

**Tuesday, May 20, 1997 (morning)**

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLORADO

Criminal Action No. 96-CR-68

UNITED STATES OF AMERICA,

Plaintiff,

vs.

TIMOTHY JAMES McVEIGH,

Defendant.

REPORTER'S TRANSCRIPT

(Trial to Jury - Volume 104)

Proceedings before the HONORABLE RICHARD P. MATSCH,  
Judge, United States District Court for the District of  
Colorado, commencing at 9:00 a.m., on the 20th day of May,  
1997, in Courtroom C-204, United States Courthouse, Denver,  
Colorado.

Proceeding Recorded by Mechanical Stenography, Transcription  
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APPEARANCES

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Defendant McVeigh.

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PROCEEDINGS

(In open court at 9:00 a.m.)

THE COURT: Be seated, please.

Good morning. Are we ready for the jury?

MR. TRITICO: Yes, sir.

THE COURT: Okay.

(Jury in at 9:00 a.m.)

THE COURT: Members of the jury, good morning. We're

ready to proceed with further cross-examination of Mr. Burmeister by Mr. Tritico.

Mr. Burmeister, if you'll resume the stand, please.

(Steven Burmeister was recalled to the stand.)

MR. TRITICO: May I proceed?

THE COURT: Yes, please.

CROSS-EXAMINATION CONTINUED

BY MR. TRITICO:

Q. Good morning, Special Agent Burmeister.

A. Good morning.

Q. Did you have a restful evening?

A. Pretty well.

Q. Yesterday when you were testifying on direct examination, you -- I believe you testified you are currently the acting chief of the C/TU.

A. Yes, I am.

Q. That's the Chemistry/Toxicology Unit within the lab; is that right?

A. Yes, it is.

Q. How long have you been the acting chief?

A. Probably since January of this year. Sometime in and around that time frame.

Q. Who was the chief before you became the acting chief?

Steven Burmeister - Cross

MS. WILKINSON: Objection, your Honor.

THE COURT: Sustained.

BY MR. TRITICO:

Q. Who was the chief of the Chemistry/Toxicology Unit when you joined the lab?

A. When I joined the laboratory, it was Special Agent James Corby.

Q. And who was the chief of the Chemistry/Toxicology Unit in April of 1995?

A. Special Agent Roger Martz.

Q. Is Special Agent Roger Martz still at the lab?

MS. WILKINSON: Objection, your Honor.

THE COURT: Sustained.

BY MR. TRITICO:

Q. Yesterday you testified that you sponsored, I believe, an international conference on protocols in 1993?

A. Yes.

Q. Where was that conference?

A. The conference was held at the FBI Academy at Quantico, Virginia.

Q. And how many countries attended?

A. We had approximately 100 guests present at that particular conference, and I would venture to say 50 percent of those guests were from international countries.

Q. And I believe, if I understood your testimony, you

Steven Burmeister - Cross

discussed your protocols that existed at your lab in 1993 at this conference; is that right?

A. Yes.

Q. And presented those protocols at the conference for discussion; is that right?

A. Our protocol was introduced and discussed amongst the group. We also had other countries present their protocols and procedures as well.

Q. Let me show you what's already been introduced as Government Exhibit 914.

This is -- can you see that on your screen?

A. I can see it, yes.

Q. And this is Government Exhibit 914; is that right?

A. Yes, that's 914.

Q. Is this what you testified yesterday is the protocol that you used in your lab in April of 1995?

A. Yes. It would be, yes.

Q. Is this the protocol that you submitted to the conference in 1993 on the international conference?

A. It may have one or two additions, but I believe it's the same -- same structure that was presented at the conference. There may have been one arrow that might have been changed, but that's the protocol and procedure that was presented, yes.

Q. Is that the only protocol and procedure that was presented at the conference?

Steven Burmeister - Cross

A. It was the only one that the FBI presented at the conference, yes.

Q. Let me show you, sir, what's been marked as McVeigh Exhibit J400.

MR. TRITICO: Your Honor, may I have Mr. England sit up there and hand him the exhibits? It may make things move a little smoother.

THE COURT: Are there going to be a lot?

MR. TRITICO: There might be.

THE COURT: All right.

Have copies been provided to Ms. Wilkinson?

MR. TRITICO: I have them here for her, your Honor.

MS. WILKINSON: I just received them, your Honor.

MR. ENGLAND: 400.

MR. TRITICO: J400, please.

BY MR. TRITICO:

Q. Would you take a look at McVeigh Exhibit J400, please.

THE COURT: What are we doing, reading every page of this?

MR. TRITICO: I was --

BY MR. TRITICO:

Q. Have you had a chance to review it?

A. I'm in the process. You asked me to review the documents.

Q. Do you recognize those documents?

A. Well, half of them that I've been able to go through.

Steven Burmeister - Cross

Q. Go ahead.

A. Okay.

Q. Have you had a chance to review those?

A. Yes.

Q. Are those the protocols that were in effect in your lab from April 1, 1995, until at least December the 19th, 1996?

A. It's the protocols and the foundation material for those protocols.

Q. That would be the procedures?

A. Yes.

Q. Okay.

MR. TRITICO: I'll offer McVeigh Exhibit J400, your Honor.

MS. WILKINSON: Your Honor, I'm going to object at this point to relevance. I'm not sure --

THE COURT: What are you offering them for?

MR. TRITICO: Let me ask a few more questions.

BY MR. TRITICO:

Q. Did you submit any of these at the conference in 1993?

A. The -- there was a page in here which I recognize, which was a protocol presented at the conference, yes.

Q. Only one page in there?

A. Well, it was the overall protocol for analysis that was presented at that conference.

Q. Is that the same protocol that's in evidence as Government

Steven Burmeister - Cross

Exhibit 914?

A. I believe it may have one additional instrument listed -- or I'm sorry -- one instrument removed from the list, but there's a -- there's a protocol sheet that's in here that's not the one that you showed me on the screen.

Q. Other than the one instrument, is it the same chart?

A. Yes.

Q. Okay. And other than that, you didn't submit any of the protocols that are in Exhibit J400 at the conference; is that right?

A. No. The protocol that was presented is shown in this packet, yes.

Q. Other than that one, you presented no other protocols out of J400 at the conference; is that right?

A. Well, that was our protocol at the time that I presented it.

Q. Okay. Now, this protocol --

MR. TRITICO: Can I have this on?

BY MR. TRITICO:

Q. The protocol that's in evidence as Government Exhibit 914, you did not submit this solely to ASCLD as your protocols for certification, did you?

MS. WILKINSON: Objection. Your Honor.

THE COURT: Sustained.

BY MR. TRITICO:

Steven Burmeister - Cross

Q. Is the lab currently seeking certification from a group called ASCLD?

MS. WILKINSON: Objection.

THE COURT: Sustained.

BY MR. TRITICO:

Q. Has the FBI lab ever been certified by a certification group?

MS. WILKINSON: Objection.

THE COURT: Overruled.

BY MR. TRITICO:

Q. Has the FBI lab ever been certified by a certification group?

A. You'll have to ask particular areas. It's possible that the DNA unit has been certified by particular agencies.

Q. How about the trace analysis section?

A. We don't have a trace analysis section.

Q. How about the residue analysis area of the Explosives Unit, have they ever been certified by a certification group?

A. We have not been certified by any particular group in the explosive residue area. And I'm actually not sure of any particular group that will.

Q. Does trace analysis include the residue area? Is trace analysis included within the residue area, explosives residue area?

A. Well, trace analysis is certainly a part of the residue

Steven Burmeister - Cross

analysis, yes.

Q. Are you currently seeking certification by any group in that area?

MS. WILKINSON: Objection.

THE COURT: Sustained.

BY MR. TRITICO:

Q. You recall yesterday I asked you about your opinion of Dr. Whitehurst?

A. Yes, I recall that.

Q. And I believe your testimony was that you respected his ability; is that right?

A. At the time that I worked with him, I respected his abilities, yes.

Q. Have you ever made a statement different than that?

A. Not to my knowledge.

Q. Did you offer testimony to investigators from the Inspector General's office?

MS. WILKINSON: Objection.

THE COURT: Sustained.

MR. TRITICO: Your Honor, may I respond?

THE COURT: No.

BY MR. TRITICO:

Q. Yesterday you testified that you have found that explosives adhere to plastic, foam rubber, glass pieces, and pieces of

metal. Do you recall that?

Steven Burmeister - Cross

A. Yes.

Q. Now, you took what's in evidence as Government's Exhibit 826 back to the lab; is that right?

MR. TRITICO: May I have that, please?

BY MR. TRITICO:

Q. You took this sign and took it back to the lab; is that right?

A. I personally didn't take it back to the laboratory, but yes, it arrived back at the laboratory.

Q. Right, you removed it and then it was taken back to the lab; right?

A. Yes.

Q. Did you test it?

A. Yes, I did.

Q. Found no explosives residue on it?

A. That's correct.

Q. You found no traces of ammonium nitrate on it?

A. Well, there were -- there were ammonium ions and nitrate ions found on that particular object, but I couldn't attribute it to any significance at the time.

Q. Because ammonium ions and nitrate ions happen naturally; correct?

A. That's correct, yes.

Q. You didn't find them attached together?

A. Right.

Steven Burmeister - Cross

Q. As a matter of fact, when you have like nitrate ions on a surface -- for instance, Government Exhibit 826 -- they -- nitrate ions can attract ammonium ions and they can attach together before you test it; right? That can happen?

A. The -- you really don't know that -- you don't know that the nitrate ions are attached to some other metal. It could be sodium, potassium. You don't know.

Q. Sure. But my point is ions, ammonium ions and nitrate ions, can attract together naturally; isn't that right?

A. Given the right conditions, it could.

Q. And you wouldn't know when you test something and find ammonium ions and nitrate ions attached together -- you wouldn't know how and when and under what circumstances those two ions attached together, would you?

A. Well, if you're testing the surface and you're only looking for the ions themselves, you don't know whether those two species are actually affixed together. For example, the ammonium ions that are found on that piece of metal and the nitrate ions that were found on that piece of metal, it could very well have been ammonium nitrate at one time; and when I did the water extract on that surface, I was removing the ammonium nitrate and putting it into a solution, so --

- Q. So what you're telling me is you found no crystals?  
A. There were no crystals on that surface, that's correct.  
Q. Is it true that ammonium ions and nitrate ions can

Steven Burmeister - Cross

crystallize on their own?

A. They can certainly do that, yes.

Q. And when you find crystals, you don't know under what circumstances they crystallized, do you? In other words, you don't know if they started from a prill of ammonium nitrate or if they joined together naturally and formed crystals, do you?

A. Well, that's part of the analysis and the size of the crystal and the shape. There are certain conditions that come into play that you have to analyze those to make that determination.

Q. But you don't necessarily know, do you?

A. The -- when you look at the surface, I've seen a lot of material when it's recrystallized -- I spent some time doing microcrystal work, and there is under -- when the material recrystallizes and precipitates out, there's a different appearance that's formed when it's doing it.

Q. Did you have any discussions with other experts in the field back in 1995 regarding the crystallization of ammonium and nitrate ions?

A. I don't believe I've had specific conversations in that area. I know from my background in microcrystal work that what I've seen before and what tests I've run at that time.

Q. Did you have a discussion with Dr. Fred Whitehurst about ammonium ions and nitrate ions on May the 4th, 1995 -- May the 3d, 1995?

Steven Burmeister - Cross

A. I don't have a specific recollection. Dr. Whitehurst and I, especially during my training period, routinely would discuss ions and how they interact within the environment; and certainly that -- it would be consistent with a conversation I may have. I don't recall that particular conversation you're talking about.

Q. Were you still in training on May the 3d, 1995?

A. No.

Q. You were just working together with Dr. Whitehurst in the same lab?

A. Yes.

Q. And you did work together from time to time?

A. Yes.

Q. As a matter of fact, you worked together to build the urea nitrate bomb that was shown yesterday; right?

A. That's correct, yes.

Q. That was -- that test that you performed was actually performed in preparation for testimony in the World Trade Center case, was it not?

A. That's correct.

Q. That was not a test that was done by the FBI lab just for

Q. That was not a case that was done by the FBI lab just for forensic purposes in general; it was for a specific case; right?

A. Well, it had a dual purpose. At the time when we put that entire examination into play, we were looking not only for the

Steven Burmeister - Cross

blast and for detonation velocities coming off of that particular material, we also had the availability to set up witness material at the time. So that was a capture material for us.

Q. But the test was performed -- I'm sorry. The test was informed -- performed in preparation for testimony in the World Trade Center case; right?

A. Well, it certainly wasn't performed for my testimony. I had an interest in it for residue analysis at the time, and that's how I was brought on board. The test was in play and it was being organized, but I had the availability. It doesn't come very often that you have a chance to actually take a real-life sample like this and put out witness material. That's what I had the opportunity to do at this particular case.

Q. And that's when you found that unexploded explosives may be found on things like Government Exhibit 826, the sign which acts like a glove; right?

A. Right.

Q. The one in this case which you found no explosives residue on; right?

A. Well, there's an explanation as to why I didn't find it, but you're correct.

Q. You found -- you take other signs back to the lab?

A. I'm sorry?

Steven Burmeister - Cross

Q. Did you take other street signs back to the lab?

A. That particular sign was in the -- in an area which I thought was probative, so that's the reason why we took that particular sign back.

Q. Did you take other street signs to the lab?

A. No.

Q. Did you take the pole on which you removed Government Exhibit 826 back to the lab?

A. No.

Q. Now, when you -- did you find through your research and discussions with other people in your lab that nitrates are ubiquitous in the environment?

A. That's correct, they are.

Q. What does that mean?

A. It means that unfortunately with our environment with the pollution that occurs, there are nitrates present as the rainwater comes down. And they are present not only from the rainwater, but there are other sources of nitrates in the environment. So detecting nitrates on surfaces doesn't



necessarily mean anything at the time. You need to have some sort of history of that material. You also need to have some sort of control samples; that is, a -- what is the normal background of that area. So those are the things that you have to take into consideration before understanding what a nitrate reading means.

Steven Burmeister - Cross

Q. Do you have information in the FBI lab or have you received information in preparation for your work in this case that the FBI lab has information which indicates that an explosive could detonate, deposit nitrate only, and before analysis have ammonium ions form?

A. Say that one more time. I'm sorry.

Q. Sure.

A. If you could repeat that.

Q. You have information in the FBI laboratory or have you received information from others that an explosive could detonate, deposit nitrate only, and before analysis have ammonium ions form?

A. There was a situation which was shown that understanding -- that if you take a aqueous extract of a material --

Q. I'm sorry, a?

A. An aqueous. I'm sorry, it's a water extract.

Q. Okay.

A. If you do a water extract of a material and you take that extract and you let it sit for some period of time and you only detect nitrate ions in that solution, there is a possibility that that nitrate can convert over to ammonium ions, and then those ammonium ions can convert back over to the nitrate ions. The concentration is low, but there is a back-and-forth if you let the solution sit.

I recall an instance with Dr. Whitehurst in which that

Steven Burmeister - Cross

event took place, and I believe he presented that to me at the time.

Q. He wrote you a memo about that, didn't he?

A. Boy, I'm not sure if he wrote me a memo. I remember discussing that feature with him.

Q. Let me show you what's been marked as Defendant McVeigh Exhibit J444.

Do you have that?

A. Yes, I do.

Q. Is this a memo that you received from Dr. Whitehurst on May the 4th, 1995?

A. I recall receiving the memo itself. I'm not -- I think I've seen the attachments. I'm not sure if the attachments came at the same time as the memo. But I do recall seeing the attachments.

Q. In the memo --

MR. TRITICO: I'll offer McVeigh Exhibit J444, your Honor.

MS. WILKINSON: Objection.

THE COURT: What's the objection?

MS. WILKINSON: It's hearsay, first of all. It's an memo from Dr. Whitehurst to Agent Burmeister.

THE COURT: You ask additional questions whether he considered it in forming his opinion.

