

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 PETROLIA ENERGY CORPORATION FOR APPROVAL OF
REACTIVATION OF AUTHORITY TO
INJECT IN CHAVES COUNTY, NEW MEXICO. CASE NO. 16250

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

June 28, 2018

Santa Fe, New Mexico

BEFORE: PHILLIP GOETZE, CHIEF EXAMINER
DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Chief Examiner, Phillip Goetze, and David K. Brooks, Legal Examiner, on Thursday, June 28, 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 PETROLIA ENERGY CORPORATION:

PETE V. DOMENICI, ESQ.
REED EASTERWOOD, ESQ.
DOMENICI LAW FIRM, P.C.
320 Gold Street, Southwest, Suite 1000
Albuquerque, New Mexico 87102
(505) 883-6250
pdomenici@domenicilaw.com

INDEX

PAGE

Case Number 16250 Called	3
Petrolia Energy Corporation's Case-in-Chief:	
Witnesses:	
John Maxey:	
Direct Examination by Mr. Domenici	5
Cross-Examination by Examiner Goetze	17
Jason Bagby:	
Direct Examination by Mr. Domenici	21
Cross-Examination by Examiner Goetze	24
Redirect Examination by Mr. Domenici	27
Proceedings Conclude	31
Certificate of Court Reporter	32

EXHIBITS OFFERED AND ADMITTED

Petrolia Energy Corporation Exhibit Numbers 1 through 8 and 1A	30
--	----

1 (1:42 p.m.)

2 EXAMINER GOETZE: We'll go back on the
3 record.

4 At this time we will call Case Number
5 16250, application of Petrolia Energy Corporation for
6 approval of reactivation of authority to inject in
7 Chaves County.

8 Call for appearances.

9 MR. DOMENICI: Good afternoon. Pete
10 Domenici and Reed Easterwood for Petrolia.

11 Hello, Mr. Brooks.

12 EXAMINER BROOKS: Hello.

13 EXAMINER GOETZE: And no other appearances?
14 Witnesses?

15 MR. DOMENICI: We have two witnesses.

16 EXAMINER GOETZE: Go ahead, at this time,
17 stand, identify yourself for the court reporter and be
18 sworn in.

19 MR. MAXEY: John Maxey, Roswell, New
20 Mexico.

21 MR. BAGBY: Jason Bagby, Rockdale, Texas.
22 (Mr. Maxey and Mr. Bagby sworn.)

23 MR. DOMENICI: May we proceed?

24 EXAMINER GOETZE: Please, by all means.

25 MR. DOMENICI: So there is a preliminary

1 matter. We have the exhibit book in front of you.
2 Exhibit 1 is the proof of notice, and we do have -- we
3 have both an Affidavit of Publication and green cards to
4 all of the parties mentioned in the application, which
5 are the surface owners and the other operators, and the
6 supplemental Exhibit 1, which is the final green card,
7 but it's all part of Exhibit 1.

8 Just by way of background, this application
9 is to reinstate injection authority within the Twin
10 Lakes Unit that has historically been prior --
11 previously approved, and we're seeking to reinstate
12 injection authority for five wells where, over the
13 history of the Twin Lakes Unit, there have been at times
14 more than 50 injection wells. So it's somewhat of a
15 limited first step to get -- to reinstate this
16 reinjection and water flow purposes. So that's why the
17 notice goes to who it goes to. Everything is within the
18 unit, and it's very much centrally within the unit, not
19 affecting any parties outside of the unit.

20 We also made and have in your book,
21 Mr. Hearing Examiner -- we went ahead and made the
22 application Exhibit 8. It's our record, but we thought
23 it might come up, so we thought we would go ahead and
24 make it an exhibit. So it's part of the book also.

