q. Sorry? 12 13 We did, the Oil Conservation Division. Α. 14 Okay. Looking at page 3 of the document, which Q. 15 basically gives you some background on the Galisteo Basin Report, does it not cite to the Galisteo Basin Archeological 16 17 Site Protection Act, which is federal law? 18 A. Yes. It does. Have you reviewed that law? 19 0. 20 No, not personally, no. Α. 21 Is there any provision in the law that states Q. 22 that, you know, BLM might not have to be able to operate in the Galisteo Basin? 23 24 A. I haven't reviewed it, so I wouldn't know that. 25 With this rule, is your Division intending to 0.

prohibit or limit the BLM or an operator with BLM rights for 1 2 them to use those rights? 3 Α. Not that I'm aware of. O. So then how -- if there's a difference in BLM 4 rules concerning the surface and the ability to drill from this 5 6 rule, how would the Division resolve that problem? A. We usually work well with the BLM and in 7 conjunction with the BLM on certain issues, and we would 8 9 probably do the same on this case. Q. Is there an MOU, or Memorandum of Understanding, 10 between you and the BLM concerning the drilling for gas and oil 11 in the Galisteo Basin? 12 A. No, we don't have an official MOU. We just have 13 14 a good working rapport. 15 Q. And is there an MOU or understanding concerning operations in Santa Fe County? 16 17 Α. No. The public law, which was cited in the Galisteo 18 Ο. Basin Report, Public Law 108-208, again, the Archeological Site 19 Protection Act -- again, you haven't reviewed it, correct? 20 Α. 21 No. So you're not aware of the subject matter of that 22 0. 23 act? 24 Α. Not off the top of my head, no, ma'am. Did you review any cultural resources issues 25 Ο.

concerning preparing this rule? 1 2 Α. No. You personally did not consider any cultural 3 0. 4 resources? No, not myself, personally. 5 Α. All right. Now, I think I might have been 6 Q. writing notes when you were talking about it earlier. Did you 7 8 actually help draft this rule? 9 Α. No. 10 0. So I reserve that question for another witness. Are you familiar with the State Historic Preservation Office? 11 A. Yes, to some extent. 12 13 And since you're familiar with them, do you know Ο. what their responsibilities include or generally? 14 A. Yes, that they exist. I don't know what they're 15 charged with, no I don't. 16 So it's just another government agency? 17 Ο. 18 Pretty much, yes. Α. 19 Okay. Now, do you know if Tecton Energy had any Q. 20 public meetings? 21 A. I believe they had maybe one, two, public meetings, but I didn't attend them. I don't know when they 22 were held. But I do believe they were at one or two of the 23 24 public meetings. 25 Q. And do you know, of these three APD applications,

what type of surface ownership there is in these three cases? 1 2 Α. No, I don't. And is there a witness that I could ask that? 3 0. I'm not sure. The person who would have been 4 Α. reviewing these is not a witness. So I'm not sure. Maybe --5 Will Jones is fairly familiar with that process. 6 Q. Okay. So I could ask him. 7 So he may be able to answer. But I don't know if 8 Α. 9 he could for sure, but he may be able to answer for you. 10 Q. Looking at Exhibit 18, the Governor's Executive Order, that's Executive Order 1008 -- is it 14? 11 A. No. It's 2008-004. 12 004. Do you know when that was signed? 13 Q. 14 Α. On January 24th, 2008. Okay. And what's the date today? 15 0. 16 December 11th, 2008. Α. 17 Okay. And has it been more than six months since 0. 18 the execution of this executive order? 19 A. Yes, it has. 20 0. Was there a subsequent executive order issued by 21 the executive? A. Yes, there was, 2008-038. 22 And that would be Exhibit No. 14? 23 Ο. I believe that's Exhibit No. 21. 24 Α. 25 21, sorry. And do you know when that was issued? Q.

July 14th, 2008. 1 Α. 2 Now, are you familiar with which -- why the 0. 3 Governor decided to actually issue this executive order and direct the Division to do what it had to do? 4 5 CHAIRMAN FESMIRE: Mr. Foster, let's clarify: You're 6 asking him to read the Governor's mind? 7 MS. FOSTER: As well as he can, Mr. Chairman. CHAIRMAN FESMIRE: No, ma'am, I believe would be the 8 9 proper answer. 10 THE WITNESS: No, ma'am. I'm not aware of why he issued these orders. 11 12 Q. (By Ms. Foster): Are you familiar with the 13 executive order that granted you the authority to do this? 14 A. Yes, I am. 15 And was there any use of police powers or was Ο. 16 there an emergency section in this executive order issued by 17 the Governor? 18 A. I didn't get into it that much. I saw what it 19 was; it was meant to be our charge, and that's what I took in. 20 I didn't read and try to analyze the entire executive order. 21 Q. Okay. Would you like me to have you read it now 22 and see if there is anything pertaining to police powers in 23 there? 24 A. No, not really. 25 Q. Now, you're a Division manager, did you say?

1 Compliance and enforcement manager. Α. 2 Q. And as a compliance and enforcement manager, the Oil and Gas Act is your primary statutory responsibility; is 3 that correct? 4 5 A. That's correct. Q. And is there another agency that you might report 6 to or be responsible to for the administration of their rules? 7 8 Α. No. Are you a constituent agency of another agency? 9 0. 10 A. Oh, we're a division of the Energy, Minerals, and 11 Natural Resources Department, yes. Q. Are you a constituent agency of the Water Quality 12 Control Commission? 13 14 A. I'm not sure about the Water Quality -- I know 15 that we have a certain responsibility with that, but I'm not involved in the Water Equality Control Commission. 16 17 Q. Okay. So then you wouldn't be familiar with how 18 it is that you have protection over groundwater 19 responsibilities? 20 A. Not through that act, no. 21 Q. Okay. 22 MS. FOSTER: I have no further questions of this 23 witness. CHAIRMAN FESMIRE: Ms. MacQuesten, any redirect? 24 25 MS. MACQUESTEN: Yes.

REDIRECT EXAMINATION 1 2 BY MS. MACQUESTEN: Q. Mr. Sanchez, is the OCD part of Energy, Minerals, 3 and Natural Resources Department? 4 5 A. Yes, we are. Is that department an executive agency? 6 Ο. Yes, it is. 7 Α. And is that, as an executive agency, is it 8 Ο. charged with carrying out the order of the executive consistent 9 with statutory authority? 10 Yes. 11 Α. Q. If it's true that the executive order has 12 expired, as Ms. Foster indicates, is there any indication to 13 14 you that the will of the executive has changed? 15 Α. No. 16 Q. Ms. Foster also asked you questions about the APD 17 that would had been filed by Tecton Energy, and specifically 18 asked you about the use of the existing drilling pad. And I 19 believe you responded that that showed an intent to minimize 20 the surface impact of that drilling. Is that accurate? 21 A. Yes. That's what I believe, yes. 22 When you are talking about minimizing the surface Ο. impact, you would be limited to what the APD addresses, which 23 24 is where the well site is to be located; is that right? 25 A. Yes.

1 So did the APD address -- it was limited to one Ο. 2 well; is that right? 3 Α. Each APD, yes. 4 Q. Each APD only addresses the siting of that one 5 well? 6 Α. Yes. 7 So it doesn't address any related facilities that 0. might be needed -- associated with the drilling of that well? 8 9 Α. No, it does not. Gathering lines, for example? 10 Q. 11 Α. No. Does it discuss the transportation of any product 12 Ο. 13 that's produced from that well and the impact that could result from that? 14 15 Α. Not that I saw, no. Does it address where any waste will be taken as 16 Q. 17 a result of the drilling and production operations? 18 Α. No. Does it address what will be done with the 19 Q. 20 produced water that is handled as a result of that drilling 21 operation? 22 Α. No. So when you're looking at the APD, and you're 23 Ο. talking about this APD represents an attempt to minimize 24 25 surface impact, you have a very limited issue that you're

addressing; is that right -- just the drilling of that 1 2 particular well site? 3 A. Yes. MS. MACQUESTEN: That's all I have. Thank you. 4 5 CHAIRMAN FESMIRE: Mr. Hall, anything on that 6 subject? 7 RECROSS-EXAMINATION 8 BY MR. HALL: 9 0. Ms. MacQuesten asked you about Exhibits 18 and 10 21, the executive orders. You've reviewed those prior to this 11 hearing. Can you point to any provision on those executive orders that indicates the statutory authority for the Governor 12 13 to issue them? A. Like I said, I didn't analyze them to that 14 15 extent. I looked at the portions that were relevant to this 16 Division and the timing. 17 Q. Do you agree with your counsel's statement that the Division is not relying on the Galisteo Basin Report as a 18 19 factual basis for this rule-making today? 20 A. Yes, I do. 21 Who wrote the Galisteo Basin Report? 0. It was a compilation of nine various agencies. 22 Α. 23 Each one of them created an individual report based on what 24 they came with up with. Those were turned in and submitted to 25 me and put together to submit to the Governor's Office.

1 Who wrote the section for the Energy and Minerals Ο. 2 Department? 3 Wow. It's been awhile. I don't remember exactly Α. 4 who -- there were multiple staff members that helped put that 5 together. 6 Can you tell us their names? Ο. 7 Α. Not right offhand. 8 Were you involved at all? 0. Yes. Part of the introduction and the background 9 Α. 10 I wrote. But the actual -- of the report itself -- but the 11 section from Energy, Minerals and Natural Resources Department, 12 I did not have any part in that section of the report. 13 O. You don't know who else in the Division or the 14 department that might have written that portion of the report? 15 A. It was mainly individuals within the 16 Environmental Bureau, so it could have been any one of the 17 seven staff members in the Environmental Bureau. Q. Do you know if Mr. Jones contributed to it? 18 Mr. 19 Brad Jones? 20 A. I'm sure he might have had something to do with 21 Like I said, there was a number of people involved in it, it. 22 and at the time, I didn't track everyone who was working on 23 that project. 24 Q. Okay. You just don't know; is that your answer? 25 Pretty much, yes. I don't know. Α.

1 Q. Okay. 2 MR. HALL: I don't have anything further. CHAIRMAN FESMIRE: Ms. Foster, anything on those 3 4 subjects? 5 MS. FOSTER: Yes, thank you. RECROSS-EXAMINATION 6 7 BY MS. FOSTER: Q. Ms. MacQuesten asked you concerning -- a question 8 9 concerning the will of the executive, which is the Governor, 10 correct? 11 A. Yes. 12 Q. Okay. Does the Governor make the laws in the State of New Mexico? 13 14 A. No. Q. So when he makes a statement and executive order, 15 16 how does that control you as an executive agency? 17 A. Working within the division of a department, that 18 is, under the executive agency, I don't get into the relevance of those orders issued. I pretty much do what I'm directed to 19 20 do, and if it means it came from the executive branch down to ours, I don't question that. I do what my job requires of me. 21 22 Q. Certainly. But does that mean that when the will 23 of the executive is exercised, does that mean that you have the 24 right to violate other statutes that are in place concerning 25 how you operate your agency?

Not having a legal background, I'm not sure I can 1 Α. 2 answer that. 3 So you're not sure how you can answer whether you Ο. have to stay within the laws --4 5 Α. I would think that we have to stay within all the 6 laws and rules that we are currently under, yes. 7 Q. Now, is it not -- are you familiar with the 8 legislature in the State of New Mexico? 9 Yes. Α. 10 0. What do they do? I don't get into the politics. I know that they 11 Α. 12 get together and they make the laws of the State and 13 everything, but I don't get into the details of what goes on in 14 a session. So it's the legislature that makes the law and 15 0. 16 therefore, the policy of the State, correct? 17 A. As far as I know, yes. 18 Okay. Ms. MacQuesten asked you some questions Ο. 19 concerning the insufficiency of the APD, that it didn't tell 20 you about transportation of the product, gathering lines, 21 location of the batteries, et cetera, et cetera. 22 MS. MACQUESTEN: Objection; I think that 23 mischaracterizes my question. I'm not questioning the sufficiency of the APD, I'm pointing out the limitations of 24 25 what is presented in an APD.

1 CHAIRMAN FESMIRE: Sustained. Ms. Foster, you can 2 rephrase if you want. Q. (By Ms. Foster): Concerning the APD, that does 3 not give you full information on transportation and gathering 4 5 lines that an operator intends to use once the product is recovered at that location; is that correct? 6 7 To the best of my knowledge, yes, that's correct. Α. And the OCD has other rules concerning -- has 8 Ο. 9 rules concerning gathering of product, correct? 10 A. Yes. 11 And the OCD has rules concerning drilling Ο. 12 operations, specifically the Pit Rule? 13 A. Yes. 14 Ο. And the OCD has rules concerning waste disposal? 15 Α. Yes. 16 And were those rules in place in December of Ο. 17 2007? 18 Yes, they were. Α. So under those other rules, would an operator 19 Q. 20 have had to submit reports to you concerning gathering lines 21 and transportation and the other issues that were not 22 specifically addressed in the APD? 23 A. Yes. 24 Q. And based on your understanding of why you're 25 testifying here today, why is it that the Galisteo Basin and

Santa Fe County has to have a rule that is different than the 1 2 rules that are already in existence? 3 CHAIRMAN FESMIRE: Ms. Foster, how is that within the 4 scope of redirect? 5 MS. FOSTER: It's asking him the reason why he's 6 testifying today. 7 CHAIRMAN FESMIRE: And was that addressed in the 8 redirect? Well, since Ms. MacQuesten doesn't have an 9 objection --10 MS. MACQUESTEN: I don't have an objection, although, one witness' opinion on this matter is hardly dispositive. 11 12 CHAIRMAN FESMIRE: Okay. But is it within the scope of the questions that you asked on direct? 13 14 MS. MACQUESTEN: Not on redirect, no. 15 CHAIRMAN FESMIRE: That would be -- is that an 16 objection, Ms. MacQuesten? 17 MS. MACQUESTEN: I think it is. MS. FOSTER: I don't believe it's a very strong 18 19 objection, though. 20 CHAIRMAN FESMIRE: Ms. Foster, stay within the scope 21 of redirect. 22 (By Ms. Foster): Again, going back to the line Q. 23 of questioning in the number of rules that Mr. Hall looked at 24 before in this large volume here in front of us, the OCD has a 25 rather large amount of the rules, correct?

1 Actually, that's a subjective question. I'm going to 2 rephrase that. 3 The OCD actually has rules for oil and gas operations 4 Statewide; is that correct? 5 A. Yes, we do. And in this line of questioning, what is the 6 Ο. reason based on the rules that already exist for this new rule? 7 A. It was a directive from the Governor's Office 8 9 through the executive order that this be done, so that's what 10 we're doing. Q. So what you're saying is that you're not aware of 11 any science or geology or any other reason based on your --12 13 since you are the division head for this rule other than the executive order? 14 15 A. I'm not the division head. Q. Mr. Fesmire is the division head, but I can't 16 17 question him today, so I have to question you. A. Like I said, this rule came about through 18 19 direction from the Governor's Office through Executive 20 Order 2008-038, and we're following those directives. 21 MS. FOSTER: Thank you. No further questions. CHAIRMAN FESMIRE: Ms. MacQuesten, anything else? 22 23 MS. MACQUESTEN: No, thank you. CHAIRMAN FESMIRE: Commissioner Bailey, do you have 24 25 any questions?

1	COMMISSIONER BAILEY: Yes, just a couple.
2	EXAMINATION
3	BY COMMISSIONER BAILEY:
4	Q. I'm looking at Exhibit 13 and putting it together
5	with Exhibit 6, which is the map of all the wells that have
6	already been drilled in Santa Fe County compared to the
7	drainage boundary map, and it appears to me but it's hard to
8	tell at this scale that most of the wells have been drilled
9	within an arroyo or creek or drainages within the Galisteo
10	Basin. Is that a fair analysis?
11	A. I never really made that analysis. I really
12	can't and from the maps, it's really kind of difficult to
13	tell.
14	Q. Well, if you look at Exhibit No. 13 and the
15	proposed wells that are
16	A. Uh-huh.
17	Q that are dotted there?
18	A. Okay.
19	Q. Particularly number 3, which is along the
20	San Lazaro Arroyo?
21	A. Yes.
22	Q. It appears as though there have already been some
23	wells drilled right in that same vicinity at the junction at
24	Arroyo De La Jara and San Lazaro; is that right?
25	A. Yes, it does.

1 Q. So maybe those wells have been drilled within 2 drainage systems? It looks like they have, or it's very close, yes. 3 Α. Okay. And overall you said that there were 32 Q. 4 wells that have been drilled within the county? 5 A. And within the Galisteo Basin. 6 7 Q. And in the basin. And the last one was drilled 8 in, what, 1986? 1986. 9 Α. 10 Q. Which clearly predates the Pit Rule? 11 Α. Yes. 12 Q. Which clearly predates Rule 50 that was superseded by the Pit Rule? 13 14 A. Yes. Q. And even predates the OCD expansion of powers 15 that were given by the legislature? 16 Α. Yes. 17 Q. So my question to you, after all introduction, 18 Are you aware of any contamination cases or reports from 19 is: the drilling of these 32 wells in Santa Fe County? 20 Personally, no, I'm not aware of any. 21 Α. 22 Q. Do you oversee the Environmental Bureau? Yes, I do. 23 Α. So it would be within your purview to know 24 Ο. 25 whether or not there were contamination cases that have been

1	reported within
2	A. Yes.
3	Q and by the drilling of the 32 wells?
4	A. Yes.
5	Q. That's all. Thank you.
6	CHAIRMAN FESMIRE: Commissioner Olson?
7	COMMISSIONER OLSON: I think I just have one
8	question.
9	EXAMINATION
10	BY COMMISSIONER OLSON:
11	Q. Mr. Hall was bringing up the having some kind
12	of a stakeholders process, but it's my understanding from your
13	testimony that there was the Division was out seeking public
14	input on issues on the Galisteo Basin.
15	A. Through the first executive order. That was part
16	of it, to take public comment.
17	Q. And did Tecton participate in that?
18	A. There were some meetings that they did
19	participate in prior to that coming out, and I believe that was
20	because of the county moratorium. I'm not sure. I wasn't at
21	any of those meetings where they participated in that public
22	outreach.
23	Q. Was there anything that limited them from
24	participating
25	A. No.

1 Q. -- and providing comments to the Division? 2 No, nothing at all. Α. 3 COMMISSIONER OLSON: That's all I have. 4 EXAMINATION 5 BY CHAIRMAN FESMIRE: Q. Mr. Sanchez, building on what Commissioner Bailey 6 7 asked, the last of those wells was drilled in '86, correct? 8 A. Yes. 9 Do you happen to know how the pits were closed? Ο. No. Personally, no, I don't. 10 Α. 11 Q. Do you know if any samples were taken under the 12 pits to determine if there was contamination? 13 A. No, I'm not aware of any. 14 CHAIRMAN FESMIRE: I think that's all the questions I 15 had. Ms. MacQuesten, do you have anything else for this 16 witness? 17 MS. MACQUESTEN: No. 18 CHAIRMAN FESMIRE: Mr. Hall and Ms. Foster? 19 MR. HALL: Nothing further. 20 MS. FOSTER: Nothing further. 21 CHAIRMAN FESMIRE: Mr. Sanchez, now we can say thank 22 you very much. 23 THE WITNESS: Thank you. CHAIRMAN FESMIRE: At this time, why don't we take a 24 25 ten-minute break and reconvene at five minutes to 11:00.

1 [Recess taken from 10:42 a.m. to 10:57 a.m., and 2 testimony continued as follows:] CHAIRMAN FESMIRE: Let's go back on the record. 3 The 4 record should reflect that Commissioners Bailey, Olson and Fesmire are present. This is a continuation of Case No. 14255. 5 6 And at this time we're going to ask for public 7 comment. Like I said, there will be another opportunity for public comment this afternoon, but I understand that we've got 8 9 some time constraints, specifically you, so would you please come forward, ma'am and state your name for the record. 1.0 11 MS. SLICK: Katherine Slick. 12 CHAIRMAN FESMIRE: Okay. Ms. Slick, by whom are you 13 employed? 14 MS. SLICK: I'm employed by the State of New Mexico, 15 the Department of Cultural Affairs, Historic Preservation 16 Division. 17 CHAIRMAN FESMIRE: And I understand you have a pretty 18 significant public comment to make; is that correct? MS. SLICK: I don't know how significant it is. 19 20 CHAIRMAN FESMIRE: Okay. Would you like to stand or 21 would you rather sit? 22 MS. SLICK: I would rather sit. I have a feeling I may need to look at some papers. 23 24 CHAIRMAN FESMIRE: Okay. 25 MS. SLICK: Mr. Chair, members of the Commission, I'm

1 Katherine Slick, the State Historic Preservation Officer, 2 Director of Historic Preservation, Department of Cultural 3 Affairs, State of New Mexico. MS. FOSTER: Mr. Commissioner, I would ask that this 4 5 witness be sworn so we may have an opportunity to cross-examine 6 her. 7 CHAIRMAN FESMIRE: It's up to her. She can make a statement or she can be sworn for the record and 8 cross-examined. Ms. Slick, do you have a preference? 9 MS. SLICK: I'm here to make a statement in support 10 11 of your rule. CHAIRMAN FESMIRE: Okay. That's her decision, 12 13 Ms. Foster. MS. FOSTER: So she's refusing to be --14 CHAIRMAN FESMIRE: No, she has that option. She can 15 16 make a public statement without being sworn. 17 MS. FOSTER: Yes. I would just like to clarify that in the record that she's refusing to be sworn in, and she's 18 refusing to be cross-examined as a State employee. 19 20 MS. SLICK: I don't have my attorney with me today, 21 Chairman Fesmire, so I would rather make a statement. 22 CHAIRMAN FESMIRE: Madame Director, that's purely 23 your option. 24 MS. SLICK: Thank you. 25 CHAIRMAN FESMIRE: Go ahead, please.

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MS. SLICK: Just some background information: The Department of Cultural Affairs is the State agency that honors New Mexico's diverse heritage by protecting the past, celebrating the present and envisioning the future.

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The Historic Preservation Division of the Department of Cultural Affairs is the senior policy advisor to DCA and to federal and State agencies, local governments and the public on historic preservation matters. HPD's mission is to protect, preserve and interpret New Mexico's unique cultural resources, including its archeological sites, architectural and engineering achievements, cultural landscapes and diverse heritage for present and future generations.

As the State Historic Preservation Officer under the National Historic Preservation Act, I have responsibilities to preserve, protect and enhance the cultural resources of New Mexico, including its archeological sites, architectural and engineering achievements and the cultural landscapes and sacred places under State and federal laws under the State of New Mexico and the nation.

20 When we look at our consultation under law, federal 21 and State agencies and local governments are required to 22 consult with the State Historic Preservation Office and to take 23 into account the effect of projects on significant cultural 24 resources under several federal and State laws, but notably 25 Section 106 of the National Historic Preservation Act and

Section 18-6-8.1 of the New Mexico Cultural Properties Act. 1 2 Though State undertakings under 18-6-8.1 of the 3 Cultural Properties Act say that a State agency must afford the State Historic Preservation Office a reasonable and timely 4 5 opportunity to participate in planning to preserve, protect and minimize adverse effects on a property listed in the State 6 register of cultural properties. 7 Applications to drill and issuance of associated 8 permits are State undertakings that require consultation with 9 10

permits are State undertakings that require consultation with the State Historic Preservation Act -- I'm sorry -- State Historic Preservation Office under the Cultural Properties Act. And following the Attorney General's Opinion No. 87-64 under Hal Stratton, the State Historic Preservation Office may participate in the State agency's deliberation when the agency is considering issuance of a license that would affect a registered cultural property on private land.

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Under federal undertakings, a parallel process occurs when federal land or federal permits are required for oil and gas development, and the federal agencies consult with my office as the State Historic Preservation Office. So what might that mean for oil and gas drilling or other development projects in the Galisteo Basin?

Federal and State laws require that cultural resources be taken into consideration when agencies deliberate or make decisions on oil and gas or other development projects.

Sale of leases and applications for drilling are considered undertakings. The laws are set up as a process to consider the effects of the project or undertaking on cultural resources, among other factors. But the laws do not require that a project or undertaking be denied because of cultural resource concerns.

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I am here today in support of the Oil Conservation 7 Division's proposed rule modifications, Section 19.15.39.9(b)9, 8 9 which the section will require that the applicant provide 10 necessary information of cultural resources and effects for OCD 11 to be able to consult with SHPO as required under State Law 12 Section 8-1 of the Cultural Properties Act. This language that 13 you have before you is consistent with other rule-making under Energy, Minerals, and Natural Resources, in particular the 1415 mineral and mining rule.

16 Cultural resources in the Galisteo Basin are a 17 problem for all of us. As has been stated before, there are a number of known sites. The dilemma that we face, though, is that we only have surveyed something like 12 percent of that 19 basin so we don't know where everything is. We do know that 20 within that 12 percent of what's been surveyed, more than 3,000 21 cultural resources have been recorded in the basin representing 22 a fraction of resources expected to be found. 23

Twenty-five sites or districts within the Galisteo Basin are listed in the National Register of Historic Places or

1 the State Register of Cultural Properties. To be listed on 2 either Registered Properties they must meet specific 3 eligibility criteria. We also know that under the federal Galisteo Basin Protection Act, that there are a number of 4 5 properties that are archeological properties that have been 6 identified, and while not all of them are listed, they are considered eligible for listing under federal law. 7 8 Mr. Chair, I'm open for any questions you might have. 9 CHAIRMAN FESMIRE: Ms. Slick, we don't traditionally 10 take questions on unsworn statements. Is there anything else you'd like to add? 11 12 MS. SLICK: That's it. CHAIRMAN FESMIRE: Thank you very much. And is there 13 14 anybody else who has a time constraint who would like to make a 15 public comment? 16 Mr. Egolf? 17 As we explained previously, you have the option of being sworn and being subjected to cross-examination or just 18 making a public statement. 19 20 MR. EGOLF: I'm just going to make a statement. I don't think anything I'm going to say would be appropriate for 21 22 cross. 23 My name is Brian Egolf. I live in Santa Fe County. 24 In November, I was elected to the State House of 25 Representatives District 47. That district covers, by my

estimate, about one-sixth of the Galisteo Basin and I would say about one-third of the people who actually live in the Galisteo Basin.

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I'm here today to speak in support of the proposed rule. First of all, I noted here this morning that in the opening statement of Ms. Foster, she referred numerous times to political and public pressure having motivated this. Contrary to her view, I would consider that and applaud that as the workings of democracy, that people in Santa Fe County turned out in numbers unseen for virtually any other public issue that has come before the people of this area for decades.

And as the result of their determined efforts, as the result of their focus, and as the result of their hard work, we sit here today with a proposed rule that would go a long way to protect a resource in this community that is critical -- and I'm referring specifically to the water of the Galisteo Basin.

We've got thousands of people in the Galisteo Basin who rely exclusively on groundwater for drinking water and for domestic purposes. Oil and gas operations threaten the safety and the supply of that water; water resources, I might add, which are irreplaceable given the arid nature of our State and the availability of water rights in other areas in New Mexico; they are simply not available to be transferred into this area.

Any use of county water systems to supply water in this area would be at enormous cost in terms of the water

rights and the infrastructure should something happen to contaminate the aquifers that are beneath this area. I find that given the marginal nature of any oil and gas resources that will be available in this area, the tight sands and the geology that we find here, it is -- it's sort of confusing to me why the industry is fighting this rule so hard for such a marginal area of productivity given the enormous public policy issues that present themselves on the other side and that are threatened by threats to the water in this area.

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I would also like to comment that the process, at least it's my understanding -- that the process that has been followed up to this point has received hundreds of comments from very thoughtful people who have taken a great deal of care in ascertaining a very limited area for protection.

When we look at the entire State and the hundreds of 15 16 thousands acres -- millions of acres, in fact -- that are 17 available for oil and gas production and exploration that are 18 already under oil and gas production and exploration, the 19 amount that we are attempting -- that you are attempting to set 20 aside in this rule is a de minimus amount, especially given the 21 marginal nature of the resources that may be sought through 22 this oil and gas play in this area.

So I support the rule and will do everything in my power, once I take office in January, to support efforts like this, given the tremendous importance of the resource that is

potentially threatened by oil and gas exploration in this particular area.

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3 So that's my comment, and I appreciate the 4 opportunity to appear before you. Thank you for taking into 5 account my time constraints this afternoon and thank you for 6 the opportunity to comment.

CHAIRMAN FESMIRE: Thank you, Mr. Egolf.
Anybody else with a time constraint? Go ahead.
MS. ANDERSON: Good morning. My name is Megan
Anderson. I'm with the Western Environmental Law Center, and
we submitted comments on behalf of several organizations, and
I'll just mention those now.

On behalf of Amigos Bravos, Friends of Wild Rivers, 13 Earthworks, their Oil and Gas Accountability Project, the 14 National Wildlife Federation, the New Mexico Wildlife 15 Federation, the Albuquerque Wildlife Federation, the Climate 16 and Energy Program of Wild Earth Guardians, the Concerned 17 18 Citizens for the San Juan River Quality -- excuse me -- the Concerned Citizens of the San Juan River Quality Waters Trout 19 Fishery, another concerned citizen, Art Martinez, New Mexico 20 Trout, Common Ground United, Southwest Consolidated Sportsmen 21 22 and the New Mexico Council of Trout Unlimited.

And I just want to reiterate our comments we submitted to the Commission. I appreciate the opportunity to allow public comment on this rule. And I just wanted to go

1 through a couple of the points that we mentioned again. 2 Generally we're in support of this rule. We really appreciate OCD's creation of a more holistic approach to oil 3 and gas leasing in this area, and we ask that the Commission 4 5 consider that on a more Statewide level as well, doing a more 6 holistic approach in the planning process for operators. 7 We also appreciate in the rules the coordination that was had in the Galisteo Basin Report amongst the various 8 9 agencies and ask for greater coordination amongst those 10 agencies in moving forward, in particular, on issues such as 11 wildlife and protection of the environment. 12 Along those lines, we also ask that in the rule there 13 be greater protections of the environment. We appreciate the 14 protection of the natural environment is included in the rule 15 and ask that it explicitly state protections for wildlife and, 16 in particular, wildlife corridors that are greatly impacted by 17 oil and gas development throughout the Galisteo Basin and Statewide. 18 Additionally, we reiterate our request that operators 19 20 be required to disclose the chemicals that are used in the

fracing process. There have been reports of great contamination to water supplies because of those chemicals, and we request that that be a requirement of an application.

