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Agency: Nuclear Regulatory Commission

Title: Investigative Interview of  
Donald R. Knoke (CLOSED)

Docket No.

LOCATION: Gore, Oklahoma

DATE: Tuesday, March 5, 1991

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EXHIBIT 89

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1       BEFORE THE  
 2       U. S. NUCLEAR REGULATORY COMMISSION  
 3       In the Matter of:                    )  
 4       INVESTIGATIVE INTERVIEW OF:       )  
 5       DONALD R. KNOKE                     )  
 6       (CLOSED)                             )

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Conference Room  
 Sequoyah Fuels  
 Gore, Oklahoma

Tuesday, March 5, 1991

The above-entitled matter convened for  
 INVESTIGATIVE INTERVIEW pursuant to notice at 10:24 a.m.

APPEARANCES:

On behalf of the U.S. Nuclear Regulatory Commission:  
 LARRY CHAPMAN, Senior Investigator  
 Office of Investigations  
 U. S. Nuclear Regulatory Commission  
 Suite 1000, 611 Ryan Plaza  
 Arlington, Texas 76011

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On behalf of Sequoyah Fuels:

IRA S. SHAPIRO, Attorney  
Winthrop, Stimson, Putnam & Roberts  
1133 Connecticut Avenue, N.W.  
Washington, D.C. 20036



## P R O C E E D I N G S

1  
2 MR. CHAPMAN: For the record, this is an interview  
3 of Don Knoke, who is employed by Sequoyah Fuels Corporation,  
4 Gore, Oklahoma. The location of this interview is the  
5 Sequoyah Fuels Facility, Gore, Oklahoma. The date is March  
6 5, and the time is 10:25 a.m.

7 Present at this interview in addition to Mr. Knoke,  
8 is Ira Shapiro who is an attorney from the law firm of  
9 Winthrop, Stimson, Putnam & Roberts, Washington, D.C., and is  
10 representing Sequoyah Fuels Corporation. Also present at  
11 this meeting representing the U.S. Nuclear Regulatory  
12 Commission, Office of Investigations, is Larry Chapman.

13 Mr. Knoke, would you please stand and raise your  
14 right hand?

15 Whereupon,

16 DONALD R. KNOKE

17 appeared as a witness herein, and having been first duly  
18 sworn, was examined and testified as follows:

19 MR. CHAPMAN: Thank you, Mr. Knoke, be seated.

## EXAMINATION

20  
21 BY MR. CHAPMAN:

22 Q For the record, Mr. Knoke was spoken to a couple of  
23 days ago, the exact date escapes me, and I would just remind  
24 you that we may cross over some information that was covered  
25 in that other testimony and the information there as well as

1 the information you give today is under oath.

2 All right, sir, since I spoke to you, a couple of  
3 areas have come to light that you and I didn't have an  
4 opportunity to discuss and I'd like to mention and discuss  
5 them with you now.

6 Of major interest to me, to start off with, is an  
7 additional laboratory analysis result that has come to light  
8 dated August 7. I see that you have a copy in front of me  
9 and I'd like for the record to go over it somewhat in detail  
10 if we may, sir, because it is in a different measuring unit  
11 than what we are accustomed to and have been discussing. ~~Let~~  
12 me ask you a couple of questions on it, sir.

13 First of all, this is a special analysis request.

14 A That's correct.

15 Q Dated August 7, 1990 and submitted by a Gary  
16 Barrett, correct?

17 A That's right.

18 Q Underneath the heading "Sample Designation" it  
19 references "Tank excavation site sample", correct, sir?

20 A That's right.

21 Q Now, sir, immediately to the right of this sample  
22 designation are three tests that were asked, I assume by Mr.  
23 Barrett, would that be correct?

24 A That's correct.

25 Q And for the record, they are in order, TBP, hexane,

1 nitrates and a notation "percentage of U", correct, sir?

2 A That's correct, that's four tests.

3 Q Four tests, I'm sorry, I said three, yes, sir. And  
4 for the record also, under the heading of TBP, is a notation  
5 "More than 80 percent"?

6 A Greater than 80 percent.

7 Q Greater than 80 percent, and under the hexane is a  
8 notation 10 percent, the nitrates is X'd out.

9 A That's right.

10 Q And under the percentage of U is a number 1.0.

11 A That's correct.

12 Q And about halfway down in the middle of the page  
13 there is a notation .974 SPG. What does that represent, sir?

14 A That's the specific gravity of the material, .974.

15 Q All right, sir, and just so we get the information  
16 on the sample on record, down at the bottom, under date  
17 reported is August 7, 1990, the Sequoyah lab approval  
18 indicates a William Mandell and the laboratory report number  
19 is referenced as 900818, correct, sir?

20 A That's correct.

21 Q All right, now that we have the information on the  
22 record here, sir, why don't you explain to me what this test  
23 result represents, particularly what the percentage factors  
24 mean and why it's expressed in percentage factors.

25 A It's expressed in -- the uranium is expressed in

1 percentage factors because this is what Gary Barrett wrote  
2 down on the request sheet.

3 Q Is this unusual for someone to ask for something in  
4 a percentage factor designator rather than grams per liter or  
5 --

6 A Normally on a liquid sample it'll be requested in  
7 grams per liter, but if it's somebody that is not real  
8 familiar with submitting samples for analyses, they can put  
9 down percent. Sometimes we will change and report in grams  
10 per liter or we can accommodate them and calculate a  
11 percentage on it. —

12 Q Are you familiar with Mr. Barrett?

13 A Yes, I know Gary.

14 Q Do you know what department he works in?

15 A Presently and at this period of time he works in  
16 the Health and Safety Department as our safety engineer.

17 Q As a safety engineer?

18 A Right.

19 Q Primarily industrial safety?

20 A Right.

21 Q So probably it would not be unusual for Mr. Barrett  
22 not having a true working knowledge of radiation safety, to  
23 perhaps ask for something in a percentage factor?

24 A That's correct. He knew that he wanted uranium,  
25 and the fact that he put down percent rather than grams per

1 liter, I don't have any major problem with.

2 Q What -- just looking at this -- particularly in  
3 light of looking at TBP and hexane, those numbers expressed  
4 in greater than 80 percent and ten percent -- do those  
5 numbers tell you anything about what this possibly was as far  
6 as a solution, and its origin perhaps?

7 A Yes. I would say that this was probably the  
8 organic portion of the solvent extraction process, which is a  
9 30 percent TBP/hexane mixture, 30 percent TBP, 70 percent  
10 hexane mixture, in which the hexane, some of the hexane has  
11 disappeared.

12 Q Is it possible looking at these numbers that it  
13 would even give you, I guess, a life expectancy or give you  
14 the -- since a lot of hexane is missing, is there a  
15 measurable unit by which hexane evaporates at a certain rate  
16 and you can tell how long this mixture has possibly been in  
17 the ground even?

18 A No. Our laboratory sure couldn't do anything of  
19 that sort.

20 Q But you made a comment that the presence of hexane  
21 in this percentage is an indicator that it came out of that  
22 solvent extraction building.

23 A That's right.

24 Q What do you base that on, sir? I know you  
25 mentioned 30 and 70 percent. How does that 30 and 70 percent



1 lead you down the road to believing that this is out of the  
2 solvent extraction building?