25 EXAMINER GOETZE: Thank you.

1 MR. DOMENICI: With that, we would proceed
2 with Mr. Maxey, with our testimony, if that pleases --

3 EXAMINER GOETZE: Go ahead. That's fine.

4 JOHN MAXEY,

5 after having been previously sworn under oath, was
6 questioned and testified as follows:

7 DIRECT EXAMINATION

8 BY MR. DOMENICI:

9 Q. Mr. Maxey, have you testified before the OCD
10 before?

11 A. Yes, I have.

12 Q. And have you been accepted as an expert witness
13 in petroleum engineering?

14 A. Yes, I have.

15 Q. And did you do the work that is reflected in
16 Exhibits 3, 4, 5, 6 and 7 of the exhibit book?

17 A. Yes.

18 MR. DOMENICI: So I would move Mr. Maxey as
19 an expert petroleum engineer.

20 EXAMINER GOETZE: Well, based upon your
21 previous appearances, yes, we'll go ahead and make him a
22 qualified witness.

23 Q. (BY MR. DOMENICI) So, Mr. Maxey, can you
24 describe the analysis you performed for purposes of
25 supporting this application to reactivate injections?

1 A. Yes. I'll start with Exhibit 1. I've been
2 engaged by --

3 **Q. That might not be Exhibit 1, actually.**

4 A. I'm sorry. Exhibit 3. Yeah. We had three --
5 two exhibits, my first exhibit, Exhibit 3.

6 **Q. Okay.**

7 A. Thank you.

8 I was engaged by Petrolia. They would like
9 to restore injectivity in five wells in the Twin Lakes
10 San Andres field -- Twin Lakes San Andres Unit. And as
11 I took a brief look at the unit, the unit was
12 actually -- the Twin Lakes San Andres field was
13 discovered in the late '60s, and injection was started
14 in about 1988. So this field is an old waterflood.
15 There's been some work done on it over a period of time
16 by many different operators. So my study was treated
17 more as a scoping study to see just kind of how this
18 system -- this unit has performed.

19 So Exhibit Number 3 is a map -- cumulative
20 oil production map for the Twin Lakes San Andres field.
21 The field has produced about 5.6 million barrels of oil
22 and 9.8 Bcf of gas. On this particular map, the five
23 red circles are -- the circles are the actual injection
24 wells that Petrolia would like to get injection
25 authority for. It's Twin Lakes San Andres Unit 50, 59,

1 68, 70 and 88.

2 Also on this map, there is a type log. I
3 pulled one type log off. It's a little hard to get
4 petrophysical data off of this because -- from the unit
5 because most of the logs in the unit are -- case hole is
6 drawn or open hole is drawn. There are very few lateral
7 logs or induction logs run, any kind of resistivity
8 logs. I saw references to core data, of which I have
9 none, so working primarily off of -- I wanted to
10 illustrate that with the type log in one of the future
11 exhibits.

12 You can see that one of the things this --
13 as I scoped this that this illustrates is that you
14 have -- I'll call it an inverse C, kind of a backwards
15 C. There is a sweet spot that runs through the
16 northwest to the east side of the unit back to the
17 southwest. And in Exhibit 4, you'll be able to see that
18 injectivity kind of followed the sweet spot by the
19 amount of water that could be placed in the unit.

20 **Q. Okay.**

21 A. So Exhibit 4, I wanted to look at kind of the
22 history of the water injection on the unit. And, again,
23 you know, the cumulative oil map basically gives me an
24 idea of sweet spot higher perm intervals, and that's
25 what I'm seeing on the injection map. And, you know,

1 when you combine the two maps, what I was seeing was the
2 effect that you're having from injection on some of the
3 offset producers. And one of the things that -- that I
4 noticed and that I illustrate in a later example, number
5 one, there was some pretty quick water breakthrough
6 after the unit was placed on the waterflood, but there
7 was -- there's definitely some areas of pretty high
8 perm, possibly a little fracturing, accepting a lot more
9 water than other areas. And one of the things I could
10 tell here was balance of injection, conformity issues
11 probably were a problem over the life of the unit.
12 There's been a multitude of operators. The well -- the
13 field was originally drilled on 40-acre spacing. It's
14 been despaced, and that varies because the patterns have
15 been changing over time. So it's a little bit of a
16 convoluted unit the way it is now.

17 Petrolia actually didn't take over
18 operations until November of '17. So all of this has
19 really been inherited by Petrolia.

