STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION

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

APPLICATION OF DKD, LLC, FOR AN ORDER GRANTING GANDY CORPORATION TO SHOW CAUSE, LEA COUNTY, NEW MEXICO

CASE NO. 13,686 de novo

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSION HEARING

BEFORE: MARK E. FESMIRE, CHAIRMAN

JAMI BAILEY, COMMISSIONER

WILLIAM C. OLSON, COMMISSIONER

January 11th, 2007

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission, MARK E. FESMIRE, Chairman, on Thursday, January 11th, 2007, 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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INDEX

January 11th, 2007 Commission Hearing CASE NO. 13,686 de novo

	PAGE
EXHIBITS	3
APPEARANCES	4
OPENING STATEMENTS	
By Mr. Domenici	9
By Mr. Hall	19
APPLICANT'S WITNESSES:	
GEORGE FRIESEN (Engineer)	
Direct Examination by Mr. Hall	31
Voir Dire Examination by Mr. Domenici	57
Cross-Examination by Mr. Domenici	58
Examination by Commissioner Bailey	69
Examination by Commissioner Olson	76
Examination by Chairman Fesmire	78
Redirect Examination by Mr. Hall	84
PAUL CALLAWAY (Production Superintendent, Energen Resources)	
Direct Examination by Mr. Hall	86
Cross-Examination by Mr. Domenici	96
Examination by Commissioner Bailey	99
Examination by Commissioner Olson	101
Examination by Chairman Fesmire	102
Redirect Examination by Mr. Hall	103
DANNY RAY WATSON (President, DKD)	
Direct Examination by Mr. Hall	105
Cross-Examination by Mr. Domenici	106
REPORTER'S CERTIFICATE	111

* * *

	EXHIBITS		
Applicant's	Identified	Admitted	
Exhibit 1	33	58	
Exhibit 2	=	_	
Exhibit 3	_	_	
Exhibit			
Exhibit 4	39	58	
Exhibit 5	39	58	
Exhibit 6	-	_	
Exhibit 7	39	58	
Exhibit 8	34	58	
Exhibit 9	38	58	
Exhibit 10	45	58	
Exhibit 11	-	-	
Exhibit 12	-	-	
Exhibit 13			
	_	_	
Exhibit 14	_	-	
Exhibit 15	-	_	
Exhibit 16	_		
Exhibit 17		_	
Exhibit 18	_	_	
Balliste 10			
Exhibit 19	_	_	
Exhibit 20	_	_	
Exhibit 21	88	96	
		50	
Exhibit 22	_	-	
Exhibit 23	23, 52	58	
Exhibit 24		-	
·			
Exhibit 25	-	-	
Exhibit 26	-	_	
Exhibit 27	_	-	
Exhibit 28	_	-	
Exhibit 29	-	-	
Exhibit C-1	L 89	96	
	* * *		
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* * *

WHEREUPON, the following proceedings were had at 1 9:05 a.m.: 2 CHAIRMAN FESMIRE: The next item before the 3 Commission is the Case Number 13,686, the de novo 4 Application of DKD, LLC, for an order granting Gandy 5 Corporation to show cause, Lea County, New Mexico. 6 Applicant seeks an order immediately and permanently 7 revoking the authority of Gandy Corporation to utilize the 8 State "T" Well Number 2 for injection and produced water 9 [sic] for disposal purposes. The State "T" Well Number 2 10 is located 4290 feet from the south line and 500 feet from 11 12 the west line of Lot 12 in Section 6, Township 16 South, Range 36 East, NMPM, in Lea County, New Mexico. 13 At this time we'll take an entry of appearance of 14 15 counsel. MR. HALL: Mr. Chairman, Commissioners, Scott 16 17 Hall, Miller Stratvert law firm, Santa Fe, appearing on behalf of DKD, LLC, the original Applicant, and I have 18 19 three witnesses to be sworn. 20 MR. DOMENICI: Mr. Chairman, Pete Domenici, Jr., for Gandy Corporation. I appear with co-counsel Charles 21 Lakins. 22 23 CHAIRMAN FESMIRE: I was about to ask you to 24 spell your name, Mr. Lakins, and then I remembered I've 25 read it a dozen times this week.

1	Mr. Hall, since the motions that we'll be arguing
2	are Gandy's motions, would you mind if they went first in
3	the presentation?
4	MR. HALL: That's fine. I ask that we take a
5	moment to distribute our exhibit books. I might refer to
6	them during my comments, if that would be all right.
7	CHAIRMAN FESMIRE: Okay. Mr. Domenici, would
8	there be any problem doing that?
9	MR. DOMENICI: Well, I object if we're if
10	they're going to be used for anything other than the
11	motions, because we were told yesterday that this was going
12	to be a motions hearing. So if it's for purposes of
13	motions, I don't; if it's for something else, then I do.
14	CHAIRMAN FESMIRE: Mr. Hall, the exhibits that
15	you're will be used to support to your motion argument
16	today?
17	MR. HALL: Yes, sir.
18	MR. DOMENICI: No objection.
19	CHAIRMAN FESMIRE: Okay, then please do that, Mr.
20	Hall.
21	Mr. Domenici, did you have any witnesses today?
22	MR. DOMENICI: No, we don't.
23	CHAIRMAN FESMIRE: Mr. Hall, would you ask your
24	witnesses to stand and be sworn, please?
25	(Thereupon, the witnesses were sworn.)

CHAIRMAN FESMIRE: Mr. Domenici?

MR. DOMENICI: Yes, there's been a flurry of activity, so I'd like to try to set an order up, propose an order to hear these issues.

What I would propose is, first we hear the motion to vacate. I'd like to confirm on the record that there was a ruling yesterday granting the motion to vacate. The evidentiary part of this -- de novo hearing, which is the reason we don't have witnesses here today.

Then I would like to argue our jurisdictional motion to dismiss this entire matter.

And third, I'd like to argue our notice of withdrawal to dismiss the appeal, which has some countermotions, a motion to strike or a request for hearing, all of those seem to go together. So that would be the order I would propose to proceed.

CHAIRMAN FESMIRE: Mr. Hall, would you see any problem with that order?

MR. HALL: That's fine. I think I would propose just to address all of them at once. If you want to take them up in that order, I'll just address them all at the same time.

CHAIRMAN FESMIRE: Okay.

MR. HALL: And I have to get clarification as well. I never got anything other than second-hand word

about the status of the hearing today, but it's my understanding that the evidentiary portion of the hearing will be continued to February 8th; is that correct?

CHAIRMAN FESMIRE: After we hear the motions, did we set February 8th or did we leave the date open? We've continued the case-in-chief until the later date, February 8th.

MR. HALL: All right. If I might just briefly comment on that ruling. In view of the fact that we followed the rules and made our filings on time, and it was only at the last minute, last Friday, that we were informed that Gandy Corporation would seek to withdraw its de novo appeal, I had made arrangements to have our exhibits delivered to Mr. Domenici's law firm, and I made inquiry of him when I could expect theirs, and that's when I found out about their desire to vacate the hearing altogether.

In view of the fact that we have delivered our exhibits to them, if we are to continue the hearing it would seem to me that we are at somewhat of a disadvantage, having shown our cards early. I would ask that the Chair direct that Gandy Corporation make its exhibits available to us no later than Monday of next week.

CHAIRMAN FESMIRE: Mr. Domenici, would you have any problem with that?

MR. DOMENICI: What I would like to do is comment

on that at the end of the hearing, when I hear more about 1 what they're proposing, but I think that makes sense. 2 CHAIRMAN FESMIRE: Okay. Why don't we go ahead 3 and decide that now, and go ahead and order that you make 4 5 your exhibits available? 6 Which leads to the issue of, after seeing their exhibits, if anybody wants to make changes. I don't think 7 that the Commission should accept any changes from the 8 9 exhibits that are prepared, except as rebuttal exhibits at 10 the hearing. 11 MR. HALL: We agree. CHAIRMAN FESMIRE: Okay. Is that agreeable to 12 13 you, Mr. Domenici? 14 MR. DOMENICI: I don't understand what you're 15 saying. CHAIRMAN FESMIRE: 16 That Mr. Hall will not take 17 your exhibits and then ask for a chance to change his, except --18 MR. DOMENICI: Oh --19 20 CHAIRMAN FESMIRE: -- as rebuttal exhibits at the 21 hearing. 22 MR. DOMENICI: -- yes, that's fine. 23 CHAIRMAN FESMIRE: Okay, let's go ahead and 24 proceed then, Mr. Domenici. 25 MR. DOMENICI: Yes. Just to -- so the record is

clear on the motion to vacate, we filed, I think as Mr.

Hall stated to some extent, we filed a de novo appeal of
the decision of the Hearing Examiner, timely. There was no
other appeal filed. So DKD has not filed a timely appeal
of the Hearing Examiner's decision.

We also asked to stay the decision at that time, and for scheduling reasons that was also set for today, couldn't be scheduled any earlier than today.

We also filed a motion to dismiss the entire proceeding on the grounds that this is basically a private action of DKD, misusing the administrative process, and that — there was a response filed to that fairly late, either Thursday or Friday of last week. So that motion has been pending for 30 days or so. And then the order, actual order of the Hearing Examiner was October 24th.

Nothing was done by DKD to try to get any relief or notify any of the parties or the Commission or the Division of any form of relief between October 24th and when they objected to this motion to vacate, yesterday or the day before. So we're talking several months where they were -- knew the status quo and relied on it and didn't object to it.

In addition, they didn't ask for any relief, extraordinary relief, while the Hearing Examiner was deciding the case for six months or so.

So there is no basis for a claim of urgency or emergency as a grounds to deny the motion to vacate that is in the record. After the fact, on the eve of the hearing, there's an argument saying, well, let's get these over with, these are serious issues, these are eminent issues. But the record simply doesn't reflect that.

So we think the right decision to make, to move that part of the hearing, the merits, to February 8th and - So I just want that to be clear for the record. And we understand that has been the ruling, and we've relied on that ruling, and we had witnesses lined up yesterday and we told them they did not need to appear. So I won't comment further on the motion to vacate. If we're going to hear all these together, I'll just go into the other issues.

When we filed our notice withdrawing our appeal, we withdrew our motion for a stay, we withdrew our motion to dismiss, and we withdrew our appeal. We basically withdrew all our pending requests of the Commission.

We also filed a notice, a plugging notice, that we were going to plug this well no later than July of '07, and indicated that -- and the well has been shut in, by the way, since November 23rd, pursuant to the Hearing Examiner order.

So we told the Commission several things. We don't want to proceed with this -- Let me back up. When we

filed the motion to dismiss we said, We want this dismissed and we're going to plug the well in July, so if you dismiss this proceeding, because it never was proper, we would be able to operate that well from now until July, and then we would plug it.

When we withdrew our appeal, we indicated we would not operate that well again. That well would be plugged. So we essentially said, We think this resolves the case.

We are willing to live with the requirements of the Hearing Examiner -- and actually more rigorous requirements. The Hearing Examiner decision allowed us to shut in the well and then to re-apply to use it, after DKD plugged its nearby well. So rather than go through that, we could have theoretically withdrawn our appeal and said, Okay, we're just going to go through the -- let this well sit shut in, wait till they plug, then try to re-permit. We've decided and made a commitment we are going to plug this well, so this well will not operate again.

And we provided that notice and received an objection. And the objection doesn't say anything about the substance of the objection; it simply says, We want a hearing on your notice.

And then subsequently there's a motion to strike our request for withdrawal. And it seems to say that DKD

wants relief in addition to what the Hearing Examiner grants, as if DKD is appealing and did appeal the Hearing Examiner's decision, when in fact DKD did not appeal the Hearing Examiner's decision.

And we're not clear exactly what their relief is.

They say it goes back to their amended application, and so they're not asking for any relief outside of that application. But the application is somewhat as to what relief they would want outside of what the Hearing Examiner's decision was.

What we think this really highlights is two things. First, it highlights this proceeding never should have been allowed to go this far through OCD, and now OCC. This proceeding started with DKD following a statutory requirement to send a letter to OCD saying, We want the Division to take action on a possible violation. Exactly as the statute says.

And then the statute says, If the Division does not take action the aggrieved party can go to district court. And what DKD is basically saying is, we can file an administrative application on any project that is permitted by OCC/OCD. And because they're permitted they're subject to your jurisdiction. Which is true. But there are many, many operations, as you know, that are permitted by this Division.

So their argument is, As an interested party, as a competitor, as a neighbor, as a dissatisfied party in the original proceeding, we are allowed to force the administrative process to review our private complaint.

That's exactly what's going on.

As you can tell, OCD is not represented here. They haven't taken a position on this, they're not supporting DKD's position. That is -- In other environmental areas, as Mr. Olson is aware, there are citizen suits set up for this. They put a statute in place. They say, If you want to challenge the inaction or action of an agency, you provide them notice, and if they don't do something you have a right to go to court.

That is very similar to what the statutory obligation here is. You provide notice. If they don't take action, you go to District Court.

What DKD is proposing is to totally go around that and basically set a global precedent that anyone who says, you know, My competitor has three wells that aren't plugged. Those wells are permitted, therefore they're under your jurisdiction. They're having a competitive advantage because they're not having plugged it. We're going to file an application, we're going to force a hearing on why those wells aren't plugged. Even if OCD doesn't participate, doesn't feel it merits their

involvement, we are going to go through the Hearing

Examiner process. If we get a decision we don't like, we can do a de novo appeal.

And then they're even going further, saying, If there is a decision against that party who had those wells, and the decision said, Plug those wells in six months, and the party said, I'm going to appeal that, and then later changed their mind and said, No, I'll go ahead and plug, they say at that point they can still step in and say, No, we want those plugged tomorrow.

So the full process here, I think, is demonstrating the lack of jurisdiction, a fundamental lack of jurisdiction, and the reason why that lack of jurisdiction should be upheld to avoid these kind of basically private disputes where a well is not going to be used, a well is going to be plugged, a full hearing was held, during six months while that hearing decision was pending nothing was done, during three months since the decision nothing has been done, and now they're saying, We can now use the *de novo* process to somehow extract a harsher business setting, business remedy against the —our competitor because we got this ball rolling with this application.

They didn't apply for a permit. I mean, the application here is not for a permitted activity that is

required to be permitted through the Division.

And so we would suggest that there is no basis for this claim, and the Application should be dismissed.

