

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION COMMISSION FOR
THE PURPOSE OF CONSIDERING:

ORIGINAL

APPLICATION OF OCCIDENTAL PERMIAN LIMITED Case No. 14981
PARTNERSHIP TO AMEND ORDERS R-4934 AND
R-4934-E GOVERNING THE SOUTH HOBBS GRAYBURG-SAN
ANDRES PRESSURE MAINTENANCE PROJECT TO ALLOW THE
INJECTION OF CARBON DIOXIDE AND PRODUCED GASES, TO
MODIFY THE SURFACE INJECTION PRESSURE, TO OBTAIN
OTHER RELIEF, AND TO QUALIFY THIS EXPANSION FOR
THE RECOVERED OIL TAX RATE PURSUANT TO THE NEW MEXICO
ENHANCED OIL RECOVERY ACT, LEA COUNTY, NEW MEXICO

APPLICATION OF OCCIDENTAL PERMIAN LTD. Case No. 14976
FOR APPROVAL TO ADD THE NORTH HOBBS G/SA
UNIT WELL NO. 431 AS AN INJECTION WELL FOR WATER,
CARBON DIOXIDE AND PRODUCED GAS IN ITS NORTH HOBBS
GRAYBURG-SAN ANDRES TERTIARY RECOVERY PROJECT
LOCATED WITHIN THE HOBBS GRAYBURG-SAN ANDRES POOL,
LEA COUNTY, NEW MEXICO

REPORTER'S TRANSCRIPT OF PROCEEDINGS
COMMISSIONER HEARING

BEFORE: JAMI BAILEY, Chairman
DR. ROBERT BALCH, Commissioner
TERRY WARNELL, Commissioner

May 10, 2013
Santa Fe, New Mexico

This matter came on for hearing before the New
Mexico Oil Conservation Commission, JAMI BAILEY,
Chairman, on Friday, May 10, 2013, at the New Mexico
Energy, Minerals and Natural Resources Department, 1220
South St. Francis Drive, Room 102, Santa Fe, New Mexico.

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1 Conservation Division.

2 CHAIRMAN BAILEY: Do you have an opening
3 statement?

4 MR. RANKIN: Just some brief remarks,
5 Madam Chair, just to help put in context what the
6 application is seeking today.

7 Oxy originally filed this application for
8 authorization to inject as an administrative application
9 before the Division. Upon review, the Division
10 determined that while the application was approvable the
11 Division could not approve the application
12 administratively because it was determined that the well
13 was outside what is called the Phase 1 project area.

14 The Phase 1 project is an area that was
15 authorized by the Division through Order Number R-6199-B
16 to inject CO2 and produced gas. Because this well is
17 just outside of that boundary -- it's within the unit
18 boundary but just outside of the Phase 1 area -- the
19 Division requested that this case be brought before the
20 Commission for authorization to expand that unit area --
21 rather, the Phase 1 area.

22 Therefore, Oxy has requested that this matter
23 be brought before the Commission on the Division's
24 request to expand the Phase 1 area to include the lands
25 on which the injection well is located and to include any

1 lands which may produce fluids or gas injected by this
2 well, Well 13-431.

3 So Order Number R-6199-B already establishes
4 an approved CO2 flood and produced gas flood and tertiary
5 project, and upon the Division's request, we're seeking
6 and have a recommendation for what lands should be
7 included in a Phase 1 area expansion.

8 So you'll hear today what that recommendation
9 is, as well as the details of the C-108 application and
10 the analysis of the area of review.

11 CHAIRMAN BAILEY: Ms. Gerholt, do you have
12 opening comments?

13 MS. GERHOLT: Yes, I do. Thank you, Madam
14 Chair.

15 It is correct that the Division did receive
16 this C-108 for administrative approval. Will Jones, who
17 was the Division Engineer at that time, reviewed the
18 C-108 application and found it to be approvable but that
19 this well was outside of the Phase 1 area. Therefore, we
20 requested that Oxy have a hearing before you all to
21 determine that this well should be included within the
22 Phase 1 area.

23 The Division does not object to this
24 application. We believe it will prevent waste and
25 protect correlative rights. We would request that the

1 Phase 1 area be expanded to include this well. Thank
2 you.

3 CHAIRMAN BAILEY: Would you like to call
4 your first witness?

5 MR. RANKIN: I would very much so. Thank
6 you very much.

7 My first witness is Ms. Kelley Montgomery.

8 CHAIRMAN BAILEY: You were already sworn
9 in the previous case, but let's go ahead and do it for
10 this case.

11 KELLEY MONTGOMERY

12 Having been first duly sworn, testified as follows:

13 DIRECT EXAMINATION

14 BY MR. RANKIN:

15 Q. Good afternoon. How are you today?

16 A. Fine.

17 Q. Can you please state your full name for the
18 record.

19 A. Kelley Montgomery.

20 Q. And by whom are you employed?

21 A. Oxy.

22 Q. And what is your current position with Oxy?

23 A. Regulatory consultant.

24 Q. Were your credentials previously accepted as a
25 matter of record -- let me back up.

1 Your role is as a regulatory consultant. Your
2 background is also in production engineering; is that
3 correct?

4 A. That's correct.

5 Q. And also in oil and gas environmental
6 engineering?

7 A. Correct.

8 Q. Have your credentials as an expert in
9 petroleum production engineering and oil and gas
10 environmental engineering been previously accepted and
11 made a matter of record before the Commission?