3 A The solvent extraction building is the only place  
4 where we use tributyl phosphate. And although this wasn't  
5 specifically identified as tributyl phosphate, there is  
6 little doubt in our laboratory's report that it is  
7 essentially tributyl or degraded tributyl phosphate.

8 MR. SHAPIRO: I'm sorry, for my own clarification,  
9 Mr. Knoke, when you say it's not specifically identified as  
10 tributyl phosphate, what does that mean? You have TBP here  
11 and it's greater than 80 percent. —

12 THE WITNESS: We feel that it is greater than 80  
13 percent tributyl phosphate. And when we turn over to the  
14 back of this sheet and we go through the calculations, I  
15 think I can answer your question a little bit better.

16 BY MR. CHAPMAN:

17 Q One bit of information I want to make sure that I  
18 understood for the record. You're saying that TBP, tributyl  
19 phosphate, is only used in the solvent extraction building in  
20 this facility?

21 A Yes, sir, that's where it's used. I'm not sure  
22 where all it might be stored or how it comes in and how it  
23 gets over there, but tributyl phosphate is used there and in  
24 the laboratory.

25 Q Well this brings up an interesting point to me

1 also. If -- on these other laboratory analyses that we  
2 discussed some in the past that took place between August 1  
3 and August 22, there's TBP present in these. Are you saying  
4 that would also be an indicator to someone that probably this  
5 solution is from the solvent extraction building, because it  
6 has a TBP concentration in it?

7 A It should be, yes.

8 Q So I guess what I'm asking, to make sure I'm  
9 somewhat clarified on this, someone in the plant looking down  
10 in the excavation and seeing a liquid in the plant with  
11 tributyl phosphate, which we've kind of identified as a brown  
12 substance and usually floats on the top of water -- would  
13 probably indicate to those people it is a solvent extraction  
14 solution.

15 A That is correct. To clarify a little bit more, I  
16 think we had some samples submitted requesting TBP and/or  
17 hexane that really didn't have any measurable amount of brown  
18 material floating on the surface that, again, was something  
19 that we could determine at that level. We could make an  
20 educated estimate.

21 Q Yes, sir, I understand what you're saying, but I  
22 just wanted to indicate what tributyl phosphate looks like in  
23 a kind of floating natural state that someone could observe,  
24 and to tie in the fact that if you see a brown liquid which  
25 is identified to some degree as tributyl phosphate floating

1 on top of a water solution and tributyl phosphate is  
2 primarily used in the SX building, the logical conclusion  
3 would be that the solution has come from the solvent  
4 extraction building.

5 A That's correct.

6 Q Okay, sir. And of course, it's well established, I  
7 believe, that the solvent extraction area has uranium flowing  
8 through the process there.

9 A That's correct.

10 Q Which is mixed in with these solvents as it goes  
11 through the process flow through the plant. —

12 A Correct.

13 Q Okay, sir. Now let's then turn over on the back  
14 side of this and rather than me ask several questions, if you  
15 would, if you would identify these things the best you can  
16 and just tell me what these notations mean. And again, for  
17 lack of a better term, there are some little cash register  
18 receipts or ticker tapes, as we've somewhat identified these  
19 as.

20 A Okay, let's just work our way down from the top,  
21 and the top being the printout that says 121 and then a 125.

22 Q All right, sir.

23 A This is the uranium analysis on what is called  
24 Matrix 125, which is a procedure that is set up for the  
25 determination of uranium in grams per liter in tributyl

1 phosphate/hexane mixtures.

2           Going across -- do you want everything identified  
3 that's on here?

4           Q    I think, sir, for the purpose of this, it'd be  
5 best.

6           A    Okay, on the first line, the next thing is the  
7 letter "B" which indicates the background line, it's  
8 something that we're going to ratio the uranium to, to come  
9 up with our final answer. The next number, 4353, is the  
10 count rate, total counts accumulated in the ten second  
11 period.

12                   Dropping down to the next line, we're still on  
13 Matrix 125, the first -- there is a letter "U" and then we  
14 count a point for the background on uranium -- beside the  
15 uranium peak. The number there is 4487 counts accumulated in  
16 a ten second period.

17                   The third line, again in Matrix 125, again we're  
18 counting uranium and this time we're counting the peak of the  
19 uranium L-alpha line for a ten second period. The computer  
20 than takes over after it gets these three pieces of data and  
21 it calculates the grams per liter uranium in the solution by  
22 first subtracting this background from the uranium peak --

23           Q    Which is 4487?

24           A    4487 subtracted from 118,255 and then ratioing that  
25 difference to the 4353 that shows up in the first line. This

1 ratio is then related to the grams per liter uranium in the  
2 solution by means of a standard curve that we run  
3 periodically to restandardize or check the standards.

4 The next line down states the date and the time,  
5 and this was August 7 at 11:32 a.m., 47 seconds.

6 The next line down is the position in the sample  
7 changer of the x-ray. This is a ten-position unit, it was in  
8 position number one. Then some ID on the sample which is  
9 just SX exc, for solvent extraction excavation.

10 The next line down is Matrix 125 uranium and it  
11 prints out as 8.412 with a percent sign behind it. The —  
12 percent sign on this software as supplied with the x-ray  
13 always -- it always prints out a percent, whether we're  
14 dealing in grams per liter or whatever. They didn't leave us  
15 this option to change this thing. This always prints out, at  
16 this point, in percent. We know it to be grams per liter.

17 Q Okay, sir, just for the record then, this 8.142 and  
18 a percent sign means 8.142 grams per liter?

19 A 8.412 grams per liter.

20 Q Yes, sir, and we should disregard the percent sign?

21 A That percent sign, that's right.

22 Q Okay, sir.

23 A Okay. Next to that are some handwritten numbers  
24 and those handwritten numbers are to convert that grams per  
25 liter to percent. And what Mr. Mandell has done is to take

1 the specific gravity from the preceding page and he's  
2 transcribed one number wrong, the third digit I think  
3 originally was a .2, .974 and he has transcribed this as  
4 .971, but it has no effect on the final calculation. He has  
5 multiplied that .971 by 1000 which is the number of  
6 milliliters in a liter, so we end up with the weight of a  
7 liter of solution.

8 So what we have there is uranium in grams per liter  
9 of 8.41 divided by the weight of a liter of this solution  
10 multiplied by 100 to give you percent, and he came out with a  
11 number of .87 and that is a percent mark there behind that--  
12 and he has changed it to equal to or greater than .87.

13 This isn't a standard test or a standard sample, so  
14 there was a lot of -- there can be a lot of variance in the  
15 analysis or some variance in the analyses.

16 Q While we're right here, for the record, on the  
17 front of this page he expressed percent of U as 1.0. Do you  
18 feel he merely rounded up the .87 to one?

19 A Absolutely. This, as I said, wasn't a real good  
20 sample and we were feeling our way through this and rounded  
21 it off to a whole number here.

22 Q As also a matter of information, a one percent  
23 solution of uranium, is there a measure by which you can  
24 convert this into what it means in grams per liter? Would it  
25 be correct that a one percent solution, just for some sort of

1 reference point, is ten grams per liter?

