

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: 22357

APPLICATION OF MANZANO LLC FOR  
APPROVAL OF A PRESSURE MAINTENANCE  
PROJECT AND AUTHORIZATION TO INJECT,  
LEA COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF VIRTUAL PROCEEDINGS  
EXAMINER HEARING  
DECEMBER 2, 2021  
SANTA FE, NEW MEXICO

This matter came on for virtual hearing before  
the New Mexico Oil Conservation Division, HEARING OFFICER  
WILLIAM BRANCARD and TECHNICAL EXAMINERS DEAN McCLURE and  
DYLAN ROSE-COSS on Thursday, December 2, 2021, through the  
Webex Platform.

Reported by: Irene Delgado, NMCCR 253  
PAUL BACA PROFESSIONAL COURT REPORTERS  
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A P P E A R A N C E S

For the Applicant:

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I N D E X

CASE CALLED

SUMMARY OF CASE AND EXHIBITS 03

REPORTER CERTIFICATE 39

E X H I B I T I N D E X

Admitted

Exhibits and Attachments 33

1 HEARING EXAMINER BRANCARD: For our final item on  
2 the agenda, Number 66, Case 22357, Manzano LLC.

3 MS. HARDY: Mr. Examiner, Dana Hardy with the  
4 Santa Fe office of Hinkle Shanor on behalf of Manzano LLC.

5 HEARING EXAMINER BRANCARD: Thank you. Are there  
6 any other interested persons here for case 22357?

7 (No audible response.)

8 HEARING EXAMINER BRANCARD: Hearing none, so Mr.  
9 Rose-Coss will be with us and Mr. McClure is also here. If  
10 Mr. Rose-Coss isn't asking the tough questions, he will jump  
11 in.

12 MS. HARDY: Thank you. And I do have Manzano's  
13 witnesses available if there are questions.

14 HEARING EXAMINER BRANCARD: That's excellent.  
15 Thank you. So please proceed.

16 MS. HARDY: Thank you. Manzano seeks an order  
17 approving a pressure maintenance project for the injection  
18 of produced gas through the Vince BGH Number 1 Well into the  
19 San Andres formation in a project area comprised of the SE/4  
20 of Section 30, Township 9 South, Range 35 East in Eddy  
21 County, and authorizing Manzano to convert the Vince BGH  
22 Number 1 from a producer to an injector.

23 The proposed injection will provide pressure  
24 maintenance support for Manzano's other wells in the project  
25 area and will also allow Manzano to attempt to eliminate

1 flaring.

2 In support of the application we provided the  
3 affidavits of landman Nick McClelland, geologist John  
4 Worrall and engineer Mike Hanagan.

5 Mr. McClelland's affidavit is provided as Exhibit  
6 A. He provides background on the project and addresses the  
7 relevant land matters.

8 Manzano's C-108 is provided as Exhibit A-2 to Mr.  
9 McClelland's affidavit. Page 32 of the C-108 provides a map  
10 of the project area and identifies the surface and mineral  
11 ownership interest. There are no other operators within the  
12 one half mile area of review.

13 Exhibit A-3 to Mr. McClelland's affidavit is a  
14 hearing notice letter and associated return receipts.  
15 Notice was also published. We did have several of the  
16 certified mail letters that were returned, but we did timely  
17 publish notice, and the affidavit of publication is provided  
18 as Exhibit A-4.

19 Mr. Worrall's affidavit is provided as Exhibit B.  
20 He summarizes the geology issues and discusses the structure  
21 map, isopach map and cross sections that are contained in  
22 the C-108. He states that the project area is well suited  
23 for pressure maintenance operation. He explains that there  
24 are no water wells within one mile of the proposed injection  
25 well.

1           Mr. Worrall concludes that the injection  
2 operations will not impair the hydrocarbon bearing zones and  
3 that the injection fluids will be confined to the injection  
4 interval.

5           Mr. Hanagan's affidavit is Exhibit C, and  
6 discusses engineering and operations matters related to the  
7 project. He provides as Exhibit C-1 a decline curve,  
8 showing the production will decline in the absence of  
9 pressure maintenance support.

10           He also explains that without approval of this  
11 application, Manzano will likely have to plug its three  
12 wells in the project area due to the lack of available  
13 options to dispose of produced gas.

14           The last page of his Exhibit C-1 is a map that  
15 shows the location of the wells in relation to the nearest  
16 pipeline which is unavailable.

17           Manzano's three witnesses all testify that  
18 Manzano's proposal will protect correlative rights and  
19 prevent waste.

20           And Manzano would like to request an expedited  
21 order in this case, if possible, because otherwise it's my  
22 understanding that they will need to shut in their wells in  
23 January due to the lack of options for the disposal of  
24 produced gas.

25           And I also wanted to mention that I did submit an

1 amended exhibit packet yesterday. When I was preparing for  
2 the hearing I determined that a few pages of the C-108 that  
3 we had submitted on Tuesday had been omitted. I think it  
4 was a scanning problem. And so we provided the C-108  
5 yesterday in a complete amended packet even though that's  
6 the only change in the update.

7 So with that, I would move the admission of  
8 Exhibits A, B and C, and Manzano's witnesses are available  
9 for questions.

10 HEARING EXAMINER BRANCARD: Thank you. I guess I  
11 will start with Mr. Rose-Coss.

12 TECHNICAL EXAMINER ROSE-COSS: Hi, yes. Thanks  
13 for being here today. Glad we were able to get this  
14 organized. So let me first touch on the proposed spacing  
15 units for the order. Can you -- someone be able to kind of  
16 review or summarize how that was determined and what the  
17 proposal is?

18 MR. WORRALL: Yeah, Dylan. Are you talking about  
19 the size of the project area -- this is John Worrall.

20 REPORTER: If you guys can identify yourselves  
21 before you speak, that would help the court reporter. Thank  
22 you.

