		ige 2
1	I N D E X	
2	Page	
3	APPLICANT'S WITNESSES:	
4	ROBERT PULLEN Direct Examination by Mr. Larson 3	
5	LEE WINN	
6	Direct Examination by Mr. Larson 11	
7	JAMES HULING Direct Examination by Mr. Larson 29	
8	Direct Examination by Mr. Earbon 25	
9		
10	EXHIBITS	
11		
12	APPLICANT'S EXHIBITS:	
13	Exhibit Nos. 1 - 3	
14	Exhibit Nos. 4 - 6 23 Exhibit No. 7 45	
15		
16	COURT REPORTER'S CERTIFICATE 61	
17		
18		
19	APPEARANCES	
20		
21	FOR THE APPLICANT: GARY W. LARSON, ESQ.	
22	Hinkle, Hensley, Shanor & Martin, LLP	
23	P. O. Box 2068 Santa Fe, NM 87504	
24		
25		

- 1 HEARING EXAMINER: At this time we call Case
- 2 No. 14494, Application of VPR Operating, LLC to Establish
- 3 a Waterflood project in the Sawyer West Field in Lea,
- 4 County, New Mexico. Call for appearances.
- 5 MR. LARSON: Good morning, Mr. Examiner, Larry
- 6 Larson with the law firm of Hinkle, Hensley, Shanor and
- 7 Martin on behalf of VPR operating. I have three
- 8 witnesses.
- 9 HEARING EXAMINER: Any other appearances? Okay.
- 10 At this point, will the witnesses stand up, state your
- 11 names, and then be sworn.
- MS. WINN: Lee Winn.
- MR. JAMES HULING: James Huling.
- MR. PULLEN: Robert Pullen.
- 15 (Note: The witnesses were placed under
- oath by the Court Reporter.
- 17 ROBERT PULLEN,
- the witness herein, after first being duly sworn
- 19 upon his oath, was examined and testified as follows:
- 20 DIRECT EXAMINATION
- 21 BY MR. LARSON:
- Q. Good morning, Mr. Pullen, would you please state
- 23 your full name for the record?
- 24 A. Robert B. Pullen.
- 25 Q. And where do you reside?

- 1 A. Austin, Texas.
- Q. And by whom are you employed and in what
- 3 capacity?
- A. VPR Operating in Austin, Texas, and I'm the
- 5 Senior Vice President.
- 6 Q. Could you briefly summarize your educational,
- 7 and oil and gas professional background?
- 8 A. I was born in Dallas, Texas. I was educated in
- 9 South Carolina at the College of Charleston, majoring in
- 10 business and administration classes.
- 11 First time I got in the oil and gas business was
- in 1986. I bought some properties out of bankruptcy from
- 13 the banks. Worked in every sector from operations, to the
- 14 service industry, drilling rigs, and have been with my
- 15 current partner and group for about the past 20 years.
- Q. And with this current partner, do you focus on
- 17 land matters?
- 18 A. I do.
- 19 Q. And have you ever testified before a regulatory
- 20 agency with regulatory authority over gas and oil
- 21 operations?
- 22 A. I have, the Texas Railroad Commission.
- Q. And did the Railroad Commission qualify you as
- 24 an expert in land matters?
- 25 A. They did.

- 1 MR. LARSON: Mr. Examiner, I move for the
- 2 qualification of Mr. Pullen as an expert in land matters.
- 3 HEARING EXAMINER: In addition to being
- 4 qualified before the Railroad Commission, are you a
- 5 certified public landman?
- 6 THE WITNESS: No, sir.
- 7 HEARING EXAMINER: Okay. Yes, he's qualified to
- 8 testify.
- 9 Q. And can you briefly tell the Examiner the
- 10 history of VPR Operating, which is a recently formed New
- 11 Mexico limited liability company?
- 12 A. It's the operating arm for Victory Park
- 13 Resources, Corp., which maintains properties in New Mexico
- 14 and Oklahoma.
- 15 And we use it to do all the fieldwork,
- 16 contracting with any of the service companies, engineers,
- 17 the geologists, it's the operating arm, so to speak, for
- 18 Victory Park Resources.
- 19 Q. And those operations are focused on New Mexico?
- 20 A. The vast majority of them, yes.
- 21 Q. And when did VPR Operating acquire the leases in
- 22 the Sawyer field?
- A. About a year ago in roughly May of '09.
- Q. And is the Sawyer field unitized?
- A. It is not, not at this time.

- Q. And what is VPR's long-range plan for the Sawyer
- 2 field?
- A. Well, we're here in front of the OCD today to
- 4 ask for permission to start this water flood. Our studies
- 5 indicate that the San Andres in this area is an ideal
- 6 candidate for secondary recovery.
- 7 And we're going to institute the waterflood, and
- 8 then gradually build it out moving toward unitization of a
- 9 lot of our acreage positions out there, maybe some
- 10 additional.
- 11 Q. And do you have primary management
- 12 responsibility for the operations in the Sawyer field?
- 13 A. I do.
- Q. And did you have primary management
- 15 responsibility for the preparation and submission of VPR's
- 16 application that's the subject of this hearing today?
- 17 A. I did.
- 18 Q. And who prepared the application on behalf of
- 19 VPR?
- 20 A. James Hulling did most of the work, but it was
- 21 kind of a collaborative effort between my office,
- 22 Mr. Hulling, and Ms. Winn.
- Q. And Ms. Winn is a consultant geologist?
- A. She is. And your firm.
- Q. Yes. I'd direct your attention to VPR Exhibit

- 1 No. 1.
- A. Yes.
- 3 Q. And who prepared this map?
- 4 A. Again, it was kind of a collaborative effort.
- 5 James and Lee prepared it under my direction.
- Q. And does the blue shaded area of the map that's
- 7 Exhibit 1 accurately depict the project area identified in
- 8 the application?
- 9 A. It does, yes.
- 10 Q. And where is this project area located?
- 11 A. Township 9 South, Range 37 East, I believe, and
- 12 partial Sections 27 and 28.
- Q. And who is the surface owner of the project
- 14 area?
- 15 A. Of the project area, Mr. Michael Harton.
- 16 Q. So it's all fee ownership?
- 17 A. Yes, sir.
- 18 Q. And what is VPR's working interest in the
- 19 project area?
- 20 A. Minimum is about 85 percent. It may have one
- 21 partner that owns 15 percent. There's a couple very small
- 22 1 and 2 percent working interest owners, but we basically
- 23 represent one hundred percent of the working interest.
- Q. And referring back to Exhibit 1, we see six
- 25 triangular shapes around the outer edge of the blue shaded

- 1 area. Are those the wells that VPR proposes to convert
- 2 for injection?
- 3 A. That's correct.
- Q. And there are two red dots in the middle, are
- 5 those in-fill wells -- in-fill producing wells, I should
- 6 say.
- 7 A. Yes. The ones marked inside the shaded area are
- 8 recent drills. We drilled those last year, and those will
- 9 be the producers.
- 10 Q. So the proposed waterflood wells are on a five
- 11 spot pattern?
- 12 A. That's correct.
- Q. Okay. And has VPR's management evaluated the
- 14 historical oil production in the project area?
- 15 A. We have.
- Q. And has Management also assessed the potential
- 17 oil in place of the project?
- 18 A. Yes, sir.
- 19 Q. And based on those evaluations and Management's
- 20 cost-benefit analysis of the recoverable oil in the
- 21 project area and the cost associated with the developing
- 22 waterflood, does VPR's management believe that the
- 23 proposed waterflood is economically viable?
- A. We do. We think a concerted development effort
- 25 and moving to full secondary recovery operations can

- 1 exploit a good portion of these reserves in place there.
- Q. And will VPR be the sole operator of the
- 3 proposed waterflood?
- A. We will.
- 5 Q. And I'll next refer your attention to Exhibit 2.
- 6 Who prepared this map?
- 7 A. I believe Mr. Huling prepared this.
- 8 Q. And did the circles that are identified as
- 9 radii, those are the half mile radii from each of the
- 10 proposed injection wells?
- 11 A. Right. Identifies the notice area, I believe.
- 12 O. And did VPR send written notices of the
- 13 application and today's hearing to all affected areas
- 14 within each one-half mile radius?
- 15 A. We did.
- Q. And how did you identify the names and addresses
- 17 of those affected persons within those areas?
- 18 A. We had done extensive title work out there and
- 19 we retained the services of a certified petroleum landman,
- 20 Mr. Charlie House out of Midland who's done a lot of work
- 21 in this area and contracted with him to identify everybody
- 22 within the notice area and prepare that list.
- Q. And did Mr. House do his work under your
- 24 direction?
- 25 A. He did.

