

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: 20141, 20142

APPLICATION OF NGL WATER SOLUTIONS
PERMIAN LLC FOR APPROVAL OF SALTWATER
DISPOSAL WELLS IN LEA COUNTY,
NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

JANUARY 23, 2020

SANTA FE, NEW MEXICO

This matter came on for hearing before the New Mexico Oil Conservation Division, EXAMINERS FELICIA ORTH, LEONARD LOWE, PHILLIP GOETZE, and LEGAL EXAMINER ERIC AMES, on Thursday, January 23, 2020, 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: Irene Delgado, NMCCR 253
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1 HEARING EXAMINER ORTH: Like to turn now to Case
2 20141 and potentially 20142 this is NGL. Call for
3 appearances.

4 MS. KATZ: Lara Katz on behalf of NGL Water
5 Solutions Permian. I apologize, but my witness -- this has
6 moved faster than we thought, and my witness is still on his
7 way over from the airport. So if it would maybe be possible
8 for the next case, I wouldn't mind bumping up and hopefully
9 he will be here soon.

10 HEARING EXAMINER ORTH: Okay. We can certainly
11 do that.

12 Ms. Katz, I'm sorry, do you intend to present by
13 witness or by affidavit?

14 MS. KATZ: We have one witness, and he will be
15 testifying in one affidavit, it will be very short, but yes.

16 HEARING EXAMINER ORTH: Okay. Thank you.

17 (Pause in proceedings.)

18 HEARING EXAMINER ORTH: Let's go back to Ms.
19 Katz, 20141 and 20142; is that correct?

20 MS. KATZ: That's correct. Good morning. Lara
21 Katz of Abadie and Schill on behalf of the applicant, NGL
22 Water Solutions Permian. I would ask to consolidate these
23 two cases.

24 HEARING EXAMINER ORTH: Are there other
25 appearances?

1 MS. ANTILLON: Andrea Antillon on behalf of the
2 State Land Office, only in case 20141.

3 HEARING EXAMINER ORTH: All right. Anyone else?

4 MR. RANKIN: Good morning, Madam Examiner. Adam
5 Rankin with the Santa Fe law firm of Holland & Hart
6 Invenergy on both cases.

7 MR. BRUCE: Jim Bruce of Santa Fe representing
8 Kaiser-Francis Oil Company in both cases.

9 HEARING EXAMINER ORTH: Anyone else?

10 (No response.)

11 HEARING EXAMINER ORTH: Are there objections from
12 any of the other counsel to Ms. Katz proceeding on the basis
13 of affidavit?

14 MS. KATZ: I have one witness.

15 HEARING EXAMINER ORTH: Oh, that's right. I'm
16 sorry. If you would proceed.

17 MS. KATZ: I will call my first witness, Neel
18 Duncan.

19 NEEL L. DUNCAN

20 (Sworn, testified as follows:)

21 DIRECT EXAMINATION

22 BY MS. KATZ:

23 Q. Good morning, Mr. Duncan. Will you please state
24 your name for the record?

25 A. Neel L. Duncan.

1 Q. And for whom do you work?

2 A. I'm managing director of Integrated Petroleum
3 Technology.

4 Q. Have you been retained as a consultant by NGL?

5 A. I have.

6 Q. What are your responsibilities for NGL?

7 A. Drilling and subsurface operations for NGL in
8 Southeast New Mexico.

9 Q. And do your responsibilities include management
10 and oversight of drilling saltwater disposal wells?

11 A. Yes.

12 Q. Have you previously testified before the Division
13 and Commission?

14 A. Since 1991.

15 Q. Were your credentials accepted as a matter of
16 record?

17 A. Yes.

18 Q. You are familiar with the applications filed by
19 NGL in these matters?

20 A. I am.

21 Q. You are familiar with the wells that are the
22 subject of these applications?

23 A. I am.

24 MS. KATZ: I would tender the witness as an
25 expert in operations and engineering matters.

1 HEARING EXAMINER ORTH: Are there any objections?

2 MS. ANTILLON: No objection.

3 MR. RANKIN: No objection.

4 HEARING EXAMINER ORTH: He is so recognized.

5 BY MS. KATZ:

6 Q. Turning to Tab 1 of the exhibit packet I
7 prepared, behind Tab 1 is a request for dismissal of the
8 application for the Sparrow and Trident SWD Wells, Case
9 Numbers 20141 and 20142, respectively.

10 Can you please briefly describe what NGL is
11 seeking in these applications?

12 A. We were seeking approval for two Devonian
13 injection wells, injection below the Woodford Shale, quote-
14 unquote, the Devonian. These wells would have 7 inch, be
15 completed with 7 inch casing and 5.5 inch tubing, and inject
16 at a rate of 50,000 barrels per day each. That was the
17 plan.