Our last argument is, even if it's not dismissed, we should be allowed to withdraw our appeal. And Mr. Hall has selectively cited rules of appellate procedure that do not bind you, and basically said, In a formal appeal if you want to dismiss your appeal you need to get concurrence of parties or an order of the appellate court.

That is only part of the story, though. First of all, an appellate appeal really is a different beast than where we are with a de novo appeal.

In an appellate appeal, either a party files a cross-appeal, so they have issues they have joined, and there's issues from both parties pending, and in those circumstances I can see why you would not be able to -- I can dismiss the entire appeal when someone else has a -- pending.

In a case where there's only one appeal, one party appealing, even though that rule is there, there's no precedent, authority, indicating that a court would refuse to dismiss that appeal where the only party filing it says, I'm now prepared to withdraw.

And there is a requirement in appellate rules to file a cross-appeal. So if you are planning during the

appeal to raise arguments other than supporting the decision, you need to provide notice early on to the tribunal that, I understand Gandy is fighting six pieces of this decision, we are going to fight these other three. That's a cross-appeal, and that's jurisdictional in the Court of Appeals. So if you don't file a cross-appeal, you can't then later on say, I want to raise this issue. It's gone.

And so our issues are what we raised, the issues on this appeal are what we raised. DKD did not raise any issues on appeal. And we think, particularly before the start of the hearing and evidence is taken and rebuttal testimony might be put on that somehow re-shapes the issues and says, Well, if Gandy actually wants this we would like it shaped this way -- before that starts, which is what -- which hasn't started, they should not be allowed to force us to pursue our appeal, which is what their proposal is.

I could see if we had gone in and if witnesses were kind of arguing a point and saying, well, if the pressure is this and they said that, and so you start talking, well, what about the middle or something like that -- we haven't gone that far. All we've gone is to filing prehearing statements, they are generic prehearing statement that sets out clearly what additional relief they would

want, why they would want it, why they should be entitled to it.

Yeah, I mean, they're filing that late, after
we -- after we've said, Let's continue the case, they're
trying now to sort of say, Well, here's the issues we want.

CHAIRMAN FESMIRE: Mr. Domenici, if I understand your argument correctly you're saying that your client has agreed to plug the well?

MR. DOMENICI: That's correct.

CHAIRMAN FESMIRE: And that once they plug the well, that's the end of our jurisdiction to the remainder issues; is that your argument?

MR. DOMENICI: Well, once -- That's a simple way of saying it. Once we agree to plug it, then that resolves the issues we raised on appeal.

CHAIRMAN FESMIRE: Okay, but I don't see any order in this case, ordering that well to be plugged yet.

MR. DOMENICI: Well, we filed a C-103. We are prepared as part of our dismissal to have that incorporated in the dismissal order. We anticipated our notice would be binding on us, it would be a statement we made to the Commission that we were going to plug it. That would be an obligation -- not necessarily an order, but it would be something we would certainly be obligated to do. If we didn't do it, it could be enforced against us. So that's

our position. I don't know if you have any more questions. 1 CHAIRMAN FESMIRE: Commissioner Bailey? 2 COMMISSIONER BAILEY: No. 3 CHATRMAN FESMIRE: Commissioner Olson? 4 COMMISSIONER OLSON: No. 5 CHAIRMAN FESMIRE: Mr. Hall? 6 MR. HALL: Mr. Chairman, if I might approach the 7 bench, I'm sorry we don't have all of the sets of the 8 exhibits available for the Commissioners. 9 CHAIRMAN FESMIRE: Has Mr. Domenici seen it? 10 11 MR. LAKINS: Yes, we have one. Is that your Number 1? 12 It's Number 1. 13 MR. HALL: To provide all of us with some orientation on the ground that is the subject of 14 this Application, Mr. Chairman, Commissioners, I represent 15 DKD, LLC. DKD is the operator in Section 6 of the Snyder A 16 17 Com -- I'm sorry, the Snyder A Number 1 producer, and it 18 also operates the Watson 6 Number 1 disposal well. It's 19 disposing into the Permo-Penn. 20 Mr. Domenici's client operates the State T Number 21 2, located here, which is disposing into roughly the San Andres formation. 22 23 Mr. Chairman, I agree with Mr. Domenici to a 24 certain degree. The Division's procedural rules do not 25 provide us with much guidance in this situation. In my

years of experience before this body I've never been faced with this situation before where a few days before a scheduled hearing there is a unilateral notice of withdrawal. So it's not clear how we proceed in circumstances like that.

I would suggest to you that under the commonly understood meaning of de novo applications, de novo means anew, we start anew. It's as if the Division hearing, Examiner hearing, did not occur at all. And so we start with new proof, new evidence, new arguments, and we present those to a de novo tribunal, you, the Commissioners.

That's what we plan to do.

We relied on Mr. Domenici's application for hearing de novo, we prepared for hearing, we engaged in discovery, we responded to motions to dismiss, we subpoenaed documents, we prepared exhibits, we have rehearsed witnesses, we were ready to go.

When we first brought this application to you approximately one year ago -- to the Division, I should say -- just after the original application was filed, we filed a motion for emergency relief. We thought the situation out on the ground was sufficiently urgent enough that some administrative action ought to be taken immediately, the plugging of the well or the cessation, the revocation of the injection authority, at least, to try to prevent

further damage.

We didn't succeed in getting any relief on that.

We proceeded to Examiner hearing in April, and it took the

Examiner more than six months to generate an order. It was

issued October 26th, and the application for hearing de

novo was filed by Gandy corporation some time after that.

We are prepared today to present you with evidence that as a result of Gandy Corporation's operations out in the field, that their injection well — which has had a checkered regulatory history, by the way. It has been the subject of earlier regulatory actions for the reasons that there were perforations in the wellbore beyond the intervals initially permitted by the Division, there were operations of the well before operations were authorized. The well was the subject of one or more emergency shut—in orders, and in one case even the Department Secretary issued a shut—in order to stop operations of the State T Number 2 well.

We're prepared to show you that the well has been operated in excess of the permitted injection pressures, we're prepared to demonstrate to the Commission that some of the filings of the injection rates and injection pressures do not correspond with the actual pressures out in the field. They were exceeded a number of times, and we believe that led to the situation we see today where these

high injection pressures in an overfilled reservoir caused damage to surrounding wellbores, the failure of at least three wells that we know of, casing leaks in more wells, and we would be prepared to demonstrate to you that there has been a loss of otherwise producible hydrocarbon reserves in this area, not only within the half-mile area of review but possibly in an area extending as far as one mile from this wellbore.

In Gandy Corporation's prehearing statement they have argued -- they have represented to the Commission that there are only two wells within the half-mile area of review of the State T Number 2: the Watson A 6 injection well and the Snyder A Number 1, Mr. Watson's well; with that, we understand those wells are in pretty good condition, there's no harm, we can keep the status quo and go forward.

That's not true.

There is another well, the Chesapeake Little 6
Number 1, which I think you may see on there to the south
southeast of the State T Number 2. And not shown on that
map, because we've only recently discovered it, is the
Yates Petroleum BIW State Well Number 1. It is drilled in
Unit I in Section 1, I would say some 1200 feet to the west
of the State T Number 2. We discovered the circumstances
surrounding the Yates well only recently, and only on

January 3rd did we get documentation of those circumstances.

What we found happened is that after the Examiner hearing in April, and before the issuance of the Division order on October 26th, Yates Petroleum went out to Section 1 and started drilling the Door State BIW Number 1 at that location, and with normal mud weights they encountered a significant waterflow situation. The situation was such that it caused drill pipe to get stuck, and Yates spent a considerable amount of time trying to stop the waterflow and trying to fix -- free the stuck drill pipe.

Had you your exhibits in front of you, I would refer you to our Exhibit 23, which are the daily drilling reports that Yates provided to us, and I would refer you to the entry on July 9th, 2006, where if you read through it you would see that during operations to try to free the stuck drill pipe, which we believe was caused by the waterflows, Yates had to conduct an emergency evacuation of the rig floor. The well tried to run away with them, there was a release of hydrogen sulfide, 100 parts per million, which I understand is a lethal amount. Yates personnel had to mask up and get back in and try to control that well.

And it took a considerable amount of time. They had numerous truckloads of water they were taking off that well for several days, if not weeks, if my understanding is

correct.

And all of that -- We'd show you another exhibit, their mud logs. And the mudlogger identified the waterflows that they were experiencing as disposal water, not just connate water or reservoir water, it was disposal water. So I think we can connect the dots there and look at the likely culprit. It's the State T Number 2.

Yates eventually had to abandon that well, after having drilled through the San Andres to approximately 6900 feet, had to walk away from a considerable investment, skidded over some 50 feet to the east and drilled their 1 Y well. In doing so, they had to account for the overpressured reservoir and the waterflows, and at considerable cost had to use significantly heavier mud just to drill their well. Luckily, they were successful.

With proof like that, I think we would be able to demonstrate to the Commissioners that not only do Gandy's operations constitute a risk of loss of property, loss of reserves, but I think there is a significant risk of harm to the environment, harm to freshwater supplies, and harm to human health and safety.

And for that reason, Mr. Commissioner, I think it's apparent that additional regulatory action is needed. The relief that we would propose the Commission take is all within the scope of relief set forth in our original

application. We're prepared to put on witness testimony to provide you with some basis for affording that relief.

How the request for relief comes before the Commission, it would seem to me, is unimportant. It can come before you by virtue of an application from the Division itself, it can come to you from any interested party as an interested party is defined under the Division's regulations and under Section 70-2-23 of your Statutes. Anyone with an interest adversely affected can and should be able to approach this agency for regulatory relief.

And it would seem to me that immediate relief is required. I have to tell you, I was not happy when I learned that the hearing on the merits would be continued, because I think we were prepared to demonstrate to you that urgent and immediate action is necessary.

There are some procedural uncertainties here.

What do we do, how do we go about getting that relief from the agency?

We could go file a new application to the Division, because I think the agency in each and every one of its orders has standard language that the agency always retains jurisdiction of its orders for the entry of further relief if necessary. We could do that, but it would seem to me that would be a waste of time, frankly.

It seems to me we have a process in place. We're ready to go forward with our request for relief to the Commission, and I would urge that we do that just as soon as possible. I do not want to have to go back and file a new application with the Division and provide new notice. I'd be looking at a hearing in March, I'm pretty certain, to do that.

Again, procedural rules are uncertain but the bottom line is, this agency has considerable discretion in how it can act and how it can discharge its duties under the Oil and Gas Act to protect reserves, to protect hydrocarbon resources, protect water supplies, protect property, protect the environment and human health and safety. That's what we're asking you to do.

One final point is, I'll address the jurisdiction issues under Gandy Corporation's motion to dismiss.

They're saying that we're seeking a private cause of action, and if we want to do that we ought to go to the courthouse. It's a question that's been raised before this agency, before -- at least twice that I'm aware of.

In the OXY-Hartman case, Mr. Hartman was complaining that OXY's pressure maintenance program in its Langlie-Mattix unit was watering out his Jalmat reserves some years ago. An application was filed with the Division to seek remedy for that. OXY turned around and filed a

lawsuit in the Lea County District Court, tried to move to dismiss the action before the Division, and was told by both the Division Director and the District Court that proper relief was had from this agency, because this agency had primary jurisdiction because of its particular expertise in the oil and gas industry to address the matter.

Again in the Pendragon case, Commissioners
Bailey, Ms. Davidson and Mr. Brenner had the pleasure of
sitting through that hearing some 10 years ago or so. We
had operators in separately owned Pictured Cliffs/Fruitland
Coal reserves who were effectively frac'ing into each
other's ownership, causing the escape of gas, fluids,
waters, frac fluid into each other's formations. Relief
was sought in front of this agency. There was an effort on
the part of the Fruitland Coal owner to dismiss the
application pending before the OCD and file a lawsuit in
the First Judicial Court here. The Court directed the coowner to come back to the agency and have a full-blown
hearing and get the relief it wanted, and that's what
happened in that case as well.

I don't think this case is any different.

Operators ought to be able to come to this agency, which does have the requisite expertise to address the issue and provide the appropriate form of relief.

What we would be asking the Commission to do is do more than just honor a C-103 that indicates the State T Number 2 is going to be plugged. We are prepared to present evidence to you that would show that's not acceptable, it's not enough. There is a hazardous situation that exists out there right now --

CHAIRMAN FESMIRE: Mr. Hall, when you say that's not enough are you talking about the C-103, or are you talking about plugging the well?

MR. HALL: Plugging the well. We're prepared to make a recommendation what the Commission ought to do, and again, within the scope of our original application. We would be prepared to say that Gandy Corporation ought to be required to take some pressure off of that reservoir, because unless it does so there is too great a risk that additional harm to property, reserves, will occur.

We have a situation out there where someone else will come in and drill through the San Andres formation, just like Yates did. This is a prolific producing area, in the vicinity of the West Lovington-Strawn unit. It is very active right now. Another operator could come in and have the same experience as Yates did. It could possibly be worse.

That's why we think simply plugging the well is insufficient. The reservoir pressure has to be reduced,

and it has to be reduced soon. A natural decline in the pressure is inadequate. That's the proof we are prepared to present to you today.

There's going to have to be some proactive steps taken here. The agency is going to have to direct Gandy Corporation to do more so that we protect property and the environment and human health and safety in the area.

That's all I have, Mr. Chairman.

CHAIRMAN FESMIRE: Okay, are you prepared to call your first witness on that issue?

MR. DOMENICI: Well, I would object to that if it's just on a motion.

your client has agreed to plug the well, and I think the question before the Commission is whether or not that is a sufficiently adequate remedy for the -- you know, the complaints that they've raised. And I think that the question in the motions is whether or not they're entitled to proceed to show that, given the -- you know, the de novo hearing and the fact that, you know, they -- your client has agreed to do something that would ordinarily terminate the case. I mean, that's the relief that they could seek from us.

