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 PERMIAN, LLC FOR APPROVAL OF A SALTWATER DISPOSAL WELL IN LEA COUNTY, NEW MEXICO.

CASE NOs. 20063, 20084, 20093

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

November 16, 2018

Santa Fe, New Mexico

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

This matter came on for hearing before the New Mexico Oil Conservation Division, William V. Jones, Chief Examiner, Phillip Goetze, Technical Examiner, and David K. Brooks, Legal Examiner, on Friday, November 16, 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.

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EXHIBITS OFFERED AND ADMITTED

(8:53 a.m.)

EXAMINER JONES: Let's call Case Numbers 20063, 20084 and 20093, and all are --

Phil, the names, why don't you just go ahead?

EXAMINER GOETZE: Are applications of NGL Water Solutions Permian, LLC for approval of a saltwater disposal well in Lea County, New Mexico.

EXAMINER JONES: Call for appearances.

MS. BENNETT: Deana Bennett appearing on behalf of NGL for all three cases.

MS. KESSLER: Mr. Examiner, Jordan Kessler, on behalf of Ameredev Operating, LLC. I'm appearing in Cases 20084 and 20093.

MS. BENNETT: Thank you.

EXAMINER JONES: So you're appearing in only two cases?

MS. KESSLER: Correct.

EXAMINER GOETZE: Because of the proximity to horizontal drilling proposed by --

MS. KESSLER: That's correct, Mr. Examiner. Ameredev, as I understand it, is the mineral lessee in the tracts of two of the proposed wells.

EXAMINER GOETZE: Okay. Proceed.

MS. BENNETT: Thank you. We have one

witness today, Neel Duncan.

NEEL L. DUNCAN,

after having been first duly sworn under oath, was questioned and testified as follows:

MS. BENNETT: Thank you.

As before when we presented these cases to the Division, we have Mr. Neel Duncan with us today and then a series of affidavits, and these affidavits contain exhibits in the form that we've previously discussed with Mr. Goetze and that we've previously submitted to the Division. So we'll be following that same path forward today in this hearing for these three consolidated cases.

DIRECT EXAMINATION

BY MS. BENNETT:

Q. With that, Mr. Duncan, will you please state your name for the record?

A. Neel L. Duncan, D-U-N-C-A-N.

Q. And, Mr. Duncan, who do you work for?

A. Integrated Petroleum Technologies, and we are a contractor to NGL Water Solutions Permian, LLC.

Q. And what are your responsibilities for NGL?

A. To manage the process for permitting, drilling, completions of saltwater disposal wells in southeast New Mexico.

Q. And you have previously testified before the Division?

A. I have.

Q. And your credentials were accepted as a matter of record?

A. Yes, they were.

Q. Does your area of responsibility at NGL include the areas of southeastern New Mexico that we're talking about today?

A. Yes.

Q. And are you familiar with the applications that NGL filed that we'll be discussing today?

A. I am.

Q. And are you familiar with the saltwater disposal wells which are the subject of these applications?

A. I am.

MS. BENNETT: I would like to tender Mr. Duncan as an expert in operations and engineering matters.

EXAMINER JONES: So qualified.

Any objection?

MS. KESSLER: No objection.

EXAMINER JONES: Thank you.

Q. (BY MS. BENNETT) I have given everyone a packet

of the exhibits. And turning to Tab 1 of this packet, Tab 1 is the application for the Falcon case, Case Number 20063; is that correct?

A. Yes.

Q. And what does NGL seek under this application?

A. Approval to drill and complete a saltwater disposal well into the Devonian-Silurian.

Q. And what type of tubing is NGL seeking?

A. We're looking for a 7-inch by 5-1/2-inch tapered tubing string.

Q. And how many barrels -- billions [sic] of barrels per day?

A. 50,000 barrels per day of water.

Q. 50,000 barrels. Thank you.

Turning to Tab 2 in the exhibits, Tab 2 is the application for the Hornet SWD, which is Case Number 20084?

A. Yes. Also, we're asking for approval to drill, complete and operate a saltwater disposal well in the Devonian-Silurian with 7-inch by 5-1/2-inch tubing.

Q. And one thing I failed to mention about Tab 1 -- that is true about Tabs 1, 2 and 3 is that they also contain the application materials, the C-108s and other application materials; is that correct?

