		Page 1
1	STATE OF NEW MEXICO	
2	DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESO OIL CONSERVATION DIVISION	OURCES
3		
4	APPLICATION OF BLACK HILLS GAS RESOURCES, INC. FOR A NONSTANDARD PRORATION UNIT, RIO	INC.
5	ARRIBA COUNTY, NEW MEXICO	
6		
7	CASE NO. 14057	
8		
9	JANUARY 24, 2008	
10	1220 South St. Francis	
11	Santa Fe, New Mexico	
12		
13	EXAMINER: DAVID BROOKS	
14		2008
15		
16	OCEAN MUNDS-DRY, Esq. HOLLAND & HART	H C H
17	HOLLAND & HART Santa Fe, New Mexico 87501	
18		
19	WITNESS: CARLETON EKBERG	5
20	EXHIBITS: 1 - 4	
21		
22	REPORTED BY: Jan Gibson, CCR-RPR-CRR	
23	Paul Baca Court Reporters 500 Fourth Street, NW - Suite 105	
24	Albuquerque, New Mexico 87102	
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1	EXAMINER BROOKS: At this time we will	
2	call Case No. 14057, Application of Black Hills Gas	
3	Resources, Inc. for a Nonstandard Proration Unit,	
4	Rio Arriba County, New Mexico. Call for	
5	appearances.	
6	MS. MUNDS-DRY: Ocean Munds-Dry with the	
7	law firm of Holland & Hart in Santa Fe representing	
8	the applicant black hills gas resources and I have	
9	one witness.	
10	THE WITNESS: Carleton Ekberg.	
11	EXAMINER BROOKS: Would you spell that for	
12	the record.	
13	THE WITNESS: C-A-R-L-E-T-O-N,	
14	E-K-B-E-R-G.	
15	CARLETON EKBERG	
16	(being duly sworn, testified as follows:)	
17	DIRECT EXAMINATION	
18	BY MS. MUNDS-DRY	
19	Q. Would you please state your full name for	:
20	the record?	
21	A. Carleton Lee Ekberg, and Lee is L-E-E.	
22	Q. Where do you reside?	
23	A. Golden, Colorado.	
24	Q. By whom are you employed?	
25	A. Black Hills Exploration and Production,	

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Inc., which is the parent company of Black Hills Gas 1 2 Resources, Inc. How are you employed with Black Hills? 3 0. I am senior counsel and the director of Α. 4 the land department. 5 Have you previously testified before the 6 Ο. 7 Oil Conservation Division? I have not testified before this division. 8 Ά. I have testified before the Colorado Conservation 9 10 Commission. 11 Could you please briefly review your 0. 12 education and work history for the examiner. I have a bachelor's degree and a master's 13 Α. 14 degree in mathematics from the University of Denver 15 and I got my JD in 1977 from the University of 16 Upon graduation, I went to work for Poulson Denver. Odell & and Peterson, which is a 10 to 15 person law 17 18 firm, depending on the year, in Denver primarily 19 representing oil and gas clients. I was made a 20 partner in 1981 and remained at Poulson Odell & 21 Peterson until November of 2005. 22 During that time I represented oil and gas clients and title opinions, transactional matters, 23 24 financing, acquisitions and divestitures, oil and 25 gas hearings, commission hearings, and before the

Page 4 various federal and state and local agencies. 1 How long have you been with Black Hills? 2 Q. I started with Black Hills in November of 3 Α. 2005 as the senior counsel and director. 4 As a part of your position there, what are 5 0. 6 some of your duties? My responsibilities include supervision of 7 Α. the land department, which includes maintenance of 8 9 ownership and working with the regulatory divisions 10 with respect to filing of regulatory matters. Are you familiar with the application 11 0. that's been filed in this case? 12 13 Α. I am. Are you familiar with the status of the 14 Ο. lands that are the subject of the application? 15 16 Α. Yes, I am. 17 MS. MUNDS-DRY: Mr. Brooks, we would 18 tender Mr. Ekberg as a expert in petroleum and land 19 matters and probably legal matters as well. EXAMINER BROOKS: So qualified. 20 Would you, Mr. Ekberg, please state what 21 Q. Black Hills seeks with the application? 22 We seek a nonstandard proration unit in 23 Α. which two existing vertical wells that are drilled 24 25 to and producing from the Picture Cliff Formations

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and one horizontal well drilled to and producing
from the Picture Cliff Formation are dedicated to a
nonstandard proration.

