STATE OF NEW MEXICO

ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

CASE NOS: 22919

APPLICATION OF FAE II OPERATING, LLC FOR PRE-APPROVAL OF DOWNHOLE COMMINGLING OF PRODUCTION FROM THE YATES, SEVEN RIVERS, QUEEN, AND GRAYBURG FORMATIONS ON AN AREA-WIDE BASIS, LEA COUNTY, NEW MEXICO.

> REPORTER'S TRANSCRIPT OF VIRTUAL PROCEEDINGS EXAMINER HEARING JULY 7, 2022 SANTA FE, NEW MEXICO

This matter came on for virtual hearing before the New Mexico Oil Conservation Division, HEARING OFFICER WILLIAM BRANCARD and TECHNICAL EXAMINER McCLURE on Thursday, July 7, 2022, through the Webex Platform.

Reported by:

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13	Direct by Ms. Hardy 06
	CHARLES HOOPER
14	Direct by Ms. Hardy 09
	VANESSA NEAL Direct by Ms. Hardy 15
16	
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Page 3 1 HEARING EXAMINER BRANCARD: That brings us to Item 81, Case 22919 FAE II Operating LLC. 2 3 MS. HARDY: Mr. Examiner, Dana Hardy with Hinkle 4 Shanor on behalf of FAE II Operating LLC. 5 HEARING EXAMINER BRANCARD: And I think I have an 6 entry of appearance from COG here? 7 MR. RITTENHOUSE: Yes, sir, that's correct. This 8 is Joby Rittenhouse appearing on behalf of COG Operating. 9 HEARING EXAMINER BRANCARD: Thank you. 10 Mr. Rittenhouse, do you any objection with this case going forward? 11 12 MR. RITTENHOUSE: No, sir, I do not. HEARING EXAMINER BRANCARD: Are there any other 13 14 interested persons for case 22919? 15 MR. BRUCE: Mr. Examiner, Jim Bruce here entering an appearance on behalf the North Fork Operating, and we do 16 17 not object to the case proceeding by affidavit. HEARING EXAMINER BRANCARD: That was North Fork 18 19 Operating? 20 MR. BRUCE: Yes, like the north fork of a river. 21 HEARING EXAMINER BRANCARD: I don't know if we 22 have those anymore. 23 MR. BRUCE: Don't bother -- don't bother asking 24 me any more questions. I'm done for the day. I will be on 25 the phone, but I'm not going to say anything else in this

Page 4 1 matter. 2 HEARING EXAMINER BRANCARD: Okay. Anybody else in Case 22919? 3 4 (No audible response.) 5 HEARING EXAMINER BRANCARD: Because this is such 6 an interesting topic, we have a special guest examiner, Mr. Phil Goetze is joining us. With that Ms. Hardy, how 7 8 would you like to proceed? 9 MS. HARDY: I was planning to give a brief 10 overview of what we are requesting and then have our three witnesses go through their exhibits. 11 12 HEARING EXAMINER BRANCARD: All right. 13 MS. HARDY: Briefly. 14 HEARING EXAMINER BRANCARD: Please proceed. 15 MS. HARDY: Okay, thank you. FAE seeks an order preapproving downhole commingling of production from the 16 Yates, Seven Rivers, Queen and Grayburg formations on an 17 area-wide basis in Lea County that includes various lands in 18 multiple townships, sections and ranges. 19 The lands are identified in our application and 20 our testimony as the commingling area, that's what we refer 21 to it as. The request is approximately 49 pools which are 22 also identified in our application and testimony. 23 24 FAE operates approximately 600 wells in this 25 area, has sought many commingling approvals and intends to

Page 5 seek many more. Preapproval would expedite this process and 1 2 reduce administrative burdens on the Division and FAE because it would allow FAE to submit commingling 3 4 applications via form C-103, and FAE would give notice of the C-103s as required in the commingling rule, so we are 5 6 not seeking to circumvent any notice requirements. 7 We have three witnesses who will testify in 8 support of the application. Steven Lehrbass will address 9 land. Charles Hooper will address geology, and Vanessa Neal 10 will address engineering. The witnesses' testimony and exhibits will 11 establish there is sufficient data for the Division to 12 13 preapprove downhole commingling in this area in these pools. 14 The Division has approved numerous commingling applications 15 in this area, and commingling will not damage the pools or negatively impact production. 16 17 In addition, production from several of the zones is marginal, but production from multiple zones is economic. 18 FAE will also establish approving this application will 19 protect correlative rights and prevent waste. 20 So with that, I would like to call our first 21 witness, Steven Lehrbass. 22 23 Mr. Lehrbass, can you hear me? 2.4 HEARING EXAMINER BRANCARD: How about if we --25 MS. HARDY: They need to be sworn in, don't they?

Page 6 1 HEARING EXAMINER BRANCARD: Let's swear in all 2 witnesses in the group. 3 (Witnesses sworn collectively.) 4 HEARING EXAMINER BRANCARD: Please proceed, Ms. Hardy. 5 6 STEVEN LEHRBASS 7 (Sworn, testified as follows:) 8 DIRECT EXAMINATION BY MS. HARDY: 9 10 Thank you. Mr. Lehrbass, can you please state Q. your full name for the record? 11 12 Α. Steven Lehrbass. 13 By whom are you employed and in what capacity? Q. 14 I'm the director of land for Forty Acre Energy. Α. 15 Have you previously testified before the 0. Division? 16 17 Α. Yes. 18 Were your credentials as an expert in petroleum Q. 19 land matters accepted? 20 Α. Yes, they were. MS. HARDY: Mr. Examiner, I move to qualify 21 Mr. Lehrbass as an expert in petroleum land matters. 22 23 HEARING EXAMINER BRANCARD: So qualified. 24 Thank you. Mr. Lehrbass, can you please identify Q. 25 the document that's marked as Exhibit A?

Page 7 1 Α. That's my affidavit in this case. 2 Is the affidavit true and correct to the best of Q. 3 your knowledge? Yes, it is. Α. 4 5 Can you please identify the document attached to Q. 6 your affidavit as Exhibit A-1. 7 Α. That is our application and proposed notice. 8 0. What does application request? 9 Α. The application is requesting that the Division preapprove FAE's request to downhole commingle in the areas 10 and pools that are identified more particularly in the 11 application pending --12 13 Which formations are involved? 0. The Yates, Seven Rivers, Queen, Grayburg 14 Α. formations. 15 16 And how many wells, approximately, does FAE 0. 17 operate in the commingling area? 18 Approximately 600. Α. 19 Q. Are more wells planned? Yes, they are. 20 Α. 21 Does FAE frequently seek approval to downhole 0. 22 commingle in these pools in these areas? 23 Α. We do. 24 Q. Can you please identify the document attached to 25 your affidavit as Exhibit A-2?