23 HEARING EXAMINER BRANCARD: Ms. Hardy, can we get  
24 your witnesses sworn in at this point?

25 MS. HARDY: Yes, that's what I was going to

1 request.

2 HEARING EXAMINER BRANCARD: Can each of them  
3 identify themselves first, please? I see all three of them  
4 there.

5 MR. WORRALL: My name is John Worrall. I'm with  
6 Manzano.

7 MR. McCLELLAND: Nick McClelland, land manager.

8 MR. HANAGAN: Mike Hanagan, engineering  
9 operations.

10 HEARING EXAMINER BRANCARD: All right.  
11 Gentlemen, can you raise your right hands. Do you swear the  
12 testimony you're about to give or may give is the truth and  
13 nothing but the truth?

14 WITNESSES: (Collectively.) Yes.

15 HEARING EXAMINER BRANCARD: Please proceed.  
16 Mr. Worrall, I believe, was about to answer the question.  
17 Is that correct?

18 MR. WORRALL: Yes. Dylan, would you repeat your  
19 question so I can make sure I answer correctly?

20 TECHNICAL EXAMINER ROSE-COSS: Sure. I just kind  
21 of wanted a summary for the record of what the spacing unit  
22 is proposed to be and how that was decided upon, and maybe  
23 some discussion about some of the kind of reservoir,  
24 reservoir confinement within the area.

25 MR. WORRALL: Okay. I will try to address that.

1 The area that we proposed is the SE/4 of Section 30. Our  
2 wellbore that we are proposing to inject in is in the NW SE  
3 of Section 30. And there is an older San Andres well that  
4 is now uneconomic.

5 And so we are proposing to take the gas from the  
6 Rag Mama and the Sodbuster and inject it into that well.  
7 The reservoir is the same as the zone of which we are  
8 producing the gas from. It's the San Andres P1 dolomite,  
9 and it's a very low permeability reservoir, probably about a  
10 one millidarcy zone.

11 And we believe that the area of this is -- the  
12 maximum that will be affected by this injection, primarily  
13 because when we fracked the Rag Mama with a large amount of  
14 sand, I don't know how many pounds, we did not see any  
15 communication to the injection well. So it's going to take  
16 time for that gas to affect a very large area at all. So we  
17 limited it to the SE/4 of Section 30.

18 TECHNICAL EXAMINER ROSE-COSS: Where is the --  
19 where in relationship is this other wellbore, the surface  
20 hole location and the downhole location in relation to this  
21 injector well?

22 MR. WORRALL: The Rag Mama is along the E/2 E/2  
23 of Section 30 and the E/2 NE of Section 19. So it's  
24 directly east one-quarter mile, the lateral is. And the  
25 lateral is placed in the P1 dolomite, the same zone as the

1 injection.

2 TECHNICAL EXAMINER ROSE-COSS: So roughly a half  
3 mile away, or quarter mile away from each other within the  
4 subsurface?

5 MR. WORRALL Correct, quarter mile away.

6 TECHNICAL EXAMINER ROSE-COSS: And what about the  
7 other wells. The proposal is for -- for produced gas from  
8 two wells injected into the third, and then that injected  
9 gas will support the continued production of the two  
10 producers?

11 MR. WORRALL: Yes. The other well is located in  
12 the E/2 W/2 of Section 21. As such it's about a mile and a  
13 quarter to the NE of the injection well. They are  
14 identified both on the area of review map.

15 TECHNICAL EXAMINER ROSE-COSS: Okay, thank you.  
16 And I will give it to Mr. McClure at this point. In terms  
17 of this unit here, did you -- you had raised a question to  
18 Mr. McClure about the size of the proposal of the unit? Did  
19 you have any concerns with it?

20 TECHNICAL EXAMINER McCLURE: Yeah, I was gonna  
21 say, per rule they need to require the entirety of the  
22 spacing unit of their production well. So their project  
23 area is going to have to be amended. As to whether we  
24 consider that a major modification of their application, I'm  
25 not sure at this juncture.

1 MR. WORRALL: Okay. So to --

2 TECHNICAL EXAMINER ROSE-COSS: Go ahead.

3 MR. WORRALL: To clarify, you are asking us to  
4 amend the size of the project area to include the 240 acres  
5 of the wellbore, plus the 40 acres of the injection well?  
6 Is that what you're saying?

7 TECHNICAL EXAMINER McCLURE: I was going to say,  
8 you could include your SE/4, and then include your E/2 E/2  
9 and then your E/2 of your SE/4. But at a minimum, I think  
10 you would be looking at your 40 acres that is currently  
11 assigned, I guess, to that well. Once it's an injection  
12 well it's no longer dedicated acreage. And then also you  
13 would have to include the spacing unit for your production  
14 well at minimum.

15 MR. WORRALL: Okay.

16 HEARING EXAMINER BRANCARD: Ms. Hardy, what Mr.  
17 McClure is referring to is regulation 19.15.26.8F, and then  
18 1 and 2, which is sort of where we establish the concept of  
19 the project area for pressure maintenance units.

20 TECHNICAL EXAMINER McCLURE: You are exactly  
21 right. I didn't site it, but, yes, those are the ones I'm  
22 referring to.

23 HEARING EXAMINER BRANCARD: That's what we need  
24 compliance with for this application. Mr. McClure, did you  
25 have other questions?

1           TECHNICAL EXAMINER McCLURE: Well, I do have  
2 other questions. I think Mr. Rose-Coss might have extra  
3 questions, too. I'm assuming you want us to continue  
4 regardless of the modification. Correct, Mr. Brancard?

5           HEARING EXAMINER BRANCARD: Yeah, I mean, we are  
6 here. We have the application in front of us, we have the  
7 witnesses, so let's try to get as much information as we can  
8 today. Mr. Ross-Coss, were you going to continue?

