

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 NO: 20317

Application of Jay Management Company
for approval of a salt water disposal
well in Lea County, New Mexico.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

THURSDAY, MARCH 7, 2019

SANTA FE, NEW MEXICO

This matter came on for hearing before the New Mexico Oil Conservation Division, Examiners Leonard Lowe and William Jones, and Legal Examiner David Brooks, on Thursday, March 7, 2019, 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
PAUL BACA PROFESSIONAL COURT REPORTERS
500 Fourth Street, NW, Suite 105
Albuquerque, NM 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

A P P E A R A N C E S

For the Applicant: Kate Ferlic
Ferlic, Egoff, Martinez & Harwood
123 West San Francisco Street, 200
Santa Fe, NM 87501

I N D E X

CASE NO. 20317 CALLED
EDWARD HOHOS: 03
TAKEN UNDER ADVISEMENT: 31

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

Admitted

Exhibits 1 through 5 31

1 HEARING EXAMINER: The next case we're going to
2 hear is the last case for the day, and it will be Case
3 Number 20317, Jay Management Company for approval of a salt
4 water disposal well, Lea County, and Michael McMillan be
5 will be operating this --

6 MR. McMILLAN: You are going to be operating.

7 HEARING EXAMINER: Call for appearance.

8 MS. FERLIC: Kate Ferlic, Egoff, Ferlic, Martinez
9 and Harwood on behalf of Jay Management.

10 HEARING EXAMINER: Will your witnesses please
11 stand and be sworn.

12 MR. HOHOS: Ed Hohos, I'm the geologist for Jay
13 Management.

14 (Witness duly sworn.)

15 MR. HOHOS: Bear with me a second while I hook it
16 up.

17 MS. FERLIC: Are we on the record?

18 HEARING EXAMINER: Yes, we are.

19 MS. FERLIC: Would you like for me to begin?

20 HEARING EXAMINER: Yes.

21 MS. FERLIC: On October 23 of 2018 Jay Management
22 submitted their C-108 application for approval of a
23 saltwater disposal well in Lea County.

24 The applicant seeks an order approving disposal
25 into the Pennsylvanian Formation to GS SWD Number 1 for

1 purposes of operating a saltwater disposal well.

2 The Division basically stated that the C-108
3 could not be approved administratively because there is an
4 actively-producing well within a half a mile.

5 This well is also leased and operated by Jay
6 Management, and it is to their benefit to place it back --
7 or it's to their benefit for the Commission to approve the
8 saltwater disposal well.

9 I have brought today one witness. His name is
10 Edward Hohos, and he is a geologist. May I have him present
11 some of his qualifications and then move his admission as an
12 expert.

13 HEARING EXAMINER: Yes.

14 EDWARD HOHOS

15 (Duly sworn, testified as follows:)

16 EXAMINATION

17 BY MS. FERLIC:

18 **Q. Edward, why don't tell the Commission a little**
19 **bit about your education?**

20 A. I have a bachelor's degree in geology from
21 Indiana University of Pennsylvania, and a master's degree in
22 geology from the University of South Carolina. I did
23 further work with the Ph.D. program, but never completed it
24 in the oil industry.

25 I have been working since 1974 in the petroleum

1 industry, and my areas of particular interest are in Texas,
2 New Mexico, and Oklahoma and North Dakota. I started work
3 in New Mexico in 1978 working in the Fruitland Formation in
4 the San Juan Basin. And in the last eight years I have been
5 consulting with Jay Management and overseeing their work in
6 the Lea County area.

7 **Q. Do you also work for other companies?**

8 A. Yes. I retired from EOG in 2010. I was spending
9 quite a bit of time working in the Fort Worth Basin drilling
10 horizontal wells. And more recently I have been drilling
11 horizontal wells in the Wolfcamp in the Midland Basin.

12 Prior to EOG, I worked for Comstock Resources in
13 Dallas, and my area of concentration was just about any
14 basin they have an interest in. I did both exploration work
15 and development work as well as evaluation of property
16 acquisition.

17 **Q. What's your work history that is most influencing**
18 **your work today?**

19 A. I spent quite a bit of time in, working in the
20 part of the Penn throughout Texas and New Mexico, and
21 especially in the Strawn Canyon, Cisco and Wolfcamp
22 Formations, and I feel I have good handle on the controls in
23 the fluids in the carbonates especially, and I think that
24 it's applicable to what we are discussing today.

