STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



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

APPLICATION OF GANDY CORPORATION FOR APPROVAL OF A SALTWATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO

CASE NO. 13,293

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

July 8th, 2004

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Thursday, July 8th, 2004, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

July 8th, 2004
Examiner Hearing
CASE NO. 13,293



(Continued...)

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E X H I B I T S

| Applicant's | Identified | Admitted |
|---|---|---|
| Exhibit 1 | 6, 66 | 67, 108 |
| Exhibit 2 | 19 | 20, 108 |
| Exhibit 3 | 22 | 22, 108 |
| Exhibit 4 | 25 | 108 |
| Exhibit 5 | 27 | 29, 108 |
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* * *

| DKD | Identified | Admitted |
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# A P P E A R A N C E S

FOR THE DIVISION:

GAIL MacQUESTEN
Deputy General Counsel
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

DOLAN & DOMENICI, P.C.
Attorneys at Law
6100 Seagull St. NE, Suite 205
Albuquerque, New Mexico 87109
By: PETER V. DOMENICI, JR.
and
LORRAINE HOLLINGSWORTH

FOR DKD, L.L.C.:

MONTGOMERY & ANDREWS, P.A.
Attorneys at Law
325 Paseo de Peralta
P.O. Box 2307
Santa Fe, New Mexico 87504-2307
By: PAUL R. OWEN

* * *

WHEREUPON, the following proceedings were had at 1:00 p.m.:

EXAMINER JONES: Okay, let's go back on the record, and let's call Case 13,293, Application of Gandy Corporation for approval of a saltwater disposal well, Lea County, New Mexico.

Call for appearances.

MR. DOMENICI: Pete Domenici, Jr., and Lorraine Hollingsworth, and we're here with our client, Gandy Corporation represented by Dale Gandy.

EXAMINER JONES: Other appearances?

MR. OWEN: Paul R. Owen of the Santa Fe law firm of Montgomery and Andrews, appearing on behalf of the protestant, DKD, L.L.C. I have one witness in this matter.

EXAMINER JONES: Will all witnesses please stand to be sworn?

(Thereupon, the witnesses were sworn.)

EXAMINER JONES: Okay, as the Applicant, go ahead with your case, call your first witness.

MR. DOMENICI: Could I make a brief opening statement?

EXAMINER JONES: Sure.

MR. DOMENICI: We're here on the Application that was filed on -- for this -- signed May 11th, 2004. It's Exhibit 1 in our package. And it's not completely clear to

us, but I want to be clear on the record as to whether this is a revision of an existing permit for this well or an actual new application for this well.

And the reason I say that is, in the Application, the May 11th, 2004, Application, we clearly indicate on the second page that we are proposing to revise an existing project. And I think that might be important because there's been an order, a final order by the Commission, on a number of issues that could possibly arise in this matter that we feel are clearly collateral estoppel. There is an identity of parties to that order, there were several issues that were necessarily decided in that case. We're actually talking about the same exact well, and we're actually talking about a permit based on -- or an application based on an order related to that previous application that indicated one way to cure that order was to file a new application.

And in particular the issues -- and I'm not sure they're going to come up, I can't tell from the prehearing statement or the exhibits, but I want to just be clear for our record, is, essentially what we are asking for is a very -- relatively narrow technical change to this permit, which is to change the permitted interval that we can inject in from the interval from 6000 feet to 6400 feet, which is what the original permit and the order, the final

order of the Commission, established, to an interval of 4810 feet to 6880 feet.

And we think the issues that we need to demonstrate to establish that we should be allowed to inject in that have been set forth in at least three places by either the Division or the Commission. And those three places are in the original -- actually at least probably four places, in the original May 23rd, 2003, order it clearly outlines what needs to be established for the original permit to be issued.

Then there was a May 3rd, 2004, order to cease operations. That indicated what needed to be established.

Then there was an emergency application, and there was an order denying that application that again stated what needed to be demonstrated in order for this interval to be allowed.

And those are basically what we feel are the standard requirements for an injection well, prevention of waste, protection of correlative rights and protection of freshwater resources.

What we don't think is at issue -- And so we think those three issues are something we need to prove, and we're prepared to do that.

What we don't think is at issue are issues that were resolved in the Commission decision, final decision

that was not appealed. And those would Paragraphs 18 through 26, essentially. All of those paragraphs deal with two issues, primarily. Paragraph 18 is one issue by itself, and that is the question of whether an objection of loss of revenue by DKD was some basis at that time to reject the Application, and there's a clear ruling by the Commission that that is not a grounds to reject the Application.

And so we think that issue should not be re-litigated today. That was decided between these parties in this forum. And I'm not sure there's an intent to re-litigate that, but we certainly would object to that and say that's already been decided by a final adjudicatory decision.

The second issue is Paragraphs 19 through 26, and that's -- in our book or our package of exhibits, that's Exhibit Number 8, Applicant's Exhibit 8 is this order I'm referring to.

EXAMINER JONES: Can you say again where that's --

MR. DOMENICI: It's probably right in the middle. It's Applicant's Exhibit 8. And I don't know how familiar the Hearing Examiner is with this history, so that's why I'm going through this. But this is critical to this case because this is the order that allowed the drilling to

start that has resulted in this interval that we're at issue over.

And so the party, DKD, was making a protest in this case --

EXAMINER JONES: Oh, the findings, okay.

MR. DOMENICI: -- and in Finding Number 18 there's a resolution of a claim regarding interference with revenue as being some grounds for rejecting this Application. So we think that is a collateral estoppel or -- issue, conclusion.

Then Issues 19 through 26 all deal with the issues of title and questions of what type of title the Applicant, the well owner and operator, should have relative to other mineral estates. And we think that issue was clearly decided and should be collateral estoppel.

And essentially what the Commission appeared to have done was say that that's an issue for the courts of title, if there's a claim for trespass or something like that, that's to be handled by the courts. They cited some other Commission rulings, some case law, some treatises, legal treatises, all supporting that.

And the basic idea is, the surface owner probably has a right to inject as part of the surface estate, is kind of how I read these findings.

The mineral estate owner may have the right to

inject the residue of developing the mineral estate alone, but probably doesn't have any greater right. And therefore if someone with the mineral estate thinks that somehow this overlaps with their title and impedes their title, the Commission already looked at that issue and said you need to go to district court and have that decided, if you want to, as a trespass issue.

So we think those two issues are beyond the scope of this hearing and we're entitled to collateral estoppel on those if they arise.

What we plan to do in the fundamental technical issues is, we have the same witness who testified before and whose testimony is cited in these findings as a basis for allowing the 400-foot interval. He will come in, he's prepared to revisit the basis for that testimony and that decision and then expand his analysis to include this additional interval and then provide technical supports saying the same result should apply with this expanded interval. So we have that witness available.

We have Dale Gandy available, and he's going to talk about what happened from the point of time from the final Commission order until today, as far as drilling operations.

I also want to raise an issue on the scope of the hearing which is, we don't think there's any basis to deny

this Application on grounds of any alleged or potential violations that may have occurred from today, going back to the May 23rd, 2003, Commission order. There's no legal authority saying we can look back and if we find a three-day period you didn't do something we didn't like, or a 20-day period or a 60-day period, that's grounds to deny this or condition it. There's no authority that I'm aware of that will allow that type of activity to be grounds to condition this permit or deny it.

That might be grounds for separate action, which is what all the correspondence from the Division has stated. None of that correspondence has said, if you don't do this your permit may be revoked or we may consider a renewal or a revision. And so we don't think testimony on that issue is helpful. We don't think it's relevant to any issue that needs to be decided to grant this Application, and therefore we would object to that type of testimony.

But with that, we're prepared to proceed.

EXAMINER JONES: Let's go off the record. We'll be right back.

(Off the record)

EXAMINER JONES: Okay, let's go back on the record.

And Mr. Owen, what do you say in response to what Mr. Domenici has said?

MR. OWEN: Well, as stated in our prehearing statement, the focus of our protest is not the ownership issue, and we don't intend to raise the authority of the Applicant to inject, as far as his ownership rights in either the minerals or the surface are concerned at today's hearing. We don't anticipate that that will be an issue, and I don't think the Division Examiner needs to decide any issue of collateral estoppel with regard to that issue.

Similarly, although we will be talking about a potential loss of revenue by the Protestant, DKD, and talking about the service that DKD offers to the industry in the area and the contributions that it makes to the production of hydrocarbons in the area, we don't anticipate arguing that that is a basis for denying the application in this case and therefore do not think that it is an issue of collateral estoppel upon which the Division Examiner needs to rule.

The final issue raised by Mr. Domenici is whether or not the operator's actions since the disposal well was authorized have any bearing on this hearing today. It is always within the Division's authority to consider whether or not an operator is a prudent operator.

Mr. Domenici makes a statement that they are seeking a narrow and technical expansion of the authority given by the original permit in this case. What they are

seeking is an expansion of the approved interval from 200 feet to over 2000 feet. We're not talking about a minimal or technical expansion of the authority, we're talking about a significant expansion of the authority.

In that vein, it is our position -- and we have already argued this -- in response to Mr. Domenici's request for an emergency order that the Applicant is not a prudent operator, that it, in fact, intentionally deviated significantly from the order issued by the Division and confirmed by the Commission in the ultimate Commission ruling.

Those sorts of issues are clearly and squarely before the Division, whether or not this particular Applicant is a prudent operator. Moreover, we will be examining whether or not waste will be caused by the injection of saltwater into the expanded zone, specifically into the upper zones, into which the Applicant seeks to inject.

We think we will very clearly show that the Applicant has very little practical regard for the Division's rulings or the Division's Rules and should be very closely monitored in this particular operation, and its operation should be restricted to that which advances the protection of correlative rights and the prevention of waste.

EXAMINER JONES: Okay, the way it was advertised is application for a saltwater disposal well, and the way we're looking at this is, you have a permit -- you have an existing permit that hasn't been revoked yet, but it's -- unless the Division Director decides to revoke it based on some grounds, it's still valid. It says in all those permits that they can be revoked at any time if the Division Director decides that it doesn't meet with the Division's goals.

So I think what we need to do here is hear all the evidence that we've got, and I am familiar with those other cases. I was in here during most of the testimony, so I'm familiar with it from the time the first application came in until the Commission actually ruled on it.

So let's just proceed and hear all the evidence, and --

MR. DOMENICI: Could I raise one other issue that I left out, which is that we had also filed a request that you have authority to consider allowing us to operate at the close of the hearing today? I just wanted to make sure the parties are aware we're still pursuing that relief.

EXAMINER JONES: Well, as far as that goes, what we're looking at here is a decision by the end of the day tomorrow on the whole matter on this case, so --

MR. DOMENICI: Okay, I wasn't aware of how long

it might take to get the decision --

EXAMINER JONES: Yeah.

MR. DOMENICI: -- so that's -- we were trying to just take that into account. So with that information --

EXAMINER JONES: Yeah, I think both parties will know by the end of the day tomorrow.

MR. DOMENICI: Well, we're ready to proceed.

EXAMINER JONES: Okay. Call your first witness.

MR. DOMENICI: We call Larry Scott.

EXAMINER JONES: Okay.

LARRY R. SCOTT,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DOMENICI:

Q. Will you state your name for the record, please?

A. Larry R. Scott.

Q. Briefly describe your educational training as relates to this matter.

A. I have a bachelor of science degree in electrical engineering from the University of Texas, seven years of experience with Continental Oil Company in various engineering positions, the last as supervising production engineer in Hobbs, New Mexico, and for the last 23 years I've been employed and a partner in Lynx Petroleum

Consultants, an independent producer and consulting company based in Hobbs.

Q. Describe the type of engineering activities you've performed wit Lynx or have performed over that 23-year period.

A. They would be all of the engineering activities associated with an independent oil and gas producer from prospect generation through completion through saltwater disposal issues.

MR. DOMENICI: I would move Mr. Scott be considered an expert witness in the field of petroleum engineering.

EXAMINER JONES: Any objection, Mr. Owen?

MR. OWEN: No objection.

EXAMINER JONES: Mr. Scott is qualified as an expert petroleum engineer.

Q. (By Mr. Domenici) Mr. Scott, did you testify in the earlier proceedings related to this same well?

A. Yes, I did.

Q. What type of investigation did you do as part of your preparation to testify in the previous hearings?

A. Well, I reviewed completion data, drill stem test data and electrical logs in most of two sections surrounding the proposed injection well.

Q. Did you come to any professional opinions

regarding the suitability of that application to meet the criteria for underground injection approval?

A. I believe that the State "T" Number 2 in the originally applied-for interval was eminently suitable for saltwater disposal purposes from the standpoint of waste prevention, protection of correlative rights and the protection of freshwater resources.

Q. If you'll turn in the exhibits in front of you to Exhibit 8, if you would look at that Finding Number 15...

A. Which one is 8?

Q. It's the May 23rd, 2003, Order of the Commission.

A. Well --

Q. It's about halfway down.

EXAMINER JONES: It's about in the middle.

THE WITNESS: Okay.

Q. (By Mr. Domenici) Particularly directing you to Finding Number 15.

A. And we have it.

Q. Now, have you reviewed that recently in preparation for this hearing?

A. Yes, I have.

Q. And is that -- where it says Pronghorn presented testimony of a petroleum engineer, was that you, to your knowledge?

A. That is correct.

Q. And is this an accurate summary, finding, of what you testified?

A. That is correct.

Q. Now, after the May 23rd, 2003, Order was entered, what involvement did you have with the -- either drilling or permitting of this well, between that time and the hearing today?

A. I've had virtually no involvement with the subsequent workover operations and the actual conversion of the well to saltwater disposal. I was contacted several weeks ago when it became clear that we were going to be back up here looking for a revised vertical interval, and I commenced an investigation in support of this effort.

Q. Can you describe what investigation you undertook?

A. Well, I reviewed scout ticket data on the two sections that are as Exhibit 2, and they're the two sections, being Section 6 of 16-36 and Section 1 of 16-35. I reviewed drilling and completion records on 18 wells in Section 6 and 20 wells in Section 1.

Q. Okay, what exhibits are you referring to there?

A. That would be the ownership map, your Exhibit 2 in the packet --

MR. DOMENICI: Okay, I would move for admission of Exhibit 2.

EXAMINER JONES: Any objection?

MR. OWEN: No objection.

EXAMINER JONES: Exhibit 2 is admitted to evidence.

Q. (By Mr. Domenici) Okay, had you performed a similar analysis to Exhibit 2 when you testified originally?

A. Oh, yes, virtually identical. There are 38 wellbores in the two sections that penetrate -- actually penetrate Pennsylvanian Strawn or Permo-Penn Wolfcamp horizons. Of these 38 wells, there were 43 completion attempts in various horizons and production established in the Wolfcamp and the Strawn.

There was no evidence that I could find of any drill stem tests or any production tests in any horizon above the Wolfcamp.

Q. Okay. And I know that this Hearing Examiner was here for a lot of previous testimony, but I want to be sure we have a complete record. So just quickly describe the stratigraphy that we're dealing with here, so --

A. Okay, the interval that Mr. Gandy currently seeks to inject into runs from just below the top of the San Andres, approximately 200 feet, down to the base of the Glorieta. And my investigation of the wellbores in the two sections were for a production, drill stem, log, RFT tests

or any evidence of hydrocarbons in that interval from the San Andres to the base of the Glorieta.

Q. And what was the result of your investigation?

A. I could find not one instance of hydrocarbons indication in any of those intervals.

Q. Just so we're clear, in the San Andres or Glorieta interval, any of these --

A. That is San Andres through the base of the Glorieta, that's correct. I actually went all the way to the Tubb sand and could find no evidence of any commercial hydrocarbon potential down below the base of where Mr. Gandy is wanting to put his injection fluids.

Q. So what is the stratigraphy below the Glorieta? What's the --

A. Below the -- it's -- oh, for many thousands of feet it's a brown, dolomitic, light-tan limestone, for quite a long ways.

Q. Is that what you would call the Tubb sand?

A. Yes, the Tubb sand would be consistent with that description, yes.

Q. So in reviewing a change between what you -- or in summarizing a change in what you looked at for the original hearing and today's hearing, given this extended interval, did you reach any conclusions regarding production of oil and gas?

A. Well, the original interval included the basal San Andres and upper Glorieta. No evidence of hydrocarbons. I had to expand my investigation to include all the way to the top of the San Andres to the base of the Glorieta. Again, same result: no evidence of hydrocarbons.

Q. And what is Exhibit Number 3? If you'll turn in the thick exhibit package --

A. Okay, Exhibit Number 3 is my schematic of the wellbore as it was actually completed.

Q. And what did you use to create that schematic?

A. The drilling and completion -- say the drilling -- the workover and completion reports that were furnished to me by Gandy Corp.

MR. DOMENICI: I would move for admission of Exhibit 3.

EXAMINER JONES: Any objection?

MR. OWEN: No objection.

EXAMINER JONES: Exhibit 3 is admitted to evidence.

Q. (By Mr. Domenici) Now, looking at Exhibit 1, if you will, which is a very long exhibit, it's the entire Application, if you would look at the seventh page of Exhibit 1 --

MS. MacQUESTEN: I'm sorry, which page?

MR. DOMENICI: The seventh page of Exhibit 1,

which, if I counted right, it should be this OCD form -- or the eighth -- is that the eighth page? I think it's the eighth. But if you could find that, it's the eighth --

MS. MacQUESTEN: I think we have it, thanks.

MR. DOMENICI: Okay. Do you have it?

MS. MacQUESTEN: Yes.