9           TECHNICAL EXAMINER ROSE-COSS: Well, on the same  
10 point regarding this notice and the spacing area, does  
11 that -- or this project area, does that change the notice  
12 requirements? Does it become a half mile from the edges of  
13 this project area, or are we still looking at a half mile  
14 from the proposed injection wellbore?

15           TECHNICAL EXAMINER McCLURE: I was going to say,  
16 unless of course we believe there is a geological reason, I  
17 guess, that the gas is not going to escape the project area,  
18 then I would assume that the argument of the boundary  
19 conditions is because there is no production in the  
20 immediate vicinity anywhere close in the San Andres  
21 formation.

22           So, yes, I would argue that, yes, the notice is  
23 going to have to be extended to that project area or half  
24 mile around, and also will include the State Land Office, at  
25 the minimum, has to be noticed even if there is no other

1 working interest owners or anything in the other areas.

2 But having said that, I don't know if the  
3 applicant is thinking that their gas ain't going to escape  
4 that project area or not and what the -- how that  
5 determination has been made. I don't know what the thought  
6 process is there. I didn't see that concept or that topic  
7 mentioned in their exhibits, I guess.

8 TECHNICAL EXAMINER ROSE-COSS: Yeah, could we  
9 have a discussion about that just for the record. Does  
10 Manzano believe that the injected gas will be confined to  
11 this project area both laterally and vertically if their --  
12 that is, like what are the proposed upper and lower flow  
13 boundaries to the injection. And laterally is it -- will  
14 this injection -- injected gas stay within the project area?

15 MR. WORRALL: Yes, sir. So the injection wells  
16 in the P1 dolomite, I think you should have an exhibit on  
17 the geology showing the map, the zone pinches out to the  
18 north into tight anhydrite, the faces change above it. The  
19 P1 dolomite, the same thing, it is confined by the P1  
20 anhydrite.

21 We have already shown with the Rag Mama frac job  
22 not even affecting us 40 acres away that this is a very  
23 tight, complex reservoir. We don't expect much migration of  
24 gas. It'll take time to even affect the Rag Mama next door.

25 So, Mike, do you have any more you want to

1 comment on that? I do not believe there is any reason to  
2 expect we are going to get out the project area with this  
3 modest amount of gas.

4 TECHNICAL EXAMINER ROSE-COSS: Perfect. Thanks  
5 for clarifying that for the record then. And I suppose now  
6 that we're -- this can segue into the next topic, and I  
7 imagine it says it in your application, but could you  
8 explain for us the volumes of gas you are expecting to  
9 inject? Or how will the operation, the day-to-day operation  
10 of this well run?

11 And do you anticipate -- so with the volume and  
12 the kind of reservoir situation being as it is, do you  
13 anticipate at least at some point there being a positive  
14 effect, neutral effect, or negative effect on the  
15 neighboring Rag Mama well?

16 MR. WORRALL: The volume we are currently  
17 producing is 129 MCF of gas per day. It may go up slightly  
18 as you have a GOR that increases over time. So we are  
19 proposing an average of 150 MCF a day. We are asking for a  
20 maximum proposed rate of 1000 in case additional wells are  
21 drilled over time.

22 The more gas you inject, the more positive effect  
23 you will have. When you repressurize an oil reservoir  
24 that's a solution gas drive, you are putting more gas back  
25 into solution over time which helps drive oil to the

1 wellbore. That's a pretty well-known fact.

2 So there is no negative influence. There can be  
3 a positive influence over time to oil production.

4 TECHNICAL EXAMINER ROSE-COSS: Perfect. And so  
5 currently this 129 MCF is simply being flared; is that  
6 correct?

7 MR. WORRALL: Yes, it is. There is no other  
8 option that we have.

9 TECHNICAL EXAMINER ROSE-COSS: And I suppose  
10 that's been looked into, the cost of a pipeline isn't  
11 feasible?

12 MR. HANAGAN: Yeah, this is Mike Hanagan  
13 speaking. The pipeline, there was a pipeline to this  
14 location when it was previously an Atoka well with sweet  
15 gas. Once it was put into the San Andres, the pipeline  
16 (unclear) the gas (unclear) about 20 percent, I think it's  
17 10 percent nitrogen, and 12, 13 percent CO2. So the gas  
18 well, that pipeline was -- it was (unclear) it has since  
19 been abandoned.

20 So what pipe actually exists in this area is not  
21 currently in use, and also gas is off, you know, off spec  
22 pipeline quality gas. So we don't even have a choice to say  
23 we are going to build 50 miles of pipeline to get it  
24 somewhere. It's just offset gas. All we can do is process  
25 it out, which we really don't have that option with 130 MCF

1 a day.

2 TECHNICAL EXAMINER ROSE-COSS: Okay, I see.  
3 Thank you. That helps me segue into the next series of  
4 questions. Is this -- can we speak to the kind of offset  
5 gas with a certain amount of nitrogen and CO2 contents, do  
6 we expect any issues with corrosivity in the proposed  
7 injection well? And are there -- can you speak to the  
8 corrosion prevention plan, the kind of well integrity, long  
9 term of the injection well injected with the gas?

10 MR. HANAGAN: The CO2 is potentially corrosive,  
11 but we haven't noticed it so far, but we will still have  
12 lined tubing and a plastic coated packer, also. So I don't  
13 expect there to be any corrosion impact.

14 TECHNICAL EXAMINER ROSE-COSS: There won't be any  
15 treatment of the gas prior to injection to diminish any  
16 corrosive aspects of the gas or potential?

17 MR. HANAGAN: No, we don't anticipate needing to  
18 do that.

19 TECHNICAL EXAMINER ROSE-COSS: I see, okay. Can  
20 you talk a little bit about how this -- what sort of  
21 infrastructure will need to be put in place and how the well  
22 will be operated to create setting up the project?