A. That's correct.

Q. Okay. So turning now to Tab 3, Tab 3 is the application for Case 20093 for the Thunderbird SWD; is that correct?

A. That's correct.

Q. And can you briefly describe what NGL seeks in this application?

A. We seek approval to drill, complete and operate a saltwater disposal well in the Devonian-Silurian with 7-inch by 5-1/2-inch tubing as the -- as the conduit for the water.

Q. And 50,000 barrels per day?

A. And 50,000 barrels per day.

Q. I wanted to -- at the end of Tab 3, I've included a freshwater analysis that wasn't previously included with the C-108. And I just wanted to -- I should have marked it separately. But it starts with "Cardinal Laboratories" on the top. This was a freshwater sampling analysis that was done, and we didn't have it at the time the application was submitted, and so it is included in this packet for your convenience. And it has been emailed separately as well.

A. That is correct.

EXAMINER JONES: Does it say where it's located, where the samples came from?

THE WITNESS: It gives the well number -- the water well number. Yes.

EXAMINER JONES: Okay. And the lat/long?

THE WITNESS: Yes, it does, 32 minus 103.

MS. BENNETT: Uh-huh.

Q. (BY MS. BENNETT) The lat/long is the project number, more or less? I mean, that's what --

A. No. That's the -- the geo reference coordinates.

Q. But I'm looking at the analytical results header, and it says "Project Thunderbird, Project Number 32.094615 and negative" --

A. Oh, okay. Here it says "Location." That's on page 2.

Q. Great. Well, it's in multiple areas.

Yes. Yes is the answer. It does show the lat/long.

EXAMINER JONES: We notoriously get these things, and they don't say where they came from.

EXAMINER GOETZE: We do use them in the future, so that's why we like to have them. Otherwise, we can't use them for anything. It's background.

Please.

Q. (BY MS. BENNETT) So have you considered whether the Hornet SWD and the Thunderbird SWD will be located

in the Capitan Reef?

A. Yes.

Q. And what is your conclusion there?

A. That the casing design needs to be modified from what's in the C-108, and we're working on that modification. Our drilling engineers are going to get the district involved. We have a plan for doing this. We need to see if there is another -- a more -- another acceptable plan that might be a little cheaper. The casing alone is $600,000 for the 24-inch.

CROSS-EXAMINATION

BY EXAMINER GOETZE:

Q. Well, the alternative is you can come to hearing and get an exemption for the aquifer. Seeing how there are only four wells within, let's say, 200,000 square miles of aquifer, I think the cost of the casing is minimal compared -- and, again, you're making an investment that we would like to see go for a long time.

A. Right. Right. Yeah.

Q. So the last thing you need is to have a salt section go bad on you.

A. Exactly. Exactly. No, we agree. Yeah.

Q. We appreciate that. We're glad you've --

So for both the Thunderbird and the Hornet, you're looking at --

A. Just like the Galaxy. I sent you kind of the principles of what we're talking about by email. So --

Q. Yeah.

Again, as long as we can isolate that salt section, that's what we're looking at, and keeping the aquifer at least out of contact.

A. Right. Right.

Q. Thank you.

CONTINUED DIRECT EXAMINATION

BY MS. BENNETT:

Q. Could you please explain NGL's reasons for requesting a larger tubing size?

A. To reduce friction, reduce the horsepower to inject. We'll -- we can also get more water with fewer wells. There are lots of good reasons for doing that, provided the induced seismicity stays in check, and -- and -- and it continues to be safe and to protect the public.

Q. Are you aware of any Devonian disposal wells for which the Division has approved the 7-inch by 5-1/2-inch tubing?

A. Yes. The Commission has approved this for Mesquite, I know, and for OWL, and there's been a few other cases.

Q. Are there other wells currently injecting into

the Devonian in this area?

A. No. We're pretty -- we're pretty isolated there. We've got some -- one well way, I think, way off to the northeast but nothing proximate to us.

Q. Has NGL retained a reservoir engineer to conduct a study of the injection zones for these wells?

A. Yes, we have.

Q. Was that Scott Wilson?

A. Scott Wilson of Ryder Scott.

Q. And Mr. Wilson has previously testified before the Division?

A. Yes. And his qualifications were accepted.

Q. And Mr. Wilson has provided an affidavit for this hearing today discussing these applications?

A. Yes, as Exhibit 4.

Q. Let's turn to Exhibit 4, and just quickly we can talk about Mr. Wilson's affidavit and the study that's attached.

In Mr. Wilson's affidavit, does he confirm that increasing the tubing size for these wells will reduce friction in the wellbore?