- 1 Q. And once Mr. House provided you with a list of
- 2 names and addresses, did you direct me as VPR's counsel to
- 3 send certified mailed notices to all the affected persons?
- 4 A. I did, yes.
- 5 Q. I next refer to you Exhibit No. 3. Would you
- 6 identify this exhibit?
- 7 A. It's a copy of the correspondence that went out
- 8 to everybody in the notice area.
- 9 Q. And also, it includes the registered mail return
- 10 receipts?
- 11 A. It does.
- 12 Q. And these are true and correct copies of the
- 13 notice letters and return receipts?
- 14 A. They are.
- Q. And did all of the persons notified sign and
- 16 return the certified mail receipts?
- 17 A. To my knowledge, we had a hundred percent
- 18 returned, yes.
- 19 Q. And if the Division approves VPR's application,
- 20 do you request that any further applications involving the
- 21 waterflood be approved administratively?
- 22 A. Yes, I do.
- Q. And in your opinion, will the granting of VPR's
- 24 application serve the interests of preventing waste and
- 25 protecting correlative rights?

- 1 A. I do believe that, yes.
- MR. LARSON: Mr. Examiner, at this time, I move
- 3 the admission of Exhibits 1, 2 and 3.
- 4 HEARING EXAMINER: Exhibits 1, 2 and 3 are
- 5 admitted.
- 6 MR. LARSON: And I pass Mr. Pulling at this
- 7 time.
- 8 HEARING EXAMINER: Thank you.
- 9 MR. BROOKS: I don't believe I have any
- 10 questions.
- 11 HEARING EXAMINER: Okay. Mr. Pullen, let's
- 12 start with -- when I read the application --
- THE WITNESS: Yes, sir.
- 14 HEARING EXAMINER: The application described the
- 15 land in this waterflood project, I found it to be in the
- 16 north half of Section 27 and all of Section 28 from the
- 17 descriptions.
- 18 Why is it necessary to put it in the way you put
- 19 it in the application? Look at the application where you
- 20 join all of them and you concluded the north half of 27
- 21 and then all of 38.
- So is there a reason why, if we go back to the
- 23 application, for example, you start with northwest
- 24 northwest quarter, southwest northwest quarter, east half
- of northwest quarter, and then the other one, which

- 1 completes Section 27 in the north half. And then you
- 2 describe it again -- that's all of section 28.
- 3 So is there any reason why you put it in there
- 4 like that? I want to understand why you put it in that
- 5 form. Because if you read it, the flood description is in
- 6 the north half of 27, the second description is all of 28.
- 7 Is there it any reason why you put it in that way?
- 8 THE WITNESS: We can discuss that maybe with
- 9 Mr. Huling, but one of the things we wanted to do is
- 10 concentrate it in one lease area.
- It's all contained within this SFPRR lease. You
- 12 know, one set of mineral owners, one landowner, and that
- 13 thing.
- 14 The physical descriptions of how it was in the
- 15 application -- I may have to consult with Mr. Huling on
- 16 that.
- 17 HEARING EXAMINER: A it's not really -- I just
- 18 want to understand. Because if I'm doing that, I would
- 19 say north half of Section 27, and all of 28, you know.
- 20 But since you broke it down there, I wanted to
- 21 understand why you broke it down the way you did, you
- 22 know. Because they're are tracks that need to -- I don't
- 23 know. But I just wanted to understand it.
- 24 Because when I tried to piece it together, I
- 25 came out with the north half of 27 and all of 28. And if

- 1 you read through -- And so it's not really anything that
- 2 impacts on this hearing, but I wanted to understand why
- 3 you did that.
- 4 There must be a reason why somebody did that.
- 5 So it's not really anything very important, but I just
- 6 wanted to understand that.
- 7 THE WITNESS: I know the focus was for us to
- 8 stay in on that same SFPRR. I think one of the things
- 9 we're going to ask for is the ability to expand the
- 10 waterflood, and maybe that description helps in that
- 11 initial expansion.
- 12 HEARING EXAMINER: Okay. Maybe Mr. Huling will
- answer that question when he comes to the stand. This
- 14 waterflood is not unitized, right?
- 15 THE WITNESS: That's correct.
- 16 HEARING EXAMINER: Okay. And I thought you
- 17 mentioned that sometimes you might be unitized.
- 18 THE WITNESS: Absolutely. You know, in our long
- 19 range plans, should we get the kind of results we expect
- 20 here, we will move toward unitization of a bigger acreage
- 21 position.
- 22 HEARING EXAMINER: So you're trying to do this
- 23 just to conduct a pilot and see how you're going to --
- 24 THE WITNESS: Yes.
- 25 HEARING EXAMINER: If you go back to Exhibit 1,

- 1 I see a red outline. Is that the solid waste?
- THE WITNESS: It's kind of indicative of our
- 3 holdings out there in kind of a rough sketch of what a
- 4 potential unit would look like.
- 5 HEARING EXAMINER: Okay.
- THE WITNESS: I think once as we expand this
- 7 initial area, we may be able to get some other areas on
- 8 these boundaries that we don't currently own. We may find
- 9 that certain areas -- And I think some of our geology
- 10 tends to lean this way.
- 11 There are areas that are tighter that may not be
- 12 quite as good waterflood candidates that we may not
- include in the unit, so we'll be able to better define a
- 14 specific unit as we establish it and draw it out.
- 15 HEARING EXAMINER: So the red outline is
- 16 currently what VPR, you know, having --
- 17 THE WITNESS: It's a basic outline of the
- 18 holdings, yes, sir.
- 19 HEARING EXAMINER: Okay. And then you said that
- 20 you might -- apart from those interest, you want to
- 21 unitize the whole area?
- THE WITNESS: There could potentially be some
- 23 added within that area that don't become part of the unit.
- 24 HEARING EXAMINER: Okay. Now, you said 85
- 25 percent is VPR, 15 percent is who?

- 1 THE WITNESS: A gentleman here in Santa Fe, Leon
- 2 Romero. Good partner and solidly behind what we're trying
- 3 to do.
- 4 HEARING EXAMINER: Okay. This 15 percent -- I
- 5 don't see it here, but is there a list of the people you
- 6 notified on this? I want to see a list of all the people
- 7 you notified, but I think I can find it from --
- 8 THE WITNESS: I think you could take the copies
- 9 and make a list, but I think that is everybody. That's an
- 10 entire list.
- 11 HEARING EXAMINER: Yeah, that's what I'm trying
- 12 to find out.
- 13 THE WITNESS: Yes, sir. That depicts the entire
- 14 list. If you need us to --
- 15 HEARING EXAMINER: No, you don't need to, but I
- 16 wanted to make sure.
- 17 THE WITNESS: Yes, sir, it is the entire list.
- 18 HEARING EXAMINER: I want to make sure you
- 19 notified everybody that is supposed to get notice, no
- 20 matter what, if they do a form letter and then give that
- 21 form letter to everybody, and to write a list. But, you
- 22 know, if you do it individually, that's also acceptable.
- THE WITNESS: Yes.
- 24 HEARING EXAMINER: Okay. And the lines here, is
- 25 all fee, no federal no state?

- THE WITNESS: There's a little bit of -- within
- 2 the initial area, it's all fee. When we start to expand
- 3 it, there's some state lands, but they don't impact, I
- 4 think, this application on what we're trying to do today.
- 5 But we do have some state lands here to the south and I
- 6 think a little to the north.
- 7 HEARING EXAMINER: Okay, so all the red lines
- 8 are fee currently?
- 9 THE WITNESS: Inside this area, yes, sir.
- 10 HEARING EXAMINER: Okay. I just want to make
- 11 sure. This man, Mr. Harton, he called me yesterday. Did
- 12 you have a discussion with him?
- 13 THE WITNESS: Yes, sir. I have had
- 14 discussion -- I think kind of what led to that and the
- 15 withdrawal is, I went out and sat down with Mr. Harton, as
- 16 I had a number of times.
- 17 I think going in, when he got the letter, he
- 18 didn't have a lot of detail on it or -- I think he was
- 19 just kind of anxious to have somebody come out and kind of
- 20 walk him through it.
- 21 I did that last week. They had told us that
- 22 they -- Because I think that was Wednesday or Thursday,
- 23 and it's kind of a deadline for the opposition. He told
- 24 me they were going to file, and I said, you know, feel
- 25 free, but make sure you protect our rights and whatever

- 1 you think you need to do.
- 2 HEARING EXAMINER: Yes.
- THE WITNESS: But once I kind of went over it,
- 4 we talked very specifically about where the services will
- 5 stay and where our facilities will be. We just drilled
- 6 the two wells within the -- inside the five spot patterns
- 7 were drilled last year. We have agreed to just expand one
- 8 of those pads to put the facility on.
- 9 HEARING EXAMINER: Yeah.
- 10 THE WITNESS: So I think once we walked through
- 11 it, he was fine.
- 12 HEARING EXAMINER: Okay.
- 13 THE WITNESS: And that's what led to the
- 14 withdrawal.
- 15 HEARING EXAMINER: Okay. I just wanted to
- 16 mention it for the record. Because he called me yesterday
- 17 and said, "I'm withdrawing my objection."
- 18 THE WITNESS: Yeah. We saw it and we got a copy
- 19 of the letter, I think, that he sent.
- 20 HEARING EXAMINER: Okay. Very good. If there's
- 21 nothing more, you may be excused. You may be recalled if
- 22 there is a concern later on that we need to know.
- THE WITNESS: Yes, sir. Thank you, sir.
- MR. LARSON: Next I'd call Lee Winn.