12 A. Yes, they have.

13 Q. Are you familiar with the application that was
14 filed in this case?

15 A. Yes.

16 Q. Did you prepare or oversee the preparation of
17 exhibits for today's presentation?

18 A. Yes.

19 MR. RANKIN: Madam Chair, I would like to
20 tender Ms. Montgomery as an expert and be recognized as
21 her expert credentials.

22 MS. GERHOLT: No objection.

23 CHAIRMAN BAILEY: She is so recognized.

24 Q. (By Mr. Rankin) Ms. Montgomery, I gave a
25 brief overview of what this application is all about.

1 But can you briefly summarize for the Commission what it
2 is that Oxy is seeking with this application?

3 A. Yes. We want to amend the Division Order
4 PMX-89, and we want authorized injection of carbon
5 dioxide and produced gases into the Hobbs Grayburg-San
6 Andres pool in Well Number 431, API 3002505445.

7 Q. Order Number PMX-89 was included as Exhibit 1;
8 is that correct?

9 A. Yes.

10 Q. And that order is simply an authorization for
11 injection of water under Order Number R-6199-B; is that
12 correct?

13 A. Yes.

14 Q. Rather, 6199.

15 Now what is the legal location of the subject
16 well, Well 13-431?

17 A. 1640 from the south line and 1,000 from the
18 east line, Unit Letter I of Section 13, Township 18
19 South, Range 37 East.

20 Q. So it's already an existing, unauthorized and
21 approved project; correct?

22 A. Yes.

23 Q. So this would be an expansion of that project;
24 is that correct?

25 A. That's correct.

1 Q. That project was originally approved by the
2 Division through Order Number R-6199-B; is that correct?

3 A. That's correct.

4 Q. Please explain for the Commission what the
5 North Hobbs Grayburg-San Andres tertiary recovery project
6 is and how it operates, briefly.

7 A. Well, it was a waterflood that was converted
8 to a tertiary recovery project in the early 2000s. I
9 think injection started in 2003.

10 Q. That was authorized -- the conversion was
11 authorized under R-6199-B?

12 A. That's correct.

13 Q. Now, 6199-B created what's called a Phase 1
14 area?

15 A. Yes.

16 Q. That's the area that captures the area that's
17 been approved for CO2 and produced gas injection; is that
18 right?

19 A. Yes.

20 MR. RANKIN: Madam Chair, I've got an
21 exhibit here which was not originally prefiled. It's
22 been labeled Exhibit 5. It's an area -- depicts the area
23 that Oxy recommends be included in the expansion of Phase
24 1. If there's no objection from the Division, I would
25 like to distribute that exhibit now.

1 CHAIRMAN BAILEY: Ms. Gerholt, do you have
2 any objection to that?

3 MS. GERHOLT: No objection.

4 Q. Ms. Montgomery, can you review for the
5 Examiners what this map show?

6 A. Yes. The area shaded in yellow is the
7 boundary of the North Hobbs Grayburg-San Andres Unit.
8 The outline in blue is what is the Phase 1 area of our
9 tertiary recovery project that was approved by R-6199-B.
10 You can see up at the top there's a little
11 dot, Well Number 431, the red dot. And the area that's
12 outlined in red is what we are proposing to include in
13 the Phase 1 area. It's within the unit boundary. It's
14 just outside the Phase 1 area.

15 Q. The legal description of the area that you
16 would propose for expansion of Phase 1, is that the north
17 half of the southeast quarter of Section 31, Township 18
18 South, Range 37 East; is that right?

19 A. That's correct.

20 Q. And we'll get to this through your testimony.
21 But the reason you're recommending to include the
22 northwest quarter of the southeast quarter is because
23 that's where the production well is located; is that
24 correct --

25 A. That's correct.

1 Q. -- that would benefit from the injection?

2 A. Yes.

3 Q. So I alluded to this briefly in my opening
4 remarks. But can you briefly explain how it is that this
5 application is now before the Commission, rather than
6 before the Division through administrative application?

7 A. Yes. It was originally submitted to the
8 Division to be administratively approved, and it was
9 found to be approvable. However, because this well lies
10 just outside the boundaries of what we had designated as
11 the Phase 1 area, it was sent to be heard before the
12 Commission to be approved.

13 Q. Your understanding of the Division's
14 recommendation is that the Phase 1 area be expanded to
15 include the location of the well and any wells -- and the
16 land on which any wells are located that would produce
17 fluids or gas from which are injected into Well 431?

18 A. That was my understanding, yes.

19 Q. Ms. Montgomery, can you identify for the
20 Commission wells by API number that would be benefited
21 from injection into Well Number 431?

22 A. Sure. I'll identify four production wells.
23 They are Well Number 331, which is API Number
24 30-02505447; Well Number 832, API Number 30-02540822;
25 Well Number 341, API Number 30-02505446; and Well Number

1 645, which is API 30-02538518.

2 Q. Thank you very much. And the key well in this
3 case would be Well Number 331, which is the well that's
4 in the northwest quarter of the southeast quarter of
5 Section 31, which should be that portion of the proposed
6 Phase 1 expansion; is that correct? On page 10 of the
7 C-108, which we'll come to, identifies the location of
8 that well?

9 A. That's correct.

10 CHAIRMAN BAILEY: I think you said,
11 "Section 31."

12 MR. RANKIN: Oh. 13. Thank you very
13 much. Section 13. We'll identify that well when we come
14 to that in the C-108.