2 A That's correct.

3 Q How would one arrive at the fact that's ten grams  
4 per liter? I believe you told me that earlier. What's the  
5 mathematical calculation that would --

6 A Grams per liter, a liter of pure water or solution  
7 weighs 1000 grams. If you take one percent of that, you  
8 would be multiplying that by .01, which would be ten grams.

9 Q Okay, sir. So looking again at the back sheet  
10 here, having .87 percent and using the same basic calculation  
11 you did, easily can be said that that's somewhere around 8.7  
12 grams per liter?

13 A Right, it's actually the 8.4 is what it is, and our  
14 density was -- specific gravity was a little bit less than  
15 one.

16 Q Right. So I wanted to turn back over again and  
17 reference the front sheet. If I was someone in the operation  
18 al end of Sequoyah Fuels, would it be foreign to me to see  
19 something expressed in one percent? And if it is somewhat  
20 unusual, would I still have a working knowledge, you think,  
21 that one percent is ten grams per liter?

22 A Would you -- you asked about three questions there.  
23 You want to go through them one at a time?

24 Q All right, sir, I'm sorry. Is it foreign to anyone  
25 in the operations facility to see uranium or any other

1 chemical expressed in a percentage factor?

2 A It is unusual for them to see a liquid sample  
3 expressed in percent.

4 Q But it's not uncommon?

5 A No, it happens.

6 MR. SHAPIRO: It's unusual but it's not uncommon?  
7 I'm not trying to play with words either. I mean, I think it  
8 is uncommon and I think it is unusual.

9 THE WITNESS: Yeah, unusual, it's uncommon but it  
10 does happen. Okay?

11 BY MR. CHAPMAN:

12 Q I guess what I was getting to by uncommon, it  
13 wouldn't totally throw someone off if it came across their  
14 desk, it would not be something that's never been seen or  
15 even understood amongst the operations facility people, that  
16 some things are measured in percentage factors.

17 A That's right.

18 Q I believe you told me prior to the interview that  
19 soil is sometimes expressed in percentages.

20 A Soil, solids, whether it be soil or anything, will  
21 routinely be reported in percent.

22 Q Now would I be somewhat correct in the fact that  
23 solids and soils are expressed in percentages -- that those  
24 same values hold true, that one percent of a soil analysis  
25 expressed in percent means a certain number of uranium



1 concentrations in that?

2 A It's a certain percent of the material is uranium,  
3 right. If you have 100 grams of soil and you say that it's  
4 one percent, then there's one gram of uranium there.

5 Q So would, in all fairness to whoever is looking at  
6 this soil -- this laboratory sample -- would they have to  
7 know the measure of water being submitted to know what the  
8 relative value of one percent is?

9 A First, this wasn't water, this was an organic.  
10 However, the specific gravity is located here, so they know -  
11 - they can calculate or estimate the weight of a liter of -  
12 material or a given measure of material. And then percent  
13 then can be converted to grams per liter.

14 Q So knowing a specific value written on the front of  
15 the sheet is an indicator that will make some sort of sense  
16 out of this one percent.

17 A That's right -- that's right.

18 Q If I, as an operations person, say operations  
19 manager or project manager for this excavation or even the  
20 Senior Vice President of this facility, saw this percentage  
21 of uranium expressed in one percent with the specific gravity  
22 notation, would I have a fairly knowledgeable understanding  
23 of what one percent means, in your opinion?

24 MR. SHAPIRO: We haven't really talked about this  
25 much, but it's a reasonable -- close to the line of being

1 speculation.

2 MR. CHAPMAN: I understand. But the reason I asked  
3 that is that Mr. Knoke brought up the fact that with this  
4 number on the face -- it is a reference point for people to  
5 use when they read these numbers up here and I'm trying to  
6 establish basically the correlation between the two and how  
7 someone in operations would be able to make some sort of a  
8 direct correlation between the two.

9 THE WITNESS: If anybody wanted to convert this to  
10 grams per liter from percent, I think any of our operations  
11 personnel or our technical personnel can easily go from one  
12 unit to the other.

13 BY MR. CHAPMAN:

14 Q Okay, sir. And we'll go back -- since we discussed  
15 the front here, let's go back to the back side a moment and  
16 look at the remainder of the notations on the back.

17 A Okay, there are -- you see where the three strips  
18 of paper have been taped to this unit, this being a xerox  
19 copy. The first one on the left and to the left of it is  
20 written gross and tare, is a gross weight and tare weight on  
21 the sample of material. It was placed in a container of some  
22 sort, probably an aluminum weighing dish, and we weighed the  
23 empty dish and then put some material in the dish and weighed  
24 it. The difference between the gross and the tare was shown  
25 down below the line where it says percent hexane, as 10.8325

1 grams of sample.

2           What we did was take that sample, and since we do  
3 not have gas chromatography or IR, infrared spectrometry, we  
4 did this just by driving off the volatiles which we would  
5 assume to be hexane, if this was an all organic sample, and  
6 it appeared to be. I don't remember seeing the sample, I  
7 don't know if I should say that it appeared to be this, but  
8 I've seen other samples of this material floating on an  
9 aqueous solution. We dried it for one hour and reweighed it  
10 and calculated the change in weight over that period of time.  
11 It was then dried for another hour to see if there was any--  
12 further loss and there was a slight loss going from 38.8470  
13 to 38.8460 with the loss of one milligram during the second  
14 hour of drying.

15           We used the first weight, after being dried for one  
16 hour, and we took the loss on weight of the material which  
17 was 1.0909 grams, divided by the original sample weight,  
18 which was 10.9 grams, multiplied by 100 to convert it to  
19 percent, and we came up with a percent hexane of 10.08 and  
20 then with a note here that it was reported as 10 percent.

21           Q     Okay, sir. The TBP is shown by which calculations?

22           A     The TBP is not shown by any calculations on there.  
23 We had ten percent hexane, ten percent volatiles, we had one  
24 percent -- approximately one percent uranium and this was  
25 reported on TBP as greater than 80 percent, just by

1 difference.

2 Q So there's no actual --

3 A No actual measurement of the TBP other than --

4 Q I guess what I want to make sure is that you feel  
5 fairly comfortable and fairly certain of this 80 percent  
6 number?

7 A Yes, sir.

8 Q Through your laboratory and technical experiences.

9 A Since this time, and for my own benefit, I have  
10 compared this brown liquid to pure tributyl phosphate and  
11 looking -- again, I can't look at tributyl phosphate per se,  
12 but I can look at the phosphorus in it there, and a scan x-  
13 ray -- a semi-quantitative x-ray scan, puts the phosphorus  
14 level at about the same point. And I've been asked to do  
15 this just a week or so ago by an outside firm.

16 Q Okay, sir. So without getting too technical on the  
17 record then, you feel very, very comfortable and confident in  
18 that 80 percent number?

19 A That's right.

20 Q Okay, sir. Now I'd like to call your attention on  
21 the back of that same sheet to some numbers at the opposite  
22 end of what we've discussed to some degree, and I'd like to  
23 also make reference to the fact that on the same computer  
24 printout, these numbers appear to have occurred at 11:26,  
25 some six minutes before the ones we went into some discussion

1 about, and they also reference U numbers.