BY MR. TRITICO:

Steven Burmeister - Cross

Q. This memo was the result of a conference or conversation that you and Roger Martz had with Agent Whitehurst regarding this case; is that right?

A. I don't recall that. I don't recall that I had a conversation and that precipitated this memo. I don't recall that.

Q. Did you look at this memo -- you read the memo after you got it; right?

A. Yes.

Q. The memo discusses searching for ammonium nitrate?

A. Yes.

Q. It discusses the things we were talking about regarding the ubiquitous nature of nitrates?

A. Yes.

Q. It discusses things relevant to your investigation in this case, does it not?

A. Well, the material that's presented here was all review to me, and at the time none of it was new information that I was receiving from Dr. Whitehurst. I remember receiving it and reading over it; and there wasn't anything in the memo that struck me as being something I should have taken note of. I already knew what was in the memo.

Q. So you did read over it?

A. Yes.

Q. And did you utilize it in any form or fashion in your

Steven Burmeister - Cross

investigation in this case?

A. No. Not really. Because there wasn't anything new brought up in this memo. I had already had my ideas set forward. The ideas coincided with what was presented in the memo.

Q. What ideas?

A. About the nature of ammonium nitrate, the presence of ammonium and nitrate ions at a scene, the significance of those ions. Those are things which I had already known prior to even coming to that crime scene.

Q. Did you take soil samples from the area around which Q507 was found?

A. No, I did not.

Q. One of the things Dr. Whitehurst was discussing with you in this memo --

MS. WILKINSON: Objection, your Honor.

MS. WILKINSON: OBJECTION, YOUR HONOR.

THE COURT: Yes, you can't get into that until the memo is in.

Do you still object to the memo?

MS. WILKINSON: Yes, your Honor.

THE COURT: Overruled. But I'm not sure about the attachment because I didn't understand your testimony about the attachment.

THE WITNESS: The attachments -- I recall seeing the attachments, but I'm not sure whether the attachments came with this memo. I've seen them before, but I'm not sure if they

Steven Burmeister - Cross

came --

THE COURT: Okay. Only the memo is received. The first three pages of Exhibit J444.

MR. TRITICO: 444.

THE COURT: Yes.

BY MR. TRITICO:

Q. Now, you took no soil samples from around the area from which Q507 was found; right?

A. I'm not sure that it was actually on soil that the Q507 was recovered.

Q. How about anything around the area where Q507, did you take any samples?

A. No other evidence was collected in that vicinity, no.

Q. Matter of fact, you weren't there when Q507 was discovered by Agent Kelly, were you -- or Mr. Kelly, were you?

A. That's correct.

Q. You don't know if Mr. Kelly moved it and then took it back to the space where he had found it, do you?

A. I'm not aware of how it was actually recovered.

Q. You don't know of your own personal knowledge if it was Agent Kelly who found it, do?

A. In conversations with Mr. Kelly --

Q. Sir, do you know of your own personal knowledge that Mr. Kelly was the one that found Q507?

A. Not personally, I wasn't physically there.

Steven Burmeister - Cross

Q. Now, the memo that you have here from Dr. Whitehurst -- strike that.

Without taking the samples from around the ground area from where something is found, in discovering the amount of nitrates in the area, you don't know if the nitrates from the ground attached themselves to the subject object, do you?

A. Well, I have no reason to believe that the ground itself had nitrates on them.

Q. But you didn't check, did you?

A. It's typically not a procedure that I would actually take only --

THE COURT: Just answer the questions, please.

THE WITNESS: Sorry.

BY MR. TRITICO:

Q. Did you check?

A. I did not check the soil or the surface around that object.

Q. Now, let's talk for a minute about the other items that you did or did not look at and examine. If I understood your testimony yesterday, that there was a lot of glass laying around the area?

A. Approaching the scene from 6th Street, I did see glass in the roadway, and then turning onto Robinson, I did see glass in the roadway and some metal fragments that were in the roadway.

Q. You didn't test any of the glass, did you?

A. No.

Steven Burmeister - Cross

Q. You didn't test any of the glass, if I understand your testimony, because it was exposed to the rain that had occurred on the 19th?

A. That's correct, yes.

Q. Was Q507 exposed to the rain?

A. Yes, it was.

Q. Does the glass have a bottom side to it?

A. The glass would have a bottom side to it, yes.

Q. Yet you tested none of it?

A. I did not test the glass that was in the roadway. It was some distance away. I wasn't sure of the source of that piece of glass.

Q. I see. How about the glass that would have been closer to around the building?

A. One of the things that we looked at was glass which was close to the building. We actually -- one of the things we were looking for was pieces and materials that would have been sheltered; and we did go into the Murrah Building, and glass fragments were recovered from inside the Murrah Building. They were recovered and tested.

Q. Found nothing on them?

A. No, that's -- the glass actually had -- inside the Murrah Building, there were fragments of glass that had elevated levels of ammonium ions and nitrate ions, and these were high levels compared to everything else that I tested at the scene.

Steven Burmeister - Cross

Because of the fact of the noncontrols of what the glass should normally have on it, I reported that as no significance, because of the fact that I didn't have controls. But the levels of the glass that were actually found in the building were elevated amongst everything else.

Q. So the ammonium ions and the nitrate ions that you found on the glass that was in the building, you could attribute no significance to because you can't tell from which they came; fair?

A. I can't -- based on -- without the control samples, I'm not able to draw a conclusion at this time.

Q. Control samples from where?

A. I would need control samples of that area for the glass what normally is on that building, whether there's specific coatings, what kind of solvents they use to clean the windows, those kind of things.

Q. And you made no attempt to discover any of those things; right?

A. Well, the incident had already occurred. I would have loved to have taken controls a week before this event.

Q. Well, you could have found out where the glass was purchased from, right, and what kind of glass it was, could you? Yes or no?

A. I could have, yes.

Q. You could have found out what type of cleaning solution

Steven Burmeister - Cross

they used at the building; yes or no?

A. That's correct.

Q. You didn't do that?

A. That's correct.

Q. Let's talk for a minute about your investigation that you conducted at the Murrah Building. You arrived on the 21st, I believe you said yesterday?

A. No, I arrived on the 20th.

Q. 20th, I'm sorry. And who came -- Agent Kelly was the only -- Mr. Kelly was the only person that went with you?

A. Yes. He was from my area, yes.

Q. Anybody else from the lab go that you're aware of?

A. I believe Special Agent Hechman was with me and perhaps a photographer was with the group that I was traveling with.

Q. Anybody else?

A. No.

Q. Do you know of anybody else from the lab that went to the scene that didn't travel with you but was at the scene?

MS. WILKINSON: Objection. Relevance of the other people not traveling with him, your Honor.

THE COURT: I don't understand the objection.

MS. WILKINSON: I think he's asking what other laboratory personnel went to the scene but didn't travel with him. I don't know if he has any personal knowledge about that and how it's relevant to this testimony.

Steven Burmeister - Cross

THE COURT: Well, what is your question?

MR. TRITICO: The question was who else from the lab went. That's what I really was trying to get. And I was trying to exclude the previous --

THE COURT: Well, I guess instead of asking "went," you could ask who was there.

BY MR. TRITICO:

Q. Other than the people that you testified traveled with you, who else from the lab was present in Oklahoma City?

A. There were -- there were other individuals present at the

A. There were -- there were other individuals present at the site. There were some people from the photo section that were there. Other individuals from the Explosives Unit were present at the scene.

Q. Who else from the Explosives Unit?

A. The one person which I recall was Special Agent Dave Williams.

Q. Anybody else from the Explosives Unit?

A. I think further down -- I could be wrong on this, but I think Special Agent Mohnal might have arrived at the scene. I'm not positive of that.

Q. Do you know Special Agent Mohnal's first name?

A. Yes, Tom Mohnal.

Q. What is his position at the lab?

A. He is an examiner in the Explosive Unit.

Q. Special Agent Dave Williams, what was his position in the

Steven Burmeister - Cross

lab in April of 1995?

A. He's an examiner in the Explosives Unit.

Q. Is he still there?

MS. WILKINSON: Objection.

THE COURT: Sustained.

BY MR. TRITICO:

Q. Now, when you arrived on the scene in Oklahoma City, who did you report to?

A. There were some agents that met us at the airport just as a logistical coordination. Those individuals, I believe, were from the Oklahoma office. I'm not sure of their names. I wouldn't even be able to recognize their faces at this point. But we went and were guided to the place where we could rent a vehicle. We rented a vehicle. And after leaving the hotel, we went to the command post, and we checked in at the command post. The individual that I believe was Agent Hahn that I might have -- might have actually contacted once we were at the command post.

Q. Rick Hahn?

A. Yes.

Q. Was Agent Hahn the person in charge of the scene?

A. I really am not sure who was directly in charge of the scene. There were numerous hats being shared by several different individuals.

Q. You reported to Mr. Hahn, though?

Steven Burmeister - Cross

A. I reported really to my section chief as far as back at the laboratory. He was the one coordinating my response to the scene. But actually at the scene, there were just logistical, knowing that we were on site. So I wasn't really reporting to one individual person. They had -- as the command post wanted to know who we were, where their contact numbers were, we were assigned pagers, those kind of things. So there really wasn't a central person or anything that I went and reported to.

Q. If I understand your testimony, then, you got no direction from anybody in Oklahoma City as to what you were to do and how you were to do it; is that fair?

A. Actually on site, that's correct, yes.

Q. Were you the person from the lab who was in charge of the laboratory's investigation?

A. No, I was on site to -- in charge of the chemical analysis area, but if you want to subdivide it into the chemical analysis, that was my role.

Q. Was there somebody from the lab who was in charge of the laboratory's investigation?

A. I'm not sure if you could actually say in charge of the laboratory investigation. Like I said, there were numerous hats being worn. I'm not sure exactly who was in your sense of what you mean in charge of the laboratory. We had different phases that were working there at the scene.

Q. So if I understand you correctly, the person from

Steven Burmeister - Cross

special -- from photo, I believe you said, Agent Williams -- Dave Williams, he was in the Explosives Unit; right?

A. Yes.

Q. And you and the people from the C/TU; right?

A. Yes.

Q. That's the Chemistry/Toxicology Unit?

A. Right.

Q. And you each went your own individual ways and did your own thing?

A. It was understood when we arrived at the scene that the chemistry individuals would be taking the chemical analysis of the site. It was an understood thing. And we arrived at the scene; they knew we were there, we were given a blanket access to the entire scene. The understanding was that we would go in, collect the samples we needed, and then depart.

Q. So the answer to my question was yes.

A. If you could rephrase the question. I think I answered the question, but --

Q. When you got to the scene, the individual departments from the lab went and did their own thing; right? You didn't coordinate with each other as to what your activities would be?

MS. WILKINSON: Your Honor, could he just ask his personal knowledge? I think that's where there's some misunderstanding. As to what other people did.

THE COURT: You're asking his understanding of what

Steven Burmeister - Cross

was going on?

MR. TRITICO: Yes, sir.

THE COURT: All right.

THE WITNESS: I don't know if you can actually say that we were sort of just cut loose to do whatever we wanted. We certainly contacted the command post. They knew what we

were doing. But directly speaking, essentially what you're saying is correct, we were allowed to go out and do what our specific function was.

BY MR. TRITICO:

Q. Now, your function was the residue analysis; right?

A. That's correct.

Q. Trace analysis; is that fair?

A. I prefer residue, but --

Q. Okay. That's fine.

When you got there on the 20th, what was the first thing that you did?

A. I said the first thing that we did was rented a car.

Q. At the scene? At the scene?

A. The first thing that we did when we got to the scene was again we went to the command post and checked in at the command post. There we received ID badges, we received pagers, we relayed our hotel phone numbers, logistical things of that nature.

Q. What was the first thing you did forensically at the scene?

Steven Burmeister - Cross

A. First forensic thing was actually just walking up to the scene. That was the first thing. Sizing it up.

Q. And how long did you size it up?

A. I want to think we probably -- Mr. Kelly and I walked for, up Robinson Street, probably 20, 30 minutes.

Q. And after you walked up Robinson Street for 20 or 30 minutes, what was the next thing that you did?

A. At that point we discussed what our next procedure would be and how we would go about actually collecting the samples.

Q. And what was the next procedure you were going to do?

A. That would be the walk-through of the scene and see if we could determine specific samples that would be appropriate for residue analysis.

Q. And that was the next thing that you did?

A. Yes.

Q. Where did you start your walk-through of the scene?

A. The actual walk-through began at the corner of Robinson, and I guess that's 7th Street -- or 5th Street, rather.

Q. How long did that take? Did you break it down into areas, I guess is my question.

A. Yes, we broke it down initially to the front of the building. We worked on that area. And then we proceeded down 5th Street down towards the Regency Tower.

Q. When you say the front of the building, do you mean the street immediately in front of the building?

Steven Burmeister - Cross

A. Yeah. I believe it's 5th Street. I believe that's correct.

Q. So you searched the area immediately in front of the building and then you worked your way down toward -- on 5th



Street, worked your way down toward the Regency Tower Apartments; is that right?

A. Yes.

Q. How long did that take?

A. Well, it was into the afternoon because I know the sun was setting, but it was -- it took a good portion, quite a few hours to do that entire walk-through.

Q. And as you're walking down 5th Street and working in front of the building, are you identifying items that you wish to analyze at the lab?

A. No. We would stop off -- I remember there was a red vehicle close to the Regency. There was a fragment that was close to the vehicle there. We stopped and we actually swabbed that particular item.

Q. That was a big item?

A. Yes.

Q. All right. Are you identifying the smaller items that you wished to have transferred to the lab?

A. There was a piece of tire that was observed, and that was actually physically collected.

Q. So -- I'm sorry, I didn't mean to cut you off.

Steven Burmeister - Cross

A. Yes. There was a piece of tire which was physically collected.

Q. That's the only thing that you physically collected on your walk from the front of the building down to the Regency Tower hotel?

A. No, we physically collected the street sign. It was directly across from the building. And then the rest were swabbings that we took.

Q. So the time it took you to search in front of the building, take the sign, pick up the tire, and swab how many items?

A. Without checking my log, as far as the evidence that was collected that day, I want to think about ten items, ten swabs.

Q. And during that time you didn't identify -- you didn't walk around looking and seeing small things that you might want to analyze later and identify them for later pick-up on the street; is that right?

A. We were looking for items at that time that would be probative for swabbing. And these were items that would be sheltered in some respects from the weather. So it was looking around for certain things that would be appropriate for the examination, some of which were certainly out in the weather. The street sign, it served no purpose to swab it. There was characteristics on the street sign, for example, that I wanted to collect, so that's the reason why we collected the street sign.

Steven Burmeister - Cross

Q. After you worked your way down the street to the Regency Towers Apartments, what was the next thing you did?

A. I believe we came up -- I'm not sure of the street. If I

A. I believe we came up. I'm not sure of the street. If I came over to the diagram, I might be able to tell the street. But we rounded the curve on the right side, if we're all looking at the Regency Tower, the right side, came up the street, and there was a parking lot and then we came back towards the scene.

Q. So you went all the way around the Regency Towers Apartments?

A. Yes.

Q. And did you collect or identify items of evidence that you might wish to analyze at the lab when you did that?

A. I believe there was a object which was behind the Regency Towers, if I'm correct on the location, but it was in that area which was swabbed, and then we proceeded back towards the Murrah Building.

Q. Okay. My question, did you identify items that you might like to take back to the lab and analyze further?

A. I did not identify particular items that I wanted to take back, no, not at that particular time.

Q. Was the photographer with you when you were walking down the street and around the building?

A. No.

Q. You swabbed one item after you went around the Regency

Steven Burmeister - Cross

Towers and back toward the scene; is that right?

A. That's my recollection, yes.

Q. After you walked around the Regency Towers and back toward the building, what was the next thing that you did?

A. If we were complete for that day -- which is my recollection, that there may have been some additional items in and around there -- we then took those items down to the Evidence Control Center for submission.