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In addition, the Oil and Gas Act has great protections against waste in the oil and gas process. Much of

that waste we now know are greenhouse gas emissions, and we ask that the Commission be vigilant in requiring mitigation measures such as compliance with the Environmental Protection Agency's Natural Gas STAR Program, which has various mitigation measures that while some companies are using, many companies in the State are not.

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And again, we'd just like to express our support andthank you for this opportunity.

9 CHAIRMAN FESMIRE: Thank you, Ms. Anderson. Kim,10 would you like to make a statement?

MR. SORVIG: Mr. Chair, Commissioners, my name is Kim Sorvig. I'm a research associate professor in the School of Architecture and Planning at UNM. That makes me a State employee, so I suppose I may also be characterized as refusing to be sworn; and, in fact, I do.

I am also here to support the Commission, to thank this Commission -- this -- what are you, a division or a department? Anyway -- thank all of you as well as thanking the governors and the citizens of New Mexico for recognizing that this regulation is appropriate and necessary.

If you haven't already this morning, I'm sure you're going to hear the same arguments, that there are too many rules, which is kind of ironic. It would be funny if it wasn't coming from a lawyer for an industry that has bent the rules to its own advantage so many times that there's no science, which

is what the Bush Administration at the behest of the oil industry has been saying about climate change to our great cost -- that it would be too costly to comply.

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This from an industry that's been breaking all records for corporate profiteering over the last year or two while refusing to invest in responsible exploration at the very same time, and that the income is way too important to the State's economy to be messed with, when from a slightly different perspective, the fact that millions of dollars of hyped revenues can suddenly evaporate, should tell us that this is not really a very good economic strategy for the State to rely so heavily on a single industry and especially when it is subject to boom and bust.

It's an industry that's been subsidized. It's been allowed to externalize the costs of doing it business. 15 That's not just my opinion. I think you will recall that Professor Chama, a UNM professor who's internationally known as a business economist, made this point in sworn testimony at the pit hearings that these externalities that are put out on the public are what allow the oil and gas industry to profit because they're really not really regulated well enough.

And because we've subsidized this industry and exempted it from things like the Clean Air, Clean Water, Public Right-to-Know Acts, they've become used to getting their way. You'll hear lawyerly terms for it, but it's basically a spoiled

1 child complaining that their privileges are going to be limited 2 a little bit -- and I would like to frame it in those terms. 3 I think what's really going on here with this rule and other rules around the country, not just in New Mexico, is 4 5 a market correction that's reshaping an industry that has 6 relied so heavily on subsidy that they can't really be 7 considered competitive. What's happening now is they are being 8 pushed to be competitive, to rejig, to learn to be truly 9 responsible, and that is why this regulation is so important 10 and so appropriate. 11 And I do want to extend my support and that of the 12 people in the Galisteo Basin who have had input into this 13 rule-making process. Thank you very much. 14 CHAIRMAN FESMIRE: Thank you. Is there anybody else 15 who would like to -- is there anybody that can wait until this 16 afternoon before we break? Okay. 17 That having been said, I guess, come on up. 18 MR. LOCKRIDGE: My name is Ross Lockridge. I'm from 19 the Village of Cerrillos. 20 CHAIRMAN FESMIRE: Mr. Lockridge, would you like to 21 make a statement or would you --22 MR. LOCKRIDGE: Just a statement, please. Thank you. 23 I'm representing the Rural Conservation Alliance. 24 It's an alliance of community organizations and individuals 25 dedicated to the preservation and protection of the natural

resources and rural character of the Galisteo Basin area in Santa Fe County, New Mexico.

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We support this effort. We do have a few concerns. We're concerned that the proposed amendments are not clear on the issue of possible preemption of Santa Fe County authority. The amendments need to specify that operators shall comply with any county regulations that protect the environment and consequent health and safety and general welfare of the public. At the same time, in particular instances, the strong regulation should prevail.

If, for example, a county regulation is stronger than the OCD's, the county regulation should prevail. In this way, possible nuisances can best be discouraged and prevented. We also were concerned that the determination of public hearings should not be purely administrative. If any person requests a hearing in a timely manner, the Division shall hold a public hearing.

18 We support the strongest protection of the Galisteo 19 Basin and your efforts to strengthen the regulations. Thank 20 you.

21 CHAIRMAN FESMIRE: Thank you, Mr. Lockridge. Is 22 there anybody who can't wait? Okay. Come on up. The last 23 one.

24 MR. HAMILTON: Thank you, Mr. Chair. I've got a 25 parent/teacher conference. My name is Allen Hamilton. I'm the

Conservation Director of the New Mexico Wildlife Federation.
 CHAIRMAN FESMIRE: Mr. Hamilton, I'm assuming you
 just want to make a statement?
 MR. HAMILTON: Just a statement. I'm also a
 psychologist. I live here in Santa Fe, and I've worked a lot
 with OCD, obsessive-compulsive disorder.

CHAIRMAN FESMIRE: Nobody has ever noticed that before, at least not on the record.

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9 MR. HAMILTON: Most of the time people make 10 unnecessary rules, and it kind of binds their life in difficult 11 ways, but I'm here to support this rule. I think it's an 12 important one.

I'm also -- I've lived on the edge of the Galisteo
Bain for almost 19 years now. I've spent a lot of time in this
area, and it's an extraordinary treasure. I was out just last
week with some people reviewing some river restoration. The
RERI funding that has just come through the State. Some of
it's gone to restore some of the seeps and springs in the
Galisteo Basin.

And the work out there has been impeded by -- we're just trying to do low impact work with rocks and sticks to prevent erosion in some arroyos. And there are so many artifacts out there that we can hardly even move a stone without having to stop our work to let the archeologists come in. So it's -- I can't imagine how the infrastructure involved

in oil and gas could move forward when we can't even make headway doing restoration with rocks and sticks.

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But what I'd really like to speak about is the wildlife in the Galisteo Basin, because I don't think it's been appreciated enough how important an area this is for wildlife. It's a very critical wildlife habitat because it connects several important mountain ranges. It's the connection between the Sangre de Cristo, the Ortiz, the Sandia and the Jemez. It's a critical wildlife habitat. Just the other day I saw badgers. I've seen mule deer, there are antelope. The Townsend's Solitaires are migrating as well as raptors, and it's really critical that the wildlife in the habitat there is appreciated and protected. 13

And I would ask that the Game and Fish is consulted 14 15 whenever there's going to be any kind of development to make 16 sure that whatever development is allowed doesn't interfere 17 with the corridors, the habitat, and the breeding grounds, 18 because it is a critical wildlife habitat corridor.

So thank you for this opportunity.

20 CHAIRMAN FESMIRE: Thank you, Mr. Hamilton. Like I 21 said, we'll have again an opportunity for public comment at the 22 end of day before we break.

23 With that, Ms. MacQuesten, are you ready for your 24 next witness?

MS. MACQUESTEN: Yes, I am.

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1 CHAIRMAN FESMIRE: We do have one housekeeping chore. 2 Counsel has advised me that we need to get the witnesses' names on the record as having been sworn, so we're going to have to 3 4 go through the experience of being sworn again. 5 Would you please stand and raise your right hand and 6 state your name for the record, please? 7 TOM MORRISON 8 after having been first duly sworn under oath, 9 was questioned and testified as follows: 10 DIRECT EXAMINATION 11 BY MS. MACOUESTEN: 12 Q. Could you please state your name for the record? 13 Α. Tom Morrison. 14 And could you briefly describe your education and Q. 15 relevant work experience? 16 A. Yes. I have a Bachelor of Science degree from 17 the University of New Mexico in civil engineering. I have approximately 30 years of professional experience in 18 19 hydrogeology. 20 I was originally employed after my education with the 21 Office of the State Engineer in the hydrology bureau. I was a 22 staff hydrologist for about ten years. My primary 23 responsibility was to conduct hydrogeological investigations 24 for the processing of water applications, primarily the 25 estimation of effects due to proposed wells.

In late -- sometime in 1989, I became the chief of 1 2 the hydrology bureau within the OSE. My duties were to manage 3 our staff with respect to performing hydrology investigations. 4 I was also spending quite a bit of time drafting rules and 5 regulations and basin policies for the administration of water 6 resources. 7 Q. Mr. Morrison, are you a registered professional 8 engineer? 9 Α. Yes, I am. What is your present position? 10 Q. 11 I'm now a consultant to the hydrology bureau of Α. 12 the OSE. My duties involve the development of proposed rules 13 and policies. I also provide training to the staff on the operation of our different models and the conductance or 14 15 preparation of our hydrologic studies. 16 Q. Have you been authorized by the Office of the 17 State Engineer to provide testimony at this hearing? 18 Α. Yes. 19 Is the authority that you've been given by the Q. 20 Office of the State Engineer limited to certain issues? 21 A. Yes, it is. I'm limited to testifying on 22 Exhibit 37, which is the letter from Mr. Reynolds to the OCD. 23 I'm limited to discussing Exhibit 39, which is a hydrology 24 report that we prepared, and I'm limited to discussing Exhibit 25 No. 40, which is a report on freshwater resources. I'm also

authorized to answer questions asked by the Commission. 1 2 Q. Have you ever testified before the Commission before? 3 4 Α. I've testified before the OCD. So you've testified before the Division Hearing 5 Q. 6 Examiners? A. Yes. 7 8 Q. Did the Division Hearing Examiner accept you as 9 an expert? 10 Yes. Α. 11 Q. In what field? 12 A. Hydrogeology. 13 Have you testified before other administrative Q. 14 agencies? Yes, I have. 15 Α. 16 Q. As an expert? A. Yes. 17 18 Q. Again, what field? 19 Hydrogeology and hydrology. Α. 20 MS. MACQUESTEN: The OCD offers Mr. Morrison as an 21 expert hydrogeologist. 22 MR. HALL: No objection. 23 MS. FOSTER: No objection. CHAIRMAN FESMIRE: Mr. Morrison will be so accepted 24 25 as an expert in hydrology.

MS. MACQUESTEN: We asked specifically for 1 2 hydrogeology because he's going to be testifying for the OCD 3 regarding the hydrogeology. CHAIRMAN FESMIRE: Okay. On hydrogeology. 4 Thank 5 you. (By Ms. MacQuesten): Mr. Morrison, could you 6 0. 7 describe any relevant work experience you've had that directly 8 relates to the Galisteo Basin? A. I've performed hydrogeologic evaluations of the 9 10 El Dorado area to estimate the effects upon other wells and also on the Galisteo Creek. I've supervised the development of 11 a number of hydrogeologic studies, again, with respect to water 12 13 rights administrations. I have helped manage a project to 14 develop a model, a groundwater flow model, for the north 15 central part of the basin. 16 Q. Were you called upon to prepare reports in 17 response to the Governor's Executive Orders? 18 Yes, I was. Α. 19 Did you prepare Exhibits 39 and 40? Q. 20 Yes, I did. Α. 21 Did the Office of the State Engineer authorize 0. 22 the submittal of these exhibits for the hearing today? 23 Α. Yes. 24 Ο. Can you tell us what those exhibits are and why 25 they were prepared?

Α. Yes. Executive Order 2008-004 required that the 1 State Engineer prepare a report on the statutes, rules and 2 3 regulations that pertain to the OSE with respect to oil and gas exploration. As part of that report, the OCD requested that we 4 5 prepared a hydrology report on the basin. Exhibit 39 is 6 basically a portion of the report that we submitted in June to the OCD. 7

8 Exhibit 40 was prepared in accordance with the 9 Executive Order 2008-038. The executive order required the 10 State Engineer to provide a report on the fresh water resources 11 of the Galisteo Basin.

12 Q. How did the Office of the State Engineer define13 the boundaries of the Galisteo Basin?

A. The executive order did not define what was meant by the basin, so we had to -- it was our purpose that we should evaluate the watershed boundaries; that's all the tributaries to the Rio Galisteo.

18 There are several different types of basins in 19 New Mexico. We have administrative basins that the State 20 Engineer declares for administration water rights. We have 21 geologic basins, and we also have watershed basins. So we 22 evaluated the watershed with our reports.

Q. You talked about preparing Exhibits 39 and 40,
the two reports. Were there other reasons for preparing those
exhibits besides the executive orders?

Yes, there was. Exhibit 39 contains information 1 Α. that the Engineer is required to provide the OCD. 2 3 Section 70-2-12(B)(15) requires that the Oil 4 Conservation Division regulate the production of oil and gas in 5 a manner that will provide reasonable protection to freshwater supplies as designated by the Engineer. 6 7 What is the State Engineer's definition of fresh 0. water supplies? 8 This definition is provided in Exhibit 37. 9 Α. What is Exhibit 37? 10 Ο. 11 Α. Exhibit 37 is a letter from S.E. Reynolds, the 12 State Engineer at that time. It's a letter dated July 13 10, 1985, to Mr. Dick Stamets of the OCD. And how does it define freshwater supplies? 14 Q. 15 Α. "All underground waters in the State of New Mexico containing 10,000 milligrams/liter or less of 16 17 dissolved solids are hereby designated by the State Engineer 18 pursuant to Section 70-2-12(B)(15) NMSA 1978, except this designation shall not include any water for which there is no 19 20 present or reasonably foreseeable beneficial use that would be impaired by contamination. This designation supersedes all 21 22 previous designations pertaining to underground water. 23 "The water in lakes and playas should not be 24 contaminated even though they contain more than 10,000 25 milligrams/liter of total dissolved solids unless it can be

shown that contamination of the lake or playa will not adversely affect groundwater hydrologically connected to the lake or stream.

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"The surface waters of all streams within the State of New Mexico regardless of the quality of water within any given reach are designated for protection."

MS. MACQUESTEN: Commissioners, for your convenience, the OCD has made its rule defining fresh water an exhibit in this case so that you can compare the definition used by the OCD with the definition of the Office of the State Engineer. And that definition is at Exhibit 38 in your packet.

12 Ο. (By Ms. MacQuesten): Mr. Morrison, has the Office of the State Engineer made a determination of which 13 14 aquifers contain less than 10,000 milligrams/liter TDS within 15 the Galisteo Basin?

16 A. Based on available information, the State Engineer finds that all the geologic formations in the basin 17 have the potential for containing water less than 10,000 18 19 milligrams/liter TDS. The water quality varies significantly 20 in the Galisteo Basin. The area is quite complex.

21 We really can't determine what the water quality is 22 at any specific site until a well is drilled and water quality samples have been taken and analyzed. In the absence of 23 site-specific data, all groundwater in the Galisteo Basin is presumed by the State Engineer to contain fresh water. 25

1 Is this designation provided in your exhibits? Q. 2 Α. Yes, it is. It's provided in Exhibit 39 on page 3 8, on that page. 4 Q. Before we get into the details of your 5 investigation, would you please give us an overview of the water basins in Santa Fe County? 6 7 Α. The watershed basins of the Galisteo Basin are provided in Figure 1 of Exhibits 39 and 40. 8 Again, this shows the boundaries of the basin in 9 10 green. These are the watershed boundaries. The Galisteo Basin occupies the central portion of Santa Fe County. To the north 11 12 of the Galisteo Basin, we have the Santa Fe Basin. To the south we have the Estancia Basin. The Galisteo and Santa Fe 13 14 Basins, those watersheds drain into the Rio Grande and are part 15 of the Rio Grande Underground Water Basin declared by the OSE. 16 Q. Could you please summarize the hydrogeologic 17 conditions within these basins? 18 In the Santa Fe Basin, which extends from about Α. 19 El Dorado all the way to the northern end of county, the primary aquifer is the Santa Fe Group. The Santa Fe Group also 20 21 extends into the northern part of the Galisteo Basin. The 22 other basin in the area is the Estancia Basin. The primary aquifer in the Santa Fe Basin is composed 23 of sands, gravels, clays and silts. And it's, again, termed 24 25 the Santa Fe Aquifer. The aquifer is over 2,000 feet thick in

many portions of the basin. And, in general, the sediments are in good hydrologic connection with one another. There are various saturated sands and gravels that provide the primary source of water in the Santa Fe Basin.

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The primary aquifers in the Estancia Basin include basin fill and also sandstone and limestone units. These formations are fairly continuous and are in good hydrologic correction. When a well pumps from one, the effects may be observed in other formations.

10 Galisteo Basin is much more complex geologically 11 relative to these other areas. The water-bearing formations are not as continuous as the other basins. There are numerous 12 13 faults in the area. The fault here in Figure 1 is the Tijeras Galisteo faults. And, really, this is a very simplistic 14 drawing of the fault. There's actually a swarm of faults that 15 trend in this direction. 16

There's also faults that trend normal to that fault. The faulting has allowed volcanic rocks to move upward or intrude upward into the other sedimentary formations. This has 19 caused a great deal of disruption in the formation. 20 The geologic formations have been shifted. They've been moved 21 22 against each other. They've been fractured to various degrees.

There are numerous dry holes the Galisteo Basin. There are different geologic units, and each unit has its own type of water-bearing capabilities and also its own water

quality characteristics. The hydrologic connection between the 1 2 various zones in the Galisteo Basin is highly variable. Q. What information did you use to conduct your 3 investigation? 4 A. We started out by looking at the well records in 5 our WATERS database. The records show information on the total 6 7 well depths, the depth at which water was encountered and the depth to water. 8 9 We also evaluated two studies from the U.S. 10 Geological Survey. The first one was done by Mourant in 1980. 11 It was a study formed for Santa Fe County. It was a data compilation showing well record information, depths to water, 12 13 and water quality measurements for the area wells. The second report we used was a report prepared by 14 15 White and Kues, also from the U.S.G.S. It was a Statewide 16 report which provided spring flow, information on the flow of 17 spring and the water quality of the springs. 18 In addition to this, we also used maps prepared by the New Mexico Bureau of Geology and Mineral Resources. We 19 also consulted numerous consultant reports. I also looked at 20 21 the Jemez y Sangre Regional Water Plan, which describes the 22 hydrology and water quality of the basin. I also looked at the Santa Fe County water quality atlas. I've also performed field 23 24 investigations of the area.

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Q. Are the sources you describe sources that you'd

normally use in your work in preparing quality reports? 1 2 Α. Yes. Could you describe the wells that were used in 3 Ο. the investigation? 4 The wells are shown on Figure 2 of Exhibit 39. 5 Α. This figure shows the distribution of water wells that are in 6 7 our WATERS database. Most of the wells you see here are domestic and stock wells. They generally produce very little 8 9 water, less than 10 gpm. Most of these wells are less than 500 feet down below land surface. 10 11 We do have a few wells in the basin which are 12 completed to depths between 1,000 and 1,600 feet below land 13 surface. The wells I'm going to be talking about in my presentation are primarily water wells. The aquifer is quite 14 15 thick here, so really the wells have only penetrated a very 16 small portion of the aquifers in the area. 17 Q. And what geologic formations do these wells produce from? 18 The wells in the north produce primarily from the 19 Α. Santa Fe Group aquifer. Also in this location you have the 20 21 San Marcos Arroyo; El Dorado is in here. Most of these wells 22 produce from the sands and gravels in the area. We also have 23 up in the mountain front here along the I-25 corridor -- a lot 24 of these wells produce from the fractured igneous rocks. 25 The Valley Alluvium is distributed along the Galisteo

Creek, which is right along here. We also have the alluvium line next to the various arroyos that are tributary to the Galisteo. Wells can produce enough water for stock and domestic supplies generally, and maybe some small community wells. Again, those materials are made up of sands, gravels.

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Both the Santa Fe Group and the igneous rocks and the alluvial aquifers generally provide potable water. The State of New Mexico defines potable water as water containing less than 10,000 milligrams/liter TDS.

10 The other formations that we have are the volcanic 11 rocks, the Espinaso Formation. Also we have a number of dikes and igneous rocks that have been protruded upward. Those can 13 also contain water if they're fractured.

14 In the Galisteo formation, which lies generally below 15 the volcanics, small quantities for domestics and stock wells can be obtained, generally. There are also a number of dry in 16 that formation in many low yielding wells. The water quality 17 18 in the Galisteo Formation varies from potable to non-potable. 19 It's highly variable.

Wells in the basin also produce from the other deeper sedimentary rocks that are also exposed in some areas. These include the Mesaverde Group and the Mancos Shale. Now, beneath these rocks are other sedimentary formations. They extend thousands of feet below land surface, and we really don't have any wells on records that have penetrated those formations.

It's possible that those formations can contain fresh water. 1 Since the -- you have a wide variety of rocks. 2 They've 3 They've been disrupted in numerous different ways. been fractured; they've been compressed. The water-bearing 4 characteristics are highly variable in the basin. 5 6 Q. Mr. Morrison, you talked earlier about the definition of freshwater. I believe you said it was 10,000 --7 A. Yes. The State definition is potable water is 8 9 1,000 milligrams/liter TDS or less. Now, that's different from the definition we use for freshwater with respect to 10 Statute 70-2-12, I believe. 11 12 O. So there's a distinction between fresh water and 13 potable water? 14 A. Yes, with respect to the statute, which requires us to provide information on fresh water to the OCD. The State 15 16 Engineer defines in Exhibit 37 that freshwater is any groundwater containing less than 10,000 milligrams/liter TDS. 17 MS. MACQUESTEN: Ms. Duran-Saenz, could we have 18 Figure 3 of Exhibit 39, please? 19 Commissioners, forgive me. I should have pointed 20 21 this out earlier, but these maps are attached to the exhibits 22 in your folders also. 23 (By Ms. MacQuesten): Mr. Morrison, could you 0. describe what Figure 3 of Exhibit 39 shows? 24 25 A. Yes. This map is a geologic map showing the

official geologic formations. The data to prepare, to develop, this map was obtained from the New Mexico Bureau of Geology and 3 Mineral Resources.

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Each color defines a certain geologic formation. Again, this shows the geologic formations of the land surface. The Santa Fe Group, the abbreviation is QTs, which is up here. And you can see it extends down to about the -- close to the Rio Galisteo or San Marcos Arroyo.

9 Now, just because the Santa Fe Group is present in this area doesn't mean that it's entirely saturated. 10 The basin 11 fill up in the Santa Fe Basin is quite deep, like I said. But 12 as you move southward, the basin becomes thinner and thinner. 13 Naturally, the saturated thickness disappears for most areas 14 once you get down by San Marco Arroyo.

15 Now, the Santa Fe Group, the Santa Fe Formation, is 16 also deposited south of Galisteo Creek, but in this area, it's not really saturated. You may have some thin zones which lie 17 at the bottom of the formation which are saturated, but it's 18 19 typically not a fairly good aquifer.

20 The other formations that I've talked about are the 21 Espinaso volcanics right. That's labeled Te. It's in the 22 purple right there. That doesn't really show up. Now, these 23 rocks may also underlie the Santa Fe Group, and they're also deposited elsewhere in the basin. All the formations shown on 24 25 this map have the potential to contain freshwater. The one

formation that's kind of difficult to see here is the Valley Alluvium. It's deposited along the Galisteo Creek and all the other arroyos.

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O. Are there areas where water wells have a better 4 5 chance for being successful?

A. Based on available information, we see that the most productive wells are located up in the El Dorado area. Those produce from several different aquifers, one of the primary aquifers of the Santa Fe Group. The other wells that can be productive are along the alluvium along the Galisteo Creek and the arroyos. The well unit properties are highly variable. The saturated thickness may not be very extensive in 13 these areas, and that limits the well yields in the area.

14 The other formations generally yield relatively small quantities of water. It's very -- it's highly variable. 15 Ιf you hit fractures, you can produce more water, if those are 16 17 saturated. If you hit solid rock without fractures, you're 18 going to obtain very little water.

19 The upper part of the Galisteo Formation provides limited sources of water. And likewise, the formations down 20 21 here, the Mancos Shale, they produce generally very small 22 quantities of water. And generally, that water as non-potable. 23 MS. MACQUESTEN: Ms. Duran-Saenz, could we have Figure 4 of Exhibit 39, please? 24

> (By Ms. MacQuesten): Mr. Morrison, could you Ο.

tell us what is described on Figure 4? 1 2 A. Yes. Figure 4 shows the water level contours. 3 This was obtained from Mourant's U.S.G.S. study that was published in 1980. And basically, these are like land 4 5 contours. It shows that along these lines, there's a specific elevation and that the water surface may be found at this 6 7 elevation. 8 There's one caution using this map. The wells that 9 were used to generate this map were completed at various 10 depths, and this is a general picture of the depth to water. As you can -- it's hard to tell, but the highest 11 12 elevations are up here along the Sangre de Cristos and also 13 here along the margins of the Estancia Basin and also up here 14 by the Ortiz Mountains. What this means is that we have 15 recharge occurring along the Sangre de Cristos, also along 16 Galisteo Mesa and on the highlands toward south. We also have 17 recharge occurring from the Ortiz Mountains. 18 Now, as that recharge flows through the subsurface 19 and enters the groundwater system, it flows fairly parallel to 20 the direction that the surface water flows. It flows toward 21 the direction of the Galisteo Creek. And then it flows onward 22 to the Rio Grande.

Now, one thing that's probably not shown very well is that we have recharge occurring also along Galisteo Creek and the other arroyos. Again, the materials along the arroyos and

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Galisteo Creek is probably made up of alluvial materials. These are very porous, permeable materials made up of sand and gravel. Water is readily able to percolate through these sediments and flow downward to the aquifer.

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The aquifer is also fairly shallow in this area. It's variable, but you do have some very shallow depths to water. This allows recharge to occur because that water can flow all the way to the aquifer without being evaporated or transpired by plants. In other areas, where the depth to water is fairly significant, we have less recharge because a lot of that water is held up in the formation and is lost to evaporation.

Now, because we have the great potential for recharge occurring, we also have the great potential that if there's land surface pollution that -- the system is very vulnerable.
Pollution could filter down into the alluvial aquifer because the sediments are so permeable and the depth of the aquifer is very shallow.

19 Q. Could you describe the groundwater quality20 conditions in the basin?

A. Yes. As I said previously, the groundwater quality varies significantly throughout the area. The quality depends upon the materials that the water comes in contact with. There's also a number of factors that affect water quality; the residence time also influences water quality. The

older the water is, the more time it's had to pick up soluble material from the different formations.

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I like to look at Figure 2 of Exhibit 40. This map was obtained from Mourant's study. And we took Mourant's map showing the Mourant's data, and we calculated the total dissolved solids content. What this map shows is the water wells that we have quality measurements for in that part. It's kind of difficult to see all the numbers, but generally the map shows the geologic formations, and the symbols right up here, like QTa, is a different unit of the Santa Fe Group.

The newer values show TDS values. And again, water that contains less than 1,000 milligrams/liter TDS is generally considered potable. Most of the wells up in this area have TDS ranges that are typically less than 500 milligrams/liter.

Now, I'm talking about average values. When you look at this map, you can see a variation in that water quality, but on the average, wells in the far north end of this basin have better water quality compared to the wells in the southern part of this basin. The wells in the southern part of this basin below Galisteo Creek have water qualities ranging from 1,000 to about 6,000 -- between 1,000 and 6,000 milligrams/liter TDS.

I'd like to show Figure 3 now of Exhibit 40.

This figure doesn't show very well in the projector, but basically, the area colored in the blue, which is up in the El Dorado area, on the average, the water quality in this

region is less than 500 milligrams/liter TDS. Again, these are average values. In the area south of Galisteo Creek and along the Cerrillos Hills, the average water qualities range from about 500 to up 1,000 milligrams/liter.

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Again, we have a lot of variation. We have numerous dry holes in here. We have low-yielding wells, and we have pockets of areas where the water quality does exceed 1,000. But overall the average value in here is less than 1,000.

9 Now, for the remainder of the basin which is south of 10 Galisteo Creek, the water quality is greater than 1,000, but 11 less than 6,000 milligrams/liter. It should be kept in mind 12 that the data we're using is from water wells, and the majority 13 of these wells are less than 500 feet deep.

14 Now, as you go deeper in the formation for any given area, the water quality generally deteriorates. 15 The TDS 16 increases because the water generally comes over and it's had 17 more time to pick up the solubles from the various geologic materials. So this picture really only shows you the TDS that 18 19 is maybe there based on available information. It represents 20 the water quality of the very upper surface of the aquifer. It 21 does not reflect the water quality that you may find at deeper 22 depths.

However, all the water wells that we looked at had water qualities well below 10,000 milligrams/liter TDS, which is the State Engineer's designation of waters that need to be

protected from oil and gas well drilling. If oil and gas 1 products are obtained in the deeper formations, the water 2 associated with those formations will be above 10,000 3 4 milligrams per liter. 5 MS. MACQUESTEN: I have no more questions of Mr. Morrison. I would move for the admission of Exhibits 37, 6 7 38, 39 and 40. That's the letter from the State Engineer defining fresh water, the OCD definition of freshwater and the 8 9 hydrology reports. 10 CHAIRMAN FESMIRE: Mr. Hall? 11 MR. HALL: No objection. 12 CHAIRMAN FESMIRE: Ms. Foster? 13 MS. FOSTER: I would object to the admission of 14 Exhibit 37. That's the letter from Mr. Reynolds. 15 CHAIRMAN FESMIRE: Ms. MacQuesten? 16 MS. MACQUESTEN: I'd ask for the grounds of the 17 objection. 18 MS. FOSTER: The grounds being that this witness did 19 not write the letter; that this is not in the rule. This is 20 just a letter between two individuals. I don't see how this 21 becomes policy of the Division whatsoever. 22 And if you'd like, I can question the witness on 23 that, but the testimony, I believe, was that this was a letter 24 from the State Engineer to the Oil Conservation Division's 25 director, but does that make it Division policy because it's a

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letter between the two divisions?

CHAIRMAN FESMIRE: I think Mr. Morrison has testified that this has been his department policy, and he has 30 years' experience in using that letter -- well, since the letter was drafted.

THE WITNESS: Yes. Also in Exhibit 39, it provides that definition. And this exhibit was approved by the State Engineer to be submitted to the OCD.

