

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:

APPLICATION OF NGL WATER SOLUTIONS                      CASE NO. 16505  
PERMIAN, LLC FOR APPROVAL OF SALTWATER  
DISPOSAL WELL IN LEA COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

November 1, 2018

Santa Fe, New Mexico

BEFORE:    PHILLIP GOETZE, CHIEF EXAMINER  
             WILLIAM V. JONES, TECHNICAL EXAMINER  
             DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Phillip Goetze, Chief Examiner, William V. Jones, Technical Examiner, and David K. Brooks, Legal Examiner, on Thursday, November 1, 2018, at the New Mexico Energy, Minerals and Natural Resources Department, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico.

REPORTED BY:    Mary C. Hankins, CCR, RPR  
                     New Mexico CCR #20  
                     Paul Baca Professional Court Reporters  
                     500 4th Street, Northwest, Suite 105  
                     Albuquerque, New Mexico 87102  
                     (505) 843-9241

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

# APPEARANCES

FOR APPLICANT NGL WATER SOLUTIONS PERMIAN, LLC:

DEANA M. BENNETT, ESQ.  
JENNIFER L. BRADFUTE, ESQ.  
MODRALL, SPERLING, ROEHL, HARRIS & SISK, P.A.  
500 4th Street, Northwest, Suite 1000  
Albuquerque, New Mexico 87102  
(505) 848-1800  
deanab@modrall.com  
jlb@modrall.com

# INDEX

PAGE

Case Numbers 16505 Called	3
NGL Water Solutions Permian, LLC's Case-in-Chief:	
Witnesses:	
Neel L. Duncan:	
Direct Examination by Ms. Bennett	4
Cross-Examination by Examiner Goetze	16
Cross-Examination by Examiner Jones	22
Proceedings Conclude	29
Certificate of Court Reporter	30

# EXHIBITS OFFERED AND ADMITTED

NGL Water Solutions Permian, LLC Exhibit Numbers 1 and 3 through 7	13
---	----

1 (9:59 a.m.)

2 EXAMINER GOETZE: So we'll go ahead with  
3 the next case, 16505, NGL Water Solutions Permian, LLC  
4 for approval of a saltwater disposal well in Lea County,  
5 New Mexico.

6 Call for appearances.

7 MS. BENNETT: Deana Bennett on behalf of  
8 the Applicant, and with me is Jennifer Bradfute.

9 EXAMINER GOETZE: Oh, a change.

10 MR. PADILLA: Mr. Examiner, Ernest L.  
11 Padilla for Fulfer Oil & Cattle, LLC. We will not  
12 present any evidence or testimony.

13 EXAMINER GOETZE: Would you like to have  
14 the opportunity to make comments later or --

15 MR. PADILLA: Not really.

16 (Laughter.)

17 MR. PADILLA: I don't think I have anything  
18 to say, so I'll make it easy.

19 EXAMINER GOETZE: Thank you very much.  
20 Please proceed.

21 (Mr. Duncan sworn.)

22 EXAMINER GOETZE: Mr. Padilla's comment  
23 threw me off.

24 MS. BENNETT: Thank you.

25 Good morning. Again, my name is Deana

1 Bennett, and I'm here on behalf of NGL. I presented  
2 you-all with a notebook today, and the notebook has  
3 several exhibits in it. I did want to mention at the  
4 outset this morning we agreed to continue Case Number  
5 16509, which is the Raptor case, and so the notebook,  
6 though, was prepared before we decided to continue that  
7 case. So I won't be discussing Exhibit 2. And all of  
8 the affidavits that we had prepared were prepared for  
9 both, so we would ask that they be considered only for  
10 the Galaxy case, which is Case 16505 for today.