15 Q. (By Mr. Rankin) So just to summarize,
16 Ms. Montgomery. In light of the Division's request that
17 the Phase 1 area be expanded to include the land on which
18 Well 431 is located and any wells that produce fluids or
19 gases from that injection, is it your opinion that the
20 Phase 1 area should be expanded to include the lands that
21 have been identified by this red square?

22 A. Yes, it is.

23 Q. Now let's move on to notice of this
24 application. To whom was notice provided of this
25 application?

1 A. Notice was provided to the surface owner where
2 the injection well is located, Black Gold Estates. And
3 it was also provided to all the leasehold operators
4 within a half mile of the area of review.

5 Q. You also prepared or oversaw the preparation
6 of a C-108 application; is that correct?

7 A. That's correct.

8 Q. And that's been identified as Exhibit Number
9 2?

10 A. Yes, that's correct.

11 Q. And on page 25 of that exhibit is a copy of
12 the notice letter that was sent out to the notice
13 recipients; is that right?

14 A. Yes, that's correct.

15 Q. On page 26 is the map indicating the tracts
16 within a half mile of the proposed injection well?

17 A. Yes.

18 Q. And on the subsequent page is a list of all
19 the offset operators, the surface owner and the mineral
20 interest owners within each of those tracts who received
21 notice; is that correct?

22 A. That's correct.

23 MR. RANKIN: Madam Chair, I have an
24 additional exhibit that I want to make a matter of --
25 just to complete the record that was not prefiled. If

1 there's no objection from the Division, I'd like to
2 present that exhibit, as well.

3 MS. GERHOLT: If I may have a moment to
4 review it?

5 MR. RANKIN: This is an affidavit of
6 publication from the Hobbs News Sun indicating that the
7 legal ad noticing the C-108 application was actually
8 published.

9 MS. GERHOLT: Madam Chair, the Division
10 has no objection.

11 CHAIRMAN BAILEY: Then you may distribute
12 it.

13 MR. RANKIN: This is marked as Exhibit
14 Number 4.

15 Q. (By Mr. Rankin) Ms. Montgomery, what I just
16 circulated that's been marked Exhibit Number 4, can you
17 review for the Examiners what that is?

18 A. Yes. It's an affidavit of publication in the
19 Hobbs Sun newspaper.

20 Q. It just indicates that Oxy published the legal
21 ad notifying the public that this application has been
22 filed with the Division; is that correct?

23 A. Yes, that's correct.

24 Q. Moving on to the C-108 application itself, did
25 you oversee the preparation and filing of the C-108?

1 A. Yes.

2 Q. And as I mentioned, that's been marked as
3 Exhibit Number 2?

4 A. Yes.

5 Q. Now, does the C-108 contain all the
6 information required by the Division?

7 A. Yes, it does.

8 Q. And can you please, just for background and
9 information purposes, provide a brief history of Well
10 13-431, how it came to be?

11 A. It was drilled in 1935 as a producer. It was
12 authorized to inject and has been injecting water until
13 the early '90s, and then it was TA'd. And in 2009, it
14 was brought back as a water injector, and it's been
15 injectioning water since that point.

16 Q. On page 7 of Exhibit 2, this is the wellbore
17 schematic of the subject well; is that correct?

18 A. That's correct.

19 Q. Can you please walk through for the
20 Commissioners the wellbore schematic and what Oxy's plans
21 are for injection through this well?

22 A. Sure. Looking at the wellbore schematic on
23 page 7, you've got several strings of casing. You have
24 surface casing set at 264, and that cement is circulated
25 to surface. You have an additional string of casing set

1 at 1,591, and that is also cement circulated to surface.

2 You have a production casing string set at
3 3,960. It is -- top of cement is at 3,290, and that is
4 verified by CBL. You also have a partial liner in the
5 injection zone, and the liner is set from 3,867 to a
6 depth of 4,299.

7 Currently the perforations are between 4,163
8 and 4,246. The plug back depth right now is 4,251, so we
9 propose to deepen the well to 4,365. So the entire
10 interval that we're asking to inject into is from 4,000
11 to 4,365. A portion of that will be open hole and a
12 portion of that will be through perforations.

13 Q. Will this injection be operated using the same
14 monitoring and same control equipment that Oxy uses in
15 all of its injection wells in the North Hobbs Unit, which
16 was testified to and described in Case Number 14981?

17 A. Yes, it will.

18 Q. Will there be continuous monitoring and
19 recording of the injection rates, temperatures, pressures
20 and annulus pressures in the tubing well, as well?

21 A. Yes.

22 Q. Will there be an annular fluid that contains
23 biocide and anticorrosives, as well?

24 A. Yes, there will.

25 Q. In your opinion, is Oxy's design and plans for

1 injection into this well protective of groundwater,
2 correlative rights and would it protect waste?

3 A. Yes.

4 Q. Does Oxy also plan a stimulation of this well?

5 A. If necessary, there might be a small acid
6 wash.

7 Q. Now, moving away from the well to the area of
8 review analysis, did you conduct an area of review
9 analysis of this well?

10 A. Yes, we did.

11 Q. On page 10 of Exhibit 2, is this a map
12 depicting the area of review?

13 A. Yes, it is.

14 Q. So the subject injection well is located in
15 the center with a 431 next to it; is that correct?

16 A. That's correct.

17 Q. Can you please review for the Examiners the
18 other aspects of this map so they understand what all the
19 markings mean?