9 CHAIRMAN FESMIRE: You've got it down in the records 10 of the State Engineer?

11 THE WITNESS: Right. And the State Engineer approved 12 this document that we submitted.

13 CHAIRMAN FESMIRE: Okay. I'll overrule the 14 objection. We'll admit Exhibits 37, 38, 39 and 40 for the 15 record.

16 [Applicant's Exhibits 37, 38, 39 & 40 admitted into 17 evidence.]

Mr. Hall, did you have any questions?

MR. HALL: Yes, sir.

CROSS-EXAMINATION

BY MR. HALL:

22 Q. Mr. Morrison, could you tell us the scope and 23 extent of the Office of the State Engineer to regulate water 24 quality?

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A. The Office of the State Engineer is charged with

the admission and protection of the waters within New Mexico, 1 2 and that's a very broad duty. Commonly, we'll look at water quality matters with water right applications. Suppose a well 3 4 is proposed that may draw in contaminants into other existing 5 water wells. In that case, we will consider water quality. Also we'll consider water quality with respect to the 6 7 statute I've been referring to. That was -- I keep on 8 forgetting that number here -- that statute was 9 Section 70-2-12(B)(15). And again, that statute requires that the State Engineer designate fresh water bodies for the OCD. 10 11 Q. All right. Aside from the designation of 12 aquifers as 10,000 TDS -- or more or less, what specifically 13 does the Office of the State Engineer do to regulate water 14 quality? 15 We have a couple of statutes dealing with Α. impairment and public welfare in which water quality issues may 16 17 be considered. We also have a statute pertaining to aquifers 18 which are below 2500 feet which contain water containing more than 1,000 milligrams/liter. That statute is 72-12-24. 19 20 Q. Can your office restrict or prohibit the drilling 21 of a water well where water quality issues are concerned? 22 A. If he finds that that's detrimental to the public 23 welfare and whether it results in impairment, yes, he can. 24 O. Has that ever been done in the Galisteo Basin? 25 Α. Not that I'm aware of.

Mr. Morrison, are you aware of the protocols for 1 Ο. 2 oil and gas well drilling that the Oil Conservation Division and the Oil Conservation Commission established for the 3 Tularosa Basin in Otero and Sierra Counties? 4 5 A. No, I'm not. Q. Do you know generally if -- do you know anything 6 7 about the hydrogeology of the Tularosa Basin? A. Yes, I do. 8 Is there generally more data available to your 9 Ο. 10 office in the Tularosa Basin and Otero County than in the 11 Galisteo Basin? A. Yes. I would say there's more information for 12 13 the Tularosa Basin. I'm not sure about the Otero Mesa area. 14 Q. If you could turn to your Exhibit 39, let me ask In the course of preparing your report, did you review 15 you: 16 the available well logs from the 32 oil and gas wells that were drilled in the area? 17 A. No, I didn't. I looked at some exhibits that 18 19 were prepared, but I did not examine those closely, no. 20 Would that data have been helpful to you at all? Q. Well, generally, my experience with oil well logs 21 Α. 22 is that they are mainly concerned about the deeper formations. 23 They really don't provide much information about the upper 24 surface. What we're really concerned about in protecting 25 existing wells is that we're concerned about the

characteristics of the upper formations, which are not often well described in the oil well logs in the degree that we are concerned with. They're mainly concerned about oil and gas intervals, while we're concerned more about the water-producing capabilities at the very upper surface of those formations.

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Q. Well, did you look to see at all if any of those logs would have had resistivity data that would have helped you calculate the saturation of the aquifers that you're concerned about?

A. We were not concerned primarily about the thickness of the aquifers. We were concerned, due to the statutes, with designating aquifers containing 2,000 milligrams/liter or less. I did look at those logs, and I found they were highly variable conditions throughout the area, and I could not really use that information to come up with a designation of what's fresh and what's not fresh.

17 CHAIRMAN FESMIRE: Mr. Morrison, you said 2,000? Was 18 that a misstatement? 19 THE WITNESS: Yes. 20 CHAIRMAN FESMIRE: What should you have said? 21 THE WITNESS: I forget what I was answering. 22 CHAIRMAN FESMIRE: Could the court reporter please 23 read that back? 24 [The record was read by the reporter.] 25 THE WITNESS: I think it was 10,000 milligrams/liter

TDS or less.

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CHAIRMAN FESMIRE: I'm sorry.

THE WITNESS: Our position is to find freshwaters which is 10,000 milligrams/liter TDS or less, so we were primarily focused on water within that quality range. But we did examine other information. But due to time constraints, we had to focus our efforts upon the water wells.

CHAIRMAN FESMIRE: I'm sorry. I misheard, apparently. Mr. Hall?

Q. (By Mr. Hall): If I understood your testimony, when constructing some of your figures, you had a contour map for your Figure 4 to Exhibit 39, and then you tried to map water quality in your Figure 2, Exhibit 40. Tell me if I misunderstood what you said, but to do these maps, you looked at the water quality -- you just tapped the top of the aquifer; is that right?

A. Most of these wells are drilled until they get the quantity that's required for the proposed use. Domestic and stock wells don't require much use. It's expensive to drill wells. Once they get the quantity and quality necessary, they generally stop drilling.

Q. If I understood you correctly, I heard you say the primary source of fresh water supplies for the Santa Fe Basin, Stanley Basin and Galisteo Bain come from lenses; is that accurate?

1 Lenses are basically discrete zones of sand Α. Yes. 2 and gravel. In these formations you have interfering of 3 sediments. You have clays and silts mixed in with sands and gravels. In a very simplistic manner, it looks like a layer 4 5 cake, but it's much more complex than a layer cake; they're 6 inter-fingered together. 7 Q. Would it be correct to assume that if you describe these as lenses, they are limited in their horizontal 8 extent; in other words, they pinch out? 9 10 A. Yes, they do. Some can extend for quite some 11 distance. 12 Q. And how do you determine that that's the case? 13 Α. Well logs. 14 Okay. And if we look at all the data points you Ο. 15 had on your Figure 2 attached to Exhibit 39, did the data you 16 obtained from the well logs from all of those data points, was 17 that enough date to allow you to determine whether there's 18 broad continuity among the freshwater aquifers you're mapping? 19 A. Based upon other information, the aquifer is 20 generally considered to be very well connected, based upon my 21 experience and other materials I've reviewed. Also the well 22 logs, they indicate sand and clay zones. And those zones may not be continuous but still our understanding of those lenses 23 24 is that they are very permeable, and they allow water to 25 propagate through them with very good hydrology connection with

one another. 1 And how does the water travel? How is it 2 Ο. Is that in response to pressure? 3 transmitted? It's in response to, yes, pressure and gravity. Α. 4 From other water wells? 5 Ο. It's in response to -- in the figure that I 6 Α. 7 showed you in Exhibit 40 -- I mean Exhibit 39 -- there was the water level contours. 8 9 Ο. Say again? 10 The water level contour map. And I think Α. 11 that's -- yeah, this one right here. 12 So what happens is that we have runoff occurring from 13 the Sangre de Cristos and these highlands. As that water comes 14 into the system, it's at a higher elevation compared to the bottom of the basin. That elevation difference derives water 15 16 from the upper portions of the basin to the lower end of the 17 basin. 18 We do have confined aquifers in the area which may 19 have a different configuration of the contours. But, again, we 20 have very little information to define those deeper flow paths. 21 O. All right. In your analysis of any of the data, 22 did you test for the presence of the hydrocarbons? No. My studies were based upon the information 23 Α. 24 that was contained in the U.S. Geological Surveys. 25 Q. And you found that data to be accurate?

Excuse me? 1 Α. You found those data to be adequate? 2 Ο. 3 Α. Yes. 4 Ο. Okay. Looking at the last page of your Exhibit 39, page 8, you're saying that water quality for each 5 saturated zone will vary from site to site; therefore, it 6 cannot be determined until drilling samples have been collected 7 and analyzed. So hydrogeologists can't have enough data, 8 9 right? A. Right. 10 11 Q. Always looking for more. And then you're 12 recommending -- well, you point to an absence of site-specific data, and in the absence of data, you simply declare the entire 13 basin as a protected aquifer. Is that the process? 1415 A. Yes. In some areas like the El Capitan Reef, we 16 have quite a bit of information so that we can tell that a 17 certain geologic formation contains waters with less than 2,000 18 milligrams/liter TDS. However, in this area, we really can't 19 do that. We don't have enough information. The information we 20 do have is highly variable from one spot to another. 21 Q. And so that's why you called for site-specific 22 I guess we need to know what you mean by site-specific data. Is there a definition for that? 23 data. 24 A. Yes. What it means is that when you are drilling 25 the well, the water quality needs to be sampled. We need to

1 know what the total dissolved solids content is as you drill 2 that well. Once that well is drilled and the operator can show -- demonstrate -- to us that water is greater than 10,000 3 4 milligrams/liter, then that water does not fall within our designation of fresh water. Until it can be shown that it 5 6 exceeds that level, we're going to assume that it is fresh 7 water. Q. Okay. Tell us how an operator would collect 8 water samples during drilling like that? 9 10 A. By testing the mud. And there may be other 11 means; logging. 12. Q. Mud log reports would be sufficient? 13 They would be helpful. But testing the mud would Α. be more definitive. 14 Q. In the last paragraph of your Exhibit 39, to 15 16 summarize, you simply want operators to be required to show 17 that drilling will not contaminate fresh water supplies. How 18 do we do that? 19 A. No. We're mainly interested for the driller to provide us information so we can tell whether or not water 20 21 contains less than 10,000 or more than 10,000. The 22 responsibility then rests with the OCD to ensure that there's 23 no contamination. 24 Q. All right. Now, prior to actual drilling, what 25 types of data would be acceptable to your office, and

potentially to the OCD, in making a determination that 1 2 contamination of fresh water supplies will result from 3 drilling? That was outside of the scope of my study. 4 Α. 5 Q. Okay. What databases would you recommend that the OCD rely on in making its pre-drilling permit approvals? 6 7 That's outside of my responsibility. Α. 8 0. Okay. Well, tell us what databases that you use 9 at the Office of State Engineer. 10 A. I used our WATERS database, which is primarily a 11 well driller database. It contains information on the depth of 12 wells, the depth of water, the description of the water-bearing 13 units and the other sediments that are penetrated. It also 14 provides information on the water-yielding capabilities of 15 different formations. I also used the information that was in the two 16 17 U.S.G.S. studies that I referred to. Q. In briefly looking at your Exhibit 39 and 40, you 18 19 didn't express the need for any data from monitoring wells, did 20 you? 21 A. No, I didn't. 22 MR. HALL: I have no further questions. 23 CHAIRMAN FESMIRE: Ms. Foster? 24 MS. FOSTER: Thank you. 25

1	CROSS-EXAMINATION
2	BY MS. FOSTER:
3	Q. So I'm sorry. Your last name again?
4	A. Morrison.
5	Q. Morrison. I'm sorry. I want to call you Tom.
6	Mr. Morrison, if you could clarify something for me: Is the
7	Galisteo Basin, is that a declared basin by the Office of the
8	State Engineer?
9	A. It's within the Rio Grande Underground Water
10	Basin, which was declared by the State Engineer. The Galisteo
11	Basin is a sub-basin like the Santa Fe Basin. The Rio Grande
12	Basin extends from the Colorado/New Mexico state lines all the
13	way down to Elephant Butte. Below Elephant Butte, it's
14	declared as the Lower Rio Grande Underground Water Basin.
15	Q. So basically everything between our arbitrary
16	state lines which are on the surface has been declared
17	north all the way down to Elephant Butte all the water?
18	A. Yes. The entire State is within a declared
19	underground water basin. The watershed within the Rio Grande
20	is within the Rio Grande Underground Water Basin or the Lower
21	Rio Grande Water Basin.
22	Q. Okay. And what about aquifers that are deeper
23	than 2500 feet? Has that been declared?
24	A. That depends upon that's controlled by the
25	Statute 72-12-24, and there's special provisions that must be
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1 met to have that water to be outside the purview of the State 2 Engineer. Q. So in your exhibit, you talked about the water 3 contour map. Can we look at that? 4 5 CHAIRMAN FESMIRE: Part 2, Exhibit 39? MS. FOSTER: I think it was Figure 4 of the exhibit. 6 CHAIRMAN FESMIRE: Four; you're right. 7 Q. (By Ms. Foster): Could you explain that map to 8 9 me in terms of -- I mean, you have some pretty big numbers on 10 there. Specifically, closer to El Dorado you have 7,000, 6900, 11 and then going down towards the southeast portion, you have 12 6300. You don't have any numbers in the middle. But can you 13 explain to me what that means in terms of depth to water? What this means is that -- first of all, this map 14 Α. 15 was taken from Mourant's study. And what these lines represent 16 are land surface -- I mean, what they represent is elevations. 17 It's much like a topographic map which shows land surface 18 elevation. This map shows the surface, the general surface, of 19 where the top of the water-bearing formations are. 20 I would like to correct that. It basically tells you 21 the depth where the aquifer is located. Now, what that means 22 is that water is going to flow from -- you gave the example of 7,000 elevation. Well, if you take that elevations and you 23 24 subtract it from the land surface elevation, you get a general 25 idea of how deep you have to drill before you hit water.

1 Ο. Okay. So closer to the Sangre de Cristos, 2 according to your map, you'd have to drill over 6,000 feet? 3 Α. No. 0. No. 4 That's the elevation of the water surface. 5 Α. Ιn 6 general, you'd have to take the land surface elevation. Suppose your land surface elevation was 8,000 and this contour 7 8 map showed the water was at 7,000, you would have to drill approximately 1,000 feet to get water. 9 Q. Oh, I see. Okay. Because you did state in your 10 testimony that most of the water wells are 500 feet to reach 11 12 the top of the aquifer. 13 A. A majority of the wells are less than 500 below 14 the land surface. 15 Q. Okay. And how does the State Engineer deal with, 16 you know, if you have somebody who is drilling down to 17 8,000 feet and goes through an aquifer that's deeper than 2500, whose water is that? Is that declared? 18 A. Yes, unless they follow the procedures on the 19 20 statutes relating to 72-12-24 which is the statute that relates to the 2500 foot top of the aquifer designation. But if we 21 just get an application in for a new depth, we're going to 22 treat it like any other water right application. We're going 23 24 to assess it for impairment, public welfare and conservation. 25 Q. And you're going to make the assumption that it's

fresh water.

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2 We're going to use all the information available Α. 3 to calculate the effects of the use of that proposed well. O. Okay. And again, reviewing the portion that 4 5 Mr. Hall raised, in your report I believe you stated that, you 6 know, you didn't have specific information but you are making 7 the assumption that the Galisteo Basin is all fresh water? 8 A. We're doing that because of the great uncertainty 9 about where the fresh water extends and where the water greater 10 than 10,000 begins. 11 Q. All right. Now, you mentioned that testing the 12 mud and mud logging would be a good water quality test. A. Uh-huh. 13 14 0. Did you state that? 15 Α. Uh-huh. How would you go about testing mud? 16 Ο. 17 I'm not experienced in that area. Α. Okay. So you're not experienced. So you 18 Ο. 19 wouldn't know if there's actually an approved method to do that 20 within the OSE? 21 A. I believe there is. I've been told there that 22 And like I said, I'm not a mud logger. was. 23 Q. But can you give me an example of how that might 24 be done? 25 A. I'm not a mud logger, no.

Okay. And how would you determine the salinity 1 Q. 2 of the water from those mud logs that you said could give you 3 some information? A. Again, there's several methods to do that, and 4 5 I'm not a mud logger, and I've never tested water quality from 6 mud. Q. Okay. So you're not a mud logger, but you're 7 recommending that that's the best way to determine water 8 9 quality? 10 A. I'm saying that whatever has to be done to 11 determine to water quality, needs to be done. 12 Q. But you don't have enough experience in water logging to be able to tell me how to do it or what the actual 13 14 results would be and how to test for salinity? A. Yes. I'm not going to tell you how to do it 15 16 because that's not my area of expertise. With respect to the 17 State Engineer, we just want a demonstration that the water is 18 either greater than 10,000 milligrams/liter or less than 10,000. 19 20 Q. All right. And that's the only way that you 21 think you can do it. There must be other ways. What about 22 monitoring wells, for example? A. Uh-huh. 23 24 Q. All right. 25 A. But, again, because of the complexity of the

area, I think it's important that you get water quality 1 measurements from the well that's been drilled. You can move 2 over a short distance, and you may encounter totally different 3 4 types of formations and water qualities. Q. And you are recommending -- or at least the rule 5 states -- that we have to have a water logger, a mud logger, 6 every day to write a daily report. Are you aware of that 7 provision in the rule? 8 Those are not our rules. That's not my area of 9 Α. expertise. 10 Okay. Then you wouldn't be familiar with how 11 Ο. costly it is to do daily mud logging and all that? 12 A. No, I'm not. 13 Now, in the Galisteo Basin Report on page 43, 14 0. there's a discussion of the designation of the Galisteo Creek. 15 16 Α. Can you refer to what exhibit that is? Exhibit 20. 17 Ο. 18 Α. On what page? Q. Page 43 under the bolded language, Regulation of 19 20 Water Associated with Oil and Gas Drilling -- that first 21 paragraph. 22 Α. Yes. What about it? It discusses the Galisteo Creek drainage area --23 Q. Α. Uh-huh. 24 25 -- and that was designated by the Office of the Ο.

1 State Engineer in 1956, and then they extended in 1970, Is that what it generally says? 2 correct? 3 What it says is the western area of Galisteo Α. Creek drainage basin was declared as part of the Rio Grande 4 Underground Water Basin by the State Engineer on November 5 6 29, 1956. The declared basin was extended on December 7 17, 1970, to include the entire drainage area of the Galisteo 8 Creek. Q. Okay. And is Galisteo Creek the same thing as 9 10 Galisteo Basin, this whole area that we're talking about? 11 Α. The Galisteo Basin includes the Galisteo Creek 12 and all the other tributaries which are flowing into Galisteo 13 Creek. 14 Q. Okay. All right. But, again, I'm still 15 confused. Because it seems to me that in your report you 16 didn't quite qo as far as designating it, but you made the 17 recommendation that you think there's freshwater. 18 A. I don't understand your question. 19 Ο. Well, there seems to be a discrepancy between this official designation of 1970 of Galisteo Creek, which is 20 21 on the east side of the basin, okay? 22 A. It extends throughout the basin. 23 Okay. Well, then, I would ask you to look at Q. 24 Exhibit 13. According to that exhibit, which is the Galisteo 25 Surface Water Drainage Boundary Map, you have the Galisteo

River going east and south and you have the Galisteo Creek 1 going northwest. I mean -- I'm sorry -- Galisteo River going 2 east/west and Galisteo Creek going north/south. I don't know 3 my right and left here. 4 5 Α. That's not our exhibit. Many people refer to the Galisteo in many different ways. I've seen it referred to the 6 7 Rio Galisteo, Galisteo River and Galisteo Creek. For our purposes, we're looking at all tributaries and all main stems 8 9 of the Galisteo system. 10 Q. Okay. Then why is it that the Santa Fe River 11 might not be included in this process or the Pecos River with 12 offshoots that are very close to this as well? I mean, there's 13 no tributaries, there's no connection between those larger 14 rivers. 15 Α. Can you rephrase your question? 16 Well, what I'm asking is: Is the designation --0. 17 this line that you have in this map that's designated in red, 18 it seems to me a little arbitrary with the other rivers that 19 are going there. If you're telling me it's based on 20 tributaries and extensions of the tributary --21 MS. MACQUESTEN: Mr. Chairman, could we have a 22 distinction made between a declared basin and the definition of 23 the Galisteo Basin as a surface feature? I think that might 24 help clear up some of these questions. 25 CHAIRMAN FESMIRE: Mr. Morrison, would you like to

address that?

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THE WITNESS: Yes. The State Engineer is required to declare underground water basins for him to administrator the water resources in that area. Now, quite often folks talk about other basins, and they are quite different than the OSE designations.

Now, when I talk about a watershed basin, I'm talking about if you go out and dump a bucket of water on the land surface, which way is it going to flow? If you do that and it 10 flows in the Galisteo system or its tributaries and main stem, then that's within the watershed.

If you dump that bucket out and it flows towards the Santa Fe River, then it's in the Santa Fe Basin. If you dump it out toward the east there and it goes towards the Pecos, then it's part of the Pecos Basin.

Q. Okay. So but, again, based on the descriptions that you just gave me, any aquifers that the top of the aquifer is greater than 2500 feet is not declarable by the State Engineer, correct? That's not declared fresh water?

Certain provisions have to be on that. Α. Q. Meaning what? What do you mean by that? I'm not an attorney. I can't answer that Α. question.

Q. But based on your experience as a hydrologist, water that is deeper than 2500 feet, does it or does it not

come within the jurisdiction of the Office of the State 1 2 Engineer if it's not potable? 3 A. The statute is not --CHAIRMAN FESMIRE: Hang on, Mr. Morrison. 4 MS. MACQUESTEN: Objection; I believe this calls for 5 6 a legal conclusion. 7 CHAIRMAN FESMIRE: Sustained. Ms. Foster, can you 8 rephrase that question or do you want to move on? 9 MS. FOSTER: Let's move on. Thank you. I'm getting 10 hungry. 11 CHAIRMAN FESMIRE: So is Commissioner Bailey. 12 MS. FOSTER: I'm sorry, Commissioner. 13 (By Ms. Foster): Just a couple more questions. Q. 14 There was quite a few wells that you demonstrated on one of 15 your pictures, water wells, and you mentioned that there was 16 fracing of the igneous rock on some of those wells, the ones 17 that were closer to the top portion of the Galisteo Basin? 18 A. Indicated that in some areas the igneous rocks 19 are fractured. 20 Okay. And does that mean naturally fractured or 0. 21 fractured in the process of drilling a water well? 22 Naturally fractured. Α. 23 Does fracturing occur if you have to drill a 0. 24 water well? Can it occur? A. Not necessarily. I guess anything is possible. 25

Okay. But if you are picking a location, you're 1 Q. 2 trying to drill a water well and you end up hitting shale, is 3 it common practice -- how would you get through that shale to 4 get to your water formation? 5 A. You drill through it. And you may disrupt the formation as you're drilling through it. 6 7 Q. Right. And drilling through it with no fracing 8 procedure whatsoever? 9 A. I'm not familiar with fracing. 10 Ο. In your report in Exhibit 39, are you familiar with the ownership of the surface of the Galisteo Basin? 11 12 A. No, I'm not. 13 Okay. On Exhibit 39 in the bottom of the third Ο. 14 paragraph, do you not state that most of the lands in the 15 southern half of the Galisteo Basin watershed are owned by the 16 Santo Domingo Pueblo? 17 A. What page was that? Page 1 of Exhibit 39. 18 0. 19 Α. Yes. 20 Yes. So most --Ο. 21 Α. I would say that when you get down to the west of I-25 or in the vicinity or I-25, it's my understanding that a 22 23 lot of those lands are owned by the Santo Domingo Pueblo. 24 Q. And lands within the Santo Domingo Pueblo, what 25 agency does that come under? Who has jurisdiction over those

1	lands?
2	A. I'm not authorized or can answer that question.
3	I'm not a lawyer.
4	Q. Okay. But as a former Office of the State
5	Engineer person, if there was a water well in the Santo Domingo
6	Pueblo, would you be responsible for it?
7	A. I don't know.
8	Q. Well it's a simply yes-or-no question; you're
9	either responsible for it or not.
10	CHAIRMAN FESMIRE: I believe he has answered that
11	question.
12	THE WITNESS: I'm not qualified to answer that.
13	MS. FOSTER: Okay. I have no further questions.
14	Thank you.
15	CHAIRMAN FESMIRE: Okay. At this time, we're going
16	to break for lunch and return at 1:30, at which time we'll
17	start with the Commissioner examinations by Commissioner
18	Bailey.
19	[Noon recess was taken from 12:25 p.m. to 1:31 p.m.]
20	CHAIRMAN FESMIRE: Okay, at this time, we'll go back
21	on the record. The record should reflect that this is the
22	continuation of Case 14255; that all three Commissioners are
23	present; we do have a quorum; and, it's approximately 1:30 on
24	Thursday, December 11th, 2008.
25	At this time, we are going to take another detour.

1 We found some folks that wanted to make a statement, and 2 they're not here -- so, oh, yes, sir. Okay. Back in the back. You wanted to make a statement on the record, sir? 3 Would you come forward and do so, please? 4 5 MR. DORAME: Mr. Chairman, there's actually two of us. My name is Tony Dorame, and I'm Lieutenant Governor of 6 7 Tesuque. CHAIRMAN FESMIRE: Why don't you have a seat, and 8 we'll do it one at a time here. And would you restate your 9 10 name here so the court reporter gets it correct? MR. DORAME: All right. Sure. My name is Tony 11 12 Dorame, D-o-r-a-m-e. Again, I'm Lieutenant Governor of Tesuque Pueblo, and I'm here to speak to a matter that's of high 13 interest to me and the pueblo as well, and that has to do with 14 15 the wildlife concerns that we have regarding the project. And I'd like to read a prepared statement, but I'd 16 17 also like to add to that I'm also formally trained as a biologist, so my remarks not only are about our interests 18 19 culturally speaking, but it's also something I hold very dear 20 to my heart. I'm here to comment on behalf of the Tesuque Pueblo 21 22 and your proposed revision to regulations applicable to exploration and drilling in Santa Fe County and the Galisteo 23 Basin. Tesuque Pueblo is very concerned that the proposed 24 amended regulations do nothing to prevent negative impacts on 25

wildlife caused by oil and gas exploration and drilling.

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The continued health of wildlife within the overall ecosystem is critically important to the pueblo because wildlife is important in our overall traditional culture. The pueblo is especially concerned about recent scientific findings establishing the multiple, detrimental impact oil and gas exploration development have on wildlife, including loss of habitat, habitat fragmentation, morbidity due to ingestion of toxic chemicals, electrocution of hawks and eagles by power lines and severe disruption of nesting and mating behavior.

Exploration also frequently results in invasion of undesirable, noxious, non-native plant species which fundamentally change habitat. It is therefore critical for the public and for the pueblo that this biological impact of exploration be a factor in the approval of or denial of permits.

In general terms, we would like to know if any 17 endangered species studies or other wildlife studies have been 18 done in the area. If such studies exist, we would like to 19 20 review them. In specific terms, we believe the impacts on 21 wildlife should be considered as a factor in determining 22 approval or denial of a plan. In addition, OCD should require 23 that the New Mexico Department of Game and Fish monitor the 24 health of wildlife before and after a plan is put into effect 25 and that adaptive management practices to mitigate previous

unknown effects are put in place. Impacts on wildlife should 1 2 also be addressed in each development plan's contingency plan. Last, we think OCD should consult with the tribes and 3 pueblos of New Mexico on any wildlife impacts before any permit 4 is granted consistent with Governor Richardson's executive 5 6 orders. And that's my comment. 7 8 CHAIRMAN FESMIRE: Thank you, Mr. Dorame. You indicated there was someone else that would like to speak? 9 10 MR. DORAME: Yes. Mark Mitchell, who is former Governor from Tesuque Pueblo, would like to speak as well. 11 CHAIRMAN FESMIRE: Mr. Mitchell? 12 MR. SMITH: May I say something? 13 CHAIRMAN FESMIRE: Sure. 14 15 MR. SMITH: Lieutenant Governor Dorame, just so there isn't any confusion, your request to review wildlife studies, I 16 17 think probably the thing to do if you really want to see those, would be to submit something in writing to the Division and let 18 them treat that as a request under the Public Records Act, 19 Inspection of Public Records Act. Because what I don't want to 20 be is for the Commission to be in a position to have to 21 22 remember things like that in the testimony and then produce that material. 23 24 CHAIRMAN FESMIRE: Okay. That's basically the same 25 thing that was filed either as a comment or as a -- yeah -- as

a comment earlier in this proceeding, hadn't it? Okay. 1 2 MR. DORAME: Thank you. MR. MITCHELL: Good afternoon. Mr. Chairman, members 3 of the Commission, my name is Mark Mitchell, former Governor of 4 5 the Pueblo of Tesuque, and I also serve as their Historic Preservation Officer. 6 I'm here in support of the SHPO's statement earlier. 7 I'm also here to inform that the Galisteo Basin area is alive 8 9 and well, from its plants to its wildlife to its humans that live out there. As part of my point of view is our culture 10 11 hasn't gone away. We still practice our culture, and we do visit this area periodically -- or I should say throughout the 12 13 whole year, depending on whenever the traditional calendar calls for us to get out there. 14 15 And we also look at the area as far as comparing 16 areas to the Galisteo Basin versus the Jicarilla Ranger 17 District, because we also have items in that area, and I know 18 first hand what oil companies and drilling companies can do to a certain area. 19 20 So I'm here on behalf of the Tesuque Pueblo in hopes 21

that this Commission does see fit or see to the fact that along the way, that there is consultation with the tribes that are going to be affected by this and making sure that the area that was stated earlier by the SHPO, Ms. Slick, referencing that only 12 percent of the Galisteo Basin has been surveyed and

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making sure that the archeological sites are protected, that the petroglyphs are protected.

I did submit a written testimony. I don't know if you all received it, but because we were kind of at the last minute changing things, so we were just shooting from the hip at this time. But I also want to -- hopefully you guys had read this letter I had sent in before. And that's where I stand with this, if you have any questions.

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CHAIRMAN FESMIRE: Thank you very much, Mr. Mitchell. MR. MITCHELL: Thank you.

11 CHAIRMAN FESMIRE: We will also have an opportunity 12 this afternoon for public comment before we adjourn, but if 13 there's anybody that's on a time constraint that would like to 14 make a comment now?

> Seeing none, we'll continue with the proceeding. Tom, would you like to retake the witness stand?