Q. Mr. Brooks, I am glad you are the examiner today since you are familiar with some of the history of what brought us here, but just for the record, I will ask Mr. Ekberg to briefly give us some of the history of why Black Hills is seeking application at a hearing today.

We proposed this well or filed an APD for 10 Α. 11 this particular well as a vertical well in May of 12 2006. Subsequent to proposing that well, we came in 13 and got an order which allowed increased density, and contemplated drawing horizontal wells. 14 We 15 determined that horizontal wells were the more appropriate way to develop the Picture Cliff 16 Formation. We filed sundry with the Bureau of Land 17 18 Management in 2007 to change this to a horizontal 19 well. At the same time we filed the C-102 showing 20 the well to traverse four different spacing units, 21 and we completed this well in December.

The well didn't really go to the length that we thought it would for technical reasons, so we filed our amended C-102 or as drilled C-102 to show the well traversing three units. The district

Page 6 office and this office were uncomfortable without a 1 hearing to do that, so we are responding to the 2 3 request for a hearing on the matter. 4 EXAMINER BROOKS: Those three spacing 5 units being the northeast of Section 8, the northwest of Section 8 and the northeast of Section 6 7 7. THE WITNESS: Correct, sir. 8 EXAMINER BROOKS: Continue. 9 10 Ο. (By Ms. Munds-Dry) Thank you. If you please, give us then some background as to what 11 12 rules govern the development of the area. 13 Α. 8774 established nonstandard proration units for the units running down the west side of 14 Township 30 north 3 west where this area is located. 15 That included Section 6 and Section 7 and then the 16 ones to the south. So that established Lot 10 of 17 Section 6 and Lots 3 and 4 of Section 7 as a 18 19 nonstandard proration unit. Then there was NSL 4355 which was 20 initially issued September 7, 1999 and then was 21 amended in 2002. It's called the Mallon Jicarilla 22 23 Consolidated Contract Area. Basically it provides for 160-acre spacing with 660 acres set back from 24 25 the outer boundaries and from the quarter sections.

Page 7 Then as I mentioned, last November we came 1 2 before this OCD requesting an increased density in 3 Order 12707 and that is called the Jicarilla Apache Tribe Production Area. We asked to increase density 4 5 from one well per 160 acres to two well per 160 6 That applies to both the Picture Cliffs acres. 7 Formation and the tertiary formations. We asked for two horizontal wells. And that order approves 8 9 unorthodox well locations which provide for 660 feet 10 from the outer boundaries of the Jicarilla Apache 11 Tribe Production Area, and then ten feet from any 12 section lying within that Jicarilla Apache Tribe 13 Production Area. 14 Q. That order essentially incorporated the 15 previous NSL 4355 into this hearing order? 16 Α. Yes. 17 Also established increased density, as I Ο. 18 believe you said? 19 Α. Correct. 20 MS. MUNDS-DRY: We would ask you take 21 administrative notice of Orders 8774, corrected Administrative Order NSL 4355 and Division Order R 22 23 12707. So noticed. 24 EXAMINER BROOKS: 25 If you then would please turn to Exhibit Q.

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No. 1, and we have sort of reviewed this previously,
but if you will give a few more details of what is
on the map.

4 Α. Okay. This map shows the area that was 5 originally dedicated to this well on the first C-102 that was filed, and also shows the as drilled area. 6 7 Starting in the right side, we have the unit consisting of Lots 1, 2 and the south of northeast 8 9 quarter of Section 8. Moving west we have the unit consisting of Lot 3 and 4 in the south half of the 10 northwest corner of Section 8. Continuing westerly 11 12 we have the unit consisting of of Lot 1 and 2 and 13 the south half northeast corner of Section 7, and finally on the very western side the unit consisting 14 of Lot 10, Section 6 and Lot 3 and Lot 4 of Section 15 7. 16

17 This plat shows the surface location, which is 1,000 feet from the north line and 2300 18 19 from the west line located in Lot 2 of Section 7, 20 basically the northwest quarter northwest quarter. 21 It shows the proposed bottom hole location which was 22 proposed at 200 feet from the north line and 700 feet from the west line, and that would have been in 23 24 Lot 3 of Section 7, and then it shows the actual 25 bottom hole location as surveyed.