11 And with me, again, is Mr. Neel Duncan.

12 NEEL L. DUNCAN,  
13 after having been previously sworn under oath, was  
14 questioned and testified as follows:

15 DIRECT EXAMINATION

16 BY MS. BENNETT:

17 Q. Will you please state your name for the record?

18 A. Neel L. Duncan.

19 Q. And for whom do you work?

20 A. NGL. Well, Integrated Petroleum Technologies,  
21 but we do work for NGL Water Solutions.

22 Q. And what are your responsibilities for NGL?

23 A. We do the drilling development for NGL.

24 Q. So your responsibilities include management and  
25 oversight of the drilling saltwater disposal wells?

1           A.    Yeah.  Yeah, from North Dakota to south Texas,  
2   including southeast New Mexico.

3           Q.    And you've previously testified before the  
4   Division?

5           A.    Yes.

6           Q.    And your credentials were accepted as a matter  
7   of record; is that right?

8           A.    Yes.

9           Q.    Are you familiar with the application that NGL  
10   filed in this matter?

11          A.    I am.

12          Q.    And are you familiar with the saltwater  
13   disposal well that is the subject of this application?

14          A.    Yes.

15                   MS. BENNETT:  I'd like to tender Mr. Duncan  
16   as an expert in operations and engineering matters.

17                   EXAMINER GOETZE:  So qualified.

18          Q.    (BY MS. BENNETT) I'd like to turn to Tab 1, and  
19   this is the application for the Galaxy SWD No. 1 well,  
20   which is Case 16505.  Mr. Duncan, can you please explain  
21   what NGL is seeking under this application?

22          A.    We are seeking approval to drill and inject  
23   into this Galaxy SWD No. 1.

24          Q.    And what size tubing are you requesting?

25          A.    7-inch in the upper section, 5-1/2 down in the

1 liner section.

2 Q. And how many barrels per day maximum of  
3 injection?

4 A. 50,000, but whatever we can get up to that.

5 Q. Great. Thanks.

6 And can you explain NGL's reasons for  
7 requesting a larger tubing size?

8 A. Yes. It will reduce the horsepower required to  
9 inject into this well. It will increase the injection  
10 rate at a pressure that will not frac the formation. So  
11 it reduces horsepower, reduces energy, greener.

12 Q. Has there been a recent study done about the --  
13 about a larger tubing size?

14 A. Yes. There -- and, in fact, we've done our own  
15 internal studies in terms of the friction pressure  
16 reduction, and the sum has been presented to the  
17 Commission here.

18 Q. Great. Thank you.

19 Are you aware of any Devonian disposal  
20 wells for which the Division has recently approved the  
21 use of 7-inch by 5-1/2 tubing?

22 A. Yes. Yes, for Mesquite. In fact, there was an  
23 eight-well package for Mesquite for approval of 7-inch  
24 by 5-1/2.

25 MS. BENNETT: I included in the front of

1 each notebook a map to orient us to what we're  
2 discussing here. It's in the front flap of the  
3 notebook, and it's entitled "November 1 Cross Section  
4 Wells/Lines." And just for everyone's information, this  
5 is a map that's part of our geologist's affidavit, but I  
6 wanted to just have it here handy as well to orient us  
7 to what we're talking about here.

8 EXAMINER JONES: Okay.

9 Q. (BY MS. BENNETT) So taking a look at this map,  
10 can you identify where the Galaxy is proposed to be  
11 drilled?

12 A. Yes, and without the attorney's help.

13 Q. (Laughter.)

14 A. Now, in the southeast portion of this map,  
15 you'll see a star.

16 Q. And that's denoting Galaxy. But there are a  
17 few other wells on here that have the same blue star,  
18 Raptor, Cobra and Sidewinder?

19 A. Yes. Those are, in fact, continued at this  
20 point.

21 Q. So even though those are noted as November 1  
22 proposed wells, those have actually been continued?

23 A. That's correct.

24 Q. Is the Galaxy well that is being proposed  
25 fairly spaced out from other wells?

1           A.    Yes, it is.

2           Q.    And are there other wells currently injecting  
3   into the Devonian within this area?

4           A.    Not right there.

5           Q.    Okay.  Has NGL retained a reservoir engineer to  
6   conduct a study of the injection -- injection zone for  
7   this well?

8           A.    Yes, Scott Wilson of Ryder Scott.

9           Q.    Thank you.

10                       And has Mr. Wilson previously testified  
11   before the Division?

12          A.    Yes, he has.

13          Q.    And did he prepare an affidavit for this case  
14   in which he discusses his study?

15          A.    Yes, he did.  Yes.

16          Q.    So if we turn to Exhibit 3, skipping Exhibit 2  
17   for the moment for today, is Exhibit 3 Mr. Wilson's  
18   affidavit?