2 A That's correct.

3 Q Is this the same sample?

4 A This is the same sample. And as I stated, we  
5 weren't sure what to do with this sample, it didn't fit any  
6 of our normal things. This matrix number or method number on  
7 this is 135, which stands for a procedure we have for uranium  
8 in waste water.

9 Q So for the record, the difference between the 125  
10 identifier and the 135 is the different test procedures?

11 A Different test procedures -- different set of x-ray  
12 parameters, different type of sample going into the x-ray  
13 unit.

14 Q Okay, sir.

15 A In talking with Mr. Mandell on this particular  
16 sample, he ran it both ways because he didn't know which was  
17 going to be sufficient. He thinks that he diluted this one  
18 by a factor of ten with isopropyl alcohol, even though --  
19 with some alcohol -- although it doesn't show any dilution on  
20 the sheet. So I can't really comment on that.

21 Q Let me ask you, if he did do that skew these  
22 results?

23 A No, no.

24 Q It would have no bearing. And while we're right  
25 here, let's just make sure I asked you the difference between

1 the 125 and the 135. Just for the record, what is a 125 test  
2 -- what is the procedure, how is it identified? Has it got a  
3 number, has it got an identifier, has it got a machine or --

4 A It has the procedure number or name and I'm trying  
5 to remember the exact name of the procedure is uranium in  
6 organic solutions, and it is made to analyze the amount of  
7 uranium in our solvent extraction stream, which is TBP and  
8 hexane.

9 Q And 135 is a --

10 A Is a procedure for measuring uranium in waste oil  
11 that accumulates around the plant, drained out of a fork -  
12 truck or wherever it may come from.

13 Q Okay, but both of them are very well established  
14 procedures and both of them have been proven to be effective?

15 A That's right, and both of them are inorganic, but  
16 we elected to use the one that was designed for the tributyl  
17 phosphate/hexane mixture because we felt that's what we were  
18 dealing with.

19 Q Okay, sir, excuse me for interrupting you, go ahead  
20 and discuss the procedure 135 here.

21 A With the 135, and in fact it was diluted by a  
22 factor of ten, the results would agree very well -- the  
23 result come out 1.031 grams per liter uranium.

24 Q Disregarding the percent sign again?

25 A Disregarding the percent sign. If you take in a

1 factor of ten dilution, that would be 10.31 grams per liter,  
2 whereas on the other -- on the TBP/hexane, we had 8.4 grams  
3 per liter. I realize these aren't perfect agreement but with  
4 the type of sample it's --

5 Q But the definitely show that the numbers eight to  
6 ten are very, very valid.

7 A That's right.

8 Q I feel very comfortable without going into a long  
9 detailed analysis, that the same type of background numbers  
10 and subtractions --

11 A Everything is the same, all of our uranium analyses  
12 in aqueous samples relate to a -- we relate the net peak to a  
13 background and use the ratio for comparing it to a series of  
14 standards.

15 Q Okay, sir. Now that we've pretty well gone over  
16 this thing in nitty gritty detail, you feel very comfortable  
17 that this information was made available to Mr. Barrett on  
18 the 7th of August --

19 A Yes, that's correct.

20 Q -- and by looking at the information we discussed,  
21 it was probably telephonically available sometime around noon  
22 of that day because the machine had printed out on the back  
23 the latest showing of 11:32 a.m.

24 A Well that's the uranium. Let's see, we don't put a  
25 date on the printer printing out the weights on the loss on

1 drying -- it doesn't put a date. So it could have been an  
2 hour or two later that these analyses --

3 Q But before the end of the day, you feel comfortable  
4 that this information was certainly available for anyone.

5 A Yes.

6 Q Okay. Do you recall anyone from the operations  
7 side or the health physics side or basically anyone  
8 contacting you about these results for discussion after they  
9 were made available?

10 A No, sir.

11 Q How about Mr. Mandell? I know you can't speak for  
12 him.

13 A I can't speak for him and I didn't ask him that  
14 question. We've reviewed all this data front and back, but I  
15 didn't ask him if anybody had contacted him.

16 Q Do you recall any meetings subsequent to this lab  
17 sheet that you were a party to or have since heard, where  
18 these percentages or this lab sheet was discussed?

19 A No, not to my recollection.

20 Q And of course, as we discussed a little earlier, on  
21 the senior staff meeting that took place on the 7th, where  
22 you went back to your laboratory and pulled out some sheets  
23 and you made a pronouncement to a couple of individuals of  
24 three grams per liter -- do you think you probably didn't  
25 have this information even available at that time, it was



1 still in the process of --

2 A No, I know that I didn't have it available at that  
3 time because what I found earlier was probably around 9:30 in  
4 the morning.

5 Q Okay, sir.

6 A And this was at noon probably.

7 Q Okay, sir. And I think also for the record, this  
8 information became somewhat of a surprise to you, probably  
9 within the last day or so that in your research of laboratory  
10 analysis for the NRC and for the Sequoyah Fuels internal use,  
11 this one did not show up on your research and for the record,  
12 I'd like for you to tell me kind of why you think it didn't  
13 show up and why it was overlooked.

14 A First, you're true, it didn't show up, and I can't  
15 be positive why it didn't. In going through the index of the  
16 special analysis files, it could have been that Gary  
17 Barrett's name didn't trigger anything for me because I may  
18 have still been assuming him as part of maintenance, he had  
19 been in this present job maybe six weeks or two months,  
20 something. The tank excavation site sample, it doesn't  
21 describe it well -- doesn't describe it exactly; however, I  
22 think I should have picked it up and put it in there.

23 Q I'm certainly not looking for blame, I was just  
24 trying to make sure that -- what I want to establish, Mr.  
25 Knoke, is you didn't know about it until just yesterday?

1           A     Yesterday morning I believe it was, and I found the  
2     sample, that's correct. I missed it.

3           Q     Okay. Is there any other information regarding  
4     this sample that you can recall or any information you think  
5     I should know about, since this was kind of a surprise to me  
6     as well?

7           A     No, I think we've covered everything on the sheet  
8     of paper. I've told you as much as I can. I think I  
9     mentioned that this statement down here is attributed to Mr.  
10    Mandell.

11          Q     The statement "it appears to be highly degradable  
12    TBP"?

13          A     Correct.

14          Q     And does that have any significance -- I notice he  
15    has a large arrow drawn up to the less than 80 percent --  
16    does that have any significance to that or --

17          A     Other than the fact that it doesn't look like  
18    reagent grade TBP. It's a dark brown, almost black mass and  
19    --

20          Q     He was merely putting some sort of descriptor of  
21    what the material's appearance was?

22          A     That's correct. And it certainly has a lot of  
23    impurities in with it.

24          Q     Okay. And I think we've discussed but I want to  
25    make sure before I move on, that TBP in this form would be a

1 brownish color, do you think, or is it hard to describe a  
2 color?

3 A It's hard to say. The TBP will pick up elements in  
4 addition to uranium in that ore; iron, anything would give it  
5 color, and this is where the color comes from.

6 Q What is TBP in its natural state, does it have a  
7 color?

8 A Essentially colorless -- essentially colorless.

9 Q Okay, sir. In light of that, we'll talk about some  
10 additional laboratory analyses that have come to light --

11 MR. SHAPIRO: Larry, could I inject a couple of --  
12 questions for my own clarification --

13 MR. CHAPMAN: Certainly.

14 MR. SHAPIRO: -- before we leave this subject?

15 I've been looking over Mr. Knoke's copy in part  
16 because my copy didn't have anything on the back. In  
17 general, if someone got a copy of the lab result, would it  
18 have the material on the back or just the front?