25

Page 18

- 1 LEE WINN,
- the witness herein, after first being duly sworn
- 3 upon her oath, was examined and testified as follows:
- 4 DIRECT EXAMINATION
- 5 BY MR. LARSON:
- Q. Will you state your full name for the record?
- 7 A. Lee Winn.
- 8 Q. And where do you reside?
- 9 A. Santa Fe, New Mexico.
- 10 Q. And what is the name of your business?
- 11 A. Lee Winn Consulting Geologist, LLC.
- 12 Q. Is that also based in Santa Fe?
- 13 A. Yes.
- Q. And Mr. Pullen testified that you had a role in
- the preparation of VPR's application; is that correct?
- 16 A. Yes.
- 17 Q. In connection with Mr. Huling?
- 18 A. Yes.
- 19 Q. And prior to working on VPR's application, did
- 20 you have familiarity with the Sawyer West field and the
- 21 Slaughter zone in the San Andres formation?
- 22 A. Yes, I did. I've worked in the Slaughter zone
- 23 in the '80s in Texas in the Levelland field which is in
- 24 Kaufman County, and also in New Mexico where it extends
- 25 through Roosevelt northerly, and Chaves Counties over

- 1 to -- I think the western boundary is -- the biggest field
- 2 to the west is the Kato field.
- Q. And could you briefly summarize your educational
- 4 and oil and gas professional background?
- 5 A. I have a bachelor of science degree in geology
- 6 from Sul Ross University. I received that in 1983. I
- 7 also have a master of science degree in geology from the
- 8 University, of Texas when I received in 1994.
- 9 I've worked for 27 years as a geologist, 12 of
- 10 which has been as a consulting geologist specializing in
- 11 the Permian basin in New Mexico and Texas.
- 12 Q. And are you an American Association of Petroleum
- 13 Geologist certified professional geologist?
- 14 A. Certified Petroleum Geologist No. 5910.
- 15 Q. Okay.
- MR. LARSON: Mr. Examiner, I'd move for the
- 17 qualification of Ms. Winn as an expert petroleum geologist
- 18 for the purpose of this hearing.
- 19 HEARING EXAMINER: Ms. Winn is so qualified.
- 20 MR. LARSON: Thank you, Mr. Examine.
- Q. Could you please describe the geology of the
- 22 formation that VPR has proposed to inject into?
- 23 A. The Slaughter trend of the San Andres
- 24 formation's lithology consists of interbedded anhydrite
- 25 and gray to brown medium to coarsely crystalline dolomite.

- 1 Styolites and vuggy porosity are present related
- 2 to the secondary porosity development per dolomitization.
- 3 The dolomite also contains scarred inclusions of gray and
- 4 white anhydrite with intervals of thin argillaceous
- 5 sediments present throughout the section.
- 6 HEARING EXAMINER: And what does that mean?
- 7 THE WITNESS: It means it's dolomite with some
- 8 sand it in. It's an anhydrite.
- 9 HEARING EXAMINER: Okay, so does that mean that
- 10 there's production from there, potential production from
- 11 that sand analysis, is that what you're saying?
- 12 THE WITNESS: I'd say the sand is not the
- 13 protective interval due to the dolomitization. The sand
- 14 was windblown frosted grain sands from the savkha
- 15 environment, the evaporated -- that reef environment
- 16 that's like a mud flat.
- 17 HEARING EXAMINER: Okay, go ahead.
- 18 O. And what's the estimated thickness of the
- 19 Slaughter zone?
- 20 A. The upper porosity zone is approximately 80 feet
- 21 thick.
- Q. And what's the depth of the zone?
- 23 A. The depth in this field ranges from 930 feet to
- 24 1,050 feet below mean sea level, or from 1,920 feet to
- 25 5,030 feet below the land surface.

- Q. And I'd direct your attention to Exhibit No. 4.
- 2 Could you identify that for the record, please?
- 3 A. This is a type log from the field.
- Q. And did you prepare this exhibit?
- 5 A. Yes.
- 6 Q. And what's it intended to depict?
- 7 A. It's intended to depict the Guadalupian strata
- 8 that includes the San Andres -- down to the San Andres
- 9 productive interval.
- 10 Q. And I next direct your attention to Exhibit
- 11 No. 5. Could you identify this for the record?
- 12 A. This is a structural cross-section across the
- interval that we proposed to waterflood.
- Q. And did you prepare this exhibit?
- 15 A. Yes.
- 16 Q. And in your professional opinion, is the
- 17 injection zone continuous?
- 18 A. Yes. It's a stratigraphic formation.
- 19 Q. And is the horizontal continuity of the zone
- 20 demonstrated by Exhibit 5 which you've prepared?
- 21 A. Yes.
- 22 Q. And in your opinion, has the reservoir been
- 23 recently defined by previous development?
- 24 A. Yes. Because of historical and recent drilling,
- 25 we've been able to define the subsurface control, and this

- 1 was recently confirmed by our -- by wells drilled last
- 2 year.
- 3 Q. With the two in-fill wells?
- 4 A. Yes.
- Q. And I next refer your attention to Exhibit
- 6 No. 6. Could you identify that, please?
- 7 A. This is a depiction of the zone of injection.
- 8 Q. And did you prepare this exhibit?
- 9 A. Yes.
- 10 Q. And is the zone of injection limited to P-1?
- 11 A. Yes, it is.
- 12 Q. And are there any known faults that might
- 13 connect a fresh water zone with the injection zone?
- 14 A. No, sir.
- Q. And in your opinion, will the fluids injected by
- 16 VPR be confined to the injection zone?
- 17 A. Yes, sir.
- 18 Q. And are you aware of any known water-bearing
- 19 strata in the project area?
- 20 A. There are porous brackish waters that are above
- 21 the San Andres in the Guadalupian, Yates, Seven Rivers,
- 22 and Grayburg formations.
- Q. How about a fresh water formation?
- A. There is a fresh water formation near the
- 25 surface that's part of the high-plains aguifer, and it's

- 1 cased, it's behind casing.
- Q. And what's the approximate depth of the fresh
- 3 water?
- 4 A. I think it's approximately 200 feet.
- 5 HEARING EXAMINER: 200 feet north?
- 6 THE WITNESS: It's -- I'd have to look at the
- 7 application.
- 8 Q. Would Mr. Huling be --
- 9 A. Mr. Huling has the exact depth to.
- 10 Q. SI.
- MR. LARSON: So I can pin that down with
- 12 Mr. Huling, Mr. Examiner.
- 13 HEARING EXAMINER: Okay. I need to know the
- 14 depth of fresh water.
- 15 Q. In your opinion, is there any likelihood of
- 16 fluids impacting this fresh-water zone -- I'm sorry,
- 17 fluids injected by VPR contaminating the fresh water-zone?
- 18 A. No.
- 19 Q. And in your opinion from a geological
- 20 standpoint, is the project area a good candidate for
- 21 waterflooding?
- 22 A. Yes.
- MR. LARSON: Mr. Examiner, I move the admission
- 24 of Exhibits 4, 5, and 6.
- 25 HEARING EXAMINER: Exhibits 4, 5 and 6 are

- 1 admitted.
- 2 MR. LARSON: And I'll pass Ms. Winn.
- 3 HEARING EXAMINER: Thank you.
- 4 MR. BROOKS: No questions.
- 5 HEARING EXAMINER: Okay, Ms. Winn, you said you
- 6 determined the injection interval to be from about 5,000,
- 7 right?
- 8 THE WITNESS: I'm sorry, I didn't hear you.
- 9 HEARING EXAMINER: The injection interval, what
- 10 is the injection interval in these wells, the approximate
- 11 depth?
- 12 THE WITNESS: Between -- Do you want subsea
- 13 or --
- 14 HEARING EXAMINER: What is your ground level
- 15 elevation?
- 16 THE WITNESS: It's approximately 4,500 feet.
- 17 HEARING EXAMINER: Okay, 4,500.
- THE WITNESS: It does say 4,000 feet.
- 19 HEARING EXAMINER: 4,000 feet?
- THE WITNESS: Yeah.
- 21 HEARING EXAMINER: Okay. So if you mention
- 22 going -- you know, subsea, but let's use the -- you know,
- a solid number, 4,000 all the way to 5,000.
- 24 THE WITNESS: Okay. On the injection zone well,
- on that exhibit, it's 3,900 feet. This particular one is