Q. (By Mr. Domenici) Okay, I'm asking -- Do you have it, Larry?

A. No, I don't --

Q. Okay, Exhibit 1 is the top exhibit, the eighth page. It's this form here.

A. Got it.

Q. Okay. First of all, for the record, what is that form? Are you familiar with that form?

A. Well, this is a sundry notice. It's a notice of intention to do work on a well.

Q. And did you review this in preparing Exhibit 3?

A. Yes, I did.

Q. And did you review the attachment behind it?

A. Yes, I did.

Q. And on the OCD form under item number 13, will you read that statement into the record?

A. It says, "See Attachment Administrative Order No. SWD-836".

Q. Now, are you familiar with SWD-836?

A. Yes, that's the original SWD order that Mr. Gandy received as a result of his first application.

Q. So in your experience, when this form was submitted with the attached page and referencing SWD 836, what would your experience lead you to believe that the reviewer would have had available?

A. I think the reviewer would have had all of those saltwater disposal orders at his disposal and this attachment to look at.

Q. And he would have been able to -- an experienced regulator or petroleum engineer would have been able to visualize a schematic similar to your Exhibit 3?

A. Oh, absolutely, I believe so, yes.

Q. And do you see the signature space on the bottom there?

A. Yes.

Q. Do you recognize Chris Williams?

A. Chris Williams is the head of the local OCD office in -- located in Hobbs.

Q. So in your experience, a signature by the District Supervisor on the line -- it says approved by -- with the information contained on this form -- would that indicate to you that the District Supervisor was approving a well essentially like your Exhibit 3?

A. I believe that is correct.

Q. And it's your understanding that is, in fact, the well that is in place now?

A. I believe that is correct.

Q. So you prepared a schematic, you then reviewed the production information, the well completion, and what kind of oil and gas -- would that be summarized in Exhibit 4?

A. Exhibit 4 are the wells that were drilled and completed, locations and total depths, in Section 1 of 16-36 and Section 6 of 16-35. These would be the two extended-length sections surrounding the proposed injection well.

Q. And what conclusion did you draw regarding the oil-producing capability of those formations based on this?

A. Of the San Andres through Tubb, I don't believe there is any oil-producing potential in any of those zones.

Q. Now, as part of your second round of analysis for purposes of this hearing, did you review this extended interval for potential impact on freshwater resources?

A. I had resistivity data on San Andres, Glorieta and Paddock wells that were completed in the Lovington and West Lovington fields, and this resistivity data indicated that the water contained in the disposal interval that is being applied for would be on the order of 30 to 70,000 parts per million of total dissolved solids, not

inconsistent with San Andres through Paddock water in the rest of southeast New Mexico.

Q. And how did you -- Can you describe the specific data you relied on?

A. This was water-analysis data that had been compiled by Conoco over a period of operations spanning approximately 40 years and was compiled in support of water resistivities for electric log analysis.

Q. And in your opinion and experience, was that sufficient data for you to draw the conclusions that you've reached?

A. Yes, I believe it was.

Q. And is that information summarized on one of your exhibits?

A. I believe -- I don't think I prepared an exhibit specifically to that effect. I did make some water-saturation calculations on the State "T" Number 2 log for the intervals in question.

Q. And does that support or how does that relate to your --

A. Well, the zones are wet, they are water-filled.

Q. Can you look at Exhibit 6 and explain in a kind of brief sentence what that shows?

A. Well, this is the basic Archie equation that we used to predict whether a zone will be oil- or water-

productive. It takes into account formation porosity, formation water resistivity, and attempts to develop a predictor, if you will, of whether or not a zone will produce oil or water.

In my opinion, the water saturations that I developed here, ranging from 36 up to 91 percent, are well above cutoffs that would be used in dolomitic limestones to establish commercial production.

Q. So Exhibit 6 would primarily support your conclusion that there's no commercial production?

A. That is correct.

MR. DOMENICI: Okay, I would move for admission of Exhibit 6.

EXAMINER JONES: Objections?

MR. OWEN: No objection.

EXAMINER JONES: Exhibit 6 will be admitted.

THE WITNESS: If we could go back to Exhibit 5 for just a minute --

Q. (By Mr. Domenici) What does Exhibit 5 indicate?

A. I reviewed the completion information that was available in the San Andres through Tubb horizons in four townships surrounding the proposed injection interval and excluded the Lovington and West Lovington oil fields. Okay? I mean, there is production in the San Andres through Paddock in the Lovington and West Lovington fields,

but these fields are six miles south and southeast, so I took those away.

Q. Okay.

A. All of the other completions in the four townships in the San Andres through Tubb were for the purposes of saltwater disposal, and there were 12 of those, and those are shown as Exhibit 5.

Q. Now, were you aware of this information at the first hearing?

A. No.

Q. So this is a new analysis for purposes of this hearing; is that --

A. That is exactly correct. I went back and I looked at those 12 SWD completions in the four-township block, looking for precedent with regards to extended vertical intervals. And of the 12 SWD wells that were completed in the four townships, I found three -- 6 of 15-35, 4 of 15-35, and 32 of 16-35 -- that were completed over intervals from 4660 to 6404, 4660 to 6325, and 4844 to 6437, similar intervals to those that are being applied for in this hearing.

Q. And why are those similar? Why would you consider those similar?

A. Top of the San Andres to base of Glorieta.

Q. And to your knowledge, did all of those have

permits from the New Mexico Oil Conservation Division?

A. I looked at the OCD website on all three wells, and I believe all three had permits in place, although -- well, I know they did.

Q. Okay. And then what information did you gather from the other nine disposal wells?

A. Well, those other nine disposal wells were primarily in the San Andres, not an extended interval.

MR. DOMENICI: Let me move for admission of Exhibit 5.

EXAMINER JONES: Any objection?

MR. OWEN: No objection.

EXAMINER JONES: Exhibit 5 admitted to evidence.

Q. (By Mr. Domenici) What analysis did you do to see if this Application would be protective of correlative rights?

A. Well, all of the wellbores in these two sections, being deep wells, had intermediate -- a deep intermediate casing string set at approximately the top of the San Andres. The vast majority of these were cemented approximately to surface, sometimes a little below, but clearly San Andres and above appears to be very well protected.

I don't believe I have any knowledge of freshwater resources below the San Andres in any portion of

this part of Lea County.

Q. Now, did you do any analysis as to how the proposed increased interval would affect the spread of the injected water versus what the original application called out in the original findings?

A. Well, oddly enough, when you're discussing purely volumetrics, or perhaps not oddly enough, the original application vertical interval of approximately 400 feet gross, and I think I had, from the logs on the State "T", picked out approximately 75 feet of net porosity, would over a period of time, pure volumetrics spreads disturbance laterally. By increasing the vertical coverage of the disposal interval, you actually reduce the net effects on your offset operators' horizons, because it takes a much longer period of time for the same volume of water to reach out to the same areal extent laterally.

Q. If you can find Exhibit 8 again, which was the OCC order of May 23rd, 2003 -- Do you have that? That's Exhibit 8.

A. Got it.

Q. If you'll look at paragraph 16 in there --

A. Got it.

Q. Okay, do you recall testimony at the first hearing regarding the potential harm 2000 feet away? It says some 2000 feet away.

A. I believe there was testimony to the fact that the operator was interested in drilling a well, but really I don't think said much more than that.

Q. In there it says, Pronghorn's expert testified that even after nine years of operation at 1500 barrels per day, water would be swept away from the wellbore at most 1320 feet. Do you see that?

A. Yes.

Q. Under your analysis with this increased interval, do you have a similar analysis as to the distance water would move away from the injection well?

A. Necessarily, my analysis has to be somewhat back-of-the-envelope because of the assumptions involved. But if we increase the permeable h from 75 feet to 440 feet, we move the affected area out at 1500 barrels a day to over a hundred years.

Q. So instead of nine years at 1320 feet, your testimony is, it would be around 100 years --

A. That's correct.

Q. -- at 1320 feet?

Do you believe that the interval in this proposed Application should receive approval like the interval did in the original one?

A. Yes, I do, without reservation.

MR. DOMENICI: That's all I have.

EXAMINER JONES: Mr. Owen?

MR. OWEN: Thank you.

CROSS-EXAMINATION

BY MR. OWEN:

Q. Mr. Scott, I think you said that you reviewed 38 wells in the sections around the proposed injection well; is that right?

A. Yes, sir.

Q. And from the top of the San Andres to the base of the Glorieta you found no evidence of hydrocarbons; is that right?

A. I found no evidence of potential commercial production of hydrocarbons.

Q. So if you said earlier in this hearing that you found no evidence of hydrocarbons, that's not quite true, is it?

A. That is not quite true.

Q. There are some hydrocarbons in the San Andres, aren't there?

A. Always -- almost always when the San Andres is drilled through, there will be a show of hydrocarbons.

Q. Okay, let's turn to your Exhibit 6. You show water saturations from 36 percent to 91 percent; is that right?

A. That's correct.

Q. What composes the other -- in the example of 36 percent, what composes the other 64 percent?

A. We normally assume to be some form of hydrocarbon.

Q. So we're talking about injecting into intervals that have 64-percent hydrocarbons?

A. That would be, generally speaking, correct.

Q. And I think you testified at the Commission hearing on this case that the main issue in the way of producing those hydrocarbons would be the porosity; is that right?

A. No, sir.

Q. Why can't somebody produce a zone that has 64-percent hydrocarbons?

A. Because of the relative permeability of the various constituents, because of the two -- those various constituents.

Q. Okay. So the various constituents, the formation, is now permeable enough to --

A. -- to allow the hydrocarbons to move to the wellbore, that's correct.

Q. Okay. Are there methods of increasing permeability?

A. Oh, certainly.

Q. Acidizing?

A. And fracturing, you bet.

Q. Fracturing? Would that be possible in these zones?

A. No, sir, what you'd net would be much more water.

Q. If you acidize or fracture, would you increase the porosity?

A. No.

Q. The porosity would not be increased at all?

A. No.

Q. Would the permeability be increased?

A. Absolutely.

Q. So more water and more hydrocarbons could flow to that wellbore; is that right?

A. You miss the term "relative permeability", and the relative permeability of that rock to those two constituents doesn't change. In this instance what we're looking at is 99.99 percent water and .01 percent hydrocarbon?

Q. Even though we're looking at 64 percent hydrocarbons in the zone --

A. That would be correct. Commercial production through these zones would normally be established at somewhere around 20 percent, not 36 percent.

Q. Okay, and if you fractured, you would have both more oil and more water flow to that wellbore, wouldn't

you?

A. You would have more of everything flow to the wellbore, that's correct.

Q. And in that case, then, the problem with producing is, you could have too much water compared to the oil you would produce; is that right?

A. It requires BTUs, horsepower and dollars to lift water, and what happens is, the BTUs going in are more than the BTUs coming out, so that it costs you net dollars to lift the fluids.

Q. And one of the main costs associated with water production is water disposal, isn't it?

A. It would be a significant cost, but in this instance lifting it would probably be the most significant cost.

Q. Okay. I think you said you didn't have anything to do with the actual recompletion of this well as a saltwater disposal well; is that right?

A. No, sir, I did not.

Q. Okay. I think you testified in Exhibit 1 -- There was that one page you had a hard time finding. It was a C-103, the sundry notice --

A. Yes, sir.

Q. -- that I'm talking about, signed by Chris Williams. Do you remember talking about that?

A. Uh-huh, I recall.

Q. Did you prepare that?

A. I did not.

Q. Did you submit it to the OCD?

A. I did not.

Q. Did you prepare any of the data attached to it?

A. I did not.

Q. Okay. Do you know if a District Office supervisor has the authority to increase authority granted by the Oil Conservation in a saltwater disposal order?

A. I do now.

Q. Based on your experience in the industry, does the Division -- does the District Office Supervisor have the authority to overrule an order issued by the Division?

A. No.

Q. Okay, I want you to turn to Exhibit 5, please.

A. Got it.

Q. Those are the wells in the immediate area that are completed in the San Andres and Glorieta as disposal wells; is that right?

A. In four townships surrounding the proposed injection site.

Q. And you excluded the Lovington and West Lovington oil fields?

A. That's correct.

Q. Are those within those four townships?

A. Yes.

Q. Now, they're producing from the San Andres and Glorieta?

A. Absolutely.

Q. So in addition to the saltwater disposal wells in the San Andres, there are also producers in that four-township area?

A. In those two fields, you're absolutely correct.

Q. In the San Andres and Glorieta. Do you know what the relative porosity in those producers is?

A. Repeat the question?

Q. Do you know what the relative porosity in those producers is?

A. Relative permeability.

Q. Relative permeability.

A. I know that the initial water saturation in those fields was in the neighborhood of 15 to 22, 23 percent. That's from Roswell Geological Society records on those old fields.

Q. Fifteen to 22 percent water?

A. That would be correct.

Q. Okay. And in this particular well that we're talking about, we have 36 percent, at least part of the interval requested; is that right?

A. That is correct.

Q. Okay. In looking at -- When you were talking with Mr. Dominici about Exhibit 5, you indicated that most of these were injecting in a shorter vertical extent within the San Andres; is that right?

A. That is correct.

Q. How long of a vertical extent are we talking about?

A. In the other nine wells?

Q. Sure.

A. Oh, it would have been anywhere from three to six, seven hundred feet.

Q. Seven hundred feet is about the largest vertical extent?

A. Outside of the three that I mentioned in my earlier testimony.

Q. Okay, what about the three that you mentioned in your earlier testimony?

A. Those were -- and you might help me with a calculator -- 4660 to 6404, 4660 to 6325, and 4844 to 6437.

Q. Do you know who the operators are of those wells?

A. I may have that here. Okay, I actually had five wells, I'll give you five operator names, but now two of these that were listed as San Andres through Glorieta did not actually perforate the entire vertical interval, and

I'm not sure which two we're discussing.

Q. Well, let's limit you first to the three that you talked about --

A. Okay.

Q. -- a second ago. On Exhibit 5, which are those three wells?

A. Fasken Oil and Ranch --

Q. Is that the first one, the --

A. No.

Q. -- Cabot Q State SWD?

A. Stoltz State SWD.

Q. Okay.

A. The VF Petroleum.

Q. That's the Kathy?

A. That's correct.

Q. Why does it say "(don't use)"?

A. I don't know, that looked like an active well from the OCD records to me.

Q. Is that the name of the well?

A. I don't know, can't answer the question. And I believe C.W. Trainer operates the Amerada State SWD as the third well.

Q. The Amerada State SWD?

A. Correct.

Q. Did you prepare this exhibit?

A. Yes.

Q. I'm curious why you've got the words "(don't use)" on that.

A. This actually came from the state database, and I get that on a computer disc once a month, and that's exactly the way it was listed in that field.

Q. Okay. Now, based on your Exhibit 6, it's fair to say that there are hydrocarbons in the San Andres and Glorieta zones; is that right?

A. Mr. Owen, there have been 40 penetrations of that horizon in those two sections over a period of 50 years. There has not been a drill stem test, there has not been a completion test, there has not been an RFT in any of those intervals. All of the operators in those two sections, despite numerous available opportunities, have decided that the zone is wet, and it's wet.

Q. Okay. So my question was, based on the information presented on Exhibit 6 --

A. -- the zone is wet.

EXAMINER JONES: Mr. Scott, just go ahead and answer the question.

THE WITNESS: Okay, I'm sorry.

Q. (By Mr. Owen) My question is, are there hydrocarbons --

A. Yes, there are.

Q. -- in the San Andres and Glorieta?

A. That is correct, there are.

Q. Okay. Before about 1910, were there any oil wells drilled in New Mexico?

A. Not that I'm aware of.

Q. I want you to turn back to your exhibit -- it just depicts the wellbore in this case, Exhibit 3. Are you aware that the Applicant was required to put a cement plug in at the bottom of the -- near the bottom of the proposed injection zone?

A. Yes.

Q. Do you know if that was done?

A. I show a casing squeeze at the lowermost holes at 7650 feet.

Q. Now, that was squeezed because of a hole in the casing; is that right?

A. That's correct.

Q. Do you know if there was actually a cement plug --

A. Yes.

Q. -- put in place in --

A. The reports so indicate, yes.

Q. Do you know where it is?

A. 7650 feet.

Q. Okay, I want you to turn to Exhibit 1, to the

ninth page. We were talking earlier about the eighth page; that was the sundry notice, C-103.

A. Okay.

Q. At the very top of the whole stack, nine pages down.

A. Okay, got it.

Q. That ninth page has a number of items listed as having -- apparently having been performed. Is that what that appears?

A. That's my understanding, yes.

Q. Look at item number 5. Does that indicate that that cement plug was put in about 7690 and tagged, but the top of it was tagged up about 7690?

A. Yes, sir. I actually went back to -- all the way back to the actual daily reports --

Q. Okay.

A. -- and 7650 was what was indicated there.

Q. Okay. And you've got -- on your Exhibit 3 you have a packer at 4720; is that right?

A. Yes, sir, that is correct.

Q. Look at that same page in Exhibit Number 1, item number 16. It indicates that that packer was set at 4740; is that right?

A. Again, I went back to the original workover reports and noticed a 20-foot discrepancy.

Q. So are the original workover reports accurate, or is the form submitted to the OCD accurate?

A. I would have no way of knowing.

Q. Do you know how well either of these, either the packer -- the depth at which the packer was set or the depth at which the cement plug was set comply with the OCD saltwater disposal well order in this case?

A. For the original order?

Q. The original order.

A. Would not comply.

Q. Okay. Do you know why?

A. I do not know.

Q. Anybody talk about any casing corrosion in this hole?

A. Well, I have -- I think Mr. Gandy is prepared to testify about what actually went on --

Q. Okay.

A. -- but I can tell you what I know, but it's second-hand.

Q. Is it second-hand from Mr. Gandy?

A. That is correct.

MR. OWEN: Okay, I'll explore that with him.

All right, may I have a minute, Mr. Examiner?

EXAMINER JONES: Sure.

MR. OWEN: Okay, that's all the questions I have.

Thank you.