20 A. Sure. It's a little -- the copy is a little
21 light. There's no legend. But typically on these maps,
22 when you have a solid dot, those are producer. A solid
23 dot with a circle around it are injectors. Anything that
24 is P&A'd will have a line across it, and TA'd wells would
25 have a designation next to it that says, "TA." The dark

1 black would be something that is operated other than by
2 Oxy.

3 Q. Looking at this map, where you see Well Number
4 431, just to the left you see a well identified as Number
5 331; is that correct?

6 A. That's correct.

7 Q. Now, looking at Exhibit Number 5, which is the
8 overview of the unit Phase 1 area, is it correct that
9 Well Number 331 is in the left-hand side of that
10 rectangle circled by red?

11 A. Yes.

12 Q. And the 431 obviously is identified on that
13 map, and it's the well on the right side of that
14 rectangle that's circled in red?

15 A. Yes.

16 Q. That corresponds to the recommendation that
17 Oxy has made for a proposed expansion of the Phase 1
18 area?

19 A. That's correct.

20 Q. Turning to page 11 of Exhibit 2 of the C-108,
21 this is a -- can you review for the Examiners what this
22 table is and the information contained --

23 A. This is a summary of the area of review that
24 was done for this well. At the top there are several
25 wells identified that the well construction data or

1 plugging diagram plans were previously submitted to NMOCD
2 in Case Number 12722. So there was no remedial work
3 required on these wells, so they are listed.

4 There are additional wells that have been
5 reviewed within this AOR that were not previously
6 submitted. They are listed here, as well as -- on the
7 bottom, there are four P&A'd wells that are included
8 here.

9 Q. So just to reiterate, the wells at the top of
10 the table, those were already submitted, and the Division
11 determined that, upon its review, there was no additional
12 remedial work necessary for those wells?

13 A. That's correct.

14 Q. And then the wells at the bottom half of the
15 table are wells that, since that time, have been either
16 drilled or their status has changed; is that correct?

17 A. That's correct.

18 Q. In your review of these wells, have you
19 identified any issues with the completions that would
20 result in any migration out of the injection zone or any
21 cause for concern that there be any compromise of the
22 containment of injection fluid and gases?

23 A. No, I have not.

24 Q. Since this application was filed, have there
25 been two additional wells that were drilled since this

1 application was filed?

2 A. That's correct.

3 Q. That are within the area of review?

4 A. Yes.

5 Q. Those are included in Exhibit Number 3; is
6 that right?

7 A. Yes.

8 Q. Can you review for the Examiners what Exhibit
9 3 shows?

10 A. Yes. Exhibit 3 are two producing wells that
11 were drilled just to the north of the injector 431.

12 Q. So the first one is identified as Well Number
13 832?

14 A. Yes.

15 Q. The second one is Number 833; is that correct?

16 A. That's correct.

17 Q. These wells you've identified as being -- at
18 least 832 is identified as being one of the wells that
19 would benefit from the injection through Well Number 431?

20 A. That's correct.

21 Q. And that's drilled -- is that in the same unit
22 as the injection well, Unit I?

23 A. Yes, that's correct.

24 Q. Thank you. Now, in your table on page 11 of
25 the C-108 exhibit, there are some wells that are

1 identified as being plugged and abandoned; is that
2 correct?

3 A. That's correct.

4 Q. Does this C-108 contain all the wellbore
5 schematics required by the Division for those P&A'd
6 wells?

7 A. Yes, it does.

8 Q. Those start on page 12?

9 A. That's correct.

10 Q. Flipping through these, each of the wellbore
11 schematics for each of the wells, in addition to the
12 sundries indicating how the wells were plugged and
13 abandoned, those are all included in the C-108 for each
14 of the wells?

15 A. Yes.

16 Q. Did you do an analysis and review of these
17 P&A'd wells?

18 A. Yes, we did.

19 Q. Did you determine that there was adequate --
20 the plugging and abandonment of these wells was adequate
21 to protect against migration of fluids from the injection
22 zone?

23 A. Yes.

24 Q. Having reviewed all of the wells that you
25 identified in the half mile area of review, is it your

1 opinion that any wells in the AOR present a potential
2 conduit for fluids or gases to migrate out of the
3 injection zone?

4 A. No.

5 Q. What injection volumes is Oxy proposing for
6 water -- produced water and for the gases through this
7 well?

8 A. We are proposing what is consistent for what
9 we proposed with the other wells in the Phase 1 area.
10 That's a maximum of 9,000 barrels of water per day and a
11 maximum of 15,000 mcf a day.

12 Q. And the source of the produced water that
13 you'll be injecting?

14 A. It's the Grayburg-San Andres produced water.

15 Q. So have you also conducted an analysis of the
16 proposed injection water to determine whether there's any
17 compatibility issues?

18 A. Yes. There are no compatibility issues.

19 Q. For the record, that's contained on page 21 of
20 the C-108, the chemical analysis of the water; is that
21 correct?

22 A. Yes.

23 Q. Now, the injection system will be open or
24 closed?

25 A. A closed system.

1 Q. And what surface injection pressures is Oxy
2 proposing for this well?

3 A. We are proposing the same injection pressures
4 that are consistent with the other wells in the Phase 1
5 area. That's 1,100 psi for water, 1,250 psi for CO2, and
6 1,770 psi for produced gas.

7 Q. We've already touched on this briefly, but how
8 will Oxy be monitoring the integrity of the wellbore
9 during injection?