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Page 9 We have 412 feet from the north line and 1 2 1117 feet from the west line. I would like to state that the 412 feet is not accurate. It's actually 3 442 feet, and that is shown on the C-102 for the 4 5 as-drilled and I have advised Ms. Munds-Dry of that 6 and she is preparing a revised plat and we will 7 present it to the OCD. That was fundamentally my assistant's 8 inability to read my writing. 9 10 MS. MUNDS-DRY: Mr. Brooks, we will provide that to you, a corrected version of this 11 12 after the hearing? 13 EXAMINER BROOKS: Very good. 14 This plat also shows three existing Α. 15 vertical wells that have been drilled producing from the Picture Cliffs Formation, the Jicarilla 458, 08 16 No. 7 located in the south half north half of 17 Section 8, the Jicarilla 458 No. 3, which is located 18 19 in basically the southeast northeast of section 7, 20 and then the Jicarilla 458 No. 8, located in Lot 4 21 of Section 7. 22 Those are the existing vertical wells 23 drilled to and producing from the Picture Cliffs 24 Formation. 25 Q. In the northwest quarter of Section 8,

Page 10 there's not a vertical well indicated on this map? 1 2 Α. That's correct. We do have maps producing 3 for tertiary formations but not the Picture Cliffs 4 Formation. I would also like to point out one other 5 thing. This horizontal well we call the 45801113, 6 it may also be referred to as the 4580813. We 7 changed the nomenclature. The additional 1 8 designates it in our records as a horizontal well. 9 Just to be clear for the examiner, what Q. 10 are the proposed boundaries for the spacing unit that we are seeking today? 11 12 We would like that spacing unit to consist Ά. 13 of the north half of Section 8 and the northwest 14 quarter of Section 7, the three different 160 units 15 that are traversed by the horizontal well. 16 EXAMINER BROOKS: You mean the northeast 17 quarter? 18 THE WITNESS: Yes, the northeast guarter the Section 7. Excuse me. 19 20 Which wells would be dedicated to the Ο. 21 nonstandard spacing prorations? 22 458 No. 3, the 45808 No. 7, and the 45808 Α. No. 113. 23 24 Q. Thank you. Would you please then turn to 25 what's marked as Black Hills Exhibit No. 2 and

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1 review the packet for the examiner?

A. Yes, ma'am. The first page on the packet is the Application for Permit to Drill that was filed on May 4, 2006. As I mentioned before, at that time this well was proposed as a vertical well. That was approved by the BLM on August 30, 2007.

As I mentioned, between that time and --7 between the time we filed the application and the 8 9 approval, we determined that it would be more 10 appropriate, more cost effective and more efficient for producing reserves to drill this as a horizontal 11 12 well, so we filed a sundry notice on October 30, 13 2007 changing this to horizontal well. The surface location did not change. 14

15 The third page of that is the original C-102 that was filed October 30th showing the 16 surface location and the bottom hole location as 17 proposed and then the acreage dedication. You will 18 19 note that included all four of the units including the one which would include Lot 10 of Section 6 and 20 21 Lots 3 and 4 of Section 7, and then the next page of 22 that report is the acreage dedication or C-102 revised to the as drilled well, and that was dated 23 December 20, 2007 filed with this division on 24 25 December 26, 2007.

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Page 12 You note there that the footages are 442 1 feet from the north line and 1770 feet from the west 2 line as the bottom hole location. That coincides 3 with the correction that I mentioned before. 4 Then 5 following that is the survey for the well. That does confirm the surface and more 6 0. 7 importantly the bottom hole location for the well? Yes, it does. Those are the revised or 8 Α. as-drilled surface and bottom hole locations are 9 10 correct, based on the survey. 11 What is the primary objective for the Q. 12 well? Picture Cliffs Formation. 13 Α. 14 Q. What pool? The East Blanco Picture Cliffs Pool. 15 Α. 16 Ο. Would you turn to Exhibit No. 3 and identify and review this for the examiner? 17 18 Α. Okay. This is a sequence of pages that 19 show the ownership of the various units in this 20 tract. The first one, the first page shows the ownership of the unit consisting of Lots 1 and 2 in 21 22 the south half northeast quarter of Section 8, which is the unit on which the surface hole location 23 24 exists. You will note we show the Jicarilla tribe 25 with a one-sixth royalty, a number of different

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overriding royalty interest owners and the Black
Hills Gas Resources interest. Those are all net
revenue interests.

