

1 STATE OF NEW MEXICO
2 ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
3 OIL CONSERVATION DIVISION
4 IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION DIVISION FOR
THE PURPOSE OF CONSIDERING:

ORIGINAL

CASES 15431

5 APPLICATION OF BREITBURN OPERATING LP
6 FOR APPROVAL OF A WATER DISPOSAL WELL,
7 HARDING COUNTY, NEW MEXICO.

8 REPORTER'S TRANSCRIPT OF PROCEEDINGS

9 EXAMINER HEARING

10 January 21, 2016

11 Santa Fe, New Mexico

12
13
14 BEFORE: MICHAEL McMILLAN, CHIEF EXAMINER
SCOTT DAWSON, EXAMINER
15 PHILLIP GOETZE, EXAMINER
DAVID BROOKS, LEGAL COUNSEL
16

17 This matter came on for hearing before the
18 New Mexico Oil Conservation Division, MICHAEL MCMILLAN,
Chief Examiner, SCOTT DAWSON, Examiner, PHILLIP GOETZE,
19 Examiner, and DAVID BROOKS, Legal Counsel, on January
21, 2016, at the New Mexico Energy, Minerals, and
20 Natural Resources Department, Wendell Chino Building,
1220 South St. Francis Drive, Porter Hall, Room 102,
Santa Fe, New Mexico.

21
22 REPORTED BY: ELLEN H. ALLANIC
NEW MEXICO CCR 100
23 CALIFORNIA CSR 8670
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25 Albuquerque, New Mexico 87102

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A P P E A R A N C E S

For Breitburn Operating LP:

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Also Present: Loretta Hayoz

I N D E X

CASE NUMBER 15431 CALLED

BREITBURN OPERATING LP
CASE-IN-CHIEF:

WITNESS NICHOLAS LATULIP

	Direct	Redirect	Further
By Mr. Feldewert	4		
By Examiner Dawson	EXAMINATION 14		

Statement by Ms. Hayoz: Page 15

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E X H I B I T I N D E X
Exhibits Offered and Admitted

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BREITBURN OPERATING LP EXHIBIT 13	14

1 (Time noted 2:00 p.m.)

2 EXAMINER McMILLAN: I would like to call the
3 hearing back to order. I want to call case Number
4 15431, Application of Breitburn Operating, LP,
5 For Approval of a Water Disposal Well, Harding
6 County, New Mexico.

7 Call for appearances.

8 MR. FELDEWERT: May it please the Examiner,
9 Michael Feldewert with the Santa Fe Office of Holland
10 and Hart appearing on behalf of the applicant.

11 I have one witness here today.

12 EXAMINER McMILLAN: Are there any other
13 appearances?

14 MS. HAYOZ: I am here to listen. I am
15 Loretta Hayoz. I am adjacent to the property where they
16 want to put the saltwater disposal.

17 EXAMINER McMILLAN: Thank you.

18 MR. FELDEWERT: Mr. Examiner, we'll call our
19 witness.

20 EXAMINER McMILLAN: Please proceed.

21 NICHOLAS LATULIP
22 having been first duly sworn, was examined and testified
23 as follows:

24 DIRECT EXAMINATION

25 BY MR. FELDEWERT:

1 Q. Would you please state your name, identify by
2 whom you are employed, and in what capacity.

3 A. My name is Nicholas Latulip. I work for
4 Breitburn Operating as a production engineer.

5 Q. And Mr. Latulip, did you testify before the
6 Division at the January 7th hearing in this matter as an
7 expert of petroleum engineering issues?

8 A. Yes, I did.

9 Q. At that time, were your credentials accepted and
10 made a matter of public record?

11 A. Yes.

12 MR. FELDEWERT: I would retender Mr. Latulip
13 as an expert witness in petroleum engineering.

14 EXAMINER McMILLAN: So qualified.

15 Q. Mr. Latulip, at the last hearing, did you discuss
16 with the Examiners the design of the proposed injection
17 well?