They're saying that they're seeking additional relief in essentially bleeding the pressure off, because

that has a threat to issues that could be raised before 1 this Commission, waste of resources and the threat to human 2 health and the environment. 3 MR. DOMENICI: Well, it goes to whether the 4 dismissal should be allowed. 5 CHAIRMAN FESMIRE: Right, absolutely. 6 would ask, Mr. Hall, that you limit your testimony to those 7 issues, whether or not the additional remedy is justifiable 8 and should be sought under the de novo Application. Okay? 9 Are you prepared to begin now, or would you --10 MR. HALL: Give me 10 minutes to adjust, and --11 12 CHAIRMAN FESMIRE: Okay. MR. HALL: -- I can do that. 13 COMMISSIONER OLSON: Could I ask a question? 14 15 CHAIRMAN FESMIRE: Surely. 16 COMMISSIONER OLSON: I quess -- Mr. Domenici was 17 mentioning that DKD did not appeal the Division's order. was wondering why -- if they thought the relief was 18 19 inadequate, why didn't they appeal it? 20 MR. HALL: There's no requirement that we do so. As a party, we're entitled to rely on the filing of an 21 22 application for de novo hearing in any event. 23 those applications are one sentence long. All it does, I 24 think, is vest the Commission with jurisdiction altogether, 25 and because of that we're -- I believe we're entitled to

1	raise and pursue any matter that's set forth in our
2	original application.
3	Does that answer your question?
4	COMMISSIONER OLSON: Yeah, I just I was
5	curious why you didn't appeal it.
6	MR. DOMENICI: And we don't agree with that, by
7	the way.
8	CHAIRMAN FESMIRE: Why don't we take a 10-minute
9	break, and we'll come back just before 10 o'clock and begin
10	the testimony.
11	(Thereupon, a recess was taken at 9:47 a.m.)
12	(The following proceedings had at 9:58 a.m.)
13	CHAIRMAN FESMIRE: Let the record reflect that it
14	is approximately 10 o'clock, that all three Commissioners
15	are still present, therefore the quorum is still present.
16	Mr. Hall, I believe you were going to present your first
17	witness?
18	MR. HALL: We need to find him.
19	(Off the record)
20	GEORGE FRIESEN,
21	the witness herein, after having been first duly sworn upon
22	his oath, was examined and testified as follows:
23	DIRECT EXAMINATION
24	BY MR. HALL:
25	Q. All right. For the record, please state your

1 name. George Friesen. 2 Α. Mr. Friesen, where do you live and how are you Q. 3 employed? 4 I live in Midland, Texas, and I have a consulting Α. 5 business called Petroleum Property Evaluation. 6 You've previously testified before this agency 7 0. and had your credentials as a petroleum engineer accepted 8 as a matter of record; is that correct? 9 10 Α. Yes, I have. Would you please give the Commissioners a brief 11 Q. summary of your educational background and work experience? 12 Yes, I have a bachelor of petroleum engineering 13 Α. degree from the University of Wyoming in 1976, and then 14 15 I've got 30 years of oilfield experience, primarily in the Permian Basin, about 25 years in the Permian Basin. 16 17 CHAIRMAN FESMIRE: Mr. Friesen, are you a registered engineer? 18 19 THE WITNESS: Yes, sir, I am, in Texas. 20 Q. (By Mr. Hall) Are you familiar with the lands and the wells that are the subject of this proceeding 21 today? 22 23 A. Yes, I am. 24 MR. HALL: At this point, Mr. Chairman, we would 25 offer Mr. Friesen as an expert petroleum engineering

witness. 1 CHAIRMAN FESMIRE: Mr. Friesen is so accepted. 2 Any objection, Mr. Domenici? 3 MR. DOMENICI: No objection. 4 (By Mr. Hall) Mr. Friesen, have you undertaken 5 Q. an investigation to determine whether or not the operations 6 of the Gandy State T Well Number 2 have resulted in the 7 escape of fluids out of zone? 8 Yes, I have. 9 And have you also undertaken an investigation to 10 0. determine whether or not the injection reservoir for the 11 State T Number 2 has been exceeded in capacity? 12 Yes, I have. 13 Α. And in the course of your investigation, have you 14 formed certain conclusions with respect to the present 15 condition of the reservoir out there and the risks that 16 that condition may pose to other operators in the vicinity? 17 Yes, I have. 18 Α. 19 Q. Would you explain to the Commission how you 20 reached your conclusions? 21 Α. Yes, I conducted a survey of the wells in the area, and that's what I've put on Exhibit Number 1. 22 And Exhibit 1, just -- we -- Let me hold this up 23 and just point out, kind of orient everybody on the key 24

wells out here.

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This is the Gandy State T 2. This is a well that's caused excessive reservoir pressure in their disposal zone and has resulted in, as Mr. Hall said, the loss of at least three wells out here. And I've also conferred with Energen here recently, and actually this area that is affected, negatively affected, has actually moved further to the north, off of the plat that I show, and has affected some Energen wells to the north, causing some waterflows in some wells that they redrilled, some casing leaks, and they've also plugged additional wells out here.

Also what I've done in conducting this is to look in the area originally right in here, in the area I show you here on the plat that is affected by the Gandy well. I show on this plat casing leaks that have occurred within the permitted disposal zone, the Gandy well.

And I might just quickly refer to this crosssection here on the wall. It's shown here on Exhibit 1. It starts down here with the Snyder A Com, that's A, down at the south here on the Exhibit Number 1.

- Q. Excuse me just a minute, Mr. Friesen, is the cross-section Exhibit 8?
 - A. It's Exhibit Number 8, yes.
 - Q. Go ahead.

A. And this cross-section starts at the south with

the Energen Snyder A Com 1. This is one of the wells that the Gandy well has affected, and it had to be subsequently plugged at a much elevated cost to plug due to the excessive surface pressures, since they had to weight up with special mud, spend a lot of extra money to get this well P-and-A'd. This well is the Snyder.

The next well is the DKD Snyder A 1. It has been affected by the Gandy well. The well is not currently plugged but has high pressure -- we'll get into the numbers here in a little bit -- as a result of the Gandy disposal.

The next well is the Pronghorn State Number 1, and it is a well that just really isn't necessarily -- it's on the cross-section just to show correlation here.

The next one is the Gandy Corporation State T 2. This is the active well out there, the well that's caused the problems. And just for a moment I might just show, this is the permitted interval here, 4740, down to -- excuse me, the permitted interval is 4810 down to 6880, right here.

This zone in yellow corresponds to the zone of the casing leaks. Kind of broad brush, but I went through there and investigated the depths of all those casing leaks. And just for reference, I note at the top of what I call the corrosive zone from those casing leaks and the bottom of the corrosive zone, I've shown it in yellow, and

that's completely within the permitted interval for disposal.

We've got this established area of casing leaks in here, we've got this corrosive zone we know about from the casing leaks. We know too from Gandy injection well survey that back when this particular survey was run, 20 percent of the water was going here, about 10 or so, 5 to 17 percent here, most of it was going right here, about 6200 to 6300 feet, that's about 70 to 80 percent.

Yates drilled an offset well --

CHAIRMAN FESMIRE: Was that spinner or tracer?

THE WITNESS: Well, they're both. One is a velocity, the other is intensity. They're both radioactive. The velocity is a stationary, and that's on the left. And the intensity is a dynamic test, it's on the right. And they're in pretty good agreement when I put the results of both on there.

And you have a temperature survey on there too.

You can see that right here is where the temperature really shows and where most of the injection is going as well.

Just to continue on the cross-section here, the next well is the Energen Snyder B 2, and that well is one of the wells that we had the surface waterflow caused by the Gandy well. That well has been plugged, so that's the third well, if you like, that can clearly show -- We show

the Snyder A, Energen well is plugged. We still have the DKD well that's affected. And we have the Snyder B 2, which was affected and lost reserves there, in my -- in conferring again with Energen, they showed me what they felt like they had lost as a result of losing that well.

and then another Energen well, the B 1 out on the end, which is plugged, but -- plugged, was actually inactive prior to -- you know, it apparently does not -- as a result of the Gandy well, is not plugged as a result of any surface flows, the result of that. They were out here plugging the wells and decided to go ahead and plug that one as well.

- Q. (By Mr. Hall) Mr. Friesen, how did you determine that the escape of fluids from the injection interval were caused by the T 2 well specifically?
- A. Well, the key there -- Well, two things. First of all, this zone right here, this interval where they're disposing into, has almost no porosity at all. It's not really much of a storage zone for fluids at all. And most of the logs are old, but the Watson well drilled in 1998, DKD's well, has a CNL FDC run through it. Again, you can't see this, but by looking at the log it's essentially zero porosity. There's a few little intervals in there that have a little bit of porosity where you could get some water into.

So it's a very poor storage zone. It's something that you're going to fill up quickly, balloon, and cause -- have excessive pressures. And they've already asked and gotten -- ran a step rate test and got, you know, increase in surface pressure in this well. So you know, it did just about what the logs would show. It's just not a storage zone, it filled up quickly, pressure caught the surface.

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And Danny Watson provided me with Exhibit Number I must just -- might have you refer to that. That's really the key exhibit here. I mean, you know, we have two things. First of all, we have surface waterflows on three wells, so that's right there. We've got an artesian well situation, we've got excessive pressure somewhere. It's not going to happen out here normally, it has to be maninduced, you have to put pressure on the -- you have to put pressure on the water and fluids, you have to bring that pressure up above a normal gradient, and that's how you get water to flow at surface out here, because we can show by the drilling records out here that to drill a well out here is just a freshwater to a cut-brine environment, clear down here to the bottom. There are no abnormal pressures. But that's part of it.

The other thing is, Mr. Watson provided me with a lot of pressure data. The blue line here on this graph, Exhibit Number 8, is his well. That is his Snyder A well.

Just so we're clear on the record, you're Q. 1 referring to Exhibit 9; is that correct? 2 I'm sorry, Exhibit 9. 3 Α. And is Exhibit 9 compiled from the data that's Q. 4 reflected in Exhibits 4 and 5, the pressure data for the 5 Snyder A 1 and the T 2 --6 7 Α. Yes. -- is that correct? Q. 8 And Exhibit Number 7. 9 Α. Yes. 10 CHAIRMAN FESMIRE: Are these flowing pressures, or are they shut-in pressures? 11 THE WITNESS: Well, we've got a combination here. 12 On Mr. Watson's well we have shut-in pressures, the blue 13 line, and it's continuous data, pretty much. It may not be 14 every day, but it's what I would call continuous data, and 15 that's a -- you get a good reading, you know, on pressure, 16 17 it's continuous for the most part every day. 18 Now if you'll also notice, over here I've got a 19 little black line and a little green line over past, oh, about October of 2005. Now these are two of the Energen 20 wells where Energen put pressure gauges on their wells and 21 22 shared that data with Mr. Watson. And the green line there -- again, this is pretty 23

That's the well that's subsequently been plugged

much continuous data, but the green line is the Snyder A

24

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Com well.

down here. And what we have there are dates from 11-3 to 11-22 of '05, about 20 days in there, and what we see is the pressure rising from 210 to 382 p.s.i.

So something's causing that pressure to rise, and it's caused by the Gandy well in my opinion, my conclusion. It's the only well out here injecting into the zone that could cause that kind of a problem.

CHAIRMAN FESMIRE: Okay, and that communication you're talking about is not because they're perforated in that San Andres interval, but because they have casing leaks?

THE WITNESS: Well, let me back up, I did forget
-- I did forget one -- to get with this cross-section and
kind of clarify a couple of things.

What I show here is the tops of cement, shown here in this kind of magenta or black color, along with producing wells. And what you see here, the top of cement is well below the permitted interval and this corrosive zone. So the only well that has casing through the permitted zone, the corrosive zone, is the Watson 6 1. It's a disposal well, but it's a disposal well down at this depth, below the casing -- the cement tops of all the existing wells. So there really is no way this well can affect any of these wells over here. They're isolated by cement.

However, the only well that has cement across this corrosive zone in that cross-section is only the -- is his disposal well. All the others are open. So what you've got here is, you're injecting water into a zone that can't hold much water, the water is moving out rather rapidly across, there's nothing to prevent it from coming in, channeling either up or down in these wells. That's what's happened. It happened to channel down and cause a casing collapse here and waterflow. And also over here in the Snyder B 2, they happened to see it at the surface. It came to surface.

CHAIRMAN FESMIRE: Okay. But your -- that was the reason I asked whether it was a spinner or a tracer. Your injection wells doesn't show that crossflow, it shows it going into the formation, doesn't it?

THE WITNESS: Pardon?

CHAIRMAN FESMIRE: Your injection well shows it going into the formation, doesn't it?

THE WITNESS: It shows it going in here and here.

But what it does, it moves across, and then this -- there's no cement sheath here, there's just a whole casing to mud, maybe -- you know, maybe fragments from drilling and things. But you know, no kind of hydraulic seal provided there.

So fluids can easily move here and either go up,

which is preferentially where it will go, or, you know, perhaps down. It's just a -- it just depends on the pressure regime in the well. Where's the easiest place for that fluid to go?

And what we've seen out there is, fluids from this well migrate to other wells, migrate to the B 2, migrate to Mr. Watson's Snyder A, migrate over here to the Energen Snyder A Com and show up at the surface where we can monitor, then, the pressure, because those wells now have a column of water standing in it.

Put a pressure gauge to the top, and Mr. -- the DKD -- or the Watson well continues to inject water, the pressure keeps going up in the reservoir, and what we see is that same pattern, that same event taking place in the observation wells. The observation wells are the wells with the pressure gauges on, the three wells I talked about, Mr. Watson's well and the two Energen wells.

And with those observation wells, with standing

-- with a full column of water in them, coming from this

well, the only place you could get abnormal pressure, why

we see in all of these situations where the Watson -- where

the Gandy well pressure, surface, is increasing, we get a

corresponding increase in the observation wells.

And again, over here -- I want to go back. I'm kind of bouncing around, excuse me, but on the Gandy well

that's not continuous data, it's rather sporadic. So that's -- you're getting a lot of oscillation in that data, and where there is no red dot there is no data. So I only put a line in there to kind of show a trend, to kind of connect things together. But keep in mind, where there's no dot there's no data, so you kind of have to squint just a little bit.

But it is just too -- it's not coincidental, it's a cause and effect. You take a well here and you inject fluid into a zone, you fill that zone up, you catch a positive surface pressure, you cause casing leaks and other wells, they're now standing with a full column of fluid in it, you can put a pressure gauge on those wells and measure it. As the Gandy well surface pressure is coming up, Mr. Watson's well pressure is coming up. Cause is the Gandy well; effect, Mr. Watson's pressure response.

When the Gandy well pressure goes down -- you can see that about 6 of '05, that's the cause, is a reduction in the surface pressure of that well and in the corresponding reservoir pressure, Mr. Watson's pressure goes down. Cause is the Gandy well; effect, over in Mr. Watson's well.