25 **Q. And without going into all of the exhibits, what**

1 **are the basic technical stats that lead you to a conclusion**
2 **today?**

3 A. Yeah. The producing well, which is about a half
4 mile away, or less than a half mile away from the proposed
5 saltwater disposal well has been on line since the mid 60s,
6 I believe. And adjacent to it, the saltwater disposal well,
7 the OG2 Number 2, has been injecting water since the mid
8 80s, I believe.

9 And the perforating zones that are producing in
10 the Gulf Sohio State Number 1, quite common with the -- the
11 injection zone which would be produced or injected into the
12 OG Number 2 well just offsetting it, and I can show you that
13 now very clearly on the cross-section.

14 **Q. And let's wait for that just for a minute.**

15 MS. FERLIC: I would like to move admission for
16 Edward Hohos as an expert in geology.

17 HEARING EXAMINER: He is so qualified.

18 **Q. So I want to start first -- oh, wait.**

19 MS. FERLIC: Exhibit 1 is his resume, if you want
20 to take a look at that.

21 **Q. And I would just ask, Mr. Hohos, if that's your**
22 **resume, Exhibit 1.**

23 A. Yes, it is.

24 MS. FERLIC: Move its admission.

25 MR. JONES: In the Fruitland were you working at

1 Amoco?

2 THE WITNESS: I was working for a coal company
3 called the Rochester and Pittsburgh Coal Company located out
4 of Pittsburgh P.A., and I was sent out to evaluate the --
5 the coal potential near the Jicarilla Apache Reservation in
6 the Dulce area on the east side basin.

7 MR. JONES: That was early Fruitland work.

8 THE WITNESS: Yeah, it was. It was before the --
9 yeah.

10 Q. So now I would like to just very quickly review
11 the application. In the exhibit book I put sticky notes on
12 pages that we will just briefly be discussing because these
13 documents are not Bates numbered. I will share with you.

14 So in a sentence or two, what is Jay Management
15 applying for?

16 A. The first chart on the page is a request by Jay
17 Management for a commercial saltwater disposal well, turning
18 a previously non-producing well into a disposal well.

19 And you see the application from back in October
20 and all the other requirements for the application have been
21 complied with.

22 When we move into the second colored page,
23 colored section, this is the -- the proposed work to do on
24 the well in order to get it into a status to inject our
25 water. That's Page 4, C-103.

1 MS. FERLIC: Mr. Hearing Examiner, it may be the
2 next sticky note. Okay, good.

3 A. And we're in a holding pattern on the actual work
4 until we have the approval from the OCD. The next color-
5 coded section just shows the status of the well data sheet,
6 the depth, the size, denotation, and the actual potential --
7 projected perforated to inject.

8 And the next color section shows the perforations
9 as they are today, beginning at 9192 with the limestone in
10 the Cisco, and we go down to the 10354, total of 83 feet.

11 The next color coded page is the work done in
12 October of last year in order to evaluate the well, AG
13 pressure sets, and the results are on the following page.

14 And that pretty much concludes the application.
15 And I would like to jump into the -- show you the actual
16 wells themselves and why we think that the -- there may not
17 be a problem affecting the producing well.

18 This is a cross-section between the three wells.
19 The well on the left, this is the one anticipated or
20 proposed as the saltwater disposal well. The well in the
21 center is the -- is the Sohio producing well, and the well
22 on the right is the other A2 which was the previous
23 saltwater disposal well that they injected water into the
24 same well.

25 MR. McMILLAN: Where is the base map?

1 MR. HOHOS: What's that?

2 MR. McMILLAN: Where is the base map? I mean,
3 the cross-section has no relevance to me without looking at
4 a base map.

5 MS. FERLIC: Look at Exhibit 4.

6 MR. HOHOS: This is a base map of the -- of the
7 area, and the blue three lines, and that's the cross-
8 section which you see a section. The map itself is a map on
9 the top of the Wolfcamp Formation showing that in the
10 immediate area that, in general, there is not much more than
11 ten feet of depth from the center well on the left, and then
12 it's pretty flat as well on the right.