The next page shows the same information with respect to the northwest quarter of Section 8, fundamentally Lots 3 and 4 and the south half of the northwest quarter. The same royalty exists and the same overriding royalties exist in that area.

9 The next page is the ownership of the northeast guarter of Section 7, Lots 1 and 2 in the 10 south half of the northeast guarter. You will see 11 12 the same parties are involved with respect for the 13 royalty, overriding royalty No. 1, 2, and 3 are the 14 same. Overriding royalty No. 4 is decreased a little bit and then we have Energy Resources 15 Corporation and Black Hills Gas Resources, Inc. in 16 17 that particular unit.

18 Then finally, the next page is the 19 proration or the unit consisting of Lot 10 of 20 Section 6 and Lots 3 and 4 of Section 7. That 21 ownership would be common with the northeast quarter 22 of Section 7.

I would like to point out that the minerals in here are owned by the Jicarilla tribe. This is all subject to one lease. It's the

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1 Jicarilla Contract No. 458.

2 The pages after that then show the 3 ownership of the plan proration unit and the last page is the ownership of the drill proration unit 4 5 where the ownership is allocated between the various 6 tracts on an acreage basis. So the last page is the 7 drill proration unit, and that is how we will 8 perceive the allocation based on an ac rage basis. 9 Ο. The only other working interest here is 10 Energy Resources? 11 Α. Yes, ma'am. 12 0. Have they agreed to participate as well? 13 Α. They have elected to participate. 14 Let's turn back just briefly just to Q. 15 highlight a few things that happened in what was 16 Case No. 13816 which resulted in order R 12707 just 17 to highlight for the examiner some of the testimony and evidence that was presented in that case. 18 Whv 19 did Black Hills bring that case? 20 Α. Well, as I mentioned, we determined along 21 the way that the formation was conducive to 22 development through horizontal wells. We also 23 determined that one well per 80 acres was not going to drain -- I'm sorry, 1 acre per 160 acres was not 24 going to drain the gas in place in the Picture 25

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Page 15 1 Cliffs Formation, and actually 80 acre density was 2 the more appropriate density. So we filed the 3 application to do that. 4 0. I'm sorry for interrupting. I believe there were also a number of surface issues? 5 6 Α. Yes, I will get to those. And the 7 testimony shows that we specifically contemplated at 8 that time a second well per unit in that horizontal 9 wells would be used to drill it. We requested 10 unorthodox well locations, first of all, to avoid 11 the numerous archaeological sites we might 12 encounter, to minimize disturbances to forest and 13 wildlife areas, and to minimize construction of well pad by avoiding steep terrain. 14 15 These were all matters we discussed with the Jicarilla tribe before we came and made this 16 17 application. 18 Finally, it allowed us to position our surface hole locations in the bottom hole locations 19 20 optimally for geologic reasons. 21 At the hearing, we had a letter from the 22 BLM in support of our application, a resolution from 23 the Jicarilla Apache Tribe in support of our 24 resolution, and Innergen was present and consented 25 or supported our application in their presence.

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Page 16 Mr. Ekberg, do you recall during that Q. 1 hearing did Black Hills call a geologist that 2 discussed how horizontal wells are drilled in the 3 Picture Cliffs Formation? 4 5 Yes, we did. We called Richard White, a Α. senior geologist at Black Hills to present the 6 geology testimony, and he did describe how the 7 horizontal wells would be drilled. I think that was 8 9 on Page 36 of the transcript. And he actually stated that if we had concluded that the Picture 10 Cliffs is a good formation to be developed 11 12 horizontally. Did Black Hills also present the testimony 13 Q. 14 of a reservoir engineer to discuss the Picture 15 Cliffs reservoir? Yes, we called Thomas Sattak, who is a 16 Α. 17 consulting reservoir engineer for us on the project specifically to look at development of the Picture 18 Cliffs in the area as a horizontal area and the 19 20 requirement for the density. What were his conclusions? 21 0. 22 Α. His conclusions were that well density of 80 acres is effectively required to drain the 23 24 Picture Cliffs Formation in this area, and that this 25 density will result in incremental reserves being