Q. What items?

A. The swabbings that we had collected, the street sign, and the piece of tire that was collected.

Q. That's the only things that you took to the Evidence Control Center on April the 21st (sic), 1995; is that right?

A. Yes.

Q. And was Agent Kelly with you when you did this?

A. Mr. Kelly was with me the whole time.

Q. Mr. Kelly, I'm sorry. He was with you the whole time?

A. Yes.

Q. And that sums up the day that you had on April the 21st (sic), 1995, in Oklahoma City; is that right, forensically?

A. That would do it, yes.

MS. WILKINSON: Objection, your Honor. I think he's misstated the testimony.

THE COURT: Well, the witness answered yes, he agreed with the characterization.

Steven Burmeister - Cross

Proceed.

BY MR. TRITICO:

Q. Now, on the 22d, did you continue searching in Oklahoma City?

A. On the 22d?

Q. I'm sorry, on the 21st, excuse me.

A. Okay. We continued our searching on the 21st, yes.

Q. Did you make contemporaneous notes of the activities that you were doing while you were conducting these searches?

A. No.

Q. Do you ever make -- after you finish with a day or whatever you do, do you make notes to document the activities that you did on that day?

A. No, I don't.

Q. The activities that you were -- strike that.

Now, on the next day, which is the 21st; right?

A. Yes.

Q. What time did you get started that morning with your search?

A. I recall it was sometime early in the morning. It was crisp in the morning. I want to think around 9:00, something like that, 8 or 9:00.

Q. And did you meet up with Mr. Kelly?

A. Yes, we did.

Q. What was the first thing you and Mr. Kelly did on that day?

Steven Burmeister - Cross

A. We again designed a type of strategy as to how we would go through several of the buildings. We started with the Journal Record Building and began searching the inside of that, principally looking for things that might have penetrated into the building; and they, being sheltered, would have provided a good avenue for residues.

Q. Did you identify items of evidence in the Journal Record Building that you might like to take back to the lab for analysis?

A. No, the floors that I went through, I couldn't find anything in there that would have been a viable material.

Q. How long did it take you to search the Journal Record Building?

A. I was in there probably an hour and a half, maybe more than that. I do recall receiving a page at that point to place a telephone call.

Q. After you placed a telephone call, did you go back to the Journal Record Building?

A. No. I didn't answer that page for a little while.

Q. Oh, you didn't leave, you stayed there and continued your search?

A. Yes.

Q. Okay. And did -- I'm sorry, I think I asked you this; I don't remember what your answer was. Did you spend how long in the Journal Record Building?

Steven Burmeister - Cross

A. It had to have been an hour and a half, two hours maybe max.

Q. And did you and Mr. Kelly leave at the same time?

A. Mr. Kelly had left the building and had begun a search on the exterior of the parking lot area out in the front of the Murrah Building.

Q. Did you have a photographer with you in the Journal Record Building?

A. I believe I did, yes.

Q. Did you ask the photographer to photograph any particular items in the Journal Record Building?

A. No, there was nothing significantly -- there was nothing significant in the building that required photography.

Q. You found no unconsumed or unexploded prills of ammonium nitrate in the Journal Record Building; is that right?

A. No.

Q. You found no PETN in the Journal Record Building; is that right?

A. That's correct.

Q. No EGDN in the Journal Record Building; is that right?

A. In cautioning some of these comments of mine, I wasn't really looking for these items in that building, and I didn't find any specimens that were removed from that building for testing.

Q. So you found none.

Steven Burmeister - Cross

A. Well, I wasn't looking, but . . . I probably misspoke there by saying that I was looking for it when I didn't actually look for it.

Q. So I guess the answer is you didn't take anything back to test.

A. Right.

Q. And therefore you don't have any evidence that there was; right?

A. There was nothing recovered from the Journal Building that I took back to test to see if anything was present.

Q. You were looking for unconsumed prills of ammonium nitrate; is that right?

A. Definitely something that I would be looking for, but principally I was looking for objects that would have penetrated into the building, and those objects would have been protected and those that I could take back to the laboratory.

Q. You were more concerned with the objects than finding unconsumed prills of ammonium nitrate?

A. Yes, because I would believe those objects to house these materials.

Q. You have information, do you not, that ammonium nitrate and fuel oil bombs are not very efficient? Do you not?

A. No, because I've talked to commercial manufacturers who -- one of their flat-out statements to me has been, "My product will go to completion." And I personally know that not to be

Steven Burmeister - Cross

true, but there is factual information out there to support that.

Q. You personally know that not to be true because you know that ammonium nitrate and fuel oil bombs are not very efficient; right?

A. No, I wouldn't say that. It's dependent upon the construction of that particular device.

Q. Exactly. The commercial manufacturer of the ammonium nitrate and fuel oil would be better than the impoverished or the homemade ammonium nitrate and fuel oil; right?

A. No --

Q. In quality?

A. No, I wouldn't say that. It's all in the construction.

Q. What did Agent Whitehurst tell you on May the 4th, 1995, about his experience with ammonium nitrate and fuel oil explosions?

A. Are you referring to this memo? I don't recall this conversation.

Q. Looking at McVeigh Exhibit 444.

A. Uh-huh.

Q. Five lines down, do you see where the -- well, actually, the second full sentence, you see where it starts, "When I was in training"?

A. Yes.

Q. That says, "When I was in training to become an examiner,

Steven Burmeister - Cross

one of the things that I was taught and that I have myself taught to my students is that because of the inefficiency of these explosives, one can expect to find prills or unconsumed ammonium nitrate at the crime scene." That's the memo he wrote you on May the 4th; right?

A. Yes.

Q. You were his student; right?

A. During training, I was, yes.

Q. Now, I think you testified that after you finished in the Journal Record Building, you went outside to do some more searching?

A. I was beginning to do that. And I knew about the page that I had to respond to, so I went to the command post and did place a telephone call and finally returned the page.

Q. And did you return to search, or did you leave Oklahoma City at that time?

A. No, I returned actually to advise Mr. Kelly that we both needed to make plans to travel the following day.

Q. So the last search that you did in Oklahoma City was in the Journal Record Building; is that fair?

A. Yes.

Q. You never searched the parking lot across the street from the Murrah Building, did you?

A. I personally wasn't searching. That's correct, yes.

Q. Now, you never searched the interior of the Murrah

Steven Burmeister - Cross

Building, did you?

A. I did enter parts of the parking garage, I believe, on the left side of the building. But that was for a very brief period; that's correct.

Q. You made no extensive search of the interior of the Murrah Building, did you?

A. It was part of my strategy to do it, but I didn't have time to do it; but you're correct in --

Q. Agent Whitehurst told you on May the 4th that the interior of the building might be a great place to look for unconsumed prills of ammonium nitrate; did he not?

A. That would be the reason why we would look at these areas, to look for this kind of material.

Q. Yet you didn't do it.

A. I was tasked to do other things and due to a timeliness and even being called in testify in another court, I didn't have a chance to do it.

Q. Didn't leave Agent Kelly -- Mr. Kelly there to do it.

A. Yes, we did. He stayed behind.

Q. Oh, I thought your testimony was you and he had to leave.

A. Well, he did. He came with me; but when we returned back to the scene, he stayed behind; I left to travel to New York. But he remained on the scene to continue just that effort.

Q. And you don't know that he went into the Murrah Building to search for unconsumed prills of ammonium nitrate, do you?

Steven Burmeister - Cross

A. No, he did. He made entry into the building. That's how the pieces of glass were recovered.

Q. He found no unconsumed prills of ammonium nitrate in the building?

A. I would assume he would be looking for that and also collecting pieces that would be viable and possibly have that on it, yes.

Q. I believe you just testified that you assumed he would be looking for it.

A. Yes.

Q. He found no unconsumed prills of ammonium nitrate in the Murrah Building, did he?

A. He never reported the finding to me, if there was any; and I never received any evidence that had anything on it from the Murrah Building.

Q. Now, where did you go -- you said you were ordered -- told to leave. Where did you go?

A. It was a departure to Junction City, Kansas.

Q. And what was that for?

A. We were advised that upon our arrival at Junction City, Kansas, we were to assist in a search, and that search would be conducted with the assistance of an ERT team or Evidence Response Team.

Q. And when you got to Junction City, Kansas, was Mr. Kelly with you?

Steven Burmeister - Cross

A. Yes, he was.

Q. And you left Oklahoma City immediately upon getting the call to go to Junction City; right?

A. No. It was the following morning.

Q. I see. And when you got to Junction City, you were searching what?

A. When we were -- when we arrived in Junction City, we drove to Herington, Kansas, where we went to a staging area where a command post was established.

Q. And you were to search what?

A. A residence.

Q. Mr. Nichols' residence?

A. That's correct.

Q. Did you search anything else in Herington, Kansas?

A. Not at Herington, Kansas, no.

Q. Did you search any storage --

A. Yes, I apologize. There was a storage facility there.

Q. And you participated in that search?

A. Yes.

Q. Who all was present at that search?

A. Mr. Kelly, myself, and I believe Special Agent Jasnowski was there.

Q. Your purpose in conducting -- in participating in the search at the storage unit at Herington, Kansas, was to search for explosives residue evidence; is that right?

Steven Burmeister - Cross

A. Yes.

Q. What did you -- when you went into the -- were you the first person into the storage unit?

A. No.

Q. Who was the first person in the storage unit?

A. The first and only person in the storage unit was Mr. Kelly, who was suited up and ready to proceed and process the scene.

Q. So you never entered the storage unit?

A. That's correct. I was on the -- at the door.

Q. Did you watch Mr. Kelly?

A. Yes. The door was wide open. I could watch what he was doing.

Q. When you opened the door, there was nothing in the unit; correct?

A. That's right.

Q. Did you swab the door handle?

A. Not the exterior, but we did swab the interior.

Q. Swabbed the interior door handle. Did you swab the walls?

A. I believe we swabbed the floor adjacent to the walls, right at the bottom, as the wall joined the floor.

Q. ... swabbed the walls ...

Q. Never swabbed the walls?  
A. I don't believe we swabbed the walls.  
Q. How many swabs did you take from the floor?  
A. I'm not positive at this point.

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Q. Well, actually, how many swabs did Mr. Kelly take? I guess the question, you didn't take any; right?  
A. That's correct.  
Q. You don't know how many swabs Mr. Kelly took?  
A. There were several swabs. I know there were several swabs taken. The exact number, I'm not sure right at this point.  
Q. And you took those swabs back to the FBI lab; is that right? They were sent back to the FBI lab; is that fair?  
A. Yes.  
Q. For later analysis?  
A. Yes.  
Q. You analyzed those for PETN, correct?  
A. Yes.  
Q. Found none.  
A. My recollection of the results for those swabs, that's correct, yes.  
Q. You analyzed those for EGDN?  
A. Yes.  
Q. Found none.  
A. Yes.  
Q. You analyzed those for HMX?  
A. Yes.  
Q. Found none.  
A. Yes.  
Q. You found no explosives residue in the storage unit in

Steven Burmeister - Cross

Herington, Kansas; is that fair?  
A. Yes.  
Q. You found no ammonium nitrate, combined ammonium nitrate in the storage unit in Herington, Kansas; is that fair?  
A. Yes.  
Q. You found no prills of ammonium nitrate in the storage unit in Herington, Kansas; correct?  
A. Yes.  
Q. Did you search any other storage units in Kansas?  
A. That was the only one that I recall in Herington, Kansas.  
Q. Did you search any other storage units?  
A. No other storage units that I searched.  
Q. Were other storage units searched that you're aware of?  
A. I'm aware, I believe, of one additional storage unit that was searched.  
Q. Do you know where that was?  
A. I think -- I believe it was in the same vicinity as this other one.  
Q. How about Council Grove, Kansas? Does that ring a bell?  
A. That site doesn't ring a bell. the address. I just know



A. That site doesn't ring a bell, the address. I just know that there was another one searched. I wasn't personally on that search.

Q. Who from the lab assisted in the search of the storage unit that you're referring to now?

A. It was -- would have been Mr. Kelly -- would have been

Steven Burmeister - Cross

involved in that.

Q. And Mr. Kelly sent some swabs back to the lab to be analyzed; is that correct?

A. My recollection of those swabs is that's correct, they were sent back.

Q. Did you personally run those, the tests on those swabs?

A. I need to actually see my results for those particular swabs, but . . . I'm having a difficulty recalling those exact swabs or the results of those.

Q. To the best of your recollection, was any explosives residue found?

A. I seem to recall that there was some nitroglycerine found.

Q. Nitroglycerine is -- you testified yesterday nitroglycerine can be a high explosive; right?

A. Yes. And I believe there was some ammunition present, so that would have explained.

Q. And that was my next question. Nitroglycerine is a component in ammunition; is that right?

A. Yes.

Q. It's what makes it fire; right?

A. That's what propels it, yes.

Q. And people who use firearms and handle firearms can often get nitroglycerine on them; right?

A. Yes.

Q. Like when you go to the shooting range and qualify, when

Steven Burmeister - Cross

you get through here, you're going to have nitroglycerine on your hands, aren't you?

A. Yes.

Q. Probably? Possibly?

A. I would say probably.

Q. Generally when you fire, you're going to get it on you; right?

A. Yes.

Q. And when you find nitroglycerine, you can't ever say that that nitroglycerine was a result of just an explosive other than -- and not just from gunpowder; correct?

A. That's correct.

Q. What's an SEM/EDX?

A. The SEM/EDX -- EDXA is a scanning electron microscope with an energy dispersive X-ray analyzer.

Q. That's the test you can use to analyze nitroglycerine to determine if it is the result of gunshot residue, is it not?

A. No, not for nitroglycerine it's not going to be very good

because these are carbon and carbon-based materials, and I can see that with the SEM. You're --

Q. I'm sorry. If the nitroglycerine you have is a result of gunshot residue, it should have the carbons in it; right?

A. The nitroglycerine has carbon in it, and you're correct.

Q. So if you run it through the SEM/EDX, you can rule out whether it's the result of gunshot residue, can you not?

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A. No.

Q. Is there a test available to you at the FBI lab for which you can test nitroglycerine to rule out the possibility of gunshot residue?

THE COURT: The question is not clear to me -- it may be to the witness -- as to whether you're distinguishing nitroglycerine from ammunition, gunshot residue, or from another source.

MR. TRITICO: Okay. Let me reask it, then.

THE COURT: All right.

BY MR. TRITICO:

Q. Is there a test available to you at the FBI lab wherein you can distinguish nitroglycerine you find from gunshot residue as opposed to bomb or explosive residue?

A. Well, the -- you're talking about a complex area. There's a chemical analysis that can be conducted of the residues. And there's certain chemicals that can be present in those residues that will suggest a propellant which is in a bullet. Now, when you're talking about gunshot residues, gunshot residues is almost a specific area. And that specific area is detecting metals that are found when the projectile comes out. And it's typically residue that's formed on a shirt where there's a bullet hole. That's where they usually do gunshot residue.

There are some elements that are present, and that's what the scanning electron microscope will do. It reads the

Steven Burmeister - Cross

elements that are present on the surface of a material. But it's not going to do you any good to tell whether it was ammunition or not.

Q. Well, not having ever taken chemistry, please forgive me for some of my questions; but is there a test that you can do to distinguish nitroglycerine residue from that having been part of gunpowder or part of an explosive?

A. Yes, there is a --

Q. What is that test?

A. You can use gas chromatography with a mass spectrometer or any other gas chromatography technique to actually distinguish other chemicals that are present, and those other chemicals are those that would be present in a propellant. But they're not always there, not always there in levels. We see that with pipe bomb explosions. We detect nitroglycerine. We may find a particle of smokeless powder there which is in the bullets, but

we may not find the other features that are present within the smokeless powder.

Q. Now, you ran no tests to attempt to distinguish the nitroglycerine that you found at this storage unit that we were talking about to determine if it was a result of the gunpowder or an explosive; is that correct?

A. Well, the analysis was run. It was determined to be nitroglycerine. There was also ammunition present, so the conclusion was one in which we couldn't state that it came from

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an explosive or not.

Q. My question to you, sir, was did you attempt to analyze it to determine if it was a result of the gunpowder or an explosive?