10 A. We have pressure monitors on the tubing and
11 casing annulus.

12 Q. Same as for all the other injection wells in
13 the North Hobbs Unit?

14 A. Consistent with all the other wells in the
15 North.

16 Q. You've already mentioned this. But Oxy will
17 be using anticorrosive fluid in the annular space, as
18 well as biocides; is that correct?

19 A. That's correct.

20 Q. Now, will the injection through Well Number
21 431 be contained within the unit, in your opinion?

22 A. Yes, it will. It's part of a five-spot
23 pattern.

24 Q. So Well Number 832 is just to the north of the
25 injection; is that correct?

1 A. I believe that's right.

2 Q. That will serve as a mechanism for a sink for
3 containment within the unit boundary?

4 A. That's right.

5 Q. Have you identified any fresh water zones in
6 your analysis of the geology of the area?

7 A. Yes, we have. They are located down to about
8 250 feet. It's the Ogallala.

9 Q. That's as was described in Mr. Randy
10 Stillwell's testimony in Case 14981; is that correct?

11 A. That's correct.

12 Q. You've got a fresh water analysis within a
13 mile of the injection; is that correct?

14 A. Yes, we do.

15 Q. That's on pages 22 and 23 of the C-108?

16 A. Yes.

17 Q. In your opinion, will the proposed injection
18 pose a threat to any sources of fresh water in the area?

19 A. No.

20 Q. Has Oxy previously submitted the required
21 geological exhibits necessary through the C-108?

22 A. Yes, we have.

23 Q. And that was through the previous case, Number
24 12722; is that right?

25 A. Yes. I believe that's right.

1 Q. That was the case that established Order
2 6199-B; right?

3 A. Yes.

4 MR. RANKIN: Madam Chair, I would ask that
5 the Commission take administrative notice of the
6 geological exhibits and testimony that were presented in
7 Case 12722.

8 CHAIRMAN BAILEY: Any objection?

9 MS. GERHOLT: No objection.

10 Q. (By Mr. Rankin) Ms. Montgomery, in Oxy's
11 review of the geology and engineering data in this area,
12 has Oxy found any evidence of any open fault or any
13 hydrologic conduits that would allow the escape or
14 migration of injected fluids out of the injection zone?

15 A. No, we have not.

16 Q. In your opinion, will the geology of the
17 injection zone adequately contain the injected volumes
18 that Oxy is injecting?

19 A. Yes, it will.

20 Q. In your opinion, will the granting of this
21 application result in any waste or impair correlative
22 rights?

23 A. No, it will not.

24 Q. In your opinion, will the proposed injection
25 into Well 13-431 enhance production within the expanded

1 project area?

2 A. Yes, it will.

3 Q. And when Oxy injects -- with approval, when
4 Oxy injects produced gas, will it also be injecting some
5 portion of hydrogen sulfide gas, as well?

6 A. Yes, it will.

7 Q. As a result, will Oxy have to operate under an
8 approved H2S contingency plan?

9 A. Yes.

10 Q. Does Oxy currently have an approved H2S
11 contingency plan in place?

12 A. Yes.

13 Q. So prior to commencement of injection, will
14 Oxy seek to amend that plan to include this well?

15 A. Yes, we will.

16 Q. I think that's it. Were Exhibits 1 through 5
17 prepared by you or was their preparation overseen by you?

18 A. Yes, they were.

19 MR. RANKIN: Madam Chair, I would move to
20 admit Exhibits 1 through 5 into the record.

21 MS. GERHOLT: No objection.

22 CHAIRMAN BAILEY: They are admitted.

23 (Oxy Exhibits 1 through 5 were admitted.)

24 MR. RANKIN: Before I pass the witness, I
25 have one final request. And that would be -- because

1 this application was -- at first we thought we could get
2 it approved administratively. We'd like to request, if
3 possible, if it's deemed appropriate by the Commission,
4 to commence injection prior to the entry or approval of a
5 final order if it's acceptable to the Commission.

6 CHAIRMAN BAILEY: We'll take that into
7 account in our deliberations.

8 MR. RANKIN: Thank you. I have no further
9 questions. Pass the witness.

10 CROSS-EXAMINATION

11 BY MS. GERHOLT:

12 Q. I have a question in regards to this well and
13 the hydrogen sulfide contingency plan that was approved
14 by the Division on May 3rd. Does that
15 contingency plan not cover this injection well?

16 A. This well is not listed as a sour gas CO2
17 injector in that plan. So it will cover this -- it
18 covers the area, but this particular well will -- it will
19 be amended to include this well as a CO2 injector.

20 Q. But the review of the area has already been
21 completed?

22 A. Yes. Our contingency plan covered the entire
23 area.

24 Q. It's my understanding that this injection well
25 will also be placed on the SCADA system that Oxy operates

1 for the North Hobbs Unit?

2 A. That's correct.

3 Q. And would Oxy be willing to work with the
4 Hobbs District Office in determining a retention schedule
5 and providing that information on pressure monitoring, et
6 cetera, to the Division as requested by the Division?

7 A. Yes, we will.

8 Q. Thank you.

9 Now, if I could draw your attention to page 7
10 of Oxy's Exhibit Number 2, the injection wellbore
11 diagram.

12 A. Yes.

13 Q. Is Oxy proposing a dual packer arrangement for
14 this well?

15 A. Yes, I believe that we are.

16 Q. Is that necessary for this operation?

17 A. We believe it is, yes.

18 Q. And would Oxy object to that being expressly
19 approved in the order by the Commission, that dual
20 packer?

21 A. No, we would not.

22 Q. If I could now draw your attention to page 21
23 of that same exhibit. This is the chemical analysis of
24 the produced water; is that correct?