Page 17 1 recovered. EXAMINER BROOKS: What was the case in 2 3 which his testimony was given? MS. MUNDS-DRY: 13816, Mr. Examiner. 4 EXAMINER BROOKS: Thank you. 5 Did all of the interest owners in that 6 Ο. 7 case agree to the application? Yes. As I mentioned we had support from 8 Α. 9 the BLM, the Jicarilla Apache nation, from Innergen, and we were not advised of any protests. 10 11 Collateral rights were addressed in that Ο. 12 case? 13 Yes. One of the conclusions was no there Α. 14 are no collateral rights issues. And the order also addressed wastes? 15 Ο. Yes, the conclusion was granting of the 16 Ä. order will maximize production and minimize surface 17 18 disturbance and result in incremental reserves. 19 0. Thank you for the brief highlight of what 20 occurred in the case. I thought it would be helpful 21 to this application. So in your opinion, will the granting of this application be in the best interest 22 23 of conservation, the prevention of waste and the protection of correlative rights? 24 25 Α. Yes.

Page 18 1 0. Is this well the subject of an emergency order allowing Black Hills to produce this well? 2 Yes, it is. 3 Α. Will we need some sort of -- let me back 4 Ο. 5 up. Do you know when the emergency order expires? 6 Α. It expires at the end of this hearing. 7 So we need an interim authority or some 0. sort of bridge authority in order to produce the 8 well pending this order? 9 10 Α. Yes, ma'am, we do. Or alternatively an expedited order? 11 Q. Either one. 12 Α. MS. MUNDS-DRY: Mr. Brooks, obviously you 13 14 are aware of with the emergency order and since that expires today we make that request for some -- one 15 16 or the other. If I can assist you in providing a draft order, I will be glad to do that if that 17 18 helps. I will leave that to whatever you think is 19 best. 20 EXAMINER BROOKS: Does that conclude your examination of the witness? 21 22 MS. MUNDS-DRY: I had one other thing. 23 EXAMINER BROOKS: Go ahead. 24 Ο. Mr. Ekberg, do we request that future applications for these sort of nonstandard operation 25

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Page 19 units be processed administratively? 1 2 Α. Yes, we do. We expect that this would be the way the area is developed and save OCD time and 3 our time. 4 5 0. Is Black Hills Exhibit No. 4 an affidavit 6 of publication giving notice of the case. 7 Α. Yes. Were Exhibits 1 through 4 either prepared 8 Q. by you or compiled under your direct supervision? 9 Α. Yes. 10 11 MS. MUNDS-DRY: Mr. Brooks, we would move the admission of Exhibits of 1 through 4 into 12 13 evidence. EXAMINER BROOKS: Exhibits 1 through 4 are 14 15 admitted. (Note: Exhibits 1 through 4 16 admitted into evidence.) 17 MS. MUNDS-DRY: That concludes my direct 18 examination. 19 EXAMINER BROOKS: What you are currently 20 21 asking is only for the three spacing units, correct? 22 THE WITNESS: Yes, Mr. Examiner. 23 EXAMINER BROOKS: There are only the three 24 wells shown on Exhibit 1 within the three spacing 25 units?

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1 THE WITNESS: Yes. The two vertical and 2 the one horizontal well.

3 EXAMINER BROOKS: Right. I think the best solution for an interim order is to draft another 4 order, and I don't think it will be a drafting 5 6 problem, because we will do the same -- we will make 7 it just like the previous two except it will not be 8 an emergency order because it's an order that's been 9 issued after a hearing. Therefore, it will not be 10 an emergency order so it will not be limited to ten 11 days.

12 Of course, if I could get the questions 13 resolved this afternoon I would love to do that, but I don't know that I can. For some reason, and I 14 15 attempted to contact the gentleman yesterday and 16 tell him -- left a message saying I wanted to 17 discuss it before the hearing, but he did not get 18 back to me. Maybe he is out of the office. But he 19 had very serious concerns about the issue, and I 20 don't understand what they are. So.

MS. MUNDS-DRY: I don't understand what they are either, Mr. Brooks. I can tell you my conversation with him, from what I understand, he was concerned about making a decision on this particular unique circumstances without Santa Fe

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1 first reviewing it.

EXAMINER BROOKS: Well, I believe the application -- formatting it as an application for nonstandard spacing unit was pursuant to my suggestion, was it not?