EXAMINATION

BY EXAMINER JONES:

Q. Okay, Mr. Scott, so you kind of came into this later on, right? Or you testified at the original --

A. No, I testified at the *de novo* hearing.

Q. Okay, at the Commission hearing.

A. Yes.

Q. Okay. And this C-103, I think that's kind of critical. We need to identify whether that is a -- On the first page of the C-103, the notice of intention and subsequent report on Number 8 of Exhibit 1?

A. Yes, sir.

Q. There's a box checked on notice of intention to perform remedial work and a box checked on subsequent report of remedial work. You may not be the right one to ask about this, but -- because it sounds like you found some discrepancies between the next page and actually the workover that was done, the daily reports.

A. They were 20 feet, very minor compared to the summary sheet that was typed up.

Q. Okay. So this second page was actually the work that was done in the well?

A. I don't know. My understanding is that when they discovered those holes in the casing they shut down and

developed this plan and then took that down to Chris to get it signed off on before they proceeded. But Mr. Gandy would be better prepared to testify to that.

Q. Okay, we can ask him the same question, then.

So the actual drill reports, workover reports that you had access to, we don't have access to those here, do we? Because they're not in our state well files --

A. No --

Q. -- they're not required to be in the state well files.

A. They probably would not be, no.

EXAMINER JONES: Yeah. I think, Mr. Domenici, we're going to need to have a copy of those, hopefully faxed to us as soon as possible, but just the report, the internal report that they use to say exactly what they did to the well, and --

MR. DOMENICI: That's fine. And Mr. Scott may have those. I don't know if he took copies of those. If not, we'll make arrangements to get them immediately.

Q. (By Examiner Jones) Okay. And Mr. Scott, this Exhibit 3, this shows the work that was actually done. Are you prepared to talk about that, or do you want and maybe talk to Mr. Gandy about that?

A. Okay, repeat the question?

Q. Exhibit 3, the wellbore diagram --

A. Okay, I prepared this wellbore diagram from the State "T" Number 2 workover reports, which I have a copy.

Q. Oh, you have those?

A. Yes.

Q. Do you mind if wee get a copy of those --

A. Absolutely not.

Q. -- and Mr. Owen gets a copy of them also?

A. Not at all.

EXAMINER JONES: Mr. Domenici, do you mind?

MR. DOMENICI: That would be fine.

EXAMINER JONES: Okay, we'll do that at a break or something, but...

Q. (By Examiner Jones) This wellbore diagram, the top of the cement was normally -- was originally 9762, and that was determined by -- do you know how --

A. Temperature survey, I believe.

Q. Okay. And then I know the original permit to inject had some conditions that had to be met before injection started, such as squeezing the casing on this well and raising the cement -- they said raising the cement to the surface and running a cement bond log. So how many times did they have to squeeze this well?

A. Well, when they got the squeeze in at 4750, they came up and shot holes in the production string at 4320 and circulated 500 sacks of cement from there to surface.

Q. Okay, that was the last squeeze, though, right?

A. That's correct.

Q. And what before that happened? Before that there was another squeeze, looks like?

A. Above and below. 4750 would be the top one, 7650, the holes at the bottom.

Q. Okay. So when they went in they found some problems in the casing. It didn't satisfy an MIT, basically; is --

A. That is correct.

Q. So not only was squeeze work initiated because of that, but also because it was required in the order?

A. That is correct.

Q. Okay. And do you know why there wasn't a cement bond log running after all of this work was done?

A. I can't answer the question, don't know.

Q. Do you think with the wellbore -- with the records that are available, that those would suffice to determine the competency and the extent of the cement behind the pipe?

A. From the packer setting depth up?

Q. Actually the whole thing.

I mean, can we tell from those records -- can we verify your wellbore diagram?

A. I believe you can.

Q. Okay. When they inject water out there, what kind of water are they injecting?

A. It's produced water from various sources.

Q. Okay, different salinities of water?

A. I would say so, yes, depending on which formation they were picking it up from.

Q. Okay. Well, what water is in the formation right now? You've already testified to that. It's -- What does it say, 20 to 60,000?

A. Thirty to seventy-thousand parts per million --

Q. Thirty to seventy- --

A. -- total dissolved solids, yes.

Q. So the water that's being injected is almost the same as the water that's in the formation right now?

A. Oh, certainly.

Q. Okay, what would be the mobility ratio of the injected water versus the water that's in the formation right now?

A. Well, from my calculations, I assume 50 percent.

Q. Fifty percent of what, now?

A. Well, of the water that was currently in the formation, was moveable.

Q. Okay. So when they inject water, they're moving the formation water?

A. That's correct.

Q. Okay. So are you familiar with the Safe Drinking Water Act, the Underground Injection Control Program, the EPA-administered program to administer the Federal Safe Drinking Water Act?

A. I am vaguely familiar but would not consider myself an expert, no.

Q. Okay, they have some very good websites, and the State is -- We have primacy over administering that program with the EPA, but we have to answer to the EPA on protection of any fresh waters and due to any underground injection --

A. Uh-huh.

Q. -- so that's kind of what I'm getting at. And one of the calculations that they encourage people to do, such as yourself as an engineer, looking at an injection well, is not just a Hall plot, which would be a good thing to do, but a ZEI -- zone of endangering influence -- calculation.

A. Uh-huh.

Q. Are you familiar with that?

A. I have -- I'm familiar with it. Did not do one in this case.

Q. Okay, hopefully we will have an easily usable one of those on our website pretty soon, so engineers such as yourself can utilize at least one version of it. Of

course, you could always do that yourself but...

When you did your area-of-review calculations here and looked -- How far out did you look? You looked at those two sections, right?

A. That's correct.

Q. So that would include one half mile radius, or --

A. Actually, the -- or from the disposal well, it was a mile east and west, and because these are extended-length sections, about three-quarters of a mile north-to-south.

Q. North -- further south, probably. Okay, you said that -- I think I understood you to say that through the Tubb is the last -- there is a high water saturation, high enough to have low mobile oil?

A. Correct.

Q. Okay. What about the Abo? Did you look at the Abo?

A. There is -- I did not look at the Abo.

Q. Okay, the Wolfcamp -- What about the Wolfcamp? Can you talk about the Wolfcamp?

A. Oh, the Wolfcamp is productive in this area, in multiple wellbores --

Q. Okay.

A. -- in fact, was one of the original completion targets in the area.

Q. Okay, is the Wolfcamp protected?

A. Yes.

Q. Within a half-mile radius?

A. Yes. And those issues were addressed substantially in the first application, but because the Wolfcamp was a target, it was well cemented.

Q. Okay, what about any -- do you know -- This is a big injection interval you've got here, and admittedly it may be the same as some of the other injection wells, but where's that water going? Do you have any idea?

A. The best permeability appears to me, from electric-log analysis on that State "T" Number 2, to be the basal San Andres and upper Glorieta. There are some other intervals of permeability, very little in the upper San Andres, probably some better zones in the lower Glorieta. But the originally permitted interval clearly is the best spot.

Q. Is that based on a low gamma-ray reading or an invasion from the resistivity?

A. Fairly clean gamma rays, invasion profile on the resistivity logs, very low resistivities, and lost circulation during the drilling of the well.

Q. Did you look at any cement bond logs on offset wells to see if those showed permeability in that --

A. I didn't have cement bond logs available. I did

have a modern set of logs on the Watson 1 6, and I believe the other one is the Big 6 Number 1, and these two wellbores were similar to the State "T".

Q. Do you know if any tracer logs have been run on this well, this State "T" Number 2?

A. I'm not aware of any, no.

Q. Okay, what about the volume that's being injected? Is this a closed-loop system or an open-loop system?

A. Well, they're hauling 1500 barrels a day into the facility.

Q. There is no pipelines coming into it?

A. Not that I'm aware of, no.

Q. Okay. So it's an open system. 1500 barrels a day is kind of an average number; is that right?

A. That's my understanding yes.

Q. Okay, I can ask Mr. Gandy that later.

Is this a commercial operation or a --

A. I believe it is a commercial operation.

Q. Commercial operation. And what is the injection pressure --

A. Vacuum, vacuum.

Q. Okay. What was the injection pressure when you perforated the first -- the 400 feet that were originally permitted?

A. I don't know that I can answer that question.

Q. Okay, I'd better ask that one later.

Okay, what about a Murphy switch on the well? Do you know if they've got one on there? I'll ask that later.

Okay, your lowest cement -- cast-iron bridge plug in this well?

A. 10,288 feet.

Q. Okay, and above that it's just cement that was tagged. Was it tagged after it was set up?

A. Above that cast-iron bridge plug it was tagged, that's correct.

Q. Okay. Did the OCD witness that operation?

A. I don't know. I'm recalling that from the drilling -- from these drilling reports.

Q. Okay. And you said that the relative permeability was -- I assume that you're basing that on the -- on what's normally understood to be the production of the San Andres out there. You don't have any hard data on relative permeability out there, do you?

A. No hard data on relative permeability at this wellbore site, no.

Q. Okay, let's see here. Before we let you get away we need to make sure we ask you all these questions, so...

The San Andres on this well here, the calculations, you actually came up with -- used a simple

Archie equation? You didn't modify that for any shale or anything? Is that the normal carbonate --

A. That's exactly correct. That's a standard carbonate, and I didn't have enough data to factor any significant modification in.

Q. Did you have modern enough logs on here to come up with your porosities?

A. I had to extrap- -- I did have modern logs on those two offsets --

Q. Okay --

A. -- and --

Q. -- did you use those data, that data?

A. I used that data and a best guess, trying to correlate over to the State "T" Number 2.

Q. How far away were they?

A. They're about 2000 feet, roughly.

Q. Okay.

A. And I'd like to bring up -- It appeared to me that the 36 percent water that I was getting in the upper San Andres was substantially by virtue of those two lobes being fairly tight.

Q. Oh.

A. I included them because they showed some resistivity breakback, but I really don't think they're probably taking very much water, or would give up anything.

And I think I made that note on my --

Q. Yes, I see the note, but I think -- I remember on log calculations, sometimes if it's tight, it will shoot up a real high water saturation. Is that not your experience?

A. Well, it tends to -- it tends to drive your resistivity up, that's correct.

Q. Okay.

A. But I didn't have an invasion profile between the medium and the deep tools to work with, which is --

Q. Yeah. You didn't have some real good logs to work with out here?

A. That's what we had.

Q. Now, this water saturation, how low does it have to get there to be productive?

A. Twenty percent, probably.

Q. Twenty percent?

A. Twenty-five percent at the outside.

Q. That's given a certain shale -- or a certain --

A. Correct.

Q. -- gamma-ray reading, okay.

Okay, did you look -- You said you looked at the drilling records, right?

A. Correct.

Q. Okay, did you look at the plugging records, at any --

A. There's -- sometimes when they plug wells they find some oil that has been in that wellbore --

A. Uh-huh.

Q. -- and in your experience is that ever an indication that sometime that might be a productive interval?

A. Oil has been discovered that way, without question.

I went back through -- Now, the completion records were from our scout ticket computerized database. Because that database does not always pick up later completion attempts or other work, I went back to the OCD website and well files to look for evidence that any operator felt like any of these zones had commercial potential. You know, did anybody try to test them? And I couldn't find one instance of anyone attempting to establish production.

Q. Okay, what about drill stem tests?

A. None.

Q. None?

A. None, not one.

Q. People are kind of scared of drill stem tests, maybe.

A. Not in the San Andres, I mean, that's --

Q. It's sour.

A. Well, it's sour, but it's clean lime and a good packer seat and -- and these wells were drilled, many of them, in the mid-1950s to early 1960s when the San Andres was a primary target. You know, it looks to me like if it had a shot, it was going to get a shot.

EXAMINER JONES: Okay. I think that's -- that's all I can think of right now. Do you guys have any more questions for this witness?

MR. OWEN: Mr. Domenici?

MR. DOMENICI: I don't have anymore.

MR. OWEN: I do have one follow-up question.

FURTHER EXAMINATION

BY MR. OWEN:

Q. Mr. Jones asked you if, in plugging records, if somebody had found oil in the wellbore in that interval, if that would indicate a productive zone, and I think your answer was simply that oil has been discovered that way?

A. Yes.

Q. What about the question, would that indicate a productive zone?

A. Not in this case.

Q. Not in this case?

A. No.

Q. If there were oil in the wellbore in a plugged well in that zone, that would not indicate a productive

reservoir?

A. This is a very large number of penetrations, over a very long period of time. Completion -- recompletion reserves are very inexpensive reserves to acquire. Any operator, prudent or otherwise, will leave no stone unturned, because to acquire his reserves he doesn't have to drill for them, all he has to do is perforate for them. It's incredibly cost-effective. Here we've got almost 40 wellbores that penetrate the zones, and not one instance of any operator feeling like they had the potential for commercial production. To me, it's compelling evidence that these zones are suitable for water disposal.

Q. So your evidence is that because nobody has produced it, it is not productive?

A. In this instance, that's correct.

MR. OWEN: Okay, thank you.

EXAMINER JONES: One more question.

FURTHER EXAMINATION

BY EXAMINER JONES:

Q. When you reviewed those reports, did you see any evidence of swabbing, swab tests on this well, when they perforated that interval? They didn't swab it, they just perforated it and started injection?

A. I don't believe I recall any swab test. I don't believe there were any done.

EXAMINER JONES: Okay. Gail, do you have questions?

MS. MacQUESTEN: No, thank you.

EXAMINER JONES: Okay, the witness may be excused.

MR. DOMENICI: Okay, thank you. If we can get those logs, we'll make them an exhibit.

EXAMINER JONES: Do you guys want to take a 10-minute break here?

MR. DOMENICI: Sure.

(Thereupon, a recess was taken at 2:35 p.m.)

(The following proceedings had at 2:47 p.m.)

EXAMINER JONES: Okay, let's go back on the record.

And Mr. Domenici, do you want to make that an exhibit or --

MR. DOMENICI: Yes, we'd like to make that Exhibit 12.

EXAMINER JONES: Exhibit 12 --

MR. DOMENICI: 13, I'm sorry.

EXAMINER JONES: Okay, 13.

MR. DOMENICI: 13.

EXAMINER JONES: Can we scribble "13" on those and pass them out?

MR. DOMENICI: Yes.

EXAMINER JONES: Thank you very much. And do you want to admit that to the record?

MR. DOMENICI: Yes, I move for admission of Exhibit 13.

EXAMINER JONES: Any objection?

MR. OWEN: No objection.

EXAMINER JONES: Exhibit 13 will be admitted to the record.

Okay, let's call the next witness.

MR. DOMENICI: We'll call Dale Gandy.

DALE GANDY,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DOMENICI:

Q. Will you state your name for the record, please?

A. Dale Gandy.

Q. Where do you live, sir?

A. Lovington, New Mexico.

Q. Briefly describe your background.

A. I was raised in New Mexico, I have a background in agriculture and the trucking business in the State of New Mexico. We have an oilfield service company that consists of several realms of service work, all above surface, most of it, work.

Q. What's your familiarity with oil and gas well drilling activities or procedures?

A. I'm certainly not an expert in it. I've had a little bit of experience, I've been around it. We support them, we haul water to them, we do different functions, but not as far as any well completion or technicality part of it, I'm not.

Q. Will you describe -- and let's start at the beginning, when you became involved with this, what is now the injection well.

A. Yes, sir, I think it was back in July or August of '03, Mr. Garner came to me, and we had talked previously about another project of putting together a disposal well. He said that Mr. Baber owned the State "T" Number 3. We started talking about it, it showed good porosity, it showed good potential for a disposal well and a good location, a safe location.

We pursued it. Our deal was that they would -- Mr. Baber would apply for the permit, Marks and Garner would complete the well to the point where it needed tubing. At that point I would take it over, be totally responsible for it and they would have an override in it, nothing to do with the operations of it.

Q. And what was your understanding at that time as to the status of the permit from the OCD?

A. At that time they had started the status of the permit -- the OCD had started paperwork on it. I'm not sure it had been -- I don't know what date it was filed or anything, because I didn't keep up with the permit part of it, because that was not -- that was supposed to be furnished with the well to me.

Q. And then at some point did you become familiar with the actual well-drilling and reworking activities taking place?

A. Yes, sir, when they started to work on the well they notified me, and I thought if I'm going to be an owner and operate this well, I need to know, and so I witnessed everything that was done. Anything that happened or changed, I was on location and witnessed it.

Q. What -- Describe, if you will, what happened during the work on that well that resulted in a different interval that we are facing today.

A. Basically, there was a hole in the casing at the bottom that changed our depth a little bit. They cemented it, tagged it. The difference in the measurements that we're talking about in the intervals is -- my recollection was from calculations with the tubing to a water line that showed a little bit different. We went in, started -- Where do I need to start?

Q. Well, I'd like to make sure the record is clear

as to -- What was the original intention? Let me start that way.

A. The original intention was to set the packer at 6000 feet, approximately where the permit said, and down to the bottom interval.

Q. And then when did that original intention change?

A. When we figured out we had mechanical problems, we had a hole in our casing up high, also below, in the top of the San Andres, in the upper part of the San Andres.

Q. Did -- Was there a point in time where the project stopped while a plan was developed to deal with this question?

A. There was.

Q. Describe what happened.

A. When we set the packer and located the hole and narrowed it down to where it was in the casing, we shut down and also come up above the hole and knew that our casing would test above it. We shut down, they made out the Form -- I believe it was 103, whatever it is -- and asked for permission to set the packer at that depth. We shut operations down until we received that from the OCD in our local area and then went back to work and started squeezing and started our workover at that time, in the top part of the well.

Q. What was your understanding about what the OCD --

about what the approval by Chris Williams meant, as far as this project?

A. At that time I had never questioned our local OCD authority, you know, when they -- Their Rules and Regulations is what we've always operated under in our trucking business and moving product and -- so I didn't have any thought to question his authority to do it.