25 A. That's correct.

1 Q. I see that hydrogen sulfide was one of the
2 constituents analyzed; is that correct?

3 A. It's listed here, but there's -- I mean there
4 are no -- let me orient myself. Oh, yes, it is. I'm
5 sorry. Yes, it is.

6 Q. What does this mean, do you know? I see
7 hydrogen sulfide and milligrams per liter and the
8 equivalent weight. Does this mean there's already some
9 hydrogen sulfide present in the produced water?

10 A. There will be some trace amounts of hydrogen
11 sulfide in the produced water, yes, because it's produced
12 back with the hydrocarbons.

13 Q. And that's from the San Andres-Grayburg, the
14 authorized injection interval?

15 A. Yes.

16 Q. Ms. Montgomery, have you had the opportunity
17 to review Will Jones' prefiled testimony for this case?

18 A. I have.

19 Q. Does Oxy have any objection to the
20 recommendations that Mr. Jones set forth in his
21 testimony? Specifically I would draw your attention to
22 page 2, paragraphs G and I.

23 A. We're fine with that.

24 Q. Also on page 4, the request included in the
25 Phase 1 area?

1 A. We agree.

2 Q. Then my final question is about MITs. Does
3 the current North Hobbs permit set out the MIT period for
4 injection wells; do you know?

5 A. I'm not sure what that schedule is for the
6 Hobbs Unit.

7 Q. I don't have the order in front of me, either.
8 If I may have -- go ahead, Ms. Montgomery.

9 A. I don't know that the order prescribes it. I
10 don't know.

11 Q. Does Oxy have a proposal for the MIT schedule
12 for this well?

13 A. I don't have a proposal.

14 Q. Would Oxy be willing to work with the Hobbs
15 District Office to set forth a schedule for MITs?

16 A. Yes, we would.

17 MS. GERHOLT: Thank you. I have no
18 further questions of this witness.

19 CHAIRMAN BAILEY: Commissioner Warnell?

20 EXAMINATION

21 BY COMMISSIONER WARNELL:

22 Q. Let's go ahead and start where Ms. Gerholt
23 started on page 7. That well was drilled in 1935?

24 A. Yes, sir.

25 Q. Do you know what the TD was on that well in

1 1935? Was this deepened at a later date?

2 A. I don't know the answer to that.

3 Q. Your proposal is to drill a little bit deeper
4 and go down to 4,365?

5 A. Yes.

6 Q. That will basically be open hole from 4,299 to
7 the new TD?

8 A. Yes, that's correct.

9 Q. Okay. I wanted to make sure I was reading
10 that right.

11 And then if we can go next to page 21. I was
12 surprised to see that the date of this sample was 2005.

13 A. Yes.

14 Q. Any reason we didn't get a more current
15 sample?

16 A. I don't know the answer to that. Although it
17 would not have substantially changed the water that we
18 produce.

19 Q. Then if we go over to page 22 and page 23, now
20 I'm really getting surprised because these sample dates
21 are May of 2000.

22 A. That's fresh water?

23 Q. Um-hum. Same argument?

24 A. Well, the fresh water -- it would be the same
25 argument. But the fresh water -- it's a baseline that

1 you take this fresh water from, so this would still be
2 considered a baseline.

3 COMMISSIONER WARNELL: I have no more
4 questions.

5 CHAIRMAN BAILEY: Commissioner Balch?

6 EXAMINATION

7 BY COMMISSIONER BALCH:

8 Q. Good afternoon, Ms. Montgomery.

9 My map is pretty washed out, so I was hoping
10 you might be able to show me the production pattern
11 associated with the new injection well.

12 A. Mine is pretty washed out also. As I
13 understand from our production engineer, it's a five-spot
14 40-acre pattern. So you'll have an injection in the
15 middle and you'll have your producers surrounding it.
16 We've got a new drill producer that's not shown. It's
17 the one that we incorporated here.

18 Q. Where is that going to be located at?

19 A. They're within the unit boundary. Here in
20 Section 13, just north of 431 -- I don't have the exact
21 location. The exact location is here, but it's hard for
22 me to locate it.

23 Q. There is one north of 431?

24 A. It's north of 431.

25 Q. And within the boundary of the unit?

1 A. Yes.

2 Q. Then the other -- I'm guessing the 33 well?

3 A. Yes.

4 Q. The 34 well?

5 A. 833 is in Section 18, so that's just on the
6 other side.

7 Q. Okay. So what are the other two production
8 wells?

9 A. It's hard to see on this map. You have 341.
10 That's located just to the southwest.

11 Can you read that on yours?

12 Q. I can read a 34.

13 A. Yeah, that's one. Then we also have 645, and
14 that's to the south of it. Then we have -- so those are
15 the two that we have listed. Plus we also have listed
16 331, and then the 832.

17 COMMISSIONER BALCH: Thank you. That's
18 all.

19 EXAMINATION

20 BY CHAIRMAN BAILEY:

21 Q. I'm curious, looking at the configuration, why
22 were these 80 acres not included in Phase 1 to begin
23 with?

24 A. It's my understanding that when initially they
25 went to hearing for the Phase 1 area, it was to be

1 included along the boundary. However, there are a few
2 wells to the north that they didn't have enough
3 information from in the area of review, so they decided
4 to not include this pattern. Those wells are on our area
5 of review and have since been plugged and abandoned, I
6 believe, in 2004. So they are included in this area of
7 review now.