19          A.    Yes, it is.

20          Q.    And in his affidavit, does Mr. Wilson confirm  
21   that increasing the tubing size for these wells will  
22   reduce friction in the wellbore?

23          A.    Yes.

24          Q.    And does he also confirm that using increased  
25   tubing sizes will only have a very small impact on the



1 pore pressures in the formation?

2 A. Yes.

3 Q. Is it his opinion that the increased tubing  
4 sizes will not cause fractures in the formation?

5 A. Yes.

6 Q. Did he also perform a study looking at model --  
7 which models migration of fluids that are injected into  
8 the wells?

9 A. Yes.

10 Q. And in that study, did he conclude that over a  
11 period of 20 years, the majority of fluids injected  
12 within the well will stay within a mile of where the  
13 well is located?

14 A. Yes. In fact, less. Uh-huh.

15 Q. Has NGL retained a geologist to review the  
16 geology in the area where the well -- this well will be  
17 located?

18 A. Yes, Dr. Kate Zeigler.

19 Q. And has she previously testified before the  
20 Division?

21 A. Yes, she has.

22 Q. And did she prepare and provide an affidavit  
23 which outlines her studies and conclusions in this case?

24 A. Yes, she did, Exhibit 4.

25 MS. BENNETT: So turning to Exhibit 4,

1     that's Ms. Zeigler's affidavit. And Ms. Zeigler, just  
2     to orient everyone, has prepared an affidavit and some  
3     information, including maps --

4                     THE WITNESS: A cross section.

5                     MS. BENNETT: -- structure maps, a cross  
6     section, isopach of the area.

7             Q.     (BY MS. BENNETT) And did Ms. Zeigler find that  
8     the area where the well is located is suitable for  
9     injection at increased rates?

10            A.     Yes.

11            Q.     And did she find that there is a permeability  
12     barrier both above and below the injection zone which  
13     will prevent the migration of fluids?

14            A.     Yes.

15            Q.     Great.

16                     So let's turn now to Exhibit 5, Tab 5,  
17     which is an affidavit of Steven Taylor. Do you have  
18     that --

19            A.     I have that. Yes.

20            Q.     -- in front of you?

21                     Okay. And can you describe for the  
22     Division who Mr. Taylor is? Dr. Taylor, I should say.

23            A.     Dr. Taylor is a geophysicist. He resides and  
24     works out of Los Alamos. He does the seismic monitoring  
25     for NGL, for all of NGL's operations.

1           Q.    And did he look at prior seismic activity in  
2   the area where this well will be located?

3           A.    Yes, he did.

4           Q.    And he found that there is not a lot of seismic  
5   activity in this area; is that right?

6           A.    No, there is not.

7           Q.    And his study is immediately after his  
8   affidavit?

9           A.    Yes.

10          Q.    And then following his affidavit is a study  
11   prepared by FTI Platt Sparks?

12          A.    Yes.

13          Q.    And did NGL -- NGL works with and consults with  
14   FTI Platt Sparks to run a fault slip probability tool  
15   analysis; is that right?

16          A.    Yes.   Yes.

17          Q.    And did Mr. Taylor review that analysis?

18          A.    Yes, he did.

19          Q.    And did Mr. Taylor and FTI Platt Sparks find  
20   that there is very little risk of induced seismicity as  
21   a result of this well?

22          A.    Yes.

23          Q.    Let's turn now to Exhibit 6, Tab 6.  Tab 6 is  
24   the declaration that we've obtained from Mr. Steven  
25   Nave.  And can you describe a little bit about Mr. Nave

1     **and what his job is?**

2           A.     Yeah. Mr. Nave has a fishing tool company and  
3     fishing tool consulting, and he provides the on-site  
4     service for fishing. And he has described in his  
5     affidavit the procedure for fishing 5-1/2 tubing inside  
6     a 7-5/8, 39-pound or less casing.

7           **Q.     And has he concluded that fishing operations**  
8     **are possible under those circumstances?**

9           A.     Yes. It's possible.

10          **Q.     And those are the same diameters and tubing**  
11     **sizes that NGL is proposing to --**

12          A.     Yes. It's consistent. Uh-huh.

13                   MS. BENNETT: If you turn now to page --  
14     I'm sorry -- Exhibit 7, Exhibit 7 is an affidavit that I  
15     prepared for notice for Case Number 16505. And turning  
16     to that -- or excuse me -- to my affidavit, you'll see  
17     the list of folks whose names and addresses we had for  
18     the Galaxy case, and then immediately following that,  
19     there is a Notice of Publication.