19 THE WITNESS: No, just the front.

20 MR. SHAPIRO: Okay.

21 THE WITNESS: If I could expand on that a little  
22 bit.

23 MR. SHAPIRO: Sure.

24 THE WITNESS: This material on the back,  
25 particularly these tapes, are just held on there with a piece

1 of scotch tape, so we keep all of our raw data and original  
2 data in the lab in a separate file.

3 MR. CHAPMAN: Let me ask a question on that because  
4 I want to also clarify something.

5 MR. SHAPIRO: Sure.

6 BY MR. CHAPMAN:

7 Q That's not unusual that they don't see the  
8 backside, it's normally the front side that always goes out  
9 to the requester.

10 A That's right.

11 MR. SHAPIRO: No, no, I wasn't suggesting it was  
12 unusual. What's unusual about this sample is that it's in  
13 percentage and the back does refer to grams per liter, and I  
14 just wanted to point out that nobody would have the back, you  
15 know.

16 THE WITNESS: No, that's correct.

17 MR. SHAPIRO: I mean they should be -- I understand  
18 that they could be held accountable for being able to convert  
19 it, but they still haven't seen the grams per liter.

20 The other question -- you were commenting on how  
21 this didn't get pulled or identified and it occurred to me --

22 I guess I should ask how the original sheet of samples did  
23 get pulled? I've sort of assumed that you put in a title  
24 like SX pit or something like that, but I guess I don't know  
25 that.

1 THE WITNESS: No. This original booklet, this data  
2 that I prepared, was taken first just on my own volition, I  
3 was trying to get together all this data for my own benefit.  
4 And what I did was take the special analysis file from our  
5 process control computer that had a lot of this data on  
6 there. And then I went through our other special analysis  
7 file that contains no data, but just lab project number and  
8 name of the sample and the analyses performed, and  
9 interspersed those in the right chronological order into that  
10 original data base.

11 MR. SHAPIRO: I see.

12 THE WITNESS: And in so doing, I missed this one.

13 MR. SHAPIRO: You made a comment, and I don't have  
14 it literally, but the comment was "this sample didn't fit any  
15 of our normal things".

16 THE WITNESS: Right, we don't normally get  
17 something that looks like this and have somebody ask for TBP,  
18 hexane and nitrates. Most of our samples come from certain  
19 tanks or certain areas within the plant and they are a  
20 routine type sample, and we have a procedure for that  
21 particular sample.

22 MR. SHAPIRO: So that -- I mean, this was an  
23 unusual sample as well as the fact that that percentage  
24 expression of uranium was unusual.

25 THE WITNESS: Was an unusual request as well.

1 MR. SHAPIRO: Okay, thanks.

2 BY MR. CHAPMAN:

3 Q One question that come to mind when he was asking  
4 you a couple of clarification matters -- I know you didn't  
5 run the sample itself, Mr. Mandell did, but tank excavation  
6 site sample, does that leave any question in your mind where  
7 this sample came from?

8 A Not at all, not now when I see it, it doesn't, no.

9 Q I mean there was only one tank excavation taking  
10 place out in this facility that we know of, and that was at  
11 the SX area?

12 A That's true, and I know that now, but what was  
13 going on during shutdown, they could have been digging up  
14 several tanks. Now I know that the one at SX was primary,  
15 but I didn't know everything that was scheduled for the  
16 shutdown work. But I can't deny that I should --

17 Q No, I'm not trying -- I'm just asking -- I'm not  
18 even suggesting that, Mr. Knoke, I was just trying to find  
19 out if I received this laboratory report, would I be at  
20 question as to where it came from, and I guess I have to  
21 establish if there was other excavations taking place, and if  
22 there isn't, then obviously we know where it came from.

23 A That's right.

24 Q Okay, sir. Let's change subject matters here if we  
25 may, and let's discuss what has been referred to commonly as

1 SX sandwell analysis. Have I discussed this with you  
2 previously?

3 A No, sir, I don't believe so.

4 Q I've talked to several people and I want to make  
5 sure I don't backtrack over a couple of areas here.

6 MR. SHAPIRO: Shocked me. I thought we discussed  
7 it with him.

8 THE WITNESS: I don't believe so.

9 MR. SHAPIRO: No, you're probably right.

10 BY MR. CHAPMAN:

11 Q Okay, sir, it also has recently come to light --  
12 and the order in which I learned them, by the way, was first  
13 that there were some pipes, for lack of a better term -- some  
14 pipes buried in the ground and I think the exact depth is  
15 unknown, but somewhere two to three feet in the ground, at  
16 various fire stations which the fire stations themselves have  
17 been located in some sort of a circle around the SX building  
18 and adjacent to and somewhat around the excavation. And for  
19 reference as we talk, you can see that the fire stations are  
20 identified as two, three, four and five. And two being -- if  
21 what I understand is correct -- two being somewhat adjacent  
22 and to the northeast corner of the excavation, fire station  
23 two. Fire station three is somewhat adjacent but to the  
24 south -- I'm sorry, northwest corner. Number four being to  
25 the southwest corner of the SX building itself. Number five

1 being to the northeast -- southeast corner of the SX  
2 building. And again, as I understand, there are pipes buried  
3 in the ground at these stations, within proximity to these  
4 stations to which liquid samples were taken. Do you have  
5 some --

6 A I can't input to that, you know more about where  
7 they are and how they take the samples than I do.

8 Q This is merely for your reference so that you'll  
9 kind of have an understanding that that's the general area  
10 we're talking about, so that as we discuss these, you'll know  
11 the area we're speaking of. -

12 Now with that in mind, I was provided some  
13 laboratory analysis, which I don't have in front of me but I  
14 do have sort of a compilation of this information from a  
15 sheet that was being maintained by the Health Physics  
16 Department as I understand it, which records a laboratory  
17 analysis. And we believe these to be fairly accurate, we've  
18 compared a few of them, so we think these numbers are very  
19 valid.

20 The first question to you, sir, is do you recall  
21 your laboratory performing uranium analysis on water that was  
22 -- or liquid that was taken from fire stations commonly  
23 referred to as sandwells?

24 A Yes, SX sandwells and/or fire stations. They come  
25 in labeled I think differently at different periods over the



1 history.

2 Q Did you and your laboratory personnel understand  
3 that these sandwells were located, in the case of the ones  
4 we're questioning, around the SX building?

5 A We realize that they're around SX due to the name,  
6 right. I didn't know the actual location until this morning.

7 Q But we feel fairly comfortable that we can rely on  
8 the fact that SX was the identifier?

9 A That's right.

10 Q Are these analyses that are run by your laboratory,  
11 are they done basically in the same fashion that all other  
12 analysis are run?