18 Q. And copies of those applications are attached to
19 this request for dismissal. Sparrow is on Page 3 of the
20 package and Trident is on Page 28. And these are similar to
21 other well applications NGL has -- that NGL has submitted
22 and been considered by the Division; is that correct?

23 A. Yes, they are.

24 Q. Turning to Tab 2, what's the sense why NGL is
25 withdrawing these applications? Behind Tab 2 is an

1 **affidavit prepared by Todd Reynolds. Who is Mr. Reynolds?**

2 A. He is managing director of FTI Platt Sparks.

3 He's a geophysicist.

4 **Q. He is a consultant that NGL has retained?**

5 A. Yes, he has been retained by NGL.

6 **Q. He conducts modeling and evaluates the potential**
7 **for NGL's SWD applications?**

8 A. Yes, he does.

9 **Q. And his affidavit sets out his experience?**

10 A. That's correct. And his credentials have been
11 accepted by the Commission.

12 **Q. He has testified here before?**

13 A. He has testified before.

14 **Q. In his affidavit Mr. Reynolds states his**
15 **evaluation of these applications revealed significant**
16 **faulting in the areas of the proposed well locations. And**
17 **he includes a cross-section on Page 58 of the materials that**
18 **identifies the faults; is that correct?**

19 A. That's correct. It's Page 58.

20 **Q. And can you describe what this cross-section**
21 **shows?**

22 A. It shows several faults in the area on this E/W
23 cross-section.

24 **Q. Okay.**

25 A. Proximal to the proposed wells.

1 Q. And in his affidavit Mr. Reynolds states his
2 concern with these faults is not related to any induced
3 seismicity; is that correct?

4 A. No. It's more related to conservation and
5 potential of fluid migration from a Devonian injector into a
6 productive zone.

7 Q. Okay. Those faults are not oriented in such a
8 way that would be considered critically stressed; correct?

9 A. That's correct. They are not a fault slip risk.
10 There is not an induced seismicity risk here, it's just the
11 possible communication.

12 Q. And so as you stated, their concerns are related
13 to the injectivity from -- due to boundary effects from the
14 faults?

15 A. Yes. The other thing is because we are injecting
16 up against the fault, you reduce the ability to inject --
17 inject. The formation won't take as much fluid.

18 Q. And confinement concerns?

19 A. Yes, that is confinement. Yes.

20 Q. And so Mr. Reynolds recommends that the Division
21 take a twofold approach to the application in this area that
22 are identified on the map that's included as Exhibit B to
23 his affidavit which is on Page 59 of the materials.

24 So beginning with the area that's highlighted in
25 pink on this exhibit, what does that depict?

1 A. This is a half-mile distance from the fault and
2 where it's mapped at the Devonian, and it's recommended that
3 inside this one-half mile, that there be no injection wells
4 approved.

5 Q. And then there is another area that's delineated
6 by a blue dashed line, and tell me what that depicts.

7 A. That depicts an area where Todd is recommending,
8 or Mr. Sparks is -- Todd Reynolds, Mr. Reynolds is
9 recommending that injection be reduced or restricted to
10 20,000 barrels per day.

11 Q. That's in between the half mile out and three-
12 quarter miles out from the fault?

13 A. Yes, in that area.

14 Q. And so let's see on this map there -- the
15 Sparrow Well is shown as within that three-quarters of a
16 mile and between the half-mile and three-quarter mile zone,
17 but NGL is withdrawing that application. Can you explain
18 why?

19 A. We are withdrawing Sparrow in an abundance of
20 caution.

21 Q. Okay. And then I just wanted to address a couple
22 of other wells that are shown on this map. There's -- first
23 there's the ASROC Well, which is shown down in Section 6,
24 Township 25 South, Range 34 East, and it's within that
25 red -- that pink no-go zone. Can you explain that, the

1 **status of that application and what NGL is proposing?**

2 A. Yes. That application has been taken under
3 advisement, but this, this information to us is new, and we
4 are asking that an injection order not be written for this
5 well, and we have submitted a formal withdrawal.

6 Q. Okay. And also then there's the Viper Well, and
7 that is to the south of the Roswell in Section 18. That
8 well is shown within that half-mile to three-quarter mile
9 buffer zone for which Mr. Reynolds had recommended a 20,000
10 barrel per day injection limit. And so what is NGL
11 proposing for that well.