8 Q. On page 30 of Exhibit 2, the listing of all
9 the people that were notified, the mineral interest
10 owners, do you know what "u/w/o" means? On the left-hand
11 column, the fourth name down, "Trust u/w/o Kathleen
12 Cone"?

13 A. I don't know the answer to that. These
14 addresses were compiled by our Land Department, and I can
15 certainly find an answer to that. But I don't know what
16 that means.

17 Q. I'm just curious because in the previous case,
18 page 2 of 3 under Tab 14, we have Kathleen Cone, Kathleen
19 M. Cone and Kenneth G. Cone, where addresss were not
20 found, but yet this list has addresss for them. One of
21 those left hand and right hand maybe not sharing
22 information?

23 A. Yeah. I don't know.

24 CHAIRMAN BAILEY: It's possibly important
25 in your distributions.

1 Those are the questions I have.

2 Do you have any redirect?

3 MR. RANKIN: I do, Madam Chair. I'm just
4 looking to make sure I see where you're indicating the
5 addresses.

6 CHAIRMAN BAILEY: On page 30, it says,
7 "Trust u/w/o Kathleen Cone fbo Children of Kenneth Cone."

8 MR. RANKIN: Yes.

9 CHAIRMAN BAILEY: And then on the
10 right-hand column, it says, "Trust u/w/o Kathleen Cone
11 fbo Children of Clifford Cone." And then we have quite a
12 few cones which are scattered in Oklahoma, Texas and
13 Arkansas.

14 MR. RANKIN: Correct. You were indicating
15 about a lack of an address?

16 CHAIRMAN BAILEY: In the previous case
17 that we just heard today.

18 MR. RANKIN: I'm sorry. I missed that
19 comment.

20 CHAIRMAN BAILEY: On page 23 under Tab 14
21 of the previous case. Names that caught my eye. Let's
22 put it that way.

23 MR. RANKIN: Madam Chair, just a few
24 comments before I ask my redirect. If the Commission
25 would request, we would be happy to provide some updated

1 water samples of the produced water, as well as the fresh
2 water samples.

3 However, I think our position or feeling is on
4 the fresh water samples, those are essentially a
5 baseline. But if you would like an updated produced
6 water sample, I think that's something we could provide,
7 if requested.

8 And if the Commission has additional questions
9 about the five-spot production pattern, the production
10 engineer is in the audience. If you would like to ask
11 questions of him on the production pattern, he will be
12 happy to --

13 COMMISSIONER BALCH: I mainly wanted to
14 make sure that there was something to intervene between
15 the injection wells and the boundary.

16 MR. RANKIN: Well Number 832, as I
17 understand, is that well.

18 On my redirect, I have one point to make that
19 I don't think you drew in the testimony.

20 REDIRECT EXAMINATION

21 BY MR. RANKIN:

22 Q. Ms. Montgomery, can you turn to page 10 once
23 again of Exhibit 2?

24 A. (Witness complies.)

25 Q. In your earlier testimony about this map, the

1 area of review, you described that the wells with the
2 circles around them are the injection wells; is that
3 correct?

4 A. Yes.

5 Q. Which indicates that Well 431 is an injection
6 well?

7 A. Yes.

8 Q. But also Well 331, as indicated on this map,
9 is an injection well; is that correct?

10 A. As indicated on the map.

11 Q. But since this map has been prepared, Oxy has
12 since converted that well from injection to production;
13 is that correct?

14 A. Correct.

15 Q. So that Well 331 constitutes the northwest
16 quarter of what would be the five-spot pattern for that
17 pattern --

18 A. Yes, that's correct.

19 Q. -- for production. Thank you.

20 MR. RANKIN: Madam Chair, one other point
21 that I neglected to ask for, and that is when I asked for
22 administrative notice to be taken of the previous case in
23 which the geology was provided, I think it's Case 12271,
24 I'd also ask that the Commission take administrative
25 notice of the geology testimony and exhibits in Case

1 14981. In that case, Mr. Stillwell provided testimony
2 and exhibits indicating that the geologic structure is
3 continuous from the North Hobbs to the South Hobbs.

4 CHAIRMAN BAILEY: And a lot easier to
5 access for the Commissioners.

6 MS. GERHOLT: The Division does not
7 object.

8 Q. (By Mr. Rankin) One other quick question,
9 just to touch all my bases.

10 Ms. Montgomery, on page 17 of Exhibit Number
11 2, is this the wellbore schematic for the Rice Number 2
12 Well?

13 A. Yes.

14 Q. That is -- flipping back to page 10, that's
15 one of the wells that was just to the north of the
16 proposed Phase 1 expansion area?

17 A. That's correct.

18 Q. And just to the left of that on the same map
19 is the Rice Number 1 Well -- I'm sorry. Rice Number 1 is
20 on the right and Rice Number 2 is on the left; is that
21 correct?

22 A. That's correct.

23 Q. And the Rice Number 1 Well, the wellbore
24 schematic is on page 15 of the C-108?

25 A. Yes.

1 Q. So both of those wells are included in your
2 area of review and in your wellbore schematic diagrams?

3 A. Yes, they are.

4 MR. RANKIN: Madam Chair, I believe you
5 were asking about those two wells; is that correct? Had
6 you been asking about them before? No?