20 So just to give you an idea how much water
21 has gone in the unit, the field -- it was a pretty
22 rapid -- rapidly developing waterflood. It didn't take
23 a lot of time to go ahead and make the decision to set
24 up the injectors. They were primarily converted in
25 1988, and the initial flood was set up. And since then,

1 there's been 40.3 million barrels of water injected in
2 the unit.

3 **Q. And what does Exhibit 5 show?**

4 A. Okay. So Exhibit 5, I wanted to illustrate the
5 unitized interval from the documents that I had seen.
6 The San Andres porosity, the P1 and P2 porosities, with
7 the anhydrite section between the two, basically that's
8 the unitized interval. It's approximately 100 feet of
9 porosity in the San Andres. The top of the San Andres,
10 from the OCD records, ranged to about -- from about
11 2,000 to 2,100 feet across the field. So this porosity
12 develops about 5- to 600 feet into the San Andres.

13 **Q. Will you please describe Exhibit 6?**

14 A. Exhibit 6 is a curve on total field
15 performance. And so it's a busy plot, but there are
16 some things I wanted to look at. As I got an idea just
17 of the history and injection, I looked at the
18 performance of the field, and you can see this curve
19 starts in about 1969. You can see the well count. All
20 these curves are labeled. The blue well count,
21 increasing well count, until about, oh, '83, when you
22 reach the max well count and you reach peak oil.

23 You can see the water injection in purple.
24 That's labeled. That was initiated in '88, and you've
25 got about 18 years of consistent injection in this unit.

1 And you didn't see a big peak in oil production on the
2 response, but you did see a pretty good decrease in the
3 decline. So that's a -- that's a significant response.

4 There was evidence of pretty high GORs
5 prior to injection -- or excuse me -- GORs that were
6 increasing very rapidly, so you were losing energy
7 initially. And then like I said, you saw -- after
8 injection was started, there was some evidence of
9 breakthrough in some of the offsets fairly quickly. So
10 there was directional permeability in this unit, and
11 over a period of time, changes in the pattern --
12 altering of some of the patterns has helped recovery.

13 But the thing I wanted to point out on this
14 curve was approximately 2008, which is 08 on the axis --
15 on the x-axis -- that's the beginning of the year
16 2008 -- you notice just prior to 2008, something was
17 happening in the unit. And I don't know who was
18 operating at the time, but there were wells -- a few
19 wells went off line, and then in 2008, the thing I
20 wanted to note, in July of 2008, WTI price was \$145 a
21 barrel. That same year, in December, WTI had crashed at
22 \$30 a barrel -- \$30.28 a barrel, and you see the decline
23 in production somewhat. Whoever was operating, obvious
24 to me that they made a decision to start shutting in
25 wells and cutting their costs. Injection fell off.

1 Production -- I would imagine, producing wells were shut
2 in, but I cannot differentiate injection wells versus
3 production wells, which ones were shut in. But it does
4 definitely appear like a cost-cutting effort.

5 And then by 2012, you see a dramatic drop
6 in the well count.

7 And then finally, I've got noted where
8 Petrolia takes over as operator in November of 2007
9 [sic].

10 One thing I can determine from performance,
11 we're looking at about 4.7 million barrels of oil on
12 primary recovery from the unit. And secondary recovery,
13 based on performance, was approximately 1.3 million
14 barrels of oil. So, basically, you have a secondary to
15 primary ratio of less than a third of a barrel of oil.
16 It actually calculates .28 barrels of secondary for
17 every barrel of primary. That's -- that's pretty low,
18 but San Andres is low because you do have directional
19 permeability. You have some issues with water
20 breakthrough. I don't see large -- in southeastern New
21 Mexico -- Texas, it's different because you have more --
22 you have a thicker section. But in the San Andres,
23 Northwest Shelf-type waterfloods, I don't see high
24 secondary to primary ratios.

25 So really it's all about trying to optimize

1 your pattern, possibly change -- alter some viscosity of
2 your injected fluid, change mobility ratio, change the
3 pattern. And now we have horizontal drilling as a
4 possibility for altering the way this unit's operating.

5 But that's -- that's somewhat brainstorming
6 right now. Petrolia is here to see if they can get
7 permission to put five wells back on injection.