Q. And it wasn't until after the approval was received that the operation -- that you went back into operation?

A. Yes.

Q. And then describe what happened as far as how the work was completed.

A. We pumped cement in there in three different intervals, trying to squeeze the hole off. We didn't have any luck. We finally got cement to stand, went down and tagged it, and it held, we come up above it -- and I could go back in the records and tell you exactly where -- and perforated it and cemented the casing. We overpumped about 17 barrels back in the frac tanks, to make sure that we had a good job on it.

Shut down, we called the OCD and told them what we were doing when we started pumping. They did not send a representative out to do it. Then we pressure-test- -- then we set our packer, pressure-tested our casing. We

also called them at that time. They didn't send a representative to witness it, but later they did. We re-tested it, and they did witness it the second time.

Q. How much time passed between when they came out and re-tested it, if you can recall?

A. Probably three months.

Q. So after the construction was completed, what was your involvement with the injection well at that point?

A. I took the well over at that time and we run tubing, set the packer, Marks and Garner continued helping me do that. We assumed -- I bought adjacent property to it, I bought about 90 acres. We laid a 4-inch pipeline from closer to the highway, we built about a $250,000 facility to receive the water and clean it up and get it ready for our disposal. It's been taking it on a vacuum, and that's the procedure we went.

Q. Roughly what kind of volumes does the facility average?

A. 1500, 2000 barrels a day.

Q. And from the time that you took it over until May of this year when you received a letter from the OCD, did you have any concerns that there were any problems with the validity of the operation?

A. I did not. I thought the form for Mr. Williams made us legal in what we were doing.

Q. And based on that understanding, you invested this money and bought this extra land and --

A. Yes, sir.

Q. -- engaged in all the activities you've described?

A. Yes, sir.

Q. What was your response to the May 3rd, 2004, emergency shut-in order? What did you do in response to that?

A. I called Mr. Williams and he did some checking on it, called me back and said if I would start the order to redo it, that he would give me a verbal permission to go ahead and operate.

Q. Did you start the process --

A. We did --

Q. -- for permission?

A. -- immediately.

Q. And is that what's attached as Exhibit 1 in this stack of documents in front of you?

A. It is.

Q. What was Mr. Seay's involvement?

A. Mr. Seay is the one that prepared this permit and made the changes. He had prepared the permit the first time for Mr. Baber and redid it this time with the changes that had been made in accordance with the form signed at

Hobbs.

Q. And was this filed on your behalf, this Application?

A. It was, yes.

MR. DOMENICI: I'll move for admission of Exhibit 1.

EXAMINER JONES: Any objection?

MR. OWEN: No objection.

EXAMINER JONES: Exhibit 1 will be admitted to evidence.

Q. (By Mr. Domenici) Now, after you received this verbal authorization from Mr. Williams, pending this application process, what did you understand the application process would involve?

A. Simply a change of where the packer was set, from 6000 to where it's set, 4780, where --

Q. And after you received -- after you filed this Application, did you receive a letter from the OCD telling you to shut down around July -- June 29th?

A. Yes.

Q. If you would look in the exhibit package in front of you, and it should be very close to the bottom, there is -- it's actually Appellant's Number 12, which is on my letterhead. It's a fax transmittal letter.

A. The cover letter --

Q. It's up about four or five pages.

A. Okay.

Q. Okay, first of all, if you look on that, it says the phone number there, the fax number?

A. Yes, sir.

Q. What is that fax number for?

A. It's my office number. It's 396-6887.

Q. Where were you on the 29th?

A. I was in Lubbock Hospital. My mom's had colon cancer, and I've been over with her.

Q. When did you actually first receive information that this order had been -- or this letter had been sent?

A. When you called me on my mobile phone that afternoon about 5:30 or 6:00 o'clock and asked me if I was all right with the letter.

Q. And prior to that had you seen or heard about this letter?

A. No, I had not.

Q. And what response did you take in response to that letter?

A. We responded and complied with it.

MR. DOMENICI: That's all I have.

EXAMINER JONES: Mr. Owen?

MR. OWEN: Before I start the questioning of Mr. Gandy, I want to clarify what -- I don't want to ask the

questions of Mr. Gandy that should be appropriately addressed to another witness. He's here to talk about the actual operations, drilling, and do we have somebody else that's going to talk about that as well?

MR. DOMENICI: No.

MR. OWEN: Okay.

MR. DOMENICI: We have Larry Gandy. He might -- he would primarily be a rebuttal witness, or if there's a specific point --

MR. OWEN: Sure.

MR. DOMENICI: This witness would be the person.

MR. OWEN: Okay, thank you. I'm sorry for the interruption.

Mr. Gandy, thank you for coming today. I do have a few questions for you.

CROSS-EXAMINATION

BY MR. OWEN:

Q. Since we're looking at that Exhibit Number 12, you say that fax number that's on there, that 396-6887, that's your office fax; is that right?

A. That's correct, sir.

Q. Do you have a business there?

A. Yes, sir.

Q. You run a lot of oil servicing through that office and through that business?

A. Yes, sir.
Q. Do you have people in the office?
A. Yes, sir.
Q. Were there people in the office on the 29th?
A. Yes, sir.
Q. Do you have managers below you of your businesses?
A. I do, sir.
Q. Were they in the office or on duty on that day?
A. They were, sir.
Q. Okay. All right, I think you said you're injecting between 1500 and 2000 a day; is that right?
A. Yes, sir.
Q. At least 1500 a day, would that be a fair --
A. Not all days, no, sir.
Q. Most days?
A. Most days, yes, sir.
Q. And up to 2000 a day?
A. Yes, sir.
Q. It's all on a vacuum?
A. Yes, sir. There's times that we get an air bubble or something in it that we have to kick a centrifugal pump on. It puts about 150 pounds, something, at the facility, to make it take water, and then it will go back on a vacuum.

Q. Okay. When did you become involved in the project?

A. In probably September of '03.

Q. 2003?

A. Yes, sir.

Q. Last year?

A. Yes, sir.

Q. All right. Mr. Gandy, I've handed you a stack of exhibits. I want you to turn to Exhibit D. It's only about -- I don't know, seven or eight pages down, before the color pictures. I think that might be it. It's on Marks and Garner letterhead --

A. Yes, sir.

Q. -- at the top?

A. Uh-huh.

Q. Does this exhibit set forth the agreement between you and Marks and Garner and Pronghorn Management Corp. for the drilling and operation of this well?

A. It is.

Q. Okay, what's the date?

A. It's the 6th and 5th and '02.

Q. Is that 2002?

A. Yes, sir.

Q. Is that your signature?

A. It is.

Q. So did you actually become involved in this project in June of 2002?

A. I suppose I did.

Q. Okay. I want you to --

A. I think it was -- I thought you was talking about when we become involved in doing the well.

Q. Okay. Now, I think when you were talking about that C-103, that sundry notice that Chris Williams signed --

A. Yes, sir.

Q. -- that's contained in your Exhibit 1, do you know what I'm talking?

A. I know what you're talking about.

Q. -- I think you said that your understanding was that that authorized you to set the packer higher than the SWD order; is that right?

A. I thought it would change the SWD order, yes, sir. I thought that whatever -- in my experience, whatever we got through our local office is what we went with, you know.

Q. Okay.

A. I didn't -- I'm not -- been tempted to question them, Mr. Owen.

Q. And the intention was to set the packer higher; is that right?

A. Yes, sir.

Q. Did you discuss with Mr. Williams increasing the perforations in this well?

A. I'm not sure. Marks and Garner are the one that carried the 103 to him, so I'm not sure what they discussed.

Q. Is there anybody from Marks and Garner here?

A. No, sir.

Q. Did you, in fact, perforate far more intervals than that authorized by the SWD order?

A. We perforated below the packer, yes, sir.

Q. Okay. Well, let's take a look at the SWD order. I'm going to go to mine --

MR. DOMENICI: It's Number 7.

Q. (By Mr. Owen) Number 7? Let's go to your Exhibit Number 7. Do you see that?

A. No, sir, where is it at?

Q. Well, it's going to be after that first paper-clipped bunch, and then it's going to be several below that, that first paper-clipped one is the real thick one.

A. Okay. Exhibit 6?

Q. Exhibit 7, sir.

A. Okay, okay.

Q. And if I could get you to take that clip off, I'm going to ask you to look between two documents.

A. Okay.

Q. So keep that Exhibit 7 in front of you there, and then that first Exhibit 1 there, that thick one that you just laid to your right --

A. Yes, sir.

Q. -- about nine pages down. I think the eighth page is the C-103. Can you find that?

A. Yes, sir.

Q. And then the next page has a list of operations that were performed. Do you see that?

A. Yes, sir.

Q. Were those the operations that were actually performed on the well?

A. They were.

Q. Okay, looking at Exhibit 7, down at the bottom and the top of page 2 of that exhibit, that authorized you to inject from 6000 to 6200 feet; is that right?

A. Yes, sir, it does.

Q. All right. In looking at Exhibit 1, that one page I had you turn to, that list of operations --

A. Uh-huh.

Q. -- you perforated everywhere from 4810 to 6880 feet; is that right?

A. That is correct.

Q. Why?

A. We felt like that we had the authority -- or I thought that we had the authority to perforate below the packer, down to where we were going.

Q. Okay, well, let's go back to before that. Why did you need to move the packer up?

A. Because there was a mechanical problem, there was a hole in the casing.

Q. There was a hole in the casing. Where was that hole in the casing?

A. About 4900 feet, 48-something.

Q. And how big was that hole in the casing?

A. We don't know exactly how big it was. It would take a considerable amount of fluid.

Q. Did you squeeze it off?

A. Yes, sir.

Q. Why didn't you just run a packer down below that after you squeezed it off?

A. Well, we went and got permission to set up above it after we -- we squeezed it off to -- we put about 30 sacks of cement in it three different times, we tagged it twice and it didn't hold, the third time it did. And then we had permission, or -- at that time -- I can't recall exactly, I think we went and got permission to set the packer above it, and so we perforated above it and circulated cement above that area and then set the packer

at that area.

Q. Did you consider going on through that -- where you tagged it and setting the packer below it, where you were told to, at 5950?

A. No, sir, they had got permission at that time from Mr. Williams to set the packer higher.

Q. I'm talking about before you got that permission, did you consider going through where you tagged it off and setting the packer where you were told to, at 5950?

A. I don't think I understand what you're saying. Did we consider it? Yes, sir, we had a mechanical problem that prevented us from doing it, or would make it costly to do it.

Q. And you made that mechanical problem go away by squeezing off that hole; is that right?

A. Yes, sir.

Q. So that hole is no longer existent; is that right?

A. There is -- That particular hole no longer exists. I don't know if there's another hole below it or not.

Q. Okay. So the mechanical difficulty that you had that caused you to go -- to want to come up toward -- or not to be able to set your packer at 5950 had been solved by squeezing it off, right?

A. Yes, sir, that particular hole had.

Q. Okay. And there was nothing to stop you from going ahead at that point and going through where you'd tagged up to the top of the cement and setting your packer at 5950, was there?

A. Well, we didn't know how we would circulate our cement. If we went below that, then we couldn't circulate our cement up above it.

Q. Okay. Well, let's talk about your circulation of cement for a little bit.

A. Okay.

Q. I want you to look at that SWD order on page 2, the third paragraph. It starts, "Prior to perforating..." Do you see that?

A. Yes, sir.

Q. All right. The second, the third -- I guess it's the second complete sentence starts -- it's on the right-hand side -- "Next, spot mud..." Do you see that sentence?

A. Yes, sir.

Q. And it says, "...spot mud from the retainer to 6500 feet and set a cement plug inside the 5 1/2 inch casing at 6500 feet." Right?

A. Yes, sir.

Q. And then you're supposed to wait on the cement and then run cement to the surface; is that right?

A. Yes, sir.

Q. Supposed to circulate cement all the way to the surface?

A. Yes, sir.

Q. All right, let's look at what you actually did. Let's look at that Exhibit 1.

A. Okay.

Q. It looks like you set the first bridge plug at 10,288 and you put some cement on that; is that right?

A. That's correct.

Q. And it looks like -- item number 5 looks like you set a cement plug and tagged it up at 7690; is that right?

A. That's correct.

Q. Does it say there that you circulated cement to the surface?

A. No, sir.

Q. Why didn't you circulate cement to the surface?

A. Well, we come back up the hole and found that we had a hole in the casing, is the reason we didn't circulate cement to surface.

Q. Now, that hole was found later with a packer at 4750, right?

A. Uh-huh.

Q. Did you try to circulate to the surface when you set that cement plug at 7690?

A. We didn't try to circulate cement to the surface because we couldn't circulate.

Q. Why not?

A. Because it would go away, we couldn't get circulation.

Q. And you -- Did you try to do that?

A. We did.

Q. Now, the order required you to set that cement plug at 6500 feet, right?

A. Yes, sir.

Q. And you actually set that cement plug at 7690; is that right?

A. Yes, sir.

Q. Why did you set it 1000 feet deeper than you were ordered to?

A. Because there was also a hole in the casing there, there was a mechanical problem there.

Q. At 6500 feet?

A. Yes, sir.

Q. Why didn't you just squeeze it off there?

A. I don't really know. You know, I don't -- I was witnessing it, and I --

Q. Who was doing your work there?

A. Mr. Garner.

Q. And he's not here?

A. No, sir.

Q. So we don't know why that cement plug wasn't set at 6500 feet and just squeezed off, do we?

A. Well, it wouldn't -- you couldn't set a plug at 6500 feet, as I remember correctly. It would take it.

Q. It just kept taking it?

A. Yes, sir.

Q. Kept taking the cement?

A. Kept taking the water. You couldn't circulate it to get -- you know.

Q. It kept taking the water outside of the casing?

A. Yes, sir.

Q. Where was it going?

A. We don't know.

Q. You don't know if it was going uphole?

A. No.

Q. You don't know if it was going downhole?

A. No, sir.

Q. Did you attempt to set a cement plug there?

A. Yes, sir.

Q. 6500 feet?

A. We attempted to set a packer there to circulate it, to find a spot to set it, yes, sir.

Q. And you couldn't circulate it because there was a hole?

A. That's correct.

Q. Did you try to squeeze off that hole?

A. No, sir.

Q. If you could have squeezed off that hole, you could have set your packer at 6500 feet, couldn't you?

A. I don't think so.

Q. All right. Now, let's look at that operations sheet there. You set your packer at -- Well, item number 16 there, you set your packer at 4740; is that right?

A. Yes, sir.

Q. And then you perforated -- item number 9, you shot four holes at 4320; is that right?

A. Yes, sir.

Q. Then you did a pressure test after that?

A. No, sir.

Q. At some point after that you did a pressure test, an integrity test of the casing; is that right?

A. We did an integrity test of the casing before we shot the holes. It helped, and then we shot the holes, circulated cement and did another integrity test.

Q. And that integrity test after you shot that cement at 4320 -- there was a second integrity test after you shot the holes at 4320?

A. Not until after we pumped the cement in it, no, sir.

Q. And you pumped the cement in, and then you pumped, and then you did another pressure test --

A. Yes, sir.

Q. -- is that right? And the packer was still sitting down at 4740?

A. No, sir, we set -- we had to drill out and come back and set our packer, and we set a -- as I remember, I think it was a bridge plug or something that was set in there. Anyway, it was something that we drilled out, you know, because we had to drill back down to it and get it out after we poured -- put our cement in it.

Q. Where did you set that bridge plug?

A. I believe it's at 47- -- I'm not sure it was a bridge plug or -- We set the cement retainer in it, and we had to drill the cement back out, and then after we drilled it back out we set the packer where we had permission to set it and then did an integrity test on it.

Q. You set that cement retainer, that's item number 10?

A. Yes, sir.

Q. Where did you set that?

A. I don't remember, I don't really know.

Q. Was it above that 4320?

A. No, sir.

Q. It was below it?

A. As I remember correctly, it was, yes, sir.
Q. You didn't have the packer set yet?
A. I don't remember.
Q. Okay. Is that packer still set in that 4740?
A. The packer -- We set the packer in there after we pumped our cement and drilled out. Then we went back and set this packer in there.
Q. Well -- Yeah, I mean today, as we sit here, is that packer setting there at 4740?
A. Yes, sir.
Q. Okay. I think Mr. Scott's well diagram indicates that it's at 4720; is that right? Exhibit Number 3?
A. There is a discrepancy, as I said before, between our tag on our calculations with our tubing and our wireline.
Q. Okay. So the order required that the packer be set at 5950, right?
A. I'd have to look and see.
Q. I think it's on the top of page 2, second line.
A. Yes, sir.
Q. Order required that it be set at 5950?
A. Uh-huh.
Q. Your work report here says that it's set at 4740, right?
A. Yes, sir.

Q. Mr. Scott's diagram says that it's set at 4720, right?

A. Yes, sir.

Q. Okay, I'm just trying to figure out where this thing is. All right, let's move on a little bit.

Now, your original proposal was to perforate from 6200 feet to 6400 feet; is that right?

A. Yes, sir, it is.

Q. Okay. Why don't you take a look at -- in my stack of exhibits, Exhibit D?

A. Okay.

Q. Do you see that?

A. Uh-huh.

Q. And that's your APD for this well; is that right?

A. That's what?

Q. I'm sorry, Exhibit C, let's go to Exhibit C.

A. Okay.

Q. That's your -- essentially your proposal for this well; is that right?

A. Yes, sir. That's Pronghorn's proposal for it, yes, sir.

Q. That's Pronghorn's proposal for this well?

A. Yes, sir.

Q. And the proposal was to -- item number 7, perforate from 6200 to 6400, right?

A. Yes, sir.

Q. And turning back to that order, on page 2 at the top again there, in that same line, requires -- or permits injection from 6000 to 6200 feet, right?

A. Yes, sir.

Q. And then when we turn to your operations log, you actually perf- -- item number 15, you actually perforated from 4810 to 6880, right?