17 The record should reflect this is the continuation of 18 the testimony of Mr. Tom Morrison.

19 I believe that we will start with the questioning by 20 Commissioner Bailey.

EXAMINATION

22 BY COMMISSIONER BAILEY:

23 Q. Let's look at Exhibit 40 first. On page 4, you 24 have a section on contamination sites and the first bullet say 25 cyanide and metals contamination have been detected at the

1 Ortiz Mountain mine site. Is that in groundwater, or is that 2 soil or --A. I obtained this information from the Jemez y 3 Sangre Regional Water Plan, and they did not specify, but I 4 assume that it's both to the soil and the groundwater. 5 6 O. And do the metals also include arsenic and 7 mercury? 8 Α. I don't know. Okay. Are you aware of arsenic and mercury 9 Q. contamination within the Galisteo Basin? 10 11 A. No, I'm not. 12 Ο. How about septic tanks? I've been told that septic tanks are one of the major contributors to groundwater 13 14 contamination, but yet you don't list it here as a 15 contamination source. A. Yes. Domestics may cause a problem with 16 nitrates, but it's very site specific. Any time you have a 17 septic tank which is where the depth of water is very shallow, 18 there's a potential there for sometimes nitrates to reach the 19 20 water level. But I was mainly looking at the overall -- I 21 wasn't -- you know, septics are a problem throughout the State, 22 depending on your situation, so I didn't specify those. 23 Q. So this is an incomplete list, is what you're saying? 24 25 Α. I'm saying that I listed the sites that were

1 listed in the Jemez y Sangre Regional Water Plan. They had a 2 section there on contamination sites, and that's where I got 3 this information. Q. Looking at Figure 2 in this same exhibit for 4 total dissolved solids, I notice that the source map is dated 5 1980. Is this information from 1980 for the TDS --6 7 A. Yes. Q. -- or has it been updated with the proliferation 8 9 and explosive growth in that area? A. I'm not aware of any comprehensive study that's 10 up to date. I used Mr. Mourant's study because it was 11 comprehensive and it was done by the USGS and, yes, there's 12 additional data out there, but due to time constraints, I did 13 14 not use that. Again, the purpose for my evaluation was to 15 16 characterize where the fresh water was located. And based upon this information, I feel that it's, you know, the information 17 18 provides a fairly realistic representation of the water quality in that area. 19 20 Locally, it may change differently. I'm trying to 21 say that I'm using average values with the condition that if 22 you drill a well in this spot, it could change from these values because the geology is so complex. 23 Q. But over the past 30 years, nearly, you have not 24 25 updated the information for this rule-making session?

1 Α. No. 2 Q. Okay. 3 I was asked to prepare a report, and I was not Α. really authorized to go out and collect field data. That was 4 5 beyond the scope of my project. Q. Or that had already been collected and you 6 7 haven't updated? 8 A. Again, I utilized the USGS studies because they 9 were fairly comprehensive. 10 Which takes us to Exhibit 39 with Figure 2. Ο. Is 11 this data also nearly 30 years old? A. No, it's not. We're constantly maintaining and 12 13 updating our database. 14 Q. How old would you say that this number of existing water wells is? 15 16 Α. I'm sorry? How old is the information on this? 17 Ο. 18 This information was put together last spring Α. 19 when we were preparing our exhibit, so I assume that it's up to 20 date to about last May or April. 21 Q. Other questions on your testimony: You've given 22 us a lot of very useful information about the Galisteo Basin, 23 but this rule is also going to apply to the rest of Santa Fe 24 County but yet we don't have the information from you as to 25 applicability for the rest of Santa Fe County. Can you provide

us with that information, or should we not even consider going 1 outside of the Galisteo Basin? 2

A. I'm sorry. I provided an overview of the 3 hydrogeology of Santa Fe County. If you'd like additional information or have specific questions, I can answer those. 5

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Q. Okay. Can you discuss the intervening and the possible transport and communication between the water wells in the northern reaches of the county?

A. Yes. The wells in the northern part of the 9 county are again producing from the Santa Fe Group aquifer, and 10 that's a thick sequence of sand and gravels, clays and silts. 11 12 The sediments are very well connected to one another, so the way you pump from a sand layer probably those affects are going 13 14 to propagate through the other formations.

The administrator of the Santa Fe area is stream 15 connected. What that means is when you pump a well, you're 16 going to be affecting the Rio Grande, the tributaries and also 17 the springs that are in the area. So the system is very well 18 19 connected hydrologically.

20 Q. How does that tie in with your comment that the 21 saturation thickness disappears by San Marcos?

22 Well, your previous question was about the Α. 23 northern part of the county. Now, the San Marcos Arroyo is basically where the Santa Fe Group aquifer ends. It's very 24 thick in the northern part of the county, but as you proceed 25

southward towards San Marcos, it pinches out, so it becomes unsaturated in that area.

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If you can visualize, it's like a bathtub and Galisteo Basin is sitting on the lip of the bathtub where there's a very, very shallow amount of the water.

Q. So would you say there's very little communication between groundwater south of the Galisteo River near San Marcos with any wells to the north of it?

A. There's very little information. The geology is very complex. For administrative purposes, we would assume a good connection because we're here to protect the Rio Galisteo and ensure that other wells are not dried up by the proposed application.

The answer to your question is really very case specific and oftentimes we really don't have enough information to really answer that question. We have to make assumptions 16 17 based upon the available information that we have.

18 Q. I'm a little confused because in the context of 19 the question concerning monitor wells, you said that the State Engineer does not require monitor wells because if you move 20 21 just a short distance, you'll encounter a different formation.

I'm not sure if I said that. We do condition a Α. number of our permits to require monitoring wells. We've done that for the City of Santa Fe, the City of Alamogordo; there's been some others. But that's about the only place where we

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require monitoring wells.

The State does have an investigative program where we have installed monitoring wells. Some are in certain areas where we want to study the resource in a much greater degree, but we've not done any of those monitoring wells in Santa Fe County. We do have a cooperative program with the U.S. Geological Survey where we go out and collect well data with them. All that information is compiled and put in a database that's available to everybody.

Q. I'm sorry. I did not quite understand what you were saying when a monitor well is required except in a contamination case?

A. I am talking about water right applications where 13 14 most of these were not concerns related to contamination. Ιt 15 was related to the effects of wells upon the aquifer. How 16 water levels are going do drop is our main reason for requiring 17 these monitoring wells. We want to ensure that there is no 18 impairment to existing water rights, and sometimes there's a 19 question about whether our calculations are correct. And so in those instances, the State Engineer will often require the 20 21 applicant to install monitoring wells so we can ensure other 22 rights are not being impaired.

Q. Is that a short term for a pump test is what you're telling me?

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A. No. I'm talking about the installation of

long-term monitoring wells where we collect information
 continuously into the future.

Q. Then the comment about communication between wells in the Galisteo Basin because of the complex and fractured geology, there is or there is not good communication between the water wells in that area?

A. It is highly variable. I can't see beneath the ground surface to see where all the fractures are. It's very complex and fractured. Hydrogeology is one of the areas where there's often a great deal of uncertainty. Sometimes you can see the fractures on the surface, but it doesn't tell you what's in the subsurface.

So, you know, determining whether or not a well is connected or not is very difficult. But for ensuring the water rights are protected, we assume that connection is there. We don't want to have a proposed well go in where we assume that it's not connected, but it really is. When we don't know something, we're very conservative. We're conservative by assuming that there's a connection.

20 COMMISSIONER BAILEY: That's all the questions I
21 have.
22 CHAIRMAN FESMIRE: Commissioner Olson?
23 EXAMINATION
24 BY COMMISSIONER OLSON:

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Q. Well, Mr. Morrison, I guess I am having the same

concern Commissioner Bailey did just on the information that you provided. You provided pretty extensive information on geology and hydrology of the Galisteo Basin, but I guess we don't have any information on the remainder of Santa Fe County and why it should have special restrictions, then.

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A. My job was to prepare a report on the Galisteo 6 7 Basin. I'm able to offer information on the rest of the county 8 and how it relates to the Galisteo Basin, just so we understand the geology of the entire county and how it fits in with the 9 10 Galisteo Basin. But I did not do my study for the entire Santa 11 Fe County for this project.

Q. And so I quess for the Galisteo Basin, that's considered a limited resource is why it's a designated basin for State Engineer?

15 Α. No. The Galisteo Basin is in the Rio Grande 16 Underground Water Basin because we found that it has reasonably 17 ascertainable boundaries and that there is a need for orderly 18 management of the resource. By declaring a basin, that 19 requires any person who wants to use a water well for 20 beneficial use to come into our office and apply for a permit 21 to drill that well.

So, you know, the entire Rio Grande is a basin 23 because we're concerned that when you do pump a well, it's going to affect the surface water sources like the Rio Grande 25 and other springs, but it may also affect nearby wells. So we

1 declare a basin to ensure that there's no impairment. 2 Q. Then I guess within this basin as far as water 3 use, groundwater is pretty much the sole source of the drinking 4 water throughout the Galisteo Basin? A. Yes. 5 Okay. 6 Q. COMMISSIONER OLSON: I think that's all I have. 7 EXAMINATION 8 BY CHAIRMAN FESMIRE: 9 Q. Commissioner Olson hit on my question there at 10 the last: There is no surface water supply for the major 11 population center out there, specifically El Dorado; is that 12 13 correct? A. That's correct. 14 It's all groundwater from this thin system that 15 Ο. 16 you were talking about? Α. Yes. 17 18 Q. You mentioned that in some places outside of the basin you've got thicknesses of 1,000 feet or more in the 19 20 aquifer --21 A. Uh-huh. 22 0. -- but in the basin I didn't quite catch that. That's in the Santa Fe Basin that's here in Santa 23 Α. 24 Fe, and as you progress northward. And as I said, as you move 25 south towards the Galisteo, the saturation thickness decreases.

1 Ο. Okay. What kind of a typical saturated thickness would you encounter out there? I know that it's incredibly 2 3 variable because of the fractured nature of the system, but say around El Dorado, what kind of saturated thickness are you 4 running into; do you know? 5 6 A. It's variable. And again, it feathers out to 7 nothing. So it really depends upon the exact location where you're at. 8 Q. Okay. But where the water exists, I think what 9 10 you're telling us is that's an extremely transmissive aquifer? A. Yes, relative to the Galisteo Basin, it's very 11 12 transmissive. Q. Well, I'm talking about the Galisteo Basin. 13 14 Oh, the Galisteo Basin? Α. 15 Q. Yes. 16 The Galisteo Basin formations are a lot less Α. 17 transmissive compared to the Santa Fe Group and also the aquifers in the Estancia Basin in general. 18 19 Q. So in the Galisteo Basin, are there any defined directional transmissivity anomalies? I mean, is there a 20 21 preferential transmissivity in the basin? 22 The numbers are all over the place. You know, Α. 23 again, since it's fractured controlled to a large degree, you 24 can get good producing wells with a high transmissivity, 25 relatively, and then there's areas where you have dry holes

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2 Q. So I guess what you're telling us, generally, you 3 can't say anything generally about this basin, is that right?

A. Yeah. So we rely upon data and with the absence of data, we're just able to talk about it in general. We do have a knowledge about the rocks, and when we know about the rocks, we can talk in general terms about how water is obtained from those rocks. But we don't know for sure until you drill the well.

Q. Would the State Engineer's Office consider the Galisteo Basin over appropriated, under appropriated, or do we have enough information to know for sure?

A. I don't think that determination has been made.

Is there enough water in the Galisteo Basin?

14 Q. Well, from the information that you generated and 15 looked at for this report, is there a sufficient supply out 16 there?

A. Can you rephrase that question?

A. Well, it depends on how much you need and where you're located. If you have a stock well and you're able to get one or two gpm, yeah, you have enough water.

If you're a community of El Dorado or something and your well isn't producing more than 50 gpm, maybe that's inadequate. There is a general lack of water availability in the area. It's difficult to get water in certain areas. When

you drive out there, oftentimes you see homes with these huge water tanks. Well, the reason why they have water tanks usually is because either their wells aren't working or they are producing very little water.

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It's just highly variable. It depends on where you're at. The basin has not been explored. In other areas we have groundwater flow models. We have numerous investigations. For the Galisteo Basin, we really don't have that.

9 Q. Okay. I'm getting the feeling here that we can 10 generally say that there's not enough known about this basin to 11 really make the predictions and estimates that we would need to 12 know.

That was a very bad way of putting it, but there just 13 isn't much known about the water situation out there, then, I 14 15 guess, is what you are telling us?

16 A. It's very localized. There are a number of 17 subdivisions out there and the Subdivision Act requires that they follow through and meet the county's subdivision 19 regulations. In Santa Fe County, they require aquifer tests to 20 complete. So in those areas they may do an aquifer test and they may know quite a bit about their little local area.

But we don't have any large comprehensive study. Like in the Santa Fe area, we know the basin really well between the Sangre de Cristos and the Rio Grande. We have numerous wells; we have numerous well logs; we've had many

aquifer tests. In the Galisteo Basin, the data is much more limited.

CHAIRMAN FESMIRE: That's all the questions I had.

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COMMISSIONER OLSON: Just to follow up on that: I guess we're talking about the El Dorado area and water supplies over there. There's some pretty extensive development that's occurred over in the El Dorado area. I think there are some 3,000 homes out there today. Most of them are served by a public water supply system.

Are you aware that there have been limitations on growth over there due to concerns over the water supply in the El Dorado area, such as the county's had moratoriums on development out there? And I believe the El Dorado area has been under water restrictions for some length of time there due to concerns over the availability of water. Are you aware of all that?

THE WITNESS: Yes, I am.

COMMISSIONER OLSON: Okay. That's all I had.

CHAIRMAN FESMIRE: Mr. Morrison, is there any place else in the State where we've got this sort of confluence of pretty tremendous growth like we have in the northern part of the Galisteo Basin and the lack of water? Is the whole State like that?

THE WITNESS: Oh, no. Generally, our problems are in the mountainous areas like in Ruidoso. We have a mountainous

area where the geology is very complex. There's a lot of 1 2 faults. We also have a lot of development in that area around Ruidoso. The areas around Cerrillos, the area La Cienega, the 3 area around Placitas, New Mexico in the Sandias. 4 Most of other areas of large alluvial basins where we 5 know guite a bit about and there's really plentiful water. One 6 7 exception to that would be in the southeast part of the State where you have the Ogallala, which is an alluvial basin, but 8 9 it's very thin. 10 So generally, when you hit the mountainous areas, 11 that's where you have much more complex area problems and also 12 a lack of information. 13 CHAIRMAN FESMIRE: Ms. MacQuesten, I have no further 14 questions. Do you have a redirect of this witness? 15 MS. MACQUESTEN: No, I don't. 16 CHAIRMAN FESMIRE: Mr. Morrison, thank you very much. 17 MS. MACQUESTEN: Mr. Chairman, may this witness be 18 excused? Or do you need him to remain? 19 CHAIRMAN FESMIRE: Mr. Hall, do you see any reason 20 why this witness can't be excused? 21 MR. HALL: I see none. 22 CHAIRMAN FESMIRE: Ms. Foster? 23 MS. FOSTER: No. 24 CHAIRMAN FESMIRE: Mr. Morrison, thank you very much. 25 MS. MACQUESTEN: I'd just like to express thanks from

the OCD to the Office of the State Engineer for allowing 1 2 Mr. Morrison to testify today. And I would also like to wish 3 Mr. Morrison a happy birthday. 4 CHAIRMAN FESMIRE: Happy birthday, Mr. Morrison. It's now preserved in perpetuity on the record. 5 Ms. MacQuesten, is your next witness ready? 6 MS. MACOUESTEN: Yes. The OCD calls Brad Jones. 7 CHAIRMAN FESMIRE: Mr. Jones, since we didn't get 8 9 your name on the record when you were initially sworn, we're 10 going to ask you to be sworn again. 11 BRAD A. JONES 12 after having been first duly sworn under oath, 13 was questioned and testified as follows: DIRECT EXAMINATION 14 15 BY MS. MACQUESTEN: 16 Q. Would you please state your name for the record? 17 A. Brad Jones. 18 Where are you employed? 0. 19 Α. The Environmental Bureau of the Oil Conservation 20 Division. 21 What is your title? Q. 22 Environmental Engineer. Α. Would you please summarize your education and 23 Q. 24 work experience related to environmental regulations? 25 I have a Bachelor's of Science in environment Α.

health from the University of Georgia. I have over ten years of professional experience in regulatory and environmental applications. I've been with the Oil Conservation Division since July 2006, approximately two-and-a-half years.

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Prior to that -- well, let me explain what I do for the OCD, I guess. Currently, I've been commissioned to help draft several regulations and policies. I provide training on those regulations to the public, industry and consultants on how to implement those regulations.

I also review permit applications for permits issued under the Water Quality Control Commission; regulations such as discharge permits and hydrostatic test permits for discharge. I also review permit applications for surface waste management facilities.

Prior to coming to OCD, I worked for the New Mexico Environment Department for the solid waste bureau where I was involved in permitting municipal solid waste landfills. I also dealt with groundwater monitoring issues with those types of facilities.

20 Prior to that, I was working for the State of Florida 21 for their Department of Health as an environmental specialist 22 where I designed, permitted, inspected and approved onsite 23 sewage systems. For a short stint I worked for a private 24 consulting firm where I performed investigations or remediation 25 cleanups of underground storage tank contamination sites.

1 And then I also worked for Highland County Health Department, which is located in the State of Washington for 2 that county. I was overseeing the solid waste programs that 3 they had implemented there as well as voluntary cleanup 4 programs of contaminated sites and also oversaw the cleanups of 5 meth lab sites. 6 7 Q. Given your work with the OCD, are you familiar with the OCD's regulations and permitting with regard to 8 environmental issues such as solid waste management facilities 9 10 and environmental cleanups? 11 Α. Yes. Q. Have you testified before the Oil Conservation 12 Commission in other cases? 13 14 A. Yes. I testified in the Pit Rule hearing. Ι 15 believe that's Case 14015. 16 Q. In that case, were you accepted as an expert in 17 environmental engineering and environmental regulation? Α. Yes. 18 19 MS. MACQUESTEN: I would offer Mr. Jones as an expert in environmental engineering and environmental regulation. 20 21 CHAIRMAN FESMIRE: Mr. Hall, any objection? MR. HALL: An expert in environmental engineering and 22 what? I didn't catch the next part. 23 24 MS. MACQUESTEN: Environmental regulation. MR. HALL: No objection. 25

1 CHAIRMAN FESMIRE: Ms. Foster? 2 MS. FOSTER: Thank you. May I ask the witness some 3 questions? 4 CHAIRMAN FESMIRE: You may take the witness on a 5 short voir dire. 6 MS. FOSTER: Thank you. 7 VOIR DIRE EXAMINATION 8 BY MS. FOSTER: 9 Q. Mr. Jones, what is your degree in? 10 Environmental health science. Α. 11 Okay. So you don't have an engineering degree? Ο. 12 No. Α. 13 But you have a health science degree? Q. 14 Yes. Α. 15 0. What exactly does that cover? 16 Anywhere from toxicology to epidemiology to Α. 17 groundwater monitoring to solid and hazardous waste management 18 to air quality to industrial hygiene, applications, 19 regulations, public and environmental law. 20 Q. And in your degree program, did you take any 21 engineering courses at all? 22 A. No. 23 MS. FOSTER: I would object to having him as an expert in environmental engineering. 24 25 CHAIRMAN FESMIRE: Ms. MacQuesten?

1 MS. MACQUESTEN: May I ask Mr. Jones some question? 2 CHAIRMAN FESMIRE: You may, ma'am. 3 MS. MACQUESTEN: What is meant by environmental 4 engineering? MS. FOSTER: I'm sorry. I didn't hear you. 5 6 MS. MACQUESTEN: What is meant by environmental 7 engineering? 8 THE WITNESS: I think it's broad-based. It's the 9 application of environmental principles. So, you know, when you talk about engineering, it doesn't have to be construction 10 11 or design of some type of facility or feature. It could be the 12 implementation of concepts, environmental concepts. MS. MACQUESTEN: Is this a term that is used 13 14 routinely in the environmental field? 15 THE WITNESS: Yes. I mean, you can be an 16 environmental engineer, an environmental scientist, an environmental specialist -- they could all be used to represent 17 18 the same thing. 19 MS. MACQUESTEN: Okay. CHAIRMAN FESMIRE: Mr. Jones will be accepted as an 20 21 expert in the fields requested. 22 CONT. DIRECT EXAMINATION BY MS. MACOUESTEN: 23 24 Q. Mr. Jones, are you familiar with the two new 25 sections that the OCD is proposing in this case?

1 Α. Yes. 2 Ο. And, in fact, did you suggest some of the 3 modifications proposed by the Division in its November 24th pleadings? 4 5 Α. I did. Is OCD Exhibit No. 2 a copy of your written 6 Q. testimony reviewing those proposed sections with the requested 7 modifications? 8 9 A. Yes. 10 Ο. Did you work with me to prepare that written 11 testimony? Yes, I did. 12 Α. Have you reviewed it, and do you accept it today 13 Q. under oath? 14 15 A. Yes. MS. MACQUESTEN: Mr. Chairman, at the close of 16 Mr. Jones' testimony today, I would move for the admission of 17 18 No. 2, giving, of course, Mr. Hall and Ms. Foster the opportunity to cross cross-examine Mr. Jones first. 19 20 At this time, I would like to continue with a summary of the testimony and some additional questions. 21 22 CHAIRMAN FESMIRE: Please do. 23 (By Ms. MacQuesten): Mr. Jones, does your 0. 24 written testimony go through the proposed sections paragraph by 25 paragraph in the order in which they appeared?

1 Α. Yes. I'm going to ask you to take a different approach 2 Q. 3 in explaining the proposed rules today. Would you please walk us through what an operator would need to do to drill a well in 4 Santa Fe County or the Galisteo Basin under the proposed rules? 5 6 A. Okay. I guess --If I could, as you do that, I would ask you to 7 Ο. refer to Exhibit No. 22. Is this the red line version of the 8 9 proposed sections? These are the recommended changes. 10 Α. Yes. 11 Ο. The items in red are the recommendations proposed 12 by the OCD? 13 A. Yes. CHAIRMAN FESMIRE: So the OCD is proposing changes to 14 15 the OCD proposed rule? MS. MACQUESTEN: Yes. After filing the original 16 17 application, we did file a request for certain modifications to the rule. That was filed on November 24th, the same day that 18 19 any person interested in filing modifications would have been 20 required to file. CHAIRMAN FESMIRE: Okay. So this is in response to 21 22 the modification and requests and comments filed by other 23 parties? 24 MS. MACQUESTEN: Only in part, because we didn't 25 receive them until that day. So to the extent that there were

1 comments that we could address in modifications, we tried to do 2 so, but these modifications also reflect additional concerns 3 that Mr. Jones and other members of the Environmental Bureau brought to light --4 5 CHAIRMAN FESMIRE: Okay. 6 MS. MACQUESTEN: -- independent of the comments that 7 were received by other interested persons. 8 CHAIRMAN FESMIRE: Okay. Please proceed. 9 THE WITNESS: I guess with any type of application 10 process that we usually have, there's basic information that is 11 usually requested. There's always the who, the where, the 12 how -- that type of information that we're looking for. 13 In this case, this rule requires that an applicant 14 looking to do some type of development into this area, be it Santa Fe County or the Galisteo Basin, submit an application. 15 16 And the application would be for an Exploration and Development 17 Plan. 18 So in this case, we are looking at the who, we are 19 looking at the contact information of the operator, who they 20 are, their address, telephone number, address, e-mail address, and so forth. The where we are looking at is the area that's 21 22 going to be covered by the plan. This should include an 23 estimate of the productive area. The what would be the target 24 zones that they are anticipating encountering for their 25 production. And, of course, the how would be the plans and

methods that the operators propose, which we will get to here 1 2 shortly as we walk through this process.

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So in order to assess these proposals -- for OCD to assess these proposals in the Exploration and Development Plan, certain items have to be provided. We request in this proposed rule that we receive a topographic map of the area as covered by the plan and also include a half-mile -- an additional half-mile beyond that area.

And the importance of something like that would be to 9 10 be able to assess what additional features may encroach or be 11 impacted by that. There may be -- if you noticed earlier on 12 the other maps, there are creeks and other type of drainage 13 features. Those features may impact certain activity for 14 certain accumulation of surface runoff that may impact where 15 someone is going to have a well. So we want a broader stance. 16 We not only want to look at the area that's being proposed, but 17 we want to see what's around it as well that may have an impact on the activities within that area. 18

19 Other types of maps that are going to be required and 20 are being proposed here to be submitted would also encompass 21 that area and that half-mile radius, but would plot certain 22 features so we can see what's in that area of development 23 that's surrounding it.

In this case, we're looking at things such as ownership boundaries. That could be State, federal, private, 25

tribal, municipal or county type boundaries. So we want to see what impact that has, and we'll talk about the importance of that here in a second.

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Other types of features would be farms, plotting locations of farms. The importance of something like that could be influenced by if there's a farm, there's probably some type of irrigation, water use, on there. There could be wells that have not been permitted under the Office of the State Engineer because of that area being declared. So if there is a farm, if there is farming activity, there might be an irrigation well linked to that farm that may not be documented. So there's things while we're looking at certain features.

Of course, there's other types of features such as 13 14 buildings and infrastructures. Those could include highways, 15 roads, railroads, pipelines, power lines, antennas, wind 16 turbines, solar farms and mines -- and these mines are surface 17 and subsurface. These could be looked at for access to certain 18 properties. Instead of developing roads when there are roads 19 present, it could have the impact of -- lower impact of surface 20 disturbance.

These also may be able to identify certain common easement right-of-ways in case there is a need to develop infrastructure such as pipelines to these proposed wells. But the subsurface mining, there may be some type of consideration to additional engineering considerations, depending on what's

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being proposed in the plan.

Other things that should be plotted on these maps are water courses, sinkholes, playa lakes and unstable areas. These types of features may identify certain siting that may have to be addressed or commented on due to certain permitting used regarding the proposed activity, such -- well, there's certain features that they're going to have to identify, certain facilities that they may have to identify, if they propose a surface waste management facility, be it centralized 10 or commercial, to handle their waste as requested under this proposed rule.

12 There may be siting restrictions in their initial proposal to be brought up during the hearing process and 13 identified of issues they may encounter or exceptions or 14 waivers they may have to request. There's also municipal fresh 15 16 water fills that also need to be plotted out on here. This goes back to identifying those boundaries, such as municipal 17 boundaries or county boundaries on the map. You may be able to 18 assess if there are or will be in the future certain features 19 20 like that where there will be a huge draw from a certain area 21 of water that could potentially be impacted by the activities proposed under this plan. 22

Of course, wellhead protection areas -- we use that term -- that's a general definition that we use within our regulations, and it's defined. We're looking at the location.

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Once again, it could be a siting issue linked to this. We want these things plotted, those wells plotted, so we can identify where they're at, because they may impact, once again, the proposal itself. The activities that they chose to propose in the plan, there may be limitations on what they can do, and these need to be brought to our attention.

Once again, that would go back to possibly certain things not being documented, certain wells not being documented, due to the limitations on databases or just those -- this will go back to things like the buildings, the infrastructure, the farms. Usually if you've got a cluster of houses and you're having to plot those in on this area that you're proposing be covered in your plan, if there's not a well identified with those houses, that should be a red light to ask more questions about that. Where are they getting their water? What is the source of their water? They may have an undocumented well out there that was prior to Office of the State Engineer declaring that area and permitting and also including that in their database. So it may be something that's not in the database, but is existing.

Of course, other features would be all existing oil and gas wells in the proposed area and the locations of the proposed exploratory wells and related facilities. This is what I was getting at earlier. There could be tank batteries, gathering lines, waste disposal facilities, pressure stations,

access roads. We want to see what they're actually proposing, to see if there are existing right-of-ways and so forth that could be utilized and applied rather than constructing new roads to get out to areas that may not be necessary.

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So there are these items. Now, for this plotting on these maps, of course, if there are areas which are unsurveyed such as land grants or certain tribal lands or areas that haven't been surveyed under the -- I'm trying to remember -the public lands survey system -- those areas will require some type of GPS coordinates in order to identify and plot those locations.

Additional things that we're asking for under this would be a hydrogeologic and site report. With that, we're looking at the area's topography soils, geology, surface hydrology, groundwater hydrology. We're going to be looking to see what potential effects these proposals may have.

17 Other proposed plans that we're asking for would be a 18 groundwater monitoring well and installation plan. It's a 19 plan. It's not saying that you're actually going to have to do it, but the reason that we're asking for these types of things 20 21 would be if you're proposing a surface waste management facility. Right now currently, through the permitting process, 22 we would be asking for people to go out to actually demonstrate 23 that site-specific area. So the insulation of wells is 24 25 something that we're looking at and siting those.

We want to know site-specific what the hydrology is of the site. Where is the shallowest water-bearing zones? So those plans may be able to address those issues. So to have them prepared and submitted as part of this application will address the concerns of looking at certain areas and the proposed activities that they may have.

Of course, we are also looking for a plan for the drilling program, a mud logging program. And, of course, this mud logging program, the items that we ask for would be used to address the conditions in Section 10 as being proposed as well.

A waste management plan: Now this is a plan that we're looking at to address proper waste management and suitability for permitting, which is outside of the approval of the plan itself. But, you know, we want to know what's going to be generated in the drilling process and the production process and how is that going to be handled.

Of course, a plan to minimize pad size is to consolidate the facility. The idea there is to reduce the surface disturbance and promote low intact standard operating procedures, and, you know, to consider those type of aspects. And, of course, plans for developing the area, this will assist in OCD's assessment of the prevention of waste and protection of correlative rights, so we would be looking at those types of developing areas and how it's going to be produced.

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A written contingency plan is also part of the

1 application that the operator would have to provide. This will 2 be a mechanism to provide an extra level of protection for this 3 area for a response to see the availability of the resources 4 that are there to respond to any type of emergency. But it's 5 also a preventative-type thing and a detection-type aspect. So 6 the goal is to address this plan to address in a preventative sense and also in a detection sense. So there should be also, 7 8 you know, what measures can you put in there to address those. 9 We're looking at things like BMPs, best management practices.

10 And, of course, there's -- I believe it was Ms. Slick 11 with SHPO who had pointed out our provision 9 here, 12 paragraph 9, which would address those cultural resources 13 listed or eligible for listing with the federal government or 14 the State. And this is so that we can comply with the Cultural 15 Properties Act, and I'll talk about that later in a little bit 16 more detail.

And then there's the proposed exceptions that are based on Section 10 that, you know, the applicant should be identifying what those exceptions requests are and justifying why a section should be granted.