13 And this overlay on the map it shows the current
14 status of the wells. The center well we call State Sohio
15 Number 2 is producing out of the two part zones next to
16 the -- being pointed at by the area. Below the
17 perforations we have a -- point, and deeper down there is
18 some perforations which we are trying to seal behind the
19 plug but not squeeze off.

20 The well is the OG Number 2 well, and the red
21 zones are the actual zones the injection had taken place for
22 the last 25 years. And the -- if you look at the copy, it's
23 very --

24 **Q. If you look at Exhibit 4, there is a copy of that**
25 **with directions.**

1 A. There is a smaller copy, but I thought it would
2 be easier to see the large cross-section in detail. The
3 producing zones are indicated by the small color coded
4 perforation symbols here and in here. And when you move
5 over to the injection well, you see the same perforations
6 over in here that have a common injection with producing
7 zone.

8 Now, we feel that the injections of, in this area
9 of the proposed injection of the proposed well won't
10 interfere with the presently-producing well, and the reason
11 we feel that is, I've compared the historical production for
12 the last five years on the OG2 and the Guls State Well --

13 MS. FERLIC: This is Exhibit 5. I'm sorry.

14 A. What this is is the Guls State Oil production
15 year by year from 2018 to 2014, and over here is the yearly
16 injection of water in the OG Number 2 disposal well that is
17 presently shut in because of mechanical problems, and what
18 this shows is that there is a direct correlation between the
19 amount of water produced -- injected per year in the OG2
20 Well and the amount of oil produced in the producing wells.

21 For example, when you have somewhere around
22 13,000 -- 12,000 barrels of water being produced a year, you
23 have something around 50 barrels of oil, but as you start
24 increasing water production, 200,000 barrels a year, it
25 increases to 800. When you go to 300,000 barrels a year, it

1 increases 1600, and then above 300,000 barrels a year it,
2 goes over 1600 barrels.

3 So essentially what it has done is taken the most
4 recent production of 2018 which was averaging 1.8 barrels of
5 oil a day, and it compares it with the lack of water being
6 produced, and it shows that the more water you produce, you
7 inject it into the wells, the more oil you produce.

8 So we feel that injecting the disposing water in
9 the disposal well will actually benefit the oil production
10 in offset the producing well.

11 MR. JONES: That's a maximum of about 1000
12 barrels a day; is that right?

13 MR. HOHOS: The maximum is 1614. You will see on
14 the upper, left-hand side, the oil.

15 MR. JONES: Oh, yeah. I had that wrong. So you
16 take the total divide by the injecting days into the days in
17 the year?

18 MR. HOHOS: No. I had that somewhere else, but
19 this is just -- this is just the number of years or number
20 of barrels of water per year from the OG2 well, or injected
21 per year in the OG 2, the oil produced.

22 MR. JONES: I see. But the maximum injection,
23 that 353,000 per year is equivalent to --

24 MR. HOHOS: Under 1000 barrels a day.

25 MR. JONES: A thousand barrels a day.

1 A. Yes.

2 **Q. Where is the underlying data that makes up**
3 **Exhibit 5, Exhibit 3?**

4 A. I believe so, yes. I got the data from the OCD's
5 well file. I believe it's Exhibit 3. And if you look at
6 the data, OG Number 2, the water production given on Page 12
7 of 13, and so that corresponds with what I used on there.
8 And the next color-coded page showed the oil production from
9 the producing well.

10 MR. JONES: I don't want to jump in too early,
11 but before you move on, did you also plot the water
12 production from the oil well along with this?

13 MR. HOHOS: No, I didn't.

14 MR. JONES: Did you remember looking at it and
15 how it -- the big increase water production effect.

16 MR. HOHOS: Well, you can see on Page 6, that's
17 Exhibit 3 on the back where the oil production is.

18 MS. FERLIC: You have three different wells in
19 Exhibit 3.

20 MR. JONES: Okay.

21 MR. HOHOS: Did you find it?

22 MR. JONES: No, but I'm sure Michael has already
23 looked at this, anyway.

24 MR. HOHOS: Six.

25 MR. JONES: Oh, here we go.

1 MR. HOHOS: This shows the producing well.

2 MR. JONES: Producing well. Here's the water.

3 So that 2014, was that a good year, 1614? Okay. It depends
4 on whether you have the well pumped off or -- I don't know
5 how they did that.