Now if you continue on -- and this is where I kind of got off track -- I've introduced the two pieces of Energen data, two more wells, standing full of fluid caused

by the Gandy well -- or caused -- yes, caused by the Gandy well. And again, for those short time frames you see the Gandy well pressure increasing, Mr. Watson's well surface pressure increasing, the two Energen wells surface pressure is increasing.

The only well that can cause that in the area is Gandy's well. The only well that's injecting constantly above surface pressure -- it's filled up the reservoir, that's why it's above surface pressure.

Mr. Watson's well has injected, you know, on the order of -- oh, I just -- let me just -- I've got the numbers, let me just rough it out. About the same volumes of water as the Gandy well. Down here, this is a tremendous storage zone, because Mr. Watson's well runs on a vacuum. Fluid won't stand in that well. This is a good disposal well because this is a good disposal zone down here, and you can just put, you know, 3000 or 4000 barrels of water a day in there, and a column of fluid will not stand in that well. So -- Excellent.

And this zone, we know, is subnormally pressured.

We know it's not even close to being back to normal

pressure because normal pressure, a full column of fluid

would stand in that well.

But on the other side of the coin is the Gandy well, which caught pressure, you know, almost -- well, in

10 of 2004 it started out -- it filled the reservoir up, it started up with about 300 pounds. After about 80 days it caught pressure and then filled it up, and the pressure has just been going up ever since, and causing a lot of trouble in the area with resulting casing leaks and subsequent plugging of wells and loss of reserves in the case of the Energen well, the Snyder B Number 2.

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CHAIRMAN FESMIRE: How did it cause loss of reserves?

well. And then when it -- and it had that waterflow to surface, the -- you know, it was -- you had pressure to the surface, and they had to go in there and just P-and-A the well, as opposed to trying -- but they did go in there and try to do some work on it but ended up, because of the waterflow, P-and-A'ing the well, so you lost the reserves there, unless they chose to redrill it.

But you know, a lot of these wells get down in rates and pressure to where you can't justify redrilling them. So you know, in my opinion there's just a loss of reserves here unless something would happen that would cause them to go back out and redrill that well.

Q. (By Mr. Hall) Mr. Friesen, if we look at Exhibit Number 10, your time graph, does that help us understand the reservoir conditions in the field now?

A. Yes, I just -- when we refer to Exhibit Number 10
-- this is the Gandy well -- what I've done there is just
show -- during the period of time it's been on injection,
I've shown the average daily disposal rates there with the
blue dashed line, and basically that starts out at about
1500 barrels a day, it gets up to about 3000 max.

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And then the pressure, surface pressure, is shown there by a solid black line. And you can see it started out on a vacuum, but then where the pressure goes from zero to what they've reported to be about 200, 300, about 350 pounds, that's where it starts catching pressure, and then from that point on pressure that they reported fluctuates.

You'll notice there's a decrease, a drop there in 2006, and that corresponds to the time Yates was drilling their well and, my understanding was, asked Gandy to shut their well down so they could contain the waterflow in their well, try to deal with it, and that's why you have that zero injection in there, they complied with Yates.

- Q. Mr. Friesen, since the time the Division revoked the injection authority for the State T Number 2 well, have we had the opportunity to observe the pressure decline rate for the reservoir on that well and on Mr. Watson's Snyder well?
- A. Yes, we've been able to look at -- Mr. Watson has kept data going since the time that well was shut in in

November, late November, November 25th, right around 1 Thanksgiving, up until January 9th. Now in that period, 2 which is, you know, a month --3 CHAIRMAN FESMIRE: Mr. Friesen, would you like to 4 sit down? 5 THE WITNESS: Pardon? 6 CHAIRMAN FESMIRE: Would you like to sit down? 7 THE WITNESS: I can. 8 9 (Laughter) 10 CHAIRMAN FESMIRE: It would probably help the question-and-answer format, rather than the lecture. 11 Yeah, I'm sorry, sure, sure. 12 THE WITNESS: don't mean it to be a lecture either, sorry. 13 No, in that period of time, which would be 30 --14 15 approximately 40 days or so, it's only dropped about 100 p.s.i. or so. It's got about 1100 pounds on it right now. 16 17 So you know, just taking that data and extrapolating that, 18 you're looking at about a year, roughly a year. You know, 19 a little -- it takes a little over a month to do 100 pounds. You've got 1100 pounds on it, so you're looking at 20 21 about a year before that reservoir pressure, the surface 22 pressure, would be zero. 23 Now at zero is kind of a -- to me, that's when you return to a normal pressure situation. So you 24 25 shouldn't have any other wells really affected adversely by

the high pressure water being injected into the Gandy zone. That pressure now would be a normal reservoir pressure, so any other existing wells out there shouldn't be adversely affected at that point as far as causing, you know, casing leaks, that sort of thing. The problem would be mitigated if -- in my mind's eye, if that pressure would go to zero, the reservoir -- or the surface pressure go to zero, return to normal pressure.

And at that point Mr. Watson too could go out and plug his well, which has 1100 pounds on it. There has been three wells -- four wells plugged out there now. You know, the three wells that I talked about, plus the first Yates well was plugged. And those are very expensive to plug, but in all those systems they had to build -- someone had to build them a heavy mud to go in there and kill those wells because of the excessive reservoir pressure in the San Andres.

And you know, easily the plugging on those wells -- and this is not my area of expertise, but when you have to go out there and build a mud system and get other equipment out there you normally wouldn't have, you know, I'd venture to say you're looking at two or three times the abnormal plugging cost, something like that. You know, maybe even more, because each well is a little different.

So if the surface pressure could return to zero,

normal pressure environment again, then certainly it's going to make it much easier and, you know, standard plugging for Mr. Watson's well. I would say standard, where we don't have pressure at the surface.

- Q. (By Mr. Hall) Mr. Friesen, are you basically familiar with the configuration of the DKD Snyder A Number 1 well and its completion and its current condition?
 - A. Yes, I am familiar with that.

- Q. In your opinion, would it be prudent for anyone to attempt to re-enter the well and plug it, given the current reservoir conditions?
- A. Well, it's going to -- it's always -- it's got

 1100 pounds on it, and it's going to be costly and always

 more dangerous whenever you have pressure on something and

 you have to get on it. So in my opinion, you're looking at

 something that we just don't know what the cost is going to

 be. It's going to be high. And then you've got the

 pressure on it, which adds to the safety issues, which you

 could mitigate.
- Q. Do we know enough about the condition of the well and the casing, the stuffing-box configuration, to have enough confidence that it can withstand 1100-pound pressures for any significant length of time?
- A. No, it's really not -- this well is not currently -- is not currently -- doesn't have the proper -- it's got

a stuffing box on it, which is holding back the fluid right now, and the pressure, but that's not the way -- that's not a good situation to have. It --

- Q. Is there a reasonable likelihood that the Snyder
 A Number 1 could fail because of the pressure being exerted
 on it?
 - A. Yeah, absolutely, absolutely.

- Q. And as a consequence of that failure, is there some risk to flow of waters to the surface and to other formations?
- A. Yes. I mean, we know that if the stuffing box fails, we're going to put saltwater out on the ground, disposal water. We don't know how much, we don't know what the rate would be. It could be small, it could be quite large, coming from that reservoir, because it's got 1100 pounds of pressure on it at the surface. So we have that.

And then the other thing, we've got a lot of old wells out here that -- that, you know, supposedly have conductor pipe and have surface pipe set. We always generally tend to look at that as being a perfect world where there's a perfect seal in there, cement seal, between the hole and the pipe.

But we've had several wells out here with casing failures, so we know we've got this saltwater to surface, and there's a possibility anyway, certainly -- a

probability, I think more than just a possibility, that we could be affecting surface out there.

You know, if it's not a perfect world, if all those old wells weren't just cemented just perfectly and plugged -- and we've got a number of wells out here that have had casing leaks or waterflows to surface caused by the Gandy well. So certainly that's -- the possi- -- the probability is there.

- Q. In your opinion, does this possibility or probability extend beyond one half mile area of review from the Gandy T 2 well?
- A. In what I've -- in my talks with Energen, yes, it does. I'm familiar somewhat with the Energen wells to the north that go off of Exhibit 1, and that's clearly further than a half mile, and they had some waterflows in this zone, in the disposal zone.
- Q. Mr. Friesen, to your knowledge is there any regulatory mechanism that would place an operator on notice that he might be drilling into an overpressured disposal zone in this area and that he needs to take -- he or she needs to take special precautions?
 - A. Is there anything in place now?
 - Q. Yes, sir.

A. No, there's nothing in place now. In fact, if I might just add, on the Yates well -- you know, they drilled

that first well and lost it, aggravated by this disposal 1 They went -- they drilled the 6800 feet. All that 2 zone. investment was gone. Had they been warned, they would have 3 drilled it like they did the second well, that once they 4 knew it was there they drilled the second well with heavy 5 mud and they set an intermediate string of pipe, which 6 nobody sets out here -- they set an intermediate string of 7 pipe right below this zone. And once they did that, they 8 were able to drill their well to TD with a -- you know, a 9 brine or a cut-brine system, which everybody would use out 10 here. 11 So they would have benefitted had there been 12 13

So they would have benefitted had there been something in place. They could have saved a bunch of money. They would have known it was there and they would gear up for it like they did on their second well.

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- Q. Let's turn to the exhibit notebook and look at Exhibit 23. Can you identify that, please, sir?
- A. This is the daily drilling report from the Yates
 BIW State Number 1 well.

CHAIRMAN FESMIRE: Mr. Hall, what's redacted? The costs?

- MR. HALL: I believe so. That was done by Yates, not by us, so -- I believe it is cost information.
- Q. (By Mr. Hall) Mr. Friesen, did you take into consideration the daily drilling report information for the

Door BIW State Number 1 in reaching your conclusions about the condition of the reservoir in this area?

A. Yes.

- Q. And as a petroleum engineer, are you familiar with the parlance used by drilling operators in daily drilling reports?
 - A. Yes, I am.
- Q. It requires some interpretation for the rest of us, doesn't it?
 - A. Yes, yes, sir.
- Q. Let's turn to the entry for July 9, 2006, on page 12 4.
 - A. Uh-huh.
 - Q. Could you summarize for the Commission what happened on that day? What led up to that day, and then what happened on that day, in your understanding?
 - A. Well, in my understanding is -- this is the day where they first encountered the saltwater flow, and this is the day Mr. Hall referred to where they had the emergency evacuation. They thought the drill pipe had been plugged, however this is where they also note waterflow started to flow out the drill pipe. H₂S was 100 parts per million, and then that's where they -- as Mr. Hall said, they masked up and prepared to take care of -- Really what they had was a blowout situation. They had a high-pressure

zone that they did not know about, they did not anticipate, and now they're putting in their emergency -- starting to put their emergency procedures into place to deal with it.

- Q. Based on what you see in the drilling reports, is it reasonable to conclude that drilling into these conditions by another operator without knowledge may pose some risk to human health and safety?
- A. Oh, absolutely. Absolutely. As I mentioned, Yates would have benefitted greatly by knowing this situation occurred out there, was occurring out there.
- Q. Now Mr. Friesen, we understand that Gandy
 Corporation proposes to simply P-and-A its well in July.

 In your opinion, will simply waiting till July and plugging and walking away from the situation -- is that a reasonable approach to addressing the conditions in the reservoir out there right now?
- A. No, it's not because, as I mentioned, we don't have any evidence to believe that -- at least right now -- by July that reservoir pressure or that pressure on the Gandy well would be at zero. In fact, you know, my rough estimate based upon the data Mr. Watson provided me shows it's about a year.
- Q. Are you prepared to make general recommendations to the Commission of some action they might take to direct that the conditions in the reservoir be corrected to a safe

condition?

A. Yes, what -- really, we ought to remove -- we ought to go ahead and remove enough water that's necessary, remove enough water from the Gandy well, bring that pressure down to zero at the surface, then go ahead and plug the well.

- Q. Is it your recommendation that the Commission take a proactive approach to correcting this situation, rather than letting the reservoir pressure decline naturally?
- A. Yes, absolutely. Because, you know, we have some producing wells off to the west here, of the -- there's the -- on my plat, here's the Yates well. We have some producing wells off here that are at risk now from the same kind of casing collapse, waterflow. So you know, there's potentially a loss here of reserves. We have Mr. Watson's well over here, his disposal well.

I mean, it's something that really we ought to take care of sooner than later, because it just keeps getting bigger. You know, I was at first here in this area, then I conferred with Energen and found out, well, heck, it's moved up here now. And you know, it just gets bigger with time.

And it's just time, I think, to go out there and cause something to happen that's going to bring that

surface pressure to zero, plug the well, and we should go back in a situation where operators wouldn't need to be notified there's a high-pressure zone or that we potentially are going to lose some other wells in this corrosive zone due to casing leaks caused by the high-pressure disposal water.

- Q. Would you recommend that the Division implement special operating rules for a defined area in this vicinity so that other operators would be placed on notice that special drilling requirements might be required of them for drilling new drills in the area?
- A. Yes, absolutely, to prevent what happened to Yates.
- Q. All right. Mr. Friesen, did you prepare Exhibits 1, 8, 9 and 10, and did you rely upon the data reflected in Exhibits 4, 5 and 7 in reaching your conclusions?
- A. Yes, I did prepare those exhibits you talked about, and yes, they're -- 4, 5 -- and did rely on the data on those Exhibits 4 through 7, yes.

MR. HALL: At this point, Mr. Chairman, we'd move the admission of Exhibits 1, 8, 9, 4, 5, 7 and 10.

CHAIRMAN FESMIRE: For the purposes of the prehearing hearing, this hearing, Mr. Domenici, would you have any objection to that?