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The goal of this is that, you know, a lot of this information that is being requested in the application itself is information that will or is somewhat required in the permitting process. So basically, we're gathering the information up front to look at a more broad aspect of things.

So a lot of this information would eventually be required under the other rules for submittal of applications.

So it's not like we're asking for stuff that wouldn't be useful in some other fashion. Because once you get your plan approved, you have to go seek your permits, and with that, a lot of this information can be applied in those application packets because they will be required under those rules.

MS. MACQUESTEN: Let me stop you right there and alert the Commission and opposing counsel to the fact that Mr. Jones is not the only witness that we have to discuss these various components of the Exploration and Development Plan.

Mr. Will Jones is going to be addressing mud logging and drilling programs specifically, and Mr. Glenn Von Gonten is going to be addressing most of the components of the plan, specifically numbered paragraphs 1 through 8 under Subsection B. So Mr. Brad Jones is not the only witness on those items.

Q. (By Ms. MacQuesten): Mr. Jones, what happens after an operator submits an application for an Exploration and Development Plan? What's the next step?

A. Well, there's an admin and complete review process. With that, the OCD will be looking to see if the information that's identified in Section B of the rule has been provided. In a lot of cases, there's specific things that are identified that have to be provided. So we'll be making sure

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of that. A good example would be the mud logging program. It says include a log sheet. We're going to be making sure there's a log sheet in there.

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It's not a comprehensive review. It's to determine, do we have the maps -- do we have maps that have these items plotted? Do the plans have what's specified in that section? It's a general for content not context type review. So the admin complete review is to see if the packet is complete for the information that's required.

And I guess what I'm trying to get at here is that the information provided inside here is not to determine if it's accurate, you know. That would be more like a technical review. And in this case, it's just a completeness-type thing. Does it have the information that's stipulated under B of this section?

Q. Does a determination that an application is administratively complete mean that the OCD endorses the application?

A. No. It just means that the information required
by B of this -- Section B -- has been provided.

Q. Does it imply that the application has sufficient
information to support approval of the plan after hearing?
A. Not necessarily.
Q. It simply means you get to go to the next step?
A. Absolutely.

What happens if the OCD does determine that the Q. application is administratively complete? What does the OCD do next?

Well, I mean, there's certain items -- I probably Α. 5 left out two or three, like the legal notice and then the certification from the operator. 6

But what the Division is supposed to do at that 7 point, they're supposed to notify the operator that they've 8 determined that they provided the information requested --9 required by the rule -- and that, you know, it is determined to 10 11 be admin complete.

12 And they would proof their notice. They're required 13 to give us a notice. It's a legal notice. So we would give them back the approved notice. We would also provide them a 14 contact list of persons who want to be notified of anything 15 related to this application. We would distribute a notice on 16 17 the next OCD docket. We would post the legal notice that we 18 would approve from the applicant and the application itself on the website. 19

And then we would provide a complete application to 20 21 the State Historic Preservation Office with a request to review and provide comments on the application. 22

What does the operator do once his application is 23 Ο. 24 deemed administratively complete?

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They're responsible for publishing the legal Α.

notice in the newspaper. They have to provide notice by certified mail to certain parties such as mineral interest owners, surface interest owners, leaders of tribes, pueblos and nations, counties and municipal government and also the State Historic Preservation Officer and Game and Fish.

They're also required to provide notice by mail or e-mail to those parties who have expressed interest to want to be notified of anything relating to the applications.

Q. Could you describe what's required, then, to be in that notice?

A. Well, what they should have in their notice, which we will approve, would be their contact information, who they are and their contact information. They should include a summary of the proposed plan. They should identify the area that's going to be covered by the plan and the number and location of the proposed wells and related facilities that they have proposed in their plan.

They should also include instructions to the public or to the parties being notified for viewing the application online or at the OCD office. They also should provide instructions on filing written comments about the application to OCD. With this notice, since this admin complete would mean that we're going to hearing, they should provide information on the hearing such as the hearing date and location.

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And then they should also include instructions for

1 being placed on a contact list for further notices relating to 2 this plan. 3 Q. Let's talk about the hearing on the application. 4 How can the OCD participate in a hearing? 5 A. Well, we could -- I guess we could make 6 recommendations or we might oppose certain approvals depending on what's being presented by the operator. There may be 7 insufficient information or inaccurate information in the 8 application such as, let's say, the plotting of certain wells 9 10 or wellhead protection areas. 11 On the map, if we receive comment that there's 12 additional wells -- private property owners, surface owners, 13 come to us and say, "Hey, I've got a well here, and they're going to put their well right beside mine." 14 Or, "They propose a surface waste management facility 15 right here where my well is located." 16 17 Or, "We're going to drill a well right in the middle 18 of your house." We might have some issues with that. We might oppose 19 their plan based upon them not providing certain information or 20 21 doing a complete assessment at that time. 22 Of course, we may also point out conflicts and say, "Based upon your proposed activities" -- let's say it's a 23 24 surface waste management facility -- "we foresee that it may 25 have some difficulty in meeting site requirements. So you

1 might want to consider another option with that or a different 2 location." 3 And then, of course, we may recommend or propose 4 conditions such as if it's in an area with certain types of drainage features, we might say, "Hey, you might need some 5 additional berming around this so you can control surface storm 6 water runoff." 7 Q. How can the public participate in the hearing on 8 9 the application? 10 Well, as we discussed with the notice that they Α. have to provide -- they're able to provide -- written comment. 11 12 They may enter an appearance and testify and present evidence, 13 or they can just make statements at the hearing. 14 Similar to the participation in today's Ο. 15 rule-making? 16 Α. Absolutely. What would an OCD Hearing Examiner need to find 17 Q. 18 in order to approve an Exploration and Development Plan? A. Well, it's stipulated within the rule. Of 19 course, the operator needs to be in compliance with their 20 21 current enforcement -- I guess it's the enforcement rules. 22 It's been renumbered now. It used to be Rule 40. Now it's --I had to quote this one, 19.15.5.9. 23 24 But they would have to be in compliance with 25 financial assurance requirements for well plugging. They would

not be able to have no more than a certain number of wells out of compliance with the inactive well rule. And I think that depends on how many wells you have is what that's based on.

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And then, of course, they would have to have no unpaid penalties and not be in violation of any order requiring corrective action. And of course, the application itself would have to provide all of the necessary information required by the rule and the information provided would have to be sufficient for the hearing officer to make a determination.

10 And then of course, there's things such as the public notice component aspect of it. The operator would have to 11 12 provide the required notice and demonstrate that. And they 13 would have to -- the OCD would have to determine that approval 14 of the application would prevent waste, protect correlative 15 rights and protect fresh water, human health and the 16 environment.

Q. Where does that standard come from, the preventing waste, protecting correlative rights, protecting fresh water and human health and the environment?

Well, you know, it comes from the Oil and Gas Α. Act. You know, if you could bring up Exhibit 33, what I'm looking at here is 70-2-11(A). This specifically addresses, 22 you know -- this right here is "Power of Commission and 23 Division to prevent waste and protect correlative rights." 25 This empowers the Division to make rules and

regulations and orders addressing this, and this is straight from the Oil and Gas Act, so it's found in our Act. When we talk about the aspects of protection of fresh water, public health or human health and the environment -- if we can go to Exhibit 34 -- that's more clearly defined under certain provisions under "Enumerations of powers."

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So with that, we're looking at things -- like if you look at A, there's certain things that gives us authority to collect data, to make investigations and inspections, to examine properties, leases, and to hold hearings as well.

Indirectly, a lot of these things listed under B, which talks about the rule-making aspect of it, a lot of the items listed from 1 to 22 under B, cover more -- well, they cover everything. They also address prevention of waste and protection of corrective rights. There are certain ones that specifically identify the protection of fresh water, and if I'm not mistaken -- let's scroll down.

18 Well, 21 is public health and environment. 22 talks 19 about the Water Quality Act. I was looking for the one for the State -- 15. That's the one I was talking about as well. 20 That was mentioned earlier in Mr. Morrison's comments about 21 22 protection against contamination of fresh water supplies designated by the State Engineer. So there's certain ones that 23 specifically identify certain provisions of this language or 24 these considerations. 25

1 But when you look at some of the other ones about the 2 pooling and all that, they also involved protection of 3 correlative rights and prevention of waste. 4 O. Is there a New Mexico constitutional provision 5 that addresses prevention of pollution? 6 A. Yeah, there is. I believe we have that as an 7 exhibit -- yeah. There's a -- there's a constitutional change 8 in 1971 that is Article 20, Section 21. It's entitled 9 "Pollution control." 10 This was a constitutional change that instructs the 11 legislature to provide control of pollution and control of 12 despoilment of air, water and other natural resources of this 13 State consistent with the use and development of these 14 resources for the maximum benefit of the people. 15 It's interesting, because this one was amended in 16 To put things in perspective, the provisions that we 1971. 17 were looking at earlier under the Act with the legislator's amended Oil and Gas Act -- I'm referring to 70-2-12(B)(21) and 18 19 (B) (22), those were developed in 1989 after this amendment. 20 So I guess what we're looking at is that the 21 amendment constituted a change within our Act to address 22 certain items for pollution control. There is a history 23 showing in 19 -- I believe it's 61 -- that the disposition of produced water also talked about that it should be in a manner 24 25 that will afford reasonable protection against contamination of

fresh water.

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That one, which is 70-2-12(B)(15), was implemented in 2 3 '61, so there was already a trend heading towards this before the constitution was changed, which actually stated that they 4 shall provide these controls so this kind of -- I guess you 5 6 could say -- change in tone which led to the addition of 7 additional environmental protective-type statutes under the Act that we saw earlier. 8 9 MS. FOSTER: I'm sorry. Before you continue, is this 10 an exhibit? 11 MS. MACQUESTEN: No, it's not. 12 MS. FOSTER: Can I get a copy of that, please? MS. MACQUESTEN: I can make you a copy. It's simply 13 14 a provision in the constitution. 15 MS. FOSTER: Well, I would like a copy since it has 16 the notes that he referred to. 17 MS. MACQUESTEN: Okay. 18 MS. FOSTER: Thank you. CHAIRMAN FESMIRE: You mean the annotations? 19 20 MS. FOSTER: Just what we see here just so I can 21 review the testimony that Mr. Jones just gave. 22 CHAIRMAN FESMIRE: Okay. 23 (By Ms. MacQuesten): Mr. Jones, getting back to 0. 24 Exploration and Development Plans, is there a provision in the 25 rule that allows the decision-maker to impose conditions on a

plan?

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A. Yes.

Q. Would you talk to us about that?

4 Well, the standard for this condition is, of Α. 5 course, going to be based on what I call the mantra, and that's 6 to prevent waste -- it must prevent waste, protect correlative 7 rights and protect fresh water and human health and the 8 environment. These types of conditions would probably address 9 things that weren't specifically proposed in the plan itself. There may be additional provisions that a condition placed on a 10 11 certain area where there's high population.

12 If the Exploration and Development Plan was to 13 propose wells being installed in El Dorado, and as we saw 14 earlier from the Office of the State Engineer, there's multiple 15 wells in that section, domestic use wells. There may be some 16 type of additional condition to protect that water source for 17 the public there.

So I mean, there could be any type of -- you have to look at the complete plan on a case-by-case basis to determine what those conditions might be and why they might be applied.

Q. So when an operator submits an Exploration and Development Plan and it goes to hearing, it's not simply an approve or disapprove situation. The OCD can add terms to that plan to address issues?

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A. Absolutely. Each one is going to be different,

1 We don't know what they're proposing until they you know. 2 submit their plans. That's why we're asking for the information so we can assess certain aspects of it to see if 3 there needs to be an extra level of protection for certain 4 5 communities and certain areas. You know, it's -- you definitely have to look at it 6 7 on a case-by-case basis. 8 Q. Once an operator obtains an approval for his Exploration and Development Plan, can he start drilling the 9 10 next day? A. No. I mean, the plan is just a plan. It spells 11 out what they're going to do, how they're going to do it and 12 13 where they're going to do it. A plan is not a permit. 14 In order to go out and to drill, you have to obtain a 15 permit, and we have regulations in order to seek out those 16 permits, and you have to apply -- submit your permit 17 applications under those regulations, even though there are 18 additional conditions that we will establish -- or that we will 19 establish here shortly in Section 10. But there is a whole process under a different set of 20 21 regulations in which the application is submitted. The same thing if you're dealing with, you know, be it closed loop or 22 pits or whatever associated with the drilling action, you would 23 24 seek that permit under Part 17. The approval of the plan under this section is not an 25

1 approval of a permit.

Q. So this section doesn't substitute for any permits that an operator would need to have under the OCD rules?

A. Absolutely not. It does not circumvent those rules. The importance of that is if you propose certain things -- let's say it would be an exception to Part 17.

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Q. Part 17 is?

Α. Is the Pit Rule. If you are proposing something in your plan that would be an exception to Part 17, there's a process in Part 17 to apply for that exception. You may be approved under your plan that, you know, that you are going pursue that, but that doesn't guarantee that you're able to get 13 that under Part 17.

15 The reason or the logic behind that is that if we 16 were to up front say, "You cannot absolutely do that," then 17 there's a due process issue -- because Part 17 has a process. 18 It has a certain request; it has hearing notices; there's a standard specified in Part 17 that must be compared against --19 20 and I believe the terms are "should be better or equivalent" --21 to a standard as specified within the rule that you have to 22 demonstrate.

So there's a whole other process that -- and what we don't want to say is that you can't or that you're not allowed to request that exception on a rule when it's granted.

Let's talk about applying for permits to 1 Q. 2 drilling, and I'd like you to address proposed Section 10. 3 Α. Okay.

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Ο. And again, we're still walking through the The operator has gotten his approved Exploration and process. Development Plan, and now he's seeking an APD. What does Section 10(A) require?

A. Well, 10(A) is the -- it addresses applying for the APD and this is the application to drill. So that would be for a well covered under the approved Exploration and Development Plan. Of course, you would have to get past the 12 point and get approved for that plan in order to pursue this 13 aspect.

But things that we're looking for is that -- and 14 we're requesting under 10(A) -- would be that with that APD, 15 16 the permit application under Part 17 or the Pit Rule, would be submitted up front with it. Currently, Part 17 states you can 17 18 either do it in that fashion or submit them separately. In this provision, it's saying that you must submit them together. 19 20 The reasons, or the logic behind all this, is that we have an 21 approved plan. If the applicant were to submit something that 22 was contrary to the plan, this is the time that we would be 23 able to recognize it.

24 So the idea is that instead of submitting them 25 separately and trying to link them to the APD, it's all up

front. It should match with what's been approved in the plan. So in this case, if you were to meet the general conditions of 10(B), you should be applying for a closed-loop system with no onsite burial or onsite closure proposed.

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If you had been approved for exception of condition 10(B) or one of those, then that should be part of that application packet. It should match up with your approved plan. So if you're applying for something that is not in your plan, then you have to go back and amend your plan, because you're not approved under the plan to do that. That was not what was agreed upon. That's the importance of that application packet.

Of course, you may be required to provide GPS coordinates of the location of where the well is going to be. This is for areas that are unsurveyed. So once again, we're looking at land grants, pueblo or tribal lands. It could be areas that remain unsurveyed under that public land survey system -- and there are some in that area.

And then of course, there's -- your supposed to also submit with your APD any additional information required by the plan. Well, these could be things that the APD is based upon or based upon a condition of that plan. This could include the contingency plan for that proposed APD and the activities that will occur around that area. It could address the insulation of monitoring wells prior to drilling if so required. I'm not

saying that's going to be a requirement, but it could be these types of things.

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Q. These are just examples of things that --

A. It's a possibility. Like I said, everything has to be assessed case-by-case. We don't know what the concerns are, but we want a provision inside there that under that APD, if there's conditions under the plan linked to the drilling, re-entry or deepening of the well, that they are addressed in whole with the APD itself, the Application to Drill.

10 Q. Okay. Now, you've been talking about 11 Section 10(A) which applies to changes to the application 12 process for an APD. Let's look at 10(B). What does that 13 cover?

A. These are -- I refer to them as kind of automatic conditions that apply to any APD unless otherwise approved by exception under an approved plan. So I guess, you know, certain parties -- I believe, Will Jones and Glenn von Gonten are going to discuss the details of conditions 3 through 8. But here I'll try to address 1 through 2. I can identify them. I mean they're up here as well.

But the first one here would be that operator should drill the well using a closed-loop system. If you notice, we've added additional language to that area and our recommendation for proposed changes to clarify what that means. The additional information for (B)(1) is the

definition of a closed-loop system under Part 17. We wanted to make sure it's clear that it does not -- closed-loop system would not be linked with below-grade tanks in pits, meaning that we're looking for something that would be operated without those items. So there are hybrid systems out there and so forth.

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But we just wanted to make sure there's clarification and consistency in our regulations. The importance of the closed-loop system aspect as an additional condition is we're looking at trying to have a low impact on the area, reduce the risk of contamination. All this was discussed during the Pit Rule, the benefits of closed-loop systems.

13 It also promotes pollution prevention aspects such as 14 the recycling and reuse of the drilling fluids. It also 15 reduces the use of the fluids at the site because of that 16 capability. So, you know, we're trying to be, you know --17 promote that pollution prevention aspect of things, the low 18 impact of the area if we can do that.

Once again, it is open to exception under the application process; it just has to have some type of justification of why something other than a closed-loop would have to be justified. Why they would choose something of that nature.

Q. So if someone wanted an exception, if they felt that a closed-loop system wasn't necessary for their particular

operation, they would have to ask for that exception as part of 1 their Exploration and Development Plan? 2 They would not only ask for it, but also justify 3 Α. why they're asking for it. I mean, asking for it is one thing 4 and saying, "I want pits rather than closed-loop." That's 5 not -- you know, that's requesting and not justifying. We need 6 7 to know why that request because this is a condition right now. Why would you want that over a closed-loop system? What's the 8 justification for that? 9 10 Q. And it would be evaluated as all the plans and amendments and renewals are evaluated in terms of the OCD's 11 12 statutory mandates? 13 A. Absolutely. 14 Ο. So it would be reviewed for the prevention of 15 waste, protection of correlative right and the protection of 16 fresh water and human health and the environment? 17 Α. Protection of human health and the environment. You want me to continue with the rest of the conditions? 18 19 O. Yes. 20 Condition 2 states that the operator shall not Α. 21 use the onsite closure methods identified in Subsection F of Part 17. Previously to this -- let's see if I've got this 22 23 right -- there was just something about dispose of waste on site. We proposed this to clarify our intent on this. Our 24 goal is not -- you know, this is linked -- these conditions are 25

linked specifically to the re-entry, the drilling re-entry or deepening of a well. So we're trying to address the waste that is generated in that process.

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Previous to this, it just said to dispose of waste on site. Well, that can be misconstrued as to include the permitting of injection wells for produced water. We do not want there to be any misunderstanding of the application of this condition. It is only linked to the drilling activity itself and the waste generated from it.

Once again, since we do have a lot of unknowns about this area as expressed by the Office of the State Engineer and the complexity of the groundwater at the site or in this basin, that instead of making it a standard of the options or allow them in Part 17, we want to be as protected as we can up front to make a proper assessment of this condition.

16 This whole application process, the whole plan of 17 approval process, is a data-gathering mission. You know, it's 18 to see what we have now. Once you get an approved plan, the goal, based upon the conditions -- the additional conditions 19 20 here -- is to gather data to find out where are those 21 water-bearing zones. You know, what is present? What is the 22 geology out in this area? Each time they drill a well, they will be obtaining more information to give us a better 23 assessment of what's present. So, you know, that's what the 24 25 plan is about.

1 Now, there are six other conditions that are Ο. automatically applied to APDs of wells, subject to one of these 2 3 plans. Are those going to be addressed by another witness? A. Yeah. I believe Mr. von Gonten or Mr. -- the 4 other Jones --5 Q. The other Jones? 6 7 -- will be addressing those in greater detail. Α. Those deal mostly with downhole issues? 8 0. 9 Absolutely. Α. 10 Q. And you're more of a surface quy? 11 Α. Yeah. 12 Let's say we have an operator who has an approved Q. plan. How long can that plan remain in effect? 13 14 The plans -- the approval of plans, they could be Α. approved up to five years with an opportunity to renew. 15 16 What happens if the operator needs to change 0. 17 something in his plan? Can they get an amendment? 18 They can apply for an amendment. You know, I Α. don't want to imply that any amendment that you want you 19 20 automatically are granted. So there's a process for that. 21 As with the renewals, you can apply for renewals. 22 I'm not saying that people won't get renewals, but it doesn't grant automatic renewal for that. 23 24 Q. Looking at the amendments for a moment, what 25 changes to a plan would require amendments?

1 Α. If you were to expand the area that was 2 originally proposed in the initial Exploration and Development 3 Plan, that would grant amendment. You would have to pursue an amendment in order to get that and get approval from it. 4 5 If you're increasing the number or changing the locations of wells that you had originally proposed, that would 6 7 be something that would require you to seek an amendment for that. And of course, if you were to change those locations for 8 9 any type of related facilities, be it surface waste management-type facilities or whatnot, that would require 10 11 someone pursuing an amendment. And then any type of change in terms to that plan would be considered an amendment that you 12 would pursue. 13 14Ο. Is the process for seeking an amendment similar to the process for requesting a renewal? 15 16 Α. Yes. 17 Ο. Could you walk us through that process? 18 Α. Well, be it a renewal or an amendment, the thing 19 that you would want to do is update the information that you 20 had provided in the initial application. Hopefully by this time you've installed some wells; you've done the mud logging; 21 22 you've isolated the fresh water zones, so that means you've 23 identified those. That information that you've been obtaining in the initial application, the approved plan, and then you've 24

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operated under an approved permit, you should be updating the

plan again and providing that information.

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So that type of information would need to be updated. So there may be new information due to changes such as ownership. There may be some surface owners; property changed hands; municipal boundaries expanded. That should be updated as well. There could be municipal fresh water fills somewhere in the proximity that wasn't there prior because it's been five years or three years or whatever it may be.

9 The contact information, the contingency plan, should definitely be updated at this point. The same people may not be there to be contacted if you have specific names. Of course, the -- based upon the information that you obtained in this data-seeking aspect of it, you would update that 13 hydrogeologic report and include that information in it to give a further assessment of groundwater, surface water and geology.

Q. Let me stop you there. Realistically, you've listened to Mr. Morrison's testimony about the hydrology of the basin. Is it reasonable to expect that an operator filing an initial plan will have much information about the basin and his particular situation?

Α. I think since we're looking at the productive areas that they have to identify, we'll be talking large areas having to be assessed. I believe the initial information is going to be very general. And it's going to be based on what's available at the time of the application. And you can only do

what you can do.

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2 So by actually going out to these areas and drilling 3 and obtaining this information, you can narrow certain things 4 down to see if there's consistencies in those formations. 0. So the process requiring an operator to renew its 5 plan at least every five years and requiring the operator to 6 7 come in with amendments and each time updating the application packet, will that result in the greater accumulation of the 8 9 available data? 10 A. Not only a greater accumulation, but a better 11 understanding for OCD as well. You know, the goal is to get 12 past the plan aspect and go to a special pooling order. We, 13 you know, that goal is based on us having a better 14 understanding of these areas. 15 CHAIRMAN FESMIRE: Ms. MacQuesten, would this be a 16 good time to take an afternoon break? 17 MS. MACQUESTEN: Sure. 18 CHAIRMAN FESMIRE: Why don't we take an afternoon break and reconvene at 3:15. 19 20 [Recess taken from 3:03 p.m. to 3:18 p.m., and 21 testimony continued as follows:] 22 CHAIRMAN FESMIRE: Let the record reflect that this 23 is at that continuation of Case No. 14255 on Thursday, December 24 11, 2008. This is the regularly scheduled meeting of the New Mexico Oil Conservation Commission. The record should 25

reflect that Commissioners Bailey, Olson and Fesmire are all 1 2 present. I believe that we were in the middle of the direct 3 examination of Mr. Jones. Ms. MacQuesten, are you ready to qo? 4 5 MS. MACQUESTEN: Yes, sir. Ο. (By Ms. MacQuesten): Mr. Jones, we were talking 6 about the process for applying for an amendment for renewal of 7 a plan, and you had been discussing the requirements that the 8 application be updated. 9 10 A. Yes. 11 Q. Can you take us from that point on once the 12 application is submitted with the updated information, what 13 happens? A. Once again, there will be a review for admin 14 completeness. Just as it was done earlier, there would be a 15 16 public notice approved during that time that would allow for 17 comments, including telling the public that they may request a 18 hearing. 19 Q. Now, they may request a hearing, does that mean 20 the hearing is automatic on applications for amendments and renewals? 21 22 A. No. It would be up to, I assume, the hearing officer to make a determination if the amendment or the renewal 23 24 would constitute -- and the comments related to that amendment 25 or renewal -- would constitute determination of having a

hearing.

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Q. Okay. If the OCD determines that a hearing is necessary, what happens?

A. Of course, there will be a hearing notice set on the application -- or a hearing notice that the applicant would have to provide identifying the time and the date and location of the hearing. So that would require a second notice.

And once that notice has been posted, there will --9 there would be the standard applied to -- once again, the 10 mantra, the standard of does it prevent waste, protect 11 correlative rights, protect fresh water, human health and the 12 environment applied to determining the approval of the 13 amendment or renewal. And then, of course, any kind of a plan 14 is subject, or could be subject, to conditions.

Q. Can an approved plan be revoked?A. Yes.

Q. What would justify revocation of a plan? A. If for some reason the operator decided not to comply with the plan and do something contrary to it, that could result in a revocation of that approval.

Another scenario would be if they were out of compliance with Rule 40, or now referred to 19.15.5.9, the enforcement rule, as we discussed earlier -- because that's part of their determination of approval. If they were out of compliance with that, that could result in a revocation of an

approved plan.

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2 Q. When does revocation occur? Is it automatic or is it after a notice of hearing? 3

It would definitely take a notice -- require a 4 Α. 5 notice to give the opportunity for an operator to have a 6 hearing on that.

Q. Will operators in Santa Fe County and the Galisteo Basin always be subject to this Exploration and 8 9 Development Plan process set out in the proposed rules?

10 A. Not necessarily. The rule is set up to allow for 11 the plan to be replaced by a special pool order. That's what I 12 was getting at earlier. Based upon the plan and the conditions 13 of the APD, the automatic conditions, that would allow us to 14 obtain additional information and accumulate more data and 15 information of that area. The goal is that at some point, we 16 could create special pool orders and replace those plans with 17 those special pool orders.

18 Q. What would be the process for the operator who 19 wanted his plan replaced by a special pool order?

20 Α. The operator would have to operate up under an 21 approved plan for at least five years. So that's, you know, 22 that's going to be the starting point of that. You wouldn't be able to get to the special pool order prior or earlier than 23 24 that.

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Of course, they would have to submit an application.

You know, like -- it's almost like the whole process for 1 2 amendment or renewal, but in this application, they would be 3 requesting for replacement with a special pool order. So they 4 would update this application with all the information and data they've obtained during their implementation of that five-year 5 approved plan. 6 They would have to provide public notice, grant 7 opportunity for a hearing. You know, just like the same 8 9 process you would go through for a renewal or amendment. 10 Q. Can a special pool order contain conditions? 11 Α. Absolutely. 12 0. So if it was determined that some of the 13 conditions that had been applied under the Exploration and 14 Development Plan are still necessary, those could be incorporated into a special pool order? 15 16 A. The proposed language of the rule allows for 17 conditions for renewals and then the initial application, and for special pool orders. 18 19 Q. And again, the special pool order would have to meet the same standard for approval of those other items; 20 prevention of waste, protection of correlative rights, et 21 22 cetera? 23 A. Absolutely. 24 What's -- once an operator has moved from an 0. 25 Exploration and Development Plan to a special pool order, can

that special pool order be changed?

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2 A. It can. If a more -- well, in most cases, it 3 will happen outside of the purview of this rule. You know, this is the renewal amendments to approved plans and then 4 5 replacing it with a special pool order. There may be certain conditions where it may -- certain activities that you 6 7 propose -- let's say you have a special pool order and you're 8 drilling in that area, and then you decide you want to go 9 outside that area, or you find something that doesn't link with 10 the consistency of the area that's been considered that special 11 pool order as in target zones, then that may require you to go 12 back for that one area and start a new plan.

But, you may be on the opposite side of that and have an additional plan that is outside the boundary of your special pool order area that may be incorporated into a special pool order itself. So there are things that could change that.

Q. Okay. Let me make sure I understand. If you have an Exploration and Development Plan that allows you to develop oil and gas wells within a certain geographic area and you apply to have that replaced with a special pool order, does this special pool order -- is that limited to the geographical area that was the subject of the original plan?

A. It could be. It should be.

Q. Because if you were to go outside of that plan, you would need to go through the regular Exploration and

3 4 Ο. Why do we have this provision allowing for 5 replace of the plan with a special pool order? 6 A. You know, this is what I've been saying this 7 whole time. The Exploration and Development Plan process is an information-gathering process. Right now, based upon the 8 9 information that the Office of the State Engineer has supplied to us, we don't have a lot of information. There's a lot of 10 11 uncertainty for groundwater out there. 12 Right now there hasn't been a lot of development. 13 There's not a lot of wells out there, so we don't know what the 14 target zones are or what consistencies there are to the 15 formations. So through the Exploration and Development Plan, 16 we're going to be obtaining this information so that we are 17 more knowledgeable of the area so we can make certain 18 assumptions of those areas just like we do in areas that are 19 well established in the State. 20 So once we can anticipate certain conditions for that area with a certain level of confidence, then we can move to 21 22 the special pool orders and get out of the plan because then we have enough information to make those assumptions. 23 24 Q. I want to ask you about two specific provisions 25 in Section 9. That's the section that deals with the PAUL BACA PROFESSIONAL COURT REPORTERS 500 4th Street, NW, Suite 105, Albuquerque, NM 87102

Development Plan process of notice and gathering information and so forth?

> Absolutely. Α.

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Exploration and Development Plan. One of the provisions required notice to the State Historic Preservation Office, and the other provision requires notice to tribes, pueblos and nations.