6 MR. HOHOS: There was several variables involved
7 in it, and they actually -- the longer the well was pumping
8 on a timer, the more fluid you are going to get, and the
9 more oil you are going to get.

10 MR. JONES: So the peak month -- the peak year
11 was 20 -- 21,000 barrels of water, so that's not that much
12 per day at all. Okay. About 9000 feet or so, something
13 like that?

14 MR. HOHOS: Yes, between 91 and 10.

15 MR. JONES: About the limit of pumping units?

16 MR. HOHOS: Yeah. Anyway, that's the information
17 that I feel supports the idea there wasn't any well damage
18 in production out of the -- the presently producing well.
19 The idea that we are disposing water in a number of -- one
20 of which happens to be in the -- the producing well, and it
21 didn't seem to be affected by all the years of production in
22 the offsetting disposal well.

23 MR. JONES: How far away is this well that got
24 shut in from the producer that -- compared to how far away
25 the proposed well is from the producer?

1 MR. HOHOS: It's .23 miles from the proposed
2 producer and .35 miles from the actual producer.

3 MR. JONES: Okay. So the producer is staying the
4 same.

5 MR. HOHOS: The producing well is in the center.
6 The proposed well is .23 miles away to the west, and to the
7 east is the OG2, which was the disposal well for many years,
8 it's .35 miles away.

9 MR. JONES: So, so one -- the well that we're
10 relating it to is directly on an east-west -- east-west
11 relation?

12 MR. HOHOS: Yes.

13 MR. JONES: And then the proposed injection well,
14 where is that? Okay, that's the proposed. Where was the
15 OG2?

16 MR. HOHOS: Right here.

17 MR. JONES: Okay. So it's a different direction
18 to the producer. What's -- what's your idea of the
19 linearity of the formation as far as where, where injection
20 goes? Do you have any way to tell?

21 MR. HOHOS: No, because if somebody is
22 perforating those, they are basically, you know, they're
23 running through water -- they're dropping the water down.
24 There is no way to tell at this point.

25 MR. JONES: On a --

1 MR. HOHOS: I think they had a maximum 1000
2 pounds pressure.

3 MR. JONES: That was the maximum allowed
4 pressure, or the maximum they experienced?

5 MR. HOHOS: The maximum they experienced.

6 MR. JONES: Okay.

7 MR. HOHOS: And you see on the cross-section the
8 red zones are the -- take the water wherever the
9 permeability is.

10 MR. JONES: Now, as far as that goes, is this
11 proposed well in an area which is more depleted in
12 production from the past, or --

13 MR. HOHOS: Yeah, they were on their last -- the
14 field has been producing since 1963, and we have all the
15 early flush production years and everything got stabilized,
16 and this injection is basically a combination of a small
17 water spud in a sense and also pressure maintenance to
18 maximize the production from the well.

19 MR. JONES: Okay. It takes more money to produce
20 more water, but you make up for that with the oil
21 production, but if you are recycling it back into that
22 well -- it's the same company you are talking about here;
23 right?

24 MR. HOHOS: Yes.

25 MR. JONES: Okay. Okay.

1 I didn't want to interrupt you. We usually let
2 you present and then --

3 MR. HOHOS: I apologize. This is the first time
4 I've met before you. I'm very unfamiliar with the
5 procedures.

6 MR. JONES: I have more questions, but I would
7 rather -- okay, I will just finish them out real quick.
8 You're proposing 2 7/8 inside 5 a half tubing. You are
9 willing to be limited to that size; is that correct?

10 MR. HOHOS: Yes.

11 MR. JONES: That's okay. And just for my
12 uneducated -- I used to work on the Permo Penn years ago on
13 the production out here, and that was 40 -- almost 40 years
14 ago, but is that -- is that limestone or dolomites?

15 MR. HOHOS: It's limestone.

16 MR. JONES: But you have porosity because?

17 That's a geology question. He's giving me the
18 look now. He's giving me that --

19 MR. BROOKS: Well, I have been known to ask
20 geology questions.

21 MR. JONES: Here, Phillip will give you the look,
22 too.

23 MR. BROOKS: He will, indeed, and maybe even make
24 verbal comments.

25 MR. JONES: So what -- what's the trap here? You

1 said it's flat. Why was this an oil field?