A. Yes, sir.

Q. You perforated about 1180 feet above the proposed zone?

A. Yes, sir.

Q. And the order that -- the zone that was ordered by the Division; is that right?

A. I'm not sure if we got permission, I don't know of any permission that we got to perforate higher than we did. I witnessed it, I know it was perforated. I'm not sure where the permission come from.

Q. Okay, when you were talking about the purpose of that visit to Mr. Williams, you said it was to get permission to set the packer higher; is that right?

A. Yes, sir.

Q. But you don't know if it was to get permission to perforate?

A. I do not.

Q. Do you have any documents that indicate that that was the purpose?

A. I do not.

Q. Do you have any documents that indicate that Mr. Williams approved perforations above the permitted zone?

A. I do not.

Q. All right, and you perforated about 680 feet below the proposed zone; is that right?

A. Yes, sir.

Q. The proposed zone was only 2000 feet, right?

A. Yes, sir -- 200.

Q. Two hundred feet, I'm sorry, thank you. And now you've got more than 800 feet perforated; is that right? I'm sorry, more than 2000 feet perforated; is that right?

A. Yes, sir, that is correct.

Q. And you don't know if you ever got permission to do that?

A. I'm not sure if they did that or not, I am not.

Q. I want you to turn to the top of my stack of exhibits, Exhibit Number B. Do you see that?

A. Uh-huh.

Q. Is that the Application that was originally filed for the disposal well in this case?

A. It's my understanding, yes, sir. I wasn't in on the -- It didn't go through me, I didn't do it.

Q. Okay.
A. I didn't make the application.
Q. And you became a couple months later, in June of 2003; is that right?
A. Yes, sir.
Q. All right. I want you to look at Exhibit Number C. That's an APD. Do you see that?
A. No, sir. In your exhibit or mine?
Q. Yes, my stack of exhibits. It looks like you were on a wellbore diagram, and it's a couple more pages past that, sir, right past the map?
A. Map?
Q. Right past that, yes, sir. Is that the APD that was filed for the original SWD in this case?
A. To the best of my knowledge it is, yes, sir.
Q. All right. I want you to turn to Exhibit G in my stack, just a few pages down. It's on the OCD letterhead.
A. Okay.
Q. Is that the letter that you received in May of this year ordering you to immediately cease injection into the well?
A. Yes, sir, I believe it is.
Q. Did you receive that order?
A. Yes, I did.
Q. All right. I want you to turn to Exhibit I, it's

just two pages down.

A. Okay.

Q. It's on NMOCD letterhead; is that right?

A. Yes, sir.

Q. It's from Gail Macquesten to Ms. Lorraine Hollingsworth; is that right?

A. Yes.

Q. Is that the letter that was faxed to your office the morning of June 29th, 2004?

A. Yes, sir.

Q. You didn't know about it till that evening, right?

A. That's correct.

Q. Okay. I want you to turn to Exhibit Number J, the color photos. Do you see those?

A. Yes, sir.

Q. Are those photos of your -- Gandy Corporation's tanks and battery associated with the injection well?

A. It is.

Q. The injection well is actually about 2000 feet away; is that right?

A. It's a little further than that.

Q. Okay, it's about -- a little over 2000 feet north of this location, right?

A. Yes, sir.

Q. You just have pipe running to the injection well?
A. That is correct.
Q. Okay. Do these accurately depict the condition of your operations?
A. It does.
MR. OWEN: Mr. Examiner, I move the admission of Exhibits B, C, D, not F, G and I.
EXAMINER JONES: Any objection, Mr. Domenici?
MR. DOMENICI: No objection.
EXAMINER JONES: Okay, Exhibits for DKD B, C, D, G and I will be admitted to evidence.
MR. OWEN: May I have just a minute, Mr. Examiner?
EXAMINER JONES: Sure.
MR. OWEN: Thank you.
All right, nothing further at this time, Mr. Examiner.
MR. DOMENICI: Can I follow up?
EXAMINER JONES: Sure.

REDIRECT EXAMINATION

BY MR. DOMENICI:

Q. Mr. Gandy, let me try to follow up on a few of these questions. If you look in the -- not our exhibits but the other set of exhibits, if you look through Exhibit C --

A. Okay.

Q. -- okay, do you have an understanding as to whether or not when Exhibit C was sent to OCD it included the page behind it?

A. It's my understanding that it did, but I'm not positive of it. I wasn't there when it was executed.

Q. And then on the first page of Exhibit C, the form, it says on Number 22 there, it says, "See Attached. Administrative Order"?

A. Yes, sir.

Q. See that language?

A. Yes, sir.

Q. And then if you look -- and I know this gets confusing, but if you look -- So that proposal went in and there was a notification on the OCD form along with a description of the work?

A. Yes, sir.

Q. And a copy of the order?

A. Yes, sir.

Q. And that's how you were proceeding?

A. Yes, sir.

Q. And then if you'll look on the order itself, if you can locate that, which is Exhibit 7 in the other package.

A. Okay.

Q. You might have separated that out of -- when he was asking you about that, but if you look in Exhibit -- if you find Exhibit 7 --

A. Okay, I've got it.

Q. Okay, if you look on the bottom of the second page --

A. Okay.

Q. -- will you read that into the record, what it says there?

A. The operator shall immediately notify the supervisor of the Hobbs District Office of the Division of failure of tubing, casing, or packer in the said well...

Q. And can you finish it? ...and...?

A. ... and shall take such steps as may be timely or necessary -- and then it gets -- I can't read it, it's --

Q. Okay, for the record I think it says, "...to correct such failure or leakage."

Did you understand that in following up with the subsequent -- what we call Form 103, C-103 form, that there was an attempt to comply with this requirement in the order, that if there was a problem, to notify the Hobbs District Office?

A. Can you --

Q. Well, looking at the language you just read in the order, that I just had you read --

A. Uh-huh.

Q. -- did you understand that pursuant to that language Pronghorn was then making a second proposal after they -- the first proposal they made wasn't working?

A. Yes, sir, that's correct.

Q. So they then made a subsequent proposal and were taking such steps as necessary, as may be timely and necessary, to correct such failure --

A. Yes, sir.

Q. -- such failure or leakage?

A. That's correct.

Q. And then Mr. Williams signed off on that proposal, to your knowledge?

A. Yes, sir.

Q. And you went forward?

A. We went forward, yes, sir.

Q. And in the proposal to Mr. Williams, in response to the order, as required by the order, he was notified that these different perforations were going to occur?

A. I'm not positive that he was. I wasn't there. I understood that we had permission to do it, but I have not seen written permission to do it, so I can't make a statement --

Q. Let me ask it this way: Do you know if the attachment, the second page to Exhibit -- second page --

it's actually to page 8 of Exhibit 1, so it's the C-103 form --

A. Uh-huh. I've lost it again.

Q. It's in the top part of that first exhibit, should be in that package right there, eighth page down.

A. Okay.

Q. Okay, there's the Form C-103?

A. Uh-huh.

Q. And then behind it is the listed items 1 through 18?

A. Yes, sir.

Q. Did you understand that when this form was submitted to Mr. Williams he received the list of items attached, the description attached?

A. Yes, sir, I did.

Q. And so when you went forward thinking that you had approval from him, you understood that he had been informed of this proposal?

A. I understood that, yes, sir.

Q. Now, let me go back and just try to tie up a couple of things. In this thick exhibit package, our exhibits --

A. Okay.

Q. -- we went through the letter that was on my letterhead, forwarding this order?

A. Yes, sir.
Q. And you said that was your office number?
A. Yes, sir.
Q. Isn't it correct that is your Lovington office fax number?
A. Yes, sir.
Q. And which office do you work out of?
A. The Lovington.
Q. Okay, so that went to the Lovington office?
A. It did go to the Lovington office, and they subsequently put it -- but instead of being -- it wasn't the Gandy Corporation, it was personally to me, and so they put it in my mailbox for me to attend to when I got back.
Q. Okay. Then after you found out about the order did you contact your son from the hospital in Lubbock, to initiate steps to comply?
A. I did.
Q. How long did you take to do that?
A. As soon as I got off the phone to you.
Q. And were you intimately involved in the decision as to where to perforate?
A. No, sir.
MR. DOMENICI: That's all I have.
MR. OWEN: Mr. Examiner, I do have a couple follow-up questions.

EXAMINER JONES: Okay, go ahead.

RECROSS-EXAMINATION

BY MR. OWEN:

Q. Mr. Gandy, do you have the daily report that Mr. Scott brought with him? Is it sitting up there? It's marked Exhibit Number 13, probably in handwriting. It says New Mexico State "T" up at the top. It should be all by itself.

A. No, sir, I don't think I do. Exhibit 13?

MR. OWEN: I don't know if that was ever provided to the witness.

MR. DOMENICI: I'll give him my copy. I know there's a number of copies around.

Q. (By Mr. Owen) Okay, I want you to -- Have you see that before?

A. Yes, sir, I have.

Q. Have you read it before?

A. Yes, sir, I have.

Q. Does it accurately describe the operations while this well was being recompleted as a disposal well?

A. It generally does, yes, sir.

Q. All right, I want you to turn to the fourth page.

A. Okay.

Q. The entry at the top is 8-18-03; is that right?

A. Yes, sir.

Q. And the entry at the bottom is 8-22-03; is that right?

A. Yes, sir.

Q. That entry on 8-22-03 describes the perforations in the injection zone; is that right?

A. Yes, sir.

Q. Does that entry describe operations that were conducted on August 22nd, 2003?

A. Yes, sir.

Q. Okay, I want you to turn back to your Exhibit 1, and the C-103 is about eight or nine pages down in there.

A. In here?

Q. It's that thick -- your Exhibit 1.

A. My Exhibit 1.

Q. Your -- yeah.

A. Okay.

Q. It's that thick exhibit, that's what we're talking about, the one you've got your hand on, sir.

A. Okay.

Q. Do you see the C-103?

A. Yes, sir.

Q. What date was that signed by Mr. Williams at the bottom?

A. 19th.

MR. OWEN: All right, that's all I have, Mr.

Examiner.

EXAMINATION

BY EXAMINER JONES:

Q. Okay, Mr. Gandy, are you -- you're familiar with the equipment on the well right now?

A. Yes, sir, I am.

Q. Okay. Does it have a pressure-limiting switch on it, a Murphy switch?

A. Yes, sir.

Q. Okay, even though you're on a vacuum right now, I understand.

A. Yes, sir.

Q. Okay, are you --

A. Sir, the pressure-limiting switch is at the facility, not at the well.

Q. Okay, that's fine.

I guess I need to ask this as a question, but are you familiar with the Safe Drinking Water Act, the Federal Safe Drinking Water Act?

A. I know about it. But familiar with the technicality of it, I'm not, sir.

Q. It's -- The Underground Injection Control Program is derived from that Safe Drinking Water Act, and it's regulated by the Environmental Protection Agency, and so they look over our shoulders as to what we do here in New

Mexico, and I have to answer to them.

A. I understand.

Q. So I wanted you to be aware of that. The --

A. The cement down to the 4720 or 4800 should protect that, shouldn't it? That was my understanding, that it would take any question of polluting any kind of water completely out of it, because we're double-cemented. The 8 and 5 is cemented down that low, plus the 5 1/2.

Q. Okay, and on that cement job, were you there witnessing that?

A. Yes, sir, I was.

Q. So you know there is cement there --

A. I know there is -- We circulated 17 1/2 barrels over.

Q. Okay, but you didn't run any bond log on it --

A. No, sir.

Q. -- so there is some intervals opposite where you're perforated that maybe have no cement, right?

A. I don't know. It was explained to me that overpump it would ensure any spot that wasn't -- you know, that it would go to.

Q. Okay. But that hole that you had down at 6600 feet or so and you tried to squeeze and you couldn't even get the water to circulate, right?

A. Yes, sir.

Q. So it sounds like you found a zone of high permeability down there?

A. Yes, sir.

Q. So were you happy when that happened, or were you -- did that influence you to go ahead and include that zone in your perforations?

A. It did not. No, sir, we were trying to do it as close as we could to the book, but mechanical problems, you know, make you go a little different route sometimes.

Q. Okay, when Eddie Seay submitted this on your behalf, this application to inject over this interval, this new interval, we got a protest from Mr. Watson as DKD --

A. Uh-huh.

Q. -- and because he was in that area of review, he has -- he had the -- and you noticed him, he had the right to protest. And do you think he was being materially affected by your well?

A. No, sir. Am I hurting his well? Is that what you're asking me?

A. Yes.

A. No, I don't think so.

Q. Okay, so you have no idea why he's protesting?

A. I don't.

Q. Okay, we'll hear from him later on this.

Let's see, and as far as where is the water going

in the well, do you have any idea where it's going in that big interval, just beyond what Mr. Scott --

A. Not beyond what Mr. Scott says, we don't.

Q. -- said earlier?

A. Uh-huh.

Q. Okay.

A. We feel confident it's not going below where our cement, you know, is on the bottom or above where it's at on top --

Q. Okay

A. -- it's going in that interval somewhere.

Q. Okay. Are you aware that we put a pressure limit on injection wells?

A. I am.

Q. And you're aware that it usually starts out at .2-p.s.i.-per-foot gradient?

A. Yes, sir, I am.

Q. And do you know how to apply for an additional pressure on your well in the future, if you ever need it?

A. Yes, sir, I do.

Q. Okay. This C-103 that was filed, was that C-103 filed prior to the work or after the work?

A. Prior to the work.

Q. Okay. But on the boxes that was checked on that C-103, they checked off a preliminary, but they also

checked off on the other side that the work had been done, and I just -- Do you know why they checked that box over on the right-hand side that says the work had already been done?

A. I think they carried it back to him after we accomplished the work, is my understanding, that it went back to him for final approval. Now, I'm not positive of that, sir, but that's my understanding.

But it was -- We did have that prior to doing the work.

Q. Okay. Why was there holes in the casing? Why do you think it had holes in the casing out there?

A. I think that there was not any cement behind it where it was at, and the water from -- Like Mr. Scott talked, it was heavily saturated, and it over a period of time ate a hole in it.

Q. Because the well is pretty old?

A. Yes, sir, that's correct.

Q. And when you bought into this well did Mr. Baber explain to you the procedure he'd gone through to get this well approved, first administratively, and then he went through the Division, then he had to go to the Commission? Did he say anything about that?

A. No, sir.

EXAMINER JONES: And why is Marks and Garner not

here today to present a witness in this, Mr. Domenici?

MR. DOMENICI: There's no specific reason? I mean, we thought Mr. Scott could explain the key issues. It sounds like maybe there's more questions about the well construction than the impact of the increased interval, which is really what we focused on, and frankly, all the orders that we have seen focus on.

Q. (By Examiner Jones) Okay, Mr. Gandy, another thing we look at besides pollution of -- and movement into any freshwater zones is movement out of zone. In New Mexico we issue our permits restricting any movement out of the injection zone.

Right now your zone that you're injecting is the San Andres and Glorieta, so we want to watch real close within our half-mile radius if there's any movement out of the San Andres up or out of the Glorieta down into any other formations. Are you confident that there will be no movement as a result of your injection in the San Andres and the Glorieta?

A. I'm confident in Mr. Scott's figures on it, yes, sir.

EXAMINER JONES: Gail, do you have any questions?

MS. MacQUESTEN: No, thank you.

EXAMINER JONES: That's it for me with this witness.

You guys have any more questions further or --

MR. DOMENICI: Nothing further.

MR. OWEN: Nothing further.

EXAMINER JONES: Okay. Thank you very much, Mr. Gandy.

MR. OWEN: Thank you, Mr. Gandy.

THE WITNESS: Thank you, sir.

EXAMINER JONES: Okay, any more witnesses?

MR. DOMENICI: Can we recall Mr. Scott to talk about some of the construction?

EXAMINER JONES: I don't have a problem with it. Mr. Owen?

MR. OWEN: I don't really have a problem with it, except that Mr. Scott testified that he wasn't there. So...

EXAMINER JONES: Mr. Scott has read a lot of the reports.

MR. OWEN: Okay.

MR. DOMENICI: It would be based on --

EXAMINER JONES: Let's --

MR. DOMENICI: -- his experience and reading the reports.

EXAMINER JONES: Yeah, let's -- We questioned him extensively, but let's try another question or two if you want to.

LARRY R. SCOTT (Recalled),

the witness herein, having been previously duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DOMENICI:

Q. Mr. Scott, have you had a chance to read again the reports of the workover activity?

A. Yes, I have.

Q. And before you answer this, is this something you do? Do you read over these kind of reports to try to determine whether you want to workover a well yourself or purchase one or determine the status of a well?

A. I have significant expertise with daily drilling and completion reports.

Q. And based on --

A. That's what I do for a living.

Q. -- that, do you use those to infer the quality of wells or to make determination about how activities took place and why?

A. Correct. Now, I must necessarily infer what went on, but the original order demanded that cement be circulated from 6500 feet up to the surface, and they got down there with holes in the pipe above and below that interval and were unable to circulate -- I mean, they were pumping water with no returns -- and at that point

determined that there was holes in the casing at approximately the 7600-foot interval. The depth discrepancies may well have been the difference between wireline measurements and tagging it with drill pipe. I don't consider those to be significant at all.

But what happened, they went in with that packer and started testing the annular space, and they kept testing that annular space till they got a good test at approximately the top of the San Andres. And that's where the holes were perforated in the production pipe and cement circulated to surface.

I think ultimately we can say they got the best cement job they could get on this well, given the fact that they had mechanical problems with holes in the casing and given the fact that they could not establish circulation down in the interval where you all were originally wanting to see cement.

MR. DOMENICI: That's all I have.

THE WITNESS: I do -- I did see a pressure chart that, to me, verified mechanical integrity from the packer setting depth up.