12 A. That well is also gone to -- he would recommend
13 when the order is written that the injection rate be limited
14 to 20,000 barrels per day.

15 Q. So the Division is aware of these other wells,
16 and NGL is working with the Division to address them in
17 light of this approach that Mr. Reynolds has recommended?

18 A. Yes, that is correct. We have communicated this
19 to the Division.

20 Q. Okay. Turning to Tab 3, on Page 60 is an
21 affidavit prepared by me that's got the notice of this
22 hearing. Is that correct?

23 A. That is correct.

24 Q. And then Pages 62 through 65 are transaction
25 reports showing the names and addresses of entities or

1 individuals within a mile of the proposed location that
2 notice was provided?

3 A. That is correct.

4 Q. And those reports also indicate whether notice
5 was received?

6 A. That's correct.

7 Q. And in addition, did NGL publish notice of its
8 application for the Sparrow and Trident Wells?

9 A. Yes.

10 Q. That's shown in the affidavit of publication from
11 the Hobbs News Sun on Page 66 and 67 of the materials?

12 A. That's correct.

13 Q. Were Exhibits 1 through 3 created by you or
14 prepared under your supervision or direction or compiled
15 from company business records?

16 A. Yes, they were.

17 Q. In your opinion, should the Division dismiss
18 these applications and likewise limit new applications in
19 the identified areas of concern as recommended by
20 Mr. Reynolds in order to promote the prevention of waste and
21 protection of correlative rights?

22 A. That is our recommendation.

23 MS. KATZ: At this time I would move the
24 admission of 1 through 3 into the record.

25 HEARING EXAMINER ORTH: Objection.

1 MS. ANTILLON: No objection.

2 MR. RANKIN: No objection.

3 MR. BRUCE: No objection.

4 HEARING EXAMINER ORTH: Exhibits 1 through 3 are
5 admitted.

6 (Exhibits 1, 2, 3 admitted.)

7 HEARING EXAMINER ORTH: Ms. Antillon, do you have
8 questions of Mr. Duncan?

9 MS. ANTILLON: No. No questions.

10 HEARING EXAMINER ORTH: Mr. Rankin?

11 MR. RANKIN: No questions.

12 HEARING EXAMINER ORTH: Mr. Bruce?

13 MR. BRUCE: No questions.

14 HEARING EXAMINER ORTH: Anything further, Ms.
15 Katz?

16 MS. KATZ: I have no further questions for this
17 witness.

18 HEARING EXAMINER ORTH: Mr. Goetze?

19 EXAMINER GOETZE: Welcome back. Was it a
20 headwind or traffic over Denver?

21 THE WITNESS: A little bit -- it was getting the
22 fuel.

23 EXAMINER GOETZE: I'm surprised. For the record,
24 you have been here many times for a lot of these
25 applications as an expert witness. You are familiar with

1 NGL's wells and activity in this area?

2 THE WITNESS: Yes.

3 EXAMINER GOETZE: First thing, the discussion on
4 the basis of vertical migration of fluids, where will these
5 fluids eventually appear? I would say, since we are
6 assuming they are going down the slip face and the fault
7 boundaries, eventually it will reach the Precambrian
8 surface, I would assume.

9 THE WITNESS: It's possible.

10 EXAMINER GOETZE: It's possible.

11 THE WITNESS: Our concern is also going up above
12 the Woodford Shale.

13 EXAMINER GOETZE: There is a possibility.

14 THE WITNESS: Yes.

15 EXAMINER GOETZE: Gravity works wonderful things.

16 THE WITNESS: It does.

17 EXAMINER GOETZE: There will be potential for
18 seismic activity in such fluids were to reach the
19 Precambrian.

20 THE WITNESS: Well, the faults were not oriented
21 in a critical stress manner, so I don't know that, but I'm
22 not going to argue.

23 EXAMINER GOETZE: You are not going to venture.
24 I'm just pointing out for the record that the EPA cite the
25 Precambrian as well as the Cambrian is, shall we say, a

1 loaded spring, and many of the citations especially for the
2 disposal in Ellenberger, there has been a storage that has
3 been identified.

4 THE WITNESS: We learned it's the Rocky Mountain
5 arsenal.

6 EXAMINER GOETZE: Yes, that's a classic. To that
7 end, we appreciate NGL coming forward. Just out of
8 curiosity, is NGL going through a process of reviewing new
9 information and reaffirming their previous evaluations as
10 part of their own process?

11 THE WITNESS: We're always -- when we get new
12 information we, we, of course, look at it and we will come
13 forward if there is anything new. And Kaiser-Francis was
14 kind enough to show us some seismic data that, that put us
15 in the position we are now.