A. No test was done to go further with that as it served no more purpose to do that.

Q. As a matter of fact, you didn't do that on any of the nitroglycerine samples that you found anywhere in this investigation, did you?

A. I didn't go further to determine that because of the significance that I placed to the finding of nitroglycerine.

Q. No significance; right?

A. Well, it has a significance; but there are other viable sources of nitroglycerine that -- that doesn't necessarily say that it's from an explosive; i.e., dynamite, for example.

Q. Was the storage unit in Kingman, Arizona, searched?

A. I'm sorry.

Q. The storage unit in Kingman, Arizona: Was it searched? Do you know?

A. There was, I believe, a facility in Kingman.

Q. And I missed a question when we were just talking about the other one. There were no ammonium nitrate prills found in the storage unit that we were just talking about a moment ago; is that right?

A. The one that I wasn't involved?

Steven Burmeister - Cross

Q. Yes, sir.

A. Yes, that's my recollection; that there were no prills found.

Q. Now the Kingman, Arizona, storage unit: Did you participate in that search?

A. No.

Q. Who from the lab assisted in that search?

A. I'm not sure who was from the lab on that search.

Q. Were samples, swabs, forwarded to the lab for testing?

A. Without the items that were recovered from that particular site, I'm not sure.

Q. Did you participate in the search of Rooms 23 and 25 at the Dreamland Motel?

A. No.

Q. Did Mr. Kelly?

Q. DID MR. KELLY:

A. I don't believe Mr. Kelly was involved in that search.

Q. Did anybody from the lab participate in the search of Rooms 23 and 25 at the Dreamland Motel, to your knowledge?

A. Direct knowledge, I don't know who from the lab would have been on that search.

Q. Were you submitted swabs taken from Rooms 23 and 25 of the Dreamland Motel?

A. I'm not sure if I received swabs. I know there were articles removed from that room.

THE COURT: Well, you mentioned two rooms. Which

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room?

THE WITNESS: I'm not sure which room. I just remember receiving articles from the Dreamland Hotel (sic).

BY MR. TRITICO:

Q. Which articles -- I'm sorry. Which articles did you get from the Dreamland Hotel? What, do you recall?

A. My recollection, a bible, a telephone book -- or I'm sorry, a telephone. Some other articles in the area.

Q. Those were submitted for testing to the lab?

A. Yes.

Q. Now, did you participate in the search of Mr. McVeigh's car?

A. Yes.

Q. Was Mr. Kelly with you?

A. Yes, he was.

Q. Let's talk about that search for just a minute. You took swabs of the interior of the car; is that correct?

A. These were vacuums from the interior of the vehicle.

Q. Is that like a small vacuum cleaner that will suck things up into the machine and keep it in a filter for later analysis?

A. It's a device in which -- what you're talking about, a vacuum cleaner, but the vacuum cleaner will draw the material over a filter and that filter is then analyzed on the instrument. And we had an instrument there to do the testing.

Q. You do this testing on the scene?

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A. Yes.

Q. What was this machine?

A. It was the Baringer ion scan. It was -- had the IMS technology, ion mobility.

Q. This is the screening device that the lab has?

A. It has a dual function. It provides analytical data, but it can also be used in a screening fashion.

Q. If I understood you yesterday, your testimony, that you can use it in another fashion at the lab when you can attach additional instrumentation to it. Is that your testimony?

A. If you're at a scene, you can acquire data which can be used. Usually you need to have a computer to acquire the data,

but that data is an analytical piece of data to be used.

Q. I thought, if I understood your testimony yesterday correctly, when you use this on the machine, you just get a yes or no, you don't get the analytical data.

A. You can use the unit to get the yes or no that you're talking about; but if you plug in a computer to the back end of the instrument, you get analytical data that comes off of the instrument. The fact that it has a yes or no on the front of the instrument is for individuals in airports and traffic areas so that they can quick scan the object and look for the yes or no. But I'm acquiring the actual analytical data that's coming off of the instrument.

Q. Did you take the computer with you?

Steven Burmeister - Cross

A. Yes, the computer was present, yes.

Q. Now, when you did -- is this the only test you did on Mr. McVeigh's car was the SEM -- I'm sorry, what test was it?

A. It's the IMS, Baringer IMS.

Q. The IMS. Is that the only testing you did on Mr. McVeigh's car?

A. Yes.

Q. You took no swabs to take back to the lab for later analysis?

A. That's correct, yes.

Q. Did you -- did you do the IMS vacuuming on the floors?

A. Yes. I recall that.

Q. You found no PETN; correct?

A. That's correct. Yes.

Q. You found no EGDN; correct?

A. That's correct.

Q. You found no HMX; correct?

A. Yes.

Q. As a matter of fact, you found no explosives residue in the floorboards of Mr. McVeigh's car; is that right?

A. On the floorboards, that's correct. Yes.

Q. You found no ammonium nitrate on the floorboards of Mr. McVeigh's car; is that correct?

A. I had my head down to the carpet, and I couldn't see any; that's correct.

Steven Burmeister - Cross

Q. So -- I needed to break my question down. I was really referring to with the testing, you found no evidence of ammonium nitrate; is that correct?

A. Well, the instrument that we had, the IMS would respond for the presence of nitrates, and we didn't get a huge response for nitrates, and that would have been an indicator that we had a nitrate there for further examination.

Q. Of course you don't know where it came from, the nitrates?

A. Right. The signal on the instrument wouldn't tell you; right.

Q. You don't know how long they'd been there; correct?  
A. Correct.  
Q. I'm not arguing with you, but you didn't answer.  
A. I'm sorry.  
Q. Now, if I understood what you said a moment ago, you went down and looked pretty hard on the carpeting for some prills of ammonium nitrate; is that right?  
A. Well, I was also looking for prills and also any crystalline material that would be removed physically.  
Q. You found none?  
A. I didn't find anything that I removed.  
Q. Did you vacuum the seats?  
A. Yes.  
Q. You found no explosives residue?  
A. Yes.

Steven Burmeister - Cross

Q. You did not?  
A. I'm sorry. That's correct, none were found.  
Q. You found no prills of ammonium nitrate in the seats?  
A. That's correct.  
Q. Did you vacuum the steering wheel?  
A. I believe we did vacuum the steering wheel.  
Q. You found no -- excuse me -- no residue of explosives on the steering wheel, did you?  
A. That's correct.  
Q. You found no ammonium nitrate residue on the steering wheel; is that right?  
A. That's correct.  
Q. Are these all the searches that you participated in during the course of your investigation in this case?  
A. Once the items were transferred to Fort Riley, Kansas, there were some additional searches there.  
Q. The items we've already talked about?  
A. From Mr. Nichols' residence, they were transported to Fort Riley, Kansas. There were some things that were at that site that were examined at that site.  
Q. Sure. But other than what we've talked about, the storage unit that you did, the search at the scene, Mr. McVeigh's car, and Mr. Nichols' home, are those the only searches you personally participated in?  
A. Yes.

Steven Burmeister - Cross

Q. When did Mr. McVeigh's clothes arrive at the lab?  
A. My recollection from seeing logs, I believe it was the 22d. I couldn't be -- I could be wrong, April 22d.  
THE COURT: We're going to start a new subject matter here?  
MR. TRITICO: Yes, your Honor. Do you want to take a break?  
THE COURT: Yes, I think we will.  
You may stop now for the morning recess

you may step down now for the morning recess.

And, members of the jury, you'll also be excused during this time for the usual 20-minute break period, with the usual cautions, of course: Continuing to avoid discussion of the case or anything about it or anything connected with -- and avoid anything in any form of communication or publication relating to issues on the trial.

You're excused, 20 minutes.

(Jury out at 10:15 a.m.)

MR. JONES: Your Honor, could we just approach the bench briefly?

THE COURT: I want to ask Mr. Tritico something first.

I did not permit you to respond with the jury present on the objection that I sustained to the question to the witness, Mr. Burmeister, about his -- I think it was with respect to his having previously expressed a different opinion of Dr. Whitehurst; right?

Steven Burmeister - Cross

MR. TRITICO: I believe that's what it was, yes, sir.

THE COURT: Do you wish to respond further now?

MR. TRITICO: I think that what my response was I had a prior inconsistent statement from sworn testimony and I would like to impeach him with was the response I was going to give the Court.

THE COURT: Yes, well, I'm still sustaining the objection, because it goes to his opinion of Dr. Whitehurst; right?

MR. TRITICO: Yes. Yes, sir, it did.

THE COURT: Okay. That's the basis upon which I sustained the objection.

MR. TRITICO: Yes, sir. May I inquire of the Court? Does the Court not wish me to respond to objections at the time?

THE COURT: Well, I can't answer that yes or no.

MR. TRITICO: Okay.

THE COURT: But I'll ask you for a response -- I mean I'll give you permission to respond if I'm uncertain about it.

MR. TRITICO: Okay.

THE COURT: But then when you need to make a record on it further, I'll of course grant you that opportunity with the jury outside the courtroom --

MR. TRITICO: Yes, sir.

THE COURT: -- if you want to make a further record.

Steven Burmeister - Cross

Now, Mr. Jones.

MR. JONES: Your Honor, we don't need to approach the bench on this. We have an agreement with the Government, with Mr. Mackev, and the motion is simply we be permitted to

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withdraw from evidence the Regency videotape at the lunch break to return it to the Court at 5:30 this afternoon to make copies from the original, and it will be appropriate safeguards with the Government.

THE COURT: Is that agreed, Mr. Mackey?

MR. MACKEY: It is, your Honor. I'll just alert Mr. Jones, as we developed in the testimony, the original is not real time, so it will take some time to get a version of that scene.

THE COURT: Well, the agreement is to withdraw the original.

MR. MACKEY: Yes.

THE COURT: That came out of the camera, so it's --

MR. MACKEY: Yes.

THE COURT: -- it's the time on the camera.

MR. MACKEY: Yes.

THE COURT: All right. We'll take 20 minutes from now.

(Recess at 10:17 a.m.)

(Reconvened at 10:37 a.m.)

THE COURT: Please be seated.

Steven Burmeister - Cross

(Jury in at 10:37 a.m.)

THE COURT: Mr. Tritico, please resume.

BY MR. TRITICO:

Q. Agent Burmeister before -- Agent Burmeister, before we took our break, I was beginning to talk to you about the examination of Mr. McVeigh's clothing. Do you recall that?

A. Yes.

Q. Now, the clothes arrived in the lab on what day?

A. My understanding is that it arrived on April 22.

Q. Who was the first person to work on the clothes? I'm not referring to Mr. Mills checking them in. Who was the first laboratory person to actually work on the clothes?

A. The first examination on the clothes?

Q. Yes.

A. That was Special Agent Roger Martz.

Q. When was his examination of the clothing?

A. That would have been on the -- he would have received those clothes on the 22d of April.

Q. Do you know what test he performed on the clothes?

A. Yes, I do.

Q. With respect to the testing that he performed on the clothes, his results are inconsistent with the testing that you performed on the clothes. Isn't that true?

A. I don't -- no. That's not correct.

Q. He didn't find inconsistent -- he did not give inconsistent

Steven Burmeister - Cross

results with yours?

Let me ask that another way.



A. I'm sorry. I don't understand --

Q. The testing that he performed on the clothes and the testing that you performed on the clothes: Is it your testimony that there are not some inconsistencies with respect to the results of those tests?

A. The results are consistent with one another.

Q. Now, there are other areas of the lab that work or examine the same items of evidence that your area of the lab might examine; is that correct? Did you understand that? That was a very poor question.

After you finish with an item of evidence, might it possibly go to another area of the lab like Special Photo to be photographed?

A. Yes.

Q. Okay. And if I understand correctly the procedure that you followed and that your lab follows in the C/T Unit -- which is where you are; correct?

A. Yes.

Q. Now, you weren't always in the C/TU -- your area was not always in the C/TU. Right?

A. That's correct.

Q. It used to be in the Materials Analysis Unit?

A. Yes.

Steven Burmeister - Cross

Q. When was it moved?

A. The exact date, I'm not sure. It was prior to, I think, January of '95, sometime before that, shortly before that time frame.

Q. Was it actually moved sometime before April of 1995?

A. It was -- it had been moved prior to that date and time.

Q. Now, this move was really on paper, wasn't it? In other words, you didn't pick up your machinery and move to another part of the lab. Right?

A. That's correct.

Q. It was a flowchart change.

A. Yes.

Q. The C/TU, the Chemistry/Toxicology Unit, did not draft and write and prepare new protocols with respect to the trace analysis area that was now in the C/TU. Is that right?

A. The explosives residue?

Q. Explosives residue.

A. That's correct.

Q. Now, the protocol and the system that you like to follow is if you're going to do some explosives residue analysis, you like to make sure that that evidence stays with you in your unit until you've finished examining it. Right?

A. It depends on the particular piece of evidence. There are times where midstream it will be transferred to some other area. Perfect example is to have something photographed.

Steven Burmeister - Cross

Q. My question to you is is that the procedure you prefer to follow; that it stays with you?

A. Well, what I'm saying is it's a procedure. It's a procedure that I follow, but it doesn't necessarily -- it's not cast in stone. There are times where it could go to another section for some other work.

Q. Other areas of the lab do not take the precautions necessary to ensure that contamination in trace amounts does not occur at their section of the lab. Isn't that true?

A. No, it's not true.

Q. Every area of the lab takes those precautions. That's your testimony?

A. The areas that I've been exposed to take good cautions to prevent any type of contamination.

Q. There are areas of the lab that assume that the trace analysis has already been conducted and therefore they don't have to worry about it. Isn't that true?

A. I don't think that you will find anybody who will say they don't worry about it. I think everybody is concerned about the evidence. They know where it's going and they don't want to introduce anything to evidence.

Q. Now, when -- after Mr. Martz finished the testing that he conducted, where did the items of clothing go?

A. That was returned back to Mr. Brett Mills.

Q. And from there, where did they go?

Steven Burmeister - Cross

A. It then went to the Special Photo Section.

Q. Who took them to Special Photo?

A. I've been advised of this as far as looking at the pathway, and I was told that Mr. Mills took it to Special Photos.

Q. Did Mr. Mills provide you with any swabs taken of the area in the Special Photo Section before the clothes were placed in there?

A. No.

Q. Did Mr. Mills provide you with any swabs taken of the Special Photo area after the clothes were in there?

A. No.

Q. You don't know what, if any, contamination existed, trace amounts of explosives, in the Special Photo Unit prior to the time that you tested the clothing. Is that right?

A. I have no reason to believe that there was a contamination of explosives there.

Q. But you didn't test; right?

A. There was no testing taken. Right.

Q. After Special Photo, where did the clothing go?

A. After Special Photo, it went to the Hairs and Fibers Unit.

Q. Who took them to Hair and Fiber?

A. Again, I was advised as far as I -- what I know the pathway of the specimens, it would have been Mr. Brett Mills.

Q. Did Mr. Mills provide you with any swabs taken from the testing areas in Hair and Fiber?

Steven Burmeister - Cross

A. No.

Q. That would be before the clothing were placed down on the tables; right? He didn't take any before?

A. My understanding is they don't place items directly on the table in the Hairs and Fibers Unit. I'm aware of their procedures, but no swabs were taken.

Q. Or after?

A. That's correct.

Q. You don't know what, if any, contamination for explosives residue may have been present on the examination tables in the Hair and Fiber Unit when the clothes were in there before you tested them. Is that correct?

A. Knowing their procedures, I have no reason to suspect that explosives would be there.

Q. You don't know what, if any, explosives residue may have been there, do you?

A. Again, I have no reason to suspect that they would be there, and I wouldn't have tested for it.

Q. But you didn't test. Right?

A. That's right.

Q. Where did the clothes go after Hair and Fiber?

A. After the Hairs and Fibers, they went back to Mr. Mills.

Q. And from there?

A. They came to me.

Q. When you got the clothes, how many bags were they in?

Steven Burmeister - Cross

A. Well, it was in a box and the -- each item was in a particular plastic bag.

Q. One bag?

A. Yes.

Q. Now, do you know the condition that the clothes were in when they arrived in the lab?

A. No, I don't.

Q. Now -- and then you proceeded to conduct your testing on the clothes. Is that right?

A. That's correct.

Q. You cut the pockets out of the pants and made a separate extract from each pocket. Is that right?

A. Yes.

Q. Prior to the time that you did that, Mr. Martz ran an extract for both pockets together. Right?

A. No.

Q. Now, you testified yesterday that your finding of the PETN and EGDN in the pockets -- the PETN identified in the left pocket and "consistent with" in the right pocket. Right?