- 1 at 4,948 to 5,025.
- 2 HEARING EXAMINER: Okay. These depths depend on
- 3 injection wells you're talking about. I just want to see
- 4 the upper to mid depths, because that is -- Okay.
- Now, let's go back to the logs that you prepared
- 6 here. I don't know what it says, because I don't see the
- 7 headings to see which one it is. Number one, you don't
- 8 have your headings here.
- 9 THE WITNESS: There's a legend -- Are you
- 10 looking at the --
- 11 HEARING EXAMINER: I'm looking at this, and I
- 12 see something at the bottom, but I can't see what type of
- 13 logs were run. And I can try to see what you're talking
- 14 about on the injection zone. And then on your Exhibit
- 15 No. 5, I'm trying to find out what type of log we have
- 16 there.
- 17 THE WITNESS: Okay, the type log is a density
- 18 neutron log with a gamma ray.
- 19 HEARING EXAMINER: Is it on the upper edge of
- 20 this?
- 21 THE WITNESS: The scales on here --
- 22 HEARING EXAMINER: It might be at the bottom of
- 23 that, I can see that.
- 24 THE WITNESS: Yeah. They're their density
- 25 neutron or just gamma-ray neutron.

- 1 HEARING EXAMINER: Okay, so Exhibit 4 and
- 2 Exhibit 5 are all are density neutron?
- 3 THE WITNESS: This one, the type I used was a
- 4 gamma ray with a density neutron. It was one of the log
- 5 sweeps I had available, and other wells here on the AA
- 6 Prime are gamma-ray neutron, because they were older logs
- 7 in the field.
- 8 HEARING EXAMINER: Are these Schlumberger logs?
- 9 THE WITNESS: They're different companies.
- 10 HEARING EXAMINER: Okay. Can you tell me
- 11 about -- You talk about the formation being continuous.
- 12 You said it is stratigraphic. What do you mean?
- 13 THE WITNESS: Stratigraphic formation is -- it's
- 14 a deposition over a large area typically without a
- 15 structural component. The productive component of a
- 16 stratigraphic formation is based on changes in porosity
- and permeability related to their depositional
- 18 environment.
- 19 HEARING EXAMINER: Okay. It looks like the
- 20 injection is only on P-1. What happened to P-2 and P-3,
- 21 there's nothing happening there?
- 22 THE WITNESS: They're not productive in this
- 23 area.
- 24 HEARING EXAMINER: On only P-1?
- THE WITNESS: Yes.

- 1 HEARING EXAMINER: Do you have an idea about the
- 2 porosity of that area?
- 3 THE WITNESS: I haven't looked at it in detail.
- 4 Usually the P-2 and P-3 produce farther back from the edge
- of the shelf more towards Roosevelt County.
- 6 HEARING EXAMINER: Maybe your engineer would
- 7 know when he comes to the stand. Because I know from your
- 8 deposition from there, you have porosity in this area that
- 9 you're producing from.
- THE WITNESS: Right. Now, the P-2 is about 200
- 11 feet below the bottom of the P-1. And wells I've seen in
- the area don't seem to have porosity in that area.
- 13 HEARING EXAMINER: Okay. And we are talking
- 14 about -- The production zone is the San Andres?
- 15 THE WITNESS: Yes.
- 16 HEARING EXAMINER: Okay. I would like to know
- 17 the depth of fresh water. First of all, is there fresh
- 18 water, and if there is, what are the actual depths of the
- 19 fresh water?
- Because it's our intent to make sure we protect
- 21 them, you, know to see how your injection wells will be
- 22 constructed to protect fresh water.
- First of all, we need to know if there is fresh
- 24 water in the area, and if there are, what are the depths.
- 25 THE WITNESS: Yes, sir. I think Mr. Huling will

- 1 be able to answer that.
- 2 HEARING EXAMINER: Okay, very good. And you
- 3 testified that there are no open faults -- Because I'm
- 4 finding out the question to ask the judge is, no open
- 5 faults or any hazards or connection that injected water
- 6 might migrate upwards in the area?
- 7 THE WITNESS: No, sir.
- 8 HEARING EXAMINER: I mean, you have had a lot of
- 9 experience with this. You made sure you explained this to
- 10 the Environment Department. You worked for the
- 11 Environment Department before?
- 12 THE WITNESS: Yes, sir. I actually didn't
- 13 mention that experience, but I did work for the
- 14 Environment Department for 17 years.
- 15 HEARING EXAMINER: Yeah. That's good
- 16 experience, too. I mean, you worked as a geologist, if I
- 17 could remember.
- 18 THE WITNESS: Yes.
- 19 HEARING EXAMINER: Okay. I was wondering, you
- 20 know, because you didn't mention that. But you have other
- 21 good experiences too.
- THE WITNESS: Thank you.
- HEARING EXAMINER: Okay. I have a question
- 24 here. I think I'd like to deal with the engineer, you
- 25 know. But if there is anything like a geologist or

- 1 landman could answer, if you are still here, we might
- 2 recall you. You may be excused, unless you have anything
- 3 else you'd like to ask.
- 4 MR. LARSON: I have nothing further at this
- 5 time.
- 6 HEARING EXAMINER: Okay, you may be excused.
- 7 MR. LARSON: Mr. Examiner, could I have a couple
- 8 of minutes to confer with my engineer before I call him up
- 9 to testify?
- 10 HEARING EXAMINER: Okay. How much time do you
- 11 need?
- MR. LARSON: Five minutes.
- 13 HEARING EXAMINER: Okay, we'll take a break for
- 14 five minutes and then come back.
- MR. LARSON: Thank you.
- 16 (Note: A break was taken.
- 17 HEARING EXAMINER: Let's go back and continue
- 18 with Case No. 14494. You may present your next witness.
- MR. LARSON: My next witness is James Huling.
- JAMES HULING,
- 21 the witness herein, after first being duly sworn
- 22 upon his oath, was examined and testified as follows:
- 23 DIRECT EXAMINATION
- 24 BY MR. LARSON:
- Q. Sir, could you state your full name for the

- 1 record?
- A. James Richard Huling.
- 3 Q. And where do you reside, Mr. Huling?
- 4 A. Fort worth, Texas.
- 5 O. And what is the name and nature of your
- 6 business?
- 7 A. Kiamichi Energy Corporation, a petroleum
- 8 engineering consulting company.
- 9 Q. Is that based in Fort worth?
- 10 A. Yes, sir.
- 11 Q. And did Mr. Pullen retain you on behalf of VPR
- 12 to work in the preparation of the preparation of the
- 13 application?
- 14 A. This is correct, yes, sir.
- Q. And have you ever testified before an agency
- 16 with regulatory authority over oil gas and gas operations?
- 17 A. Yes, sir, I have. In North Dakota, Montana,
- 18 Kansas, Oklahoma, and Texas. Never in New Mexico, though.
- 19 Q. And in each of those jurisdictions, were you
- 20 qualified as an expert in petroleum engineering?
- 21 A. Yes, sir.
- MR. LARSON: Mr. Examiner, I move that
- 23 Mr. Huling be qualified as an expert in petroleum
- 24 engineering for purposes of this hearing.
- 25 HEARING EXAMINER: Mr. Huling, could you

- 1 summarize your educational experience and your working
- 2 experience? I know you've been qualified in those states.
- 3 THE WITNESS: Yes, sir.
- 4 HEARING EXAMINER: But could you summarize for
- 5 us your educational background and your work experience?
- 6 THE WITNESS: Yes, sir. I attend the University
- 7 of Missouri and the University of Oklahoma. I received a
- 8 petroleum engineering degree from the University of
- 9 Oklahoma in 1985.
- 10 I worked for Kerr-McGee Corporation for ten
- 11 years. Subsequently worked for Riata Energy. I was
- 12 engineering manager there. Then worked for Encore
- 13 Acquisition Company as a reservoir engineering manager.
- 14 Subsequently was vice president of operations
- 15 for Novation Energy Partners. And since 2007, I've been
- 16 an independent consulting petroleum engineer.
- 17 HEARING EXAMINER: Okay, are you a registered
- 18 professional engineer?
- 19 THE WITNESS: I'm not a registered professional
- 20 engineer.
- 21 HEARING EXAMINER: You've practiced in the state
- 22 of Texas?
- THE WITNESS: Yes, sir.
- 24 HEARING EXAMINER: Okay. Mr. Huling is
- 25 qualified to testify.