2 MR. HOHOS: Originally it's started with just
3 about every carbonated level in there. The original
4 operator started down in the Strawn and just worked their
5 way up until they got into the Wolfcamp and some of the
6 records are unclear about the overall area, but I think they
7 got stuck around the perforated zones without telling
8 anybody, but looks like every time they found some porosity,
9 they would -- they would perforate and it would be
10 productive.

11 MR. JONES: And you have everything on top of the
12 Wolfcamp. Is that because it's really easy to pick?

13 MR. HOHOS: Yeah.

14 MR. JONES: First of the top of the Pennsylvanian
15 is hard to pick.

16 MR. HOHOS: Not so much hard to pick, but I did
17 it because I wanted to show where the perforations were.

18 MR. JONES: So on top of the pin here you call it
19 Cisco?

20 MR. HOHOS: There's no Cisco in here -- it's a
21 little bit of Cisco, but I would -- that's not --

22 MR. JONES: Okay. And the bottom plug in your
23 well, is that -- that you showed in your proposed well for
24 injection, is that already there or --

25 MR. HOHOS: No, I caught that on the

1 cross-section after it was printed up and didn't have time
2 to change it, but the proposed plug is going to be right
3 about 9120.

4 MR. JONES: So that's proposed below your
5 proposed injection or disposal interval?

6 MR. HOHOS: It would be above it.

7 MR. JONES: So basically it needs to be moved.

8 MR. HOHOS: We are -- I was talking about the
9 packer.

10 MR. JONES: But not the packer, but the plug
11 below the packer. Below your proposed injection -- this old
12 well used to produce down below, right, in the
13 Pennsylvanian?

14 MR. HOHOS: Yes.

15 MR. JONES: Oil or gas?

16 MR. HOHOS: Oil.

17 MR. JONES: So those -- is this a proposal to
18 plug this well back and perforate in the Permo Penn?

19 MR. HOHOS: No perforating -- no. There's actual
20 perforations right now to dispose of it.

21 MR. JONES: So they are already there?

22 MR. HOHOS: Yes.

23 MR. JONES: So in order to get those
24 perforations, the district office had to approve a procedure
25 to move up and kind of abandon the perms below. Usually

1 they require a plug above within 50 to 100 feet above the
2 existing perfs, and then move up, and we like to see a plug
3 within 200 feet below.

4 MR. HOHOS: These are, these are proposed active
5 perforations in here. Are we are talking about the same
6 well?

7 MR. JONES: The proposed injection well.

8 MR. HOHOS: Yes.

9 MR. JONES: I thought you were talking about the
10 one in the middle.

11 MR. HOHOS: No. That's a producing well.

12 MR. JONES: Okay. Okay. So the red is the --

13 MR. HOHOS: The proposed injection.

14 MR. JONES: Okay. But it's already been
15 perforated?

16 MR. HOHOS: Yes.

17 MR. JONES: So there is a plug below those perfs?

18 MR. HOHOS: Yes.

19 MR. JONES: And that plug is above the old
20 producing interval?

21 MR. HOHOS: this also was a producing interval.

22 MR. JONES: So this was a producing interval?

23 MR. HOHOS: Yes. And there is a plug below this.

24 MR. JONES: Do you know the cumulative oil and
25 water and gas, how that interval -- in other words, what

1 volume depletion happened already in that well, and how
2 would it relate to your proposed injection as far as fill
3 up, how many years would you --

4 MR. HOHOS: It was estimated 288 of oil.

5 MR. JONES: Okay. It's been reasonably good
6 then. And water, how much water?

7 MR. HOHOS: 233.

8 MR. JONES: About the same.

9 And the GOR is 2000-some or something like that?

10 MR. HOHOS: I don't know the answer to that right
11 now.

12 MR. JONES: That's fine. It's an oil well
13 anyway. So you got 450,000 barrels to fill up there, and
14 you are proposing 6000 barrels a day?