A. Yes, he does.

Q. And does he confirm that using increased tubing sizes -- excuse me -- increased tubing size will only have a very small impact on pore pressure?

A. Yes.

Q. And is it his opinion that the increased tubing sizes will not cause fractures in the formation?

A. Yes.

Q. And did he perform a study looking at model -- or a study that models the migration of fluids that are injected into the wells?

A. Yes, he did.

Q. And is his study attached to his affidavit?

A. Yes.

Q. And in his study, did he conclude that over a period of 20 years, the majority of fluids injected will stay within a mile of where the wells are located?

A. Yes, a mile or less.

Q. Thank you.

Has NGL retained a geologist to review the geology in this area where the wells will be located?

A. Yes, we have, and it's Kate Zeigler. She has been qualified by the Commission.

Q. And her affidavit and her studies are behind Tab Number 5; is that correct?

A. That's correct.

Q. And her affidavit outlines her studies and her conclusions; is that --

A. Yes, that's correct.

Q. Did she find that the areas where the wells are located are suitable for injection at increased rates?

A. Yes.

Q. Did she find that there is a permeability barrier both above and below the injection zones which will prevent the migration of fluids?

A. Yes.

Q. Let's turn to Tab 6 now. Exhibit 6 is the affidavit of Dr. Steven Taylor. Has he been retained by NGL?

A. Yes. He's been retained to look at potential induced seismicity.

Q. And his credentials have been accepted by the Division?

A. Yes. They've -- they've been anticipated.

Q. And did he look at seismic activity in the area where the -- where the wells will be located?

A. Yes, he did.

Q. And his study concludes that there is not a lot of seismic activity in the area; is that right?

A. That's correct.

Q. And his study is attached as Exhibit A to his affidavit?

A. That's correct.

Q. And NGL also works with consultants at FTI

Platt Sparks to run the fault-slip probability tool analysis; is that correct:

A. That's correct.

Q. And those studies are also attached to Dr. Taylor's exhibit?

A. Yes.

Q. And Exhibit B1, for the Division's benefit, is the fault-slip probability analysis that was run for the Falcon well, and Exhibit B2 is the fault-slip probability tool analysis that was run for the Hornet and Thunderbird wells. So there are two separate studies --

A. Yes. Yes.

Q. -- that he has prepared for these three wells? Did Dr. Taylor review those studies?

A. Yes, he did.

Q. And as we just mentioned, those studies are included as attachments to his affidavit.

Does Dr. Taylor and FTI Platt Sparks find that there is very little risk of induced seismicity?

A. Yes. There is very little.

Q. Thank you.

Let's turn to Tab 7. Tab 7 is the declaration of Mr. Steven Nave. Who is Steven Nave?

A. He owns a fishing tool and fishing services

company in Artesia.

Q. And has he previously testified before the Division?

A. Yes, he has, and his qualifications have been accepted.

Q. In his declaration, does Mr. Nave conclude that fishing operations will be possible in these wells if NGL is permitted to use the tubing it requests?

A. Yes.

Q. Okay. Then let's turn to Tab 8.

MS. BENNETT: And Tab 8 is my Affidavit of Notice confirming that notice was sent as required. And I separated the notice documents by well. So the first set of documents are for the Falcon well. The second set of documents are for the Hornet well, and the final set of documents are for the Thunderbird well. And I denoted that by slip sheets that have the well name on them.

And at the end of my affidavit, I've also included a copy of the Notice of Publication, which was published on November 2nd.

Q. (BY MS. BENNETT) Mr. Duncan, were Exhibits 1 through 7 created by you or prepared under your direction and supervision?

A. Yes, they were.

MS. BENNETT: And Exhibit 8 was prepared by me.

Q. (BY MS. BENNETT) In your opinion, does the granting of this application promote the prevention of waste and the protection of correlative rights?

A. Yes.

MS. BENNETT: I'd like to have Exhibits 1 through 8 admitted at this time.

MS. KESSLER: No objection.

EXAMINER JONES: Exhibits 1 through 8 are admitted in all three cases.

(NGL Water Solutions Permian, LLC Exhibit Numbers 1 through 8 are offered and admitted into evidence in all three cases.)

MS. BENNETT: Thank you. That concludes my presentation.

MS. KESSLER: I have just a few questions.

CROSS-EXAMINATION

BY MS. KESSLER:

Q. Good morning.

Are you aware that Ameredev Operating is the mineral lessee in the subject area for Cases 20084 and 20093?