- 1 MR. LARSON: Thank you, Mr. Examiner.
- Q. Mr. Huling, I direct your attention to VPR
- 3 Exhibit No. 1.
- 4 A. Yes, sir.
- 5 Q. And Mr. Pullen testified you had a hand in
- 6 preparing this exhibit?
- 7 A. Yes, sir. Lee Winn and I both worked on the
- 8 preparation of this exhibit.
- 9 Q. And does the blue shaded area accurately depict
- 10 the project area for the waterflood?
- 11 A. Yes, sir, it does.
- 12 Q. And did you hear the Examiner's question about
- 13 the appropriate property description for this project
- 14 area?
- 15 A. Yes, sir, I did. And specifically there, the
- 16 area of impact is the area shaded in blue. Again, the
- 17 pilot is completely encompassed in the SFPRR lease.
- 18 The area of impact should be the southwest
- 19 quarter of Section 27 and the southeast quarter of
- 20 Section 28, which is going to be the area that encompasses
- 21 again the area in blue shaded on Exhibit 1.
- 22 HEARING EXAMINER: So, what are you saying? Are
- 23 you saying that all the areas in Section 28 are not
- 24 involved in the project?
- 25 THE WITNESS: At this time, no. That is

- 1 correct. Just the southeast quarter of 28, and the
- 2 southwest quarter of 27 are the area of impact.
- 3 HEARING EXAMINER: Okay, that's the area of
- 4 impact?
- 5 THE WITNESS: Yes, very specific to those areas.
- 6 HEARING EXAMINER: Okay.
- 7 THE WITNESS: And those are entirely encompassed
- 8 within the SFPRR lease.
- 9 HEARING EXAMINER: I'm wondering if we have an
- 10 agreement to say that you are going to -- Just take a
- 11 portion of the north half of Section 27, and all of 28,
- 12 but now you're confining to the southwest 28, and then --
- well, southwest 27, and southeast 28, that's what you're
- 14 doing now?
- 15 THE WITNESS: Yes, sir.
- 16 HEARING EXAMINER: Does that cause any problem
- 17 with a reduction in area on what you're doing here?
- 18 MR. BROOKS: I don't think that it would, as
- 19 long as the reduction of the area, compare it -- The fact
- 20 that only a part of the area that's covered in the
- 21 advertisement will actually be subject to the waterflood
- 22 does not seem to me to create a problem.
- Now of course, if the waterflood would create a
- 24 larger area including areas that were not covered in the
- 25 advertisement, that would be an issue that we'd have to

- 1 deal with.
- 2 HEARING EXAMINER: Okay.
- MR. BROOKS: But a contraction of the area does
- 4 not seem to be a problem.
- 5 HEARING EXAMINER: Okay. Very good.
- Q. Mr. Huling, you also heard a question by the
- 7 Examiner regarding the depth of the fresh water strata?
- A. Yes. First off, I'm not aware of any fresh
- 9 water wells in the immediate pilot area. However, looking
- 10 at open-hole logs, and looking at resource data, I would
- 11 estimate that the fresh water zones in this area are at
- 12 approximately 270 feet from surface down to about 270
- 13 feet.
- The surface casings on all of these wells are at
- 15 approximately 400 feet and are cemented to surface. So
- 16 all of those fresh water zones that overlie this
- 17 waterflood area are cased off with cement, and there are
- 18 no active water wells in the area -- fresh water wells.
- HEARING EXAMINER: So what you're saying is you
- 20 can't find any fresh water wells, but if there are, they
- 21 might be beyond 270 feet?
- 22 THE WITNESS: Yes, sir.
- 23 HEARING EXAMINER: How do you reach that
- 24 conclusion?
- THE WITNESS: Looking at open-hole logs, some

- old open-hole logs just trying to infer where the neutron
- 2 porosity is which shows -- implies some porosity.
- And secondly, I pulled some research from --
- 4 water resource data looking at surface waters in that
- 5 area, and they were in that 270 feet range. They tended
- 6 to agree.
- 7 There are some wells to the south and west of
- 8 here that are fresh-water wells, and they're generally
- 9 shallower than that 270 feet, they're 170, 200 feet,
- 10 somewhere in that range.
- 11 HEARING EXAMINER: Okay. Go ahead.
- 12 Q. Mr. Huling, I direct your attention to Exhibit
- No. 2. And you had a hand in preparing this map?
- 14 A. Yes, sir. This map was prepared both by Lee
- 15 Winn and myself to depict the area of notification.
- 16 Q. And did you identify all wells of public record
- 17 located within each of these half mile radii?
- 18 A. Yes. All of those are identified, and they are
- 19 listed in tabular form in the C-108 application.
- 20 Q. And researching the wells within the half mile
- 21 radii, did you find the location of any plugged wells?
- A. No, sir, no plugged wells within the area.
- Q. And does the application contain all the
- 24 information the Division requires concerning each of the
- 25 wells within these half mile radii?

- 1 A. Yes, sir. To the best of my knowledge, yes.
- Q. And if asked by the Examiner, could you identify
- 3 the location, type of construction, and other specific
- 4 information about those wells?
- 5 A. Yes, I could. And they are also included in the
- 6 original application.
- 7 Q. The information about the wells?
- 8 A. Yes, sir.
- 9 Q. Now, I'd ask you to identify Exhibit No. 7.
- 10 A. Exhibit No. 7 is a schematic of SFPRR No. 18
- 11 which is one of the wells in the area that we propose for
- 12 conversion. And this would be the existing condition of
- 13 the wellbore.
- 14 HEARING EXAMINER: Let's go back to that. I was
- 15 looking for it. I didn't understand what it says. What
- 16 did you say?
- 17 MR. LARSON: It's No. 7, Mr. Examiner.
- 18 HEARING EXAMINER: Okay, that's the SFPRR
- 19 No. 18, which will be converted for injection, right?
- 20 THE WITNESS: Yes, sir.
- 21 HEARING EXAMINER: Okay.
- 22 THE WITNESS: Yes, Exhibit No. 7 depicts the
- 23 SFPRR No. 18 which is a well within the pilot area that
- 24 will be converted from an active producer to injection.
- 25 HEARING EXAMINER: Okay.

- 1 Q. And is this schematic that is Exhibit No. 7
- 2 representative of the other five producing wells within
- 3 the area?
- 4 A. It's not exact, but it is similar, yes.
- 5 Q. And I next ask you to identify Exhibit No. 8.
- 6 HEARING EXAMINER: Let's go back, because I want
- 7 to find out the well construction here. We see the
- 8 existing, we see the proposed. The proposed is to be a
- 9 conversion to injection, right?
- 10 THE WITNESS: Yes, sir. That is correct.
- 11 HEARING EXAMINER: We need to make sure this
- 12 well is well constructed which would prevent any
- 13 environmental damage here. So can you walk me through
- 14 what you did here? What did you do that is different from
- 15 the existing?
- THE WITNESS: Okay, what we would do, if you
- 17 refer to Exhibit 7, the existing?
- 18 HEARING EXAMINER: Yeah.
- 19 THE WITNESS: It is presently equipped with
- 20 tubulars and sacarad [sic] pump. We would initially
- 21 employ a rig to pull the tubing and the rods from the
- 22 well.
- 23 After pulling the tubing and the rods, we would
- 24 clean out the well to plug back TD, or a depth below our
- 25 injection interval in the San Andres P-1.

- 1 HEARING EXAMINER: P-1.
- THE WITNESS: Then we would test the casing to
- 3 show that we have casing integrity. We know that ahead of
- 4 time.
- 5 HEARING EXAMINER: And most of this casing is
- 6 five and a half?
- 7 THE WITNESS: Yes, sir -- Four and a half. Most
- 8 of these are four and a half.
- 9 HEARING EXAMINER: Okay. And two and
- 10 three-eights?
- 11 THE WITNESS: Yes, sir.
- 12 HEARING EXAMINER: The casing is four and a
- 13 half?
- 14 THE WITNESS: Yes. And after we clean out the
- 15 well and we know that the casing does have integrity, then
- 16 we would pick up a coated packer, a nickel coated or
- 17 plastic coated packer, and two and three-eights inch
- 18 tubing that's internally coated.
- 19 And we would run that in and we would circulate
- 20 the tubing casing annulus with a fresh water 2 percent KCL
- 21 solution that would also contain oxygen scavenger,
- 22 corrosion inhibitor, and scale preventative packer fluid.
- 23 And we would notify the State and perform a
- 24 mechanical integrity test, and it will be witnessed by the
- 25 State.