13 A No, these were analyses that were submitted and  
14 normally run by a fluorometric procedure. The x-ray  
15 procedure is good down to .01 grams per liter, which is ten  
16 milligrams per liter, which is 10,000 micrograms per liter.  
17 Okay? If we want to analyze for uranium at lower values,  
18 then you need a different procedure, and the standard  
19 procedure for doing that is fluorometric. You deposit a  
20 small amount of liquid on a sodium fluoride, lithium fluoride  
21 disk, you fuse it, you put it in an instrument and bombard it  
22 with ultraviolet light. The ureneoline (ph.) fluoresces and  
23 you may relate the amount or fluorescence to the  
24 concentration of uranium through a standard curve.

25 Q But of course these values and this testing

1 procedure is as valid as any of the others.

2 A That's correct.

3 Q You have full confidence in them, that they will  
4 measure with the accuracy established in the parameters of  
5 the procedures.

6 A That's correct.

7 Q So consequently, we can rely on this information as  
8 being factual within the parameters of the testing  
9 procedures.

10 A That's correct.

11 Q Now since I'm not a technician in this area and --  
12 certainly not an expert -- and I'm getting an education in a  
13 hurry here -- there's a lot of values on the sheet that range  
14 from an extreme of 416,000 micrograms per liter back in the  
15 '80s down to as low as 1246 and maybe even lower than that.  
16 And I guess what I want to understand is with these large,  
17 extreme values, and they seem to go up and down on this sheet  
18 here, are there different test procedures, if they rise up  
19 and down?

20 A That's right. During the history of these, the  
21 normal procedure was to run them by this fluorometric, the  
22 low level analysis. At times the analyst performing the  
23 analyst would say this is off-scale, we can't do it this way.  
24 We would then go in and do it by x-ray fluorescence.

25 Q Again, we have the same confidence in those

1 procedures as we do any others.

2 A That's right.

3 Q And all I'm trying to establish is that there's not  
4 much chance that we've got numbers that are being drawn out  
5 of here because procedures have caused them to be --

6 A No, sir, these are --

7 Q -- wildly changing.

8 A -- the fluorometric analysis is good at the low  
9 level, the x-ray is very good at the intermediate level.

10 Q Okay, I wanted to establish the validity of the  
11 numbers before we got into relying on their usage as we --  
12 talked.

13 MR. SHAPIRO: I've always relied on the  
14 fluorometric method myself.

15 (Laughter.)

16 MR. SHAPIRO: I was hoping we could discuss the  
17 fact.

18 THE WITNESS: We could talk about the new laser.

19 MR. SHAPIRO: Yeah.

20 BY MR. CHAPMAN:

21 Q Now the laboratory information I have here  
22 indicates that the procedures have been going on since at  
23 least January of 1980 and continued up as late as May of '89.

24 A That's correct.

25 Q You probably weren't lab manager at that period of

1 time, but just for your information this is the time range  
2 that I have.

3 A That's correct.

4 Q You became laboratory manager in what year?

5 A 1986.

6 Q 1986. Were you -- when you became laboratory  
7 manager, were you fully cognizant of these samples being  
8 taken and being ran and the information being distributed  
9 back out to the requesters?

10 A Right, these were being done from my group in the  
11 laboratory before I became manager.

12 Q So your group was even familiar with these being in  
13 existence prior to being manager?

14 A That's right.

15 Q And when was your earliest knowledge of these  
16 samples being taken?

17 A I knew that they'd been around for a long time.  
18 Now in the last couple of weeks I've been thinking about  
19 this, talking about this -- I knew that they had been around  
20 for a long time, I really wasn't sure when they had started.  
21 But you said 1980, I'll put them back in the mid to late '70s  
22 probably. They've been around forever, for all practical  
23 purposes.

24 Q Of course all the data I have is for the '80s and  
25 probably back in the '70s gets even further. With this

1 information in hand and reporting this information back out  
2 to the various requesters, then do you feel there was an  
3 understanding amongst the staff, other than the laboratory  
4 staff, that there was uranium product in water solutions or  
5 liquid solutions around the SX building? That's been known  
6 by the laboratory, in fact you yourself, for some period of  
7 time.

8 A Yes, sir.

9 Q I believe I've asked you earlier, you're not  
10 familiar with, as a laboratory manager, action levels or  
11 release levels that the NRC has applicable, or do you have  
12 that knowledge?

13 A The knowledge I think is available in the license,  
14 but I don't -- I'm not that familiar with that. My primary  
15 concern is performing an analysis or seeing that the analysis  
16 is performed and sending out the correct number. The  
17 submitter has to know where the sample comes from and what  
18 any ramifications might be.

19 Q So as far as your position, you have no  
20 responsibility as far as action levels or any requirement  
21 that you --

22 A There are some action levels now that the  
23 laboratory has responsibility for.

24 Q But prior to this August event -- we're primarily,  
25 as you remember, keeping our conversations restricted to

1 prior to August 22, 1990. I realize there's been several  
2 changes since then --

3 A That's right.

4 Q -- and several educational and awareness programs  
5 around here. The reason I asked you a couple of these  
6 questions is because on August 30, 1990, you put out an  
7 internal correspondence memo from yourself specifically  
8 identified, to Lee Lacey and this says "Subject: SX  
9 investigation". The first question that came to my mind  
10 before I get into the contents of the letter is, what SX  
11 investigation and whose SX investigation. -

12 A The SX investigation that was going on during the  
13 month of August.

14 Q By whom?

15 A By the NRC.

16 Q Okay, sir, just for information, the Office of  
17 Investigations did not make a visit until September.

18 A Okay, I wasn't sure when you were here, so --

19 Q Yes. Well that's just for your information. Would  
20 this be -- were you writing this in response to some of the  
21 NRC inspectors comments of Sequoyah Fuels personnel questions  
22 to you?

23 A To the best of my knowledge, I wrote this in  
24 response to a request by our management, and I think this  
25 came from the NRC, for everybody to search their mind about

1 anything in the past that could be connect with this or  
2 should be reported or anything similar to this.

3 Q Okay, sir. Do you recall if that was a written  
4 request to you from management or a verbal request? And I'll  
5 add a second question, when did you get it and how.

6 A I don't recall -- I know I heard it verbally, I  
7 don't know if it was written and I don't know exactly when it  
8 came out. I'm not positive this is in response to that, I  
9 think it was. But it might have been something that just  
10 came to me, that I did on my own.

11 Q One question to me is could this information be the  
12 result of Mr. Cook's, Reginald Cook's task that had been  
13 given to him by the President of the company to draw data  
14 together?

15 A This well could be, yeah.

16 Q You don't recall?

17 A He didn't -- nobody asked me for this information.  
18 There was -- at some period in time, and I don't what to  
19 state categorically that this is a response to it, because  
20 the request might have been after this date, but at some  
21 point in time, there was a request to search our memories and  
22 report anything -- or try to think of anything that we could  
23 remember.

24 Q Okay, sir. I want to read for the record the  
25 contents of this memo and then I want to discuss what your

1 mindset was and what your intentions were.

2 A All right.

3 Q And I quote, the memo of August 30, 1990 says, "At  
4 one time there was a series of samples that were routinely  
5 submitted for uranium analysis under the name of 'SX fire  
6 stations and/or sandwells'. I am not familiar with the  
7 location of these sample points, but this data might possibly  
8 be of value in the investigation of the SX history. This  
9 data should be in the Health, Safety and Environment files."  
10 And of note, it has copies to J. Mestepey, which is James  
11 Mestepey, and M. Nichols, which is Michael Nichols. And --  
12 that's the end of the letter information.