20                   And looking at the spreadsheet that has the  
21     blue header on it, which is the delivery spreadsheet,  
22     there were two people that did not receive notice -- or  
23     two entities, I should say, that did not receive notice  
24     from Modrall, Sperling for this hearing, Ameredev and  
25     the BLM. And I can tell you that Ameredev has emailed

1 me about NGL's applications. So while it was not  
2 delivered to Ameredev, I believe that they did receive  
3 notice. But in addition, we also published, and  
4 Ameredev and the BLM were identified in our Notice of  
5 Publication.

6 Q. (BY MS. BENNETT) Mr. Duncan, were Exhibits 1  
7 through 7 created by you or prepared under your  
8 supervision or direction or compiled from company  
9 business records?

10 A. Yes.

11 Q. In your opinion, does the granting of this  
12 application promote the prevention of waste and the  
13 protection of correlative rights?

14 A. Yes.

15 MS. BENNETT: With that, I'd like to move  
16 Exhibits 1 and 3 through 7 be admitted into the record.

17 EXAMINER GOETZE: Exhibits 1, 3, 4, 5, 6  
18 and 7 and we'll make it relevant to Case 16505, the  
19 contents of those --

20 MS. BENNETT: Thank you.

21 EXAMINER JONES: -- are so admitted into  
22 the record.

23 (NGL Water Solutions Permian, LLC Exhibit  
24 Numbers 1 and 3 through 7 are offered and  
25 admitted into evidence.)

1 MS. BENNETT: Thank you.

2 And with that, I don't have any further  
3 questions.

4 EXAMINER GOETZE: Okay.

5 MR. PADILLA: No questions.

6 EXAMINER GOETZE: Okay. Welcome back,  
7 Mr. Duncan.

8 THE WITNESS: Thank you. I seem to be in  
9 Santa Fe every week.

10 EXAMINER GOETZE: Yes. This is your  
11 favorite place, I'm sure.

12 We will note for the record that this is a  
13 continuing effort, as with most of our Devonian wells,  
14 that the information is built upon. So we're familiar  
15 with each of the specialists that were brought in. So  
16 we've had discussions outside of the hearing to sort  
17 through things to make sure what was presented here was  
18 accurate and relevant to what your application is.

19 So noting that, we do have a C-108 in here?

20 MS. BRADFUTE: It should be attached to the  
21 application.

22 EXAMINER GOETZE: Yes. It was included in  
23 the front of Exhibit 1.

24 With notice, the only comment I see here is  
25 the -- you sent it to the Santa Fe address?

1 MS. BENNETT: The Santa Fe --

2 EXAMINER GOETZE: Next time try Carlsbad.

3 Those are the people in the field. They know what to  
4 do, and once they see it, they'll react. The people in  
5 Santa Fe will send it back to you because they don't  
6 want to talk to you.

7 And then I made a comment -- let's see. Do  
8 we have freshwater samples?

9 MS. BENNETT: On this one, I don't think we  
10 have freshwater samples.

11 EXAMINER GOETZE: I don't think so.

12 MS. BENNETT: I'd have to check my email,  
13 but I did recently send --

14 EXAMINER GOETZE: "A third party is  
15 currently attempting to identify active wells and obtain  
16 samples," is what you have in your application. Could  
17 you provide us with that information?

18 MS. BRADFUTE: Yes, we can.

19 EXAMINER JONES: And then, of course, in  
20 review of this and the competing application for the AGI  
21 well in the area, this location is far enough away we  
22 have no concerns about it.

23 THE WITNESS: The Galaxy, yes.

24

25

1 CROSS-EXAMINATION

2 BY EXAMINER GOETZE:

3 Q. And so the next question for you is: Yes,  
4 we're in the Capitan Reef, and we have one intermediate  
5 casing which is shown to go through both the Salado and  
6 the Capitan. We would ask that there be a modification  
7 of that construction. So we'd like the salt to be  
8 isolated. That's something that we like to do in this  
9 area --

10 A. Okay.

11 Q. -- and figure out how to deal with the Capitan  
12 so that we don't have -- because you're going to be  
13 drilling heavy through the salt, and once you tap into  
14 the Capitan, we're going to have problems.