Page 8 That is the list of other operators that are also 1 Α. operating wells located in the same commingling area. 2 3 Did FAE notify all of these operators of this 0. 4 application? 5 Α. Yes, they did. 6 0. Did anyone object? 7 Nobody objected. Α. 8 If FAE's application is approved, will FAE comply Q. 9 with the notice requirements in the downhole commingling 10 rule. We would. We would continue with the same notice Α. 11 12 requirements that are currently required via form C-103 and 13 the scope of that notification would be dependent on whether 14 or not the -- was diverse. 15 In your opinion will approval of FAE's Q. application reduce administrative burdens on FAE and the 16 17 Division? 18 Α. Absolutely. We frequently request approval of downhole commingling requests, and we expect to increase the 19 number of those applications moving forward. 20 21 MS. HARDY: I have no further questions, Mr. Lehrbass. I would move the admission of Exhibit A and its 22 23 attachments, A-1 and A-2. 24 HEARING EXAMINER BRANCARD: So admitted. (Exhibits A, A-1, A-2 admitted.) 25

Page 9 MS. HARDY: Thank you. I would next like to call 1 2 our geologist, Charles Hooper. CHARLES HOOPER 3 4 (Sworn, testified as follows:) 5 DIRECT EXAMINATION 6 BY MS. HARDY: 7 Can you please state your full name for the Q. 8 record? 9 My name is Charles Hooper. Α. 10 By whom are you employed and in what capacity? Q. I'm employed by Forty Acre Energy as a geologist. 11 Α. 12 Have you previously testified before the Q. 13 Division? 14 Α. Yes. 15 Were your credentials as an expert petroleum Q. 16 geologist accepted? 17 Α. Yes. MS. HARDY: Mr. Examiner, I move to qualify 18 Mr. Hooper as an expert in petroleum geology. 19 20 HEARING EXAMINER BRANCARD: So qualified. 21 Mr. Hooper, can you please identify Exhibit B? Q. 22 It's my affidavit in the case. Α. 23 Q. Is the affidavit true and correct? 24 Α. Yes. 25 Did you perform a geologic study of the 0.

1 commingling area?

2 A. Yes.

14

Q. What formations does FAE seek to commingle?
A. Formations within the Permian Base and Artesia
group. That includes the Yates, Seven Rivers, Queen and
Grayburg formation.

Q. What are the intervals of those formations in the
8 commingling area?

9 A. The approximate intervals, Yates, Seven Rivers 10 and Grayburg are set out in Exhibit B-1. That type log is 11 State A/C Number 116. The Yates is from roughly 3119 to 12 3315, the Seven Rivers from 3315 to 3740, the Queen from 13 3740 to 4020 and the Grayburg from 4020 to 4363.

Q. Can you generally describe the geology?

A. Sure. The Yates, Seven Rivers, Queen and Grayburg formations are part of the -- within the Artesia Group. The Artesia Group is a sequence of shelf rocks deposited in a relatively shallow back-reef depositional environment and consists of sandstone, dolomites and anhydrites.

The Artesia Group overlays the San Andres formation on an erosional surface and is overlaid by these -- formation and evaporites. Down dip of the Yates, Seven Rivers, Queen and Grayburg -- to the west of our commingle area exists the Capitan Reef complexes into which

1 all four of these formations transition into.

2 To the east of our commingle area, the -- which 3 are primary oil and gas reservoirs and turns to an on shore 4 near shore depositional environment which is comprised mostly of evaporites and dolomites. These four formations 5 6 are part of a single petroleum system where oil, water and 7 gas oil contact exists at common subsea structure levels 8 regardless of the named formation. 9 And does your affidavit identify the pools that Q. 10 FAE seeks to commingle? Yes, in Paragraph 4 of my affidavit there is list 11 Α. of pools broken out by formation. 12 13 And can you please identify Exhibit B-2. Q. I'm 14 actually trying to share that, but my computer, I think 15 because the file is large, is having a hard time. So I will 16 share it when my computer is working or when it decides to 17 cooperate, but can you identify that exhibit, please? 18 Α. Sure. B-2 is a map that shows the outlines and 19 shaded areas of the pools that FAE seeks to commingle in the commingling area. 20 21 ο. Let me see if I can share those. Okay. Is that 22 Exhibit B-2 there on the screen? I believe it's --23 Α. Yes. 24 And can you identify Exhibit B-3? Q. 25 Α. Sure. Exhibit B-3 is a map that shows all wells

Page 12 completed in the Yates, Seven Rivers, Queen and Grayburg 1 2 formations in the commingling area, and those wells as part of the --3 4 0. And can you please identify Exhibit B-4? 5 Α. B-4 is a breakout of the map in Exhibit B-3. Ιt 6 is a map that shows all those completed in just the Yates formation within the commingling area of --7 8 Is that Exhibit B-4 there on the screen? ο. 9 I think so. I can't read it. Α. 10 Okay. It's pretty small. Can you please Q. 11 identify Exhibit B-5. 12 Α. Similar, it's all wells completed in the Seven 13 Rivers formation within the commingling area in pools and --14 Can you please identify Exhibit B-6? 0. 15 Α. This map shows all wells in the Queen formation within the commingling area and the wells that are --16 17 0. And is Exhibit 7 a map that shows all wells 18 completed in the Grayburg formation? 19 Α. Yes. 20 Are all of these formations productive in the Q. 21 commingling area? 22 Α. Yes. 23 Can you please identify B-8? Q. 24 Α. Exhibit B-8 is a map that shows the path and 25 locations of wells in a cross section. And next exhibit?

Page 13 1 I'm trying to get there. My computer isn't Q. 2 I apologize for that. Can you please identify cooperating. 3 Exhibit B-9? 4 Α. Exhibit B-9 is stratigraphic cross section hung on the top of the Yates formation. 5 6 0. And what does the cross section show? It shows the reservoirs within the formation are 7 Α. consistent and continuous in the commingling area with 8 numerous reservoirs that -- the reservoirs are also 9 10 consistent beyond the --11 Q. Can you please identify Exhibit B-10? 12 Α. It is a GOR map. 13 What does that map show? Q. 14 It shows the gas oil ratios of individual wells Α. 15 completed in the Yates, Seven Rivers, Queen and Grayburg formations in the commingling areas. Even though all these 16 are part of the same petroleum system, the GOR varies for 17 each well and for what is historically completed pertaining 18 to the structural depth within the wellbore. 19 You see oil wells particularly in waterfloods 20 with low GORs and wells that produced oil from the gas cap 21 or wells that only produced from the gas cap have high GORs. 22 These wells are distributed across the entire commingled 23 24 area, the GORs are distributed across the entire commingled 25 area. So low GOR oil wells and high GOR oil wells via the

1 gas cap, one would reflect -- system.