8 The last exhibit I have is actually the --
9 is a summary curve not of the field but of the five
10 actual wells that they would like to return to
11 injection. And you can see that these wells came on
12 pretty steep decline, the green oil curve. All these --
13 if I drop down to the well count curve at the bottom of
14 the graph, you can see these were all drilled relatively
15 quickly. You see a very dramatic increase in GOR. I
16 mean, we're talking, you know, from 1,000 to 4-, 5-,
17 6,000 cubic feet per barrel of oil very quickly, so a
18 dramatic loss of energy.

19 The wells were converted in 1988 as part of
20 the bigger project. And, again, these wells in that 18
21 years of consistent injection I had on the prior
22 exhibit, you see these are -- you know, you've got some
23 pretty good injection, pretty flat. It's up and down,
24 but it is flat over that period of time. And then,
25 again, in the time period I illustrated earlier, you see

1 a pretty dramatic falloff in injection.

2 And lastly I note where Petrolia actually
3 takes over is after this unit had been mothballed and
4 there wasn't a lot of production taking place or
5 injection.

6 So one of the things in the prior exhibit I
7 didn't discuss was the pink -- the pink symbols, and
8 that was basically a ratio of oil produced divided by
9 thousands of barrels of water injected every -- you
10 know, barrels of oil produced per thousand barrels of
11 water injected. And you can see that ratio is very
12 flat. So there was -- the average of that ratio within
13 that unit during 18 years was 40 barrels of oil per
14 month were produced for every thousand barrels injected.
15 And that's the ratio -- as a scoping project, I took
16 that to the five wells and used to calculate what kind
17 of cash flow could be expected if you had full injection
18 support like existed in the entire unit.

19 And at 40 barrels per thousand times the
20 average of 35,000 barrels of water per month for these
21 five wells, you're looking at these wells giving
22 pressure support to 1,400 barrels of oil [sic] per
23 month or 74,000 barrels of oil a month if you use the
24 latest sour posting price.

25 So will Petrolia be able to return these

1 wells to injection and see this kind of rate? No.
2 Right now they have virtually no production. They are
3 working diligently to get the field back in shape, get
4 some wells back on according to their agreed compliance
5 order. What they need is to get these five wells on
6 that are in the gut of the unit to start -- to help them
7 start to redevelop pressure support so they can produce
8 oil to generate some income.

9 And so what -- what I'm trying to
10 illustrate here is what these wells generated for the
11 unit under total -- 100 percent pressure support. So
12 once they get these wells back on injection, they hope
13 to start generating a fraction of this, and it's really
14 not known because this is -- exactly what they're going
15 to generate until they see results. This is not -- in
16 other words, you don't have the pressure support from
17 the other offsetting wells outside these five that they
18 wanted to put on. So that's what they're trying to
19 accomplish with this right now.

20 **Q. So let me ask you a couple of follow-up**
21 **questions. In your opinion, is it reasonably necessary**
22 **to carry on secondary recovery operations to recover oil**
23 **in this area as shown on your maps and shown as part of**
24 **the application?**

25 A. Yes. This field is beyond primary production.

1 Secondary production has been successful to a point --
2 secondary operation has been successful to a point.
3 There was a collapse of the operation. It does appear
4 to coincide with the collapse in the oil price, to which
5 it never recovered. So it appears, based on the
6 secondary to primary ratio, there is oil still in the
7 ground. It's just a matter of trying to figure out how
8 to get it out. The first step would be to reestablish
9 pressure support for this field that's pretty much
10 depleted on a primary basis.

11 **Q. Will the use of these injection wells increase**
12 **the ultimate recovery of oil and gas from a portion of**
13 **this unit?**

14 A. Yes.

15 **Q. And is the proposed method of operation**
16 **technically and economically feasible?**

17 A. Yes.

18 **Q. And are the estimated additional costs to**
19 **reinstate this injection likely to not exceed the value**
20 **that would be created?**

21 A. That's correct. The -- Petrolia is -- is
22 having to work on the field already. They've got issues
23 to work with. The electrical grid, some of their
24 producing vessels, that type of thing, they have to work
25 on anyway. These particular wells are already -- in

1 discussing this with Petroliia, these wells are already
2 set up for injection. Four of the five have had MIT
3 tests that were successful. They're ready to go back
4 on line. It's a very simple, inexpensive process to get
5 them back on line. One well that did not pass MIT
6 appears to be, in discussions with Petroliia, a tuning
7 [sic; phonetic] leak, which would be a pretty simple
8 fix.