23 MR. HANAGAN: Yes. It's fairly simple. We have  
24 an existing flowline from the Sodbuster well over to the  
25 east that's carrying fluid from the Rag Mama to the tank

1 battery. That line will be reversed around to be used as  
2 the gas line comes back to the Vince, and the Rag Mama  
3 production will be put into the Vince battery.

4 And so there will be no new facilities required  
5 other than putting in the compression necessary to put in --  
6 that will be a fairly small, two-stage compressor (unclear)  
7 and we can duplicate that as we need to if there is some  
8 pressure, additional pressure requirements. But as of right  
9 now we are anticipating only needing one of those two-stage  
10 compressors and no additional surface infrastructure.

11 TECHNICAL EXAMINER ROSE-COSS: Right. And what  
12 if any modification needs to happen at the wellhead down or  
13 downhole?

14 MR. HANAGAN: You know, we will have an injection  
15 head downhole, we will have a packer in place, with both  
16 packer and plastic coated tubing going into that, and that's  
17 all we'll have to do because currently the well has a pump  
18 jack and (unclear) take the rods out and put in the  
19 necessary coated tubing into the packer, so minimal action  
20 needed there.

21 TECHNICAL EXAMINER ROSE-COSS: I see, perfect.  
22 Good to know. You know, I think that was the extent of a  
23 certain line of my questioning. I think I'm going to pass  
24 the microphone at this point to Dean and see what other  
25 questions come to mind as Dean goes.

1                   TECHNICAL EXAMINER McCLURE: Sounds good. I  
2 guess the question I had is, trying to keep this in somewhat  
3 order and somewhat (unclear) questions, you reference that  
4 you don't think that your gas will extend beyond the project  
5 area in the immediate future. But over the life of this  
6 project, do you still foresee that to be the case, and is  
7 the argument for that because it's one millidarcy? What's  
8 your thought process there?

9                   MR. WORRALL: Well, the reservoir, it's a tight  
10 reservoir. The pressure sync is gonna push the gas to the  
11 Rag Mama, no doubt, because that's the well that's being  
12 produced, and so the idea is that the gas will be driven  
13 preferentially in that direction.

14                   Over time, we've produced a lot of fluid out of  
15 there. This volume of gas has got a lot of volume to  
16 replace, I don't think we'll ever get there. To answer your  
17 question, we have produced over a million barrels of fluid  
18 already from this Rag Mama well, and this volume of gas is  
19 compressed. It's not going to replace that for a very long  
20 time.

21                   TECHNICAL EXAMINER McCLURE: Well, having said  
22 that, I was going to say, has there been any of these  
23 plugged wells that are in the San Andres that has also  
24 produced a significant amount and as there may not -- you  
25 may not have your initial reservoir pressure in other areas,

1 not just from your production wells, if that makes sense,  
2 for your Rag Mama, I mean.

3 MR. WORRALL: Not directly near there. The San  
4 Andres, this is the first economic efforts made by drilling  
5 these horizontal wells. This is a project that beforehand  
6 there have been people that have tested it and haven't  
7 produced a lot of fluid. It's only by fracking it and  
8 drilling a horizontal well that we are able to drill this  
9 Rag Mama well which we did back in 2017.

10 MR. HANAGAN: This is Mike Hanagan. There are no  
11 vertical producers -- producers in the San Andres or current  
12 producers within a mile and a half and maybe even further,  
13 so there is nothing other than the Vince itself which is  
14 also (unclear) volume of fluid out of the San Andres, but  
15 there are another no other San Andres producers in the area.

16 TECHNICAL EXAMINER McCLURE: I think there was  
17 like five or six plugged wells in your half mile radius  
18 there, and I thought some of them might have been San  
19 Andres. Maybe I'm wrong there.

20 I guess, regardless of that, what my concerns  
21 are, I mean, we are talking millidarcies, not microdarcies  
22 or nanodarcies like in the typical non-conventional  
23 reservoirs, I guess. So with that thought process in mind,  
24 I guess something I would like to see is some sort of  
25 modeling or some sort of calculations to see exactly how far

1 we would be looking for what you perceive to be the duration  
2 of this project. Are we assuming 20 years? 30 years?  
3 What's your thought process there?

4 MR. HANAGAN: Well, I mean the San Andres has  
5 been going for quite a while, but it's a very low rate for  
6 the 15 or 20 years. I mean the primary volume is going to  
7 be pushed out here within the next three years, in less than  
8 five years.

9 TECHNICAL EXAMINER McCLURE: Well, correct, but  
10 you are going to be injecting for the entire duration of  
11 your production as your main route of where your produced  
12 gas is going to be going?

13 MR. HANAGAN: Correct.

14 TECHNICAL EXAMINER McCLURE: So essentially your,  
15 your duration for this project, we would assume, to be the  
16 same as the length of the -- of the life of both of the --  
17 of your production well there; correct?

18 MR. HANAGAN: Correct. As oil falls, so does gas  
19 fall. Production of the gas will fall in accordance with  
20 how your oil falls. So if you have a 2000 GOR right now, at  
21 the end of the day you are making 5 MCFs a day and two  
22 barrels of oil a day, there's not much gas to be injected.

23 TECHNICAL EXAMINER McCLURE: Unless you get  
24 break-through at some point and increase your GOR, but I  
25 guess that's a concern for later. I guess it would be a

1 thought process, in theory that would be years from now.

2 TECHNICAL EXAMINER ROSE-COSS: Dean, I'm going to  
3 step in for a second. Is there any plans to drill  
4 additional horizontal wells within the project area in the  
5 San Andres?

6 MR. WORRALL: Right now we do not have any  
7 current plans because the market conditions don't indicate  
8 it's profitable to do that. Right now our plans is to try  
9 to continue to produce these two oil wells and produce the  
10 70 barrels of oil a day that we produce.

11 MR. HANAGAN: And without the ability to inject  
12 the gas, we can't drill another well unless we get an APD  
13 approved because we don't have a market.