2	Q. Based on your study of the area, is it your
3	opinion that fluids from each pool are compatible and that
4	combining the fluids will not damage the pools?
5	A. Yes. The formation that make up these pools have
6	very similar pool characteristics.
7	Q. Will fluid sensitive formations that may be
8	subject to damage water or other produced liquids be
9	protected from contact with the liquids produced from other
10	pools in the wells?
11	A. Yes. There are shallower productive pools in
12	the area, and these are pools such as the the Devonian,
13	et cetera, will still require downhole commingle
14	applications and compatibility analysis.
15	Q. In your opinion, will the granting of FAE's
16	application serve the interest of conservation, the
17	protection of correlative rights and prevention of waste?
18	A. Yes.
19	Q. Were the exhibits you have discussed prepared by
20	you or under your direct supervision or control?
21	A. Yes.
22	MS. HARDY: I have no further questions for
23	Mr. Hooper. I would move the admission of Exhibit B and
24	attachments B-1 through B-10.
25	HEARING EXAMINER BRANCARD: Thank you. Any
1	

Page 15 1 objections? So admitted. (Exhibit B, B-1 through B-10 admitted.) 2 3 HEARING EXAMINER BRANCARD: Did you have 4 notice --5 MS. HARDY: I have one more witness, I have Ms. 6 Neal who is going to testify and then I can go through my notice information if that's okay. 7 8 HEARING EXAMINER BRANCARD: Please proceed. 9 VANESSA NEAL 10 (Sworn, testified as follows:) DIRECT EXAMINATION 11 12 BY MS. HARDY: 13 Let me try sharing my screen again because I Q. 14 think I can actually show these exhibits. Okay. Miss Neal, 15 can you please state your full name for the record? Α. Yes it's Vanessa Black Neal. 16 17 0. By whom are you employed and in what capacity? I'm employed by Forty Acre Energy as a senior 18 Α. 19 reservoir engineer. 20 Have you previously testified before the Q. 21 Division? 22 Α. Yes. 23 And were your credentials as an expert in Q. 24 petroleum engineering accepted? 25 Α. Yes.

Page 16 MS. HARDY: I move to qualify Miss Neal as an 1 2 expert in petroleum engineering. HEARING EXAMINER BRANCARD: Any objection? 3 4 (No audible response.) HEARING EXAMINER BRANCARD: So qualified. 5 6 MS. HARDY: Thank you. 7 Ms. Neal, can you please identify the document in Q. 8 front of you that's marked as Exhibit C? 9 Yes. That's my affidavit for this case. Α. 10 Is the affidavit true and correct? ο. Yes. 11 Α. 12 How many wells does FAE operate in the Q. 13 commingling area? 14 About 600, a little over that. Α. 15 Does FAE frequently apply for approval to 0. downhole commingle via form 107 A? 16 17 Α. Yes. 18 Does FAE expect that those applications will Q. 19 increase in the future? 20 Α. Yes. 21 Q. Get back to the exhibits maybe. Can you please 22 identify Exhibit C-1? 23 Α. Yes. This is a base map of the commingling area 24 with the wells that have been previously approved for the 25 downhole commingle orders in the proposed pools.

Page 17 And how many, approximately how many wells in the 1 Q. area have been approved for downhole commingling? 2 3 Approximately 200. Α. 4 0. And can you please identify Exhibit C-2? C-2 is a list of the previously approved orders 5 Α. 6 in the area of Lea County. 7 Approximately how many orders have you Q. 8 identified? 9 A little over 200. Α. 10 Ms. Neal, is the bottom perforation of the lower Q. 11 zone within 150 percent of the depth of the top perforation in the upper zone? 12 13 Α. Yes. 14 And is the lower zone at or below normal pressure 0. 15 with normal pressure assumed to be .433 psi per foot of 16 depth? 17 Α. Yes. 18 Can you please identify Exhibit C-3? Q. Those are production curves for historical 19 Α. production from each of the formations. 20 21 ο. And what do those show? Those are showing production from oil, gas and 22 Α. water, as well as the well counts for each of the different 23 24 zones. You will see generally they are all trending down, 25 you know, over time as the pressure becomes lower. And it's

Page 18 also kind of indicating that the wells on an individual 1 2 formation bases are reaching economic limits from the well formations. 3 4 0. Can you please identify Exhibit C-4? 5 Yes. That is an overall allocation for the four Α. 6 different unique zones in the commingling area. It's an 7 area-wide basis, so it's not something I would use for a 8 specific well allocation, but it's more of a normalized 9 allocation between the four zones across the entire 10 commingle area. 11 Q. Do you recommend the well-specific allocations be 12 included on form C-103? 13 Α. Yes. 14 Based on your evaluation of the wells in the 0. 15 commingling pool area, will commingling jeopardize the 16 efficiency of -- or future secondary operations in the pools 17 to be commingled? 18 Α. No. 19 Q. Is it your opinion that the allocated production 20 from each producing pool in the commingled wellbore will not 21 exceed the top oil or gas allowable rate for a --22 Α. Yes. Correct. 23 Will the proposed commingling reduce the value of 0. 24 the total remaining production? 25 Α. No.

Page 19 1 Will preapproval of downhole commingling in the 0. 2 commingling area extend the economic life of the wells and 3 increase ultimate recovery from the formation? 4 Α. Yes, absolutely. 5 Is one or more of the zones in the commingling Q. 6 area marginal production capacity based on recent production 7 rates of wells producing from a single zone? 8 Α. Yes. 9 Based on your analysis, is it your opinion that Q. 10 sufficient data exists within the Yates, Seven Rivers, Queen 11 and Grayburg formation to support any exceptions from the 12 criteria in the Division's downhole commingling rule in form 13 C107 A? 14 Yes. Α. 15 In your opinion, will granting FAE's application Q. 16 serve the interest of conservation, the protection of 17 correlative rights and prevention of waste? 18 Α. Yes. 19 ο. And were the exhibits you have discussed prepared 20 by you or under your direct supervision and control? 21 Yes. Α. 22 Thank you. Q. 23 MS. HARDY: I have no further questions for Ms. 24 Neal. I request the admission of Exhibit C and its 25 attachments C-1 through C-4.

Page 20 1 HEARING EXAMINER BRANCARD: Any objections? 2 (No audible response.) HEARING EXAMINER BRANCARD: So admitted. 3 4 (Exhibits C, C-1 through C-4 admitted.) 5 MS. HARDY: I also wanted to request the 6 admission of Exhibit D, which is my notice affidavit and its attachments. And we have provided a notice list, certified 7 8 mail receipts and a publication notice, and we did again notify all operators listed in the pools. 9 10 HEARING EXAMINER BRANCARD: Okay. So you notified all the operators within all the pools that are 11 affected by this? 12 13 MS. HARDY: Correct. 14 HEARING EXAMINER BRANCARD: Thank you. So 15 admitted. (Exhibit D admitted.) 16 17 MS. HARDY: Thank you. HEARING EXAMINER BRANCARD: I will start with 18 19 Mr. Rittenhouse. Any questions? 20 MR. RITTENHOUSE: None from COG, thank you. HEARING EXAMINER BRANCARD: Mr. Bruce said he was 21 not going to ask any questions, so I will go to either Mr. 22 McClure or Mr. Goetze. Who would like to start? 23 24 TECHNICAL EXAMINER GOETZE: Mr. McClure, he has 25 the most questions.