9 Q. And would the proposed injection operations in
10 conjunction with the production -- secondary production,
11 would it benefit working interest owners and royalty
12 owners of the Twin Lakes Unit?

13 A. Yes, through recovery of additional oil
14 reserves.

15 Q. And would the granting of this application have
16 any adverse effect on the Twin Lakes Unit?

17 A. No.

18 Q. In your opinion, would the granting of this
19 application be in the interest of conservation?

20 A. Yes.

21 Q. And would it prevent waste?

22 A. Yes.

23 Q. And would it protect correlative rights?

24 A. Yes.

25 Q. And would there be any fresh water impacted?

1 A. No.

2 MR. DOMENICI: That's all I have of this
3 witness. I have an operational witness.

4 EXAMINER GOETZE: Mr. Brooks?

5 EXAMINER BROOKS: Well, I think this is
6 kind of too technical for me, so I'll pass it off to
7 you.

8 CROSS-EXAMINATION

9 BY EXAMINER GOETZE:

10 **Q. Well, I would like to revisit one thing. So**
11 **we've got a history of production such that this**
12 **waterflood is still active; is this correct? We've**
13 **gotten everyone -- who is the designated operator of**
14 **this?**

15 MR. DOMENICI: Okay. So the designated
16 operator for all of these injection wells and most of
17 the producing wells is the Applicant, Petrolia.

18 EXAMINER GOETZE: Okay. And then the
19 status of the unit agreement which forms this, has this
20 been revisited with -- I believe these leases are state
21 leases?

22 MR. DOMENICI: There are some state leases.
23 This is highly private -- mostly a private unit. The
24 application shows the unit and the ownership. That's
25 the exhibit --

1 EXAMINER GOETZE: The C-108?

2 MR. DOMENICI: Yes. And about halfway
3 through, so on page -- it's one of the attachments.
4 Exhibit B shows the unit and would show the state
5 portion.

6 EXAMINER GOETZE: The reason I'm asking
7 this is because the basis -- the ability to approve
8 injections is we still have a waterflood that's active
9 and satisfy any terms of the unit agreement. So we
10 would make sure that we have clarity in who is the unit
11 operator before we move forward with approving injection
12 authority, since they have to be pretty much the same
13 unless they've been designated -- Petrolia been
14 designated as the operator.

15 MR. DOMENICI: So just to be clear on this,
16 Petrolia is the operator. Petrolia is under a
17 compliance order where they brought as many wells as
18 they could afford to bond into a compliance order. So
19 there are some unbonded wells. Therefore, there is --
20 no one's able to operate those.

21 EXAMINER GOETZE: Okay. I just want to
22 make sure we have continuity, because once production
23 ceases, the unit flood ceases, and, therefore, you can't
24 make application.

25 MR. DOMENICI: There has been continuity on

1 the production.

2 Q. (BY EXAMINER GOETZE) Then we'll move over to:
3 The five wells selected, Mr. Maxey, based upon their
4 location in the unit, there will be no impact to the
5 lateral adjacent leaseholders?

6 A. No. These are interior to the unit and have
7 producers between the injectors and the unit boundary.

8 Q. So we have -- any type of pattern selected at
9 this point, or is this just --

10 A. You know, the pattern has been a mishmash. It
11 started off as a 40-acre five spot. If you look at
12 Section 6 -- if you actually look at the well count,
13 it's 30-acre spacing. Some of it's 20. Some of it's
14 40. If you look up in 31, it's basically 40-acre
15 spacing, and it's a combination of five spot. And so
16 I'm sure -- in my opinion, when they saw a breakthrough,
17 they converted some of the wells where they had
18 breakthrough. So you've got a combination of a line
19 drive/five-spot.