A. Yes, for Hornet and Thunderbird. They're in my head as wells, but yes.

Q. Were you contacted through counsel by Ameredev?

A. Yes, by Ameredev's counsel.

Q. And what did they request?

A. They requested directional surveys from the wells after we drill them.

Q. And has NGL confirmed that they will provide those surveys to Ameredev?

A. Yes. NGL has agreed to provide those surveys.

Q. And you're prepared to honor that agreement?

A. I am prepared to honor that agreement, Jordan.

MS. KESSLER: No further questions.

EXAMINER GOETZE: Then I will ask the question: What was the notification you did? For one mile or a half mile or what?

MS. BENNETT: We did notice for -- well, we notified within a one-mile, but we also notified up to two miles so that that information is in the C-108. It includes the information about the one-mile interest owners and then the two-mile offsets, and those were all provided notice for each well.

EXAMINER BROOKS: What resources did you use to determine who was to be given notice?

MS. BENNETT: So I haven't confirmed this myself, but I know that Ms. Bradfute has confirmed that NGL searches the county records and does record searches

for the ownership information.

EXAMINER BROOKS: So they did original record searches?

MS. BENNETT: Yes.

MS. BRADFUTE: Mr. Brooks, so NGL contracts with Lonquist who handles the C-108 completion process, and Lonquist works with brokers who run title searches in the county records. And then the agent at Lonquist goes through that title information itself and provides it to counsel.

EXAMINER BROOKS: Well, in view of the fact that an applicant recently testified that they prepared the notices based on Midland Map Company maps, I thought it prudent to ask that question.

THE WITNESS: Wow.

EXAMINER GOETZE: So if you could, send us an email with just at least a clarification of what method was used.

MS. BRADFUTE: Certainly.

EXAMINER GOETZE: Okay.

You don't like Midland maps, huh?

EXAMINER BROOKS: I don't have anything against Midland Map. When it's used properly, it's a very valuable resource.

CROSS-EXAMINATION

BY EXAMINER JONES:

Q. Are you going to stay below -- below 39 pound or lower on your 7-inch?

A. Yes, we will. Yeah. 39 -- yeah, 39 pound or less weight, keep the ID big.

Q. So what's the substructure height of your rig you're going to be using?

A. The KB is 32 feet.

Q. 32 feet?

A. Yeah. 31 feet. It's Frontier Rig 32. The KB is really high.

Q. Wow.

So you've got -- you've got pipe rams and blind rams and other pipe rams on your BOP?

A. Yeah. The BOP stack, we have -- I've been through this quite a few times, but -- but yeah. We've got -- of course we'll have a bag. We'll have -- we'll have pipe rams, blind rams. We'll have two sets of rams for, you know -- and we use these very low rams, as well as the fixed pipe rams. So it's quite a stack.

Q. Yeah.

A. Yeah. And we're using routinely the 10,000-pound stack even though it's a little bit more than required.

Q. Are you going to drill underbalanced on part of it?

A. You know, we've experimented with that. We did that on one well. Some of these wells we may not need to do underbalanced. We do use the high-pressure rotating head, though, and we're ready to go to underbalanced drilling if we decide we need to.

Q. Are you going to run into higher pressures in the Pennsylvanian rocks --

A. Oh, yes.

Q. -- in this area?

You're expecting that?

A. Yeah. We expect that.

And sometimes, if we're patient, we can bleed that down, and it's low enough permeability that it doesn't keep coming at us, and -- and you don't have to mud up as much. But if you just quickly react to that and weight up your mud, then you sacrifice drilling time, and then you get more mud weight than you need.

Q. Okay. So you'll be prepared to take a flow for a while here?

A. Yeah. We've learned to be flexible and be a little bit patient.

Q. So how about the cement across the Pennsylvanian? Have you learned something from previous

wells on that, or what's the job going to look like? What kind of cement?

A. What we've learned from that -- and I don't have the cement properties in front of me. But we've learned to let that cement set up good and hard in that liner section before we reduce the weight to drill the injection section because we want to have not only the mechanical barrier but the liner hanger packer, and there are two seals on that. We also want to have the cement compressive strength there as well.

Q. What kind of logs are you going to run on all these different -- different segments?

A. We've been running regular cement bond tools. Yeah. So we see a pretty good picture around the, you know, whole cement sheath.