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In your description of the proposed rules, you've mentioned some provisions addressing cultural resources. Could you explain why the proposed rules deal with the cultural resource issues?

A. I guess the foundation of this is based upon 9 earlier comments from Ms. Slick with the State Historic 10 11 Preservation Office. One of our exhibits, Exhibit 23, this is 12 the Galisteo Basin Archeological Sites Protection Act. This is where -- but what has occurred is the U.S. Congress has 13 14 recognized the Galisteo Basin. And if we go to the findings in Section 2(A), and looking at one here, based on the findings 15 from Congress, is that the basin and surrounding area of 16 17 New Mexico, this location has many well-preserved prehistoric 18 and historic archeological resources of Native American and Spanish colonial cultures. 19

If you'll look at the finding No. 2, it definitely identifies that resources include the largest ruins of pueblo Indian settlements in the United States. What they've done in this act is identified at least 25 -- you could say districts or areas -- that if you scroll down to the next page -- that covers quite a bit of that area. If you notice, each district

is identified in acreage. And if you scroll down to the bottom of that -- and let's go to the next page -- there's roughly 20 -- well, there's 4591 acres that they have recognized in the Galisteo Basin as areas of interest.

So, you know, what we're trying to do here is, you know, we're recognizing this as something of concern. You know, earlier the gentlemen from the Taos Pueblo -- but they commented on the use of this area. They use it on an annual basis, if not more. They go down there. So there is use of this area that is established within the Galisteo Basin.

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Q. Was that Mr. Mitchell from the Tesuque Pueblo?

A. Yes, the ex-Governor of the Tesuque Pueblo. He had commented on their annual, if not seasonal, use of this area. So it is currently still active based upon his comments that he provided to us.

But there's also from Ms. Slick's comments -- let me make sure I got this right -- okay -- that we do need to be involved in sharing this information with the Department of Cultural Affairs so they can make a proper assessment. They are the agency to determine if sites need to be registered for archeological significance in the State.

We do have -- there are certain laws that have been established such as the Cultural Properties Act that requires State agencies to consult on these matters to provide information. That Provision 9 of B, if I'm not mistaken,

alludes to a certain provision within their regulations that stipulates the type of information. It references what they need to submit. The reference, the regulatory reference, is (B)(9).

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It has a reference to 4.10.7.9 NMAC, and it talks about this information should be provided and collected and provided to them for the proposal of their consultation and assessment. And we do have an exhibit that addresses this, Exhibit 24.

Q. Is Exhibit 24 a provision from the Cultural Properties Act requiring that agencies having direct or indirect jurisdiction over land or structure modification which may affect a registered cultural property shall afford the State Historic Preservation officer a reasonable and timely opportunity to participate in planning?

16 A. Yes. And so with these plans, what we want to do 17is make sure we do our part in the consultation with the 18 appropriate agency that has the knowledge and expertise and is 19 making these determinations. And the importance of this is 20 that there is additional provisions that we have to identify 21 certain things such as known cemeteries and unmarked burials 22 that you may have or may be required to have special permits in 23 order to manipulate or relocate those types of areas. It's not 24 up to us to make that decision. That goes back to the State 25 Historical Preservation Office to make those decisions on how

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those will be addressed.

2 There's also -- it's my understanding from looking at the regulations -- to do so knowingly or willingly is a 3 4 fourth-degree misdemeanor that is subject to fined or 5 imprisonment. So the idea is to make sure these parties that are out in this area that has already been identified by U.S. 6 7 Congress as having such a cultural historical significance -you know, there's over 4500 acres out there -- almost 4600 8 9 acres -- that they're concerned about that if they're doing 10 activities on these areas, they need to be knowledgeable of the 11 other requirements by other agencies to be able to comply with 12 those.

Our goal here is to act as you could say the middleman or facilitator of this by requesting this up front so we can provide the plans, the operations, that they plan to do since they have to identify these locations to allow their appropriate agency to make that assessment in their area of concern.

19 Q. Just a matter of housekeeping, is Exhibit 25 a 20 copy of the rules issued by the Cultural Properties Review 21 Committee?

A. Yes.

Q. And is 4.10.7.9 in that collection of rules the review procedure that they have set out for the consultation process?

1 Α. It's not only the review process, it's the 2 information that they require in order to do the review. Ιf 3 you look at A(1) through (5), that information right there is 4 the information that they need to submit based upon 9(B) of our 5 proposed rules. It has this reference to this section. Q. So we're asking the operator to provide this 6 7 information so that we can meet our obligation under this rule to provide it to the Cultural Properties? 8 9 Α. Absolutely. 10 Ο. Okay. How -- and is Exhibit 26 a copy of the 11 statute regarding the permit requirements for excavation of 12 unmarked burials and the penalty you were discussing? 13 A. Yes. This is what I was discussing earlier. 14 It's not to say if you come across any of these -- especially 15 the unmarked burials -- that you can't do things, or it stops 16 you from doing certain operations. It tells you how the 17 protocols that are in place to obtain the appropriate permits are to be considered to present certain considerations of --18 19 you could say moving these burial sites and relocating them and 20 so forth. It kind of points to where you need to go to obtain 21 the appropriate permits for those. 22 Q. And is Exhibit 27 a copy of the statute 23 addressing disturbing marked burial grounds? Yes. And that's more of a -- to -- it really 24 Α. defines what a marked burial ground means and also identifies 25

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the penalties involved if you disturb such areas.

Q. Okay. Now, is the OCD proposing to enforce these 3 statutes?

A. Absolutely not. Our goal is to act as a facilitator once again. We do have an obligation under the Cultural Properties Act in order to provide this information to the appropriate agency for them to make their assessment and enforce their regulations.

Now, how do the proposed rules help this process? 0.

What we've done is -- and if we could go back to 10 Α. our rules -- so under (B)(9) -- (B)(9) up here, it should be --11 12 that information should be submitted as a plan or a part of the 13 application for the plan. Our goal here is that once we 14 determine if the other information is administratively 15 complete, then we'll submit the whole plan to the State Historic Preservation Office for them to do their due diligence 16 17 based upon their assessment.

We will have to be looking at all the operations, where they're occurring. Plus with this information required 20 under 9, they'll be able to link everything together.

Q. Okay. Is there a statute concerning confidentiality of the location of archeological sites?

A. Yes, there is.

And is that set out in Exhibit 28? Ο.

Twenty-eight, I believe. So based upon this Α.

1 provision within the -- I believe it's the Cultural Properties 2 Act -- and the conditions within it, in order to protect these sites, when we get the applications and we post them on the 3 website, we will not be posting this information. 4 5 Q. So this information will be gathered and given to the State Historic Preservation Office, but it will not be made 6 7 a matter of public record? Of public record. 8 Α. Because of the confidentiality statute? 9 Ο. 10 Α. Absolutely. They're the agency to determine if 11 that information can be public or not. 12 O. And is the State Historic Preservation Office one 13 of the entities that is required to be notified of hearings, 14 amendments, renewals and other actions on the applications? 15 A. Absolutely. 16 And any changes to original plans? Q. 17 Α. Any changes that occur to their original plan are 18 the renewal, amendment or replacement with special pool order, 19 they're required to be notified. 20 Q. And those applications would also be forwarded to 21 the State Historic Preservation Office for their review? 22 Absolutely, yes. Α. 23 Do the proposed rules contain a provision for Q. 24 notifying tribes, pueblos and nations? 25 A. Yes, it does.

1 Q. Why? Well, the reason why is definitely because of the 2 Α. assessment of U.S. Congress and their determination in the --3 4 of you could say the historical significance. That's one of But --5 the reasons. 6 Q. How can the tribes help on that issue? 7 Well, in order to assist with the Cultural Α. 8 Properties Act, we see the tribes, pueblos and nations having 9 more knowledge of the area, historical knowledge, and maybe being able to identify and have those sites registered with the 10 11 State for protection based upon their historical knowledge of 12 the area or current use of the area. 13 So our goal here is to coordinate with them and 14 notify them of the activities occurring in case they have any specific knowledge that wouldn't be documented otherwise. 15 16 Q. Has the Governor's office expressed any intent 17 regarding tribal consultation? There was an executive order. It was Executive 18 Α. 19 Order 2005-003. I believe it's Exhibit 31. This was to 20 encourage tribal consultation. The order itself, if I'm not 21 mistaken -- could you take me to the second page there -directed that there would be a policy generated based upon this 22 23 to promote, I guess you can say, or improve government 24 communications with the tribes, the pueblos and the nations. 25 You might want to make it normal so people can see

1 it. 2 So based upon the policy that was generated -- I 3 believe that is Exhibit 32 -- we have included them in the 4 notice requirements to be notified to better our communication 5 with them and include them into this process, especially due to the recognition of the U.S. Government and Congress of the 6 7 significance of, you know, multiple pueblos being -- having 8 some influence in the region. 9 O. So this is a situation where you're saying notice should be given not just to pueblos with lands located within 10 11 the Galisteo Basin, but it's an issue of special interest to 12 any tribal nation in New Mexico? 13 It definitely could be, yes. Α. 14 Q. Thank you. MS. MACQUESTEN: I move for the admission of 15 16 Exhibit 2. That is the pre-filed written testimony of Mr. Jones. I also move for the admission of Exhibits 22 17 18 through 32. Exhibit 22 is the red line version of the proposed 19 rules used by Mr. Jones in this testimony. Exhibits 23 through 20 30 and 33 through 36 are statutes, rules and an Attorney 21 General opinion referenced by Mr. Jones in his written 22 testimony. And I ask that you take administrative notice of 23 these and make them part of the record. 24 CHAIRMAN FESMIRE: 33 through 36 administrative 25 notice?

MS. MACQUESTEN: And 23 through 30. These are all 1 2 statutes, rules and an Attorney General opinion. They were included for your convenience so that we could throw them up on 3 4 the screen and you could see them. 5 CHAIRMAN FESMIRE: So let me get this clear. You're asking for Exhibit 22 and then administrative notice on 23 6 7 through 30. MS. MACQUESTEN: Yes. 8 9 CHAIRMAN FESMIRE: Then Exhibit 32, and then administrative notice of 33 through 36. 10 11 MS. MACQUESTEN: Administrative notice of 33 through 36. I'd ask that Exhibits 31 and 32 be admitted into evidence. 12 Those are the executive order on tribal consultation and the 13 14 executive policy on tribal consultation. 15 CHAIRMAN FESMIRE: So just to make clear, you want 16 the admission of Exhibit No. 22, administrative notice of 23 through 30, the admission of Exhibits 31 and 32, and 17 18 administrative notice of 33 through 36. 19 MS. MACQUESTEN: Yes, and also the admission of 20 Mr. Jones' pre-filed testimony, which was Exhibit 2. 21 CHAIRMAN FESMIRE: Exhibit 2. Mr. Hall, any 22 objections? MR. HALL: No objection. 23 24 CHAIRMAN FESMIRE: Ms. Foster? 25 MS. FOSTER: No objection.

1	CHAIRMAN FESMIRE: At this time, we will admit
2	Exhibits 2, 22, 31 and 32. The Commission shall also take
3	administrative notice of Exhibits 23 through 30 and Exhibits 33
4	through 36.
5	[Applicant's Exhibits 2, 22, 31 & 32 admitted into
6	evidence.]
7	Mr. Hall?
8	CROSS-EXAMINATION
9	BY MR. HALL:
10	Q. Mr. Jones, the directive to the Division, by
11	virtue of the executive order notwithstanding, does the
12	Division plan on presenting any scientific data that supports
13	the need for the new rule?
14	A. Do you clarify what you mean by scientific.
15	Relating to what, I guess, is the clarification.
16	Q. Let's see: You are qualified as an environmental
17	scientist. Is there any what data is the Division
18	presenting in terms of geology, petroleum engineering, anything
19	of that nature to support the rule-making?
20	A. Well, I believe Mr. Morrison discussed the
21	geology and hydrogeology concerns. The lack of knowledge, the
22	inconsistency of the formations in the basin, that's the
23	scientific evidence that's been submitted before the Commission
24	here.
25	Other scientific evidence would be the U.S. Congress'

determination of the historical significance of cultural properties being in there that should be protected. That's the science of archeology. So that's additional concern. Since this Galisteo Basin Archeological Sites Protection Act was developed, there seems to be little activity from the U.S. Government, from my understanding, from due to lack of funding to investigate it further.

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Q. Any other data?

A. Well, there seems to be a limited number of wells
that have been drilled in the area. My understanding is that
multiple wells were dry; they were dry holes. And there's only
one that's producing currently in the basin. Maybe I'm
mistaken, but I believe that's correct.

So to me, that's very limited information on target zones that are available in that area. We do not have a lot of information. I know in the '80s -- that's when they were doing the exploration of those areas -- that they did not discover a lot.

19 Q. Did the Division have available to it the well20 logs from the 32 wells that were drilled?

A. I do not know. I haven't looked at that data.

Q. As far as you know, the Division does not plan on presenting any data from those well logs; is that correct?

A. My understanding of those logs -- and I believe Mr. von Gonten has looked at those logs and maybe he can

1 comment on them. But Mr. Morrison, I believe -- or maybe it's 2 3 Mr. Sanchez -- I know previously it has been expressed that a lot of the operators are not looking at the upper formations. 4 5 You can look at most logs, and unless they're from early dates 6 where they were initially investigating into an area, they did not log the first couple of hundred feet, or it could be the 7 8 first couple thousand feet. So with that, there is no information on those logs 9 in those areas. I know now it's a common practice not to do it 10 11 because they know what the target zones are. They start looking in the area where there's oil and gas. 12 13 Q. So the answer to my question is: We can look 14 forward to no more scientific data than what's been presented 15 so far? 16 A. I think the point here that should be stressed is 17 that we're tying to obtain that information. That's what we're 18 trying to do because we don't currently have or have enough of 19 it, and that should be stressed. MS. MACQUESTEN: Mr. Chairman, I would like to point 20 21 out we will have Mr. Will Jones testify. And part of his 22 testimony will address what he found when he reviewed the wells files for the wells that have been drilled in the Galisteo 23

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Q.

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PAUL BACA PROFESSIONAL COURT REPORTERS 500 4th Street, NW, Suite 105, Albuquerque, NM 87102

(By Mr. Hall): Does the Division plan on

Basin, and he will be touching on some of these subjects.

presenting a witness who will testify or offer any sort of evidence that will support a determination by this Commission that this rule adoption will prevent waste and protect correlative rights?

A. I think there's provisions that we count on under 5 6 our current Oil and Gas Act that support the proposal of this rule; meaning, that when I reference the 70-2-11(A), we're 7 8 supposed to create rules to make that determination. Right 9 now, once again, we do not know -- we cannot definitely say 10 what the target zones are here; what areas of extraction would 11 be impacted. All that goes back to protection -- prevention of 12 waste and protection of correlative rights.

So the act itself allows us to present this new rule to make those determinations and be able to implement those concepts that you're asking about.

16 Q. And so the answer to my question is: No, we 17 don't have that date to provide the Commission?

18 A. You asked about evidence, and the evidence are19 the provisions within the act.

20 Q. Does the Division plan on presenting any sort of 21 testament of hydrocarbon reserves that are available in the 22 Galisteo Basin?

A. Once again, this is why we're proposing the rule; to make those determinations, to have the information up front so we can make those assessments. So are we going to provide

1 that? Actually, we're proposing the rule to seek that. So you 2 know, that's the purpose of the rule. I didn't mean to interrupt you. Go ahead. 3 Ο. Α. No, no, no. 4 Again, the executive orders and their directives 5 Ο. notwithstanding, what is inadequate under the current Statewide 6 7 rules that the Division administers? What's inadequate? Maybe I'm not understanding your question. 8 Α. Aren't the Division's current Statewide rules 9 0. 10 adequate to protect fresh water, protect human health and the 11 environment? 12 I think they are adequate in known areas where we Α. 13 know what the formations are like; know where groundwater is located where we know a lot about the area itself. 14 15 My understanding is that the purpose of this rule is to create a level of additional protection until we find that 16 out here, because there are so many unknowns. This is, once 17 again, a data-gathering provision that allows us to reach that 18 19 point where those rules may become adequate if we determine so. Q. So as I understood your earlier testimony, you 20 21 are on a data-gathering mission primarily. You're after 22 operators to do your science for you; is that accurate? MS. MACQUESTEN: Objection; argumentative. 23 CHAIRMAN FESMIRE: Sustained. 24 25 (By Mr. Hall): Did you testify earlier that you 0.

were on a data-gathering mission? 1 2 Α. Was that a question? Yes. 3 Ο. 4 Α. What I'm saying is that currently in this area there's a lot of unknowns. There has been a lot of expressed 5 concerns about that. The proposed rule is a mechanism that 6 allows us to gather information and to create an additional 7 level of protection until we have some confidence about that 8 9 area and its production, the potential for groundwater depths 10 and knowing those things. 11 The importance of that information as well goes back to the permitting of those rules that you asked whether they 12 were they adequate enough. That information is going to be 13 14 provided for that assessment of the permits that will be 15 obtained under those rules. 16 So the idea is that we can make sure what's being 17 proposed. Let's say you proposed to get an exception to the closed-loop system and you want a pit, and your general 18 19 assessment -- general assessment -- is that the separation of 20 groundwater is greater than 50 feet from the bottom of that 21 That's a site requirement to have a pit, a temporary pit. pit. 22 Let's see you go out there and you drill and you find fresh 23 water zones that are 20 feet. Q. Go on. 24 25 Once again, we can then assess that that would Α.

1 not meet the site requirements for future pits in that area, 2 the use of pits. 3 Q. Are you familiar with the Division's current 4 rules 39.8? 39.8? 5 Α. Yeah. It's the rule formally known as 21, I 6 Ο. 7 believe. Yeah -- Rule 21. I'm --8 Α. CHAIRMAN FESMIRE: Rule 39.8? 9 10 THE WITNESS: What's the title of that rule? 11 Q. (By Mr. Hall): The Otero, Sierra County -- did 12 you review those rules to prepare for your testimony? 13 Α. No. And I didn't testify on them, either. 14 Are you familiar with that rule? Q. 15 Just by title. Α. Do you know enough about that particular case to 16 Q. 17 say whether there was adequate hydrogeologic basis to support 18 the Commission's findings --19 MS. MACQUESTEN: He already testified that he didn't 20 have anything to do with it. 21 MR. HALL: I'm asking him if he even knows. THE WITNESS: I was not party to the hearings. 22 I've 23 not read the transcripts or the decision by the Commission. I 24 wouldn't be able the comment on that. 25 (By Mr. Hall): Do you know about the adequacy of Q.

data from the Tularosa basin?

A. No.

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Q. Did you write the new rule? Are you the guy?

A. I proposed changes to the rule after it was posted for comment and allowed for proposed recommendations or changes, modifications to it. And the proposals that I addressed were for clarification purposes.

Q. Okay. Who wrote the rule? You're pointing to Ms. MacQuesten.

A. As far as I know. Let's put it this way: I talked to her about it. I don't know if there's additional parties because I was not party of the -- whatever group or people that were involved in that directly. So I know she was involved in it, and I know I made recommendations. So I'm not saying she's the sole person.

16 Q. I understand. You are the witness that the 17 Division is presenting to walk us through how an operator makes 18 application under the proposed rule.

A. Yes.

Q. So let's do that. You have your rule in front of you. If you'll look at 9.B(2). We discussed this earlier.

CHAIRMAN FESMIRE: This is Exhibit 22.

Q. (By Mr. Hall): You're asking for an applicant to provide you with a legal description of a productive area of the Exploration and Development Plan area. Is it the intent of

1 the Division that the operator try to make that description coterminous with the description for a common source of supply? 2 3 A. I believe it says that the legal description would be the area covered by the plan, which would include a 4 best estimate of the area, of the productive area. So it would 5 6 encompass that. It wouldn't be definitive on it. It's an 7 estimate. 8 Q. All right. You're not asking an operator to 9 provide you with interpretive geologic data to establish a 10 productive area, are you? 11 A. We do require a hydrogeologic report and the 12 identification of the target zones. So if you're referring to 13 that information, yes, we are. 14 Q. And when I say "productive area," I'm talking 15 about productive for hydrocarbons. Is that your understanding 16 of the rule? A. Once again, you're going to be identifying where 17 18 you're going to be proposing the location of your wells, so 19 that's up to interpretation, individual interpretation. If you 20 want to call it that, you're free to call it that. I'm not 21 necessarily saying that. This is the best estimate which would 22 be identified by your proposed locations of your wells, your 23 identification of your target zones, and there is that 24 hydrogeologic report. So there's some geology. 25 Q. But if you're after a description for an area

1 productive of hydrocarbons, it's not the Division's intent that you try to track the Division's tool, nomenclature process or 2 3 the definition of a productive area as you would use as a statutory unit, for example? 4 It's a best estimate is what it is. That's what 5 Α. 6 the language states: A best estimate of the productive area. We're not trying to define it or have the application to define 7 8 it. It's an estimate. I'm going to refer to the plan as the E&D Plan 9 Ο. for short. 10 I do that quite a bit. 11 Α. Is it possible, then, that an applicant can come 12 Ο. 13 in and describe an E&D area that is smaller than the productive 14 area if it's limited only to this drilling area; is that what 15 you're after? 16 That would probably be the smartest approach for Α. 17 an applicant. Because, you know, the idea behind this is that you would want to start small to see what's going on in that 18 19 area. You may have multiple E&D Plans, which may at some point 20 reach -- provide enough information to be combined in a special 21 pool order based on what's discovered out there, the 22 information that's gathered. So it would be advisable to start 23 small instead of starting large. 24 Ο. The Division doesn't have any need to know the 25 boundaries of an applicant's lease, does it?

You know, there's mineral right interests, 1 Α. 2 parties that have to be identified. I guess, you know, the 3 concept behind this would be advisable that you had a lease agreement prior to pursuing this rather than pursuing it 4 5 without one, because that would be a huge waste of time for the Division to submit an application for proposals of wells when 6 7 you didn't have lease rights to access those reserves. 8 Q. And again, the productive area description within 9 your E&D Plan area may be smaller than your lease. Is that 10 acceptable to the Division? Well, in order to protect correlative rights, 11 Α. you'll have to identify the -- if I'm not mistaken -- you would 12 13 have to notify those parties. 14Q. Well, again, if the operator owns all of the surrounding mineral interests --15 They would have to notify -- make that clear 16 Α. 17 somewhere to a certain extent that in their notification provision to demonstrate they've notified the appropriate 18 19 parties. 20 Q. Or that there would no need to notify those 21 parties because they are the same party? 22 A. Exactly, exactly. 23 That's what the Division says? Q. 24 Α. Yes. 25 May an operator submit an E&D Plan that describes 0.

multiple productive areas within the same E&D area? Is that possible?

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A. Well, let's look at the language that's proposed. Let's look at the B(2). So you have an area covered by the plan including at a minimum an operator's best estimate of the production area. So the area's pretty broad. You could have that.

8 The problem that you'll run into is that -- let's say 9 you have three -- two or three productive areas. Let's say 10 they're different in target zones, geology, so forth. The 11 problem you would have is replacing that complete plan with a 12 special pool order. You would create some difficulties for 13 yourself with that. You may have to be required to get a 14 separate plan.

Q. By my reading of the language in B(2), there's no restriction on the number of plans an operator may apply for; do you agree?

A. Well, the plan, the application for a plan -- a plan is a plan. So you could submit multiple applications for multiple plans, meaning that if I want to address this area under this plan, I submit an application for it, and so forth there. Is that what you're asking?

Q. Well, let me ask it this way: Would it be possible for an operator to submit an application for a single E&D Plan that had numerous productive areas, not necessarily

contiguous?

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A. Absolutely. Once again, it probably wouldn't be recommended if your goal is to replace it with a special pool order which would take you out of the plan process.

5 Q. Would it also be possible for an operator to 6 submit an E&D Plan for a single well?

7 Yes. But the area of coverage that would have to Α. 8 be covered in the plan would have to include the area that 9 would include all operations proposed under the plan; meaning, that if you have one well, you might need an access road; you 10 11 might need a pipeline; you might need some other type of 12 facility linked to that. So that area of coverage would have 13 to incorporate that as well. It would be a separate productive 14 area.

Q. So a single well E&D Plan, as I understand what you're saying, must be larger than the spacing unit or proration unit.

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A. It could be, yes.

Q. It must be at least as large as the spacing unit?A. Absolutely.

21 Q. Earlier you referenced the proposal to protect 22 the confidentiality of the archeological data. What means does 23 the Division have to protect the confidentiality of any 24 geologic or engineering data that would be submitted in 25 conjunction with the E&D Plan?

1 Α. Well, the reason that we're protecting that 2 information is because there's an act that requires us to. So 3 I'm unfamiliar of an act that requires us to protect the other 4 information you're referring to. 5 Q. Could you protect it if requested? 6 MS. MACQUESTEN: Calls for a legal conclusion. CHAIRMAN FESMIRE: Mr. Hall? 7 8 MR. HALL: Well, I think it's within the area of his 9 stated expertise. 10 CHAIRMAN FESMIRE: Environmental regulation? 11 MR. HALL: Environmental regulation. In making 12 applications to the Division and Mr. Jones, I'd like to know 13 how that process --14 CHAIRMAN FESMIRE: That may be a valid question, but 15 I don't think this is the witness to ask. I don't think 16 it's -- I think the objection is sustainable. 17 Q. (By Mr. Hall): Let me ask you about B(5)(a). 18 You're asking for mapping of State, federal, private and tribal 19 surface ownership. Why? 20 It goes back to determining which parties need to Α. 21 be notified. Once again, these entities that are here are 22 identified as parties that need to be noticed for us to 23 determine the proper notice has been provided. We would count 24 on these boundaries being established as they are identified on 25 the maps that covered the proposed area under the plan.

1 Ο. Would the Division find acceptable satellite photographic mapping with the overlay political boundaries? 2 3 Would that satisfy the Division? Well, there's two problems with that. You need 4 Α. to look at the dates of the satellite imagery. Some of it 5 6 could be a couple of months old; some of it could be years. I've seen some date back to 2006. So is that appropriate? 7 8 Absolutely not. The other thing is depending on where you are in the 9 application process, be it the initial, the renewal or the 10 11 amendment; those are subject to change. They're required to be 12 updated in a renewal, amendment or replacement. 13 Q. So how current --Α. At the date of application. 14 Would the Division accept the then currently 15 Ο. published USGS Topo maps? Is that current enough? 16 Topography, as it is assessed by the USGS 17 Α. 18 shouldn't change that much unless there's been some major mining or surface movement. So any current USGS map should be 19 20 appropriate for Topographic maps. Q. If we look at B(5)(J), you're also looking for 21 22 well locations and related facilities, and you identify, among other things, access roads. Does the Division have in mind 23 24 dictating -- strike that. 25 Does the Division have in mind directing the

1 applicant's access routes? A. Well, I guess -- are we still looking at 2 3 Exhibit 22 and using that as the source of our conversation? Because I don't have a (J). 4 Q. I'm sorry. We got out of sequence. It would be 5 6 (i). 7 A. Okay. And your question again? 8 Q. You're asking for the location of related 9 facilities on (I) including access roads. Why does the Division need to know about access roads? 10 11 A. Well, there's a multitude of reasons. I quess 12 the question is, you know -- let's say since we looked at the 13 earlier maps of the Galisteo Basin area, and the water -- you 14 could say the drainage features that are present, the question 15 would be: Are some of those considered water courses by definition? 16 17 If you were to construct access roads across a water 18 course and block it, that would be a violation of federal 19 provision that would be obstruction to a water course. Once 20 again, you might need the involvement of the Corps of Engineers 21 to construct that road. 22 So there are concerns about how access to those 23 properties and how they are developed could be crucial, and we 24 want to make sure that they are properly addressed. 25 The other is: Would it be necessary to develop

1 certain access roads when there is more accessible access 2 already available from existing, roads which we actually address under D(5) that should be identified. 3

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So we might be looking at that so we reduce the surface disturbance of construction of those access roads. Ιf there is a way to access it without disturbing certain areas, we would like to encourage that. That would go part in the protection of the environment.

O. Let's talk about your requirements under B(6) for a hydrogeologic and site report. Can you elaborate on that and tell us what the Division is looking for there?

A. Well, once again, this will be determined on what you propose. Let's say you're assessing a large area; then 13 it's going to be very general in the way it's going to be 15 presented.

16 There might be certain things that would -- and it 17 could come up, I mean, you could provide all this information in the general sense and it would still be administratively 18 complete for the purposes of going to hearing. It wouldn't 19 20 mean that it's the best information for the OCD to make a 21 determination, because due to certain proposed locations and 22 certain operations, more definitive information might be 23 required to make a proper determination.

So it goes back to your proposal, I guess. If you're looking at a broad area, you may propose just general

1 If you're looking at one well, as you discussed information. 2 earlier, then the general information may not be sufficient. 3 Q. What are the types of data and databases that the 4 Division would find acceptable in preparing hydrogeologic 5 reports? A. Well, there's multiple sources that are out there 6 7 that could be utilized to put such a report together. As for geology, there's the Bureau of Mines. They have great regional 8 9 The New Mexico Geological Society: They put out resources. publications where they've done research projects in certain 10 11 areas. I don't know if there's been one done in that area, but 12 you know, I know that they do publish those articles and assess 13 certain formations. 14 As for hydrology, be it surface and groundwater 15 hydrology, once again, it -- the Bureau of Mines actually 16 address some of those. They have county publications. I don't 17 know if there's one for Santa Fe County specifically, but I 18 know that they actually do county publications on those. 19 There's also USGS wells that they do their monitoring 20 There's the iWATERS database. Those are potential sources on. of information that you can use to compile your report. 21 22 Q. Okay. For those areas like you've discussed 23 before where there's very limited data and unsurveyed areas, 24 what are you looking for? 25 A. It would be on a case-by-case type thing.