MR. DOMENICI: Just so I'm clear, so you're not

1 moving in 23? MR. HALL: Yes, I am, as well as 23. 2 CHAIRMAN FESMIRE: As well as 23. 3 MR. DOMENICI: If I could ask a question on 23. 4 VOIR DIRE EXAMINATION 5 BY MR. DOMENICI: 6 Mr. Friesen, you're not -- I don't think you're 7 0. testifying that anything in Exhibit 23 indicated that Yates 8 9 did not know of the Gandy injection well? They -- I personally believe they did not know Α. 10 11 about it. I mean, not to say they didn't know it was over 12 there. I mean, you wouldn't have looked out and could see 13 that there was a disposal well over there. But clearly, they did not know about the abnormal pressure they were 14 15 going to encounter when they drilled through the zone. 16 Okay, do you have any evidence that they were not Q. 17 specifically told by gandy about the possible abnormal 18 pressure? 19 A. No, nothing like that. I mean, I wouldn't be 20 privy to that. 21 Q. And from your understanding, as I take it, if 22 they had known, they could have eliminated this first step 23 and done the second when they drilled it? 24 A. Yes, my opinion is that had they know about this

high-pressure zone, they would have drilled the second --

they would have drilled the first well like they did the 1 second, to get through it, or prepared in another -- you 2 3 know, another way. And other drillers could do the same thing in the Q. 4 future? 5 Yes, they could, but the reason to notify them 6 Α. 7 would be a courtesy so that they could gear up and not lose 8 -- not have to drill, you know, two wells to 6800 feet. MR. DOMENICI: All right, no objection. 9 CHAIRMAN FESMIRE: Okay, for the purposes of the 10 hearing on the prehearing motions, Exhibits Number 1, 8, 9, 11 10, 23, 4, 5 and 7 are admitted. 12 13 Mr. Domenici, did you have any questions? 14 MR. DOMENICI: Yes, just a few. **EXAMINATION** 15 BY MR. DOMENICI: 16 I know there was discussion at Gandy -- you were 17 Q. aware that Gandy had permits for this injection well? 18 19 Α. Yes, yes. 20 Q. And the injected water that you were proposing 21 they de-pressurized, it's correct, isn't it, that that was 22 injected under a valid permit issued by the OCD, and they 23 injected it in compliance with that permit? Yes, sir, except for what Mr. Scott pointed out 24 Α. 25 -- or what Scott pointed out about how, you know, it was

kind of in a speckled -- or, you know, there had been some issues with that well off and on.

- But those would be mild in terms of the vast bulk of this water that you're concerned about was injected in compliance with a validly issued permit?
 - As far as I can say, yes, sir.

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- And in that permit are you aware of any condition Q. that says if you inject in compliance with this permit and as a result of that, future drilling operators may have to take some kind of precautions or do something different, you have to either -- you have to take that water out, basically, you have to reverse your permit? Is there any condition in the permit that says that?
 - That says that, no, not that I'm aware of.
- So you're not -- you're asking for the Commission Q. to do something well beyond what they permitted Gandy to do, correct?

I'm going to object to that question. I think that's an ultimate conclusion for the Commission to reach, rather than this witness.

CHAIRMAN FESMIRE: Well, I think he asked if his client is asking that that be the result of the hearing, and I think that's a legitimate question, so I'll overrule the objection.

> THE WITNESS: Okay, would you mind asking --

STEVEN T. BRENNER, CCR (505) 989-9317

the Commission would have known about what I've shown up here, would have seen the -- where the tops of cement were, et cetera, they wouldn't have allowed something like that to go forward. And I don't think they would ever permit a disposal well in any area if they thought that it would cause this kind of harm. No, I mean I can't say what they'd do, but if it were me sitting up there I certainly couldn't.

You would permit it based upon like Mr. Watson's It's on a vac- -- you know, it's not causing any problems. But you wouldn't ever permit one if you -- I mean, I don't know if I'm really answering --

- So you're -- I don't think you are answering, Q. because what I'm asking is, there is a permit?
- A. There is --
- Q. Okay, so --
 - -- a permit, yes. sir Α.

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Q. (By Mr. Domenici) You're asking that the -- your client is asking that the Commission ask my client to do something well beyond what they allowed and what they conditioned when they permitted this injection well, correct?

A. Well, no, I'm not -- And here's the thing. If the Commission would have known about what I've shown up here, would have seen the -- where the tops of cement were, et cetera, they wouldn't have allowed something like that to go forward. And I don't think they would ever permit a disposal well in any area if they thought that it would cause this kind of harm. No, I mean I can't say what they'd do, but if it were me sitting up there I certainly couldn't.

You would permit it based upon like Mr. Watson's well. It's on a vac- -- you know, it's not causing any problems. But you wouldn't ever permit one if you -- I mean, I don't know if I'm really answering --

- Q. So you're -- I don't think you are answering, because what I'm asking is, there is a permit?
 - A. There is --

- Q. Okay, so --
- A. -- a permit, yes, sir.
- Q. -- will you accept that a permit is in place and injection took place under a permit that went through a

61 full hearing process? 1 Α. Yes, I'll accept that. 2 So then I don't want you to talk about something 3 Q. that permit should have said. I'm saying, given that 4 permit, you are asking that my client do something that is 5 not a condition of the permit that he operated under for 6 this time, correct? 7 Yes, we're asking the Commission to correct this 8 Α. 9 problem. 0. And are you -- do you understand that there are 10 11 many injection permits in New Mexico that require pressure 12 for the disposal water --13 Oh, yes. Α. -- to be injected into that well? 14 0. Yes, sir. 15 Α. And are you suggesting that all of those permits 16 Q. could at some point be the basis for an application by a 17 neighbor, by an interested party, to say, We want you to 18 19 now reduce that pressure down to zero? 20 Α. Uh-huh, yeah --21 Q. So you --22 -- if you're damaging -- sure, if you're damaging

A. -- if you're damaging -- sure, if you're damaging other wells in the area or your neighbor, yes, absolutely.

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Q. So you think basically a permit issued in New Mexico should contain a condition that says you can inject,

but you may have to take all the water back out to reduce the pressure?

A. Well, you have to be liable for what you're doing. That's what I'm saying. I mean, they went through a process, they hired people to look at the reservoir, to look at the storage, for example. And personally, I don't know what the heck they were doing, but they sure didn't look at the logs.

Now you know -- and so this permit, then, that the OCD got to look at said, We got this 10-million-barrel reservoir out here, we'll cram all the water we could possibly ever get into it, lasting for a long time. And you know, when you don't go about it properly and you don't look at the data, then you should be liable for the mess you make, that's all I'm saying. And I'm not saying what should be in these permits or anything, but yes, if -- yeah, if you don't look at your data and you get a permit and you know you're not doing what you ought to do when you first do the permit, then yeah, you ought to be liable for the mess you make.

Q. And do you --

- A. That's all I'm saying.
- Q. Do you have personal knowledge of any other wells that are scheduled to go within the area you consider of concern?

To be drilled? Α. 1 2 Q. Yes. None that I know of are going to be drilled. 3 haven't looked for any -- you know, to see if there's any 4 other permits for new wells out there. 5 Would you expect that in about 10 1/2 months or Q. 6 7 so the pressure will be down to zero --8 Α. Well --9 Q. -- based on limited data? 10 -- you know, based on that little bit of limited Α. data, yes, sir, that was my rough estimate, was about a 11 12 year. And as I understood your testimony, most of your 13 Q. 14 concern and your evidence is wells other than DKD wells; is that accurate? 15 16 My concern is partially for those wells, and then Α. 17 also for Mr. Watson's well, yes. 18 Q. Because Mr. Watson's well, you're saying, could 19 be plugged in a year, as I understand it, with nothing 20 being done. If the Commission did nothing, Mr. Watson would be able to plug his well within a year? 21 Possibly, if my data, that little bit of data, is 22 Α. Possibly a year. It could go longer, it could go 23 correct. 24 less.

And I think last hearing, the last time you

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Q.

testified, you said you couldn't give any opinion as to whether there would be any impact on his disposal well?

A. That's correct, because we don't know for sure. It could have an impact, but it could not. And if I might just add, the reason why I said that was that, you know, in a perfect world this well is -- see, this is his disposal well, it's cemented from top to bottom. So in a perfect world there's going to be a cement sheet between the hole and the pipe, and he should be protected.

But you know, as we talked about, sometimes that doesn't -- in fact, you know, oftentimes there's pipe laying against the hole when you cement and different things, and we don't have a perfect cement sheet, the perfect bond. And so it could have an effect on it, yes.

- Q. Okay. But just so we're clear and the record is clear, you basically are here hired by DKD, talking primarily -- making an argument primarily about wells totally unrelated to DKD?
 - A. No, not primarily, no.
- Q. Well, the DKD well can be plugged in 12 months, there won't be -- nothing is going to change in that well in the next 12 months, correct?
- A. Well, we don't know that. I mean, I can't say that. We could have a blowout, you know, the stuffing box could give way and we could have a big saltwater flow to

surface. 1 Well, anything can happen, but --2 Q. Sure. 3 -- most likely, 12 months from now that well will 4 be available to be plugged? 5 MR. HALL: I'm going to object, I think that 6 mischaracterizes prior testimony. 7 CHAIRMAN FESMIRE: I think the record will stand 8 for itself, but I think he's answered the question. 9 (By Mr. Domenici) And we already talked about 10 Q. the disposal well, so again, what you're talking about are 11 12 adjacent areas outside of control of your client, and wells 13 that may be drilled that you're not aware of that are outside of the control of your client, correct? 14 15 Uh-huh, they're not --So this really is a private case brought by DKD 16 17 to try to protect this region, not just to come in and protect two DKD assets, correct? 18 19 MR. HALL: I'm going to object. That calls for a legal conclusion on the part of the engineering witness. 20 CHAIRMAN FESMIRE: 21 Sustained. 22 0. (By Mr. Domenici) Okay, you're testifying about wells other than the two DKD wells that are controlled by 23 your client, and that testimony is a primary basis for your 24

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opinions today, correct?

Well, all the wells, the DKD wells and other Α. 1 wells in the area, are taken into this study area. 2 used the data from all of these wells to form my 3 conclusions. 4 Has the -- To your knowledge, has DKD sent a Q. 5 letter to the Division asking that they take any action 6 based on any data that you've developed since the Hearing 7 Examiner --8 Α. Well, I just don't know --9 -- hearing? Q. 10 -- on that. 11 Α. And what would -- I think under your 12 Q. recommendation the Gandy well would be used to take water 13 out of the injection zone, bring it to the surface. 14 15 would you expect to be the content of that water? Just -- just -- probably about -- brine, for the Α. 16 17 most part. And what would be the --Q. 18 Well, you know, 9- to 10-pound brine --19 A. What would be --20 Q. 21 -- about what they put in it. Α. 22 Q. What would be the volume of that water that you 23 would expect? 24 Α. To -- ? 25 Q. To accomplish what you're recommending?

A. Well, I don't have a number for that right now.

I only have that one -- a little bit of pressure data, and that's all that I have. I know -- I haven't really even sat down and thought about the volume that it would take to do that.

You know, we're talking about the -- we're talking about a situation here where we really ought to be watching the pressure and how fast it can go down and withdraw water enough to get the pressure to zero, as opposed to shooting for a -- you know, a volume. It's going to be tough to come up with a volume to take out of this thing and have it at zero -- you know, at zero surface pressure. It would be better just to monitor the pressures, take some water out.

- Q. And where would that water go?
- A. Well, it would have to be disposed of, you know.

 You can't -- some -- a disposal well.
 - Q. Where is the closest disposal well?
- A. The closest one is probably Mr. Watson's. I don't know that for -- well, yeah, the closest one would be Mr. Watson's, yes, sir.
 - Q. And --

A. But it wouldn't have to go there, there's other disposal wells in the area, other Gandy wells in the area,

I assume. I mean, there's --

1	Q. Have you looked at Or do you have any evidence
2	as to actual legal drilling locations that are available?
3	A. You mean in this area?
4	Q. Yes.
5	A. No, I have not done any
6	Q. So you don't have any testimony that there
7	actually are any legal drilling locations?
8	A. I don't I have not looked to see if there are
9	any legal ones, nor have I looked to see if there are any
LO	permitted you know, any new permits out there to drill.
11	Q. And as I understand your testimony, if Gandy
L2	plugged this well, best estimate, within about 10 1/2
L3	months from now the pressure would be at zero and you would
L 4	feel that there's nothing as far as imminent harm or a
L5	problem for existing or future wells?
16	A. Yes, zero is where we want to be. The time
L7	frame, based on my limited data, is more like a year,
L8	but you know, but I can't we can't nail that down
L9	with the little bit of data we have. It's If we had
20	more data, we can do better estimates, but let's say a
21	year, but
22	Q. Do you know how much the pressure dropped when
23	Yates had their problem? Did you track that
24	A. No, I haven't
25	Q how quickly the pressure dropped?

1	A. How quickly it dropped? No, I haven't really
2	looked closely at that, and I don't know that No, I just
3	have not looked closely at that to see how quickly those
4	things
5	MR. DOMENICI: Okay, that's all I have. Thank
6	you.
7	CHAIRMAN FESMIRE: Commissioner Bailey?
8	EXAMINATION
9	BY COMMISSIONER BAILEY:
10	Q. What is the formation that you're showing in
11	yellow up there?
12	A. Well, it's mostly the San Andres, is basically
13	from about right here to about the bottom of the yellow
14	zone, and then the very top of the Glorieta is just the
15	very bottom piece of this yellow zone.
16	Q. What waterflood units are within five miles of
17	this area?
18	A. Oh, now, I don't know you know, the Lovington-
19	Strawn unit is nearby, but that's gas, was gas injection,
20	as far as I know, and I just haven't conducted any kind of
21	a study to see what other injection units are close by.
22	Q. So there may be waterflood units in this area
23	that you haven't talked about?
24	A. There could be some waterflood units in the area,
25	I just don't know. I just haven't looked.

- Q. So there could be waterflood units that are injecting that could have an influence?
- A. No, no. No, ma'am, from my data that could not be happening, no.
- Q. Even though you're not testifying whether or not there are waterflood units --
- A. That's correct, because I go back to Exhibit 9, and that's all this pressure data, and that response is such that I know the cause and I can see the effect. So I know where it's coming from. And that Exhibit Number 9 is just too clear, in my opinion as a reservoir engineer.
- Q. Let's look at Exhibit Number 1 and all the casing leaks --
 - A. Yes, ma'am.

- Q. -- in this general area. Just so we're very clear for the record, could you interpret what this is saying to me? Casing leak, comma, 11-70, comma, at 5470 to 6012?
- A. Yes, I sure can. In the sundry notices -- and that's what I had to rely on, was just what was in the public record. But there was a sundry notice filed that said that -- on November of 1970, where there was a casing leak in the State B 4, and the tops and bottoms -- and that's kind of what I looked at -- was between 5470 feet to 6012 feet.