Page 21 1 TECHNICAL EXAMINER McCLURE: He was asking for a 2 volunteer, not to volunteer somebody else. 3 HEARING EXAMINER BRANCARD: That's the experience 4 of Mr. Goetze. 5 TECHNICAL EXAMINER McCLURE: I think I will save 6 some of the SWD stuff to your side, Phil, and see if I have 7 any follow-up questions and after you ask your questions, 8 then I will go again. 9 I guess the first question I have, in regards to 10 the map that's provided, and again, Ms. Hardy, if you can answer, go ahead, or direct it to whichever witness you feel 11 12 is most appropriate, but I guess my question is, on the GOR 13 map, are those units in MCF per barrel or what are those 14 units in. 15 MS. HARDY: That would be a question for Mr. Hooper, I believe. 16 17 MR. HOOPER: Yes, they are --18 TECHNICAL EXAMINER McCLURE: I'm sorry, I missed 19 that. Say that again. MR. HOOPER: You are correct, it is MCF per 20 21 barrel. 22 TECHNICAL EXAMINER McCLURE: Once we scroll up -trying to see which one it is, it is Exhibit B-7, the 23 24 Grayburg, now it looks like there is a cutoff there about 25 halfway down. Is that due to the Grayburg no longer

producing from that point, or is that an artifact of pools or what?

MR. HOOPER: Well, all of the wells that are --3 4 mostly because they don't, not productive, half productive beyond that point, but all of the wells that are marked here 5 were wells that we could verify via perforations and 6 production and well life, some combination there of their 7 8 production. If we couldn't verify one of those, then it's 9 not included in this well. So these maps by definition are 10 accurate, but incomplete.

11 It also points to, I believe there's the Penrose 12 Skelly unit, and the Penrose Skelly is sitting on a 13 structural high. And so south of that unit area you are 14 going off a -- structure, and you are transitioning from 15 Grayburg, primarily Grayburg to primarily lower Queen oil 16 production.

17 TECHNICAL EXAMINER McCLURE: So I guess my 18 question then -- because I think our well that our type log 19 came from, and I don't remember the name of it, but it's 20 about two-thirds down, isn't it? So isn't it further south 21 than what you have your end of your Grayburg ending there or 22 not? 23 MR. HOOPER: It is -- it's further -- the type

24 log is roughly in the middle of this, the middle of this
25 area.

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Page 23 1 TECHNICAL EXAMINER McCLURE: Of the, of the 500 2 square miles, or of the -- or of your Grayburg wells? MR. HOOPER: Of the, of the entirety of the 3 4 commingle area. 5 TECHNICAL EXAMINER McCLURE: So it is further 6 south than the Grayburg wells then? 7 MR. HOOPER: Than the listed completions on these 8 Grayburg wells, yes. We believe the Grayburg can be 9 productive further south, but we don't have completions for 10 those. TECHNICAL EXAMINER McCLURE: I guess, do you 11 think that that's -- go ahead. 12 13 MR. HOOPER: Right now we believe it will be productive. 14 15 TECHNICAL EXAMINER McCLURE: I guess my question is, do you think that your type log is still efficient, I 16 guess, sufficient to meet the entirety of this area taking 17 into consideration that we are talking about 500 square 18 miles? 19 MR. HOOPER: Well, the type log is -- the 20 reservoirs here are very continuous across the entire area, 21 and so, yes, the Grayburg type log, in terms of what 22 reservoir characteristics, yes, I do believe that possible 23 24 for the whole area. TECHNICAL EXAMINER McCLURE: Okay. 25

Page 24 MR. HOOPER: Now where the primary oil production 1 2 comes from, you know, and parts of this entire commingling 3 area come from, you know, the Yates down through the 4 Grayburg, so typically it's a window, you know, 2- to 300 feet of oil production. 5 6 TECHNICAL EXAMINER McCLURE: Yeah, and depending on where it is, depending on what formation it is, is your 7 8 thought process? 9 MR. HOOPER: Exactly. Depending on where it is on the platform structure. 10 TECHNICAL EXAMINER McCLURE: So I quess the 11 12 reason we are seeing the Grayburg isolated mostly towards 13 the north simply goes back to the structure that you were 14 referring to, the final structure where the top is like 15 right there then. Is that kind of correct? MR. HOOPER: Right. The highest point on this 16 17 interbasin has been 20 South, 37 East for these formations, close to that Apache Waterflow unit, you know, lower 18 Grayburg, is what's -- the primary oil window --19 TECHNICAL EXAMINER McCLURE: Just trying to see 20 if I have questions that would be more on this same topic or 21 not. I'm trying to say somewhat consistent here. 22 23 I guess maybe the closest to this topic, as far 24 as typical gravity values for our oil and BTU values for our 25 gas which would normally be submitted with a form C-107 A,

which, I mean, all the data from that as required in this
 submittal, I don't see where there is any of that is
 included.

I guess I don't know what your guys' thoughts are. My thoughts would be that we probably need to see either an estimated on or a known value for each of the pools submitted.

8 MS. NEAL: That was an oversight. They are 9 generally consistent between the different pools and usually 10 values are usually in the 32 to 35 APR range, and then I 11 would have to go do some research on the BTUs, but I know 12 they are also consistent, I just don't know off the top of 13 my head what they generally range in.

14 TECHNICAL EXAMINER McCLURE: Very good. And to 15 your knowledge, is oil or gas sweet throughout here, 16 throughout all of these formations? If I remember right, 17 that's correct, but I'm -- I don't have any confirmation on 18 that.

MS. NEAL: I would have to talk to our operations because I don't remember, and I don't want to speak incorrectly, but I can confirm that on the BTUS.

TECHNICAL EXAMINER McCLURE: Okay, now we have a statement in there that any fluid sensitive formations were protected. Now based upon your testimony, I guess am I understanding correctly that no fluid sensitive formations

Page 26 were identified, or am I -- or did I misunderstand and 1 2 there are some identified, but they are protected? MR. HOOPER: Within the Queen and Grayburg, we 3 4 don't believe there is any special fluid sensitive formations or parts of formations -- different pools, you 5 6 know, producing Yates, Seven Rivers, Queen, Grayburg pools 7 with other pools, deeper pools, but it's my interpretation 8 It could be off. TECHNICAL EXAMINER McCLURE: I see, and this goes 9 10 back to channeling what the original commissioner's intent was when the rule was drafted. But the general way that I 11 12 interpret it is to confirm that there are no formations that 13 are going to be damaged from liquids from other formations 14 reaching them. 15 For an example, if it's fresh water reaches a formation that is typically brine and has clays that are 16 inhibited by that brine and then the fresh water may swell 17 them and cause irreparable damage to the formation 18 19 essentially. 20 MS. NEAL: Yes. 21 TECHNICAL EXAMINER McCLURE: So from that standpoint, was that taken into consideration and were no 22 formations like that identified here? 23 24 MS. NEAL: Yes, we did not identify any 25 sensitive, fluid sensitive formations within the Yates,

Seven Rivers, Queen or Grayburg pools. Any other formations
 that may be sensitive would be isolated behind bridge plugs
 or behind casing in the cement.
 TECHNICAL EXAMINER McCLURE: Okay. So I was just
 trying to picture what formations would be isolated by

6 bridge plugs, but fair enough. I was going to say the7 casings one, but I got gotcha.