Clearly, I think the thinking of the people on the ground at the time was that, you know, if we can demonstrate that we're containing those fluids from the San Andres up and from the base of the Glorieta down, they

interpreted the order, I think, also said somewhere that they were authorized to inject in the San Andres and Glorieta, and I'm not sure that that interpretation didn't expand the vertical interval to include all of that.

You are exactly correct in that we can't determine with any certainty in that gross interval because there is little or no cement over most of that, probably, and they were unable to place cement because of lost circulation.

EXAMINER JONES: Mr. Owen?

CROSS-EXAMINATION

BY MR. OWEN:

Q. Mr. Scott, can you find Exhibit 7 in front of you. It says "App-7" with the --

A. Yes, sir, I do.

Q. Can you turn to page 2 for me? Second full paragraph starts, "Prior to perforating..."

A. Uh-huh.

Q. Do you see that? Third line down -- second line down, in the middle of it, says, "...then perforate above...current cement top at approximately 9762 feet and squeeze cement through perforations to the surface."

A. Uh-huh.

Q. They're required to squeeze cement from 9762, not 6500; is that right?

A. I believe it said "...above the current cement top..."

Q. "...at approximately 9762..."; is that right?

A. That is the current cement top.

Q. Okay. So then they were required to squeeze cement from that depth to the surface; is that right?

A. No, I believe they were wanting them to perforate somewhere above that cement top and circulate from that point up.

Q. Okay, so when it says "...current cement top at approximately 9762...", it doesn't mean "...current cement top at approximately 9762...", it means something else?

A. Well, you can't perforate at the cement top with any expectation of being able to pump anything into it, because that cement strings up the hole above where a temperature survey would normally indicate top of cement. They would necessarily have to perforate somewhere above that in order to have any hope of establishing circulation.

Q. 3000 feet above it?

A. 3000 feet would be excessive.

Q. And they actually never circulated cement --

A. Unable to circulate anything, let alone cement.

Q. Okay, if I can finish my question, they never actually circulated cement from 6500 feet to the surface, did they?

A. They circulated it from approximately 4400 feet to the surface.

Q. So the answer to my question would be no?

A. That would be correct.

Q. Okay, and they never circulated from 9762 to the surface?

A. That would also be correct.

MR. OWEN: Okay, thank you.

EXAMINER JONES: Okay, I don't have any questions.

MR. OWEN: That's all I have.

MR. DOMENICI: That's all the witnesses we have.

EXAMINER JONES: Okay.

MR. DOMENICI: I would like to make sure all our exhibits are in, if I could just go through them.

Exhibit 1 is in, as I understand it.

MR. OWEN: If you just want to move them *en masse*, that's fine with me.

MR. DOMENICI: Okay, we move all the exhibits in, then.

EXAMINER JONES: 1 through 13?

MR. DOMENICI: Yes.

EXAMINER JONES: In case we haven't before, Exhibits 1 through 13 of the Applicant are admitted to evidence.

Mr. Owen?

MR. OWEN: Call Mr. Danny Watson.

DANNY RAY WATSON,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. OWEN:

Q. Tell us your name, please.

A. My name is Danny R. Watson.

Q. Where do you live?

A. Tatum, New Mexico.

Q. Where do you work?

A. I'm self-employed, currently on DKD Saltwater Disposal and Danny's Hot Oil Service.

Q. Okay, what do you do with DKD Saltwater Disposal?

A. We just receive water from trucking companies and dispose of it.

Q. Have you previously testified before this Division and had your credentials as a practical oilman recognized and made a matter of record?

A. Yes, I have.

MR. OWEN: We move that Mr. Watson be recognized as an expert practical oilman.

EXAMINER JONES: Mr. Watson is qualified as an expert practical oilman.

Any objections?

MR. DOMENICI: Well, what practical -- I would like to voir dire, I guess, yes.

EXAMINER JONES: Say again?

MR. DOMENICI: Can I voir dire him, can I ask him some questions?

EXAMINER JONES: Sure.

VOIR DIRE EXAMINATION

BY MR. DOMENICI:

Q. What practical experience have you had as an oilman?

A. I've also owned four oil and gas leases previously and run them, operate them, made them work. I've run hot oil units and extensively familiar with crude oil. I've done that for over 25 years, been in the oil business for way too long, probably around 35 years.

Q. Do you have any training in hydrology?

A. No.

Q. Do you have any experience in water production?

A. Yes.

Q. What's that?

A. Due to producing my own oil wells. Also had a brine station. I understand how to make brine water very efficiently, and we used to transport it all the time in trucks and I've worked with it extensively through my

disposal.

MR. DOMENICI: No objection.

EXAMINER JONES: Okay.

DIRECT EXAMINATION (Resumed)

BY MR. OWEN:

Q. (By Mr. Owen) Okay, Mr. Watson, let's turn to -- why don't you turn to DKD exhibits, they're clipped together, probably has an application for authorization to inject on top; do you see that?

A. Yes, for Pronghorn Management?

Q. Yes, sir.

A. Okay.

Q. Let's turn now to the color photographs that were attached as Exhibit J.

A. Okay.

Q. Do you recognize those?

A. Yes, I do.

Q. What are they?

A. That is Gandy's facility that they built, and it's what you normally see every day up there, trucks unloading in it.

Q. What are those -- when you say trucks unloading in it, there are three trucks pictured in that first picture.

A. Okay, the two trucks on the left-hand side are

unloading into the big black tanks. The truck on the right-hand side, apparently they had some sort of trouble and they was probably working on something that they have there. I don't know what he's doing.

Q. Okay. And then turn to the second page. Is that -- Were you present when these pictures were taken?

A. Yes, I were.

Q. Were these pictures all taken about the same time?

A. Yes, they were.

Q. Is that second page just a close-up of those two trucks that are pictured on the first page?

A. Yes, sir, it is.

Q. Does it show them unloading?

A. Yes, sir.

Q. All right. Is the third page just basically a duplicate of that first page?

A. That is correct.

Q. What about the next page?

A. Yes, on Exhibit -- it just shows another truck coming in to unload, is all.

Q. And the next page?

A. Just a duplication of the last page.

Q. Okay. What time were these pictures taken?

A. Approximately 11:30.

Q. Do they accurately depict the scene at that time?
A. Yes, they do.
Q. All right. Is that Mr. Gandy's injection facility?
A. That's his receiving station, yes.
Q. I'm sorry, Gandy Corporation's injection facility?
A. Yes.
Q. Okay, thank you. And I want you to turn to Exhibit M, several pages down. It's handwritten. Probably the last page of that packet, Mr. Watson.
A. Exhibit M, yes.
Q. Do you recognize that?
A. Yes, I do.
Q. What is it?
A. It was just a documentation that we were running -- both me and an employee I have, just seeing how many loads was coming in.
Q. Coming in where?
A. Coming into Gandy's water station?
Q. Do you know this to be accurate?
A. Yes, I do.
Q. How do you know it to be accurate?
A. Because I filled out about half of it, and my employee filled out the other half because I paid him to

sit there and watch.

Q. Okay. Let's turn to the second page of that exhibit.

A. Okay.

Q. Can you tell me how many loads were unloaded at that facility after 8:30 in the morning on June 29th, 2004?

A. On the 29th?

Q. Yes, sir.

A. Approximately nine loads.

Q. Okay. Are two or three of those loads the trucks that are pictured on Exhibit J?

A. Yes, sir, they are.

Q. Okay. I want you to turn to -- within the Gandy Exhibits, Exhibit Number 2. Exhibit Number 1 is a big thick exhibit, Exhibit Number 2 is a one-page map. It's sitting on your right-hand side, right now.

A. Oh, this one here? Okay.

Q. Does that accurately reflect the acreage in the area around this disposal location?

A. Yes, pretty close.

Q. Do you have a disposal well in the same section as the proposed well in this case?

A. Yes, I do.

Q. Where is that well?

A. From the proposed well, if you'll come down a

little southeast, and it has like "Patterson" right below the "J.B. Selman". But the Patterson right there beside it, that should be my disposal well.

Q. It's right below the word "Selman"?

A. Yes, it is.

Q. Okay. Then there's another well, a dryhole marker to the west of that. Do you see that?

A. Yes.

Q. Right above the word "Patterson"?

A. Right above the word "Patterson", yes, sir.

Q. What's that?

A. That is -- I believe that is where my Snyder A Number 1 well is.

Q. Okay, we'll get to that Snyder A Number 1 in just a minute, but I want to talk to you about what you own in the area. I want you to turn -- Leaving that Exhibit Number 2 kind of on the side, I want you to turn to DKD Exhibit Number K. It's right after the photo.

A. Okay.

Q. Do you recognize that?

A. Yes, I do.

Q. What is it?

A. That's change of operator from Chesapeake Operating to DKD, L.L.C., for the Watson 6 Number 1 --

Q. Okay.

A. -- which is my SWD.

Q. And are there some pages and instruments that follow that?

A. Yes, they are.

Q. What are they?

A. That's a bill of sale and conveyance to all rights, title and interest to the wellbore and approximately 50 acres of minerals.

Q. Okay. Looking back at Exhibit Number 2, where -- how close to the proposed disposal location do your 50 acres of minerals come?

A. I'm approximately -- probably, oh, less than 400 yards to the east.

Q. Now, is that your disposal well, or is that actually your mineral acreage?

A. That should be my mineral acreage.

Q. 400 yards to the east?

A. Yeah, maybe a little less.

Q. Does it run basically due north from your disposal location?

A. Yes.

Q. How far up the section does it run?

A. It goes all the way up there to the State "T" Number 4.

Q. Okay. And then does it come back east?

A. It goes back east to that line there, which is a fenceline.

Q. Okay. Are you the current -- Do you currently hold the rights to the minerals under that acreage you've just described?

A. Yes, I do.

Q. And do you hold it under the assignment and the state mineral lease that are attached to Exhibit Number K?

A. Yes.

Q. Okay. Is there an interval limitation on your mineral rights? Do you only have rights to certain intervals?

A. All the way down to the Strawn, top of the Strawn.

Q. From surface to Strawn?

A. That's correct.

Q. Okay. Let's move to Exhibit Number L, please. Can you tell me what that is?

A. I'm not sure mine is -- I've got the right one here.

Q. It also says "Change of Operator". It may help if you take the clip off, Mr. Watson.

A. Yes. Okay, yes, it is change of operator from Energen Resources to DKD for the Snyder A Number 1.

Q. Looking back at Exhibit Number 2, Gandy's Exhibit

Number 2, where is that well on that map?

A. It's directly south of Gandy's SWD by one location.

Q. Is it right above the word "Patterson"?

A. Right above the word "Patterson", right below the Watson.

Q. How much -- Attached to that change-of-operator form are a wellbore assignment and conveyance. Can you tell me what -- and a bill of sale. Can you tell me what those are?

A. It's a bill of sale and a wellbore assignment to me from Energen for all rights on it up to, I believe, around 40 acres so that I can produce it.

Q. Forty acres of minerals?

A. Yes.

Q. And the wellbore itself?

A. Around the wellbore, yes.

Q. What are you going to do with that well?

A. It is my intentions to go in and test the bottom zone to see if they did walk off and leave anything. And if it does not produce, it was my intentions to come up to the San Andres zone and try it.

Q. Okay. Why do you think you can get something from the San Andres zone?

A. Well, I guess basically because my understanding

is that it has to have a little bit of oil in it. It may not be enough for commercial people, but also I'm not very big, so I don't have to have as much little. If it makes five or ten barrels a day, that's big money to me.

Q. What if it makes 90 barrels of oil with that five barrels a day?

A. Of oil?

Q. Of water, pardon me.

A. Oh, of water? That's not any problem because I've got my own disposal sitting --

Q. Is it going to make it uneconomic for you to pump that water out of that well?

A. It would be a little more costly, but it won't be that bad.

Q. How much is it going to cost you to pump 90 barrels of water out of a well?

A. Oh, in a ballpark -- this is probably high -- ballpark, maybe 10 cents a barrel, maybe.

Q. Okay. Ten cents a barrel, regardless of how much you're pumping?

A. Yeah, it's going to cost that to handle that water myself.

Q. Do you know what the current price of oil is?

A. Oh, above 30.

Q. How much would it cost you to pump out a hundred

barrels, 99 of which are water and one of which is oil?

A. Well, that would cost me a little bit more, but that -- probably about -- including electricity and everything, probably about $12 a day.

Q. Okay. Would that be an economic well for you?

A. It would be somewhat tougher, but it would probably work out.

Q. What if it went up to 10 barrels of oil in that 100 barrels?

A. I'd make pretty good money on that at $30 a barrel.

Q. What are you going to do with that water?

A. I'd just truck it over to my disposal and put it down the well.

Q. Okay. When you were here for the two previous hearings, you said you might drill a well close to your disposal well, and you didn't have any plans to -- What preparations have you made to drill this Snyder A Number 1?

A. Snyder A Number 1 is already in existence, it's just an abandoned location that I acquired. I've already got my tubing, got all my packers -- or no, but my anchor, I've got new rods, pumps, I've got everything pretty well ready to go. I've been waiting on a pulling unit for about three and a half weeks.

Q. Okay. Are there other locations in that area

that you're considering for the San Andres zone?

A. If the Watson -- or the Snyder A Number 1 was paying out and I can make some decent money with it, I'd really kind of like to take a look at that Number 4 over there, that State "T" Number 4, and I would like to try to go back into it or get back into it somehow.

Q. Okay, let's -- I want you to turn to Gandy's Exhibit 1, it's the big thick exhibit. About two-thirds of the way down there is a C-103 for the State "T" Well Number 4.

A. Okay.

MR. OWEN: Mr. Examiner, are you --

Q. (By Mr. Owen) Well, let's turn to the second page of that. It shows a wellbore diagram. Do you see that?

A. Yes.

Q. Were you there when that well was plugged?

A. Yes.

Q. Does it indicate that a plug was set somewhere in that -- at about 5501?

A. Yes.

Q. Were you there around that time when that well -- when that plug was set and that plugging operation was going on?

A. Yes, nearly daily I was there in and out, yes.

Q. Is there anything about that plugging operation that would cause you to believe that there's oil in that San Andres?

A. Yeah, definitely.

Q. What?

A. Whenever they cut the casing off at 5500 feet, approximately, I drove down there to see what they got out, and they got it out late that afternoon. And the pipe was heavily laid in dark oil, which I'm going to call San Andres, because I'm just -- through experience I'm sure that's what it was.

And that evening we had to circulate approximately 50 barrels out of that hole in order to clean it up so they could get cement on the bottom of it.

Q. What did that casing look like?

A. It looked pretty good down to approximately 4800 foot, and I didn't take a measurement, but about 4800 foot down to 5500 it just got really bad, what I call -- what you call Swiss-cheese-looking pipe.

Q. What do you mean by that?

A. Well, from 4800 foot, the first three or four joints had anywhere from three to maybe 30 holes in the pipe, and then as it got down closer to 5500 foot where they shot it off, what I saw -- they probably wouldn't even have to shoot it off, it would just come apart, come out.

Q. Okay. Now, you said that there was about 50 barrels of oil in that wellbore; is that right?

A. That's correct.

Q. Was that sitting on top of that plug at 5501?

A. They hadn't run the plug at that time. It was right after they shot the casing. They shot it, pulled the casing out, got it out late that night, and then they circulated that oil off of it in order to clean the hole up.

Q. Do you know if they had that cast-iron bridge plug that's set down at 10,727 at that time?

A. Yes, I'm sure they did.

Q. And was that above the producing zone for this well?

A. Yes.

Q. Okay, what happened the next day?

A. Next morning, whenever we got there, well, they had to circulate another 30 barrels off of it in order to get it cleaned up again so that they could run a cement plug in there.

Q. Did you see that oil?

A. Yes, I did.

Q. Did you see that 30 barrels, that it was 30 barrels --

A. Yes, and I'll have to say it's all approximately

because we had it in their truck, and I'm not sure what size truck it was. We were estimating.

Q. Okay, do you have any opinion as to what formation that oil came out of?

A. In my opinion, it came out of the San Andres.

Q. Why is that your opinion?

A. Due to the extensive background that I have in dealing with crude oil --

Q. Okay.

A. -- and working crude oil, the texture, the smell, all indications that I've seen from visual inspections, that's what it looked like.

Q. In your opinion, is there oil, hydrocarbons, in commercial quantities in the area around the proposed injection in the San Andres zone?

A. From what I saw on that, I'd have to base that there is some there.

Q. Okay, in your opinion would granting the Application in this case, which includes increasing the injection zone significantly above the previously authorized zone, result in waste of oil?

A. I would think so, yes, in my opinion.

Q. Why?

A. Well, because at the present time -- and again I am not a geologist, but as that porosity is great enough

that they try to perforate it to make it take water, it should be great enough to give up some.

Q. Okay. And if water is injected in there at the rate of 1500 to 2000 barrels a day --

A. Correct.

Q. -- what's going to happen to that oil?

A. Well, in their indication where they're on a vacuum, I don't know that they're going to actually flood it out, but I don't know that it's not technically sucking it out or thiefing it out of that zone.

Q. Taking it down to another zone?

A. Possibly.

Q. Will that oil then be wasted?

A. Oh, yeah, if it goes down that disposal well it's gone.

MR. OWEN: Okay. That's all I have.

EXAMINER JONES: Mr. Domenici?

CROSS-EXAMINATION

BY MR. DOMENICI:

Q. Let me just make sure I understand. The plugging that you just described, that took place in 1993?

A. No, it was on the plugging list for over 10 years. It took place in 12-11-02.

Q. So that took place before the hearing in front of the Commission?

A. That is correct.

Q. And you either had that available or could have presented that to the Commission, correct, in the previous hearing on this injection well?