18 A. Yes, I did.

19 Q. And did part of that testimony include a
20 discussion of the quality of the cement behind the
21 pipe?

22 A. Yes, it did.

23 Q. And your testimony at that time was what?

24 A. The cement bond log verified that we had good
25 cement behind pipe.

1 Q. And at the Division's request, did you obtain a
2 copy of the cement bond log for this well?

3 A. Yes, we did.

4 Q. And if I turn to what has been marked as
5 Breitburn Exhibit 11, is that the cement bond log
6 requested by the Examiner?

7 A. Yes.

8 MR. FELDEWERT: And, Mr. Examiner, just for
9 purposes of the record, at the initial hearing,
10 Breitburn introduced Exhibits 1 through 10, and that's
11 why this is being marked as Exhibit 11.

12 Q. Does this cement bond confirm the opinion as to
13 quality of the cement that you provided at the last
14 hearing?

15 A. Yes, it does.

16 Q. After the last hearing, did the Examiner also
17 request that the company conduct an analysis of the
18 radius of influence of your proposed injection wells?

19 A. Yes, it did.

20 Q. And has that been done by the company?

21 A. Yes, it has.

22 Q. If I turn to what has been marked as Breitburn
23 Exhibit 12, is that a series of slides that provides
24 that radius of influence analysis?

25 A. Yes, it is.

1 Q. Was this done by a reservoir engineer?

2 A. Yes, it was.

3 Q. And did it also include input on behalf of the
4 company's geologist?

5 A. Yes, it did.

6 Q. And did you consult with them in preparation and
7 understanding of this exhibit for the hearing today?

8 A. Yes, I did.

9 Q. And are you familiar with this type of analysis
10 as a result of your education and your work
11 experience?

12 A. Yes, I am.

13 Q. Would you please explain to the Examiners,
14 without going into any great detail, how this is set up,
15 how this exhibit is set up.

16 A. Sure. So if you take a look at the first page,
17 which is going to be labeled "Executive Summary," that's
18 a basic overview of what we are trying to find.

19 So your R equals equation, that is your actual
20 radius of influence. And then if I could draw your
21 attention to the right, there's a plot there.

22 And what this plot is doing is on your X axis,
23 you have years of constant injection; on the left axis,
24 you have your radius in feet.

25 And then what we did is provided four different

1 cases based on disposal volumes per day. And they are
2 color coordinated as you can see. So we have a case for
3 200, 700, 1,400, and 2,100 barrels of water injected per
4 day.

5 And you can see that over -- for each span of
6 years, it has a given radius of influence. So if you go
7 to year 25, the numbers next to the symbols would
8 actually indicate the radius of influence for each of
9 those four cases.

10 Q. And that would indicate the radius of influence
11 with constant daily injection rates at that amount for a
12 total of 25 years?

13 A. That is correct, yes.

14 Q. And if you look over, for example, then at the
15 left-hand side of this exhibit, does it give the
16 Examiners a comparison of feet in terms of a quarter
17 mile, a half mile, three-quarter mile, a mile?

18 A. Yes.

19 Q. So if I took, for example, 700 barrels of water
20 per day for 25 years, your radius of influence is 2,217
21 feet?

22 A. Correct. Which would be less than a half a
23 mile.

24 Q. And then what is reflected on the remaining pages
25 here?

1 A. So the rest of the pages are going to be how this
2 calculation was determined and how we came to some of
3 the variables that we used.

4 So the next slide you will see after the
5 executive summary is our RW determination using a picket
6 plot for the San Andres Formation, which is the
7 formation they were concerned with -- they're concerned
8 with the San Andres as well as the Glorieta as far as
9 the area of influence.

10 Looking at the picket plot, basically, what we
11 get from this is our RW value. And that's done by using
12 your SW 100 percent line. So the RW for the San Andres
13 Formation is .396.