- 1 HEARING EXAMINER: Okay.
- THE WITNESS: Subsequently, the well would then
- 3 be set up to inject produced salt water from the existing
- 4 P-1 San Andres interval down to tubing.
- 5 So at this point, you would have injection of
- 6 water down the tubing, you would have the internal plastic
- 7 coated tubing, the tubing itself, the tubing casing
- 8 annular space of packer fluid, the production casing, in
- 9 this case of the SFPRR No. 18, a cement sheath behind the
- 10 four and a half and the seven and seven-eights hole.
- 11 And then you would have surface casing -- in
- 12 this case, eight and five-eights cement, all of that --
- 13 all of those strings of protection between the injection
- 14 fluid and the fresh water zones.
- 15 HEARING EXAMINER: Yeah. Because I went through
- 16 what you are proposing for the injection wells. And I
- 17 don't think -- Is this construction the same for all the
- 18 six?
- 19 THE WITNESS: Yes, sir.
- 20 HEARING EXAMINER: Because some of them said top
- 21 of cement about 4,090. But here, I like this, because you
- 22 said four and a half is circulated to surface.
- 23 THE WITNESS: On this one it is. There are some
- 24 that may not be, and those are all --
- 25 HEARING EXAMINER: Okay, we can go back and

- 1 finish with this.
- 2 THE WITNESS: Okay.
- 3 HEARING EXAMINER: Now, this is really good,
- 4 because if you are four and a half circulated to the
- 5 surface -- And then you're placing your packer within a
- 6 hundred feet of the injection interval?
- 7 THE WITNESS: Yes, sir.
- 8 HEARING EXAMINER: This is properly constructed.
- 9 And my question is, are you going to construct the rest of
- 10 the other five to be like this? Because what I found out
- 11 was, some of these four and a half is not circulated to
- 12 surface, but however, the top is cemented to be at 4,090
- 13 feet.
- But this No. 18 is going to be converted as it
- 15 is. If it is converted, that's good. But I'm worried
- about all the ones that you're going to convert. So we'll
- 17 talk about it when we get there.
- 18 THE WITNESS: Okay. To generally provide the
- 19 outline of the plan, first off, all of these wells have
- 20 surface casing that is generally set at about 400 feet
- 21 with cement and circulated back to surface.
- HEARING EXAMINER: Yeah.
- THE WITNESS: So the possible fresh-water
- 24 intervals that exist at the roughly 270 feet and up are
- 25 going to be cemented behind the eight and five-eights inch

- 1 casing.
- 2 HEARING EXAMINER: Okay.
- 3 THE WITNESS: This particular well with four and
- 4 a half inch casing does have cement circulated back to
- 5 surface. There are some that don't. However, the
- 6 fresh-water intervals are protected with the surface
- 7 casing.
- 8 We will have mechanical integrity on all of
- 9 these production casings, four and a half, or five and a
- 10 half casings that are in the hole. And so you will still
- 11 have cement and we'll have mechanical integrity before
- 12 commencing injection.
- 13 HEARING EXAMINER: Okay.
- 14 THE WITNESS: If, in general, I have answered
- 15 your question.
- 16 HEARING EXAMINER: Yes. Go ahead.
- Q. And just for purposes of the record, could you
- 18 identify VPR Exhibit No. 8?
- 19 A. Yes. VPR Exhibit No. 8 shows the SFPRR No. 18
- 20 well --
- 21 HEARING EXAMINER: We don't have it. Do you
- 22 have it?
- MR. BROOKS: It's stapled to No. 7? There's two
- 24 pages stapled together that are labeled 7, but I don't see
- 25 an Exhibit 8.

- 1 MR. LARSON: Mr. Brooks, that's my mistake. We
- 2 went -- 7 turned out to be -- the first page is the
- 3 schematic of the existing well, the second page is a
- 4 schematic of a proposed well. That's what I started to
- 5 call 8, but I realized I was incorrect.
- 6 MR. BROOKS: That's the second page of
- 7 Exhibit 7.
- 8 Q. So I'll refer you to the second page of
- 9 Exhibit 7.
- 10 A. Which is the proposed injection conversion, what
- 11 the well will look like after conversion to injection.
- 12 Q. And this schematic would be representative in
- 13 the other five conversions as well?
- 14 A. In general, yes.
- 15 Q. And you have schematics for all the
- 16 conversations as part of the application?
- 17 A. I have schematics of the existing condition,
- 18 yes, and then I have proposed, yes, I do.
- 19 Q. And for the record, what number attachment is
- 20 that to the application?
- 21 A. It will be following Exhibit Roman Numeral 3-A,
- 22 3 and 4.
- Q. And what will be the average daily volumes of
- 24 fluids to be injected in the proposed waterflood?
- A. Initially we're estimating 3,500 barrels a day.

- 1 Q. And what is the maximum daily volume that VPR
- 2 proposes for injection?
- 3 A. Two thousand.
- 4 Q. That is per well per day?
- 5 A. That is correct.
- Q. And will the system be open or closed?
- 7 A. Closed.
- Q. And what is maximum surface injection pressure
- 9 proposed by VPR?
- 10 A. Maximum on the application is 1,500 pounds. We
- 11 will be well below that.
- 12 Q. Initially, do you have a sense of what your
- 13 surface pressures will be?
- 14 A. Less than 200 pounds. Right now the reservoir
- 15 pressure is very low. So the injection pressure will be
- 16 well below 200 pounds.
- 17 Q. Initially, and then gradually it will increase?
- 18 A. That is correct.
- 19 Q. With a end high of 1,500 psi?
- A. Correct.
- Q. And in your professional opinion, would the
- 22 proposed maximum injection pressures result in fracturing?
- 23 A. No, sir.
- Q. And in your opinion, will those pressures cause
- 25 migrating of injected fluids out of the injection zone?

- 1 A. No.
- Q. And you analyzed the historical oil protection
- 3 from the Slaughter zone?
- 4 A. Yes, sir.
- 5 Q. And you've also evaluated the potential oil in
- 6 place?
- 7 A. Yes, sir.
- Q. And in your opinion, will the waterflood recover
- 9 oil that would not otherwise be recovered?
- 10 A. Yes.
- 11 Q. Why do you hold that opinion?
- 12 A. I hold that opinion because the recoveries in
- 13 this area are indicative of other successful waterfloods
- in the San Andres and Grayburg intervals. The porosity
- 15 development and water saturations and recoveries are all
- 16 consistent with other successful waterfloods in the area.
- Q. Do you agree with Mr. Pullen that the waterflood
- 18 will be a profitable project for VPR?
- 19 A. Yes, sir.
- Q. And that's based on your evaluation of oil in
- 21 place and historical production?
- 22 A. Yes, sir.
- Q. And in your opinion, would the approval of the
- 24 application serve the interests of conservation,
- 25 prevention of waste, and the protection of correlative

- 1 rights?
- 2 A. Yes, sir, I do believe so.
- 3 MR. LARSON: Mr. Examiner, I move the admission
- 4 of Exhibit No. 7.
- 5 HEARING EXAMINER: Exhibit No. 7 will be
- 6 admitted.
- 7 MR. LARSON: I would pass Mr. Huling for
- 8 questions.
- 9 MR. BROOKS: No questions.
- 10 HEARING EXAMINER: Okay. I think you've already
- 11 answered my question about the well construction, unless
- 12 you want to change anything. Did you prepare the
- 13 application?
- 14 THE WITNESS: Yes, sir, I did.
- 15 HEARING EXAMINER: Okay. So if there is any
- 16 question, you would be the person to contact?
- 17 THE WITNESS: Please, yes.
- 18 HEARING EXAMINER: Okay. Before I lose track of
- 19 this, your attorney was asking you what depth you were
- 20 asking for. You said 1,500. How did you come up with
- 21 that 1,500 psi?
- 22 THE WITNESS: I'm projecting down the road that
- 23 as the reservoir pressures up, and since the frac rating
- 24 is proportional to the core pressure of the rock, as the
- 25 rock is pressured up, my experience in the area shows that

- 1 parting pressures later on in the life of wells get up in
- 2 that range.
- We would be injecting well below that. Our
- 4 intent is to stay well below the frac gradient and the
- 5 parting pressure.
- From a waterflood theory perspective, we want to
- 7 stay below parting pressures so that we affect all of the
- 8 rock without fracturing. We do not want to fracture the
- 9 rock to move water outside of the P-1 interval.
- In my pumping of pressure above the frac
- 11 gradient, we potentially do that. So our intent and
- 12 purpose is to inject below parting pressure.
- 13 HEARING EXAMINER: Oh, yeah. I got from the way
- 14 you said yeah, that was not -- you know. I mean, the
- 15 pressure will not be greater than the formation. We try
- 16 to give you 1,500 psi maximum.
- 17 You have to demonstrate that that can be done
- 18 without breaking the formation by what is called a
- 19 step-rate test, which I know you're familiar with.
- THE WITNESS: Yes.
- 21 HEARING EXAMINER: Okay, so no matter, you
- 22 should be aware of, you know, normal pressure gradients we
- 23 give here. We can give you 1,500 psi if you demonstrate
- 24 the need.
- 25 THE WITNESS: Right. I understand.