A. No.

Q. Is that the other way around?

A. Yes.

Q. All right. "Consistent with," when you use that in the forensic sciences field, doesn't mean an identification of the explosives residue. Is that right?

Steven Burmeister - Cross

A. Yes.

Q. And what that means is that it could be consistent with another compound; right?

A. A similar-type compound, right.

Q. Last night when you finished here, did you look to see if PETN can be found in anything other than high explosives?

A. Not last night, no.

Q. Now, you tested the pockets, as I understand your testimony, because they're -- that's where you would expect someone to be placing their hands and that's where you might find the residue. Right?

A. I would find that to be what I would consider a high-traffic area, so that's the reason why the pockets were looked at.

Q. What about the back pocket? Didn't test that, did you?

A. No.

Q. Now, from your experience, do men carry their wallets in their back pocket from time to time?

A. I would agree with that. I do myself.

Q. Especially when you're wearing blue jeans and you might not have a coat pocket to put it in?

A. That's correct.

Q. Yet you didn't test that for explosives residue?

A. The wallet?

Q. The pocket.

Steven Burmeister - Cross

A. Oh, the pocket. Yeah. That's correct.

Q. Didn't test the wallet, either, did you?

A. Yes, I did. The wallet was in what we considered the also-submitted items, and they were collected and sampled as a group; and a positive finding was in that collection.

Q. On the wallet, or on the earplugs?

A. It was everything that was in that group. I can't specifically say it came from the wallet, but everything as a group was sampled.

Q. I see. Now, how were those also-submitted items packaged at the Noble County Jail? Do you know?

A. I received them in a plastic bag.

Q. Do you know how they were packaged at the Noble County Jail?

A. My understanding was that they were placed into a paper bag.

Q. The also-submitted items?

A. Yes.

Q. That's how they were stored at the Noble County Jail? Do you know how they were stored at the Noble County Jail?

A. That's my recollection. I could be wrong, but that's my recollection.

Q. If they were kept in a paper bag, did you make any effort to determine how many other people's items had been placed in

that same paper bag?

Steven Burmeister - Cross

A. I believe it was an original bag.

Q. Did you make any effort to determine how many other people's items were placed in the same bag as Mr. McVeigh's also-submitted items?

MS. WILKINSON: Objection, your Honor. Asked and answered.

THE COURT: Overruled.

THE WITNESS: I had -- when determining the pathway of these clothing -- the clothing items, the information I was provided was that that was an original bag; that it had not been used for any other items.

BY MR. TRITICO:

Q. Perhaps my question was inartfully phrased, and I apologize. Did you personally make any effort to determine how many other people's items may have been kept in the same container as Mr. McVeigh's also-submitted items?

A. When I went through trying to find the pathway of the clothing, that was part of the -- the questioning process to find out was that an original bag or had somebody else used that bag or what else was stored in that area.

Q. And you spoke to whom at the Noble County Jail?

A. It was the individuals that were present at the time that the clothing was obtained.

Q. Do you know who they were?

A. The sheriff -- right offhand, I can't recall his name; but

Steven Burmeister - Cross

two individuals that were also present.

Q. You spoke to the sheriff personally?

A. Yes.

Q. And you spoke to the other two individuals whose names you now do not recall, personally?

A. Well, she testified just the other day -- yesterday. Her name slips my mind.

Q. And you spoke to that person personally?

A. This was some time ago, but yes.

Q. You spoke to three individuals at the Noble County Jail?

A. Not at the jail; but yes, I did.

Q. Employed by the -- at the jail. Right?

A. Yes.

Q. And the purpose of this call was to discover the -- the containing method of the also-submitted items and the history of that containing -- container. Is that right?

A. That and the pathway of that clothing and where it was placed.

Q. Can you show me the notes that you took from those conversations?

A. There were no notes collected on that, no.

Q. What is a 3022

Q. What's a 302?

A. It's a -- usually that's involved with writing an interview that will come up during testimony purposes.

Q. Did you write a 302 with respect to your interview of the

Steven Burmeister - Cross

three individuals whose name you now do not recall at the Noble County Jail?

A. No.

Q. You made no recording, no memo, memoranda, or anything regarding those conversations. Is that right?

A. That's correct.

Q. Who else from the lab talked to the individuals at the Noble County Jail regarding the container for which Mr. McVeigh's also-submitted items were collected in?

A. I was the only one from the laboratory to obtain that information.

Q. Did you go to Noble County, or did you call them, or did you bring them to you?

A. No. They were -- they were here.

Q. Oh, met with them here in Denver?

A. Yes.

Q. When was that?

A. Some time ago. I'm not sure of the exact time.

Q. Well, would you agree with me that if you met with them here in Denver that was certainly after you performed the test on the also-submitted items?

A. It was a time after the test was conducted, yes.

Q. Well over a year after you conducted the tests on the also-submitted items, did you have the conversation with the three individuals whose names you now do not recall?

Steven Burmeister - Cross

A. Yes.

Q. You made no attempt at the time that you were conducting the tests on the also-submitted items to determine the containment system for those items, did you?

A. At the time that it arrived into the laboratory, I was -- I did make a check on how it had come into the laboratory and the pathway which it took in the laboratory.

Q. So is your testimony now that you've had more than one conversation with the three individuals whose names you now do not recall?

A. I've only had one conversation with them.

Q. You did not make any attempt in May of 1995 to determine at -- in Noble County how and under what circumstances the also-submitted items were stored and contained. Is that correct?

A. At which time frame?

Q. May of 1995 was when you tested them; right?

A. That's correct.

Q. You made no attempt then to discuss this issue with the individuals at the Noble County Jail. Is that correct?

A. That's correct.

Q. You made no attempt to determine in May of 1995 if any other individuals in the Noble -- that had been incarcerated in the Noble County Jail had recently handled explosives, did you?

A. At that time, no.

Steven Burmeister - Cross

Q. You made no attempt to determine if any of the individuals that had been incarcerated in the Noble County Jail had been in recent proximity of explosives, did you?

A. That's correct.

Q. You made no attempt in May of 1995 to determine if any of the employees at the Noble County Jail had been in recent proximity of explosives, did you?

A. At that time, that's correct.

Q. You made no attempt in May of 1995 to determine if any of the employees at the Noble County Jail had recently used explosives, did you?

A. That's correct.

Q. Now, if I understand your testimony correctly with respect to the also-submitted items, you ran one extract from all of them together; is that right?

A. All of the also-submitted items were packaged in one bag as a collection; and yes, they were sampled as a group.

Q. Does that include the earplugs?

A. No. The earplugs were separate at the time. I separated those and sampled everything else as a group.

Q. Okay. And you don't know the source of any of the residue that you found on any of the also-submitted items; is that correct? You don't know the source of it.

A. That's correct.

Q. Now, if I understood you correctly, you found some residue

Steven Burmeister - Cross

on the wallet or attributed to the wallet?

A. The wallet and other items that were in the bag at the same time.

Q. But nothing in the rear pockets?

A. That's correct.

Q. Now, with the shirts -- I want to get back to the clothes for a minute, if I may. The shirts: If I understood you yesterday, you took an extract from the shirts from a pretty good portion of the shirts. Is that right?

A. Yes.

Q. Show me again what part of the shirt you were describing yesterday. Can you show me?

A. Yes. It would be from the midriff down to the bottom of the shirt.

Q. Would you take a look at No. 430, please, Government's Exhibit No. 430.

A. Do you want me to remove it from the bag?

Q. If you don't mind.

A. Okay.

Q. Now, on that shirt, Government's Exhibit 430, show me where you would have taken the extract up to.

A. It would have been taken from approximately that high and into a solvent.

Q. Almost up to the arms?

A. Yes.

Steven Burmeister - Cross

Q. Okay. Thank you. You can put that down.

Are you aware of what items Mr. McVeigh had on him weaponwise when he was arrested?

A. My understanding is he had a weapon on him, handgun.

Q. And you were aware that it was a shoulder holster?

A. I believe that's correct, yes.

Q. Do you wear a shoulder holster?

A. No.

Q. Have you seen individuals that do?

A. Yes.

Q. Shoulder holster, if I'm right-handed, will come under my armpit; right?

A. If -- it depends on what side you wear the shoulder holster on.

Q. If I'm right-handed, it would go like this. Right?

A. That would be a good place for it.

Q. And it would be right there up against the clothing; right?

A. Yes.

Q. Now, if you had a weapon in that position, that would be a good place to deposit nitroglycerine, would it not?

A. I could -- I would expect to find it if there is high-traffic area and you're actually physically touching the clothing with your hands.

Q. Or the holster itself or the weapon itself?

A. I'll have to say I've tested my holster and I haven't found

Steven Burmeister - Cross

a whole lot of nitroglycerine on my holster. I've had it on my hands, but my holster -- this is on personal testing myself; but it's entirely possible, I agree with you.

Q. Sure. And if I understood your testimony about your own personal holster, you haven't found a whole lot, but you have found some. Fair?

A. Yes.

Q. Okay. Now, the earplugs were originally packaged with all of the also-submitted items, were they not?

A. Yes.

Q. Okay. On the earplugs, if I understood your testimony yesterday, you found nitroglycerine. I believe you said consistent with PETN. Is that right?

A. Yeah -- yes.

Q. And EGDN?

A. Yes. Not consistent with EGDN. It was --



Q. You identified EGDN?

A. Yes.

Q. Did you perform the tests that we talked about before the break to determine if the nitroglycerine was a result of gunpowder as opposed to explosives residue?

A. It would have shown up in the chemical analysis, and once the determination was made for the nitroglycerine and no other chemicals were found, that's as far as it went.

Q. So that would show up in the testing that you did?

Steven Burmeister - Cross

A. Yes.

Q. Which test was that?

A. It would have been the gas chromatography with the mass spectrometry.

Q. The GCMS?

A. Yes.

Q. Now, with respect to the PETN and the EGDN, did you run any tests to determine if PETN can be mimicked by the compounds that compose the plastics?

A. I'm aware of studies that have been done with this particular substance.

Q. And my question to you, sir, is did you run those tests?

A. Did I personally run the tests?

Q. Yes, sir.

A. No.

Q. Nobody at the FBI lab ran a test to determine if the PETN you were finding on the earplugs was actually being mimicked by the components of the plastic. Right?

A. Well, there were two separate tests that were conducted for the PETN; and I know from the one, the one would not mimic, if the plastic that you're referring to, the plastic -- the composition in the plastic would not mimic it on this other instrument.

Q. There have been studies that show it has mimicked in the past; right?

Steven Burmeister - Cross

A. Yes.

Q. Did you run any tests to determine if the plastics -- components of the plastics were mimicking EGDN?

A. I'm not aware of any component that reproduces that.

Q. Would you agree with me that nobody was aware that PETN was mimicked by plastic until they tried?

A. That's the nature of research. We're constantly learning and progressing forward. This was research that had been done, and that's how I know about it now.

Q. But you did not try?

A. I didn't run the particular plastic that you're referring -- or the component of the plastic that you're referring to.

Q. I want to talk to you for a few minutes, if I may, Agent Burmeister. about contamination issues.

BURMEISTER, about contamination issues.

Now, you would agree with me that items of evidence can get contaminated at many various stages of the investigative process, from the scene all the way through the lab; right?

A. If improperly processed, it could be contaminated.

Q. It can get contaminated at the scene if you have individuals who are not taking proper precautions to protect the individual items of evidence from contamination; right?

A. That's correct.

Q. Like changing gloves?

Steven Burmeister - Cross

A. That's correct.

Q. Wearing protective clothing?

A. That's correct.

Q. Proper packaging?

A. That's correct.

Q. Now, in this case, many of the items of evidence that were delivered to the lab were not properly packaged, were they?

A. I don't know that to be true.

Q. Are you aware that many of the items of evidence entered the lab in open, unsealed bags?

MS. WILKINSON: Objection, your Honor.

THE COURT: Sustained with respect to its being vague.

BY MR. TRITICO:

Q. How about the clothing? It came in a paper bag, didn't it?

A. The paper bag was sealed.

Q. Sealed how?

A. My understanding is that the paper bag was sealed. How it was exactly sealed, I'm not sure.

Q. Would you agree with me that taking the top of it and rolling it down is not sealing it?

A. If it's not open, it's somewhat sealed.

Q. Would you agree with me that that's not sealing it closed?

A. It's not perfectly closed as far as what you're referring to as sealing it.

Q. Would you agree with me that forensically speaking a paper

Steven Burmeister - Cross

bag is not the appropriate method for transportation of items of evidence?

A. I would say that there are better methods of transportation.

Q. Paper bag does not provide protection against contamination by other explosives. Is that right?

A. It depends on the explosive that you're referring to.

Q. Sure. What items of evidence, if you know, were transferred to the lab on April 26?

A. I don't know what items were transferred -- on the 26th of April?

Q. Yes, sir.

A. I believe I transported some items on the 26th of April.  
Q. And did you do that by plane?  
A. Yes.  
Q. What other items of an explosive nature was on that plane?  
A. I have no idea. I had the package with me, so there is nothing -- it was well within my confines.  
Q. Now, when the item -- the clothing arrived at the lab, there are no notes to reflect how -- the condition the package was in when it arrived; is that right?  
A. I don't have any notes that I have.  
Q. You've never seen any?  
A. That's correct.  
Q. The FBI lab in April of 1995 did not keep those kind of

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records; is that correct?  
A. They may be present in their acceptance notes, in their file. I'm not sure.  
Q. The FBI lab had no general lab-wide protocol in April of 1995 regarding the collection of evidence, did they -- the receipt of evidence at the lab, did they?  
A. I believe there was a procedure that was in place for the receipt of evidence and the processing of that evidence.  
Q. Do you have it with you?  
A. No.  
Q. When was the last time you saw it?  
A. The last time I've seen it -- it's been updated numerous times, but I've -- I've probably seen it the week before I came here because of some preparation that I'm doing with those manuals.  
Q. Preparation you're doing with the lab-wide protocols?  
A. That and other particular documents.  
Q. That would include the Explosives Residue Analysis Section?  
A. Yes.  
Q. Why are you updating them?

MS. WILKINSON: Objection.

THE COURT: Overruled.

THE WITNESS: The reason we're updating them: One is for the material; but we have two inspections that are coming up within the laboratory, one an in-house inspection and then

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an external inspection.  
BY MR. TRITICO:  
Q. Who is performing the in-house inspection?  
A. Well, the in-house inspection is an FBI inspection mostly for documentation paperwise.  
Q. And who is doing the external inspection?  
A. The external inspection is being conducted by a group, an organization called ASCLD.  
Q. What is that?  
A. It's the American Society of Crime Laboratory Directors.

Q. Why are they inspecting the FBI lab?

MS. WILKINSON: Objection.

THE COURT: Sustained.

MR. TRITICO: May I have a moment, Judge?

THE COURT: Yes.

BY MR. TRITICO:

Q. Now, the protocol that we talked about earlier, Government's Exhibit 914 -- do you recall that?

A. The -- my explosive residue protocol? Is that 917? Sorry.

Q. You may be right.

914. Do you recall that?

A. If that's 914 -- I can't see the bottom.

Q. Oh, yes, sir. How about that?

A. Yes.

Q. Did you submit this for the ASCLD inspection coming up?

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MS. WILKINSON: Objection, your Honor.

THE COURT: Sustained.

BY MR. TRITICO:

Q. Now, we were talking about contamination. I want to get back to that for a minute.

Contamination can occur in the transportation vehicles; right?