There's general geology in certain areas. My understanding is 1 2 that people would be able to obtain that information. For 3 surface water, you know, there's surface water features that would demonstrate that. For groundwater, you would have to 4 5 look at this -- I guess look at the general area around it and then also look at the closest wells to see if there's any 6 7 correlation. 8 You see, this is the importance of the rule because 9 in those areas, we will know very little. If you get your 10 approved plan and you pursue the APD through this process, we will be obtaining more information in order to properly assess 11 12 it. 13 So the goal is to address those areas where there's a 14 lot of unknowns. 15 Q. For the purposes of reviewing well locations, 16 well siting, within an E&D Plan for approval by the Division, 17 do you have any guidance for us on an appropriate area of 18 review around the proposed well location? 19 A. Can you restate the question? Make sure I 20 understand what you're asking? 21 Q. If an operator identifies a well location in its 22 E&D Plan, you're looking, for example, for hydrogeologic data, 23 what would be an appropriate area of review surrounding that 24 well location that you would find acceptable? 25 A. Well, each one is going to have to be reviewed on

1 a case-by-case basis. You know, the question is: What are you 2 utilizing in the process of your drilling, especially when you're talking about hydrology? You're talking about 3 4 groundwater, I assume -- is what you're getting at here? What 5 assessment of the groundwater would be appropriate? 6 Q. For one, yes. Well, the drilling aspect itself, it may have no 7 Α. significance on the placement of that well. But the related 8 activities, it would definitely have some significant 9 consideration on that. 10 11 Q. You are looking for proximity to water courses? 12 Α. Absolutely, flood plains. 13 Existing wells? Q. 14 Existing wells, yes. Α. 15 Ο. How far out from a well location must an operator conduct a review? 16 17 A. Well, the report and the review of the 18 information is about the whole area addressing the plan. Q. Okay. And if this is a single well E&D Plan? 19 20 Α. You identify that area and a half mile beyond the 21 boundaries of that area that you define so we can see what's 22 outside of that. Let's say there's a municipal well field within that 23 24 half-mile boundary, and you're asking for an exception for a 25 pit. There might be some concerns because there's setbacks for

a pit to a municipal well field in the Pit Rule. So we can
 recognize that and make recommendations that that may not be
 appropriate.

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Q. So you're looking for data that would help you to make a determination on any impact on soils, water, geology, surface hydrology, anywhere where there's activity; is that accurate?

A. We're making a determination, does the proposals -- and I say proposals -- it's not only linked to the drilling, but everything associated with it -- to prevent waste, protect correlative rights, protect fresh water, human health and the environment. That's what we're basing it on.

Q. Let's look at your proposal under 9(B)(7), the requirement for monitor wells. Tell us what you're looking for there.

16 A. Well, with this right here this could be used for 17 multiple purposes. It could be if you're in an area that has 18 several domestic wells present and we know what some of the 19 formations are like there for groundwater but not completely, 20 because, you know, as it was discussed Mr. Morrison, people 21 drill the depth of their well based on their need and they're looking at what's the -- you know, how much water can I get out 22 23 of that formation for that need. So depending on the purpose 24 of those wells, it would determine maybe how deep they drill. 25 There may be multiple wells at different depths to serve

different purposes.

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So with that, if you're having a drilling program or 2 3 you're proposing 20 wells within this area where there's 4 multiple domestic wells, there may be concern to determine if there's going to impact fresh water. Now, fresh water by 5 6 definition is a quality standard, not a volume standard, 7 meaning that there's no defined volume to fresh water. There 8 is a quality standard for it to be protected. So that might be 9 one scenario. 10 Another scenario is that -- let's say you propose a 11 commercial surface waste management facility. That requires 12 site requirements and separation of groundwater. We want that 13 assessment done definitively so we can say without a doubt 14 there is no groundwater beneath it or groundwater at a certain 15 depth or the groundwater is not present based upon the 16 separation of groundwater that's required based on the proposed 17 design. So once again, the installation of wells may be 18 required. 19 Q. Now, are you looking to do anything more than to 20 determine the top of the drinking water aquifer? 21 Α. The drinking water aquifer? 22 Ο. Fresh water supply?

A. Fresh water supply. We're, through our act, we are required to make sure -- and I want to go back to that provision -- and I believe that's number 15 under 70-2-12(B) --

make sure I got the right language I'm using for that -- that 1 2 we would make sure there's protection against contamination to 3 fresh water. Q. And so does that require you to have data on the 4 5 entirety of the vertical extent of the saturated aquifer? A. Can you rephrase that question? 6 7 Do you need to know the entire vertical extent of 0. the aguifer to discharge your duty? 8 The full extent, no. We just need to determine 9 Α. 10 if fresh water is present. 11 Q. Okay. Couldn't you obtain that same information 12 from a detailed review of the available literature for an area? 13 Α. I guess I'm kind of confused by the question, because based on the Office of the State Engineer's testimony, 14 15 there's a lot of unknowns out there. There's a lot of inconsistencies in formation. So all these data, all these 16 17 publications, confirm why we need further assessment there. There's nothing to hang your hat on so to speak in 18 any certainty of what you're going to encounter. And even in 19 20 areas -- Mr. Morrison testified you may put a hole here and move over 50 feet and find something different there. 21 22 Q. Well, must an operator drill a monitor well in 23 advance of submitting an APD? 24 A. Must they? Are they required? The provision 25 doesn't state that.

1 For a single well E&D Plan, would you contemplate Ο. 2 the need for more than one monitor well? 3 Α. I'm sorry? 4 Ο. For a single well E&D Plan, do you see the need 5 for more than one monitor well? 6 That would be based upon where it's proposed and Α. 7 the concerns we may have. That's why the application requires a lot of information in it so we can make those determinations. 8 9 To say that everyone does is not a fair statement. 10 We're going to be looking at the surrounding areas, the 11 possible impacts of that well and so forth to make a 12 determination if something of that nature may be a condition or 13 not. 14 But I don't know, because these are all hypothetical. 15 I can't answer your question. It's going to have to be a 16 case-by-case basis depending on what's proposed in the plan and 17 where it's proposed and the conditions that surround that area. 18 Would the operator be restricted from using the Q. 19 well from the monitor well for drilling? 20 Once again, these are monitoring wells. You're Α. 21 asking are we granting a water right, a right to use that 22 water. I believe the Office of the State Engineer has that 23 authority. 24 Q. As far as the Division is concerned, if the 25 operator has such a right, is there any restriction from using

1 water from the monitor well for drilling? 2 A. If they get a permit, yes. I don't see what 3 would prevent them from doing that. Q. Let's look at your proposed requirement under 4 (B) (8). You're looking for a contingency plan for all releases 5 6 with no exclusion for a de minimus amount. Can you tell us what you mean by "de minimus amount"? 7 8 Α. Well, the --9 What does the operator have to give you? Q. 10 I guess to clarify that is -- we do have Α. 11 Rule 116, which is -- I don't know what the new reference is 12 now -- it's the release notification rule that specifies volumes to determine if a release is required or not, which 13 14 means, in that case -- to clarify and to have it on the 15 record -- that if it's less than five barrels, notification is 16 not required. 17 If it's, you know -- and if it's five barrels or 18 greater, then it would be a minor release. Which there's -- I don't know the time line, specifically, but it's different than 19 20 a major release, which would be 25 barrels or more that would 21 require notification within 48 hours, I believe. 22 In this case, since we have a lot of unknowns and the 23 goal is to gather data and create a level of protection until 24 we have some certainty about these areas, is to address all 25 releases. Because we don't know what the conditions are

underneath.

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We're granting a plan which will -- could be a large 2 area -- it could be ten, it could be 100 acres, you know, 3 4 square acres out there. And it's a general plan that, you 5 know, an applicant is going to be proposing to place wells. 6 And, as you described earlier, that area may have no 7 groundwater data, so we would rather create a level of protection that addresses all releases under this plan and 8 9 addresses them immediately so we have no concerns in case 10 groundwater is ten feet or twenty feet or five feet. 11 Q. So is there no minimum volume that you would ask 12 an operator to address in his contingency plan? 13 When you have a release, it alludes -- when it Α. 14 says "de minimus," it means when you have a release, you 15 address it or you prevent it. 16 You know, we talked about the implementation of best 17 management plans. The concept of a contingency plan is to be 18 aware of the possibility of things that may occur. This is a 19 contingency plan. You plan for it. In doing so, you would 20 implement certain preventative measures to address a release 21 when it occurs so it's not a release that creates 22 contamination. It contains it. 23

Q. If an operator's backhoe were to have a release of say a pint of hydraulic fluid, you're not asking for the contingency plan to address that sort of release, are you?

1 Once again, my understanding is that the plan is Α. to address the activities related to the drilling, re-entry and 2 3 deepening of wells and those actions that go with it. You know, your general plans -- and it's going to be 4 5 based on those proposed operations -- once again, proposed 6 operations -- that you have in your plan. Would the Division be satisfied with an E&D Plan 7 0. 8 with a contingency plan provision in it that met the Division's 9 guidelines under the best management practices publication? 10 It's been awhile since I've looked at the best Α. 11 management plans. I don't think they've been updated to 12 address current rules, but they do create a foundation that 13 provide excellent recommendations on that, so that would be a 14 good foundation to start out with. Q. Let's move on down to (B)(10) -- I'm sorry --15 16 let's back up to (B)(9). I want to make sure I understand the 17 rule of the State Historic Preservation Officer here. Do you 18 contemplate that the State Historic Preservation Officer would 19 have a decision-making role in the review of the E&D Plan? 20 Α. Well, that's probably not a very good question. 21 I'm sorry. Q. 22 I hate to say it. Their role is determined that Α. any -- in my understanding based on any -- and I want to make 23 24 sure I use the correct term -- any undertaking that may take

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place, they would make the determination if certain items need

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1 to be addressed under their regulations, not our regulations. 2 So if there are issues that need to be resolved under their act and their regulations, then they would be pursued 3 under that. It may impact the E&D Plan. Let's say you're 4 5 going to install a pipeline over a burial area -- or let's make it a subsurface line or whatever it may be -- you're going to 6 7 disturb an area. If you cannot obtain the permits that are required in order to do that through their office, then you may 8 have to relocate that line outside that area. That would be a 9 10 change to the plan. Q. If I understand what you're saying, if you don't 11 get the SHPO's approval, then you don't get the Division's 12 13 approval? I'm not saying that. Once again, we're not 14 Α. 15 enforcing their regulations. They're the agency to enforce 16

16 their regulations. It's much like the county ordinance. They 17 would enforce their ordinance. We don't have the authority to 18 enforce that ordinance. You must comply with all applicable 19 regulations beyond our regulations as well. If they influence 20 what you do under your plan and create a change under your 21 plan, then that needs to be identified in the plan. It may 22 cause the plan to be amended in certain cases.

Q. Would you contemplate that the Division would make as a condition of approval of an E&D Plan that the operator obtain any requisite approvals from the SHPO?

Well, then you're making our approval contingent 1 Α. 2 on their approval as you stated earlier. 3 What we're stating is that if you have to change your plan based upon issues with that other agency and those other 4 regulations or ordinances, then it may constitute an amendment 5 to the plan that we have approved. And there's a process to 6 7 amend it in this regulation. 8 Q. All right. Let's move on to Subsection 10. This 9 is your provision for exceptions. Is this where an operator 10 can come to the Division if he has -- he or she has -- an 11 expiring lease or a farmout and needs to be able to drill in 12 the short term in order to preserve its property rights? 13 Maybe I'm not understanding. These exceptions Α. 14 here are specifically linked to Subsection B of 10. I'm just 15 trying to understand your question and how it relates to that. 16 Because these are specific automatic conditions that are linked 17 to an APD that would be submitted based upon an approved plan. Once again, I'm a bit confused by the leap that 18 19 you're taking and I don't under what background there is for 20 that question. 21 Q. If an operator has a lease of short duration, can 22 he come to the Division and get an exception to the E&D Plan? Once again, 10 specifies these are proposed 23 Α. 24 exceptions to the requirement of Subsection 10. Subsection 10 25 is the APD process and the automatic conditions, closed-loop

system, no onsite disposals, logging -- there's eight of them. 1 2 Only those eight conditions are allowed for exceptions. 3 So once again, I'm confused by your question because 4 you're asking specifically about 10, provision 10, which has 5 nothing to do with what you're asking about. I guess that's where I'm confused. 6 7 Q. Let me ask it this way: What does an operator do in the Galisteo Basin and Santa Fe County if he's facing lease 8 9 expiration in the short term? What does he do? 10 A. I don't know. Does he have an approved plan? If there's not sufficient time to get an approved 11 Ο. 12 plan, what does he do? Can he get an exception? 13 A. The rule states you have to have an approved plan 14 first. Well, you have to obtain an approved plan. Let me 15 clarify that. 16 Q. So the answer to my question is: There is no 17 provision for exception in order to preserve a lease or farmout. 18 19 A. I don't see any that are proposed for the plan. 20 Okay. Q. There's also an AOD process that is linked with 21 Α. 22 that as well. 23 Q. Okay. Could you explain to us how the conversion of the order approving of an E&D Plan to a special pool order 24 25 works? Why are we doing that?

Α. It's a replacement. That's the term that's used on a conversion. What we're doing is -- you're asking why are we doing it?

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Α. Well, that's a confusing question. Maybe I can explain, you know -- maybe I wasn't clear of the purpose of the plan.

The plan is to give us some type of confidence of the knowledge of the area that we currently don't have which has been expressed multiple times here. Once we obtain that confidence and have some knowledge of that area and see consistencies of production, water, so forth, then we can 13 convert it or replace that plan with a special pool order.

14 Of course, five years under the plan has to occur for The operator has to still be in compliance with what I 15 that. refer to as Rule 40, the enforcement rule and so forth. 16 There 17 are certain things for consideration of that.

18 But the idea is that if we can gain enough 19 information to have some level of confidence of what we're 20 doing in that area to make certain assumptions like we do in 21 areas that we currently know in the southeast and the northwest 22 where there's a lot of production, a lot of information, historical information, of production and groundwater and so 23 24 forth, that the replacement to a special pool order should 25 ideally take you out of the plan process.

And would it be the case that a pool order would 1 0. survive the five-year life of a plan approval? Is that what 2 3 you contemplate? A. I'm not understanding. You have to have a plan 4 for five years to even contemplate replacing it with a pool 5 order. 6 7 And how long would the pool order last? It's 0. 8 open-ended? 9 It's open-ended. It falls out of the plan Α. 10 process. 11 Do you anticipate that the procedures that the 0. Division currently follows for pool nomenclature would apply to 12 13 the special pool orders? A. I would assume so. Now, there may be specific 14 15 conditions based upon the data that we obtain from the plan, information we obtain from the plan, the, plan's implementation 16 and the permits and the data we receive from the plan, that may 17 supplement and place specific conditions when the pool order is 18 19 established. 20 And the pool order would have a defined Ο. 21 geographic boundary as well, correct? 22 Α. Absolutely. 23 Q. And would it have a vertical definition? 24 Yes, yes. Α. 25 Q. Based on what?

Base upon consistency in the proposed operations Α. under the original E&D Plan. Based -- you know, let's say you propose to put five wells in and you enter into the same formations in all five wells; groundwater seems to be consistent across the site. You're demonstrating that there's consistency in the area that you're developing. That's what we 7 would be basing that on.

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0. Would the provisions of the special pool order apply to undesignated portions of the pool within a mile of the pool boundaries?

A. Could you rephrase that question? I'm not sure if I'm understanding, because you just asked does it apply to defined boundaries. And now you're asking if it applies beyond a mile of that boundary?

15 O. As is the current process for the Division's 16 pools under its nomenclature procedures.

17 A. Well, that's where this is different. And the 18 reason why is because you may have to get an E&D Plan to investigate that area outside your pool order defined area. 19 20 That is not part of the pool order. So it take an E&D Plan to 21 be initiated to investigate that area to see if it is part --22 it could be replaced after five years into that original pool 23 order -- because it may not.

What you found in your original pool order that allowed us to establish that may not be what is within a mile

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of that area. It may not be the same. 1 2 For your E&D Plans, would you be willing to 0. provide the Commission and the parties here with a template or 3 an example of a complete E&D Plan that the Division would find 4 5 acceptable? Well, that's like an impossible task. Each 6 Α. area -- basin -- is different. They're going to have 7 site-specific things to address. We're talking about plotting 8 of farms, buildings, infrastructures, on a map. 9 I'm sorry -- you go to one section, you go over to 10 another section, it's going to be totally different. You know, 11 12 what you choose to propose may not be a good template because 13 someone else may propose something different. 14 You know, it's going to be up to the operator to 15 determine what they think is sufficient to support their plan. 16 Q. I think you'd have to admit that the guidelines 17 under the rule are somewhat vaguely stated, open-ended, subject 18 to interpretation as you have just said. Do you think it would be helpful to operators and the Division in the administration 19 20 of this rule if you were to provide the Division and operators 21 with an example of what's acceptable to the Division? 22 A. Well, once again, I know of no guidelines that 23 are based on this rule, so I don't know what you're referring to there. I do know what the rule stipulates that you have to 24 25 submit. So there are no guidelines to it, so I'm a bit

1 confused on that reference.

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But depending on the availability of the information that's available for that area, it's going to differ from site to site.

Would you be willing to provide us with an 0. example of an E&D Plan that is focused on the Black Ferrell #001 well? Something to compare?

Well, once again, we're looking at the production 8 Α. area. We're looking at the proposed area under the plan which 9 would include all related facilities, access roads, so forth, 10 so that's not a simple task. It would be a huge task, a huge 12 undertaking.

13 And to determine what's adequate -- once again, we 14 have issues like prevention of waste, protection of correlative 15 rights, so then we have to know more about the surrounding 16 leases that are available or access to those and the people who 17 would be impacted based on the extraction of that productive 18 area.

Once again, that would be the applicant's responsibility to provide all that. You're asking us to do a pre-assessment for Tecton is what you're asking us to do, which I don't think is appropriate. Because once we set that precedent, we're going to be asked to do this for everyone. I just don't quite understand why we would do just such a task. Q. For guidance to operators, could you select

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another well in another location in the county and provide us with a template for what you want?

A. What I would do is recommend that people provide 3 as much information up front as they can to, you know, expedite 4 the process. The less information you provide, the more 5 questions will develop, meaning that if you can provide 6 7 everything that you think you can provide on what you plan to 8 do and the supporting documentation to go with it -- such as in the hydrogeologic report -- then you're in a better place than 9 10 doing a general assessment. You do yourself no favors by 11 minimizing the information in your application.

Q. Now, even though the proposed rule requires closed-loop drilling, as I understand it, you're also requiring operators now to submit a full suite of information that supports a C-144; is that right?

A. No. We didn't say that. Because the C-144 -well, let me answer this -- well, maybe I don't understand your guestion. Are you referring to the plan or the APD?

Q. In either circumstance.

A. Because there is a distinction.

Q. In either circumstance.

A. For the APD, under Section 10, absolutely. For the plan, in which you would have to have the approved plan prior in order to, you know, follow the conditions placed or identified in Section 10, maybe not.

1 There are certain similarities of information that 2 can be utilized in putting together your C-144 permit 3 application under Part 17 that you could utilize for that purpose, but is it exactly the same? Is it comprehensive? 4 No, 5 it's not. Q. So an operator using closed-loop drilling is not 6 7 permitted to submit a C-144 CLEZ form with its APD? I didn't say that. That's why I asked -- you 8 Α. 9 said for the plan and the APD. 10 O. For the APD. I was making a distinction between the two. 11 Α. When 12 we talked about the APD, I said absolutely. They could use the 13 C-144 CLEZ or they could use a C-144. 14 Q. Okay. Does the rule address what the operator is 15 expected to do for waste disposal? 16 A. Well, they're required in the application to 17 address it or propose a plan. Under B(7) of 9 -- make sure I got the right reference here -- and I believe it's D -- it says 18 19 "addressing waste during the drilling and production process." 20 So it includes drilling and production. 21 Q. Is it possible to obtain Division approval for a 22 surface waste management facility within Santa Fe County in 23 view of this proposed rule? 24 A. What do you mean by approval? A permit? 25 O. Yes.

You would have to apply for a permit under 1 Α. 2 That's where you obtain surface waste management Part 36. 3 facilities. So that's possible to do in Santa Fe County; is 4 0. 5 that right? I don't know. It would depend on where you 6 Α. 7 propose it. You could apply, absolutely. 8 Q. But the proposed rule wouldn't prohibit anyone 9 from making application for a disposal facility? 10 A. No. The issue with that is if you propose it 11 where it may conflict with the provision of Part 36. 12 Q. If a site were to qualify for a permit for 13 disposal under Rule 36 -- I can't keep up with my current rule 14 versions anymore -- what's the reason for prohibiting onsite 15 burial of waste on a well-by-well basis? 16 A. Could you state the question again? Because 17 we're talking about the implementation of two separate rules. 18 Ο. I understand. 19 Α. Can you clarify? 20 If someone can obtain a permit for a solid waste Ο. 21 disposal facility within Santa Fe County, is there any reason 22 why he couldn't also obtain approval for onsite disposal of 23 drilling waste? 24 A. Well, there's two different assessments. То 25 obtain a permit for a Part 36 facility, there are site-specific

conditions that must be assessed or demonstrated to obtain that 1 permit. Now you're saying that since you can get in one place, 2 you can get it throughout the whole entire county. That's a 3 4 huge leap of assumption on that. We don't know what the conditions are where you're 5 proposing onsite burial. I would not, you know, make that 6 7 assumption for the whole county or the basin. Q. Let's see if we can walk through the timing for 8 9 the review and approval process. If you look at proposed Rule 9(G), the Division has 60 days to determine if an 10 application is administratively complete; is that right? 11 12 Α. That's the language that's provided, yeah, and that's 60 days from receiving the application. 13 14 O. If the Division doesn't make a determination 15 within 60 days, what happens? A. The rule doesn't state anything on that. You 16 know, I'm trying to put it politely here -- you know, 17 18 personally, I don't like the specified timelines because in this provision, there's two timelines for review: One would be 19 20 the initial review and the other would be the second review if 21 there's deficiencies. 22 If an operator were to submit an application that only provided the name and location and no maps, no plans, and 23 we were to review it, we have 60 days to review it to determine 24 25 if there's any deficiencies. Then in their second submittal,

based upon addressing these deficiencies, we would only be 1 allowed 30 days to review the comprehensive application. 2 So personally, I don't like the timelines, because 3 4 those -- I had to say it -- those are realities of applications and submittals. A lot of people do not wish to provide 5 everything that's required and then the application either 6 doubles, triples or quadruples in size in the second submittal, 7 and this time we have half the time to make that assessment. 8 9 Q. All right. Presuming there's a determination of administrative completeness, then what happens next? Under 10 Rule 9(F) the Division has a separate process for the approval 11 of the proposed legal notice. Is that how it works? 12 A. Well, the legal notice, if you look back into 13 B -- and I believe it's (B)(11), it's part of the application. 14 So the idea here is that is the information that's required in 15 16 the legal notice under (F), does it coincide with the plan? 17 Is the information such as the operator's name, address, telephone number, the same as it is in the plan? 18 Is the legal description, the area as identified, match the plan? 19 20 That's, you know -- and so on. Does the summary of what's in 21 the application match the plan? 22 Q. All right. So when you review the application, the notice is 23 Α. part of the application; thus, when you determine it is admin 24 25 complete, you should also determine if that notice is adequate.

1 Q. So from that point in time under Rule 9(H), the 2 operator would then have 20 days to publish and mail notice; is 3 that right? A. Or e-mail, yes. There's three different methods 4 5 addressing various different parties. Q. Well, do you get to choose, or must you do all of 6 7 them? I do not see an "or" statement here that makes it 8 Α. optional. Of 1 through 3, they all apply under (H). 9 O. And then if you look at Rule 9(I), Subparagraph 10 1, after notice goes out, the Division sets the application for 11 12 hearing no sooner than 60 days after service. 13 First let me ask you -- I'm sorry -- under your proposed amendment, it says, "operator serves" now. So how 14 15 does that work? Does the operator come back to you and 16 establish that service has been accomplished and the hearing is 17 set within 60 days? Well, let's go back and try to assess how these 18 Α. notices are applied. There's the notice provisions including 19 20 the hearing notice provision addressing initial application, renewals, amendments, and replacements with special hearing 21 22 orders, so they're designed to address all scenarios based on 23 their application. 24 So let's say you're doing an initial application, an 25 E&D Plan application; as the rule states, all of those go to

hearing. So with that public notice, we would make sure that public notice is designed for a hearing.

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If you're doing an amendment or a renewal, it may not go to hearing; therefore, you would have to serve the public notice. But if it does, you may have to submit a second notice in order to make that -- to address that. So it's written to address all the different scenarios and the things that you can do up under this provision.

9 Q. Under the current rules, applications go to 10 hearing within 30 days. What's the need for 60 days?

A. Well, the goal here is to obtain public comment. Other regulations with other State agencies require -- a lot of them require a notice of filing up front to receive those comments.

Here, we're requiring a time that we decide that's 15 16 it's administratively complete that you can go to hearing. So 17 they only have a small window, so to speak, of being notified in that case, especially with an initial application. It would 18 be one notice. So with this, we're allowing 60 days to receive 19 these comments. This would also allow ample time for the State 20 21 Historic Preservation Officer to spend some time to assess the information that we provided to them through the application 22 process of the applicant. It's my understanding they have 23 30 days to make that assessment. So this gives them enough 24 time if they need to bring up things that may impact the plan. 25

1 It has -- I'm sorry. Were you finished? Q. 2 Α. Well, yeah. That's fine. 3 And as written under 9(I)(1), the Division set Ο. 4 the matter for hearing more than 60 days after notice of issue; 5 is that right? 6 It says, "Public hearing should be set no sooner Α. 7 than 60 days after the operator serves public notice." 8 Would you be agreeable to changing that within --0. 9 to say within 60 days after notice? 10 Α. That would be the opposite of what's being 11 proposed. I'm a bit confused on that, contrary to the current 12 language. 13 Right. I'm understanding -- I want to have an 0. 14 understanding of the timeline involved from initial application 15 to the Division's determination of administrative completeness 16 to notice to the setting of a hearing. We have additional time 17 for hearing itself. We have additional time for the Division 18 itself to issue an order pursuant to the hearing. 19 A. Well, you've got to look at the whole provision here, so I'm a bit confused. The idea here is that you have a 20 21 public notice component, and then you have a hearing notice 22 component. The hearing notice has to be at least 30 days prior 23 to the hearing. So if you make it within -- you may create a 24 conflict if you did it within 15 days of hearing; you wouldn't be able to satisfy the 30 days prior to the hearing date. 25

Q. Is it fair to say we're looking at least 180 days from initial application to issuance of final order? Do you agree?

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A. 180 days. Based on -- I'm kind of confused. Depending on the complexity of the initial application, there's a 60-day window. If it's sufficient, that would be a delay created by the operator by not addressing what should be in the application, so that would add an additional 30 days, possibly.

And then you have 60 days prior to -- or no sooner than 60 days -- for the public notice, and then the 30-day window. So if the applicant provided what they should have up front, I don't quite see the 180 days.

Q. Let me ask you about Rule 10. If I understand correctly, an operator may not submit an APD for approval in an E&D area until that E&D Plan itself is approved; is that right?

A. Well, if you look at the language of (A), it says an application for a permit to drill, re-enter or deepen a well that requires an Exploration and Development Plan pursuant to 9 must include these things.

That's what the language states.

21 Q. Can an operator submit an APD and E&D Plan for 22 approval simultaneously or no?

A. There could be a possibility, but the problem that you run into is what if you propose an exception to the conditions, and through your exception, you cannot obtain the

Thereafter, the permit that you obtain would be 1 permit. 2 different than what you proposed in the plan which means what 3 you're proposing is not what you foresee. So then you've got 4 conflicting problems with that. 5 So once again, you've created a delay for your 6 process of getting your approved plan. 7 I understand what you're saying. It is possible Ο. 8 to submit both an APD and an E&D Plan simultaneously, correct? 9 A. You could. It probably wouldn't be recommended. Should we plow ahead, Mr. Chairman? 10 MR. HALL: CHAIRMAN FESMIRE: Mr. Jones, you're not available 11 12 next Thursday, right? THE WITNESS: No. I'm going to be in Georgia or 13 North Carolina. 14 CHAIRMAN FESMIRE: Mr. Hall, I think plowing is our 15 16 only alternative. 17 MR. HALL: Thank you, Mr. Chairman. 18 Q. (By Mr. Hall): Mr. Jones, do you agree that 19 predictability and reliability and uniformity in the Division's rules benefit both the Division's administration of its rules 20 and operators' applications under those rules? 21 A. Can you say that again and make I'm understanding 22 23 all the conditions you placed on that answer? 24 Q. Do you think the Division's rules ought to be consistent and predictable? 25

Predictable on what basis and consistent -- I 1 Α. mean, we already have to have -- you've already mentioned the 2 3 Otero Mesa special pool provision. To me, we've already 4 established that that cannot be done. 5 Consistent? Each rule addresses site-specific 6 conditions -- or most of them do, especially Part 17 and Part 7 36 -- so consistency of application of those rules or 8 implementation of those rules would be assessed on a 9 case-by-case basis of what you're proposing and where you're 10 proposing it and the considerations that you have to apply to 11 it. 12 So I -- you know, can we be consistent in our rules 13 and make the same determination Statewide based upon one 14 application? Absolutely not. That makes no sense. 15 So the answer to my question is no? Ο. 16 Α. I guess I'm showing that we do not have a history 17 in our rule-making to show that it can be done. We do have 18 special rules. 19 Q. As I understand, the intent of the rule is that 20 it apply to all lands within the Galisteo Basin and Santa Fe 21 County and the other two counties, including fee, federal, 22 State, tribal; is that correct? 23 A. Fee, federal, State should apply to private as 24 well. 25 Ο. That's fee.