14 TECHNICAL EXAMINER ROSE-COSS: I see. And so  
15 that's the -- so Rag Mama horizontal is the other well  
16 that's producing, it's a vertical well, and it's not  
17 producing as much; correct?

18 MR. HANAGAN: The other well is also a horizontal  
19 well called the Sodbuster. They are both horizontal wells.

20 TECHNICAL EXAMINER ROSE-COSS: Okay. And are  
21 they both 2017, is that what you said?

22 MR. HANAGAN: I believe that's correct. 2017,  
23 maybe the second one was 2018.

24 TECHNICAL EXAMINER ROSE-COSS: Okay. That was  
25 the end of my interruption, Dean. I don't know if you have

1 more questions.

2 TECHNICAL EXAMINER McCLURE: Yeah. What is  
3 the -- do you know what the initial reservoir pressure was  
4 and what your current reservoir pressure is in the vicinity  
5 of the -- of your horizontal well and the vicinity of the  
6 injection well?

7 MR. HANAGAN: I believe it was at 13 hundred  
8 pounds was the initial reservoir pressure. 14-, 1500 pounds  
9 is what John is handing me here.

10 MR. WORRALL: Yeah, read Number 3 there.

11 MR. HANAGAN: We have that (unclear) I know when  
12 we did an injection test, we put down that we anticipate 500  
13 pound injection pressure. We have pumped into this well to  
14 check to see what it would take, and we were getting the  
15 rate of a 100 MCF at 300 pounds. So that comes up -- let's  
16 see, we had the original calculation for bottom hole  
17 pressure of 17 hundred pounds.

18 TECHNICAL EXAMINER McCLURE: That was your  
19 initial -- I'm sorry, your initial reservoir was about --  
20 you calculate to be about 17 hundred; is that correct?

21 MR. HANAGAN: Correct.

22 TECHNICAL EXAMINER McCLURE: And then currently  
23 your -- it was taking 100 MCF at 300 surface. Is that  
24 correct as well?

25 MR. HANAGAN: Correct.

1                   TECHNICAL EXAMINER McCLURE:   Okay.  Do you have  
2   the calculation -- I guess, when we are talking about the  
3   injection of gas, I mean, obviously it would have took a  
4   (unclear) analysis, but do you have a rough estimate, I  
5   guess, of what you think your current bottom hole pressure  
6   is then?

7                   MR. HANAGAN:   I think it's still around 12- or 13  
8   hundred pounds.  I don't think it's declined a whole lot,  
9   but I have not done a calculation on it.

10                  TECHNICAL EXAMINER McCLURE:   But you just  
11   estimate it about 12 hundred, something like that now?

12                  MR. HANAGAN:   Uh-huh.

13                  TECHNICAL EXAMINER McCLURE:   Okay.  Do you know  
14   about how many years do you think it would be before you  
15   start seeing an increase in production from your -- from  
16   your Rag Mama well?

17                  MR. HANAGAN:   I believe there is going to be no  
18   effect until possibly -- possibly a minimal effect, but I  
19   personally don't anticipate seeing any real effect.  If we  
20   have any effect, it will be positive, but likely, more  
21   likely neutral.

22                  TECHNICAL EXAMINER McCLURE:   So I'm trying to  
23   think of how to phrase my next question.  I guess your, your  
24   application, you're applying for essentially a pressure  
25   maintenance EUR project, but you don't think you are going

1 to see a benefit to your production wells?

2 MR. HANAGAN: Well, we hope to. Well, the reason  
3 we're applying there is there is no category for this to fit  
4 into. The pressure maintenance is what most appropriate  
5 fit. It's really hard to make the case that we are going to  
6 be impacting anything more than 1000 feet away.

7 TECHNICAL EXAMINER McCLURE: Having said that,  
8 though, your Rag Mama is less than 1000 feet; correct?

9 MR. HANAGAN: It's 1225 feet to very nearest one.

10 TECHNICAL EXAMINER McCLURE: I guess, if we were  
11 to run the assumption that your perceived additional  
12 production for your Rag Mama is relatively minor, then is  
13 your current thought process that your current allocation  
14 for your Rag Mama will be continued? I'm going to assume  
15 your current pooling agreement is based on a per-acre basis  
16 within that spacing unit; is that correct?

17 MR. HANAGAN: Yes.

18 TECHNICAL EXAMINER McCLURE: So then your  
19 allocation for this project area would be identical to your  
20 current pooling agreement which is based on an acreage basis  
21 of the spacing unit for your Rag Mama; is that correct?

22 MR. HANAGAN: I believe so.

23 TECHNICAL EXAMINER McCLURE: Do you plan on  
24 changing -- do you plan on changing your allocation from  
25 what you are currently doing; correct?

1 MR. HANAGAN: No.

2 TECHNICAL EXAMINER McCLURE: You're not?

3 MR. HANAGAN: We do not plan on changing.

4 TECHNICAL EXAMINER McCLURE: And currently you  
5 are allocating on an acreage basis within that spacing unit;  
6 correct?

7 MR. HANAGAN: Correct.

8 TECHNICAL EXAMINER McCLURE: Okay. I think that  
9 answers my question there. In regards to your cross section  
10 that you have, I'm assuming you have a larger or higher  
11 resolution file of that; is that correct?

12 MR. HANAGAN: Yes, of course.

13 TECHNICAL EXAMINER McCLURE: I was just wondering  
14 if you could go ahead and submit that to us as well. It's a  
15 little bit hard to read it, I guess, on the current PDF.

16 MR. WORRALL: Sure. Would you like me to send it  
17 as like a JPG that you can scale up. I believe you can use  
18 the zoom to make it larger or smaller.

19 TECHNICAL EXAMINER McCLURE: Oh, yeah, yeah. I  
20 was going to say, as long as the original image is a high  
21 enough resolution. I was going to say the current PDF, even  
22 if you do zoom it up, I mean, it's hard to make any -- it  
23 gets -- it's blurry when you zoom it up currently. But,  
24 yeah, as long as the original image is high enough  
25 resolution, which I'm assuming a JPG would be, then that

1 should be sufficient.