14 Q. And that is reflected at the bottom of this on
15 page 3 of Exhibit Number 12?

16 A. That's correct.

17 Q. Did you do the same calculation for the Glorieta
18 formation?

19 A. Yes, we did.

20 Q. And what is the RW for the Glorieta Formation?

21 A. The RW for the Glorieta Formation came out to
22 be .530.

23 Q. And if I continue on to page 5, there is a whole
24 bunch of numbers and equations, et cetera; is that
25 right?

1 A. Yes. So this is just the math behind the
2 calculation. The reason we were getting RW in the
3 previous slides was for the SW equation you see at the
4 bottom left-hand side, which is just your saturation of
5 the formation.

6 And then, in turn, you need your SW to calculate
7 your plume or your radius of influence.

8 Q. And, then, finally, the last page of
9 Exhibit Number 12, is this just an aerial depiction of
10 the radius of influence using these calculations that
11 you initially showed in the executive summary?

12 A. Yes.

13 Q. Set up the same way, correct?

14 A. Yes. So, basically, all we have here is you have
15 the same plot which we already looked at in the bottom
16 right-hand corner. And then we just showed the
17 different radius of influence on an aerial map for the
18 four different cases.

19 Q. And those are represented by the circles -- by
20 the different color circles in the middle of this
21 exhibit?

22 A. That's correct.

23 Q. Finally, were you aware that the Division also
24 requested, if possible, an analysis of the native waters
25 in the lower San Andres interval where the company was

1 also seeking authority to inject?

2 A. Yes.

3 Q. Was the company able to obtain an actual analysis
4 of the native waters in the lower San Andres?

5 A. No, we were not.

6 Q. Why was that?

7 A. Due to the San Andres and the Glorieta being a
8 low pressure reservoir, the ability for it to produce
9 fluid is -- it can't.

10 Q. So you didn't have -- so did you look for water
11 samples from wells in the area?

12 A. I don't believe there's any wells in the area
13 that are completed in the San Andres.

14 Q. So you couldn't find any water samples?

15 A. That's correct.

16 Q. So what did the company do?

17 A. So to get a better idea of our part per million
18 chlorides, what we did was, Schlumberger has some
19 standard charts that they use to figure this out using
20 bottom hole temperatures as well as the resistivity of
21 the solution, which is our RW that we spoke about
22 previously.

23 Using these charts, we then can make a
24 correlation for a part per million chlorides in that
25 formation.

1 Q. So if I then go to what's been marked as
2 Breitburn Exhibit Number 13, does this first contain
3 the standard charts that you spoke about from
4 Schlumberger?

5 A. Correct. So this will be the standard chart for
6 the San Andres Formation itself.

7 Q. And then you mentioned that you used the RW that
8 had been previously calculated by the company?

9 A. Correct. So for the San Andres, we had a .4 RW.
10 Our bottom hole temperature for that formation is
11 approximately 80 degrees.

12 And just so you guys know how the chart works,
13 you basically -- you make a point at your 80 degree,
14 draw a vertical line until it intersects with your
15 resistivity, and then you follow that constant
16 resistivity line down to the right-hand side access
17 where that indicates your part per million chlorides.

18 Q. And is this a common tool that is utilized by the
19 industry to determine the chloride content of a
20 particular reservoir?

21 A. Yes.

22 Q. And what does this reflect -- let me step back.

23 When you said the bottom hole temperature, was
24 that the actual bottom hole temperature from the well
25 that's at issue?

1 A. Yes.

2 Q. And then what did this indicate the salinity to
3 be for any waters that would be, if any, native waters
4 in the San Andres Formation?