- 1 HEARING EXAMINER: If this is approved, we are
- 2 going to give you the normal gradient.
- 3 THE WITNESS: I understand.
- 4 HEARING EXAMINER: Now, I didn't see any
- 5 calculation on this waterflood project. I need to see the
- 6 cost benefits and other things your attorney has been
- 7 talking about, how much you're going to produce more than
- 8 if you implement this.
- 9 I really like those, because that's really what
- 10 we want you to do. Because we encourage you to do this
- 11 waterflood, spend money to do that, but I didn't see the
- 12 costs.
- 13 THE WITNESS: Right. We did not submit that
- 14 information as part of the application, but that work has
- 15 been performed.
- 16 HEARING EXAMINER: Is there any way I can get
- 17 it? Because I'm interested in knowing how much additional
- 18 oil you're going to recover. That's something that I like
- 19 to see.
- THE WITNESS: Okay.
- 21 HEARING EXAMINER: Could that be furnished?
- 22 THE WITNESS: Yes, I could send you -- What I
- 23 would propose, following the hearing, I'll contact you and
- 24 I'll provide you with the specific information you're
- 25 after.

- 1 HEARING EXAMINER: Yes, I would like to have
- 2 that.
- 3 MR. LARSON: Mr. Ezeanyiam, may I speak to that
- 4 point? There's a proprietary information issue here.
- 5 This is a privately owned company and they're dealing with
- 6 investors on a regular basis. And that's part of the
- 7 reluctance to give hard numbers.
- I think rather than submit something which would
- 9 then become part of the record, could I just question him
- 10 generally about that kind of analysis?
- 11 HEARING EXAMINER: You don't have to do that.
- 12 We are not your competitors. I am not going to give it
- out to anybody. It's for my own consumption to be able to
- 14 approve this project.
- 15 We can make it confidential for you, nobody will
- 16 see it except the Examiners. And in that case, nobody
- 17 else will see it. It's not going to -- If you come to my
- 18 office now, I have confidential information nobody else
- 19 sees it, but I need it to do my work. I no other party
- 20 will see it.
- MR. LARSON: We're fine with that.
- 22 HEARING EXAMINER: Nobody else will see it
- 23 except the two of us, and then we'll keep it confidential.
- MR. BROOKS: Well, we have a certain here that
- 25 there is some procedures that need to be undertaken when

- 1 confidential information is submitted.
- 2 If Mr. Ezeanyiam wants to examine confidential
- 3 information, it would be easiest if it were to be returned
- 4 afterwards. We have statutory restrictions on our
- 5 handling of confidential information.
- 6 So I would suggest that you send this
- 7 information -- if you consider it confidential, that you
- 8 send it directly to Mr. Ezeanyiam addressed to him
- 9 personally with a letter stating that it's to be held in
- 10 confidence and not to be copied.
- 11 And after his review of the information, it is
- 12 to be returned to you and then we can make a record that
- 13 that has been done.
- 14 HEARING EXAMINER: I mean, we don't want to
- 15 divulge your confidential information.
- MR. BROOKS: In fact, it's a not just for your
- 17 protection, because under the statute applicable to this
- 18 Department, if we compromise information that's submitted
- 19 to us in confidence, there are criminal penalties.
- 20 HEARING EXAMINER: Yes. That's why we have a
- 21 Legal Examiner here. I'm not a lawyer, I'm just an
- 22 engineer. So I don't understand the legal implications.
- 23 But at least I know we can look at confidential
- 24 information -- we have done it before -- and then return
- 25 it to you.

- 1 MR. LARSON: We'll submit it with those
- 2 guidelines.
- MR. BROOKS: I would appreciate that.
- 4 HEARING EXAMINER: Okay. I don't have any other
- 5 questions. Do you want to comment?
- 6 MR. LARSON: I have nothing further for
- 7 Mr. Huling.
- 8 HEARING EXAMINER: Okay. These six produces
- 9 right now, are they producing any oil currently?
- 10 THE WITNESS: Yes.
- 11 THE WITNESS: How much?
- 12 THE WITNESS: About probably in the neighborhood
- of seven barrels collectively between the six wells on a
- 14 daily basis.
- 15 HEARING EXAMINER: So probably one barrel for
- 16 each one?
- 17 THE WITNESS: Yes.
- 18 HEARING EXAMINER: And you designed it to be a
- 19 five spot pad?
- THE WITNESS: Yes.
- 21 HEARING EXAMINER: And there are no plugged or
- 22 abandoned wells?
- THE WITNESS: No, sir.
- 24 HEARING EXAMINER: In the whole area of review?
- 25 THE WITNESS: That's correct.

- 1 HEARING EXAMINER: And where you drew all those
- 2 circles, you generated them before you notified Mr. Harton
- 3 in writing, that's why you were able to communicate with
- 4 him and --
- 5 THE WITNESS: Yes.
- 6 HEARING EXAMINER: Okay. Okay now, what type of
- 7 water are you going to be injecting there? Is that
- 8 produced water, is that fresh water? What type of water
- 9 are you going to be injecting?
- 10 THE WITNESS: Our plan right now is to use
- 11 existing produced water from the P-1 San Andres interval
- 12 from other wells within the field. We'll reinject that
- 13 water.
- 14 We additionally have some wells that produce
- 15 significant amounts of water from the P-1 and lower parts
- 16 of the structure that we will remove additional water to
- 17 supply water for this waterflood project. So to answer
- 18 the question specifically, produced water from the P-1 San
- 19 Andres.
- 20 HEARING EXAMINER: Do you intend to have any
- 21 make-up water?
- 22 THE WITNESS: Any make-up water present will be
- 23 from the San Andres.
- 24 HEARING EXAMINER: Fresh water?
- THE WITNESS: No, not fresh water.

- 1 HEARING EXAMINER: Okay. Do you have that kind
- of make-up water analysis that I can look at that you want
- 3 to inject?
- 4 THE WITNESS: Yes. And included in the
- 5 application are multiple water analysis samples from wells
- 6 within the field. And so, yes, those are included in the
- 7 application.
- 8 HEARING EXAMINER: So the make-up water would
- 9 come from San Andres?
- 10 THE WITNESS: Yes.
- 11 HEARING EXAMINER: From a water well from
- 12 San Andres, right?
- 13 THE WITNESS: Yes.
- 14 HEARING EXAMINER: Okay. When I read the
- 15 application, it says the make-up water will be fresh
- 16 water.
- 17 THE WITNESS: That is not the plan at the
- 18 present.
- 19 HEARING EXAMINER: Because, you know, in New
- 20 Mexico in the desert, we don't have the availability to
- 21 use fresh water. There's a bunch of produced water out
- there that we can use as long as they're compatible with
- 23 the native water.
- 24 THE WITNESS: Right.
- 25 HEARING EXAMINER: Using fresh water -- fresh

- 1 meaning TD is at least 10,000 or less, you don't want to
- 2 use water like that.
- THE WITNESS: Right. And that is not our plan.
- 4 Our plan is to use waters that are more saline.
- 5 Initially, San Andres water. In time, there could be a
- 6 case where we would look at -- you know, if we're to
- 7 expand towards unitization in a larger area, then we might
- 8 extract water from other brackish intervals above the
- 9 San Andres just because it would be cheaper to lift from a
- 10 shallower interval.
- But for the purpose of this application, we're
- 12 looking at using produced water from the San Andres. For
- any additional water, we will increase pump capacity on
- 14 some wells that have higher water capacity from the
- 15 San Andres and use that as make-up water.
- 16 HEARING EXAMINER: Yeah. Because when you send
- 17 your application to Southwest or something, they objected
- 18 to the fact that you stated that you are going to use
- 19 fresh water.
- 20 And that will come up with Mr. Harton saying,
- "We're objecting because you're going to use fresh water."
- 22 But I guess you guys settled this.
- 23 THE WITNESS: For the record, we plan to use
- 24 produced water, brackish water. We will not use fresh
- 25 water.