15 MR. HOHOS: Yes.

16 MR. JONES: How did you come up with that?

17 MR. HOHOS: That's the maximum. Realistically we
18 are probably staying about 1000 barrels a day.

19 MR. JONES: Now, where would that 1000 barrels
20 come from?

21 MR. HOHOS: Commercial disposal wells. Many of
22 the wells that are producing water in the freezing zones are
23 Jay Management wells and also other competitor wells, tank
24 water.

25 MR. JONES: Okay, but they are all vertical

1 wells?

2 MR. HOHOS: Yes, vertical.

3 MR. JONES: You're not tracking in horizontal
4 well production?

5 MR. HOHOS: No.

6 MR. JONES: Water, waste water. But
7 realistically you are looking at about 1000 barrels a day,
8 but you are asking for 6000?

9 MR. HOHOS: Yes.

10 MR. JONES: Okay. I was trying to put things in
11 into perspective here, but the type of waters that will go
12 in -- Michael already looked at this, but is it all Permo
13 Penn water?

14 MR. HOHOS: Yes.

15 MR. JONES: So the same solidity waters back and
16 forth?

17 MR. HOHOS: (Nodding.)

18 MR. JONES: Okay. I saw you looked for a water,
19 a fresh water well in the area. You found one well; is that
20 correct?

21 MR. HOHOS: Yeah.

22 MR. JONES: And -- okay, go ahead.

23 MR. McMILLAN: Okay. So if I'm understanding
24 your cross-section, your proposed injection well is on the
25 left and the producer is in the middle; correct?

1 MR. HOHOS: Yes.

2 MR. McMILLAN: My -- the first question I got is,
3 for both of those wells, where is the top and the bottom of
4 the Permo Penn in each well. You have to, after the
5 hearing, you will supply that information to us for every
6 well.

7 MR. HOHOS: You want the top?

8 MR. McMILLAN: I want the top and the bottom to
9 each well.

10 MR. JONES: How far?

11 MR. McMILLAN: I want the top, the vertical top
12 and bottom of each well.

13 MR. JONES: In the field?

14 MR. McMILLAN: Of each well.

15 MR. JONES: Of these wells?

16 MR. McMILLAN: Of those wells right here. This
17 will tell us a lot.

18 The next question I've got is, where are the --
19 where are the barriers between the producing interval and
20 the injection interval, and, lithologically, what are they?

21 MR. HOHOS: Between the producer --

22 MR. McMILLAN: Yes.

23 MR. HOHOS: -- and the disposal?

24 MR. McMILLAN: Yes.

25 MR. HOHOS: Laterally there aren't any barriers.

1 This well has been producing since -- injecting waters since
2 the 1980s into the same interval as the producing well
3 that's been producing water -- producing oil.

4 MR. McMILLAN: So you have no barriers between
5 the two?

6 MR. HOHOS: Right.

7 MR. McMILLAN: How come you didn't call it a
8 pressure maintenance?

9 MR. HOHOS: Well, I think it is a combination
10 pressure maintenance, water driver, saltwater. The pressure
11 maintenance, pushing water into the zone, but I don't have
12 any pressure data on the particular interval itself right
13 now.

14 MR. McMILLAN: Okay.

15 MR. JONES: So you are making the application as
16 a disposal well?

17 MR. HOHOS: Yes.

18 MR. JONES: And so that, that leads to, is there
19 ownership -- and you are probably not one to testify to
20 that -- ownership issues that would be affected by sweeping
21 some oil from this location over to that producing well?

22 So Mr. Brooks probably knows about this. That's
23 why Michael brought this up, because, you know, you could
24 have presented this as a discrete area that you present the
25 ownership and say, "This is just one lease or so that

1 this -- and we are basically just affecting the oil on one
2 lease. It's the same owners."

3 MR. HOHOS: I don't have an overlay on this, but
4 the -- and I will double check, but I believe all the
5 surrounding wells are Jay Management wells.

6 MR. JONES: They are operated by Jay Management.

7 MR. HOHOS: They are, yes. They have the mineral
8 lease, and that's something I can provide you.

9 MR. McMILLAN: It has to be provided by a signed
10 affidavit from a landman. We want to know everyone in the
11 mineral interest estate because you are not necessarily
12 affecting the working interest.