I notice that a huge majority of these casing Q. 1 leaks were noted prior to first disposal --2 Yes. 3 Α. -- of the State 2 -- T Number 2 within this 4 0. yellow zone that you've identified. 5 6 Α. Yes. Do you have an explanation for this volume of 7 casing leaks within this yellow zone prior to disposal in 8 the State T Number 2? 9 Well, the problem comes from -- this zone here 10 Α. has liquid in it, and the San Andres is just very corrosive 11 waters. When you put the steel pipe through here and you 12 don't put cement across it for some kind of protection 13 you're going to get a very corrosive situation, and that's 14 going to lead to casing leaks. 15 That is -- You know, I've spent a lot of time in 16 17 Texas working too, and that's very common to have -especially in the older wells where you don't have cement. 18 You have these corrosive zones, and you -- and just --19 there are problems with causing casing leaks. 20 The water that you put in there, like the Gandy 21 well, just aggravates the situation because now you're 22 23 putting -- not only in a corrosive zone, but now you're

adding pressure to it as well. So the pipe can be thin,

you add some pressure to it, and there you've got the

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casing leak, the hole that, you know, may not have occurred, or certainly wouldn't have occurred, you know, down the road at some point, but --

- Q. But it appears to be a pretty common occurrence for casing leaks within these two sections that you've identified?
- A. Yes, just looking at the public record and what I -- yes, ma'am, that's true.
- Q. Have you looked at the drilling records for any of these wells to indicate whether or not they encountered high waterflows during drilling?
- A. Yes, I've looked at, again, just what's in the public record. And this particular area, as most areas, but this is not an uncommon area it all, it's an area where you drill with either fresh water or cut brine. So it is what we call a normally pressured area. There's no reason to believe that you would encounter any kind of an abnormally high-pressured zone where you'd need to use a heavy mud weight, something like that. There have been quite a few wells drilled through here.

The only well that I'm aware of that had a blowout was the Yates well, and right in this particular zone we're talking about.

Q. Are you not aware of the high waterflows that occurred in this area during the 1960s, the 1970s, and

particularly the study that was done between industry and 1 2 the OCD in the late 1980s? No, I'm not familiar with that. Underground 3 waterflows? 4 Yes, encountered during drilling where casing 0. 5 collapsed and --6 In this area right here? Α. 7 In this general area. 8 Q. And you know, in this area here I didn't see Α. 9 any indication of anything in the public record of any kind 10 of a waterflow, looking at the drilling of these wells. 11 Not right -- you know, in this -- in my study area. 12 And your study area was both of these sections? 13 Q. Yes, ma'am, right here. And so no, I'm confident 14 Α. that, you know, here was just a -- what I would normally 15 expect, just in this particular area, just a normal 16 gradient. 17 Q. You mentioned the Energen well that had to be 18 P-and-A'd because of water coming to the surface. Do you 19 have a decline curve on the production of that well and if 20 it was meeting its normal decline anyway? 21 Α. Yes, I've seen one. I don't have it with me 22 23 right now, but I've looked at it and it's really clear.

That well was making about 20, 30 barrels a day, and when

the casing leak hit it went to zero.

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1	Q. When the casing leak hit.
2	A. Uh-huh, caused by the Gandy well, when that
3	when we had water to surface, yes, ma'am.
4	MR. HALL: Mr. Chairman, Commissioner Bailey, we
5	have Paul Callaway, who's an engineer from Energen,
6	available to testify if you would find that helpful. He's
7	present here today.
8	COMMISSIONER BAILEY: If this goes to evidentiary
9	hearing, then I believe we all should listen to his
10	testimony.
11	Q. (By Commissioner Bailey) When was the Snyder A
12	Number 1 drilled? 1957, isn't it?
13	A. Yes.
14	Q. Okay. So the casing there is what, 50 years old?
15	A. Uh-huh.
16	Q. Uncemented casing in all of these areas that have
17	been drilled, through the Rustler and through the redbeds
18	and the anhydrite areas, don't they normally show a
19	tendency to fall apart within 50 years?
20	CHAIRMAN FESMIRE: I wondered what word you were
21	going to use.
22	THE WITNESS: Well, as far as the falling apart,
23	I mean, I really looked closely at the and am most
24	familiar with the San Andres. Now the other shallower
25	zones you talk about, the Rustler and that, I did not look

at, in this particular area are not that familiar with. We did look closely at the San andres here.

- Q. (By Commissioner Bailey) And isn't it common occurrence for a casing, even through this corrosive San Andres, to develop casing leaks with or without any pressure, simply because of the formation?
- A. Yes, that's true. The casing leaks occur because the zones have liquid and they're very corrosive. If there's no cement it will cause -- eventually probably cause a casing leak in every well.

But the water, the high-pressure water that you inject into it, speeds that up. It not only speeds it up, but if you've got some places where the pipe is still intact and you put high pressure on it, now you've got a hole. So if the water would have never been injected, it's really tough to say how long the rest of these wells might have gone without casing leaks.

And in many of these instances these casing leaks were fixed, they were repaired. But they were repaired in the situation where you had normal pressure, so it was a much more economical, straightforward job to go in and try and repair those.

The problem that the Gandy well has caused, now you've added a lot of reservoir pressure to this corrosive zone and it makes it very expensive to go in, and much less

probability, in my opinion, of fixing those casing leaks. 1 So like in the case of Energen, you might go out and try 2 something, but quickly you can see you're going to get into 3 an awful lot of money and just can't justify doing it, 4 therefore you plug the wells and lose the reserves. 5 So the high-pressure water prevents [sic] a major 6 problem, in my opinion, of going out here and fixing casing 7 leaks, or in P-and-A'ing the well. 8 COMMISSIONER BAILEY: I have no other questions. 9 CHAIRMAN FESMIRE: Commissioner Olson? 10 COMMISSIONER OLSON: Just a couple of questions. 11 **EXAMINATION** 12 BY COMMISSIONER OLSON: 13 Q. Mr. Friesen, there's a number of saltwater 14 disposal wells in this state operated under pressure; is 15 that correct? 16 Under pressure, yes, sir. 17 Α. Are you suggesting that all injection wells 18 Q. 19 that operate under pressure should be depressured --20 Α. No ---- before plugging? 21 Q. No, I'm not suggesting that at all. I am saying, 22 23 though, that when you have a disposal well that causes the kinds of problems like the Gandy well causes, they need to 24

That's -- those specific instances

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go in and be fixed.

need to be fixed, because it's a -- well, a neighborhood, it's an area of different operators. There are responsibilities here. You put -- you make -- in my opinion, you go out, you do this, it doesn't work, you create problems, you should fix them, but only in specific instances where these kinds of things occur, because they don't occur that often.

- Q. Well, it seems to me if you have shallower zones like this where you're pressuring them through injection, the same circumstances would then apply to other shallow injection horizons that are going to be drilled through; wouldn't that be correct?
- A. Well, you know, that is a point, that's a possibility. But remember, here, what really created the problem were these artesian waterflows to the surface caused by the Gandy well, and the Energen wells and in Mr. Watson's well. And that is -- that's pretty darned uncommon.

See, then you can say, We've got water to surface, and therefore we might be contaminating -possibly contaminating groundwater, fresh water, because we have that -- you know, it's just -- the evidence is right in front of...

But in a lot of situations where we have injection wells under pressure -- and I do a lot of

waterflood work in a lot of old waterfloods and, you know, 1 I -- rarely do we run into any kind of surface waterflow. 2 I mean, this is -- You know, I've maybe run into one other 3 surface waterflow in a waterflood. 4 So you know, where you don't have that evidence 5 in front of us that says, Now we've got this water to 6 surface, this saltwater -- so, you know, we're using our 7 assumptions here that if we don't have any other evidence 8 that it's going into the zone we intend it to go into and 10 staying pretty much within zone, and so -- and we're not contaminating shallower zones. 11 But, you know, this is a situation where pretty 12 clear things were happening that show that this well is 13 causing a problem, in my opinion. 14 15 COMMISSIONER OLSON: That's all the questions I 16 have. 17 **EXAMINATION** BY CHAIRMAN FESMIRE: 18 Sir, you testified that you thought it would take 19 Q. 20 a least a year -- or take approximately a year for the pressure in the Gandy State T 2 to bleed off to zero? 21 Yes, sir. 22 A. On what did you base that? 23 Q. 24 Α. Well, it was only on that data that -- Danny, Mr.

Watson, had provided me with some data.

- Q. Is that what's on page 9 -- Exhibit 9?
- A. Well, yeah, let's turn to -- let's see, the exhibit with the data on it for Mr. Watson's well, which is back in like -- Let's look at Exhibit Number 4. That's the one that's DKD Snyder A 1 pressure. Let's go look at -- let's go look at November 25th on that. We have to turn to the last page of his data. Let's go look at November 25th.

On November 25th it was -- at 5:53 a.m., the data shows we had 1199 pounds on the well. Let's say 1200 pounds. The last piece of data is 1-2 of '06, and it shows that we have 1134 pounds on it. Mr. Watson said that on January 9th, just before he came here, it had right at about 1100 pounds on it. So that's where I'm getting my 100-pound drop from the time the Gandy well was shut in, which is November 25th, to January 9th, Mr. Watson's well lost about 100 pounds. And it's got about 1100 pounds on it right now, today.

So, you know, just roughly looking at that, that's over a month to drop 100 pounds, so that's kind of what I said, 11 months, but it's taken a little over a month to drop 100 pounds, so let's say 12 months.

Q. Okay.

- A. Rough figures. But not based on very much data, is the thing.
 - Q. Okay, I understand that. But on Exhibit 9 it

looks like that well was running in April of '06 about 1400 pounds, and then in August of '06 it was running about 800, a little less than 800. And didn't you testify that during the drilling in July of the Yates well --

- A. Shut down.
- O. -- it was shut down?
- A. Uh-huh.

- Q. So granted, we don't know what happened between April and July, but between July and August of '06 it dropped by half, dropped --
- A. Yes, sir.
- Q. -- 800 pounds.
- A. Yes, sir, it sure did, as a result of having that well shut in.
 - Q. So isn't that counter to what this data testifies, shows?
 - A. Well, I don't think counter because, you know, it's a dynamic situation, and now that we have a more static situation -- in other words, Mr. -- the Gandy well has been shut in for over a month, Mr. Watson's well, the observation well, has been shut in and never -- you know, never produced, that's really the data that I look at. Now that there's no injection going on, there's no Yates well being drilled, et cetera, it appears to me that we're losing about 100 pounds in about 40 days.

Now certainly, if we were to allow this to go 1 another 30 days, why, it may show that we're -- you know, 2 that's accelerated, yes. 3 Okay. Now, you didn't testify when Mr. Domenici 4 asked you if you had the evidence that -- and I may be 5 misquoting it, so please straighten out my question when I 6 get done asking it, but you didn't evaluate whether or not 7 Gandy was exceeding their permit, did you, in any way? 8 Exceeding their permit. 9 Right, were they exceeding their permit either in Q. 10 terms of rate or pressure? 11 The only thing we have in terms of that is that 12 some of the -- you know, the data that Mr. Watson provided 13 me, and some of the data that we didn't really go into 14 today, show that it was exceeding the permitted injection 15 pressure, you know, at points. 16 17 At points, but it's not a -- is it an endemic --Q. is it something that happens -- Can you say that Gandy 18 exceeded their permit conditions? 19 Oh, I can't say that. I can say it at -- you 20 know, at points as we went out. But when you said the word 21 "endemic" or what they were doing daily, I don't know. 22 23 Q. Okay.

And you've heard Mr. Domenici represent that they

I don't know.

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Α.

Q.

intend to plug this well. What could this Commission do except plug that well, that would remedy DKD's problem?

A. Well, I think that the -- plugging the well to remedy Mr. DKD's problem is to bring that surface pressure back to zero so he can go plug his well.

Furthermore, talking about other wells in the area, if they develop casing leaks in this corrosive zone and you've got normal pressure, they stand a lot better chance of going in and repairing those producing wells, economically, putting them back on production, than you do when you have high-pressure waterflow like this. So it's not just Mr. Watson, it's other people in the area that I think need to be looked out for here.

But it's getting that pressure to zero. And simply going out and plugging that well, in my mind, hasn't remedied the problem that's been created. You still have this high-pressure zone --

Q. Right.

- A. -- and we ought -- something ought to be done to relieve that high pressure.
- Q. And it's not that I don't agree with you on that, but it's that, you know, if Gandy has been injecting legally under their permit, under their permit conditions, what can this Commission do to remedy that? Is it your recommendation that we somehow add to the permit conditions

that -- Gandy's had this permit for three or four years at least --

A. Uh-huh.

- Q. -- you know, can we come back now -- or should we come back now and change the conditions on the permit, essentially?
- A. Oh gosh, you know, my engineering -- it's just an engineering background, but --
 - Q. And that's all I'm asking for.
- A. -- yes, sir, in my personal engineering -- my personal opinion, just as an individual, yes, something needs to be done here. There was harm caused to operators in this area, and it has not gone away. And yes, something needs to be done. And if that means going back now and saying, you know, well, you know, you've got to get this thing back down to where you're not causing this problem anymore, in this specific area, that's what would need to be done.

That doesn't mean to say all the wells in New Mexico have to go back to zero, et cetera, et cetera. It's just where we have these problems come up. And there's other people involved, it's not just one company, and you kind of have to look out for everybody here.

- Q. Okay.
- A. That's just my personal opinion here.

CHAIRMAN FESMIRE: Mr. Hall, that's all I have. 1 2 Do you have any more redirect? MR. HALL: Very briefly. 3 REDIRECT EXAMINATION 4 5 BY MR. HALL: Mr. Friesen, is it reasonable to assume that the 6 0. permit that Gandy Corporation received was issued on the 7 premise that there would be available pore volume to accept 8 the volumes injected and at the permitted rates? 9 Yes, absolutely. A. 10 11 Q. And in your opinion, did that not turn out to be 12 the case? That's absolutely correct, and there's data that 13 Α. shows that that would not have been the case. 14 15 Is it also reasonable to presume that when an Q. operator receives a permit from the Division, that he 16 17 operates under that permit in a manner so that waste is avoided, there's no impairment to correlative rights, and 18 there's no damage to property, there's no threat of harm to 19 20 the environment, health and human safety? 21 Α. Yes, that's what my first -- that's -- yes, sir, that's my opinion. 22 23 All right. Commissioner Bailey briefly asked you 24 about the condition of some of the older wellbores in the

Let me ask you, do you know when the Energen Snyder

25

area.