7 Well, they're in there.

8 Commissioner Balch, you were asking about
9 them; is that correct?

10 COMMISSIONER BALCH: I'm sorry?

11 MR. RANKIN: Rice Number 1 and Rice Number
12 2, just to the north of the expansion.

13 COMMISSIONER BALCH: And they're in the
14 table here. I found them.

15 Q. (By Mr. Rankin) Those were plugged and
16 abandoned, according to the wellbore schematics; is that
17 correct?

18 A. That's correct.

19 MR. RANKIN: I have no further questions
20 on redirect.

21 CHAIRMAN BAILEY: Do you have a closing
22 statement or do you have another witness?

23 MR. RANKIN: No further witnesses. Unless
24 the Commission would like to call our production engineer
25 to ask about the production pattern.

1 CHAIRMAN BAILEY: Commissioner Balch?

2 COMMISSIONER BALCH: My question was
3 answered.

4 MR. RANKIN: I have no closing. I'll
5 stand on my opening statement.

6 MS. GERHOLT: Madam Chair, the Division
7 would offer Exhibit A at this time as evidence.

8 CHAIRMAN BAILEY: Any objection?

9 MR. RANKIN: No objection.

10 CHAIRMAN BAILEY: It is accepted then.
11 Do you have a closing comment?

12 (OCD Exhibit A was admitted.)

13 MS. GERHOLT: No, Madam Chair.

14 CHAIRMAN BAILEY: Are we ready to go into
15 closed session to deliberate this case?

16 COMMISSIONER BALCH: I'll make a motion to
17 go into closed session.

18 COMMISSIONER WARNELL: I'll second that
19 motion.

20 CHAIRMAN BAILEY: In conformance with
21 Statute 10-15-1 in the Commission Resolution on open
22 meetings, we will go into closed session for the purpose
23 of deliberating this case only.

24 If you would clear the room? And it may not
25 take us very long.

1 (Whereupon the Commission went into executive session.)

2 CHAIRMAN BAILEY: Do I hear a motion for
3 the Commission to go back on the record?

4 COMMISSIONER WARNELL: I'll make the
5 motion.

6 COMMISSIONER BALCH: I'll second.

7 CHAIRMAN BAILEY: All those in favor?

8 The only thing discussed during the closed
9 session deliberation was Case 14976, and we did reach
10 agreement.

11 Counsel, would you like to explain what our
12 decisions were?

13 MR. BRANCARD: Madam Chair, the Commission
14 proposes to accept the request to expand the Phase 1 area
15 under the North Hobbs Grayburg-San Andres tertiary
16 recovery project to include the north half of the
17 southeast quarter, Section 13, Township 18 South, Range
18 37 East.

19 With that the Commission also approves the
20 authority to inject CO2 and produced gases into the well
21 identified in the proposal.

22 The Commission has a series of conditions to
23 be placed on this injection authority to be consistent
24 with its prior decisions on the Hobbs field and, also,
25 taking into account the age of this particular well.

1 The Commission proposes that prior to
2 injection, there be a cement bond log and mechanical
3 integrity test done on this well, that a mechanical
4 integrity test be performed every two years afterwards,
5 that the well use corrosion inhibitors and biocides and
6 annular fluid, that there be an annual Bradenhead test.
7 The Commission approves the idea of using a dual
8 bottomhole packer in this well.

9 In addition the Commission requests that the
10 H2S plan for this unit be amended to include this well,
11 and that the Division's proposal that Occidental make
12 available its SCADA data to the Division based on
13 consultation with the Division District Office be
14 approved. I think I've covered it.

15 COMMISSIONER BALCH: Along with the H2S
16 contingency plan, that also includes the additional
17 producers, I would presume.

18 MR. BRANCARD: The H2S contingency plan
19 would be this well and any producer wells.

20 COMMISSIONER BALCH: New producing wells.

21 MR. BRANCARD: New producing wells.

22 CHAIRMAN BAILEY: The applicant requested
23 immediate authorization for injection. However, these
24 terms of the order must be conducted for any tests that
25 are required prior to injection.

1 Would you like a draft order from the
2 applicant to be signed at the next regularly-scheduled
3 Commission hearing, which is June 6th?

4 MR. BRANCARD: Yes, that would be
5 wonderful. But that would require you to get me an order
6 in about two weeks.

7 MR. RANKIN: I will do it.

8 CHAIRMAN BAILEY: Is there anything else
9 that we need to discuss concerning this case or the
10 previous case?

11 MS. GERHOLT: Not from the Division.

12 MR. RANKIN: No, ma'am. Thank you.

13 CHAIRMAN BAILEY: Then do I hear a motion
14 for this hearing to be concluded?

15 COMMISSIONER BALCH: I will make a motion
16 to conclude the hearing.

17 COMMISSIONER WARNELL: Second.

18 CHAIRMAN BAILEY: All those in favor?
19 Thank you very much.

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REPORTER'S CERTIFICATE

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I, JACQUELINE R. LUJAN, New Mexico CCR #91, DO
HEREBY CERTIFY that on May 10, 2013, proceedings in the
above captioned case were taken before me and that I did
report in stenographic shorthand the proceedings set
forth herein, and the foregoing pages are a true and
correct transcription to the best of my ability.

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

WITNESS MY HAND this 23rd day of May, 2013.


Jacqueline R. Lujan, CCR #91
Expires: 12/31/2013