16 EXAMINER GOETZE: So did Marathon also provide
17 information or any input on this discussion?

18 THE WITNESS: I don't know if -- I really don't
19 know if Todd was able to talk to Marathon or not, but it was
20 Kaiser-Francis.

21 EXAMINER GOETZE: I'm only asking this question
22 because we have several objections based upon faults of
23 concern, and we are trying to weed out a way to get through
24 this type of information so we can have a decision-making
25 document. Any ideas as to why three-quarters of a mile was

1 selected as a, as a guidance as to what we should use for
2 proximity, or is that --

3 THE WITNESS: Well, if you look at the 20-year
4 injection and how fluids are migrating, the pressure points
5 and that sort of thing, 20,000 is pretty safe for three-
6 quarters of a mile.

7 As you know, when we were looking at injection of
8 50,000 barrels a day, you know, the theoretical distance
9 that those fluids would travel would be a mile over a 20-
10 year life.

11 EXAMINER GOETZE: Would it be part of NGL's plan
12 to, once the wells are drilled to reevaluate what they think
13 their model originally proposed at hearing and how accurate
14 it would be? Is that something that would be considered in
15 this -- just, again, curiosity.

16 THE WITNESS: Yeah, it's always prudent to
17 evaluate what you are doing. So we do monitor for induced
18 seismicity, so that's always ongoing.

19 EXAMINER GOETZE: That's after the fact, what we
20 want to avoid.

21 THE WITNESS: Right, right. Right.

22 EXAMINER GOETZE: I have no further questions for
23 this witness. Thank you very much.

24 THE WITNESS: Thank you.

25 HEARING EXAMINER ORTH: Mr. Lowe?

1 EXAMINER LOWE: I have no questions.

2 HEARING EXAMINER ORTH: Anything further, Ms.

3 Katz?

4 MS. KATZ: Just one follow-up.

5 REDIRECT EXAMINATION

6 BY MS. KATZ:

7 Q. Mr. Duncan, is it your understanding that
8 Mr. Reynolds' recommendations and the approach that he
9 recommended in the zones that he, he depicted on his -- this
10 exhibit are based on a conservative cautionary approach to
11 wells in this area?

12 A. Yes. Yes, this is conservative.

13 Q. And that's the 20,000 barrels per day injection
14 rate would be considered in abundance of caution?

15 A. Yes, it would.

16 Q. In that zone?

17 A. It would, yeah. Still very much conservative.

18 Q. And that in his, his modeling for these wells has
19 indicated that there is very little risk of induced
20 seismicity, even if there were injections done within that
21 half-mile zone?

22 A. Yes. As far as fault slip, yes.

23 Q. Thank you.

24 HEARING EXAMINER ORTH: All right. Nothing
25 further?

1 EXAMINER GOETZE: Other than one thing. If we do
2 write the order for the 20,000 barrels a day limitation,
3 shall we make it such that it can be administratively
4 reviewed and modified with information? Is that something
5 that NGL would seek as far as not coming back to hearing and
6 making it more of a review process by Division
7 administration?

8 THE WITNESS: It's always good to sit down and
9 talk, but for the record, that's probably a question I can't
10 affirmatively answer on behalf of NGL's behalf as far as --
11 but certainly we could -- we are always talking; right?

12 EXAMINER GOETZE: We do that with step rate test
13 and pressure.

14 THE WITNESS: Right.

15 EXAMINER GOETZE: In just to avoid having to go
16 through a hearing process again that's more mechanical, more
17 reservoir engineering, I will recommend that we go ahead and
18 make a clause in there so that this is something that we can
19 look at later.

20 THE WITNESS: Right.

21 EXAMINER GOETZE: Do that as opposed to coming to
22 hearing. Thank you.

23 THE WITNESS: All right.

24 MS. KATZ: Thank you.

25 HEARING EXAMINER ORTH: Anything further from

1 anyone?

2 (No response.)

3 HEARING EXAMINER ORTH: All right. Thank you
4 very much, Mr. Duncan. Ms. Katz, the matter will be taken
5 under advisement.

6 MS. KATZ: Actually, we are requesting that the
7 case be dismissed.

8 HEARING EXAMINER ORTH: Okay, yes.

9 All right. Thank you. Will do.

10 (Application for dismissal concluded.)

11 (Adjourned.)

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1 STATE OF NEW MEXICO
2 COUNTY OF BERNALILLO

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4 REPORTER'S CERTIFICATE

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

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

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

19 Dated this 23rd day of January 2020.

20

21

Irene Delgado, NMCCR 253
License Expires: 12-31-20

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