5 A. You are looking at approximately 20,000 parts.

6 Q. Well above the protectable limit here in New
7 Mexico?

8 A. Correct.

9 Q. And since you had this available to you, did you
10 also do a similar analysis of the Glorieta Formation?

11 A. Yes, we did.

12 Q. And, again, did you use the same bottom hole
13 temperature?

14 A. Yes.

15 Q. But then you had a different RW, correct?

16 A. Yes, the RW was different.

17 Q. And then what was the end result of using the
18 bottom hole temperature in the RW for the Glorieta?

19 A. Our Glorieta's part per million came out to be
20 roughly 17,000.

21 Q. Again, above the protectable standard?

22 A. Correct.

23 Q. And that assumes that there's native waters,
24 correct?

25 A. Yes.

1 Q. Does this application, Mr. Latulip, in your
2 expert opinion, pose any threat to protectable
3 groundwater, the public health, or the environment?

4 A. No, it does not.

5 Q. Were Breitburn Exhibits 11 through 13 prepared
6 by you or compiled under your direction and
7 supervision?

8 A. Yes, they were.

9 MR. FELDEWERT: Mr. Examiner, I would move
10 into evidence Breitburn Exhibits 11 through 13.

11 EXAMINER McMILLAN: Exhibits 11 through 13
12 may now be accepted as part of the record.

13 (Breitburn Operating, LP, Exhibits 11
14 through 13 were offered and admitted.)

15 EXAMINER GOETZE: Since it is my case, we
16 will go back to the original discussion.

17 The exhibits you provided have answered all
18 my questions, so I have no further interest in pursuing
19 this. I will take this information and put it into the
20 case.

21 And now I will yield to any other Examiner
22 who wishes to have a question.

23 EXAMINER DAWSON: I have a question.

24 EXAMINATION BY EXAMINER DAWSON

25 EXAMINER DAWSON: Mr. Latulip, the map you

1 provided, you indicated there is no water wells in the
2 radius of influence?

3 THE WITNESS: There is not. There are, I
4 believe, two wells, and those are owned by us as well.
5 And they are producing wells from the Hayoz Formation.

6 And we plan to plug and abandon those wells
7 due to being nonproductive.

8 EXAMINER DAWSON: Okay. I have no further
9 questions.

10 MR. BROOKS: I have no questions.

11 EXAMINER McMILLAN: Do you want to make any
12 formal statement or anything?

13 MS. HAYOZ: I would like to acknowledge to
14 Breitburn in regards to the crossing of lands, are you
15 filing this within the oil and gas lease or are you
16 filing this without the oil and gas lease and how and
17 will we be paid for crossing the lands, because you will
18 be crossing the lands?

19 MR. FELDEWERT: Mr. Examiner, Mr. Latulip is
20 not prepared to address that question. Ms. Hayoz is not
21 a party to the case. She is not allowed to ask
22 questions of the witness.

23 EXAMINER McMILLAN: Okay. I thought she
24 just had a comment.

25 MR. FELDEWERT: That's what I understood.

1 EXAMINER McMILLAN: Case No. 15431 shall be
2 taken under advisement.

3 MR. FELDEWERT: Thank you.

4 EXAMINER McMILLAN: Thank you.

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(Time noted 2:13 p.m.)

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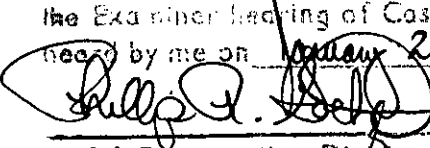
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I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 15431,
heard by me on January 21, 2016.
 , Examiner
Oil Conservation Division

1 STATE OF NEW MEXICO)
2) ss.
3 COUNTY OF BERNALILLO)
4
5
6

7 REPORTER'S CERTIFICATE

8
9 I, ELLEN H. ALLANIC, New Mexico Reporter CCR
10 No. 100, DO HEREBY CERTIFY that on Thursday, January 21,
11 2016, the proceedings in the above-captioned matter were
12 taken before me, that I did report in stenographic
13 shorthand the proceedings set forth herein, and the
14 foregoing pages are a true and correct transcription to
15 the best of my ability and control.

16
17 I FURTHER CERTIFY that I am neither employed by
18 nor related to nor contracted with (unless excepted by
19 the rules) any of the parties or attorneys in this case,
20 and that I have no interest whatsoever in the final
21 disposition of this case in any court.

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