Q. So that at least has a gamma ray with it, but you're not running any porosity logs?

A. Oh, we are. Yeah. Yeah. We're running full open-hole logs for the sections. Yeah.

Q. For each of the sections?

A. Yeah. Except the surface casing. But particularly in the reef, we're going to be -- we'll going to be looking to document the reef.

Q. So somebody's going to have to be there picking the tops of the Rustler or the salt, basically, and then

the top of the --

A. We're doing that -- we have mudloggers there for the whole well.

Q. You're going to have mudloggers on the whole well?

A. Yeah. We've always had -- we've always had mudloggers from surface to TD.

Q. The Woodford -- so they'll know when you -- are you going to go completely through the Woodford before you set your 7-inch; is that right?

A. Yes, we will. If you leave the Woodford exposed, you leave yourself the potential of wellbore collapse.

Q. Oh. But if you drill below the Woodford, do you go into something that's lost circulation so you can't circulate cement?

A. We -- we -- we haven't had that problem.

Q. Okay.

A. Yeah.

Q. So the upper part of the Devonian is competent enough that --

A. The upper is still tight. It's still tight.

Q. So you can get your --

A. That's right.

Q. I noticed you said earlier there is a bottom --

there is a cap rock above, which is the Woodford, I take it, but you said also there is a cap rock below the injection zone. I mean, that was one -- maybe the geologist testified to that.

A. The geologist testified to that.

Q. I'm not turning you into a geologist, but --

(Laughter.)

Q. Mr. Goetze might say something there if I did that. But what is that cap rock?

A. Well, I think part of the reason we're not going, you know, deeper than the Montoya in these wells is that -- is that we want to make sure we don't get water in the basement. So we do have plenty of buffer there with the Montoya before we get into the Ellenburger. And I will let Phil correct my geology.

Q. Phil obviously knows more about it than I do. But I know that when you get over in Lea County -- I thought there were more faults over in Lea County, but you said there is no seismic risk.

A. We've documented the faults in the Platt Sparks testimony, at least the known faults, and so we're -- and the -- the orientation of those faults is not prone to -- to slip as much. And I'm quickly going outside my area of expertise.

EXAMINER GOETZE: Yes, you are. And the

examiner is helping you go down that road.

EXAMINER JONES: I am. I am. I'm sorry.

(Laughter.)

MS. BRADFUTE: Mr. Examiner, I believe Ms. Zeigler's affidavit talks about the lower permeability barrier. But it's the Ordovician.

EXAMINER JONES: Okay. Okay.

EXAMINER GOETZE: And she's an attorney, too, so --

MS. BRADFUTE: Yes. This is not testimony. Please rely on the affidavit.

EXAMINER GOETZE: Dr. Zeigler has given a very good presentation for the areas of proximity where they've been doing these wells. So on the strength of her opinion, as well as other people, the Upper Ordovician is fairly tight, and, therefore, the ability for it to carry fluid down seems to be very low. Matched up with the decrease of slip faults in the area, we're not seeing the risk that we normally would see. So we've run with that model, and that's what we're going to run with until the first earthquake.

MS. BENNETT: And Ms. Zeigler -- Dr. Zeigler does include a schematic of the upper and lower permeability barriers as an attachment to her affidavit. It's this color schematic, and she shows the

shale permeability barrier as the upper barrier, which is Woodford, and then the Ordovician as the lower permeability barrier. So it is documented not just in her affidavit but in her exhibits as well.

Q. (BY EXAMINER JONES) Okay. Can you talk more about the Devonian? The injection interval is -- reservoir-wise, the rock, the permeability, the porosity, the type of permeability? Is it fractures, or is it pretty matrix perm?

EXAMINER GOETZE: Again, this is in Scott Wilson's affidavit. I think we'll have to refer --

Q. (BY EXAMINER JONES) But a reservoir engineer interpretation of that, I should say.

A. Well, it's -- yeah. It's -- it's very good. There's a lot of -- there's matrix permeability. It's not -- you know, we're not fracturing anything to put water away. You'll see this -- you know, there are not too many wells drilled out there. We'll have to see this on the logs and get a -- get a good log evaluation.

CROSS-EXAMINATION

BY EXAMINER GOETZE:

Q. Let's do this approach. In the ones that you have drilled, what have been the results of your assessment of the Devonian section? Has it been what you expected? Has it been better than what you

expected?

A. It's been what we expected. One well was worse than expected, but we just did our -- we just did a striker tube. We did a pump and test on that, and it's high capacity at quite low pressures. It was 43,000 barrels a day, roughly, still well below the permeability pressure. It was taking the water.