2 MR. WORRALL: I can resend that JPG. I would be  
3 glad to.

4 TECHNICAL EXAMINER McCLURE: Sounds good.

5 MR. WORRALL: (Inaudible.)

6 TECHNICAL EXAMINER McCLURE: I'm sorry, what?

7 MR. WORRALL: Would you like a hard copy of that,  
8 a bigger scale --

9 TECHNICAL EXAMINER McCLURE: Back in the day we  
10 would have, but now we are mostly on the digital, and myself  
11 and Dylan are in different offices now, so it would be  
12 better to have the digital. We probably don't have a use  
13 for the paper like we would have in the old days, I guess,  
14 but old days being two years ago. But, no, no, just the  
15 digital should be fine.

16 MR. WORRALL: You bet.

17 TECHNICAL EXAMINER McCLURE: Thank you, sir. I  
18 guess I don't really have any other questions. I think it  
19 looks like most of my other questions you kind of resolved  
20 through Mr. Rose-Coss like talking about like our reservoir  
21 drive and stuff like that.

22 I guess the things that I would like to see  
23 submitted would be just a calculation of how -- and have  
24 several different scales or several different -- let me  
25 restart. A calculation of how far you think your pressure

1 is actually going to reach from your injection well over  
2 different durations, but just your best estimate as to what  
3 your injections are going to be, like towards the scale of  
4 like, five, ten, 20 years. And just a table should be fine,  
5 unless you want to put it in a graph as well, it's whatever  
6 you are thinking there, but I think a table should be fine.

7 Also a lease map that includes the leases  
8 surrounding the new project area because I know currently  
9 your lease map like doesn't show what -- like I'm assuming  
10 your fee leases up in that Section 19, around that current  
11 lease, I believe, it's not including that. So if you could  
12 just also send a new updated lease map with the additional  
13 leases that were not originally included.

14 MR. WORRALL: Okay. So what -- just to clarify,  
15 is our project area no longer the SE/4 quarter?

16 TECHNICAL EXAMINER McCLURE: That is absolutely  
17 correct. You are required to have your project area include  
18 the spacing unit for your Rag Mama.

19 MR. WORRALL: Okay.

20 TECHNICAL EXAMINER McCLURE: And then I think at  
21 minimum we would be looking at the 40 acres, but I think you  
22 could include your -- or the 40 acres that is currently  
23 dedicated to your proposed injection well, but I think it  
24 would be reasonable to have your SE border that you  
25 currently have and then just add in your extra acreage

1 that's also in the Rag Mama, if that makes sense.

2 MR. WORRALL: It does.

3 TECHNICAL EXAMINER McCLURE: And then just the  
4 lease map for those leases surrounding that project area.  
5 And then additionally, as already mentioned, I mean, just  
6 kind of re-prefacing the stuff to submit to us, also that  
7 cross section we just discussed. I'm sorry, I know we just  
8 discussed it, but add it to the list here.

9 In addition, being aware, I guess, that it may be  
10 a significant period of time before the gas reaches the  
11 boundaries of your project area, I think, to cover all  
12 bases, we should still provide notice to those  
13 surrounding -- to the leases -- to the leaseholders or the  
14 affected persons, I should say, for the area surrounding the  
15 project area, which will include the state land office. I  
16 don't know if your other -- I'm sorry, go ahead.

17 MR. WORRALL: So the new project area will  
18 include the E/2 E/2 and the part going up in the 19, and  
19 what's the notice area around that? Just the 40 acres on  
20 each side, or how do we determine that notice area?

21 TECHNICAL EXAMINER McCLURE: You know, I think  
22 it's just the 40 acres on each side, I believe. If  
23 Mr. Brancard or Rose-Coss wants to correct me on that, I  
24 think it's the 40 acres surrounding it rather than the half  
25 mile.

1 MS. HARDY: I have a question or a comment on  
2 that. It's been my understanding with respect to secondary  
3 recovery projects that we would notice the parties within  
4 half mile of the injection well, and that was -- that was  
5 done here regardless of whether the project are is expanded.

6 TECHNICAL EXAMINER McCLURE: Well, correct me if  
7 I'm wrong, but in those EUR projects is it not also argued  
8 that there is some sort of boundary condition that prevents  
9 it from extending beyond the project area?

10 I mean, that there would be my only concern is  
11 that right there. And if, I mean, my thought process is, I  
12 don't think there is other production in the surrounding  
13 area in San Andres, but I mean that's not to say that the  
14 leaseholders, the affected person may not have plans to  
15 drill in it sometime in the future, so essentially they  
16 could have a concern with the project area. I'm not sure  
17 there.

18 But to answer your question, I think you're  
19 correct, in some circumstances, maybe many circumstances, I  
20 think the notice might only be within the project area, but  
21 I don't know if that would qualify in this instance.

22 HEARING EXAMINER BRANCARD: I think we should --  
23 we'll discuss internally and get back to you about notice.

24 MS. HARDY: Okay, thank you.

25 UNIDENTIFIED: Just real quick, I don't see the

1 land office -- we don't have the -- it still won't be within  
2 the area, so what is the requirement for the land office?

3 TECHNICAL EXAMINER McCLURE: The lease that is  
4 directly SE of the SE/4. It's the corner lease there.

5 UNIDENTIFIED: (Inaudible.)

6 TECHNICAL EXAMINER McCLURE: I was going to say,  
7 it's right on the boundary if you are half a mile from the  
8 injection well. But Mr. -- based on what Mr. Brancard just  
9 said, I think we are holding off on the additional notice  
10 for now. Is that correct, Mr. Brancard?