A. Yes, sir.

Q. Did you present that to the hearing?

A. I don't believe I was given an opportunity to, no.

Q. Did you attend the hearing?

A. Yes, sir.

Q. Did you testify?

A. Yes, sir.

Q. And were you ordered not to talk about that? Was there a ruling that said you couldn't talk about that?

A. No, sir.

Q. So you did have an opportunity to talk about it?

A. Probably. It was one of my first hearings, and I'm unfamiliar with what was happening at that time.

Q. And you didn't present that at that time, is your best recollection?

A. I believe I did. If I didn't, I know I did on the *de novo* hearing.

Q. Well, that's what I'm talking about, the *de novo* hearing.

A. All right, the *de novo* hearing, yes, I did

present that.

Q. Okay, so you presented that, and that argument has already been ruled on by the commission, correct?

A. Yes, sir.

Q. That exact same plugging incident that you just described --

A. Yes, sir.

Q. -- has already been presented to *de novo* hearing, correct?

A. Yes, sir.

Q. And other than that, you don't have any data from -- well, not even including that. You don't have any data from the last hearing, which was March of 2003? And that means sample results, test data. You don't have any data to show that there would be any commercially viable oil and gas production to present today, correct?

A. No, sir, I just know what I saw.

Q. What you have is, you were able to acquire a well that Energen was abandoning?

A. That is correct.

Q. And what did you provide Energen in exchange for that well?

A. A little money.

Q. How much?

A. I think I gave them -- I had to pick up the

plugging bond for $10,000, plus give them a little bit for the paperwork, which was probably a hundred bucks.

Q. And where is that agreement today?

A. The agreement for the Energen well?

Q. Yes.

A. Well, it's right there in that assignment.

Q. And is that where -- does that recite everything you gave Energen for that well?

A. Yeah.

Q. There's no other paperwork on that transaction?

A. Not other than the -- what I've got right there in lease and conveyance on it.

Q. So you took over the plugging responsibility?

A. That is correct.

Q. And as I understand it, you're going to be trying to produce from the deeper zone?

A. Yes, sir, the Wolfcamp at the present time.

Q. Now, let's -- if you can look and -- just so I'm clear -- and you don't have any data from that well since you've acquired it, to show what it might produce at the San Andres level, correct?

A. No, I do not.

Q. And looking at your Exhibit B --

A. My Exhibit B.

Q. -- which would be, I guess, part of that

package --

A. Okay.

Q. -- the last page of that is a -- What is that last page?

A. Looks like a geographical deal where the State "T" Number 2 is.

Q. Okay, I want to be sure we understand what well you're talking about on the Snyder A. Is that shown on there just above -- I think it's as --

A. Technically, it's called the Gillespie Snyder A, 1 A. That's due south of the State "T" Number 2. It says Gillespie 57, Snyder 1 A. It would be the second well off the bottom there, right in the center.

Q. And did you acquire that primarily for purposes of possibly using it in a proceeding that Gandy might have for injection --

A. No.

Q. -- to increase their injection?

A. No, I acquired it because the company man and I was over there, and we blowed gas on it for about three hours and we couldn't get it to blow down. And again, that's not any money for the big people, but it's pretty good money for a little guy like me.

Q. What other abandoned wells or wells for plugging costs have you picked up in the, say, one-mile vicinity?

A. None, other than the Watson 6 Number 1, because I own the land on it.

Q. Okay, what is the difference between the Snyder 1 A and the Snyder A?

A. Okay, the Snyder 1 A is mine. In other words, it's setting there by itself, right beside a -- what used to be the Gillespie, which is now Energen. And the A Number 1 is still Energen's, which is close to Gandy's unload facility.

Q. So the Snyder A 1 is --

A. -- is still Energen's.

Q. -- is still Energen. Was that their offset well?

A. Yes. I believe they actually called that the A Com Number 1, I believe.

Q. And how far is that well from the -- if you know, from the Gandy well?

A. It's just one location, so it's only -- gosh, it's -- it can't be over 1200 feet, I don't believe. It might be that far, but I just don't believe it is.

Q. Now, on this Exhibit M, the log that you kept --

A. Yes.

Q. -- why did you keep this log?

A. Well, really I can't explain that. I don't know why, we just started keeping it. Now, however, I believe on that first day there, I believe was the day that we

finally found out that there was a shut-in order, supposedly for Gandy, backdated May 3rd.

Q. So the 22nd, June 22nd, is when you started keeping this log?

A. Right.

Q. And that --

A. That's the first time I got wind of it at all. And you've got to understand that that log is only when we were there. We didn't set there all the time, just setting there, trying to pick -- they just -- whenever we went by and noticed it, most of it.

Q. Well, were you aware on June 21st, the day before you started this log, that your attorney had told the OCD that -- or had asked for an ext- -- to postpone the hearing, the original hearing in this matter?

A. Yes, I was aware of it.

Q. And were you aware that on the 21st your attorney had said, it doesn't appear the Applicant will be prejudiced by the requested extension because the saltwater disposal well at issue is currently in use pursuant to New Mexico OCD order?

A. Yes, sir, I'm aware of that.

Q. And so the following day, you started keeping a log?

A. That is correct.

Q. Did you still think that there would be no prejudice to Gandy in delaying the hearing --

A. No, sir, I didn't.

Q. -- to the 22nd?

A. I was not aware that they had a shut-in order at that time.

Q. But on the 22nd you were?

A. That is correct.

Q. So between the 21st and 22nd, you learned something?

A. That is correct.

Q. And you were aware by the 22nd that if the well was shut in by the OCD, there would be prejudice to Gandy?

A. No, I though they were going to get to operate. I had no opinion on that.

Q. Why were you keeping a log, then, if you thought they were allowed to operate it?

A. Because they said that they had -- My attorney called me and told me that there had been an issue of cease and desist May the 3rd, but they had a verbal agreement to go ahead and operate it.

Q. So you started keeping a log, even though you understood they were allowed to operate --

A. Yes.

Q. -- is that your testimony?

A. Yes.
Q. And then you took photos the 29th?
A. That is correct.
Q. Why did you take photos on that day?
A. You know, you're not going to believe me when I tell you this, but I was just real lucky. I had no idea what was coming down. I honestly did not.
Q. And you don't have any information that Dale Gandy himself knew about that order --
A. No.
Q. -- at the time you were taking the photos?
A. That is correct. We had no knowledge whatsoever.
Q. Let me ask you in my exhibit package there, which is all torn up, but it's Applicant's Exhibit 7 -- or actually Applicant's Exhibit 8 --
A. Am I looking in the right one?
Q. It must have got taken apart from that, I think, by the --
A. Oh, okay, here's 7.
Q. Okay, look at 8.
A. 8, okay.
Q. Look at paragraph 9, if you will, in that. The part that says "Later, Pronghorn, after a conversation with a Division engineer, requested that it be permitted to inject from 6,000 to 6,400." Do you see that?

A. Yes, I do.

Q. And you were part of that hearing. Do you recall that discussion --

A. Yes.

Q. -- at the hearing --

A. Yes, I do.

Q. -- that a discussion between Pronghorn and the engineer resulted in an extension of that interval?

A. Yes, because they wanted to change that, and they didn't do that until they were sitting right here in this hearing, in front of the Commission. They originally wanted 6000-6200 feet, and they asked for another 200 feet to get in 6400 feet, and apparently the Commission granted it to them. It was never applied for. They just asked for it in this hearing, and they got it.

Q. And did you hear an engineer testify that there was a conversation with the Division engineer?

A. I guess I don't really know what you're leading up to. What --

Q. Did a Division engineer confirm that there had been this conversation, to your recollection?

A. About increasing the intervals?

Q. Yes.

A. Yes. Now, I'm not sure who you're calling an engineer, but yes.

Q. Now, isn't it true that until you -- if you ever do try to produce from the San Andres, you won't have any data that shows that San Andres is capable of production?

A. I'm sorry, I missed --

Q. Isn't it true that until you actually try to produce from the San Andres, you won't have any data that would indicate that there is commercially viable production there?

A. Not in that immediate area right there.

Q. And you don't have that data, and you don't know when you're going to get that data, correct?

A. That's true and correct, although they run a seismograph across me about two weeks ago. I did visit with an engineer with them, and he told me he'd be more than happy to give me a reading on all the zones in there.

Q. But you don't have it today?

A. I do not have it as of today.

Q. And do you know if the Division keeps continuing jurisdiction over y our well permits?

A. Yes, they do.

Q. And do you know if they would propose to keep continuing jurisdiction over this well permit?

A. I would think so, yes.

Q. And so if there actually is data established that shows there might be a threat to your rights, the Division

would have jurisdiction to handle that, correct?

A. I think that's correct.

Q. And that's the same that's true of your disposal well?

A. That is very correct.

MR. DOMENICI: That's all I have.

EXAMINER JONES: Mr. Owen, do you have any --

MR. OWEN: I do have a couple of follow-up questions.

REDIRECT EXAMINATION

BY MR. OWEN:

Q. And Mr. Watson, I want you to understand that I'm going to ask you a couple of follow-up questions to Mr. Domenici's questions that are going to call for attorney-client-privileged information, that is, things that I told you or things that you told me. That privilege belongs to you and you don't have to answer the question if you don't want to answer the question.

A. Okay, I did not understand that.

Q. Okay, I'm going to ask you about a couple of conversations that we had. It's up to you to answer them. You don't have to answer those questions, because it calls for attorney-client information, privileged information --

A. Okay.

Q. -- between you and I.

First, I want to ask you, was I down in Tatum on June 29th? Did I visit with you in Tatum on June 29th?

A. Yes, you did.

Q. And did we talk about whether there was some sort of order shutting in Gandy's operation?

A. Yes, there was.

Q. Yes, we talked about it, or yes there was?

A. Yes, we talked about it.

Q. Did I indicate to you whether or not I knew that such an order was in place?

A. Yes, you did.

Q. Did I indicate that I didn't know what the situation was, that I had not been able to obtain that document?

A. Yes, you did.

Q. Is the first time you saw that document the following day when it was faxed to you with a response to an application for emergency relief?

A. Yes, that's the first time I saw anything in writing.

Q. Okay. The original application in this case, did it seek authority to inject from 6000 to 6200 feet?

A. The original application, yes.

Q. Did the original order permit injection from 6000 to 6200 feet?

A. State that again now?

Q. I want you go turn -- go ahead and turn back to -- I believe it's Gandy's Exhibit Number 7. That's the order from the OCD.

A. Okay.

Q. Do you see that?

A. Yes.

Q. Top of page 2?

A. Top of page 2?

Q. Top of page 2.

A. All right.

Q. Does it authorize 6000 to 6200 feet?

A. Yes.

Q. Okay, I want you to turn to Gandy Exhibit Number 8.

A. Okay.

Q. Turn to the last page, page 6. Do you see "It is therefore ordered that" down at the bottom?

A. Are you talking about the last page where "Lori Wrotenbery", Chair?

Q. Yes, sir.

A. Okay.

Q. Do you see paragraph number 1 and 2 under the words, "It is therefore ordered that"?

A. Yes.

Q. Anywhere in those paragraphs does it say that the injection interval is increased to 6400 feet?

A. No, sir, I do not see it.

Q. Okay. I want you to turn to Gandy's Exhibit Number 1 -- it's the big, thick exhibit -- and you're going to need to go 17 pages down to a page that says "Instructions", and it's got Roman numeral VIII in black marker.

A. 17 pages?

Q. Yes, sir, it's quite a ways down.

A. Application for Disposal -- Oh, okay. Okay, number what?

Q. It has Roman numeral VIII up at the top, on the top right?

A. Yes, okay.

Q. All right. Does it indicate -- In there does it indicate the top of the San Andres and footage?

A. Yes.

Q. What's that?

A. Top of San Andres appears to be forty-six-six-eighty, as I read it.

Q. And what's the top of the Glorieta?

A. 6224.

Q. What was the original interval authorized by this Division?

A. 6000 to 6200. Are you talking about from this order right here?

Q. Yes, sir, from the --

A. Right.

Q. -- original Division order.

A. Right, on Exhibit 8.

Q. When you testified in the Division and the Commission hearings, when you were examined, was the examination about -- was all of the examination about intervals below 6000 feet?

A. Only 6000-6200, as far as I can remember.

Q. Is that what people talked about in those two hearings?

A. Yes.

Q. Is that what you were examined about in those two hearings?

A. Yes.

Q. Where was that plug in the State "T" Well Number 4 that you saw plugged?

A. Where I saw plugged?

Q. Yes, sir.

A. About 5500 feet.

Q. Was there oil above that?

A. Yes.

Q. Were you asked about any oil above 6000 feet in

the previous Division Examiner hearing or the Commission hearing?

A. I believe there wasn't.

MR. OWEN: Okay. That's all I have.

EXAMINATION

BY EXAMINER JONES:

Q. Mr. Watson --

A. Yes, sir.

Q. -- how many plugged wells have you witnessed over the years, or just approximately?

A. Man, I'd have to take off my shoes and count all of them. We've been involved in a numerous amount of them. We used to have a vacuum truck and transport business, and we've been in numerous of them, hauling water to them, and my curiosity has always got me and I've always tried to watch -- try to learn something.

Q. How often have you seen oil recovered during plugging operations?

A. Oh, I'm going to say at least 25 percent of the time. Not a great lot, but at least -- because I used to have a reclaiming plant, we used to buy it off these people whenever they plugged a well.

Q. Are you familiar with the Saunders field?

A. Yes, I am.

Q. Are you familiar with the new pool in the

Saunders field?

A. The one where they're coming up in the San Andres and drilling?

Q. Yes.

A. Yes, I am.

Q. Are you familiar with the Saunders Pool when it was only the Permo-Penn?

A. Yes, sir.

Q. Are you -- Do you have any kind of structure map out here to show any kind of closure on this San Andres zone, to show that you would make anything out of it as far as a geological viewpoint?

A. No, sir, at the present time I do not.

Q. Have you talked to a geologist or an engineer about the potential in the San Andres?

A. Just in brief conversation, and again no one has anything to -- if you'll notice that most of these wells were drilled in 1957, except for my Watson 6 Number 1, and again in Lea County you don't want to mention anything a whole lot if you don't want it out.

Q. So you guys are in competition with each other?

A. Yes, sir, but that doesn't bother me.

Q. And is it your position here that this well operated by Gandy is potentially endangering your recoverable oil reserves that you might have?

A. It's a possibility. All I'm trying to do is protect what I have. If you'll notice, I have all the minerals leased to the east of him, and then I have the 40 acres straight to the south of him. So I have, if you will, kind of like and L-shape to the south and to the east of him. And all I'm trying to do is to protect -- If I have anything there, all I'm trying to do is protect it.

Q. Okay, why haven't you already tried this out here, this concept?

A. Due to the lack of funds, plus the thing is, I wound up buying tubing to go in that Snyder A Number 1 in December, I bought the pumpjack, I bought my rods. I had to wait approximately six to eight weeks on rods. I couldn't find any used ones, so I had to order new rods. And now I'm waiting on a pulling unit, and I have been for over three weeks. Due to the spurt and everything, you can't get ahold of metal, you can't get ahold of pumpjacks hardly, you can't get ahold of pulling units. It's just -- Everything is busy.

Q. Is your saltwater disposal well being affected by this well that Mr. Gandy operates?

A. How do you mean "affected by"?

Q. Economically affected.

A. Sure, it's dropped 50 to 60 percent on the revenue on it. That's fine.

Q. How is your well doing?
A. It's doing okay.
Q. What's the pressure on it?
A. Vacuum.
Q. So it's a good zone, got a good zone?
A. And I'm at approximately 10,800 feet.
Q. You're a Cisco injection?
A. Bough C and Cisco.
Q. So you're below that productive Wolfcamp zone?
A. Yes, sir.
Q. And how is your casing across the San Andres in your well?
A. According to the records, the well was drilled in approximately 1997. Chesapeake went in and put new casing all the way through it. They cemented the top zone, or the -- excuse me, the surface pipe back to surface. They circulated 8-5/8 back to surface, they've circulated cement from 11,300 feet back up with 2800-and-some-odd feet inside the 8-5/8. They told me they were not in the pipe-recovery business, they intended to make it stay.
Q. The well that you could possibly re-enter and can possibly do a test in the San Andres, what's the status of them now?
A. They are currently plugged. State "T" Number 3 was plugged, I believe, in 1990 -- 1990-something. It's in

there, but I'm not sure what date it was. I think it was around 1993 or 1995.

The State "T" Number 4, I had to write the Commission a letter and force them to plug it and force them to clean up the land. And I think that's a matter of record, and all I'm stating is facts. I'm not belligerent or mad at anybody, it's just a fact.

Q. On those wells that you would re-enter, would you have to do some squeeze-cementing operations before you could perforate the San Andres?

A. Yes, I'm sure I would.

Q. Do you think you could get a good squeeze in the San Andres so that you could actually get a good test in the San Andres?

A. Well, if they pull down to 5500 feet on that State "T" Number 4, you just re-enter it and run back down there to approximately 5500 foot or till you hit the plug and then come back up and circulate cement back to surface, more than likely, and then all you've got to do is perforate it and hope for the best or look for the worst.

Q. Did you have any kind of estimated payout on an operation like that, or an estimated cost of doing that? Have you looked at that?

A. Of drilling into it or --

Q. Yeah.

A. -- coming up the hole on the Snyder A Number 1?

Q. Actually on -- Well, let's do both, one after another. The Snyder A Number 1? What do you think it would cost?

A. Snyder A Number 1?

Q. Yeah.

A. Well, I'll tell you what. I've already got 60-some-odd thousand in that hole right now, just for tubing, rods, pumpjacks, and I expect to tie up another $10,000 getting it tied together, just to go down deep. If it doesn't pan out, it's pretty simple to come up, so all I've got to do is put bridge plugs in it, load it with mud and keep coming up to where I want to go.

And I want to -- Again, I'm not real familiar with that, but I figure it's going to cost another $30,000 to do that, maybe $40,000.