1	A Com Number 1 was drilled?
2	A. The Energen Snyder A Com Number 1 well was
3	drilled in 1998.
4	Q. Would it be reasonable to presume that the casing
5	on that well should have been in reasonably good condition?
6	A. Yes.
7	MR. HALL: Nothing further, Mr. Chairman.
8	CHAIRMAN FESMIRE: Okay. Mr. Domenici, anything
9	on that subject?
10	MR. DOMENICI: No.
11	CHAIRMAN FESMIRE: Thank you very much, sir.
12	THE WITNESS: Thank you.
13	CHAIRMAN FESMIRE: Mr. Hall, do you have another
14	witness?
15	MR. HALL: We do, we have Paul Callaway
16	available, if the Commission would like to hear about the
17	experience Energen has had in the area. Commissioner
18	Bailey asked a question about reserves from the plugged
19	wells that were lost. We'll be glad to provide that to
20	you.
21	COMMISSIONER BAILEY: I think it's important to
22	ask Mr. Callaway some questions.
23	CHAIRMAN FESMIRE: Okay.
24	MR. HALL: I'm sorry?
25	CHAIRMAN FESMIRE: Yes, she said. She said, I

1	think it's important to ask Mr. Callaway some questions.
2	For the record, Mr. Callaway, you've been
3	previously sworn?
4	MR. CALLAWAY: I have not. Well, I have in this
5	courtroom, yes, sir.
6	CHAIRMAN FESMIRE: So that's a "Yes, I have been
7	sworn "
8	MR. CALLAWAY: Yes, I have been.
9	CHAIRMAN FESMIRE: " in this case?" Okay.
10	MR. CALLAWAY: I thought you were going to ask me
11	if I'd been before the council, and I was telling you no.
12	PAUL CALLAWAY,
13	the witness herein, after having been first duly sworn upon
14	his oath, was examined and testified as follows:
15	DIRECT EXAMINATION
16	BY MR. HALL:
17	Q. For the record, please state your name.
18	A. Paul Callaway.
19	Q. Mr. Callaway, where do you live and by whom are
20	you employed?
21	A. I live in Odessa, Texas, and I'm employed by
22	Energen Resources Corporation.
23	Q. And in what capacity are you employed by Energen?
24	A. I'm a production superintendent for Energen
25	Resources.

All right. Are you -- Does Energen operate the Q. 1 West Lovington-Strawn unit in the vicinity of the Gandy 2 State T Well Number 2? 3 Yes, we do. 4 And does Energen also have leasehold interests in 5 Q. operations outside of the West Lovington-Strawn unit but in 6 the immediate vicinity? 7 Yes, we do. 8 Α. MR. HALL: Mr. Chairman, it was my intention to 9 simply present Mr. Callaway as a fact witness. I was not 10 going to ask him to opine, therefore I wasn't seeking to 11 qualify him as an expert today, if that's agreeable with 12 13 the Commission. CHAIRMAN FESMIRE: Okay, I think, Mr. Domenici, 14 Mr. Callaway is being presented as a fact witness instead 15 of an expert, and I think he'll be treated as such by the 16 Commission. Is that okay with you? 17 MR. DOMENICI: That's fine. 18 CHAIRMAN FESMIRE: 19 Okay. (By Mr. Hall) Mr. Callaway, in your capacity as 20 Q. engineer for Energen, are you familiar generally with the 21 22 operations and occurrences with the Energen wells in the 23 vicinity of the area we're talking about here today? 24 Yes, I am familiar with the operations in the Α.

area, it is under my supervision, but I am not an engineer.

1	Q. I understand.
2	A. I have a degree, but I am not an engineer.
3	Q. If you would take before you the exhibit notebook
4	and turn to Exhibit Tab 21
5	A. Okay.
6	Q if you could identify that. Is Exhibit 21 a
7	copy of the Energen daily well work activity report for the
8	Snyder B Number 2 well?
9	A. Yes, sir, it is.
10	Q. And where is the Snyder B 2 located, in proximity
11	to the Gandy well?
12	A. The B 2 would be north and east of the Gandy
13	disposal well.
14	MR. HALL: All right. Mr. Chairman, given our
15	earlier discussion about the exhibits, Mr. Callaway brought
16	with him an area map. It's not included among the exhibits
17	in our notebook, and if the Commission would find it
18	helpful we'd like to provide you with a couple of copies,
19	if there's no objection to that.
20	CHAIRMAN FESMIRE: Mr. Domenici, would you have
21	any objection to a demonstrative exhibit that wasn't
22	admitted?
23	MR. DOMENICI: No objection.
24	MR. HALL: I have a limited number. Ask the
25	Commissioners to share that. I'll refer to what's been

marked as Exhibit C-1.

- Q. (By Mr. Hall) Mr. Callaway, did you prepare Exhibit C-1?
 - A. I did.
 - Q. And what is Exhibit C-1?
- A. This is just a small -- or a snapshot of the West Lovington-Strawn unit area, and what I've done is placed marks on the wells which we've had casing leaks on, and the ones that have been plugged, and the one's that we've redrilled.
- Q. Can you identify on Exhibit C-1 where the Snyder B Number 2 is located?
- A. Yes, it's -- again, I've handwritten in "Gandy well", and then if you look in Section 6 there, if you go just north of 6, you'll see W.M. Snyder B 2, and there's an X on it. That's our Snyder B Com 2, our B 2 well that we plugged.
- Q. All right. Referring back to Exhibit 21, the activity report, can you go through that for the Commissioner and simply explain what Energen experienced with that well during the time frame shown on those days?
- A. Sure. I don't know just exactly how much detail you'd like for me to give you from this report, but the B 2 was down, it had a rod part. We had experienced some increased water on the well and the rod parted, so the well

was shut in at the time.

During our normal operation, the operators went by one day, we had a waterflow going down the road. We had blown out the stuffing box from a casing leak. We got on the well, dropped the rod string, the polish rod off, took out the stuffing box and put a valve on it so that we could stop the flow, and then cleaned up the mess.

We then -- In September of 2005, we went out and tried to repair the well, or find out what the condition of the well was. What we found through the well was that we had some collapsed casing. We worked on it to get the rods and the tubing out. We went down through it with a broach and we cleaned that spot out in the casing, and over time we got through it enough that we could actually get a bridge plug over the producing horizon. The B 2 was a Permo-Penn well.

We then -- the well was making -- prior to the casing failure, it was making 6 or 7 barrels of oil a day, so we had spent plus or minus \$100,000 trying to get to the point where we could get the bridge plug set. We decided it was not worth our money to go back in and try to repair the well any further, so we filed for a plugging permit and consequently plugged the well in November of 2005.

Q. If you refer to the second page of Exhibit 21, you look at the entry for September 16th, if we look at

that can we identify the depth at which point the casing collapse occurred?

- A. Yes, we continually hit the casing collapse with a spot at 6365, and that's the one we swedged through several days to get down to that point, where we could get the bridge plug through it.
- Q. And at the time the Snyder B 2 was lost, was it otherwise capable of producing?
- A. Yes, as I stated, it did have a rod part at the time, and it had not produced for a couple of months prior to the time that the stuffing box blew out on us, but it was on production prior to that. We just had other wells that we were working on, the production wasn't so great on that well, that's not where we moved the pulling unit. Pulling units are much more difficult to move around today than they used to be, so...
- Q. Since then have you had an opportunity to make an engineering estimate of the volumes of the reserves that appear to have been lost from the Snyder B 2 production?
- A. Yes, like any public company we have reserve calculations on all the wellbores, and we had a remaining life of this well, approximately 40,000 barrels, oil and gas, BOE.
- Q. Let's turn further in to Exhibit 21 and look at the daily activity reports for the Snyder A Com Number 1.

And first of all, if you would refer back to Exhibit C-1 and locate that for the Commissioners.

- A. Again, the Snyder A Com 1 does not -- it was not one of the wells on this little snapshot of the map that I brought, so when I created it I put it down there as to its exactness, but it's south of the Gandy well.
- Q. All right. Tell the Commissioners about Energen's experience with this well.
- A. Again, this well began to -- it lost its oil cut, started producing water, so we determined it had a casing leak, we again went in to try to work on this well, and we found that we had a casing collapse on this well, a bit deeper, about 8700 feet.
- Q. All right. If we look at the entry for May 11th, 2005, can we determine the interval at which the tubing coupling collapsed?
- A. Well, we did some freepointing, we were 10 percent free at 8770 -- I'm sorry, we were 100 percent free at 8770, and we were stuck at 8790, so the collapse was in that area right there.
- Q. All right. If you look at the entry, turn to -
 If you look at the top right-hand corner there's fax page

 numbers, and it says "Page 6" --
 - A. Okay,

Q. -- and look at the entry for May 17, 2005.

A. Uh-huh.

- Q. Can you summarize what that entry says for the Commission?
- A. Well, we pumped some brine water down the tubing, jarred on the fish with accelerators and four 3-1/2-inch drill collars, jars, bumper sub, recovered four joints of 2-7/8-inch tubing, had two joints collapse due to the collapsed casing, collar was gone off the bottom joint, the pin was split from the bottom of the threads through the upset. The well was flowing back a large volume of water constantly. Again, the field guy estimated possibly due to the disposal well. Again, that's his guesstimate based on proximity of the disposal well.
- Q. And ultimately, did Energen -- was Energen compelled to plug and abandon this well?
- A. Yes, if you go on through there -- and we did spend, you know, 100-plus-thousand dollars trying to, again, get this well back into production. This well was making about 16, 17 barrels of oil a day at the time that we had the casing collapse. We were unsuccessful in saving the well. These wells are deep. This is an 11,000-foot Strawn producer, so redrilling it for the remaining reserves probably was not economic, so we did go in and plug the well.
 - Q. Did you --

This well was plugged in December of 2005. 1 Α. Q. 2 3 4 producible from this well? 5 Α. 6 7 0. 8 legend and the stars and asterisks? 10 Α. 11 12 13 14 15 16 Lovington-Strawn Unit Number 9, which was the Snyder S Com 17 2; and then the West Lovington-Strawn Unit Number 12, which 18 was the State S. 19 20

Have you since made an engineering estimate of the volumes of reserves lost that would have otherwise been Yes, again we had a forecast, and we estimated the remaining reserves would be about 60,000 barrels. Referring back to Exhibit C-1, can you identify for the Commissioners what else is shown there by your key In the West Lovington-Strawn unit to the north I placed some stars. We have redrilled four wells in the West Lovington-Strawn unit: the West Lovington-Strawn Unit Number 2; the West Lovington-Strawn Unit Number 8 -the West Lovington-Strawn Unit Number 2 originally was the Hamilton Federal Number 2; the West Lovington-Strawn Unit Number 8, which originally was the Snyder S Com; the West

All of those wells had casing failures, and we went in, pulled the casing, pumped a plug, and then kicked off the plug, redrilled the wells and ran casing to depth.

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- Q. Anything further you wish to add with respect to Exhibit C-1?
 - Α. There are some others that had casing leaks. The

West Lovington 1, which was the Hamilton Federal Number 1, 1 also had the casing leak. 2 The Hamilton Federal Number 3 had a casing leak. 3 We have gone in and we actually pulled that casing from 4 about 8000 feet and tied it back together, so we did not 5 redrill it. 6 Number 1 currently has a casing leak, and we've 7 not determined how to repair it at this point. 8 The other wells that are down lower in the unit, 9 some of the older wells, the State D 8 is currently 10 T-and-A'd. We unsuccessfully tried a Wolfcamp completion 11 in that well recently. It also has a casing leak, so it's 12 on the schedule to be plugged. 13 We also plugged the Snyder B 1, which is the 14 direct offset to the east of the Snyder B 2. 15 We've also plugged the Snyder E 1, the Snyder F 2 16 and the Snyder F 1, all for casing failures. 17 Mr. Callaway, do you recognize the daily activity Q. 18 reports to be forms that Energen Resources Corporation 19 20 maintains in its files in the ordinary course of business? Yes, sir. 21 Α. 22 Q. And was Exhibit C-1 prepared by you? Is this C-1? 23 Α.

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(Nods)

Yes, it was.

Q.

Α.

That concludes our direct of this MR. HALL: 1 We'd move the admission of Exhibits 21 and C-1. witness. 2 MR. DOMENICI: No objection. 3 No objection, Exhibits 21 and CHAIRMAN FESMIRE: 4 C-1 will be admitted. 5 COMMISSIONER BAILEY: Could I have copies of C-1? 6 MR. HALL: I'll have to make some more. I'll get 7 those to the Commissioners. I don't have one. 8 CHAIRMAN FESMIRE: Mr. Domenici? 9 MR. DOMENICI: A couple questions. 10 CROSS-EXAMINATION 11 BY MR. DOMENICI: 12 Mr. Callaway, I note on your map it doesn't show 13 Q. the date of the wells. Do you know personally the date of 14 these different wells, the age of the wells? 15 As far as the date at which they were drilled? 16 Α. Yes. 17 Q. 18 I can't tell you with any certainty. I can tell 19 you that the A Com 1 was drilled as Mr. Friesen said in 20 The State B -- or the Snyder B 2, which I also did a little research on recently, or reviewed recently, it was 21 drilled in the 1960s. 22 23 Most of the unit wells, I'll just give a 24 generalization. The unit was drilled in the early to late 25 1980s. The West Lovington 23 is a recent well that we

drilled, and we drilled that well in -- I believe it was June of 2006.

- Q. Where is that one?
- A. It's due north of the -- it's in 34, and it's kind of the center, south. That's not an exact location, that's my location --
 - Q. Okay.

- A. -- of that well. It's the one I penciled in.

 That was the most recently drilled well. The 8 and 9 were

 done -- redrilled in June and July, respectively -- or July

 and August, respectively. The West Lovington 2 was done in

 October of '06, and the West Lovington was completed in

 December of '06.
- Q. And which ones of those encountered pressure in this zone, water pressure?
- A. We had waterflow during -- well, we had casing leaks, so we had water. But the waterflow that we encountered during drilling was in the West Lovington-Strawn 8 R, the West Lovington-Strawn 9 R, and the West Lovington-Strawn 23.
- Q. And were you able to address that and complete those wells?
- A. Yes. Yes, we mudded up through the San Andres section.
 - Q. And did you plan to do that?