11 HEARING EXAMINER BRANCARD: Yes. We'll figure it  
12 out and let you know, let the applicant know.

13 MR. HANAGAN: Appreciate.

14 TECHNICAL EXAMINER McCLURE: And the additional  
15 thing that we are going to have to figure out is whether the  
16 change IN the project area is considered a major  
17 modification to the application. If that is the case, then  
18 it will require new notice, the whole kit and caboodle, new  
19 notice to everybody if that is considered to be a major  
20 modification.

21 TECHNICAL EXAMINER ROSE-COSS: I guess the only  
22 other -- go ahead, Dean.

23 TECHNICAL EXAMINER McCLURE: I was going to say,  
24 it is a major modification. So we will require new notice  
25 for everybody that you originally noticed at the very least.

1 And then we'll have to get back to you as to how far we need  
2 to extend that area beyond the project area, if at all.

3 But it will -- it is a major modification for  
4 changing the project area boundaries, and, as such, new  
5 notice will be required including your newspaper notice.

6 MR. HANAGAN: Respectfully, I was just wondering  
7 how you determined it was a major modification.

8 TECHNICAL EXAMINER ROSE-COSS: Well, just  
9 anything that is listed within the newspaper notice that is  
10 modified, those are all major modifications.

11 MR. HANAGAN: Okay, thank you.

12 TECHNICAL EXAMINER ROSE-COSS: Anything within  
13 the newspaper notice is changed, that qualifies it as a  
14 major. I know sometimes you think -- what I'm think about  
15 is if the change is more major than what the major  
16 modifications are, but that's my simplified understanding of  
17 what classifies something as major.

18 TECHNICAL EXAMINER McCLURE: I think it might be  
19 included in the statute based off this e-mail that Bill just  
20 sent me, so it might even go beyond that, the major  
21 modification. But, I'm sorry, that was the only other thing  
22 I had to add.

23 TECHNICAL EXAMINER ROSE-COSS: And the only thing  
24 that I would add that we would like to see in addition to  
25 what we already have is an H2s contingency plan, just

1 something in writing, as simple as it might be, or that no  
2 action is required, but -- but some discussion about H2s  
3 contingency safety plan for the project.

4 MR. HANAGAN: (Unclear) we have a plan in place,  
5 anyway.

6 TECHNICAL EXAMINER ROSE-COSS: Sure. I imagine  
7 you do.

8 MR. HANAGAN: You guys will get back with us as  
9 far as who it is we need to notice now?

10 HEARING EXAMINER BRANCARD: Yes. Was there  
11 anything else we were -- somebody asked about bottom hole  
12 pressures?

13 TECHNICAL EXAMINER McCLURE: I think they  
14 addressed that question. I don't think we need anything in  
15 addition.

16 HEARING EXAMINER BRANCARD: Okay.

17 MR. HANAGAN: We'll get this information to you  
18 here in the next week, as soon as possible.

19 TECHNICAL EXAMINER ROSE-COSS: Yeah, I don't  
20 think anything of what we requested will delay the drafting  
21 or -- or progress with any orders pending, in my mind, per  
22 se. But other than that, say we can take it under  
23 advisement, Mr. Brancard, I believe that's the next step.

24 HEARING EXAMINER BRANCARD: And Mr. Rose-Coss,  
25 Mr. McClure, is it okay for, you know, the applicant to be

1 e-mailing you to clarify what it is you are requesting so  
2 they can get you what's correct?

3 TECHNICAL EXAMINER McCLURE: I think they are  
4 actually going to have to because I think our system only  
5 accepts PDFs, I think. So I think e-mail is the only way  
6 for them to send some of this.

7 HEARING EXAMINER BRANCARD: Right. But I mean,  
8 if they have questions about what it is that we have asked.

9 TECHNICAL EXAMINER McCLURE: Oh, oh, oh, I  
10 apologize, yeah, I think that should be fine.

11 HEARING EXAMINER BRANCARD: Okay. Because I want  
12 to make sure that they are not wasting their time chasing  
13 down things we didn't want, and we are getting the things  
14 that we want, so --

15 MR. HANAGAN: Just to clarify real quickly. With  
16 this new notice (unclear) kick back off again at some point  
17 from the time -- is that correct or not?

18 TECHNICAL EXAMINER McCLURE: That would be  
19 correct. That would restart the notice period, which is  
20 also the reason, I'm not sure -- I will leave it to  
21 Mr. Brancard's discretion -- but I'm not sure we can take it  
22 under advisement. I don't know what the thought process is  
23 there, but it would restart the notice period. That is  
24 correct.

25 HEARING EXAMINER BRANCARD: Yeah, I'm going to

1 admit the exhibits that we have now, and I think the  
2 issue -- we need to resolve the issue about what further  
3 notice is required and to whom notice is required, and we  
4 will get back to you pretty quickly on that because that's  
5 pretty important in terms of the time frame moving forward.

6 (Exhibits admitted.)

7 MR. HANAGAN: Okay. Thank you.

8 MS. HARDY: Yes. That's what I was going to  
9 request, that we be able to submit the notice as soon as  
10 possible.

11 HEARING EXAMINER BRANCARD: Anything else, Mr.  
12 McClure, Mr. Rose-Coss?

13 TECHNICAL EXAMINER ROSE-COSS: Nothing further  
14 from me. Thank you.

15 TECHNICAL EXAMINER McCLURE: Nothing further from  
16 me, either. Thank you.

17 HEARING EXAMINER BRANCARD: Well, Ms. Hardy, I  
18 appreciate you having your witnesses available for this  
19 discussion. I think it's very helpful in these kinds of  
20 unique projects to kind of figure out what's going on, to  
21 see, you know, which square peg we have to put the round  
22 hole in, or however it works.

23 MR. HANAGAN: Just a question. Again, is there  
24 some -- is there other, is there anything within OCD on how  
25 to handle some of this reinjecting gas just for the purpose

1 of a gas injection well versus a pressure maintenance deal?