MS. MUNDS-DRY: I believe that's correct. 6 7 EXAMINER BROOKS: Because the Rule 111 8 permits a project area consisting of multiple 9 spacing units. It does not, of course, deal with 10 the land issues that arise from that situation, so 11 it leaves industry out in a questionable area in 12 terms of figuring out how to deal with the land 13 issues.

14 But --

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MS. MUNDS-DRY: That's my view of it as well. In some with regard, Mr. Brooks, that's going to have to be the operator, the industry company's problem really in addressing how they allocate production, and some of that they are just going to have to deal with.

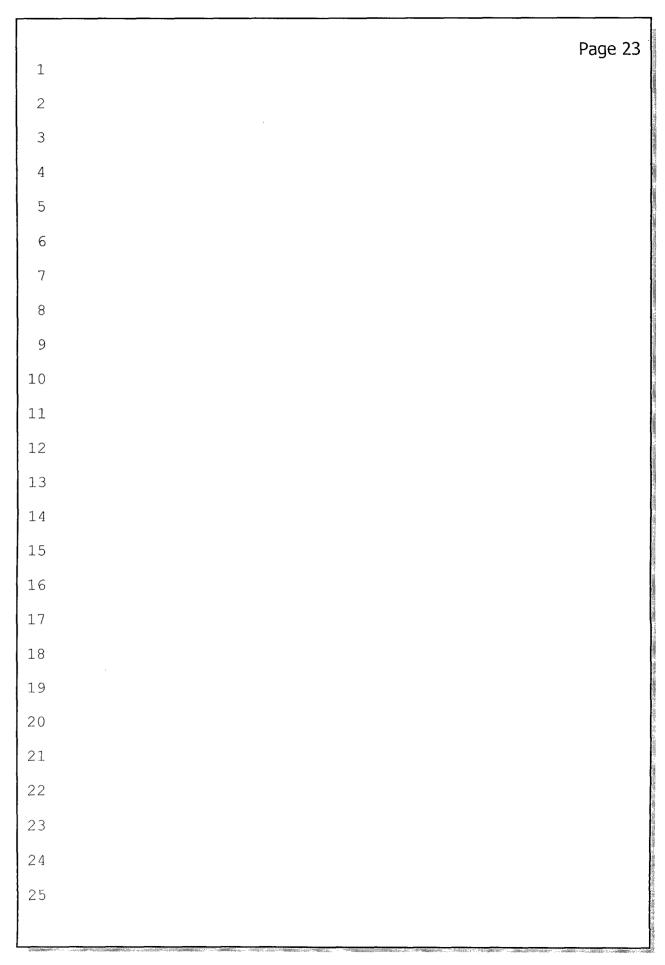
EXAMINER BROOKS: Of course, there's a history in New Mexico of the OCD attempting to regulate things in a way that consolidates spacing units and make them also ownership units.

Apparently whoever drafted Rule 111, and I

believe it was Michael Stoddard, did not take 1 account of that, which is okay, because like you 2 3 say, it's really industry's issue except when there's forced pooling. But I do not -- I am 4 unclear on why Mr. Haden gets so exercised about 5 this case, but I know that he does. I need to 6 anything that out before I can figure out to how to 7 8 address it.

9 MS. MUNDS-DRY: Appreciate that. I would 10 remind you that's why we hope that the case will 11 provide guidance in the future for the district 12 office so the applications can go back to being processed administratively. Because frankly, the 13 14 issues of correlative rights have already been 15 addressed. Not that we don't like coming to see you, but it would be more efficient and we can go 16 17 back to processing these administratively. 18 EXAMINER BROOKS: I don't believe we 19 should have unnecessary hearings. Okay. Case No. 14057 will be taken under advisement and this docket 20 21 is adjourned. 22 (Note: The hearing was concluded.) 23 I go heropy certify that the foregoing is a complete record of the proceedings in 24 the Examiner thating of Case No. heard by me on 25 , Examiner **Oll Conservation Division**

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2	I, JAN GIBSON, Certified Court Reporter for the
3	State of New Mexico, do hereby certify that I
4	reported the foregoing proceedings in stenographic
5	shorthand and that the foregoing pages are a true
6	and correct transcript of those proceedings and was
7	reduced to printed form under my direct supervision.
8	I FURTHER CERTIFY that I am neither employed by
9	nor related to any of the parties or attorneys in
10	this case and that I have no interest in the final
11	disposition of this case.
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14	JAN GIBSON, CCR-RPR-CRR
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