8 Now, we also had a statement in here in regards 9 to the base of the Grayburg being less than 150 percent of 10 the top of the Yates, but we don't have any actual numbers 11 here, I guess, other than the type log.

So I guess what I would like to see is maybe -and I don't know if you can follow up on your cross section or what your thought process is there, but just if we could see some numbers throughout the area taking into consideration that it is such a large area as to verify that.

18 MS. NEAL: Okay.

19 TECHNICAL EXAMINER McCLURE: I'm just trying to20 make a list of things that we are asking for here.

Now, another bit of information which is required on the 107 A, and there is a statement kind of to the effect of it, and that is that all bottom hole pressures are less than what they could -- what is being considered normal pressure, essentially similar to fresh water, I guess, but I

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Page 28 don't see where we have any bottom hole pressure data, 1 2 either, unless it's something you may have more scattered data on file for, but I definitely like to see, you know, in 3 4 consideration of putting this to preapproval, I guess I would like to see some sort of the splattering, I guess. 5 6 If you do have them for a cross section well, 7 that would be great, but just some sort of splattering of 8 bottom hole pressures for the different formations that we are referring to here. Throughout the 400 wells, hopefully 9 10 we got, you know, some sort of reasonable spread of them, I guess, on file already. 11 12 MS. NEAL: Yeah, we have some we can use from the 13 wells we operate. 14 TECHNICAL EXAMINER McCLURE: Very good. Okay. 15 Now you have referenced that your list for approved downhole commingle orders which actually -- I think you kind of 16 17 addressed this during questioning, and I was going to ask, am I understanding correct that that list is for the 18 19 entirety of Lea County rather than the area in question 20 here. 21 MS. NEAL: Correct. It is Lea County, but the vast majority of them are in the commingled area. I believe 22 23 there are somewhere between maybe 30 to 50 of those 200 plus 24 wells that are outside of the commingled area. 25 TECHNICAL EXAMINER McCLURE: So the vast majority

Page 29 1 are inside. I guess, could we actually have an 2 identification of the wells that are within the area? That would be more -- or separate them, some sort of identifying, 3 4 I guess, in that list, because I don't think there was an identification, correct me if I'm wrong for sure, I mean 5 6 other than the API -- other than the API number and going 7 going through individually. 8 MS. NEAL: Yes. There is identification -- that was pulled from the OCD file or OCD list. 9 10 TECHNICAL EXAMINER McCLURE: If we can just just filter that out some I guess and identify the ones within 11 12 the area, please. 13 MS. NEAL: Sure. 14 TECHNICAL EXAMINER McCLURE: The other question I 15 have something that you probably have available but wasn't included here, if we can get an Excel list of all the wells 16 you have depicted within the area, like your Exhibit C-1, 17 you have a lot of wells there, but they are not like 18 actually identified by any means. So if we can get that in 19 an Excel list of the wells that are actually of relevance 20 here, the ones producing from the pools. 21 22 MS. NEAL: Yeah, and those would be the APIs that 23 are listed with those preapproved forms, or narrowed down to 24 the commingled area? 25 TECHNICAL EXAMINER McCLURE: Well, I mean all the

Page 30 wells that's on this map, right, because not all the wells 1 2 on this map are -- isn't your triangles that you have 3 here -- I guess, diamonds, since they are little squares, 4 those you are your downhole commingling orders; right? 5 MS. NEAL: Those are the approved wells that are 6 on that list. 7 TECHNICAL EXAMINER McCLURE: Exactly. I quess what my question is, though, there is also numerous other 8 wells in this area though that produce from these pools, but 9 10 not in that table below. So we don't have a listing of the wells that are 11 actually potentially affected by this order, do we? 12 13 MS. NEAL: Okay. So you want the full list of 14 all wells that are producing from the pool? 15 TECHNICAL EXAMINER McCLURE: Correct, that's essentially what I was getting at. Some of this notice I'm 16 17 debating on. MR. HOOPER: Is that a list of all wells active 18 19 or inactive --TECHNICAL EXAMINER McCLURE: I would think that 20 all wells that aren't plugged and abandoned, I guess, would 21 be my thought process -- I suppose even the plugged and 22 23 abandoned ones I suppose in case they get -- so probably all 24 wells, I guess, that are feeding into these pools, might be 25 a better way to say it, or were feeding into the pools.

Page 31 1 MR. HOOPER: Okay. TECHNICAL EXAMINER McCLURE: I'm I debating how 2 much I want to hit upon these other two topics. They may be 3 4 more Phil's area and more Bill Brancard's area, Bill with 5 the notice and Phil with the EUR side. 6 Do you want me to release them to you, Phil, or 7 do you want me to carry on? 8 MR. GOETZE: Carry on. Carry on. 9 TECHNICAL EXAMINER McCLURE: Okay. So I'll carry 10 I guess the top pressing question when it comes over on on. that side, in your pools that you have have listed, you 11 12 include a number of disposal pools that are not being 13 produced from and cannot, by definition, be included in a 14 downhole commingling order. I guess, what is the intent 15 there? MS. NEAL: The intent was just to pull all the 16 17 pools that have Yates and the Grayburg included in them, and so they were simply -- because they are pools within those 18 formations and within the produced pools, since downhole 19 commingles are not applicable to injection wells, we are 20 okay with the removing those disposal pools from that list. 21 22 TECHNICAL EXAMINER McCLURE: So Forty Acres is of the understanding that the downhole commingling orders are 23 24 not going to be applicable to injection wells whether they 25 have multiple formations or not?

1 MS. NEAL: Correct. 2 HEARING EXAMINER BRANCARD: Okay. In regards to 3 the EUR projects, you reference -- or you have a statement, 4 I guess, that the approval of any downhole commingles within these areas would not affect current EUR projects or 5 6 future -- excuse me -- secondary recovery projects now or in 7 the future. But I guess we don't actually have any 8 discussion of the numerous secondary recovery projects in 9 the area. 10 I mean, we are looking at like four of them that Forty Acres either has or has proposed and it's now 11 12 proposing a fifth one, but on top of that we also have 13 numerous other operators with waterfloods in the area. 14 I guess, in regards to those, how much review 15 have you conducted on them, I guess, to confirm your testimony that it would not be affected by these downhole 16 commingling orders? 17 MS. NEAL: We have done a thorough review of the 18 surrounding waterfloods in the area, and we do not believe, 19 that downhole commingling would negatively affect the EUR. 20 I think they could increase efficiency on the sweep, 21 especially when the oil zone spans the list of pools, so 22 23 multiple formations, because you -- with those being 24 downhole commingles, you are able to sweep more effectively 25 across the formation.