A. Again, if improperly packaged evidence, it could possibly be. If that vehicle is contaminated.

Q. For instance, the items of evidence that were seized from Mr. Nichols' home were transported in an Army transport truck; is that right?

A. I don't know that to be the case.

Q. Were you there?

A. I'm sorry?

Q. Were you there --

A. His clothing?

Q. The items of evidence that were seized from Mr. Nichols' home: Were you present?

A. I apologize. Yes. It was transported in a vehicle like that.

Q. Nobody took control swabs of the vehicle prior to the time that the items of evidence were placed into that transport truck; is that right?

A. Those items were in sealed containers, but you're correct,

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yes.

Q. The planes that transported the items of evidence that were taken from Oklahoma City to the lab in Washington were not swabbed prior to the time that the evidence was placed on the planes, were they?

A. That's correct.

Q. And that would be something that you would expect to be done to determine whether or not there was any contamination present before the items of evidence were placed on there.

present before the items of evidence were placed on there, right?

A. Well, if items were not packaged properly, that's something that would be considered.

Q. Well, they can be contaminated even if they are packaged properly, can't they?

A. Again, you're talking about transfer of trace amounts. I don't know -- you'd have to look at a specific situation to say if it's actually present in a vehicle and how much contact has to be done and the exact location, concentration. There is a lot of variables that come into play. I can't say flat out that just because you're making that scenario that it automatically transfers.

Q. And I think you're exactly right. But if you don't check the contamination level of the transport vehicle in the beginning, you will never be able to rule out the possibility that the contamination occurred. Is that fair?

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A. Again, it's the scenario that you're talking about. You're -- I don't know levels or whether there is actually pure material in that vehicle or not. A lot of parameters that -- I'm sorry I can't answer that exactly the way --

Q. I think the reason that you're having trouble answering the question is because you don't know if the transport vehicles were contaminated when the evidence was placed in it. Is that right?

A. That's correct. I don't know if those vehicles were used to transport anything in the past.

Q. Were you present in Oklahoma City for any of the evidence collection and sifting?

A. I was there when some of the evidence was being processed, and I'm not sure if I actually saw the sifting. They did a lot of material removal, but I'm not sure if they were doing sifting at the time. They may have.

Q. And -- so you didn't see it?

A. I don't have a direct recollection of seeing the sifting operation. They could have been doing sifting.

Q. Is it your recollection that the evidence collection was not done in an orderly fashion in Oklahoma City?

A. I can't really answer that on how the actual scene was processed and what order it was processed.

Q. Now, in the lab in Washington -- is it in Washington? I keep saying that.

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A. Yes, it is.

Q. You have within the lab raw bulk explosives; is that right?

A. There is an area that some of that is stored, but they're small amounts.

Q. Sure. But those raw bulk explosives can be the biggest contamination problem for a lab. Is that fair?

A. If improperly handled and packaged, it could be a problem,

yes.

Q. The FBI lab in April of 1995 had no written protocol for dealing with the storage of raw explosives, did they?

A. There was nothing written down on how that should be handled. You're correct.

Q. Now, a protocol is something that tells you the process and procedure for which the lab will operate within that given area that the protocol is addressing. Is that fair?

A. It's a written protocol for operation, yes.

Q. Now, if those raw explosives are used on an examination table, placed on the examination table, they can and probably will contaminate that table. Is that fair?

A. If I take a piece of raw explosive and place it on the table and if I don't sanitize the table afterwards, yes, you're right.

Q. And sometimes, depending on the amount of the explosive, you can't see it by just looking at it. Right?

A. I think you could get a scenario together that would place

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something that's invisible on the table, yes.

Q. So by visual inspection, you can't tell if the table is contaminated with the explosive compound. Is that fair?

A. Yes.

Q. There are also some circumstances and situations where more than just washing down the table might be necessary to remove the explosive compound. Is that fair?

A. I think if the concentration and level is high enough, yes, you would have to take more drastic measures.

Q. That's all the kind of things that you would expect to see in a written protocol dealing with the use of bulk explosives in the lab; right?

A. It could be something you could put into a protocol, yes.

Q. That way, you know, and you're assured that the other people working in the lab are taking the precautions necessary to keep from having the area contaminated?

A. Well, I would hope that there is only a very select group of people who would be handling the bulk explosives; and those people would be only those who are authorized to handle it.

Q. Well, what controls were in place in April of 1995 to prevent the entry and egress into the lab of people who did not work there into the explosives residue area?

A. Well, they -- they were restricted basically from coming into my work area, into my room. My room was specially locked, and that's where I conducted the examinations.

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Q. Well, my question to you is what controls were in place to prevent people from coming into the explosives residue area?

A. I'm not sure if I understand what you mean.

Q. There was no lock on the exterior door and into the explosives residue area, was there?

MS. WILKINSON: Objection, your Honor. Perhaps this is vague. If he could specify . . .

THE COURT: Yes. The witness doesn't understand, as I understand it, what the residue area is -- the explosives residue area is.

BY MR. TRITICO:

Q. Is there an area and was there an area in 1995 for which the explosives residue analysis was conducted?

A. There were -- there were two areas that were designated -- I'm sorry. There were three areas that I will include into that, yes.

Q. Okay. Which ones?

A. There was a locked room where some bulk samples could be examined on a trace table, then my office, and then the outside area, which is the laboratory where the actual instrumental examination of an extract is performed.

Q. Was there a door that locked the instrumental area from the outside?

A. From the outside, being it -- this was the FBI building.

Q. I mean from people walking into that examination area.

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A. People could walk into that examination area, yes.

Q. Was there carpeting in that area?

A. A distance away, yes.

Q. This was a carpeting that was kind of like an aisleway through the middle of the work area. Is that fair?

A. No.

Q. Was the whole area carpeted?

A. No.

Q. How much carpeting was in the room?

A. The carpet is probably 3 feet wide by 10 feet.

Q. Carpets can be a major source of contamination for a lab, can they not?

A. It's something that I wouldn't put into an actual examination area.

Q. Because they can gather and hold contamination or gather and hold explosives residue in the carpet. Right?

A. Well, we've used carpet in the past as a substrate for explosives. It -- really, the true reason is so that you don't have the ability to clean it the way you would like to clean a floor.

Q. Exactly. So you never know if it's contaminated or not?

A. Well, you can take steps by having the carpet cleaned, and we have the carpet cleaned in that region.

Q. But you still never know if it's contaminated, do you?

A. Unless you test the carpet, that's correct.

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Q. You didn't do that on a regular basis, did you?

A. Not the carpet, no.

Q. Now in 1995, April of 1995, did the FBI lab have a

Q. Now, in 19 -- April of 1995, did the FBI lab have a protocol or a procedure in place whereby individuals entering the lab swabbed and tested their hands prior to coming into the lab for explosives residue?

A. Are you referring to the actual people who were handling the explosive residue analysis?

Q. Well, let's start with them.

A. This was basically a training process that people were trained in how to do this; and so those people that were trained knew the procedures.

Q. And my question to you, sir, was in April of 1995, did the FBI lab have a written protocol or directive, directing people to do that?

A. There was no written procedure for that.

Q. You don't know on any given day if anybody in the lab is following the training that they received.

A. That's not true.

Q. Now, in April of 1995, did the FBI lab have a written protocol for -- regarding the swabbing of hands of other individuals who might enter the lab?

A. There was nothing written down for that, no.

Q. Shoes can be a source of contamination, can they not?

A. Given the right scenario, it's possible.

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Q. In April of 1995, did the FBI lab have a protocol dealing with the shoes of the individuals who were in the lab, whether they worked there or not?

A. There was no procedure for sampling of shoes.

Q. Are you aware of other labs requiring people to either change shoes or put protective covering over their shoes before they enter the lab?

A. Yes.

Q. You didn't do that in April of 1995 at the FBI lab; is that correct?

A. That's correct.

Q. Lab coats can be a source of contamination in a lab; is that correct?

A. It's a possibility, yes.

Q. In April of 1995, the FBI lab had no protocol or procedure dealing with how often an examiner should change his or her lab coat. Is that correct?

A. There was nothing written down for that.

Q. As a matter of fact, yesterday when you were testifying about changing lab coats, I thought I understood you to say when you were referring to the clothes when you tested the clothes, "At this time, I changed my lab coat." Do you recall that?

A. I was just -- if that's the sequence that I said that, I was basically pointing out at that particular time that was the

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step: change the lab coat. Changing lab coats is a routine



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procedure for me. It wasn't just in that case.

Q. Others in the lab may not have followed that same rigid policy that you did?

A. Oh, I know others that do, yes.

Q. Do you know others that don't?

A. But those, I'm not aware of. I know others that do.

Q. How about air-conditioning systems? Can that be a source of contamination in a lab?

A. I really don't know how that can -- if given the wrong conditions, it's a question. I don't know.

Q. Have you ever heard of a positive pressure lab?

A. Yes.

Q. What is that?

A. It's basically one in which there is a flow of air into a particular area that maintains constant pressure.

Q. And it's on a single system in and of itself?

A. It's a separate entity, yeah.

Q. Not connected to the remainder of the lab is what I'm trying to say. Is that right?

A. Yes.

Q. That's not what you had in April of 1995 at the FBI lab; is that correct?

A. That's correct, yes.

Q. You're on a main system with other parts of the lab,

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however many systems they may have -- I don't know how big the lab is, but you're on a system connected with other parts of the lab. Is that fair?

A. Yes.

Q. Now, converse to a positive pressure is a negative pressure lab. Is that right?

A. I'm aware of two different types, yes.

Q. Do you know what a negative pressure lab is?

A. I -- what I believe a negative pressure -- but I'm not sure of a negative pressure lab. I've known of negative pressure work hoods and workstations.

Q. Okay. Now, in April of 1995, the FBI lab had no written protocol dealing with the wearing of protective clothing with respect to individuals entering the lab. Is that right?

A. There was nothing written down. That's correct.

Q. And the regular practice of the lab was the lab coat. Is that correct?

A. Wearing of lab coats is a regular procedure, yes.

Q. Individuals entering from the outside who don't work in the lab were not required to put on protective clothing. Is that correct?

A. We would hope that these folks would not be exposed to the evidence.

Q. Were they required to put on protective clothing?

A. If they were to come in contact with evidence, they would

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be required, yes.

Q. As a general rule, were they required to put on protective clothing when they entered the lab?

A. If they're just entering the laboratory, they're not required to put on a lab coat. If they're coming into my area where I'm going to be handling evidence, they're required to wear protective covering.

Q. From time to time individuals from the FBI bomb range would come into the lab; is that correct?

A. No.

Q. Never seen one?

A. We don't have a bomb range, an FBI bomb range.

Q. Is there a bomb range around that the FBI uses?

A. Yes.

Q. Do individuals from that area, that range, who have worked out there come into the lab from time to time?

A. I don't know their frequency of coming from the range to the laboratory. I don't know that.

Q. Have you seen them in the lab?

A. I've certainly seen the people who have exposure to that range in the laboratory.

Q. You took no swabs of those individuals who work at the bomb range, did you, when they enter the lab?

A. I have conducted some undocumented experiments with that, yes.

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Q. And that was a test that you conducted with Agent Whitehurst -- is that right -- that you're talking about right now?

A. I'm not sure if I conducted it in conjunction with him or not.

Q. Well, the test you're talking about occurred in the late 80's or early 90's; is that fair?

A. I'm not sure -- maybe we're not on the wavelength. Which test are you referring to?

Q. Well, tell me which one you are.

A. It was -- I remember an instance when an individual from the Explosives Unit, Mr. Mike Fanning, came to me and expressed an interest to have his hands swabbed; and the time frame on that I'm not too sure.

Q. You don't recall if it was before or after April of 1995?

A. I don't recall the exact date.

Q. You conducted another test or in conjunction with --

Dr. Whitehurst -- I'm not sure -- with Mr. Fanning, did you not?

A. Help me.

Q. Did you send Mr. Fanning to the bomb range to get exposed to explosives residue, go home, sleep all night, shower, change clothes and come back and be tested the next day?

A. I don't remember an exact study like that. Now, that doesn't ring a bell with me.

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Q. You didn't participate in that, if it happened?

A. I don't recall that -- that particular study.

Q. Okay. As a matter of fact, the individuals who work at the bomb range have a storage locker at the FBI lab, do they not?

A. Yes, they -- well, it's not in the laboratory space, but it's a -- area within the building that they have available to them.

Q. That's what I meant. And they store explosives in there?

A. Yes.

Q. The area that we were just talking about, where the bomb range individuals keep -- have their storage locker: Do you recall that a moment ago?

A. Yes.

Q. Evidence from this case was stored in that same area, was it not?

MS. WILKINSON: Objection, your Honor.

THE COURT: What's the objection?

MS. WILKINSON: I believe he's talking about evidence that's not been introduced in the case.

THE COURT: Yes. You're using "evidence" a lot without identifying what kind of evidence, so I sustain the objection as to vague.

BY MR. TRITICO:

Q. I'd like to talk to you briefly about the examination that you conducted on Q507. That's the piece of wood. Is that

Steven Burmeister - Cross

fair? Yes?

A. Fiberglass or wood, yes.

Q. Now, when did Q507 arrive at the lab?

A. Q507 arrived -- ooh -- I can only speak to the date that I actually officially received it. I'm not sure of the exact date that it arrived at the laboratory.

Q. Who was the first person to test Q507?

A. That would have been myself.

Q. Roger Martz didn't conduct any testing on Q507 before you did?

A. Not before me, no.

Q. Did Roger Martz conduct testing after you did?

A. He conducted a test of an extract that was removed off of Q507.

Q. His results were inconsistent with yours, weren't they?

A. No.

Q. Now, you also took one of the crystals off of Q507 to ICI for examination. Is that correct?

A. I took the entire Q507 with me to ICI.

Q. Okay. And did they remove a crystal?

A. We -- we attempted to remove crystals from the Q507 surface. I was unable to locate any of the crystals at that time.

Q. They were gone?

A. When I -- when I attempted to look for the crystals. I

A. WHEN I WHEN I attempted to LOOK FOR THE CRYSTALS, I

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could not find them.

Q. What happened to them? Do you know?

A. That piece has gone through a lot of hands since the times that I've seen it; and I can't speak to how they would have disappeared.

Q. There was a means whereby you could have protected and preserved the crystals on Q507, is there not?

A. The results were obtained. I was completed with my analysis and it had been bagged and packaged, and I would have -- would presume that the bagging would have preserved it.

Q. It was bagged and packaged like it is today, sort of similar to this?

A. Yes. In an envelope --

Q. My question to you, sir, was is there a means whereby you could have protected and preserved the crystals that you found on Q507?

A. It's not normally a procedure that I follow. I'm sure that there is special packaging I could have done to preserve them for the future, but I feel that I've documented it enough that there was no need to do that.

MR. TRITICO: May I have a moment?

THE COURT: Yes.

BY MR. TRITICO:

Q. Have you ever heard of a desiccator?

A. Yes.

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Q. What is that?

A. A desiccator is a material which is applied or -- let me just back-step. It's a material that will absorb moisture; and if you wanted to put it into a container, it will keep the humidity level down in that particular container.

Q. And might have protected the crystals on Q507 had you used that system?

A. Yes.

Q. When did you take Q507 to ICI?

A. That would have been November of '96.

Q. Was this the first time that you discovered that the crystals were gone?

A. It had been the first time that I had seen Q507 since the time that I had analyzed it, yes.

Q. When did Linda Jones analyze Q507?

A. I'm not sure if she has actually seen the piece physically, or at least I don't have a recollection of her touching the piece. I know she's seen photographs of the piece.

Q. Now, you testified that you were not -- I'm paraphrasing; please correct me if I'm wrong -- you were not overly concerned with the fact that the crystals were gone because you had completed your testing. Is that fair?

A. I had completed the test, placed it back into the package,

yes.

Q. Has it been your experience during the time that you've

Steven Burmeister - Cross

worked at the lab that the defense in cases would like to analyze the things that you claim to have found?

A. The evidence itself was packaged up and was certainly available.

Q. Has it been your experience in the past in working at the lab that the defense would like to examine the -- and test the things that you claim to have found?