1 Α. Okay, yes. 2 In the course of drafting the proposed rule, did Q. 3 you take into consideration what the BLM and the Forest Service currently require under Onshore Order No. 1? 4 5 Α. I didn't draft the rule. I made recommended modifications to the rule, so as you have proposed the 6 question, I wouldn't be able to answer that. I wasn't party to 7 8 that. 9 Q. Did the Division take into consideration the requirements --10 11 A. Once again, I was not involved in the drafting of 12 the rules, so I was not party to those conversations. I wouldn't be able to answer that. 13 Q. Do you know if the Division took into 14 15 consideration what the BLM and Forest Service requires --I --16 Α. 17 Ο. Just a minute. Let me finish my question. 18 Okay. Α. 19 We'll get this out. Do you know if the Division 0. 20 took into consideration the BLM Forest Service requirements for 21 submitting APDs and drilling plans under Onshore Order No. 1? 22 A. Once, again, what was discussed in the drafting 23 of the rule I was not party of. I do not know what they 24 considered in that process. I was not party of it. 25 Q. Do you --

I was not party of it. I had heard nothing 1 Α. afterwards, so I cannot answer your question. Either way you 2 propose it, I cannot answer it. 3 4 Q. Okay. Do you know what Onshore Order No. 1 is? A. You know, I have looked at it. I skimmed through 5 it a long time ago, and I don't remember any specifics about 6 7 it. MR. HALL: Okay. No further questions, Mr. Chairman. 8 CHAIRMAN FESMIRE: Ms. Foster? 9 CROSS-EXAMINATION 10 11 BY MS. FOSTER: 12 Q. Mr. Jones, you stated that you didn't believe that you could have one rule for the entire State or 13 one-size-fits-all. I'm taking you back a year ago. Do you 14 15 remember testifying in the Pit Rule? 16 A. Absolutely. Q. Okay. Do you remember -- I think you were on the 17 stand for two days at least, if I remember correctly. 18 A. 20 hours. 19 20 Okay. And we came out with a pretty lengthy rule Q. 21 on the Pit Rule that did cover the entire State, correct? 22 A. Yes. Okay. So what has changed between December of 23 0. 2007 to December of 2008 and now you're making a statement that 24 25 the OCD cannot be consistent or predictable in their rules?

Well, I think you took a small -- you took 1 Α. something out of context in what I stated. 2 3 Ο. Okay. 4 Α. What I tried to make clear is that we have a 5 history of making special rules; therefore, I would not make a 6 blanket statement that we can make everything fit. And the 7 reason I say that is because we already have the Otero Mesa rules in place. So we do have special rules that apply to 8 9 those areas. So, you know --10 Q. Okay. I believe that Rule 21, which is the one 11 that applies to Otero Mesa -- it might have been renumbered -but that was part of the Pit Rule proceeding last year. Do you 12 remember that? 13 14 It was, but my understanding is that that rule is Α. 15 still in place; is it not? 16 Q. Well, there were some changes made as a result of the pit hearings. 17 18 Α. But that rule is still in place. That special pooling rule is still in place. 19 20 Okay. And is that area very well developed? 0. I don't know much about that area. Once again, I 21 Α. stated that earlier. 22 23 Q. You stated earlier as well that your biggest 24 concern with operating in Santa Fe County and the Galisteo Basin was that you didn't have adequate information and you 25

1 wanted to go through this process to get more information on the geology and hydrology, et cetera? 2 A. I think I stated that other parties have 3 4 expressed or confirmed that. 5 Q. Okay. Well, you're the one that's testifying. 6 I'm not asking you to read into other people's minds. What, in your mind, is the reason for all these 7 8 additional provisions in this rule, then? A. Once again, I stated that we are proposing this 9 10 to obtain data so we can find out what is present in these 11 areas that we have no knowledge of. 12 There is also supporting documentation from the U.S. 13 Congress that there are historical sites in which, as a State 14 agency, we have a responsibility under the Cultural Properties 15 Act to notify the State Historic Preservation Office for them 16 to do their assessment on that based upon the undertaking under 17 their regulations. 18 Q. Okay. I'm glad you brought that up. You're 19 talking about Public Law 108-208, correct, Exhibit 23, the 20 Galisteo Basin Archeological Sites Protection Act? 21 A. Yes. That's the one of the things I mentioned, 22 yes. 23 In this document, which is six pages, is there Ο. 24 any archeological or geological finds or documentation or 25 science in this document?

1 Α. I don't know what created or the development of 2 this document. I was not party of the proceedings that 3 influenced Congress in their decision, but I would hope that 4 they would have science behind it in order to make this 5 decision in creating the act. 6 Q. I would agree. I would hope that a regulatory authority would have science behind it before they would change 7 a rule. I agree. I agree with that statement. 8 9 Now, looking at page 4, does this act -- how long is 10 this act supposed to take place -- exist? 11 A. It's on page 4. On page 4 in the middle of paragraph, it talks 12 0. 13 about management plan? 14 Well, I'd like to go back to --Α. 15 MS. FOSTER: Please, if I could ask the witness to 16 directly answer the question. 17 CHAIRMAN FESMIRE: I think he was starting to answer 18 it. 19 THE WITNESS: Yeah. 20 MS. FOSTER: Well, he's going back to another 21 I'm directing him specifically to this page, portion. 22 Commissioner. I would like to get out of here --23 THE WITNESS: Yeah. 24 MS. FOSTER: -- and I would like to ask the 25 witness -- I'm asking him some pretty simple questions here and

1 he could really answer them yes or no. 2 CHAIRMAN FESMIRE: Mr. Jones, please answer the 3 question. If you need to go somewhere else in the document to answer it, you may. 4 5 THE WITNESS: Well, it's based on prior comments provided by SHPO themselves, Ms. Slick, said that they -- based 6 7 upon --8 MS. FOSTER: Mr. Commissioner, I would object. We're 9 talking about the federal Public Law, and that's what I would 10 like to talk to him about. 11 THE WITNESS: I will be talking about that if you let 12 me bring the basis of my answer, though. And the basis is --13 MS. FOSTER: And the question is a very simple one. 14 Does he understand how long the Public Law is to be in effect? 15 CHAIRMAN FESMIRE: Ms. Foster, if he answers it in a 16 manner that is objectionable, you may object. Let him answer 17 the question. 18 MS. FOSTER: Okay. 19 THE WITNESS: My understanding from Ms. Slick's 20 response is that they adopted the registration of these areas 21 under State law, under the State registration. So what you're 22 trying to get at saying when does this end -- the question is: When does it end with the State? Because now it's under State 23 24 jurisdiction as well. 25 Q. (By Ms. Foster): Well you're citing to the

federal law. You cited to it a couple of times in your 1 2 testimony as the reason for why we are having a special pool rule in Santa Fe County. I think you even used the words that 3 the public law was evidence of science in your mind, okay? 4 5 So I'm asking you in this document, the federal law which you are relying upon, where is the science? 6 7 Where is the science? I assume -- and I have to Α. only assume -- because once again --8 9 Q. If you're assuming, that means that you don't 10 know. 11 Α. Well, they've identified 25 sites and identified 12 the acreages associated with the sites. But you don't know the basis of their siting --13 0. 14 They do not state this in this act. Α. 15 Okay. Thank you. Now, looking at provision --Ο. 16 on page 4, it states that within three complete fiscal years 17 after the date funds are available, the secretary shall prepare 18 and transmit to the Committee on Energy a report, basically. 19 So this states that this act is only in effect for 20 three. 21 MS. MACQUESTEN: I object. That mischaracterizes the 22 language in this rule. 23 CHAIRMAN FESMIRE: Ms. Foster? 24 MS. FOSTER: Yes, sir. 25 CHAIRMAN FESMIRE: I think she's got a pretty good

1 point. Do you have a response? 2 MS. FOSTER: Well, my response is I'd like to have 3 him respond. 4 MS. MACQUESTEN: He cannot give a legal conclusion interpreting a federal law, and the law speaks for itself. 5 6 MS. FOSTER: Well he had no problem --7 CHAIRMAN FESMIRE: Ms. Foster, I'll sustain the objection. Go ahead, please. 8 9 MS. FOSTER: Okay. (By Ms. Foster): Do you know if the feds have 10 Ο. 11 received funding in order to apply this law? 12 A. I do not. 13 And do you know when this law was actually signed Q. and when this was actually convened? 14 I thought it was in 2004, March 19th. 15 Α. Okay. And what year are we in now, today? Do 16 Ο. 17 you know the date? Let me help you. 18 CHAIRMAN FESMIRE: Ms. Foster, let's not do that. MS. FOSTER: Well, it's the end of the day, Judge, 19 20 and I'm very frustrated with this witness because he's not 21 answering very simple questions, okay. He could have given me 22 a five-minute diatribe on what day it was. CHAIRMAN FESMIRE: Ms. Foster, if his responses are 23 24 nonresponsive, you can object, and we'll decide then. There's 25 no need to get sarcastic. Do you have any more questions of

this witness?

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2 MS. FOSTER: I do. I have about two hours' worth. 3 Thank you.

Q. (By Ms. Foster): Okay. Mr. Jones, looking at your proposed rule, Rule 9, Subsection (B)(5)(a), you're requesting information on what the State, federal, private, tribal surface ownership and the name of the property owner at the time of the application.

A. Yes.

Q. From a simple legal perspective, which property owners are you talking about and where is the operator supposed to get that information?

A. Once again, it states that the property owner at the time of application, this could be easily obtained from the property appraiser's office.

Q. Okay. But that information could be different than the county clerk's office or the tax assessor's office, as you are aware, okay?

So are we expected to notify all the potential property owners, for example, if it's a property or a mineral estate that's been split many times within the family?

A. I believe it stipulates that it has to be theproperty owner.

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Q. And who is that, is what I'm asking.A. It would be the person owning the surface, the

1 property. O. So it would be all members who have some sort of 2 3 legal claim to the minerals or the surface in this case -- in 4 this instance? 5 A. It's the property owner. 6 Q. I can read, too. What do you mean by property 7 owners, is what I'm asking you. 8 A. Well, these are things that will be illustrated 9 on the map, so these are ownership boundaries related to that. Since we are applying the application of determining that this 10 is protection of correlative rights, it could include those 11 12 mineral right owners. Q. Every single one of them. Now, let's talk about 13 14 the land grant. Are you familiar with the term land grant? I know you're not an attorney. Are you familiar with it? 15 16 A. Yes, yes. 17 Okay. And what happens in that instance? Do you Ο. 18 have to notify all the potential family members who might have 19 a legal right to a potential part of a land grant who might be 20 part of this development area? 21 Α. It seems to be. 22 Okay. Moving on to Subsection E --Q. 23 CHAIRMAN FESMIRE: Ms. Foster, why don't we -- this 24 would be a good place to break. 25 What we're going to do is we're going to take public

We're going to -- the Commission has some other 1 comment. business they have to address, and then we're going to adjourn. 2 3 We're going to reconvene next Thursday, the 18th, in 4 this room for this case at eight o'clock in the morning. Mr. Jones will not be available. What we will do is take his 5 6 schedule and we'll discuss next time --7 Yes, ma'am? 8 MS. MACQUESTEN: I have something that might help 9 with the scheduling. CHAIRMAN FESMIRE: Yes, ma'am. 10 MS. MACQUESTEN: A lot of the questions that we heard 11 12 already and that we're hearing now go to some of the provisions 13 in the proposed rule that are going to be addressed by other 14 witnesses, and that should have been clear to everyone because 15 we made that clear in our pre-hearing statement, in the 16 pre-filed written testimony of those witnesses, in my opening 17 statement and in my direct examination of Mr. Jones. 18 So everyone should be aware that he is here to testify as to the structure of the rule, but that we have 19 20 additional witnesses to go through 1 through 8 of Subsection B, 21 and we have additional witnesses on Section 10 for B(3) -- I'm 22 sorry -- for everything except the two provisions that 23 Mr. Jones addressed in Subsection B of Section 10. 24 CHAIRMAN FESMIRE: Okay. Ms. MacQuesten, I think 25 that's relevant. We'll go through those witnesses, and we'll

1	allow Ms. Foster a chance to finish her cross-examination when
2	Mr. Jones is available. I believe the Commissioners have some
3	questions too, and they'll ask him those questions at that
4	time, okay?
5	So, is that acceptable to everybody, to all the
6	attorneys? Okay.
7	With that, we will continue Case No. 14255 as you
8	were. Before we do that, let's finish the public comments. Is
9	there anybody here who would like to make a public comment on
10	the record?
11	Okay. Ma'am? You were first. Why don't you start.
12	You have the option of making a comment, either a public
13	statement or being sworn and making testimony on the record, in
14	which case, you can be cross-examined.
15	MS. VAUGHN: I'd like to make a statement.
16	CHAIRMAN FESMIRE: Why don't you make a statement.
17	Start with your name, please.
18	MS. VAUGHN: My name is Louise Vaughn, and I'm a
19	resident of the Galisteo Basin. I feel the attorneys for oil
20	and gas chafing against these regulations. And I just want to
21	say that I so appreciate OCD and your care for us and for our
22	environment and our health.
23	We have seen in our national debacle of a financial
24	system what no regulation can do. It's horrendous. And we are
25	very concerned, people who live in the Galisteo Basin, about
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what oil and gas drilling or exploring or producing could do to us.

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So we have very little protections as surface owners. In my opinion, that law is absurd, but it is the current law, and I really appreciate OCD's care and patience with all these hearings and with really trying to set up some protection for our environment, for our wildlife, for our cultural heritage and for our health, and I just want to thank you all.

CHAIRMAN FESMIRE: Thank you, Ms. Vaughn.

10 There were several other people who raised their 11 hands. Rachel?

12 MS. JANKOWITZ: My name is Rachel Jankowitz. I'm employed as a habitat specialist in the Conservation Services 13 14 Division of the New Mexico Department of Game and Fish. The 15 Department of Game and Fish was one of the administrative 16 agencies responsible for addressing the executive order about 17 which you heard testimony earlier. As such, we did collect 18 public comments, and we did contribute to the Galisteo Basin 19 Report, and of which you heard testimony earlier.

Relative to the Pit Rule, this Commission, yourselves, found in May of 2008, that protection of the environment is not limited to protection of fresh water and prevention of human exposure to toxic agents. It is the position of the Department of Game and Fish that wildlife and affects to wildlife should be considered along with other

elements of the human and natural environment of the Galisteo Basin.

Our written comments and my comments to follow basically follow on that principle. Moving to the proposed Section 9 of the rule, Game and Fish Department strongly supports the proposed requirement for plans of exploration and development.

While this is a new procedure to OCD -- or would be a new procedure -- it is not a new concept to history. Plans of development are widely used in sensitive areas and areas where development is at early stages for oil and gas.

12 We would like to suggest in addition to the proposed elements of these plans a couple of additional elements which 13 14 would address wildlife and habitat protection. First of all, 15 we believe that the site reports should include baseline 16 information regarding fish and wildlife use patterns and habitat and the required maps submittal should include mapping 17 18 of habitats and important habitat features. The reason for 19 collecting that information is the same as the reason for 20 collecting the information which you already propose to collect 21 which Mr. Jones was testifying about, which is to identify the 22 resources that are present for the purpose of identifying 23 potential adverse impacts and whether adequate steps are being 24 taken to mitigate those impacts.

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The other proposed additional element to the plans of

development that we would recommend is that the plan should include a description of the methods of both interim and long term by which the project would be reclaimed and re-vegetated.

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CHAIRMAN FESMIRE: Ms. Jankowitz, this is in the information -- there's a written version of this in the information that you filed?

MS. JANKOWITZ: Yes, sir. Okay. Most of this.

CHAIRMAN FESMIRE: I just wanted to verify that it was the same thing.

MS. JANKOWITZ: Okay. The reclamation methods is the usefulness of that is the best management practice for protecting the environment is pretty self evident, and I would just add that reclamation is a common element of plans of development used by other agencies elsewhere.

15 Moving on to proposed Section 10 of the rule, Game 16 and Fish Department supports the requirement for closed-loop 17 drilling systems for the drilling fluids. Closed-loop systems effectively eliminate the potential for wildlife entrapment or 18 19 exposure to harmful substances. They also minimize the 20 potential for contamination of the surface soil and thus retain the soil's capacity for the future reestablishment of 21 22 productive vegetation.

We would also recommend one additional provision in Section 10, which would be the required elements of, I guess, all plans of development in the Galisteo Basin. And that would

be on specific setback distances from streams, water courses and other aquatic features. And we would recommend that those setbacks should apply from the edge of any disturbed ground associated with the oil and gas development to the edge of the riparian or wetland habitat.

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I would just like to elaborate slightly on the reason for that recommendation. The first reason for that has to do with habitat fragmentation. These types of permanent and temporary water sources are necessary for maintaining aquatic species and are critical for water sources for terrestrial species in arid environments.

12 Riparian aquatic habitats also serve as important dispersal migration and foraging corridors. When animals are 13 14 attempting to use these zones which they use in greater density 15 of animals for other areas for travel reproduction and forage, 16 and when these areas are subjected to noise and disturbance, 17 the animals are subjected to increased physiological stress and this impairs the function of the habitat by reducing the 18 19 capability of wildlife to use the habitat effectively.

The second reason for recommending setback distances has to do with the fact that the condition and health of the vegetation in the watershed is the major factor in determining the quantity and quality of the associated flow regime in the water courses so that the setbacks would protect these habitats from sedimentation and increased erosional energy of runoff

caused by loss of vegetation and widespread surface disturbance. And that's pretty much all I have. I just want to recap that the Department of Game and Fish does support the proposed rule and that we would like to see a few additional provisions which would indicate that OCD recognizes wildlife as a resource meriting comparable protections with other resources in the Galisteo Basin.

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CHAIRMAN FESMIRE: Thank you, Ms. Jankowitz. Was there anybody else? Bruce?

MR. FREDERICK: Mr. Chairman, thanks. Bruce
Frederick with the New Mexico Environmental Law Center
representing Drilling Santa Fe.

We didn't submit comment. We submitted recommended changes. So I'm wondering if there will be a chance for me to elaborate, or I would ask the leave of the Commission to elaborate on those recommended changes. We support the rule and just have a few minor changes we'd recommend.

19 CHAIRMAN FESMIRE: We could do that. It would 20 probably be more effective after close.

MR. FREDERICK: That would be fine.

22 CHAIRMAN FESMIRE: Okay. Steve, I think your hand23 was up.

24 MR. SUGARMAN: Thank you, Mr. Chairman and 25 Commission. My name is Steve Sugarman. I'm a resident of the

Galisteo Basin. This will be a statement.

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As I've listened to the proceedings today, and especially this afternoon, I'm struck by the fact that it seems that what industry is wanting to maintain is a one-size-fits-all rule that provides for fast-track approvals of APDs without any public notice and with the bare minimum of interagency consultation.

And I am very thankful that the Commission has seen the wisdom of realizing that that sort of regulatory regime is not appropriate for areas in New Mexico that are not yet part of the oil patch; that is, wildcat areas that have ecological and cultural resources that are especially worthy of protection.

14 Those sorts of areas simply deserve to have some sort 15 of protections that are special and above the protections that 16 exist in those areas that have already been developed for oil 17 and gas, especially in this environment where technology is changing so quickly and advancing so quickly and where the 18 19 resource economy is so volatile, what we're seeing is that 20 areas that were once non-commercial are now becoming commercial 21 or marginally commercial or raise questions in minds of 22 operators as to whether a commercial use can be found there.

23 So what we're seeing is we're seeing a lot of push 24 into areas that can be considered frontier areas, wildcat 25 areas, areas that are pristine. And areas that have been

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developed for other purposes that might be incompatible with oil and gas development and areas that still maintain some ecological resources, some relic resources, for instance, riparian habitats that might not have been impacted by oil and gas development.

So to me there is a very sound policy basis for treating wildcat areas like the Galisteo Basin differently than areas in the oil patch are being treated. And again, I'm happy to see that that's being done. Now, in the beginning of the day we heard some suggestion of the fact that in the Galisteo Basin that it's purely speculative that there are cultural resources present or that it's purely speculative that there might be aquatic resources that are important to protect that are present, whether they're groundwater resources or surface water resources.

Obviously, that's absurd. There is a large body of literature that discusses at great length the high density of cultural resources in the Galisteo Basin, and we know that there are also very, very valuable and hard to characterize aquatic resources in the Galisteo Basin, and you heard the representative from the State Engineer testify as to the fact that the hydrogeology of the area is very complex, the fracturing is complex, it differs from one site to another.

So treating, again, all these reason are valid reason for treating this area differently than the State would treat

Anecdotally, since Tecton has come to the 1 other areas. 2 Galisteo Basin, I think it's interesting and important to note that they have wanted to drill in areas that are most critical 3 from both an aquatic and a wildlife standpoint where they 4 5 are -- I believe that in the three APDs -- I'm not a geologist -- but in the three APDs that they have pending 6 7 before the Commission now, before the OCD right now, two of them overly the alluvial zone, which as we heard this morning, 8 is especially important for aquifer recharge. And one of them 9 10 is either within or very near to the riparian strip.

Before we had the three APDs that were filed by 11 12 Tecton, Tecton had somewhat earlier proposed an initial 13 exploratory drilling plan of eight wells. And my recollection is that of those initial eight wells, that five or six of them 14 were overlying the alluvials. So we know that there is a very 15 16 important resource there. We know that it's hard to 17 characterize, and we know that the exploratory drilling that is 18 being contemplated by operators that have looked at the 19 Galisteo Basin is going to be targeting those zones which are 20 in need of the most protections.

21 And so I think that the Commission's rule targeting 22 the need to protect important hydrologic resources is right on. And I also believe and support what Ms. Jankowitz says that it's extremely important, that it's really critical, to get a 24 handle on the biological resources of any area before any 25

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wildcat or exploration drilling is allowed.

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Because what happens with these areas, these very small relative areas of riparian habitat that still exist in New Mexico -- and I believe that the BLM has estimated that of the total riparian areas that once existed in New Mexico, there are around three to five percent right now that are remaining. And it's vitally important for our wildlife resources to protect and maintain those surviving riparian areas.

And once we get the initial incursion in there, fragmentation is going to be done and the habitat capability index is going to start to decrease and the wildlife is going to start to suffer. So it's important to get a handle on the baseline conditions and how we can protect the baseline conditions and not start down a slippery slope.

And that's what this rule does. And that's what's visionary about this rule and that's what's indispensable about this rule. It allows the OCD at one point in time to take a look at how field development will impact an area or might impact an area if the exploratory drilling is successful.

I think that it's fair to say that doing any sort of analysis in an ecologically important area like the Galisteo Basin in the way that it's been conventionally done in the oil patch on a well-by-well basis, on a discrete location basis, makes it impossible for the Commission to take a look at the synergistic impacts and the accumulative impacts of all of that

development together with the associated facilities, whether they be collection lines or roads together.

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And it's a look at the cumulative impact, generally, which is what's really essential. Now, a rule like this is long overdue in New Mexico. This is isn't something that's new. In fact, the underpinnings of our federal environmental laws are based on the fact that an agency like OCD should have all information relating to the cumulative impacts that are associated with reasonably foreseeable projects at the time it makes a decision on the first project.

11 So while this might be novel for OCD, this kind of 12 prospective rule that requires an applicant to provide 13 information as to what plan might be going forward and allows 14the public and sister agencies with resource expertise to 15 comment on the plan, that might be novel for New Mexico, it's 16 something whose importance -- it's a concept whose importance 17 has been recognized and acknowledged by the federal government 18 for 30 years. And it's a concept that has been enshrined, as I 19 said, into the National Environmental Policy Act and National 20 Historic Preservation Act. And I think that New Mexico will be 21 proud when it steps in line with other federal -- with federal 22 agencies that have taken a proactive, forward-looking, 23 plan-oriented approach to development and does the same thing 24 with those areas in New Mexico that still maintain qualities 25 that are worthy of protection.

So again, I applaud the Commission's effort in this regard. I think that an effort like this is extremely timely, given the fact that we're seeing pressure by industry to go into areas that have not been developed in the past and that have been developed for reasons such as residential use that are simply going to be incompatible with the kind of development that we heard Tecton proposing for the Galisteo Basin.

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9 We heard some very alarming projections from Tecton. They were projecting thousands of wells in the Galisteo Basin 10 11 with attendant road systems. And I think that when we have 12 information from an operator that that kind of project is being 13 contemplated for an area, I think it's not only the privilege 14 of the State to consider what the impacts of that proposed 15 development would be, it's the responsibility of the State to 16 look at the adverse impacts that are associated with that kind 17 of development. And I think that the State has full authority 18 to require operators to assist them in ensuring that that kind 19 of development would not have an undue adverse impact on the 20 resources that we're all trying to protect here. So thank you 21 very much.

CHAIRMAN FESMIRE: Thank you, Mr. Sugarman. There was one other. You want to step forward, sir?

MR. DROZ: Mr. Chairman, my name is Matthew Droz. I'm with the law firm of Baker Botts. I represent Halliburton

1 Energy Services Corporation. I would just like to request your permission to be able to defer our comments until this hearing 2 3 is continued on the 18th of December. CHAIRMAN FESMIRE: Like I said, we're required by 4 5 rule to make this opportunity available at least once a day. 6 We traditionally do it twice, once before we break for lunch and once before we break at the end of the day. Your comments 7 will be welcomed then. 8 9 MR. DROVES: Thank you, Mr. Chair. 10 MR. MICOU: May I? 11 CHAIRMAN FESMIRE: You may, sir. 12 MR. MICOU: My name is Johnny Micou. I'm a resident 13 of Santa Fe County. I will just be making a very, very brief 14 statement -- or actually elliptical statements after such a 15 long day. 16 Firstly, there have been written comments submitted 17 by the New Mexico Environment Law Center and two sets of 18 written comments submitted by the Western Environmental Law 19 Center for Common Ground United, which I am the executive 20 director. And there were nine other organizations that signed 21 on to that. And I just wanted to make sure you were aware of those comments. 22 23 As this day began, I just want to highlight, as you 24 are already well aware of, the Pit Rule is being legally 25 challenged as we speak. So the this lit up as a reason to not

1 have special rules for the Galisteo Basin, we could always go 2 to the Pit Rule. Well, if it's being challenged and kicked 3 out, then you're right back to where you were. 4 We note that Tecton's not here. They're the one that 5 began all this in Santa Fe County, and they have their leases up for sale. 6 7 We support the Commission for what you're doing today. And would you consider additional written comments from 8 9 the public? Would that be a possibility? I know we had the cutoff date, just general comments? 10 CHAIRMAN FESMIRE: Our rules don't allow it now 11 12 without some sort of exception; isn't that correct, Ms. MacQuesten? 13 MS. MACQUESTEN: I don't recall anything addressing 14 15 that issue. 16 CHAIRMAN FESMIRE: But we can accept oral comments 17 any time that we hold a Commission meeting on the rule-making. MR. MICOU: I just thought I'd ask. Thank you. 18 CHAIRMAN FESMIRE: Is there anyone else that would 19 like to make a statement on the record? 20 21 Okay, with that, we're going to continue Case No. 14255 until eight o'clock. Please note the change in 22 23 time; it's eight o'clock a.m., Thursday, December 18th, in this 24 room. 25 Thank you all.

The next case before the Commission is Case No. 14163, the de novo Application of Merrion Oil and Gas Corporation for Compulsory Pooling in San Juan County, New Mexico. This case will be continued to the January 2009 Commission meeting.

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The next case on the docket is Case No. 14106. It's the de novo Application of the New Mexico Oil Conservation Division for a Compliance Order against Xeric Oil and Gas Corporation. This case will be continued to the January 2009 Commission meeting.

The next case before the Commission is Case No. 13957, the de novo Amended Application, of Energen Resources Corporation to Amend the Cost Recovery Provisions of Compulsory Pooling Order No. R-1960 to Determine Reasonable Costs and for Authorization to Recover Costs from Production of Pooled Mineral Interests, Rio Arriba County, New Mexico. This case will be continued to the January 2009 Commission meeting.

18 The next case before the Commission is Case 19 No. 14134, the de novo Application of the Board of County 20 Commissioners of Rio Arriba County for Cancellation or 21 Suspension of Applications of Permits to Drill (APDs) filed by 22 Approach Operating LLC, Rio Arriba County, New Mexico. This 23 case will be continued to the February 2009 docket.

The next case is Case No. 14141. It is a de novo Application of Approach Operating, LLC for Approval for Six

1 Applications for Permits to Drill in Rio Arriba County, New 2 Mexico. This case will be continued to the February 2009 3 Commission meeting. 4 The next case on the docket is Case No. 14122, the de novo application of Pecos Operating Company for Approval of 5 a Non-Commercial Saltwater Disposal Well, Lea County, New 6 7 Mexico. This case will be continued to the January 2009 Commission docket. 8 9 MR. SMITH: January. 10 CHAIRMAN FESMIRE: For some reason, we've got 11 Case No. 14141 on again. 12 Let the record reflect that the Chair is gong to 13 infer a motion to dismiss -- I mean, a motion to adjourn from 14 Commissioner Bailey since she's packed, dressed and ready to 15 go. COMMISSIONER BAILEY: I so move. 16 17 COMMISSIONER OLSON: Second. 18 CHAIRMAN FESMIRE: All those in favor signify by saying "aye." 19 20 COMMISSIONER BAILEY: Aye. 21 COMMISSIONER OLSON: Aye. 22 CHAIRMAN FESMIRE: Aye. 23 Let the record reflect that the Commission meeting 24 was adjourned at 5:50 p.m. 25

1 2 REPORTER'S CERTIFICATE 3 I, JOYCE D. CALVERT, Provisional Court Reporter for 4 the State of New Mexico, do hereby certify that I reported the 5 6 foregoing proceedings in stenographic shorthand and that the 7 foregoing pages are a true and correct transcript of those 8 proceedings and was reduced to printed form under my direct 9 supervision. 10 I FURTHER CERTIFY that I am neither employed by nor 11 related to any of the parties or attorneys in this case and 12 that I have no interest in the final disposition of this 13 proceeding. 14 DATED this 11th day of December, 2008. 15 16 17 18 19 longe ( a) 20 21 JOYCE D. CALVERT New Mexico P-03 22 License Expires: 7/31/09 23 24 25

1	STATE OF NEW MEXICO )
2	COUNTY OF BERNALILLO )
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4	I, JOYCE D. CALVERT, a New Mexico Provisional Reporter, working under the direction and direct supervision of David Dava New Marian CCP License Number 112 bareby contify
5	Paul Baca, New Mexico CCR License Number 112, hereby certify that I reported the attached proceedings; that pages numbered
6	1-281 inclusive, are a true and correct transcript of my stenographic notes. On the date I reported these proceedings, I was the holder of Provisional License Number P-03.
7	Dated at Albuquerque, New Mexico, 11th day of December, 2008.
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10	Joyce D. Calvert
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