13 MR. JONES: Maybe within a half mile of the
14 proposed injection well.

15 MR. McMILLAN: Yeah, that's fine, because you're
16 affecting the royalty and overriding royalty interests, too.

17 MR. HOHOS: Okay. So you would like the top of
18 each of the wells --

19 MR. McMILLAN: yes.

20 MR. HOHOS: A signed affidavit by a landman
21 showing the interest in the well within half mile of the
22 injection well.

23 MR. JONES: Identified separately on tract. Now,
24 you did that in the application. I saw that.

25 MS. FERLIC: We did.

1 MR. JONES: So you noticed those people.

2 MS. FERLIC: It's all Jay Management.

3 MR. JONES: It's just all Jay Management?

4 MS. FERLIC: All Jay Management.

5 MR. JONES: Like they have -- okay. So the
6 leases are state leases, or all 1/8 leases -- old leases for
7 sure?

8 MS. FERLIC: Yeah.

9 MR. HOHOS: Yeah.

10 MR. JONES: Okay, well, Mr. Brooks?

11 MR. BROOKS: No questions.

12 MR. JONES: It sounds like they have already
13 identified the tracts and noticed them.

14 MR. McMILLAN: That's fine. I just want to make
15 sure --

16 MR. JONES: We've already got that then.

17 MR. BROOKS: Well, only the people required to be
18 noticed because the subject rule requires to be noticed
19 except that I think the Division has discretion to require
20 notice to the parties if the evidence shows they might be
21 affected.

22 MR. JONES: Some of these tracts actually extend
23 beyond a half mile.

24 MR. BROOKS: Right. And there are people that
25 are affected as a matter of due process, and they are

1 required to be noticed, as well as the people in the rule
2 are required to be noticed, but you have to rely on the
3 evidence to show that they are -- that they might be
4 affected because that's not something you could always
5 presume, if they are not -- if they are not stated in the
6 rules.

7 MS. FERLIC: Would you like an affidavit of
8 compliance with the requirement?

9 MR. BROOKS: Well, that's required now, anyway,
10 compliance with the notice requirement.

11 MR. JONES: You probably already have that in
12 here.

13 MS. FERLIC: I mean, right, but do you want
14 something beyond what the rules require?

15 MR. BROOKS: Do you want something separate?

16 MR. McMILLAN: I want to make sure that everyone
17 in the mineral estate is properly notified.

18 MR. BROOKS: That's what I thought you said, and
19 you think everyone in the mineral estate in the affected
20 tracts should be notified whether or not that's required in
21 all cases by the rule.

22 MR. McMILLAN: In this case I think they should
23 be done.

24 MR. BROOKS: That's a discretionary decision that
25 the examiner has the right to make.

1 MR. McMILLAN: Do you agree with that, Leonard?

2 HEARING EXAMINER: Yes, I do.

3 MR. JONES: There is only one well within a half
4 mile; is that correct? You drew your half mile circle on
5 that. There's some plugged wells, but -- okay.

6 MS. FERLIC: There is a one-mile radius map in
7 the application towards the back. It's Page 5 of the map.

8 MR. JONES: I noticed there is an engineering
9 write-up of the -- of the San Andres, but was this intended
10 originally to maybe bail out the San Andres?

11 MR. HOHOS: That 022, or Number 2 originally
12 perforated and produced in the zone and had a casing, so --

13 HEARING EXAMINER: So that was why it was in the
14 engineering report?

15 MR. HOHOS: Yes, the application, the San Andres.

16 MR. JONES: Okay. Is this close to Lovington?
17 Or is this Saunders Field?

18 MR. HOHOS: It's about 25 or 26 miles away.

19 MR. JONES: To the north.

20 MR. HOHOS: To the west.

21 MR. JONES: Little bit south of Saunders Field.

22 MR. McMILLAN: 380.

23 MR. JONES: It's real close to 380.

24 MR. JONES: It's where the underground house is
25 out there. Bobby Anthony owns that house. He is related to

1 me, by marriage. But, granted, he used to work with me.