20 Q. So the injection pattern was an injection
21 pattern of opportunity, basically what they saw?

22 A. Exactly.

23 Q. Venture to guess what is going to be the
24 ultimate recovery versus oil in place if we continue
25 with this?

1 A. Well, as Petroliia -- I discussed this with the
2 CEO just asking about future plans, and really their
3 emphasis is on getting these five wells and trying to
4 establish some revenue. However, one of the things that
5 came up -- I know there is a CO2 pipeline under the
6 unit. That is not, at the moment, really even on their
7 radar. They know the CO2 is there. It's a possibility.
8 Horizontal drilling is a possibility. It's not
9 something really being considered concrete, but we've
10 discussed, you know, the ability -- I've been involved
11 in horizontal drilling in old units that have been
12 flooded. I've seen the results of those. So there is a
13 lot of opportunity in that area. It's going to take
14 more study of the area, but that is something in a
15 brainstorming sense that is being considered.

16 **Q. Okay.**

17 A. But that gets back to altering the pattern, and
18 you have a lot better opportunity to alter patterns with
19 horizontal wells than you do with --

20 **Q. Okay.**

21 EXAMINER GOETZE: Well, that's all the
22 questions I have for Mr. Maxey today.

23 MR. DOMENICI: I would call our second
24 witness, Jason Bagby.

25

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

JASON BAGBY,

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

DIRECT EXAMINATION

BY MR. DOMENICI:

Q. Mr. Bagby, what is your position with Petrolia?

A. I am Petrolia's field operations manager.

Q. How long have you been involved in operating oil fields?

A. Eleven years total, three years in construction offshore facilities, eight years in --

Q. In field?

A. Yeah, in field operations, which, after the third year, is when I got my T2 facilities operations, API certification through James Ulmer [sic; phonetic] & Associates in Lafayette, Louisiana.

Q. And you've been to the Twin Lakes field many times?

A. Yes.

Q. What I'd like you to describe is -- assuming this permit is issued, what's going to happen as far as activity that would actually produce water that would then be injected potentially to secondary recovery?

A. Right. First of all, it'll give us, obviously, some -- generate more income, oil, and also give us a

1 place to go with our water, which we don't have now.
2 We've been alternating wells, and obviously we can't
3 bring them on full time because of the lack of ways to
4 get rid of our water. It'll also enable the testing --
5 of where we move forward, to do communication testing,
6 the pressures, waterflood implementation, to be able to
7 start from being shut in to actually monitoring the --
8 from start to where our timers would be set as far as
9 intermittent production versus water injection volumes.

10 **Q. What kind of infrastructure do you have ready**
11 **or available to --**

12 A. We -- we've been working on wells off of the
13 agreed compliance order. We soon realized we had a lot
14 of electrical issues in the power grid. Once we started
15 working on those, we realized the field is set up in
16 satellites. We've recognized facility problems at the
17 satellites. So basically what we did is we backed up
18 and regrouped and said, "Okay, we're going to go per
19 satellite and just group our wells off of the compliance
20 list on a most [sic] per satellite and start from
21 there." And that's where we started, and then we just
22 started intermittently. Once we bring a well on, we'll
23 run it for a couple of days, turn it off, go to the
24 next, turn it on, turn off. I mean, we don't -- we've
25 got one well, I think, listed under disposal or

1 something to get rid of the water, but it's not enough
2 to, you know, accommodate the 20 to 30 --

3 **Q. And maybe it's obvious, but so the record's**
4 **clear, how will you get water from the wells to get it**
5 **in a condition where you can inject it?**

6 A. Right. So there's a -- there's a pretty
7 elaborate injection system set up, header system. So
8 it's -- basically, produced water is sent back to each
9 satellite, and then from there, it's pumped into the
10 injection wells from the header system. And they also
11 have the ability to bypass and isolate for wells we
12 won't be using, you know, for obvious safety and
13 cleanliness.