A. Yes. They've actually wanted to look at it.

Q. And when the defense in this case got a chance to look at Q507, the crystals were gone. Right?

MS. WILKINSON: Objection, your Honor. Only as to his personal knowledge.

THE COURT: Well, yes. Answer if you know.

THE WITNESS: I don't know.

BY MR. TRITICO:

Q. Now, it was your testimony yesterday that it's your belief that the crystals that you found on Q507, which are no longer here, were blasted into the back side of this exhibit, piece of wood. Is that fair?

A. It's my opinion that it was -- that some pressure placed those crystals into that object.

Q. Did you testify yesterday that it was your opinion they were blasted in?

A. And it would be something like a blast would force it into that surface.

Steven Burmeister - Cross

Q. Now, what is in evidence as -- for demonstrative purposes as Government's Exhibit 663 is an exemplar. Is that fair?

A. Yes.

Q. This is the same width that Q507 would have been in the beginning?

A. Yes.

Q. Is this the same type of material that Q -- that you claim Q507 started out as?

A. Yes.

Q. Now, how thick is this?

A. Oh, it's -- without a measuring device, it's thin.

Q. I'll go along with that.

How thick is this?

A. Again, the same response but thicker.

Q. About a half inch maybe?

A. That's a good guess, yes.

Q. Now, this would have been the inside of the Ryder truck, this side that I'm showing, the white side with the black on the bottom of Government's Exhibit 663; right?

A. Yes.

Q. And, of course, the yellow and the red side is the outside. Right?

A. Yes.

Q. So looking at Q507, this would have been the outside; right?

Steven Burmeister - Cross

A. Yes.

Q. And this side that looks like just wood would have been the inside; right?

A. Yes.

Q. Now, in the -- you testified yesterday about explosions and how they occur. Do you recall that?

A. Yes.

Q. Just so we have a number to use, let's talk 5,000 feet per second. Okay? Now, when the explosion occurs, if where I've got my hands here is the base of the explosion and the blast wave is moving at 5,000 feet per second, it moves out away from that explosion all in the same direction; right? In other words, 90 degrees away from the center of the explosion is what the blast wave does. Is that fair?

A. Well, it's somewhat true, but we have to put into the factor of again what we talked about yesterday, the shape of the device certainly can change those characteristics.

Q. Absolutely. I'm referring to just a round charge. Okay? It's going to move 90 degrees away from the center of the explosion in every direction; right?

A. Yes.

Q. And it's all going to be moving at 5,000 feet per second, assuming under our scenario here?

A. At some point everything will be moving at that speed, yes.

Q. Now, it's not like a tornado. In other words, you don't

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have winds moving in different directions; right?

A. It's a wave moving out from the source, yes.

Q. Somehow, it's your belief and your testimony, Q507 was separated from the rest of the piece of wood; right?

A. Yes.

Q. Now, this is a piece of plywood that is -- you know how plywood is constructed?

A. I am not -- not an authority on plywood, no.

Q. Did you check into any of the Morgan Box Company standards with respect to the plywood and how it's constructed when you were conducting your analysis in this case?

A. Only from the fact that there is a wood layer and then a fiberglass outer layer that's connected.

Q. And it's all glued together?

A. Yes.

Q. Somehow, it's your belief that the blast occurred; over 90 percent of this piece of wood was dispersed. Right?

Correct?

A. That's probably a good number. I may go a little lower

A. That's probably a good number. I may go a little lower than that, but you're right.

Q. Was it burned away?

A. It's pressure that's forming.

Q. Was it burned away?

A. I don't see any characteristic signs of a burning on that piece.

Steven Burmeister - Cross

Q. Did you examine this for burning or charring, Q507, which is Government's Exhibit 664?

A. When I'm looking at it under the scope, I would see burned areas. I didn't see that.

Q. So somehow we separated 90 percent or so of Q507 away from the rest of the wood. Right?

A. Yes.

Q. We're moving away at 5,000 feet per second?

A. Yes.

Q. Now, these crystals of ammonium nitrate got enough speed to catch Q507 and get embedded in it. Is that your testimony?

A. A portion of that Q507 was stripped off, and the explosive was traveling and smashed into it, yes.

Q. Even though the blast wave is moving at 5,000 feet per second?

A. We're talking about amazing things at very split-second opportunities.

Q. In this split-second opportunity, the crystals had enough common sense to wait until the rest of Q507 was blasted away and then catch it?

A. You're -- you're -- you're into the realm of the amazing part of explosives, how unpredictable they are. We could take and try to find Q507 every single time and we could run it ten different times, and maybe one out of those times we'd find the crystals on Q507. You're predicting into a world that is

Steven Burmeister - Cross

unpredictable.

Q. Okay. And this is the only piece that you found that had any crystals on it; right?

A. I looked at a lot of pieces of the truck and the side wall of the truck, and I didn't find any other pieces that had it on it.

Q. Had crystals on it?

A. Yes.

Q. What is the melting point of ammonium nitrate?

A. I'm not sure the melting point. I'd have to look it up.

Q. Around 200 degrees, 190 degrees?

A. I'm not sure. I'm not going to predict it.

Q. At what temperature does ammonium nitrate evaporate into or totally break down into ammonium and nitric acid vapors?

A. I'm not sure of the exact number, but I'm going to have to estimate higher than 200. I could be wrong.

Q. Would you agree with me that the blast when it occurred

reached temperatures of higher than 200 degrees?

A. The blast itself would have, yes.

Q. If there is charring on Q507, would you agree with me that it had to reach a temperature of higher than 200 degrees?

A. If there is burn marks on Q507, yes, I would agree it would reach high temperatures.

Q. Assuming that is correct, you would not expect crystals of ammonium nitrate to survive those conditions, would you?

Steven Burmeister - Cross

A. That's -- that's hard to predict. I could definitely find them on that particular object.

MR. TRITICO: May I have just a moment, Judge?

THE COURT: Yes.

MR. TRITICO: I need just one more moment, your Honor.

THE COURT: All right.

BY MR. TRITICO:

Q. Now, your finding of the crystals of ammonium nitrate on Q507 do not mean that an ammonium nitrate and fuel oil bomb was used in Oklahoma City, do they? That's not conclusive proof, is it?

A. That's correct.

Q. You found no fuel oil on Q507, did you?

A. No indications of fuel oil on that object.

Q. You found no nitromethane on Q507, did you?

A. That's correct.

Q. Now, the amazing things that you were talking about with respect to the crystals getting embedded on Q507 are still subject to the laws of physics and chemistry, aren't they?

A. I would agree with that.

MR. TRITICO: I thank you, sir.

I'll pass the witness.

THE COURT: All right. Redirect.

REDIRECT EXAMINATION

BY MS. WILKINSON:

Steven Burmeister - Redirect

Q. Agent Burmeister, I'd like to begin where Mr. Tritico left off; and that's with Q507. You showed us one photograph that you thought depicted the crystals that you found on Q507. Is that correct?

A. Yes.

Q. Did you show a series or did you take a series of photographs preserving the crystals that you had found on Q507?

A. Yes. I took several.

Q. I'm going to show you Government's Exhibit 830, which should be on your screen. Do you recognize that?

A. I --

Q. Hold on one second. Sorry about that.

Do you recognize that?

A. Yes, I do.

Q. Is that one of the photographs you took when you were



looking at Q507 under the microscope?

A. Yes.

Q. Did you take that back in May of 1995?

A. Yes.

Q. Did you take that to preserve or in part to preserve a record of the work that you had done?

A. Yes.

MS. WILKINSON: Government offers 830, your Honor.

MR. TRITICO: No objection.

THE COURT: 830 received.

Steven Burmeister - Redirect

MS. WILKINSON: May we publish?

THE COURT: It may be displayed, yes.

BY MS. WILKINSON:

Q. Agent Burmeister, tell the jury what they're seeing and what you saw under the microscope.

A. This particular photograph depicts the wood side of Q507, and it specifically shows the area at which these crystals were observed. The major abundance was in this region right here, although they did continue down and into this area right here.

Q. Let me show you an increased magnification of Government's Exhibit 830, which is marked Government's Exhibit 831. Do you recognize that?

A. Well, it's a reduced magnification.

Q. I'm sorry?

A. Yes. It's another photo of Q507.

Q. Did you also take that back in May of 1995?

A. Yes.

MS. WILKINSON: Government offers 831, your Honor.

MR. TRITICO: Your Honor, I'm going to object to this as cumulative to the other photographs that are already in.

THE COURT: Does it show something different?

MS. WILKINSON: I believe it does, your Honor. May I have --

THE COURT: Ask the witness.

BY MS. WILKINSON:

Steven Burmeister - Redirect

Q. Agent Burmeister, can you explain what we're seeing here in Government's Exhibit 831 that differs from Government's Exhibit 830? Is this a different perspective?

A. It's a different perspective. It shows the entire piece from a distance. It gives you a better idea. If you were to look at the piece and be able to refer to the photograph, you would be able to take the piece and the photograph and hold them side by side and show where the -- where the material is located.

MS. WILKINSON: Your Honor, we offer 831.

MR. TRITICO: I'll offer the same objection, your Honor.

THE COURT: Overruled. 831 is received and may be

published.

MS. WILKINSON: Thank you.

BY MS. WILKINSON:

Q. So would it be fair to say this would orient you on the piece so you could recall exactly where you found the crystals?

A. Yes, it would.

Q. Can you show the jury by using your pen where you found the crystals on Government's Exhibit Q507, which is also 664?

A. Okay. The bulk of the crystals were observed within that circle, and then again they were down along this edge and in that cavity right there.

Q. Now, if I hand you Government's Exhibit 664, using that

Steven Burmeister - Redirect

photograph, can you point out to the jury on this piece exactly where you saw the crystals?

A. Yes.

MS. WILKINSON: Your Honor, may I approach?

THE COURT: Yes.

MR. TRITICO: Your Honor, may I move over?

THE COURT: Yes.

BY MS. WILKINSON:

Q. Do you need to look at any of the other photographs, Agent Burmeister?

A. I might need one more photograph.

Q. Would it be one you've already looked at, or the additional photographs you've already taken?

A. It would -- no. I'm okay. I've got my orientation.

Q. Okay. Can you show the jury on Government's Exhibit 664 where you found the crystals?

A. It would be right in this region right here as they reflect to the photograph.

Q. Can you give a verbal description of the area that you're pointing to?

A. It's about 1 inch down from the top portion here and approximately 1 inch over from this side, and you can see the cavity which we see right here in the photograph is right here.

Q. Thank you.

Now, do you know when defense counsel requested to

Steven Burmeister - Redirect

examine Q507 for the crystals?

A. No.

Q. And after you tested Q507 for the crystals, did you write a report documenting your findings?

A. After I tested the crystals? Yes, I did.

Q. And are you aware of whether that report was turned over to the defense?

A. Yes.

Q. And did you also disclose the notes that you had made while you were conducting the tests to Q507?

A. Yes.

Q. And were those notes disclosed to the defense?

Q. And were those nodes addressed to the defense?

A. Yes, they were.

Q. Now, Mr. Tritico asked you how you could be so sure that those crystals were embedded by some form of pressure or blast. Can you explain in more detail how an explosion works and how you believe those crystals could have been embedded in that piece of evidence?

A. Well, as the explosion is emanating out from the source -- if we take the perfect cylinder -- as the force is blowing out from the center, with that force and blast wave there is unconsumed material also being pushed out in a front, if you will. And as the front is moving out, it's reacting as it's moving. That's the process.

As it's moving out, there is pockets that are

Steven Burmeister - Redirect

unconsumed and pockets of these things that are banging into objects and moving in all sorts of different manners; so it's entirely possible that an unconsumed portion is traveling at a high speed and would impact on something that is like this.

Now, the surface area on this is much larger than a piece of unconsumed material.

Q. Mr. Tritico asked you to assume that the detonation velocity was 5,000 feet per second. If this were a midrange-velocity explosive that were used at Oklahoma City somewhere in the range of 13- to 16,000 feet per second and the explosive was an ammonium-nitrate-based explosive using some form of prill, would it be reasonable that some of those prills could be unconsumed at the very beginning of the explosion -- and I understand we're talking about milliseconds now -- and could have hit this piece and been blasted into Q507?

MR. TRITICO: Objection. Compound question.

THE COURT: Sustained.

MS. WILKINSON: Let me rephrase.

BY MS. WILKINSON:

Q. Let's assume that this was a midrange-velocity explosive. Can we do that?

A. Yes.

Q. And that ammonium nitrate prills were used as part of the explosive. Correct?

A. Yes.

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Q. Based on that, can you explain how some unconsumed matter or materials made of ammonium nitrate could be embedded in Q507?

A. Well, it's the same discussion that I just mentioned: that as that front moves, there is unconsumed material being moved along with that front, unconsumed being prills of ammonium nitrate traveling at that speed that the front is moving. And that front and unconsumed material is going to impact and hit objects. Some of it is heated up and lost. Some is impacting on objects.

If this happened to be in the way of the object, of the material, the unconsumed material, it's going to strike this surface.

Q. Is that a random occurrence in an explosion?

A. It's not predictable. The dispersion of this material is unpredictable.

Q. Does it depend in part on how the device is constructed?

A. It could be.

Q. Does it depend on how the device was boosted?

MR. TRITICO: I'm going to object to the leading nature of these questions.

MS. WILKINSON: I'll rephrase it, your Honor.

THE COURT: All right.

BY MS. WILKINSON:

Q. What does it depend on, Agent Burmeister? What are the

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factors you would consider?

A. There is a variety of different factors: Shape, how -- just what you said, how it was boosted, the configuration of how it was initiated overall, the actual vessel that it was housed in, the outside vessel that it's being housed in, the -- there is other factors, temperature of the day, the pressure of the day. Those are some other things. Humidity.

Q. Now, once this explosion occurs, are there also different factors you have to consider about whether explosive residue would be recovered at the scene at all?

A. Yes.

Q. What factors did you consider in this case?

A. Environmental factors.

Q. Give more detail on that, please.

A. Well, if the -- if it's a high humidity or if the rain might have occurred, the rain is going to wash explosives away, not only organic but also inorganic explosives. So these environmental factors are definitely present and must be considered when you're approaching and evaluating a particular scene.

Q. Is it common after explosions such as the one that occurred in Oklahoma City that there are ancillary fires in the area?

A. Yes.

Q. And could fire -- those ancillary fires also consume any uninitiated explosives that were in the area?

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A. Certainly possible.

Q. What about the use of water by the firefighters in the area?

A. That's entirely possible to have washed away residues.

Q. Did you consider that when you were analyzing the evidence in this investigation?

A. Yes, I did; but the major consideration was the rainstorm the night before.

Q. Now, Mr. Tritico asked you about the efficiency of ammonium nitrate and fuel oil or ammonium nitrate and nitromethane. And you said there can be some inefficiencies. Is that right?

A. Yes.

Q. Can you explain that to the jury?

A. Well, the one portion that you want to do whenever you are mixing the two together, the ammonium nitrate and the fuel, the concept here is to take the ammonium nitrate, which is the oxidizer, and blend it with the fuel; and that's the intimate mix that you need to try to obtain. If you obtain that blended mix, then obviously there is going to be portions that will not react and be consumed effectively. Those are the areas that I'm referring to.

Q. Is there a range of effective mixtures where the device or the materials or components of the bomb would be consumed after an explosion?

A. Are you referring to a portion of the device as far as

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consumption?

Q. Yes.

A. The areas on the exterior would be the ones that I would predict to be the likely area that would be unconsumed, on the exterior, because it's being forced on the "out."

The interior portion would be consumed in the reaction.

Q. Is it your experience that ammonium nitrate and fuel oil when detonated leaves prills after an explosion?

A. It could, but this is the first time that I've seen and recovered crystals.

Q. So would it be fair to say it hasn't been your experience to find prills after an explosion like that?

MR. TRITICO: Excuse me, Judge. Leading.

THE COURT: Well, sustained. You're talking prills, and you're talking crystals.