Page 33 1 TECHNICAL EXAMINER McCLURE: Now I guess, just as 2 a real quick follow-up, and maybe I misheard you, it almost 3 sounded like you said they were negatively affected. I'm 4 assuming I misheard you. I'm assuming you said it would not 5 negatively affect. 6 MS. NEAL: It would not negatively affect. 7 TECHNICAL EXAMINER McCLURE: Okay. I think I 8 missed a "not" in there then. 9 I guess, I guess the question I have, if your 10 commingling of production wells with zones that are not a part of that waterflood, then how is adding those zones 11 12 going to positively affect the waterflood? 13 MS. NEAL: The zones that you would be 14 commingling would need to be in the same waterflood area. 15 So you would have two injectors, one injecting into the sand, one injecting into the Seven Rivers, and if the 16 17 producers were able to commingle both, you are getting a more efficient flood and being able to produce both from the 18 19 same producer. TECHNICAL EXAMINER McCLURE: Which is very 20 logical, very logical. I guess my question here, though, 21 is, is there not pools you are asking for preapproval for 22 that are not included in their waterfloods in the area. 23 24 MS. NEAL: Yes, that's true. Most of the 25 waterfloods in the are unitized intervals, and I would

Page 34 expect that producing from those outside of their unitized 1 2 area would not be allowed or be something you would have to get additional approval for because it would potentially be 3 4 mixing intervals or mixing interests that are different. 5 TECHNICAL EXAMINER McCLURE: Yeah, and, then see, 6 I was going to say, I think we are mostly on the same page. 7 The only thing I would add to it is my concern would be a 8 cross flow or losing maybe production into, into the other 9 zone that it's commingling, but regardless I think we are on 10 the same page in that we wouldn't be allowing by preapproval pools that are not included within the waterflood within 11 12 this order. 13 So my question to you is, have you already went 14 through and filtered those out from this? I mean, taking 15 into consideration that we included the SWD pools, my presumption is that all pools were included whether they are 16 also within waterflood in those corresponding areas. Do you 17 see what I'm saying? 18 So a lot of the waterfloods are 19 MS. NEAL: Yes. units with intervals, but they are still related back to the 20 pools that are used map wide across the area. Like the 21 Cooper Jal, for an example, is a waterflood unit in the 22 area, and it is producing from both, I believe, the Jalmat 23 24 and Langlie Mattix, but it has downhole commingles so the 25 producers can produce both wells and the oil zone within

1 those two pools.

2 TECHNICAL EXAMINER McCLURE: Uh-huh. 3 MS. NEAL: So I haven't gone back and read it so 4 I can't speak to it 100 percent, but I would assume the unit agreement for that unit specifically outlines which 5 6 formations it's allowed to produce from and it happens in 7 multiple pools. 8 TECHNICAL EXAMINER McCLURE: Yes, but are there 9 any, maybe just for instance, maybe the Langlie Mattix may 10 not be the best example here, but as a different example, is there any spot where say a Grayburg pool is underlying, you 11 12 know, a Queen and Yates and Seven Rivers waterflood wherein 13 you are requesting a preapproved downhole commingle for that 14 even though we can't approve it? My concern here is that that hasn't been filtered 15 out. Now obviously the Division is going to have to be 16 17 doing a lot of review, too, but ideally what we initially have is going to have some initial work conducted on it 18 19 there. MS. NEAL: I believe I understand your question. 20 I just don't know exact how to answer it because --21 22 MR. HOOPER: -- it produces from the Grayburg, 23 that's in Township 21 South, 36 East, 20 South, 36 East, and 24 20 South, 37 East. So it produces from the Grayburg and the 25 lower Queen, and we looked at a bunch of those.

1TECHNICAL EXAMINER McCLURE: Those are -- go2ahead.

MR. HOOPER: Sorry. I don't have the defined interval unit off the top of my head, but I do know they are completed in Lower Queen and the Upper Grayburg, which are -- which are various two different pools. That would be the Eunock Pool, the Jay -- queen and the -- pool, which would be San Andres.

9 TECHNICAL EXAMINER McCLURE: So I guess where --10 where I'm coming from, and I will lean on Mr. Goetze a little bit as to maybe we actually want submitted here, but 11 12 I'm thinking that we are going to want some sort of summary, 13 some sort of submittal in regards to all these different 14 projects and whether we do have pools within them that you 15 are asking for preapproval for, and if so, then we are going to have to filter those pools out or areas of those pools 16 17 out I guess.

MS. NEAL: Okay. I just want to clarify. Are you talking about pools that have been created specifically for a specific unit, or --

TECHNICAL EXAMINER McCLURE: I'm sorry, let me rephrase, pools that are not included within the waterfloods, but either yet overlay or underlay them. For instance, if a waterflood has approval to only waterflood, let's just say the Yates and the Seven Rivers, then if there
were to be a Queen or a Grayburg underlying it, then that
pool could not be included.

MS. NEAL: Right and that should be covered in unit agreement of each of those individual waterfloods. It should specifically say which zones they won't allow to commingle, and it would be up to the operator of that unit to adhere to the unit agreement.

8 TECHNICAL EXAMINER McCLURE: Yes, that's 9 absolutely right, it would be up to them to do so, but the 10 act of preapproving downhole commingling means that all the 11 engineering had been taken care of, and part of that 12 engineering review is to confirm that we are not in 13 disagreement with waterfloods.

14 So that review, unfortunately we have, you know, 15 500 square miles here, so it is pretty extensive for sure, 16 especially with the numerous number of waterfloods, but it 17 is a review that has to be front loaded here and done at 18 this time.

But you are correct, I mean, the presumption is that anybody operating these waterfloods are not going to request a downhole commingle regardless of whether it's preapproved, that it would be -- it would be incorrect for the Division to grant said preapproval regardless of whether we assume operators of all waterfloods are going to, you know, follow their waterflood agreements, I guess.