2 HEARING EXAMINER BRANCARD: I don't know. Mr.  
3 Rose-Coss, I assume we are starting to get suggestions from  
4 operators about how to do things. And I noticed we had  
5 several other projects dealing with sort of temporary stored  
6 major gas, but that's simply when there's sort of a  
7 breakdown in their system with taking the gas off that we  
8 allow them to inject it into wells temporarily so they don't  
9 have to flare it when they can't move it. But this, I  
10 believe, is a unique one, although, I doubt it will be the  
11 last one that we get.

12 Have you heard anything else, Mr. Rose-Coss, on  
13 this?

14 TECHNICAL EXAMINER ROSE-COSS: I don't know that  
15 it's completely unique, but as far as -- but it has enough  
16 unique characteristics that this is the first of its kind  
17 that we have come across. And it has been flagged and  
18 addressed in terms of the waste rules, and you know, we'll  
19 kind of be taking it into consideration going forward.

20 MR. HANAGAN: You have been helpful.

21 HEARING EXAMINER BRANCARD: Thank you.

22 MS. HARDY: Mr. Brancard, just -- I was going to  
23 ask for a clarification. I know the Division is supposed to  
24 determine who we would need to re-notice, but I wanted to  
25 clarify whether I need to file actually an amended

1 application or not.

2 HEARING EXAMINER BRANCARD: I wouldn't think  
3 so -- well, yeah, we'll think about that. Yeah, you may  
4 need an amended application. I was thinking you needed a  
5 new application, I don't think that's true, but you may need  
6 to have an amended application.

7 MS. HARDY: Okay. Because we would like to do  
8 that as soon as possible. I know the filing deadline is  
9 next week for the --

10 HEARING EXAMINER BRANCARD: Mr. McClure, I assume  
11 that we are talking about the project area issue here?

12 TECHNICAL EXAMINER McCLURE: As far as the  
13 modification? Is that what you're --

14 HEARING EXAMINER BRANCARD: The major change to  
15 the application is the change to the project area  
16 definition.

17 TECHNICAL EXAMINER McCLURE: Exactly. The only  
18 other change would be if there is additional notice to  
19 parties. So, yeah, that would be the only real omission,  
20 and then we just have this supplemental documentation, but I  
21 wouldn't say that would be a part of the amended  
22 application.

23 HEARING EXAMINER BRANCARD: Right, right. That's  
24 just post hearing submittals.

25 TECHNICAL EXAMINER McCLURE: Exactly. I was

1 going to say, the only other clarification I guess I was  
2 going to put out there, this application is being considered  
3 an EUR application, not a disposal well. Just making that  
4 simply clear. This is for beneficial use, EUR project.  
5 That's the only thing I was going to add. Thank you.

6 HEARING EXAMINER BRANCARD: Thank you. Ms.  
7 Hardy, anything else. Any questions?

8 MS. HARDY: Not from me, Your Honor.

9 HEARING EXAMINER BRANCARD: Thank you. I  
10 appreciate everyone's participation and efforts today. I  
11 hope we made some progress.

12 MR. HANAGAN: On this last segment there, so we  
13 have applied under a pressure maintenance project, not an  
14 EUR project; correct?

15 TECHNICAL EXAMINER McCLURE: The pressure  
16 maintenance is considered EUR.

17 TECHNICAL EXAMINER ROSE-COSS: There is separate  
18 check boxes on the C-108, so I believe PMX is the correct  
19 check box.

20 MR. HANAGAN: Okay, good. We don't need to  
21 change that, is all I'm trying to make sure.

22 TECHNICAL EXAMINER McCLURE: No, you're good.

23 MR. HANAGAN: Just asking.

24 TECHNICAL EXAMINER McCLURE: Just where it falls  
25 under the rule, it falls under the EUR project area, on that

1 side.

2 HEARING EXAMINER BRANCARD: In the grand scheme  
3 of things we classify pressure maintenance within the  
4 enhanced recovery universe.

5 TECHNICAL EXAMINER McCLURE: Exactly.

6 MR. HANAGAN: All right. Sure appreciate.

7 MS. HARDY: I do have one more question,  
8 Mr. Brancard. Since we have really two approvals requested,  
9 one is for the pressure maintenance project and one is to  
10 convert the Vince well to an injector, and the amendment  
11 would only relate to the project area, is it possible to go  
12 ahead and take the application under advisement with respect  
13 to the conversion of the Vince? We wouldn't be changing  
14 that.

15 HEARING EXAMINER BRANCARD: Well, it's only an  
16 injection well for a pressure maintenance project, so  
17 therefore it has to be part of the pressure maintenance  
18 project.

19 MS. HARDY: Okay. Thank you.

20 HEARING EXAMINER BRANCARD: Thank you.

21 MS. HARDY: Thank you.

22 TECHNICAL EXAMINER ROSE-COSS: Thank you,  
23 gentlemen. We'll be in touch.

24 HEARING EXAMINER BRANCARD: With that, let's --  
25 if there are no other concerns raised by other any other

1 person which I'm interested in hearing, this is the end of  
2 the hearing on December 2, 2021. Thank you, all.

3 (Concluded.)

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1 STATE OF NEW MEXICO  
2 COUNTY OF BERNALILLO

3

4 REPORTER'S CERTIFICATE

5

6 I, IRENE DELGADO, New Mexico Certified Court  
7 Reporter, CCR 253, do hereby certify that I reported the  
8 foregoing virtual proceedings in stenographic shorthand and  
9 that the foregoing pages are a true and correct transcript  
10 of those proceedings to the best of my ability.

11 I FURTHER CERTIFY that I am neither employed by  
12 nor related to any of the parties or attorneys in this case  
13 and that I have no interest in the final disposition of this  
14 case.

15 I FURTHER CERTIFY that the Virtual Proceeding was  
16 of reasonable quality.

17 Dated this 2nd day of December 2021.

18

/s/ Irene Delgado

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