Q. Are you just going to try the Wolfcamp first?

A. That's correct, where it's at.

Q. And then are you going to shoot any part of the Glorieta?

A. No, I wasn't planning on going in the Glorieta.

Q. Is that because of what you saw on the San Andres or because of the log analysis you've done on these wells?

A. Because of what I have seen in the San Andres.

Q. Yeah.

A. And you know, in my past experience, a lot of older men that I've worked with and for, they're finding more and more all the time that you're missing two- or three-foot zones. And they may not make a tremendous amount of money but they pay out pretty quick. And I honestly believe that -- no offense, Larry, but I honestly believe that many times it's over-engineered and not looked at.

Q. I was going to ask you what you thought of Mr. Scott's testimony on water saturation out here.

A. Oh, that's his opinion. You know, he's the one that studies it, that's his job. I can't argue with him and I can't disagree with him. That's his job. I'm sure he's been far more exposed to that than I have been.

But I also know, and I also want to make this point, if I may: If the oil wells didn't make water, then there would be no need for disposal. You've got to bring the water to get the oil, in most instances.

Q. So you're talking about electric drill, then pumping in --

A. That is correct --

Q. -- it or a submersible pump?

A. -- yes.

Q. Have you got electricity out there?

A. That is correct, yes.

EXAMINER JONES: Gail, do you have questions?

MS. MacQUESTEN: No, thank you.

EXAMINER JONES: Any other questions for Mr. Watson?

MR. OWEN: No questions.

MR. DOMENICI: No.

EXAMINER JONES: Okay, thank you, Mr. Watson.

THE WITNESS: Thank you.

EXAMINER JONES: No more witnesses?

MR. DOMENICI: I'd like to call Mr. Scott back to just comment on the rebuttal.

MR. OWEN: Mr. Examiner, we've heard from Mr. Scott twice at length. I think we need to cut it off.

MR. DOMENICI: Well, I would object, and I would just say that prehearing statement gave no indication of his testimony about that -- We got their exhibits today, we didn't know that they had bought the Snyder A, didn't know what their plans are, they have no written exhibits related, so there's no possible way Mr. Scott could have commented on this specific testimony.

MR. OWEN: Mr. Domenici received my exhibits this morning at 8:30. Included in that was the assignment of the Snyder A. He had a long time to look at that, a long time for Mr. Scott to think about the Snyder A.

MR. DOMENICI: That's just incorrect. We had no

idea what they were doing with that A, that they put $60,000 on it, and they still need to prove that, there's no exhibits.

But I think it would be very prejudicial not to be able to comment on that.

EXAMINER JONES: Let's let him talk for a few more minutes here.

LARRY R. SCOTT (Recalled),

the witness herein, having been previously duly sworn upon his oath, was examined and testified as follows:

DIRECT TESTIMONY

BY MR. SCOTT:

THE WITNESS: I'd like to specifically address the issues that were raised by Mr. Watson with regards to possible recompletion in the Snyder A Number 1 to the San Andres. The well that he pointed out on the map is not the one that he purchased. His well is actually in Lot 17, 2319 from the south, 330 from the west, and it's two locations south of the proposed injector.

EXAMINATION

BY MR. DOMENICI:

Q. Could you take Exhibit B and be sure -- and circle that or highlight in some way on the map so we can be sure what your testimony is? Circle that and draw a clear line, if you could.

EXAMINER JONES: Exhibit 2, you mean?

THE WITNESS: Exhibit 2.

MR. DOMENICI: Well, or Exhibit B from the -- Did you withdraw that?

MR. OWEN: It's the last page of Exhibit B.

MR. DOMENICI: Last page of Exhibit B has a better map, actually. Let me make sure you have that. That's it.

MS. MacQUESTEN: This one?

MR. DOMENICI: That's it there.

THE WITNESS: It's this one right here.

EXAMINER JONES: Can we get a clean copy here?

Q. (By Mr. Domenici) Okay, can you show -- circle the exact location of the well that's shown on that document?

A. Snyder A Number 1 is the second one down from the proposed location, not the first one.

Q. What is the distance of that?

A. That's approximately 1980 feet from the proposed injector.

Q. Okay, can you comment on the rest of his proposal about --

A. Well, with regards to recompleting one of these wells in the San Andres, he has at his -- in his possession a newly drilled well that he just testified to the fact was

cemented up to 2800 feet, that being the Watson 1 6, and the most beneficial use that he's able to make of that wellbore today is as a saltwater disposal well.

That wellbore, clean wellbore, for the price of a perforating gun, is available to him today -- has been for a long time.

The Snyder 1 A cement top is -- well, it's a 5-1/2 liner with 8-5/8 at approximately the top of the San Andres, with a 5-1/2 liner cement top is 6300 feet, and any completion attempt in the San Andres will require considerable cost and risk over and above what would be available to him in the Watson 1 6.

The fact that oil and gas is circulated out on the plug and abandonment of wells is common knowledge in the oilfield and proves nothing about the commercial viability.

We don't know where the oil came from, we don't know when it accumulated, we don't know over what period of time it accumulated, and it just serves no purpose to talk about it because it's -- I mean, it's just a non-issue, non-factor.

MR. OWEN: Mr. Scott, you said -- Oh, I'm sorry, please pardon me.

Please go ahead.

MR. DOMENICI: I don't have any more questions of

this witness.

CROSS-EXAMINATION

BY MR. OWEN:

Q. You said that oilfields have been discovered by finding oil in a wellbore when they would go in and plug, right?

A. Oil has been discovered that way.

Q. But it serves no use today to talk about it?

A. In this instance we have multiple sets of logs with multiple sets of wellbores over an interval that has been thoroughly evaluated by multiple professional people.

Q. All those wells were drilled in the 1950s; is that right?

Except for the Watson?

A. That one was drilled in very recent times. And if I'm not mistaken, there's several other recent wellbores in there, might be a total of five or six mid-1990s vintage that were drilled as a Strawn test, West Lovington-Strawn test.

Q. Did they test the San Andres?

A. No.

Q. Nobody's tested the San Andres, right?

A. No one has tested the San Andres.

MR. OWEN: Okay. That's all the questions I have.

EXAMINATION

BY EXAMINER JONES:

Q. The logs that you analyzed, we already talked about how modern or how old they were out here?

A. Yes.

Q. And the log on this particular well, how old was it?

A. It would have been about a 1957 vintage on the State "T" Number 2. It was an induction electrical log with a microlog.

EXAMINER JONES: Okay, well, that's all. I think we need to give Mr. Watson a chance to -- if he wants to say anything else about this too.

MR. WATSON: (Shakes head)

MR. OWEN: I don't think Mr. Watson wants to elaborate.

EXAMINER JONES: Okay, you guys want to start off with closing statements? Mr. Domenici?

MR. DOMENICI: I'll make it very short. I just think the elements that we need to prove by a preponderance of evidence, we've demonstrated with competent technical testimony as far as -- and Mr. Scott has a continuity on this, just like you do as a Hearing Examiner. But he has a continuity from the first hearing, he developed that with more specific information, particularly with the other

disposal wells that had substantial intervals, and also shown -- there are no production wells, but there's 12 disposal wells in this same stratigraphy, and I think overall his testimony his testimony established all three requirements that we need to make to have an injection well at this interval.

I think the questions regarding well completion, it probably would have been better to have the engineers here who did it, or the drillers. But I think the well is well constructed, I think Mr. Scott was able to testify as to what is currently there in place, and I think if conditions need to be put in this order regarding any inspections or reporting they can certainly handle any concerns on that.

I think there's good testimony of concreting of everything above the San Andres, and I think the rest of the construction is substantiated through pressure testing and other information that should be reliable. But if it isn't, certainly a condition on that would be something that should able to resolve that, not a denial.

And as far as these other arguments of -- it's basically pure speculation that there could be commercially producible oil and gas reserves. And that's really the only argument that we have, is pure speculation on that. There's really no argument on any water concerns or waste

or freshwater resource. There's no competent evidence at all that says this is a threat.

So basically all we're left with in my -- in our position, is this speculation about a well that could have already been developed and may never be developed, and it's 2000 feet away anyways. And that shouldn't be enough to defeat this kind of application. If speculation is allowed, then none of these kind of processes should be able to go forward. Someone -- all someone has to come in and say, you've done a lot of engineering work, but I have anecdotal knowledge and a good feel for it and I think there's producible quantities over here with no data to support that and you're out of luck, sorry. And plus, by the way, it would help me with my competitive business of yours.

So I think there's plenty of safeguards for the environment, for the correlative rights and for waste of oil that are already built into your procedures with continuing jurisdiction, and I think if there's any specific concerns regarding construction, we would -- a condition related to those would resolve those.

I think the whole concept of lack of compliance, I think that is a very gray issue. I think if we read carefully that original order it clearly says, if you encounter something you don't -- didn't inspect, you do

exactly what was done here, you go to the Division person.

And so even some of the statements now, you know, the cutoff -- the original cutoff, the May 3rd one, even that is really questionable as to whether that was viable, given that the original order was followed to the T with a signoff by the Division Director, just as required.

But regardless, there's no standard to say that that would allow you to do anything. I mean, if that is allowed, some kind of prudent operator test, it's not in the Regulations, there's no recitation to it, it's not in the Statutes, the Oil and Gas Act. It allows just total arbitrariness entered into this process, that someone did something I didn't like, someone did something at some other location, the previous operator did something, and now you're out of luck when it finally comes to light. That's not the way this process is set, and so I don't think there's any merit at all to any of that.

We think on the technical merits we've prevailed in this, and we would like to get a permit and go forward.

EXAMINER JONES: Mr. Owen?

MR. OWEN: Mr. Examiner, this case is about the old axiom, it's easier to get forgiveness than it is permission. The Applicant came in here with an application two years ago to inject from 6000 to 6200 feet. Extensive testimony was taken on that. The Division issued an order

denying that. Extensive testimony was taken on *de novo* review by the Commission.

The Commission issued an order reinstating the original administrative order, which again only authorized from 6000 to 6200 feet. It required a bridge plug, required a packer to be set at 5950; they set their packer at 4740. Required a bridge plug to be set at 6500 feet and required that cement be circulated from over 9000 feet to the surface; cement was never circulated to the surface. Required that the only injection zone that was authorized was 6000 to 6200 feet; now they're perforated from 4810 to 6880, 1180 feet above the proposed zone, 680 feet below the proposed zone. If they wanted to do that, they could have asked you beforehand.

Mr. Domenici relies upon the last paragraph in the administrative order issued April 30th, 2002, which simply reads, The operator shall immediately notify the supervisor of the Hobbs District of the Division of the failure of the tubing casing or packer in said well and shall take such steps as may be timely or necessary to correct such failure and leakage.

It doesn't say that they shall take such steps to increase the injection zone, it doesn't say that they shall take such steps to lower the packer or raise the packer, it doesn't say that they shall be given an exemption from

circulating cement to the surface, it doesn't say that they should be allowed to put their cement plug lower than they were required. All it deals with is leakage, and that's -- they clearly -- it's not a gray issue, as postulated by Mr. Domenici; it is a black-and-white issue.

The order requires one thing, the operator did another thing. The order on May 3rd of this year required one thing, the operator did another thing. The order required a third thing on June 29th of this year, the operator did another thing.

There are four issues you need to look at in deciding whether to give forgiveness rather than permission. You need to look at whether waste is being prevented; you need to look at whether correlative rights are being protected; you need to look at, in this case, whether fresh water is being protected; and you also, the Division -- one of the Division's continuing duties is to decide whether a particular operator is a prudent operator.

If you would like briefing on that following the hearing, I'm sure that Mr. Domenici and I can comply with that. The Division cases are rife with orders ordering certain action based on the prudency or imprudency of operations undertaken by a particular operator.

The first issue is waste. There was a lot of testimony about the San Andres. There was a lot of

testimony about the San Andres in the earlier hearings. However, the testimony in those hearings was directed at 6000 to 6200 feet. Now we're talking bout 4880 feet and below.

Mr. Scott got up and said that we should just ignore the oil in the wellbore on the State "T" Number 4. We don't know when it got there, we don't know how long it was there, we don't know where it came from. Mr. Watson got up and told you you shouldn't ignore it, that he is considering it and spending a considerable sum of money in pursuing that evidence in order to potentially recomplete a well in that zone.

If this injection is authorized from 4880 down to below 6800, we're talking about wasting reserves. Mr. Watson did not testify, and I am not advancing the position that Mr. Watson's wells are going to be washed out. The Commission previously ruled on that issue and ruled that it was an issue of trespass. If that happens, we will pursue the Gandys -- or the Gandy Corporation, pardon me -- in a court of law for trespassing.

However, it is in your jurisdiction to decide whether or not reserves are going to be wasted. Mr. Watson got up here and told you that the first day there was 50 barrels of oil, the second day there was 30 barrels of oil. We're not talking about a quantity of oil that's been

accumulating for years and years and suddenly washed out in one day. They washed out 30 barrels on the second day, after they had already washed out 50 barrels. There are reserves in the San Andres. Those reserves should be protected from waste in this case. Whether it's around Mr. Watson's wellbores or whether it's around the injection well at issue in this case, it is the Division's statutory duty to prevent waste.

In addition, Mr. Scott said that there is no commercial production, there's no possibility of commercial production from the San Andres zone. Commercial production is a relative term. There's no commercial production in the Permian Basin in New Mexico for the majors anymore. BP has left, MobilExxon has left, everybody has -- all the majors have left. All we have left are a bunch of large independents and small independents. Mr. Watson is one of the latter. What is commercial for BP, what is commercial for Energen is a different thing than what is commercial for Mr. Watson. The reserves in the San Andres, as they sit, are commercial to Mr. Watson, and they are commercial to others similarly situated. To enter an order authorizing injection into that interval would be authorizing waste.

Second issue is correlative rights. Mr. Scott's assumptions of sweep are based upon an assumption of an

average of 1500 barrels a day. Mr. Gandy got up here and told you that they're injecting between 1500 and 2000 a day. The average is significantly higher, that testified to by Mr. Scott, and his assumptions -- the assumptions underlying his opinions, should be discounted. Therefore, his opinions should be discounted. We don't know how far this water that is injected is going to sweep, and it may well sweep into Mr. Watson's wellbores.

Furthermore, there is no cement from approximately -- it's approximately 8000 feet, I believe, to approximately 4000 feet, there's no cement at all. There's nothing to prevent cross-zone migration of the fluids, there's nothing to prevent the cross-zone migration of the fluids from the injected zone down into the one zone that Mr. Scott testified is productive, which is the Wolfcamp.

It is the Division's statutory duty to prevent -- or, I'm sorry, to protect correlative rights. Correlative rights in this case would be compromised by entry of an order which expanded the authority by over 2000 feet.

Mr. Domenici says that all of the testimony dealing with oil from the San Andres is speculation, pure speculation, and you can't base an opinion on pure speculation. I agree with you, you can't base an opinion on pure speculation. You can base an opinion, you can base

a decision, on what Mr. Watson saw with his own eyes, which is 50 barrels one day, 30 barrels the next day. There's oil in that zone, that zone should not be washed out.

The third issue is the protection of fresh water. The same issues, or the same factors leading to the conclusion that correlative rights will not be protected, lead to the conclusion that the fresh water is not being adequately protected in this case. There is no cement for about 2000 feet in this wellbore, throughout the injection interval. We do know that a well approximately 2000 feet away, when the casing was pulled, the casing looked like Swiss cheese, in Mr. Watson's words. I don't know whether that's the case down that hole or not, but what we do know is that we don't know where that water is going. Nobody got up here and told you where that water is going. It could be going uphole, it could be going downhole, it could be going into the fresh water.

And finally, Mr. Examiner, the issue of a prudent operator addressed at the outset of this closing. This operator came in and asked you -- asked the Division, for permission for 6000 to 6200 feet. Upon being called on the fact that it failed to notify Mr. Watson, he came in and presented their testimony and were denied their application by Mr. Catanach.

Following the Commission review, the original

order authorizing only 6000 to 6200 feet was reinstated. That order also included a bunch of other provisions, specific provisions, including the location of the bridge plug, including the location of the packer, including the requirement to circulate cement. None of that was complied with by this operator. This operator has failed to meet its obligations and is now seeking forgiveness rather than permission.

I request that you deny the Application in this case.

In case you decide that injection is appropriate, I request that you significantly lower the zones requested by the Applicant. The Applicant, in fact, got up and stated that there was a very good zone below the 6200 feet and within the lower intervals sought in this Application. However, I request at all costs that the reserves that are present in the San Andres be protected and the Application be denied.

Thank you.

EXAMINER JONES: Okay, thank you, and is there anything further?

MR. DOMENICI: Nothing further.

EXAMINER JONES: Okay, we're going to take Case 13,293 under advisement. Thank you all for coming.

MR. OWEN: Mr. Examiner, you stated that we would

know something tomorrow. I assume that there will be some sort of written documentation in advance of a formal order or something like that. I request that it be faxed to both parties.

EXAMINER JONES: We can do that.

MR. OWEN: Thank you.

EXAMINER JONES: Okay, with that, let's adjourn this Division Hearing.

(Off the record)

EXAMINER JONES: Okay, let's go back on the record, and Mr. Owen?

MR. OWEN: I move the admission of DKD's Exhibits B, C, D, G, I, J, K, L and M. However, I do not move the admission of Exhibit F, which was included in the packet provided to the Division and to the witnesses.

EXAMINER JONES: Any objection?

MR. DOMENICI: No objection. I would just propose Exhibit F get taken out.

MR. OWEN: That's fine with me.

EXAMINER JONES: Okay, let's admit DKD Exhibits B, C, D, G, I, J, K, L and M, but not Exhibit F.

With that, let's go off the record.

(Thereupon, these proceedings were concluded at 5:18 p.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. heard by me on

Conservation Division

Examiner

CERTIFICATE OF REPORTER

STATE OF NEW MEXICO )
) ss.
COUNTY OF SANTA FE )

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL July 15th, 2004.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 16th, 2006