15 A. Yeah. I was -- I was debating in my head. We  
16 have one map that shows it's not in the Capitan area.  
17 I'm not going to do battle with you in geology, but I do  
18 notice -- and I looked at the Leavenworth well as well,  
19 and their design is the same as ours.

20 Q. I know. And I've also taken them to task on  
21 that, so they'll be doing that at hearing.

22 A. It could -- it could mean an additional surface  
23 casing string if we need to get down to the Rustler, or  
24 if we can -- yeah. It's almost going to have to be a  
25 Rustler, then -- then down to the Tansill, which would



1 cover the salts.

2 Q. Yeah. I mean, once you're down to the  
3 Artesian --

4 A. Yeah. Yeah.

5 Q. Again, these are minor modifications, but we  
6 would ask you as the Applicant to reconsider this well  
7 design and isolate that salt. Further north we've had a  
8 collapse, and the last thing was -- yes. We had the  
9 wink [sic] in the areas like that where we've had  
10 migration uphole, and so as a result, the Salado was  
11 pulled out and collapsed around the well.

12 A. Yeah.

13 Q. So as a condition, please go ahead and address  
14 and isolate it and try to minimize the impact of the  
15 Capitan. Even though it is not of drinking water  
16 quality, it is still maintained as an underground source  
17 of drinking water. Until that day when it changes, we  
18 still have to honor our obligations to that.

19 So other than that, the application seems  
20 very complete and if we get the water sample, and then  
21 we'll deal with the Raptor as a separate item.

22 A. Yeah. And I think maybe off the record --

23 Q. No, you can't.

24 A. I can't do that?

25 (Laughter.)

1 Q. Later we can discuss it.

2 A. We can discuss that. Okay.

3 Q. Yes.

4 And for the record, there are two wells  
5 that were proposed. One is in close proximity -- more  
6 close -- closer to the proposed acid gas well, which has  
7 raised concerns, and the Division has requested a  
8 consideration for relocation --

9 A. Yeah.

10 Q. -- as opposed to --

11 A. Yeah. We're reviewing that now, for sure. And  
12 at the time that we get the plume modeling for that  
13 well, the acid gas well becomes public, then maybe we  
14 can relook at that again.

15 Q. Well, this is -- this is a roll-of-the-dice  
16 game. We don't know if the acid gas well will ever come  
17 into being.

18 A. Right.

19 Q. And so they do have a prior application in, and  
20 we'll honor that until a point.

21 A. Right.

22 Q. So with that in mind, it may evaporate within a  
23 few months --

24 A. Right.

25 Q. -- it may never happen and you may come back

1     and re-apply. But I know you have a schedule to keep  
2     and you want these locations so that you can get your  
3     operation ongoing.

4           A.     Okay.

5           Q.     So for now it's kind of a one-mile, no dead  
6     zone.

7           A.     Right. We can actually help you push that acid  
8     gas to Texas.

9                     (Laughter.)

10          Q.     That is a discussion for another day and a  
11     hearing before the Commission and I appearing. So I'll  
12     leave it at that.

13                   EXAMINER GOETZE: Any other -- Mr. Padilla,  
14     this is your chance to be on record.

15                   MR. PADILLA: No. I have no comment.

16                   EXAMINER GOETZE: Oh, come on, just one  
17     disgruntle.

18                   MR. PADILLA: No. I don't want to say  
19     anything that I shouldn't say.

20                     (Laughter.)