2 So this is not the Saunders, but it's pretty
3 close, close by.

4 MS. FERLIC: And there are a number of like
5 overlay maps that show what's within a one-mile radius.

6 MR. JONES: Mike, you looked at this. It has one
7 producer -- how far away is that producer?

8 MR. McMILLAN: Like a quarter of a mile; right?

9 MS. FERLIC: .23.

10 MR. McMILLAN: He couldn't be approved
11 administratively.

12 MR. JONES: How much is he making right now, that
13 producer?

14 MS. FERLIC: We have those numbers.

15 You just showed a -- the numbers on the
16 production well.

17 MR. HOHOS: Is that what he wanted?

18 MS. FERLIC: I think that's what --

19 MR. HOHOS: About 1.8. The average in 2018 it
20 made about 1.8 barrels a day.

21 MR. JONES: Oh, it's a two-barrel-a-day well.

22 MR. HOHOS: Yeah.

23 MR. JONES: And how much water -- but it's on
24 pump, I take it.

25 MR. HOHOS: Yeah.

1 MR. JONES: Did you look at that well to see if
2 there is any other areas perforated in that well?

3 MR. HOHOS: In the present producer?

4 MR. JONES: Yeah.

5 MR. HOHOS: I haven't, no.

6 MR. JONES: What I'm getting at is, is it at the
7 economic limit already or is it --

8 MR. HOHOS: It's produced 654 barrels in 2018,
9 and 550 barrels of water.

10 MR. JONES: It's barely able to justify -- it's
11 got electricity out there?

12 MR. HOHOS: Yeah, it's been producing. And the
13 concept or idea is by increasing the total fluid we are
14 going to increase the oil production as well, hopefully at a
15 greater rate than water.

16 MR. JONES: So the economic limit will be
17 cumbersome. I don't have any more questions.

18 MR. McMILLAN: I don't have any questions.

19 MR. JONES: Okay.

20 MS. FERLIC: Would you like the records
21 supplemented, anyway? I can get you bigger pictures.

22 MR. McMILLAN: Yeah, let's get a bigger cross
23 section in here.

24 MS. FERLIC: No problem. I'm sorry that it is so
25 small. I'm sorry. I'm happy to do that. We have a

1 correction on Exhibit 4, anyway.

2 MR. McMILLAN: If some other person were to look
3 at this, maybe they couldn't read this.

4 MS. FERLIC: I apologize. What else would you
5 like?

6 MR. JONES: I would like it if somebody took this
7 over and made a -- it looks like a good test, it already had
8 a test here, and maybe with the well in a different
9 direction you will see what a preferential flow is.

10 MR. HOHOS: That's a good idea.

11 MR. JONES: You will know what the preferential
12 flow is, you will narrow it down a little bit, and that
13 gives you a good idea of how to how to design a water flow.
14 I don't know how much oil in place is still left down here,
15 but that's -- that's a study that would have to be done.
16 Still a valuable field, probably, except there's a bunch of
17 plugged wells, but you can always reenter them.

18 The San Andres, is that another field right above
19 this one? Is it a producer?

20 MR. HOHOS: San Andres is further towards the
21 northwest.

22 MR. JONES: It doesn't produce right here then.

23 MR. HOHOS: No.

24 MR. JONES: So it's west, a little bit west.

25 You may end up bailing out the San Andres,

1 anyway, after a while.

2 MS. FERLIC: Are you requiring additional notice
3 to --

4 MR. McMILLAN: Everyone in the mineral interest
5 owner estate.

6 MS. FERLIC: Okay, got it. I'm sorry. So I
7 would move admission of Exhibits 1 through 5 and allowing us
8 to supplement 4, meaning, we will produce the bigger maps
9 and do our best to blow it up so that anyone can see it.

10 MR. McMILLAN: Yes, and then go ahead also and
11 have a really big -- a bigger display of this injection well
12 that clearly shows the top and bottom of the Permo Penn for
13 the OCD, because once again, if someone else is looking at
14 this, they can clearly see it. They are not having to see
15 three logs together, they are seeing one big one.

16 MS. FERLIC: We will get that to you by the end
17 of the day tomorrow.

18 MR. JONES: So, Mr. Brooks, we can take it under
19 advisement?

20 MR. BROOKS: Yes, I don't see why not.

21 HEARING EXAMINER: Exhibits 1 through 5 are
22 accepted for this case, and we will take it under
23 advisement.

24 MS. FERLIC: Thank you very much.

25 HEARING EXAMINER: Thank you.

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

MR. HOHOS: Thank you.
(Adjourned.)