- 1 HEARING EXAMINER: Yeah. And the produced water
- 2 is from the P-1, and you are producing from P-1 and
- 3 injecting into P-I.
- 4 THE WITNESS: Correct.
- 5 HEARING EXAMINER: I assume there's no
- 6 compatibility issues. Did you prepare this water analysis
- 7 in the application?
- 8 THE WITNESS: I did not. I mean, I asked for
- 9 them to be run, but they were run by Permian Treating.
- 10 HEARING EXAMINER: Okay. And they run it on the
- 11 produced water and they run it on the native water?
- 12 THE WITNESS: Yes.
- 13 HEARING EXAMINER: And did you look at it?
- 14 THE WITNESS: Yes.
- 15 HEARING EXAMINER: What did you find?
- 16 THE WITNESS: There's definitely some variation.
- 17 You do have some -- we're going to have some scaling
- 18 tendencies, but generally, it's brackish water ranging
- 19 from 70,000 to 100,000, you know, depending on where you
- 20 are on the structure and where it's broken in the
- 21 San Andres.
- 22 HEARING EXAMINER: Okay. You're going to be
- 23 using a closed system?
- 24 THE WITNESS: Yes, sir.
- 25 HEARING EXAMINER: You're not going to truck any

- 1 water?
- THE WITNESS: No.
- 3 HEARING EXAMINER: I read somewhere that the
- 4 water would be trucked. We prefer a closed system.
- 5 THE WITNESS: And it's our preference to have a
- 6 closed system as well.
- 7 HEARING EXAMINER: Okay. So the leased wells in
- 8 the area of review, all of those are producers?
- 9 THE WITNESS: That is correct.
- 10 HEARING EXAMINER: None are plugged or
- 11 abandoned, all of them are producers?
- 12 THE WITNESS: All of them are producers.
- 13 HEARING EXAMINER: Okay. I quess that's all I
- 14 have for now. Let me make this comment about this
- 15 confidential information we're trying to get from you.
- 16 When we get confidential information from you,
- 17 just be assured that we are not going to violate -- as the
- 18 Legal Examiner says, we're not going to divulge the
- 19 information to anybody. We use it to determine whether
- 20 this is appropriate.
- In doing our jobs, we need that information to
- 22 make sure we're doing it right, you know. Again, because
- 23 it's confidential information doesn't mean that we can't
- 24 look at it as regulators, you know. We can look at it.
- 25 However, we're not going to divulge it. And I'm

- 1 glad you say said we can mail it back to you. Nobody will
- 2 copy it, we'll just mail it back to you in whatever you
- 3 want us to mail it back.
- 4 MR. BROOKS: And the important thing is that it
- 5 doesn't get stuck in the file, because the file would then
- 6 be scanned, and that would be a problem for --
- 7 MR. LARSON: And that was our only concern, the
- 8 issue of it being not of public record. We're more than
- 9 happy to share that information.
- 10 HEARING EXAMINER: Okay, very good.
- MR. BROOKS: It's easier to manage in this case
- 12 because it's uncontested, and so we don't have to deal
- 13 with coordinating with opposing counsel and their
- 14 witnesses, and so forth.
- 15 MR. LARSON: Exactly.
- 16 HEARING EXAMINER: Okay. So if there are no
- 17 other questions?
- 18 MR. BROOKS: I have no questions.
- 19 MR. LARSON: What would you estimate as the
- 20 timing for approval? We're very anxious and eager to get
- 21 started on this project.
- 22 HEARING EXAMINER: All right. What are the
- 23 exigent circumstances, what are the problems, why do you
- 24 need this, what is going on?
- 25 MR. LARSON: Well, we have investors also that

- 1 we're trying to please. We cleaned up a -- we've been
- 2 working on this application since February, and we have a
- 3 group in -- and ourselves, we want to get this moving
- 4 along as quick as possible.
- 5 So it's definitely economically driven, you
- 6 know, to get it instituted while the weather is nice
- 7 and -- you know, to keep the project moving.
- 8 HEARING EXAMINER: Okay.
- 9 MR. PULLEN: And I might say, a project of this
- 10 scope, I mean, it takes some lead time in scheduling, but
- 11 we can't do that scheduling until we know we're within a
- 12 certain period of what we think is going to be the
- 13 approval time.
- Because if I set up the rigs and all the service
- 15 companies and all the vendors that are associated with the
- 16 execution of this part of the plan, it's a -- it's time
- 17 consuming.
- 18 And until we have a date or some kind of target
- 19 time, it's hard to get scheduled on the boards for the
- 20 service companies.
- 21 HEARING EXAMINER: Well, what kind of time are
- 22 you asking? Because, you know, we have all these --
- 23 everybody's asking for --
- 24 MR. PULLEN: Yes, sir. You know, I don't have a
- 25 good sense of that. From our perspective, as soon as

- 1 possible. If that can be within 30 days, that's great.
- 2 If it can be shorter, that's even better.
- 3 Because then I can start initiating the
- 4 execution of the program and get vendors lined up and get
- 5 some money spent to get it moving along.
- 6 HEARING EXAMINER: Okay. Send that confidential
- 7 information, that might help too. Because it's something
- 8 we need to have. So send it and then let's see what we
- 9 can do. Because there's are a lot of things we have on
- 10 your plates. So we'll see what we can do to help you. So
- 11 send that as quickly as possible.
- 12 And again, you know, initially, I forgot to
- 13 mention at the beginning about -- This was continued from
- 14 February, because VPR was out of compliance for some
- 15 reason or the another, and it wasn't put on the docket
- 16 until you came into compliance.
- 17 And as of yesterday, I went back again to the
- 18 compliance issues and found out that you are in
- 19 compliance. That's why I didn't make any bones about
- 20 that, because I checked.
- You have two other wells inactive, and there are
- 22 no financial assurance issues. So that's why the hearing
- 23 was continued. If you had been out of compliance, well,
- 24 we would hear the case, but we wouldn't be able to write
- 25 the order until you come into compliance. But none of

- 1 those is an issue now.
- 2 And in that case, you wouldn't be asking about
- 3 expediting the order, because you're out of compliance.
- 4 However, it's good news, you're not out of compliance.
- 5 MR. PULLEN: Thank you for noting that. I mean,
- 6 we worked hard to get those -- the project and all our
- 7 holdings, not only this one, but the other ones also -- in
- 8 compliance and keep them in order.
- 9 HEARING EXAMINER: Okay.
- 10 MR. LARSON: And I would add too that,
- 11 Mr. Examiner, yesterday, Mr. Pullen executed an amendment
- 12 to the inactive well agreed compliance order to add the
- 13 two wells that appear on the list.
- 14 HEARING EXAMINER: Okay.
- 15 MR. LARSON: It's not been signed by the
- 16 Director, but Mr. Swazo and I negotiated it.
- 17 HEARING EXAMINER: Okay. That would be
- 18 excellent, that would be nice. Anything further?
- 19 MR. LARSON: Just a couple of things. I know
- 20 there's a question about the proper description for the
- 21 project area.
- HEARING EXAMINER: Yes.
- MR. LARSON: What we noticed was larger from the
- 24 actual area. And I certainly agree with Mr. Brooks that
- 25 it's not an issue here. Our actual project area is

	Page 60
1	smaller than the noticed area.
2	So I just wanted to stipulate for the record
3	that Mr. Hulings' property description is the actual area
4	we would ask to be permanent for the waterflood.
5	HEARING EXAMINER: Okay, so those two sections?
6	MR. LARSON: Yes. And secondly, we will get
7	that confidential information to you as soon as possible.
8	And to reinforce my client's statements, we'd ask that we
9	get consideration for an order as soon as possible.
10	HEARING EXAMINER: Yeah, I've stated that
11	already.
12	MR. LARSON: Thank you, Mr. Examiner.
13	HEARING EXAMINER: Okay. Without further
14	comments, Case No. 14494 will be taken under advisement.
15	Thank you.
16	(Whereupon, the proceedings concluded.)
17	
18	
19	
20	I do hereby certify that the toregoing is
21	the Examiner hearing of Case(No. (L. 4.4)
22	eard by the of State of
23	Oil Conservation Division
24	
25	

	Page 61
1	STATE OF NEW MEXICO)) ss.
2	COUNTY OF BERNALILLO)
3	
4	
5	REPORTER'S CERTIFICATE
6	
7	I, PEGGY A. SEDILLO, Certified Court
8	Reporter of the firm Paul Baca Professional
9	Court Reporters do hereby certify that the
10	foregoing transcript is a complete and accurate
11	record of said proceedings as the same were
12	recorded by me or under my supervision.
13	Dated at Albuquerque, New Mexico this
14	2nd day of June, 2010.
15	
16	
17	
18	$\sim \sim 100$
19	PEGGY A. SEDILLO, CCR NO. 88
20	License Expires 12/31/10
21	
22	
23	
24	
25	