Yes because we had casing leaks in those wells, 1 Α. so we knew we had -- we had pressure in that horizon. 2 And so if you did any other wells in this area in 3 the next 12 months, you would do the same thing? 4 We would certainly be prepared for it. In the 5 12 R we saw no such waterflow. 6 Where's the 12 R? 7 0. It's the one that would be north and east of the 8 23, and it was the one that was -- it was the last one 9 completed, it was done in December of 2006. 10 So you were prepared, but you didn't have to --Q. 11 That's correct. Α. 12 -- take any action? 13 Q. 14 Do you own other locations in here that would be suitable for drilling? 15 There are other locations, legal locations within 16 the unit, none of which are currently planned to be 17 drilled. 18 So Energen has no plans to drill in the next 12 19 Q. months? 20 Α. We are going to re-enter what is permitted as the 21 22 West Lovington-Strawn Number 24. It's on the far west side of the unit. It's called the Adams Moustel Federal 33. 23 That's the only one that we currently have plans to enter 24

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in '07.

1	Q. And you anticipate you will be able to address
2	any problems, if there are any, from the water?
3	A. Yes.
4	MR. DOMENICI: Okay, that's all I have.
5	CHAIRMAN FESMIRE: Commissioner Bailey?
6	EXAMINATION
7	BY COMMISSIONER BAILEY:
8	Q. Is the West Lovington-Strawn a primary production
9	or a secondary recovery unit?
10	A. It was a gas injection project that we turned to
11	gas sales in January of 2003.
12	Q. So gas injection as a secondary unit?
13	A. Yes, this was all My employment began in 2002
14	with West Lovington I mean with Energen Resources, and
15	they were currently injecting gas into the West Lovington-
16	Strawn. The previous operator, Mr. Gillespie, started the
17	West Lovington-Strawn unit gas injection.
18	Q. And it appears as though the north half of
19	Section 6 is a part of the unit?
20	A. Yes, it is.
21	Q. So the Snyder B Number 2 well is within the
22	boundaries of the unit, but not a unit well?
23	A. The Snyder B 2, I believe, is just south of the
24	boundary, but it is not in the Strawn horizon; it was
25	Permo-Penn.

1	Q. Okay.
2	A. There are other wells operated by Energen within
3	the unit boundaries, out of other horizons, other than the
4	Strawn.
5	Q. Because the unit is strictly for
6	A. West Lovington-Strawn Unit
7	Q Strawn production?
8	A yes, ma'am.
9	Q. Does Energen use used casing?
10	A. Used casing? No, ma'am.
11	Q. Would the previous operator, you said Gillespie?
12	A. Gillespie was the operator. I don't know whether
13	he used casing or not. I think it would be possible.
14	Q. But in your experience it is not uncommon for
15	operators trying to save a few bucks to use used casing in
16	their operations?
17	A. In my experience it is not uncommon for small
18	independent operators to use used casing. However, it is
19	very unusual for them use used casing at depths of 11,000
20	feet.
21	Q. But for surface casing, particularly through
22	shallower zones, they may use used casing?
23	A. Yes, ma'am.
24	COMMISSIONER BAILEY: That's all I have.
25	CHAIRMAN FESMIRE: Commissioner Olson?

Ιt

EXAMINATION 1 BY COMMISSIONER OLSON: 2 Mr. Callaway, do you know any other saltwater 3 Q. disposal wells in this area, or just the two that were 4 listed here today, that's the only ones? 5 Those are the only two commercial disposal wells, A. 6 7 I know. We, Energen, have two disposal wells in the area. And where are they at in relation to these 8 Q. operations? 9 If you'll look on this exhibit again, C-1, right Α. 10 below -- over where all my hand-scratching is, I have the 11 well D 8 that's got a TA marker on it. The one just below 12 13 that says State D 3 SWD. That is an Energen disposal well. 14 We dispose a hundred barrels a day into the San Andres 15 formation there at about 300 pounds surface pressure. We have a second disposal well, the Bear Number 1 16 It's outside the unit, up to the -- It's on the very 17 far left-hand side of the map. We dispose around 1000 18 barrels a day, again, into the San Andres at that area. 19 20 takes about 300 pounds of discharge pressure on the pump. When the pumps shut down, the well goes on a vacuum. 21 22

- Q. But you're actually disposing, then, the same horizon as the Gandy --
 - A. Yes, we are.

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Q. And to your knowledge, has Energen ever been

asked to reduce pressure on completion of injection 1 operations with any of their injection wells? 2 No. 3 A. COMMISSIONER OLSON: Okay. I think that's all I 4 5 had. **EXAMINATION** 6 7 BY CHAIRMAN FESMIRE: Just to reiterate something Commissioner Olson 8 started here, the State D 3 is just a little over a mile 9 away from the State T 2, the Gandy well, and --10 Given my -- my guesstimate as to its location, 11 Α. yes, sir, that's correct. 12 Okay, and the pressure in the San Andres, in the 13 Q. same zone that they're injecting into at the State T 2, is 14 15 -- or at the Gandy disposal well, I'm sorry, is 300 pounds and 100 barrels a day? 16 17 A. Our surface discharge pressure is 400 pounds at 100 barrels a day. 18 19 Q. Okay. And you mentioned another disposal well in 20 the San Andres, and I missed that, I'm sorry. 21 Α. I'm sorry, it's this one right up here in the far 22 corner --Oh, it's --23 Q. -- it's the Bear Number 1 SWD. 24 Α. 25 Q. It's almost three miles away, though?

Α.	Yes.
Q.	Okay.
Α.	And it has also injected into the San Andres, and
we inject	about 1000 barrels a day. We inject our produced
water fro	m the unit into the Bear SWD.
Q.	Okay, and it's 1000 barrels a day, and you inject
at	
Α.	300 pounds surface pressure.
Q.	300 pounds surface pressure?
Α.	Yes, sir.
Q.	But when you
Α.	When we turn the pump off, it goes on vacuum.
Q.	It goes on vacuum.
A.	Yes, sir.
	CHAIRMAN FESMIRE: Okay. I don't have any
further q	uestions.
	Mr. Hall, do you have any redirect?
	MR. HALL: One briefly.
	REDIRECT EXAMINATION
BY MR. HA	LL:
Q.	Mr. Callaway, does Energen Resources control each
and every	drilling location, whether it's on 20s, 40s, 80s,
	s, on all of the areas shown on Exhibit C-1? Do
	ol all that?
Α.	No, sir, we do not.
	Q. A. we inject water from Q. at A. Q. A. Q. A. Q. A. Q. and every 160s, 320 you contr

Okay. Nothing further, Mr. Chairman. MR. HALL: 1 CHAIRMAN FESMIRE: 2 MR. DOMENICI: Nothing further. 3 CHAIRMAN FESMIRE: Mr. Domenici? Okay. Thank 4 you very much, sir. 5 THE WITNESS: You're very welcome. 6 CHAIRMAN FESMIRE: Mr. Hall, did you have 7 anything else? 8 I'm looking for an efficient way to 9 MR. HALL: address this. Mr. Domenici raised an issue in his cross-10 examination of Mr. Friesen that seemed to imply that the 11 water that would have to be taken out of the Gandy well in 12 order to reduce the reservoir pressures would go to Mr. 13 Watson's well. I'd like to lay that implicit suggestion to 14 rest if I could. I could do that through a brief 15 examination of Mr. Watson. If that's an issue of interest 16 17 to the Commission, we'll be glad to address that. CHAIRMAN FESMIRE: Since Mr. Domenici did raise 18 19 that issue, or did infer that issue, I think it would be 20 appropriate for you to bring your one rebuttal witness, recognizing, of course, that Mr. Domenici gets to cross-21 22 examine that witness. 23 MR. HALL: Yes, within the scope of my direct. 24 CHAIRMAN FESMIRE: Always. 25 MR. HALL: We'll do that. Call Mr. Watson to the

1	stand, please.
2	CHAIRMAN FESMIRE: Mr. Watson, you've been
3	previously sworn?
4	MR. WATSON: Yes, sir.
5	DANNY R. WATSON,
6	the witness herein, after having been first duly sworn upon
7	his oath, was examined and testified as follows:
8	DIRECT EXAMINATION
9	BY MR. HALL:
10	Q. For the record, state your name.
11	A. My name is Danny R. Watson.
12	Q. Where do you live, Mr. Watson?
13	A. I live in Tatum, New Mexico.
14	Q. And Mr. Watson, do you own and operate the Watson
15	6 Number 1 disposal well?
16	A. Yes, I do.
17	Q. And you've listened to the testimony here today,
18	correct?
19	A. Yes, I have.
20	Q. In response to a question asked by Mr. Domenici,
21	Mr. Friesen suggested that one place where water from the
22	Gandy T 2 well could be disposed of would be your Watson 6
23	Number 1 well. Do you recall hearing that today?
24	A. Yes, I do.
25	Q. Could you tell the Commission whether you are

willing to take water from the Gandy facility? 1 I particularly don't want the water because Α. 2 they've already testified under their witnesses in 3 previous -- that they had somehow got some stuff down there 4 to plug up their zones. So if they backflow it, even, 5 they'll get it out of there. I'm not sure I want it in my 6 wells to contaminate. 7 MR. HALL: All right, nothing further. 8 CHAIRMAN FESMIRE: Mr. Domenici? 9 CROSS-EXAMINATION 10 BY MR. DOMENICI: 11 Mr. Watson, have you told the rancher, I guess, 12 Q. the surface owner of a prospective replacement well for 13 Gandy that you were going to protest that well? 14 MR. HALL: Well, beyond the scope of direct, Mr. 15 Chairman. I'm going to object. 16 17 CHAIRMAN FESMIRE: That is correct, although I'd like to hear the answer to that; it's sustained. 18 sustain the objection. 19 20 MR. HALL: All right. (By Mr. Domenici) Well, let me just ask this. 21 Q. 22 So you were saying you will not take the water? 23 A. Correct, I would prefer not to. 24 Q. Okay, you prefer not to, or you will not? 25 Α. All right, I will not.

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1	MR. DOMENICI: Okay, that's all I have.
2	CHAIRMAN FESMIRE: Commissioner Bailey, do you
3	have any questions?
4	COMMISSIONER BAILEY: No questions.
5	COMMISSIONER OLSON: No questions.
6	CHAIRMAN FESMIRE: I have no questions either,
7	Mr. Hall.
8	MR. HALL: That concludes our presentation for
9	the motion, Mr. Chairman.
10	CHAIRMAN FESMIRE: At this time, I think the
11	Commission will deliberate on this issue until they come to
12	an answer or at noon, whichever comes first. It will be a
13	public deliberation, so if the people would like to stay
14	that's perfectly welcome.
15	COMMISSIONER BAILEY: Public deliberation for
16	rulemaking.
17	CHAIRMAN FESMIRE: We've got an option on this.
18	MS. BADA: Closed session.
19	CHAIRMAN FESMIRE: Okay, does the Commission have
20	a
21	COMMISSIONER BAILEY: I prefer that we keep non-
22	rulemaking deliberations out of
23	CHAIRMAN FESMIRE: Okay. Commissioner Olson,
24	would you
25	COMMISSIONER OLSON: That's fine with me.

1	CHAIRMAN FESMIRE: Okay, I stand corrected. At
2	this time the Commission will go into a private
3	deliberation to determine this issue. Thank you.
4	MR. DOMENICI: Chairman Fesmire
5	CHAIRMAN FESMIRE: Yes.
6	MR. DOMENICI: I have a 1:30 appointment in
7	Albuquerque that I have to make, so if I could ask if
8	you're not finished Mr. Lakins is traveling with me.
9	Could I ask if we could be vacated and be informed of the
10	decision?
11	CHAIRMAN FESMIRE: Yes, if you're not here I'll
12	call your office today.
13	MR. DOMENICI: Okay.
14	MR. HALL: Mr. Hall, may all my witnesses be
15	excused?
16	CHAIRMAN FESMIRE: They may.
17	(Off the record at 11:41 a.m.)
18	(The following proceedings had at 11:55 a.m.)
19	CHAIRMAN FESMIRE: Okay. At this time we'll go
20	back on the record. Let the record reflect that it's
21	11:55. All three Commissioners are still present.
22	During the time that we were off the record the
23	Commission met, discussed the case before it, and discussed
24	only the case before it, and has come to a decision.
25	At this time the Commission has decided that we

will allow the Applicant -- or that the Applicant will be 1 allowed to withdraw their application for hearing de novo 2 under the condition that the well remain shut in and that 3 4 it be plugged prior to July 31st, 2007. 5 While the procedural rules do not address withdrawal of the application for a de novo hearing, 6 Commission will in the future follow the District Court 7 rule and not allow a unilateral withdrawal of an 8 9 application for a de novo hearing after the deadline to file. 10 11 We've instructed Counsel Bada to draw up an order 12 to that effect, and we'll sign it at our next Commission 13 meeting, which is --14 MS. DAVIDSON: February 8th. CHAIRMAN FESMIRE: February 8th. 15 Any questions from counsel? 16 17 MR. HALL: Yes, sir. Are you setting a date certain for the advance plugging of the well? You said 18 19 plug it before July 31st. 20 CHAIRMAN FESMIRE: And not allow any injection from this time until then. It's done as an injector. 21 So what is the deadline for them to 22 MR. HALL: plug the well? 23 CHAIRMAN FESMIRE: The order will state that the 24 25 well will be plugged by July 31st, 2007.

1	MR. HALL: By July 31st.
2	CHAIRMAN FESMIRE: Yes, sir.
3	MR. HALL: I misunderstood you. I thought you
4	said before.
5	CHAIRMAN FESMIRE: Before, by
6	MS. BADA: On or by.
7	CHAIRMAN FESMIRE: On or before, and that there
8	is to be no more injection into that well. Okay?
9	Anything else in this cause?
10	MR. DOMENICI: Nothing.
11	CHAIRMAN FESMIRE: Okay. With that, we'll
12	proceed to the next case before the Commission
13	MR. HALL: May I ask one additional question with
14	respect to the request for reservoir pressures to be
15	reduced? I understand Is that to be denied?
16	CHAIRMAN FESMIRE: Yes.
17	MR. HALL: Okay.
18	CHAIRMAN FESMIRE: I'll leave it at that. Yes,
19	that will be denied.
20	MR. HALL: Okay, that's all we have.
21	CHAIRMAN FESMIRE: Okay.
22	MR. HALL: Thank you.
23	(Thereupon, these proceedings were concluded at
24	11:57 a.m.)
25	* * *

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 Commission 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 January 14th, 2007.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2010