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Page 38 I guess toward that end, Mr. Goetze, what are you 1 kind of thinking would be ideal to receive from them here, 2 not to put you on the spot or anything? 3 4 MR. GOETZE: Are you done? 5 TECHNICAL EXAMINER McCLURE: Unless you want me 6 to talk about notice. I can change topic if you want. 7 MR. GOETZE: Mr. Brancard is in charge here. We 8 can go into more detail, but continue on unless you want 9 to --10 TECHNICAL EXAMINER McCLURE: All right. I will talk a little bit about notice and let Mr. Brancard -- I 11 12 will let him ask you whatever his thoughts are there 13 afterwards. 14 It looks like there were six operators that 15 notice was returned from. Is that also your understanding, Ms. Hardy? 16 17 MS. HARDY: I would have to look at my receipts, 18 but that is probably correct. TECHNICAL EXAMINER McCLURE: As far as obtaining 19 the addresses and providing notice to these operators, how 20 was that conducted? 21 MS. HARDY: I will have Mr. Lehrbass or Ms. Neal 22 23 answer that. 24 MR. LEHRBASS: So we went ahead and identified 25 all the operators that are operating wells located within

Page 39 the commingle area, and from there we found whether they 1 2 were in any of our paydecks, and then we identify whether or not that was the correct address to send that to, just like 3 4 cross referencing and reach out to them. 5 TECHNICAL EXAMINER McCLURE: So for the six that 6 were returned, I guess were you able to have some sort of 7 communication with them other than the certified notice 8 then? 9 MR. LEHRBASS: So for the ones that were 10 returned, you know, that's how we identified the actual physical mailing addresses, but once they were returned, I 11 12 don't think there was sufficient time between them getting 13 returned and us getting to the hearing to be able to reach 14 out additionally. 15 TECHNICAL EXAMINER McCLURE: I guess in regards what we are wanting on these six, I'll leave that in 16 Mr. Brancard's court. I think what I would like to see on 17 notice though is if we could print out a spreadsheet with 18 the tracking numbers associated with each of the persons, 19 operators, I guess, and submit that to us. 20 21 MS. HARDY: Mr. McClure, with respect to the six that we didn't --22 23 TECHNICAL EXAMINER McCLURE: When you refer to 24 those, were you asking for those or the only ones I want? 25 MS. HARDY: Are those the only ones you want?

Page 40 1 TECHNICAL EXAMINER McCLURE: Assuming that we 2 have them all, I would like to have the entire spreadsheet with all the certified numbers attached. I'm assuming you 3 4 have it in some sort of format like that even though it's not actually printed in a pdf as such. 5 6 MS. HARDY: We provided the actual receipts. Do 7 you have those, they are in exhibit -- my notice affidavit. 8 TECHNICAL EXAMINER McCLURE: I do see that, but having a spreadsheet with the tracking numbers associated is 9 10 far more efficient for our records than manually typing certification number or the tracking numbers from green 11 12 cards I guess. 13 MS. HARDY: Sure, we can do that. 14 TECHNICAL EXAMINER McCLURE: I'm assuming it's 15 something you guys already have in format that would save the Division time from doing it on our end I guess. 16 17 MS. HARDY: Sure, that's fine. 18 TECHNICAL EXAMINER McCLURE: Thank you. MS. HARDY: Mr. McClure, we did publish notice as 19 20 well, so we have those returned. 21 TECHNICAL EXAMINER McCLURE: Yes, ma'am, I did --I did notice that as well. There is just some question in 22 23 regards to the Part 11 or Part 12, if that makes sense, or 24 the Subsection 11 of Part 12, the downhole commingling 25 section, there isn't explicitly stated the requirements for

Page 41 public notice there, but that's something the Division will 1 have to discuss. I guess I would want to proceed for these, 2 3 but regardless, I believe that's all the questions, that 4 come to mind, anyway. Thanks a lot for all you guys' time. 5 MS. NEAL: Thank you. 6 MR. LEHRBASS: Thank you. 7 MR. HOOPER: Thank you. 8 HEARING EXAMINER BRANCARD: Mr. Goetze? By the way, Mr. McClure, I hope you are keeping track of all of 9 10 these --TECHNICAL EXAMINER McCLURE: Yes, sir, I am. 11 Ι have one, two, three, four, five, six, seven. I have seven 12 13 things as I sit here. Hopefully I got them all my own self. 14 HEARING EXAMINER BRANCARD: Thank you. Mr. 15 Goetze? MR. GOETZE: Thank you, Mr. Brancard. First of 16 all, thank you for making this application. We are 17 overwhelmed by the scale of it. This area is old and what 18 you propose makes sense, especially with what we have seen 19 in this area of the -- of the old oil fields and Artesian 20 21 group. I would like to follow up on one question that 22 23 Mr. McClure brought up, and that's including portions of the 24 Grayburg in this area where we have no known information as 25 to production, potential production, typically downhole

Page 42 commingling is done with, in many respects, with formations 1 2 that had become depleted and therefore makes multiple use of formations beneficial. 3 4 How do we address the concerns in areas, we do have information on the Grayburg versus those we think that 5 6 has potential, do we include them and hope we get 7 information, because we are asking for preapproval. 8 MR. HOOPER: That would be --9 (Cell phone interruption.) 10 MR. GOETZE: Too many phone calls. MR. HOOPER: In regards to the Grayburg, we know 11 12 the southern half of this proposed area, we believe there to 13 be the -- we do believe there to be some, some potential 14 That said, we treated the Yates, Seven River, Queen there. 15 and Grayburg as an entire petroleum system with a common oil water contact and a common oil gas contact. 16 17 And it so happens that as you move further north, the entire structure on the center basin Hawthorn with 18 regard to the Artesian group structure, it's while you do 19 this, you go down to the west, southwest, you go off the 20 shelf edge which is pretty apparent by the line of wells 21 near the edge of the wells completed in the Yates, there 22 23 also exists a structural high in the northern part of our 24 proposed commingle area. 25 And in that northern part of the proposed

commingle area is predominantly where the Grayburg comes up structurally and opens up, so that's the main reason why the completions in the Grayburg are in that northern window area.

5 Anything that we would complete in the Grayburg 6 further to the south would be more to the transition zone, I 7 guess, we would expect a higher waterflood with those.

8 MR. GOETZE: Okay. So we're kind of guessing 9 along the south side. It's still a frontier, in essence, 10 compared to say the other shallower formations are just so 11 well defined in many respects.

MR. HOOPER: Right. And the Grayburg is very 12 13 well defined in the northern half of the commingled area. 14 MR. GOETZE: I'm sure Apache would agree with 15 you. To that end, as far as SWDs being included, really, folks, these have a pool number just so they can be sorted 16 out when we do activities. If we are looking for an order 17 or a -- some sort of database that we used to use, so do not 18 take it to heart if there is any rate associated with the 19 SWD numbers. 20

In light of that, you probably were beneficial to yourself in the sense that several of the companies you informed have eyed the same formations you are talking about in same areas you are talking about as disposal zones and have claimed them to be depleted, so you do have competition

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1 and that shall be interesting.

2 Other than that, the issue of, yeah, with regards to EUR projects in the area, and I don't know -- I see 3 4 coming out of Dean's requests, I would probably like to see if you can put together a list of the EUR projects you have 5 6 observed that are related to your proposed downhole 7 commingling so we can get a handle on this. I mean, this a 8 big area with a lot of old holes and a lot of activity, and 9 for us to go ahead and do something on this scale, we want 10 to make sure everything is well documented.