21                   EXAMINER GOETZE: Okay.

22                   EXAMINER BROOKS: Very wise.

23                   EXAMINER GOETZE: Mr. Brooks?

24                   EXAMINER BROOKS: I wanted to ask some  
25     questions about notice.

1 MS. BENNETT: Okay.

2 EXAMINER BROOKS: Exhibit 7, page 1 is the  
3 list of people to whom you sent notice.

4 MS. BENNETT: That's right.

5 EXAMINER BROOKS: How did you -- what  
6 criteria was used in determining to whom to send notice?

7 MS. BENNETT: NGL sent notice to the  
8 one-mile offsets, one-mile area of review, and I think  
9 two mile. The way they decided to whom to send notice  
10 is based on the regulations, so it's laid out in their  
11 C-108, and it is part of the exhibits. But in any  
12 event -- I'm not finding it right now, but -- here it  
13 is. So they have, for example, in their C-108 backup  
14 documentation --

15 EXAMINER BROOKS: Is this in --

16 MS. BENNETT: It's in Exhibit 1  
17 (indicating). Exhibit 1 includes all of the backup  
18 documentation that's required for the C-108.

19 EXAMINER BROOKS: Yeah. So they used one  
20 mile instead of the one-half mile?

21 MS. BENNETT: That's right, yeah, one mile.

22 EXAMINER BROOKS: And they sent notice to  
23 the people listed, but I still don't know what criteria  
24 were used in determining who got on the list.

25 Ms. BRADFUTE: Mr. Brooks, so NGL contracts

1 with Lonquist, which is a permitting company, and  
2 Lonquist -- the agent at Lonquist who works on these  
3 matters conducts a record title search, so he'll work  
4 with title companies. He'll go look at record title  
5 documents to identify these parties, and they go with a  
6 broader notice criteria. So they are notifying mineral  
7 owners and looking for operators of record as well when  
8 they're also deciding who to send notice to.

9 EXAMINER BROOKS: So they noticed all  
10 mineral owners, not just the people that would be  
11 required by the criterion of affected persons?

12 MS. BRADFUTE: They may not have noticed  
13 all mineral owners, but if there is any doubt, they go  
14 to mineral owners to use a broader criteria to  
15 overnotify the -- the goal is to overnotify instead of  
16 undernotify.

17 EXAMINER BROOKS: Okay. Did they notify  
18 mineral owners in all formations --

19 MS. BRADFUTE: They do.

20 EXAMINER BROOKS: -- not merely in the  
21 injected -- formations?

22 MR. BRADFUTE: I believe they do. I will  
23 confirm that, but I think they do all -- all depths.

24 EXAMINER BROOKS: Okay. The rule doesn't  
25 say, as you know.

1 MS. BRADFUTE: It does not. Yeah.

2 EXAMINER BROOKS: And there's been some  
3 discussion about whether it ought to say one or the  
4 other.

5 MS. BRADFUTE: We have decided to err on  
6 the side of -- and it's been a conscious choice on NGL's  
7 part that it's safer to provide broader notice and we  
8 might deal with more parties when we come to hearing,  
9 but that way there is no question, after an order is  
10 issued, that people were notified.

11 EXAMINER BROOKS: Okay. Well, thank you.  
12 That's all I have.

13 CROSS-EXAMINATION

14 BY EXAMINER JONES:

15 Q. I'll be quick. Who is applying for this  
16 Leavenworth well?

17 A. Salt Creek Midstream.

18 Q. Oh, a midstream company.

19 A. Yeah. It would be associated with a gas plant  
20 that's not there yet. I think they're -- like Phil  
21 said, they're in the early stages of planning and  
22 discussions.

23 EXAMINER GOETZE: They're currently on the  
24 December docket.

25 EXAMINER JONES: Okay.

1 MS. BENNETT: And to clarify, I included  
2 this map, which was prepared by Mr. Goetze, as we were  
3 originally going to be discussing Raptor today, but this  
4 map only relates to Raptor, not Galaxy, which has been  
5 continued.

6 EXAMINER JONES: Oh, Galaxy, over a little  
7 further west.

8 MS. BENNETT: Yes. So this map does not  
9 apply to Case 16505, but it was in the materials in  
10 expectation that we might be talking about it today.

11 Q. (BY EXAMINER JONES) Okay. But as far as the  
12 design on this well, you're not concerned about the  
13 proposed location of the acid gas well?

14 A. No. And even if it were closer, as far as  
15 we're concerned, we're -- we're pushing that acid gas  
16 away from us. It's in the same formation as we'll be  
17 injecting.

18 Q. Okay. What a name, Leavenworth.

19 (Laughter.)