14 **Q. How quickly do you expect to be able to take**
15 **advantage of injection authority if it's acquired?**

16 A. Pretty quickly, within two to three months.
17 That's stretching it. Yeah, pretty quickly. I mean,
18 the wells are in pretty good shape now. As John said,
19 there's -- we did some pre-MIT testing. I say "we." It
20 was just before I came, but our field guy has the
21 records of the pre-MITs they did for the integrity of
22 the wells. Everything -- everything is there, the
23 flowlines, everything. The injection lines are hooked
24 up, basically ready to go. From there, we'll start one
25 well to make sure everything is tight.

1 **Q. That's all I have.**

2 EXAMINER GOETZE: Mr. Brooks?

3 EXAMINER BROOKS: No questions.

4 CROSS-EXAMINATION

5 BY EXAMINER GOETZE:

6 **Q. Okay. We've looked at five coming on line.**

7 **Your scope of testing, what do you foresee within 2018?**

8 **You're hoping to obtain information, and what's the plan**
9 **after that?**

10 A. Right. So obviously we'll get good news from
11 the implementation of the waterflood, and from there,
12 the plan is, I believe, my understanding is to spread
13 out from there and purchase the existing wells from -- I
14 believe it's Blue Sky to complete the whole field. And
15 then there's obviously going to be some plugging in
16 there somewhere. They did talk about drilling. That's
17 been moved. Our plan is to basically make a complete
18 sweep of the field, get it up and running and then
19 decide from there what production looks like, what
20 testing and -- waterflood, whether it's worth going in
21 and doing some infill drilling after plugging.

22 **Q. Hmm. Well, there is still the pending activity**
23 **around the compliance order, and that will have to be**
24 **considered in your application, since we still have**
25 **another entity, Blue Sky, involved, and it's still in**

1 **there as an operator also, technically.**

2 A. Right.

3 **Q. With that in mind, are you aware that this**
4 **field has an IPI associated with the increased**
5 **pressure -- injection pressure increase order associated**
6 **with it?**

7 A. I believe -- I believe the allowables are
8 around 500. Are you talking about injection?

9 **Q. Yeah. They're up to 800.**

10 A. Okay.

11 **Q. And the problem we have with that is since the**
12 **injection authority went away, so does the IPI.**

13 A. Right. I don't think -- from what I've seen so
14 far, I don't think there is going to be an issue with
15 the high pressures. The one well we have now, it's -- I
16 mean, it's just like a light switch, basically. We're
17 not even really pumping into. We're gravity feeding
18 into it. And the two wells near it, you can tell when
19 you're flowing into it. So I don't see any pressure
20 problems as of now anyway. I mean, it could -- it could
21 come up.

22 **Q. I'm just clarifying that since we've lost**
23 **injection authority --**

24 A. Right.

25 **Q. -- that the IPI will go away with it, that**

1 you'll be back with a 22 gradient. And with that,
2 you'll have to work such that if you do go, you'll have
3 to run a step-rate test.

4 A. Right.

5 Q. And since you brought up the discussion about
6 the saltwater disposal well, that was designed
7 contingent on the fact this well would be operated with
8 the field coming back on line. I've looked at the
9 history of it, and at this point, we have an issue with
10 it because it had over 12 consecutive months with no
11 injection, which means it loses its injection authority
12 ipso facto. So that's something we also will have to
13 address. It is evident at least -- I don't know who's
14 running the shop in the field, but looking at the
15 report, May 2016 down to January 2018, we had -- we have
16 pressure recorded, which is amazing, but nothing
17 injected.

18 A. Huh.

19 Q. So with that, that's something else we're going
20 to have to consider in this order. Is it feasible for
21 you, that without the SWD, which technically should be
22 more of an injection well for a waterflood --

23 A. Right.

24 Q. -- that you would be able to live without it?

25 A. No. We would pretty much have to shut down.

1 We have a pretty -- pretty large facility for water, but
2 it doesn't take long to --

3 Q. To accumulate?

4 A. Yeah. We do keep them pretty full.

5 Q. With the five injectors approved, would the SWD
6 be required?

7 A. No.

8 Q. Okay. Let's see. And your electrical grid is
9 up and running?

10 A. Portions of it are. That's mainly what we're
11 working on, that and the satellites.

12 Q. Hopefully it will be approved by the folks in
13 licensing and regulation, don't have the issue we had
14 down in Eddy County. It was not properly permitted.