CONTINUED CROSS-EXAMINATION

BY EXAMINER JONES:

Q. This 50,000 you talk about, historically the OCD seems to go by the average monthly -- calendar monthly rates, you know, for proration. They always do that. So is that what you're talking about here, or are you talking about us preventing a surge of 50,000 in any one day within the month or an average for that month, or what are you talking about?

A. I don't think realistically it will average that much. I think we may have some surge days, but I think the average is going to be more like in the 40-, maybe 45,000-barrel range, but certainly higher than a well with restricted tubing. You know, we're trying to get more water away with fewer wells.

Q. And less pressure imposed on the well?

A. Less pressure at the surface to do it.

Q. From all the way down?

A. Yeah. Yeah. But we're still asking for the 50,000. You can imagine the horsepower required to do that.

Q. Yeah.

What kind of surface facilities and monitoring do you do?

A. NGL uses -- you know, everything's remotely monitored. They're usually using horizontal centrifugal pumps for these wells.

Q. So you could give us a printout in any given month of your rate and your maximum pressure for that month, or NGL could, I should say?

A. Yeah. Yeah. I'll defer to NGL, but yeah, they'll have the capability of --

Q. If the district asked for that, they could do that?

A. Yes.

Q. What's the deal with Ameredev? Could you reiterate what you promised?

A. They have the minerals, and so the disposal wells, you know, are sitting as an obstacle in the middle of a horizontal play. They need to be positioned -- certainly recorded so that the operator can do anticollision on the -- on the -- one horizontal well. And so with those records and with the strategic

placement of the -- of the wells, we can make sure we avoid each other and don't -- don't pose a hindrance.

Q. Are you going to run a directional survey on this well?

A. We have directional surveys from -- we're drilling with directional tools, so we have continuous surveys.

Q. You've got a mud motor?

A. Yes. We have a mud motor. We have LWD. We have --

Q. Wow.

A. Yeah. Yeah.

EXAMINER JONES: I'm sorry to hijack the proceedings.

EXAMINER GOETZE: That's okay. It's your --

EXAMINER JONES: It's very interesting.

EXAMINER GOETZE: Well, the next time he comes to visit, I'll direct him down to your office. Okay?

(Laughter.)

MS. BENNETT: It's not that interesting.

EXAMINER GOETZE: So, Miss Jordan, if we were to incorporate into the order a specific requirement that they supply the directional survey,

would that alleviate any concern with your client?

MS. KESSLER: Certainly. And NGL has sent an email confirming that they will supply those surveys. We wanted something on the record.

EXAMINER GOETZE: Okay. We'll make that a part of the stipulations, conditions of approval, if that's satisfactory to your client.

MS. KESSLER: Thank you.

EXAMINER GOETZE: And then are you done?

EXAMINER JONES: I'm done.

EXAMINER GOETZE: Just two questions.

CONTINUED CROSS-EXAMINATION

BY EXAMINER GOETZE:

Q. For the record, you are going to present us with a new well design for the Thunderbird and the Hornet?

A. Yeah, and the Galaxy that we talked about.

Q. Well, that's another case. We don't talk about other cases.

And for the record, the well design will be protective of underground resources of drinking water?

A. Yes.

Q. And also for the record, the tubing will be lined?

A. Yes, it will.

Q. Okay. I have no further questions.

MS. BENNETT: Just to clarify the stipulation about providing the survey to Ameredev, that will just be for the two cases they've entered their appearance in?

EXAMINER GOETZE: They can send anything they want, but we're just going to make sure their request is made part of the order.

MS. BENNETT: For those two wells?

EXAMINER GOETZE: Yeah. Because even with our rules, we're supposed to get every log, and you'd be amazed how many never show up. So we will make it part of any order that's created for these specific wells.

MS. BENNETT: Thank you.

With that, I'd ask that these cases be taken under advisement.

EXAMINER JONES: Okay. Case Numbers 20063, 20084 and 20093 are taken under advisement.

Thank you very much.

THE WITNESS: Thank you, Mr. Examiner.

(Case Numbers 20063, 20084 and 20093 conclude, 9:27 a.m.)

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

CERTIFICATE OF COURT REPORTER

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

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

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

DATED THIS 20th day of December 2018.

MARY C. HANKINS, CCR, RPR
Certified Court Reporter
New Mexico CCR No. 20
Date of CCR Expiration: 12/31/2019
Paul Baca Professional Court Reporters