20 MS. BRADFUTE: I know.

21 MS. BENNETT: Yeah.

22 EXAMINER JONES: Kind of morbid.

23 EXAMINER GOETZE: You never know. They  
24 might be a great-state-of-Kansas lover.

25 EXAMINER JONES: They might be.

1           Q.    (BY EXAMINER JONES) You're probably liking  
2   Santa Fe better than Bismarck right now anyway, right?

3           A.    Yeah.  Yeah.

4           Q.    Are you okay with the limitations of the 39  
5   pound on the 7-5/8?

6           A.    Yes.  We'll be into exotic rates, though.  
7   Yeah.  We'll be greater than T110.  Yeah.

8           Q.    Okay.  But you want it on the record that  
9   you're permitted to 50,000 barrels?

10          A.    Yeah.  You know, the reality is that, you know  
11   whatever -- yeah.  Whatever the geology allows to take  
12   at the -- at the pressure limitations.

13          Q.    Right.  But you want it --

14                   MS. BRADFUTE:  We would like it stated for  
15   maximum, yeah, 50,000.  But there is a physical  
16   limitation with surface pressure.

17          Q.    (BY EXAMINER JONES) Is there an implication  
18   that the seismic impact has been calculated at 50,000,  
19   and so there -- if it was to go higher than that, it  
20   would be a new seismic evaluation?

21          A.    Again, that's more of an instantaneous rate in  
22   case we get down to looking at, Oh, did you put in  
23   50,000 that day, because the average is going to be  
24   closer to 40- or 30- or something less.  50,000 every  
25   day probably wouldn't -- wouldn't happen, but you



1 certainly want the flexibility to -- okay, you've got to  
2 get rid of a bunch of water today -- bring the tank  
3 levels down because something was shut down at that  
4 capacity, if it's within your pressure limit.

5 **Q. How do you physically get 50,000 barrels a day**  
6 **to that well --**

7 A. Well, they're pipelined. These are -- these  
8 are mostly for pipeline, and you'll have pipelines going  
9 around to some of these various wells and be  
10 interconnected. So --

11 **Q. So are you the pipeline person, or is that**  
12 **going to be somebody else?**

13 A. NGL is developing those -- those pipeline  
14 networks. I'm not the pipeline person.

15 **Q. But your company?**

16 A. Not IPT, no.

17 **Q. Not IPT?**

18 A. Not IPT.

19 **Q. Okay.**

20 A. That's outside of our wheelhouse, but it's  
21 definitely in NGL's. They're a big midstream.

22 **Q. How does 50,000 barrels a day compare with**  
23 **wells that you've seen up in other states?**

24 A. I've seen it in Texas.

25 **Q. You've seen --**

1           A.    Oh, yeah.

2           **Q.    You've seen actual disposal at 50,000?**

3           A.    I've seen actual 50,000-barrel-a-day disposal  
4   in the -- in the Bell-Cherry Canyon.

5           **Q.    In the Bell-Cherry Canyon?**

6           A.    Yeah. Those wells are really -- yeah. The  
7   Delaware Mountain Group will take a lot of water. So  
8   we've got -- we've got some wells that are -- where we  
9   have 7-inch tubing set to 4,500 feet.

10          **Q.    You said you worked all the way from North**  
11 **Dakota to south Texas, so does that include Oklahoma?**

12          A.    No. We -- we don't have any -- any work in  
13   Oklahoma.

14          **Q.    Okay. I've heard some stories that Oklahoma**  
15 **wells are gigantic disposal wells.**

16          A.    Yeah. Those are Arbuckle or Ellenburger, as it  
17   would be here, and those could be gigantic wells, but  
18   current Commission -- current Division policy is not to  
19   allow injection into the -- into that zone, at least.  
20   It sits right on top of the basin, basically.

21          **Q.    So what's been your biggest risk with this**  
22 **project?**

23          A.    The biggest risk is drilling -- keeping  
24   drilling costs in check. If you have an issue, it's  
25   very expensive.