15 A. Right.

16 Q. Very good. I have no further questions for
17 this witness. Thank you.

18 MR. DOMENICI: If I may follow up on the
19 SWD.

20 REDIRECT EXAMINATION

21 BY MR. DOMENICI:

22 Q. How long have you been familiar with the actual
23 production taking place in the field?

24 A. A little over a year and a half.

25 Q. Has SWD been down any part of that or in a

1 **period of the disuse?**

2 A. Not to my knowledge, but there was quite a
3 while we went with -- you know, the power was down, and
4 we're back to working on that. So we really didn't have
5 any production to really have the need of getting rid of
6 the water.

7 MR. DOMENICI: I'm just wondering if there
8 might be a reporting issue.

9 EXAMINER GOETZE: Well, we're always
10 sympathetic to not handing in homework.

11 My question would be: Would you be able to
12 provide some sort of information to demonstrate that
13 during that period you did not have 12 consecutive
14 months without injection? So we will give you that
15 opportunity and ask you to provide us either something
16 along the lines --

17 THE WITNESS: Right.

18 EXAMINER GOETZE: -- of well information,
19 your folks in the field, whatever. And if it is such
20 that we do have a gap or misinformation, something not
21 provided, we would request you update the C-115s and
22 reflect current. And if we're going to do that, you
23 should also do the same for any other injection, and
24 then we will revisit that. At this point the
25 application is for these five wells, and that's what

1 we'll focus on.

2 MR. DOMENICI: Right. And we weren't
3 planning -- to our knowledge, there is no other
4 injection other than the SWD, but we will supplement an
5 exhibit for this proceeding. Is that a more appropriate
6 way?

7 EXAMINER GOETZE: Okay. And at this point,
8 I've gotten most of the way through the C-108. If I
9 need additional information, I shall give you a phone
10 call.

11 MR. DOMENICI: Okay.

12 EXAMINER GOETZE: And you can talk to your
13 consultant. He can supplement it through you, and we'll
14 go that way. All right?

15 MR. DOMENICI: Okay. I would tender our
16 exhibits, 1 through 8. And at the end of the exhibits
17 is 1A, which is just the way --

18 EXAMINER GOETZE: Well, unfortunately,
19 you're following in the pattern of Mr. Bruce (laughter).

20 We will accept into the record Exhibits 1
21 through 7 --

22 MR. DOMENICI: 1 through 8.

23 EXAMINER GOETZE: -- 8 and then 1A.

24 MR. DOMENICI: Yes.

25 EXAMINER GOETZE: So entered into the

1 record.

2 (Petrolia Energy Corp. Exhibit Numbers 1
3 through 8 and 1A are offered and admitted
4 into evidence.)

5 EXAMINER BROOKS: We have a prejudice up
6 here. We like the exhibits to be consecutively numbered
7 (laughter), but we don't -- we have not insisted upon it
8 consistently in the past, so if we insisted upon it now,
9 somebody would claim that they were being mistreated. I
10 just mention that --

11 MR. DOMENICI: Thank you.

12 EXAMINER BROOKS: -- for future reference.

13 MR. DOMENICI: We can just move 1A behind.

14 EXAMINER GOETZE: Well, you already opened
15 your mouth in front of the court reporter, so you've got
16 to follow through.

17 (Laughter.)

18 MR. DOMENICI: Okay.

19 EXAMINER GOETZE: I would also -- in the
20 history of this field, there is a copy of the unit
21 agreement. It does involve the State of New Mexico. I
22 might suggest you touch base with those folks over there
23 at the State Land Office, just get their feelings --
24 they're very supportive of waterfloods -- and make sure
25 everything is satisfactory with them.

1 MR. DOMENICI: We have been in touch with
2 them. They were notified -- they received notice, and
3 they've been in contact with us.

4 EXAMINER GOETZE: I didn't go through your
5 notice, so I'm guilty of that.

6 All right. If that's the end of this one,
7 then we will take Case Number 16250 under advisement.

8 And that's the end of the docket.

9 (Case Number 16250 concludes, 2:25 p.m.)

10
11
12
13
14
15
16
17
18
19
20
21
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 25th day of July 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