13 I guess one of the questions I'd like to know is  
14 once you sent this out, did you receive any comments, did you  
15 receive any correspondence back from any of the three  
16 individuals identified on here; Lacey, Mestepey or Nichols?

17 A No, sir.

18 Q Did you bring this back up to them at any time  
19 after you sent this memo out?

20 A No, sir.

21 Q Did you mention this information to any management  
22 meetings once you put this memo out?

23 A No, I didn't.

24 Q Okay, sir, what was -- if I've read the  
25 information, what was the reason you took it upon yourself, I



1 guess you said kind of at your own volition, you assimilated  
2 this data and sent it to Mr. Lacey -- why did you send it to  
3 Mr. Lacey versus someone else?

4 A Because at this point in time, he was the one that  
5 was gathering this information, and as I said earlier, I  
6 think this was in response to this request for information.  
7 Be it SX or anything else that anybody could think of around  
8 the facility. And I sent it to him because he was the one  
9 that I thought was compiling all this information.

10 Q Sir, do you recall if -- I asked you this again,  
11 but I want to make sure I'm correct -- do you recall if --  
12 during the course of Mr. Cook -- the Comptroller -- task,  
13 investigation, that he ever brought this subject matter up to  
14 you?

15 A No, he never did.

16 MR. SHAPIRO: Has he ever seen this?

17 THE WITNESS: This particular subject matter?

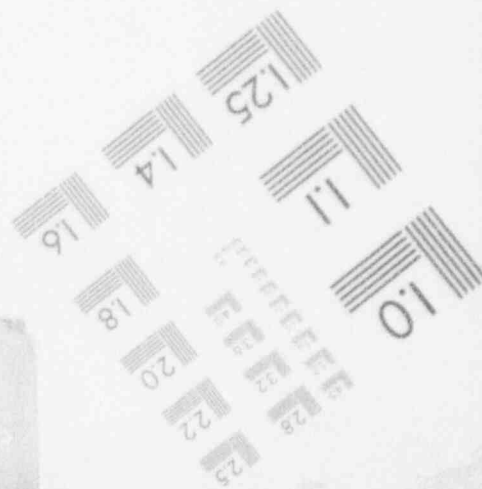
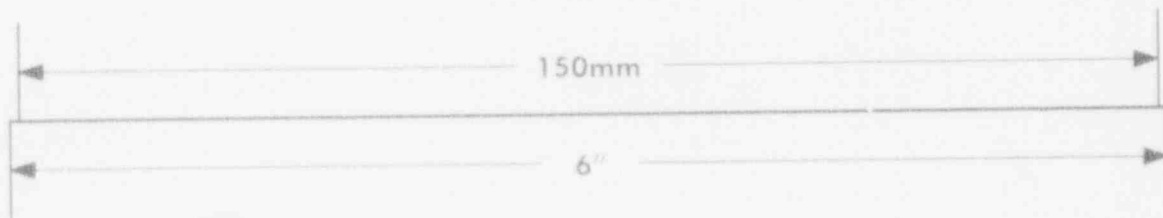
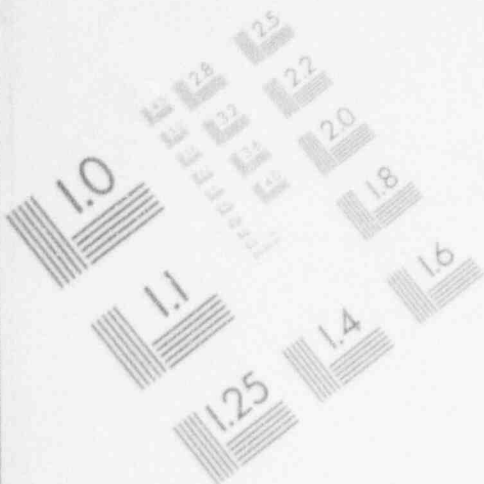
18 MR. SHAPIRO: Yes.

19 THE WITNESS: He has now, but at that point in time  
20 I don't think he had.

21 MR. CHAPMAN: I was going to get into that. I  
22 figured we may even have to ask Mr. Cook again if he was made  
23 privy to this information at the time he was tasked with an  
24 internal investigation. We may have to draw him back up here  
25 and get his comments on that.