Let's see. I think Dean pretty much beat 11 12 everything to death. Understand that because of the scale, 13 we are going to be talking internally and we will also be 14 talk with the State Land Office. BLM doesn't tend to concern itself that much, and this is an area where mostly 15 we have state land is the project in the state land is 16 17 majority holders, so we will be talking with them, even though you did provide notice because this does involve a 18 lot of things they have their finger on, we will make sure 19 they don't have any questions with -- we'll see if we can 20 avoid any problems. 21

To that end, I'm just going to wait and see what we get. And to Ms. Hardy, I would suggest next time, put a small map in there so we can see it on an eight and a half by ten as opposed to a 10,000 mile long PDF.

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1	MS. HARDY: Okay. We will do that next time.
2	MR. GOETZE: I yield back to Chief Examiner
3	Brancard.
4	HEARING EXAMINER BRANCARD: Thank you, Mr. Goetze
5	and Mr. McClure. I guess I was supposed to ask something
б	about notice. So let's just start from way back at the
7	beginning, Ms. Hardy. I assume that you're working under
8	our pool rules 19.15.12.11 which is downhole commingling,
9	D2, preapproval of downhole commingling.
10	MS. HARDY: That's correct.
11	HEARING EXAMINER BRANCARD: That is and so I
12	assume under 2D you are focusing on where it says, which it
13	says, after applicant sends notice to operators in the
14	affected pools or areas.
15	MS. HARDY: Correct.
16	HEARING EXAMINER BRANCARD: And I assume you
17	figure that approach is the notice to downhole commingling,
18	which is in the hearing section.
19	MS. HARDY: It would seem to because it's
20	specific to downhole commingling on a pool wide basis.
21	HEARING EXAMINER BRANCARD: Okay. So I think
22	your witnesses testified that they had did their OGRID
23	research on operators.
24	MS. HARDY: Correct.
25	HEARING EXAMINER BRANCARD: Did your folks look

Page 46 1 at power list addresses, we have --2 MS. HARDY: Mr. Lehrbass, you want to answer that? 3 4 MR. LEHRBASS: I am not sure if confirmation of OGRID, is that what you are talking about, the addresses 5 consistent with the OGRID addresses? That's typically the 6 7 first place we look just because of all the research, that is one of the primary sources that we use. I can't speak to 8 9 each operator in this case, but that is normal course of 10 business for us, yes. HEARING EXAMINER BRANCARD: So you are saying you 11 12 would have started there and then done further research? 13 MR. LEHRBASS: We have a data base of all of the 14 address and contact information of owners and people that 15 would routinely do business with, and we start with that and then update that whenever we have reason to send out 16 17 correspondence. 18 HEARING EXAMINER BRANCARD: So in other words you may have better notice addresses than we have. 19 20 MR. LEHRBASS: Maybe. I'm not sure. 21 HEARING EXAMINER BRANCARD: All right. Thank you. That's just the questions I have on this. So, Ms. 22 Hardy, did you want to do any redirect here, or should we 23 24 try to sum up where we are? 25 MS. HARDY: I don't have any questions. I just

wanted to make sure that FAE witnesses understand what they
have been asked to provide.

3 HEARING EXAMINER BRANCARD: Okay. Well, we are 4 going to go through that and what I'm going to tell them is, 5 sometimes when we get these unique applications asking us to 6 do something a little different than we are normally doing, 7 we end up with a fair amount of back up for it, and 8 sometimes things just kind of get bogged down in the office. 9 So what I'm going to suggest is that we continue

10 this hearing so we have a point time in the future in which 11 you should have responded to all of the requests that we 12 have, we have a little time to look at it, and then we can 13 follow up with further questions.

14 Rather than doing it slowly by e-mail, just do it 15 at another continued hearing. Okay? I think that might 16 help us make a little more progress on this. So with that, 17 Mr. McClure, can you start us off with what you have 18 requested.

19 TECHNICAL EXAMINER McCLURE: I guess the first 20 question I had, or the first thing on my list, clarification 21 as to H2S content, essentially whether it's sweet gas or 22 not, and whether that's consistent across; a spreadsheet of 23 the notice, essentially I want a list of all the persons 24 that were notified and the tracking numbers associated with 25 that notification; gravity and BTU values for each of the

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Page 48 pools; an Excel table with the listed -- with the wells 1 2 within the area listed out, more specifically, the wells that were at one point completed into any of the pools 3 4 referenced here; a scattering of bottom hole pressures for the different pools throughout the area; a scattering of the 5 6 top of the, of the Yates and base of the Grayburg, and then a confirmation of it being within the 150 percent of the top 7 8 of the Yates, essentially; the downhole commingling order listed filtered down to only include the approval orders 9 10 within the area; and then the summary, I guess, of -- or at least a list of each EUR project and whether the pools 11 12 underlying or overlying -- overlaying it that you have 13 included here that are not within that waterflood. And 14 that's everything I have. HEARING EXAMINER BRANCARD: All right. Now is 15 your chance to respond to Mr. McClure with, "What?" 16 In 17 other words, if you need some clarification about what he just requested, now is a good chance to request that. 18 You can do it later by e-mail, don't worry. 19 20 MS. NEAL: I know exactly what he wants. HEARING EXAMINER BRANCARD: Okay. So then the 21 next question is, how much time do you think you need to get 22 all of that back to us? 23 2.4 MS. NEAL: A week. 25 HEARING EXAMINER BRANCARD: Ms. Hardy, did you

Page 49 1 have stuff you had to get, too. 2 MS. HARDY: A week is fine for my notice issue. 3 HEARING EXAMINER BRANCARD: So, why don't we continue this hearing then to August 4. Is that okay, Mr. 4 McClure and Mr. Goetze, give you enough time to look at this 5 6 information and if we have a follow-up question, you know, send them an e-mail saying, "It's not what I wanted." 7 8 MR. GOETZE: It's fine by me, Mr. Brancard. 9 HEARING EXAMINER BRANCARD: I'm just trying to 10 move this along here. TECHNICAL EXAMINER McCLURE: Yes, Mr. Brancard, 11 12 that's good for me too. 13 HEARING EXAMINER BRANCARD: All right. So with 14 that, Ms. Hardy, any other questions, concerns at this 15 point? MS. HARDY: Not from me, Mr. Examiner. 16 17 HEARING EXAMINER BRANCARD: So with that, Case 22919 is continued to August 4. 18 (Continued.) 19 20 21 22 23 2.4 25

	Page 50
1	STATE OF NEW MEXICO
2	COUNTY OF BERNALILLO
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4	REPORTER'S CERTIFICATE
5	
6	I do hereby certify that I reported the
7	foregoing virtual proceedings in stenographic shorthand and
8	that the foregoing pages are a true and correct transcript
9	of those proceedings to the best of my ability.
10	I FURTHER CERTIFY that I am neither employed by
11	nor related to any of the parties or attorneys in this case
12	and that I have no interest in the final disposition of this
13	case.
14	I FURTHER CERTIFY that the Virtual Proceeding was
15	of poor to good quality.
16	Dated this 7th day of July 2022.
17	/s/ Irene Delgado
18	Court Reporter
19	License Expires: 12-31-22
20	
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22	
23	
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