MS. WILKINSON: I'm sorry, your Honor. I'll clarify my question.

BY MS. WILKINSON:

Q. Agent Burmeister, is it your experience to find prills -- not crystals; prills -- after an explosion of ammonium nitrate and fuel oil?

A. I've never seen prills after that.

Q. Why is that?

A. The prill itself is a fragile, little species. It's

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traveling at a high rate; and when it impacts on something, it's going to get crushed.

Q. And what about your experience in finding crystals of ammonium nitrate after an explosion of ammonium nitrate and fuel oil?

A. My experience, it's rare to find it.

Q. So was this an unusual occurrence in this case for you to

Q. So was this an unusual occurrence in this case for you to find those crystals on Q507?

MR. TRITICO: Objection. Leading, your Honor.

THE COURT: Overruled.

BY MS. WILKINSON:

Q. Was it an unusual experience?

A. Yes, it was.

Q. And are you aware of other research that's been done with ammonium nitrate and fuel oil explosions?

A. Yes.

Q. And are you aware of whether residues, crystal residues, were found after those experiments when the ammonium nitrate and fuel oil was detonated?

A. The studies that I've been aware of and have been a part of, I've not seen the actual crystals being observed.

Q. Have you spoken to other experts in the explosive residue field who have conducted crime-scene examinations of ammonium-nitrate-based explosives?

A. Yes.

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Q. Are you aware of whether they have ever found ammonium nitrate crystals at the scene after an explosion that they believed was in part caused by an ammonium-nitrate-based explosive?

A. Yes. My conversation with them is they have not found crystals, either.

Q. Tell the jury why it's so unusual to find the crystals at the scene.

A. It's the principle, the randomness of an explosion: that the probability of finding the right piece with this material on it -- there is a probability factor.

Q. What about finding other explosives -- high explosives after an explosion of an improvised explosive device?

A. It depends again on the scene and type of device that you're referring to.

Q. Well, let's go to a large explosion. Have you ever in your experience found PETN at a post-blast site when there has been a large explosion?

A. I have not found PETN at a large explosion scene.

Q. Now, if an explosive device used detonating cord with PETN or blasting caps with PETN, why in your opinion would it be typical not to find PETN residues after an explosion?

A. It's my opinion that it would be consumed in the overall reaction, and the quantity is so small compared to everything else that we wouldn't find any residues.

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Q. What about EGDN, if dynamite were used to detonate an improvised explosive device?

A. The material itself, again, you have to take into consideration the type of explosion that you're referring to; but again, it would have been consumed and, due to the heat of

the reaction, driven away.

Q. So would it be unusual, or usual, in your experience, to find no high-explosive residues after or in investigating a post-blast explosion crime scene?

A. It's not unusual not to find any.

Q. What about finding the remains of any kind of shock tube or safety fuse used in an improvised explosive device? Is it common, or uncommon, to fail to find remnants of shock tube or safety fuse at a post-blast crime scene?

A. Again, those items would be consumed. I think under the blast pressure that it would have been destroyed in the overall reaction.

Q. Yesterday, you narrated a videotape of the 1993 explosion of a 1200-pound improvised explosive device. Correct?

A. Yes.

Q. And after that, did you test any of the witness material to determine if there were any residues present?

A. Yes, we did.

Q. What did you find?

A. There was ammonium ions and nitrate ions found, but no high

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explosives were detected.

Q. Let's talk about the difference between ions and the crystals that you found.

A. Yes.

Q. Is there a difference to you as a scientist in finding ammonium ions and nitrate ions and finding a crystal of ammonium nitrate?

A. If we look at the crystals, we're looking at a solid substance. When we talk ions, we're looking at two that are separate; and if we look at ammonium nitrate, we're looking at ammonium ions and nitrate ions. When we glue the two together, then we have the crystal and we have ammonium nitrate. So when we're referring to ions, we're talking about the two being separated.

Q. So which is more important to you as an explosives residue expert?

A. When they're glued together and we find the actual crystal itself.

Q. Once you find the crystal, can you break it apart to reassure yourself that you have ammonium and nitrate ions?

A. Sure. There is instrumental methods you can use to examine it, either not breaking it apart -- but you can break it apart and look at the different components within it.

Q. You were asked on cross-examination about the chance that the ammonium nitrate crystals that you found on Q507 somehow

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were ions before you saw them and recrystallized and formed the ammonium nitrate crystals that you examined. Do you recall

that?

A. Yes.

Q. In your mind, is that possible?

A. I don't think it happened. It's not -- I don't think it was formed.

Q. Did you find other elements present on Q507 that suggested that this -- these crystals were in their original form?

A. Can you state that -- rephrase that. I'm sorry.

Q. Yes, I'm sorry. Did you find other elements -- when you did your SEM/EDXA, did you find other elements present on Q507 crystals?

A. Yes. There were other elements that were present on the crystals themselves.

Q. What did that suggest to you about whether this had been a crystal in its original form or whether it had been these ions that somehow magically recrystallized?

A. The elements that were present were consistent with those used in the coatings for prills, and that suggested to me that they originated at one time from a prill vs. an actual crystalline material.

Q. You mentioned that you had prior experience in crystal or microcrystal analysis; is that right?

A. That's correct, yes.

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Q. In your opinion, is there a difference in the crystal structure of ammonium nitrate when it's in its original form and when it recrystallizes?

A. There is an appearance that you will see that is different, yes.

Q. And did you observe that when you examined the crystals in -- or embedded in Q507?

A. Yes. They were not like what I was referring to as a recrystallized form. These were crystals.

Q. You were also asked on cross-examination about the earplugs that you examined from Mr. McVeigh, and Mr. Tritico pointed out that the nitroglycerine that was on those earplugs could have come from someone who was handling firearms. Is that right?

A. Yes.

Q. Are you aware of any firearms that also contain PETN and EDGN (sic)?

A. None that contain PETN or EGDN.

Q. So when you found those high-explosive residues on the earplugs, was that consistent with someone who was only handling firearms?

A. No.

Q. You were also asked about the T-shirt that you tested, the one that you held up with the blue arms and the white T-shirt, and Mr. Tritico suggested that you -- if someone were holding a holster, they might find nitroglycerine on that T-shirt. Do

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you recall that?



you recall that?

A. Yes.

Q. Did you find any nitroglycerine on that T-shirt?

A. Yes.

Q. On the blue T-shirt, blue sleeves with the white T-shirt?  
Would it help if I showed you the chart that you constructed?

A. Yes, that would be helpful.

Q. I'm referring to Government's Exhibit 430, which was Q23. What did you find on that T-shirt?

A. I'm sorry. I was slightly confused before.

Q. I'm sorry. I didn't refer to the exhibit number.

A. You're right. The -- there was no -- there was no nitroglycerine observed on the blue-armed T-shirt. That's correct.

Q. And what did you find on that T-shirt?

A. PETN.

Q. Again, that's not consistent with handling of firearms. Is that right?

A. Yes.

Q. When you had discussions or received that memorandum from Dr. Whitehurst about the ammonium ions and the nitrate ions, were you two specifically discussing the crystals, or were you

discussing the significance of finding separate ions?

A. I don't recall a discussion that took place prior to this.

#### Steven Burmeister - Redirect

I remember receiving that memo that he presented to me, and there really was no preliminary foundation for receiving that memo whatsoever. He just provided it to me almost as a for-your-information-type memo. And like I had mentioned, everything in that memo I had already known; so there was nothing new that I was finding out about that memo.

Q. In that memo he pointed out to you that when you find just the ions separately, the nitrate ions and the ammonium ions, that is not as significant as finding the crystal. Is that correct?

A. Yes.

Q. And you were aware of that before Dr. Whitehurst shared that memo with you?

A. Definitely.

Q. In fact, when you did your analysis in this case, you carefully reported the ammonium ions and the nitrate ions you found on the glass that you discussed with Mr. Tritico; is that right?

A. Yes.

Q. And what did you say about the significance of those elevated levels of ammonium ions and nitrate ions found on the glass inside the Murrah Building?

A. Essentially in the report, I said I couldn't attribute any significance to them without further information of the environment -- perhaps not in those words, but that was the

Steven Burmeister - Redirect

information that I was relaying in the report.

Q. And you did that without talking to Dr. Whitehurst; is that correct?

A. Yes.

Q. You also examined and Mr. Tritico asked you about the sign, the parking sign, Government's Exhibit 826. Do you recall that?

A. Yes.

Q. Now, you knew that it had rained the day before you seized this; is that right?

A. Yes.

Q. And just to clarify a date, what date did you seize this piece of evidence?

A. That would have been the 20th of April.

Q. Go ahead. I'm sorry.

A. 20th of April.

Q. Mr. Tritico asked you about a series of pieces of evidence that you seized including this and you stated that you seized on April 21. Were you misspeaking at that time?

A. I was incorrect, yes. That was seized the first day that we were there on the first walk-through.

Q. So it was April 20, 1995, a Thursday?

A. Yes.

Q. You were aware that it had rained the day before you seized this; correct?

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A. Yes.

Q. Why did you seize this parking sign, then?

A. It was for the characteristics of the sign based on the information which we had from the previous testing that we had had out at Socorro, New Mexico, and also for any types of residue that might be on that -- that particular sign.

Q. What are the characteristics that you were looking for in Government's Exhibit 826, the parking sign?

A. The significance of the sign shows the bending action of the sign, and what that would do is show directionality for that particular device.

Q. Knowing that it had rained, torrential downpour on April 19, 1995, did you expect to find a lot of explosive residues at the scene?

A. No.

Q. Now, when you were asked by Mr. Tritico about the recovery of Q507, you told him that you weren't present when Mr. Kelly picked it up; correct?

A. Yes.

Q. Do you know what day it was seized at the crime scene?

A. That would have been the 21st.

Q. Was that when you were paged and you were called away?

A. Yes.

Q. You told him that you didn't search the area or test the

area for nitrates. Is that correct?

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A. Yes.

Q. If you had found nitrate ions there, would that have changed your finding about identifying the crystals on Q507 to ammonium nitrate?

A. I would have used it in the consideration; but no, it would not have changed the finding.

Q. Why not?

A. Again, we can't attribute to where those nitrate ions are coming from. In this particular case, we have crystals of ammonium nitrate. We know the source of those nitrates.

Q. Let's go to the laboratory. And you were asked a series of questions about contamination. Do you recall that?

A. Yes.

Q. One that you were asked was about the air-conditioning system. Now, if there was contamination in your air-conditioning system, would you have seen evidence of that at the laboratory?

A. Yes, I think I would.

Q. Is there a common term referred to, that type of contamination?

A. As a background study, control study.

Q. And is it commonly referred to as "systemic contamination"?

A. I would consider it as being a systemic contamination. If I'm starting to see appearances in the routine evidence that I'm processing, then I would see that to be a problem.

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Q. And what would that mean, this kind of systemic contamination? How would you see evidence of it?

A. Well, I would find positive findings in evidence. That's where I would find it.

Q. On a repeated basis?

A. On a repeated basis, yes, and also in the blanks that I'm running.

Q. Now, you ran blanks on every piece of evidence that you tested in this case. Is that right?

A. Yes.

Q. And did you see positive, or did you get positive findings for contamination?

A. No.

Q. In fact, you conducted hundreds of tests for high explosives in this case; is that right?

A. Yes.

Q. And did you find a large amount of positive findings for high explosives residue in this case?

A. No.

Q. What does that tell you about the possibility of systemic contamination in the laboratory?

A. To me, it doesn't exist.

Q. Now, what about random contamination that Mr. Tritico was also asking about, about particles that might just randomly transfer from one area to the other? Are you familiar with

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that?

A. I recall that.

Q. The general concept?

A. Yes.

Q. And you were asked, I think, about the carpet that's in your instrumental area?

A. Yes.

Q. If there was PETN on that carpet, would you expect that PETN to be able to move up from the carpet, up to where you test your samples and into your sample?

A. No, unless I'm actually wiping the sample on the carpet.

Q. Did you do that in this case?

A. No.

Q. And when you test your samples out in the instrumental area, are you testing the actual piece of evidence, or are you only testing the sample?

A. I'm -- in the laboratory, I'm testing the extract removed from the sample. That's placed into a vessel that is then transported to the instrument.

The actual evidence handling is done in a separate room.

Q. All right. Let's explain that a little bit, because I don't think that's clear. When you first took out the clothes, for example, to do your examination and you went through your procedures, you told us about where you put on your clean lab

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coat and you clean the area, put down the paper, put on your gloves, and doing an extraction of a piece of evidence. Where do you conduct that -- that examination?

A. That's in an office. That's a special room for the examination.

Q. Is that the office that's locked?

A. Yes.

Q. And after you take the extract -- let's say from the shirt that you were discussing -- what do you do with that extract?

A. The extract is taken for concentration, so it's dried down to a concentrated volume, and that's done under a nitrogen gas that's blown over the top of it.

Q. And is that put into some kind of test tube or beaker?

A. Well, the extract itself is placed into a disposable test tube. That test tube is dried down again, concentrated. The volume may start large, and you want to reduce that volume down to a concentrated level. That concentrated level is then what's taken to the instrument for analysis.

Q. So by the time you're walking out to your instrument, you have a tiny, little sample; right?

A. Yes. In a tube.

A. Yes, in a tube.

Q. In a tube. Is the tube covered as you walk from your office to the instrument?

A. It has a screw cap on it.

Q. So what is the opportunity for these random PETN particles

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or other high explosives to jump inside the test tube?

A. I think it's unlikely to have occurred.

Q. What about EGDN?

A. You must take the proper procedures for EGDN; but again, it has a little higher vapor pressure in and around with the nitroglycerine, so it has some sort of a transfer capability.

Q. So what is the transfer capability of PETN vs. EGDN relatively speaking?

A. There is a difference between the two.

Q. And which one is more difficult to transfer?

A. The PETN.

Q. Now, you were asked about some contamination studies that were done; and are you aware that your area, where you do your testing, and the area where Mr. Martz does his testing was examined for contamination?

A. Yes.

Q. By Dr. Whitehurst?

A. Yes.

Q. And what were the results of the tests of your area and Mr. Martz's area?

A. There were no explosives detected.

MS. WILKINSON: Your Honor, this would probably be a good breaking point.

THE COURT: All right.

You may step down now. We'll have you back after lunch.

And, members of the jury, we'll take our luncheon recess at this time. And of course, as usual, I must caution you for the record and with emphasis, as always, to keep open minds. Don't discuss the case among yourselves or with anybody else, and be very careful to continue to avoid anything outside of our evidence that could affect your decisions.

You're excused now till -- we'll make it 1:45.

(Jury out at 12:13 p.m.)

THE COURT: There is a sort of an open record with respect to J400. It was offered at one time. There was an objection. Then there was some additional effort to lay a foundation for it, I think, but it was never reoffered. This is the memorandum with all of these attachments.

MR. TRITICO: I believe that's right. I don't recall if I reoffered it or not.

THE COURT: No, you didn't reoffer it.

MR. TRITICO: I reoffer it at this time.

THE COURT: It's been reoffered.

MS. WILKINSON: We have no objection, your Honor. That's fine.

THE COURT: We'll receive J400. I'll mention that to the jury so they're up to speed on it with us, but I didn't

know what you wanted to do about it, so --

MR. TRITICO: Thank you.

THE COURT: That's fine.

We'll recess till 1:45.

(Recess at 12:14 p.m.)

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WITNESSES

Steven Burmeister

Cross-examination Continued by Mr. Tritico 9701

Redirect Examination by Ms. Wilkinson

PLAINTIFF'S EXHIBITS

Exhibit	Offered	Received	Refused	Reserved	Withdrawn
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830	9807	9807			
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831	9808	9809			
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DEFENDANT'S EXHIBITS

Exhibit	Offered	Received	Refused	Reserved	Withdrawn
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J400					
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J400	9832	9832			
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J444					
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J444 pp. 1-3					
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REPORTERS' CERTIFICATE

We certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. Dated at Denver, Colorado, this 20th day of May, 1997.

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Paul Zuckerman

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Kara Spitler