1           **Q.    Which explains the concern over the**  
2   **increased -- additional casing?**

3           A.    Yeah.  Now, that's not -- the -- the bigger  
4   drilling risks are when you're -- when you're down below  
5   the Wolfcamp?  Getting to the Wolfcamp is easy.  Even an  
6   additional casing string is not going to be that large  
7   of an impact on the project.  But that -- that sectional  
8   of hole we drill for the 7-5/8 casing is the -- is the  
9   one where we've got a lot of pressure to deal with.  
10   Sometimes you have -- you'll be in an area where you  
11   need 15-pound mud, and then all of a sudden, you'll go  
12   into a lower-pressure zone.  We've done one with  
13   underbalanced drilling and nitrogen, and that worked out  
14   pretty well.  Depending on the area --

15          **Q.    So underbalanced drilling?**

16          A.    Yeah.  We've done underbalanced drilling.

17          **Q.    Is that what you're planning here?**

18          A.    I don't know.  We put the high-pressure  
19   rotating head on, and then we -- then we see.  Sometimes  
20   those real high-pressure zones are very low  
21   permeability.  So once you deal with that initial kick,  
22   then there is not enough permeability to -- to feed it,  
23   and you can go back to a lower mud weight.

24          **Q.    But it's still got the high pressure, but the**  
25   **rate is controlled by the rock?**

1           A.     But the rate is -- is not significant, so it  
2     doesn't present a well-control issue.  Yeah.

3           Q.     Is it is the Mississippian, or is it the  
4     Pennsylvanian?

5           A.     Down -- down in the Penn section.

6           Q.     The Pennsylvania.

7           A.     Yeah.

8                     The Atoka can be really high pressure.

9           Q.     But the drilling -- the drilling -- the hard  
10    drilling, is that in the Mississippian?

11          A.     You mean penetration rate?

12          Q.     Penetration rate.

13          A.     Yeah.  It slows down there, and -- but with the  
14    underbalanced drilling, we were seeing 30, 60 feet per  
15    minute.  We were just cycling through that with  
16    underbalanced, so it depends.

17          Q.     How fast do you drill through the Woodford?  
18    And you've got mud loggers out there that can catch  
19    that?

20          A.     Yeah.  We'll slow down a little bit in the  
21    Woodford Shale, but that's pretty much our -- we want to  
22    drill and case through the Woodford, and we need to make  
23    sure we get that covered up.

24          Q.     So it's all right to -- to penetrate the  
25    Woodford as far as getting your cement?

1           A.    Yeah.  Yeah.  And then we -- we -- we get that  
2   behind and circulate.

3           **Q.    You don't have to be careful about not**  
4   **penetrating through the Woodford?**

5           A.    No.  We want to get -- we want to get that  
6   behind pipe and penetrate that --

7           **Q.    Thanks.**

8           A.    -- because that could later come to haunt us if  
9   we left it exposed into our injection well.  Yeah.

10          **Q.    Thank you.**

11                   MS. BENNETT:  With that, I'd ask this case  
12   be taken under advisement, with the caveat that we have  
13   a couple of things to provide to you.

14                   EXAMINER GOETZE:  Very good.  Case 16505 is  
15   taken under advisement with the stipulation that  
16   additional information requests are going to be  
17   provided.

18                   Thank you.

19                   MS. BENNETT:  Thank you.

20                   MS. BRADFUTE:  Thank you.

21                   (Case Number 16505 concludes, 10:31 a.m.)

22

23

24

25

1 STATE OF NEW MEXICO  
2 COUNTY OF BERNALILLO

3

4 CERTIFICATE OF COURT REPORTER

5 I, MARY C. HANKINS, Certified Court  
6 Reporter, New Mexico Certified Court Reporter No. 20,  
7 and Registered Professional Reporter, do hereby certify  
8 that I reported the foregoing proceedings in  
9 stenographic shorthand and that the foregoing pages are  
10 a true and correct transcript of those proceedings that  
11 were reduced to printed form by me to the best of my  
12 ability.

13 I FURTHER CERTIFY that the Reporter's  
14 Record of the proceedings truly and accurately reflects  
15 the exhibits, if any, offered by the respective parties.

16 I FURTHER CERTIFY that I am neither  
17 employed by nor related to any of the parties or  
18 attorneys in this case and that I have no interest in  
19 the final disposition of this case.

20 DATED THIS 11th day of November 2018.

21

22

23 MARY C. HANKINS, CCR, RPR  
24 Certified Court Reporter  
New Mexico CCR No. 20  
Date of CCR Expiration: 12/31/2018  
Paul Baca Professional Court Reporters

25