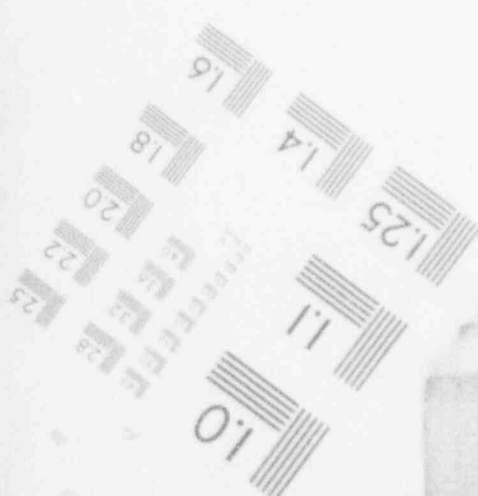
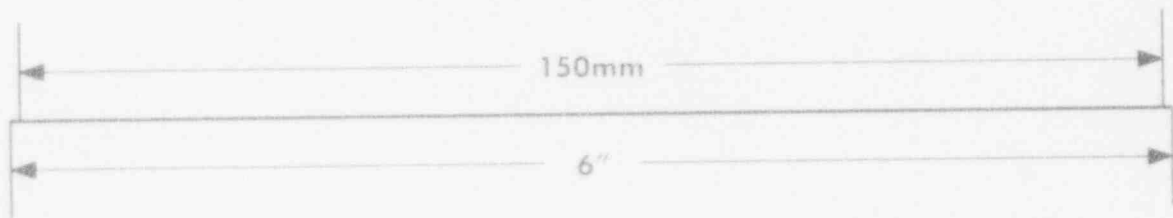
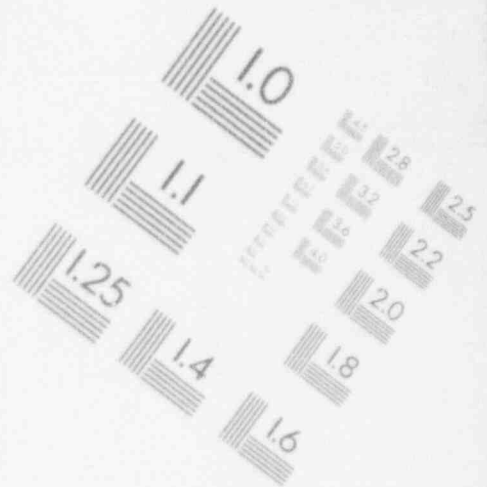
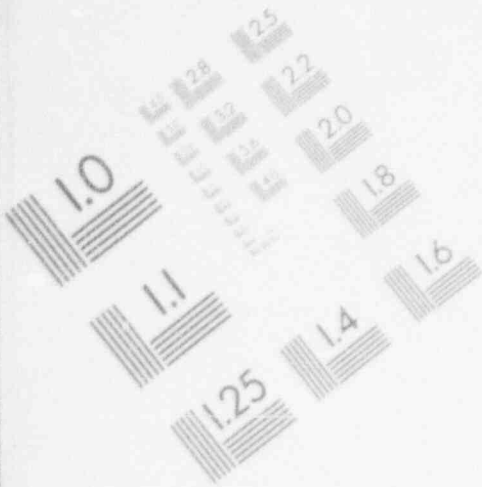
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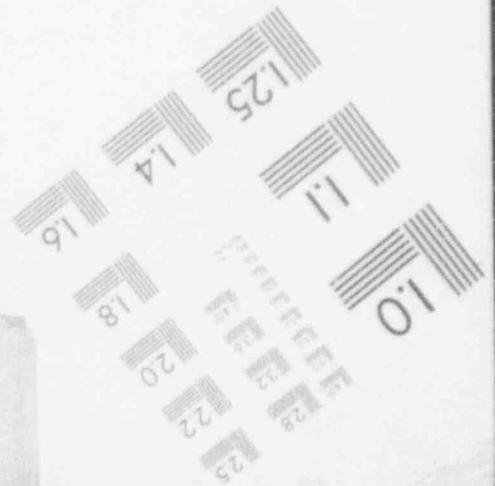
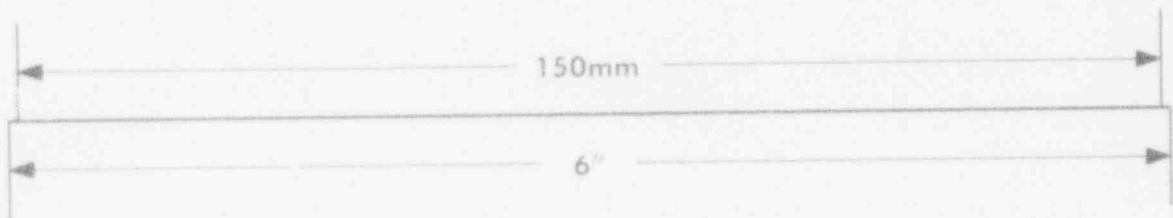
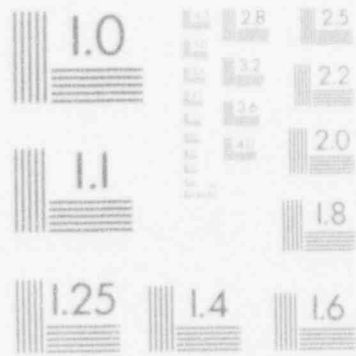
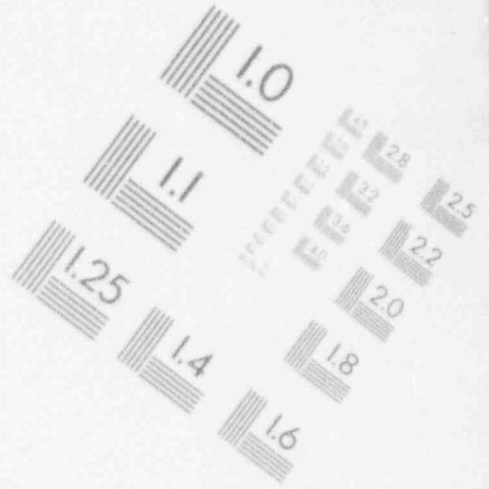
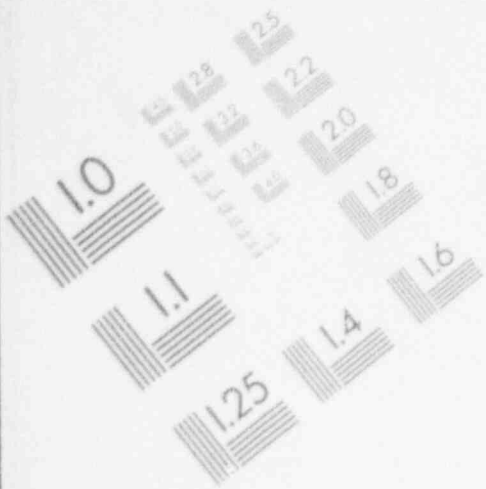
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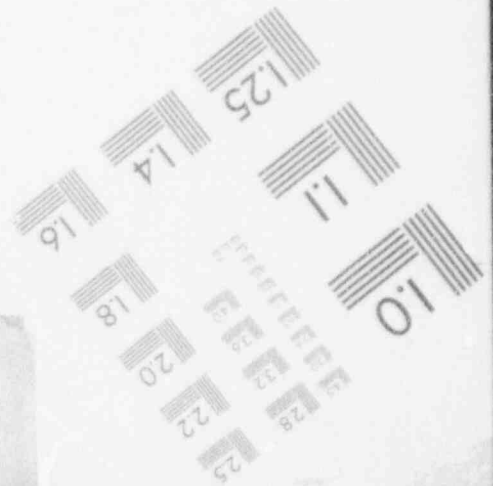
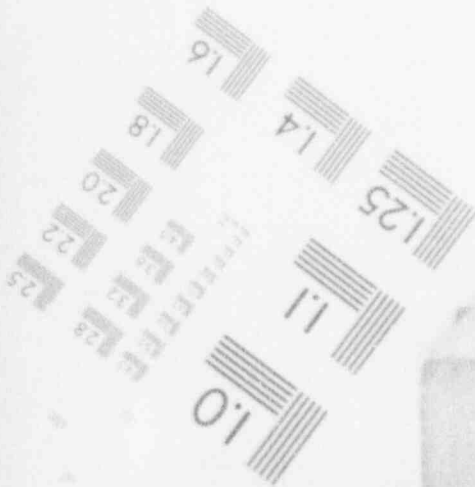
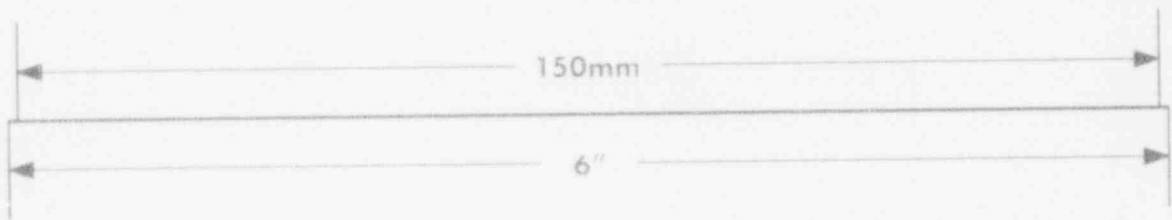
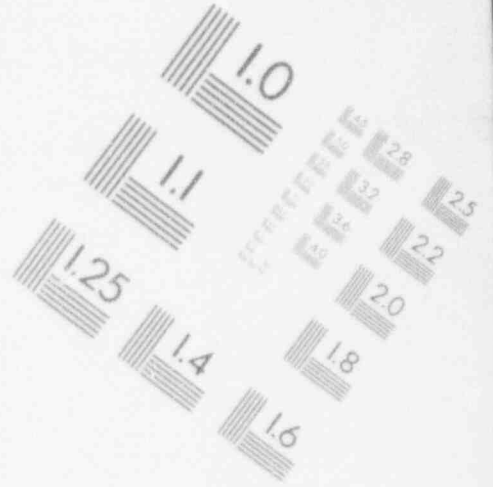
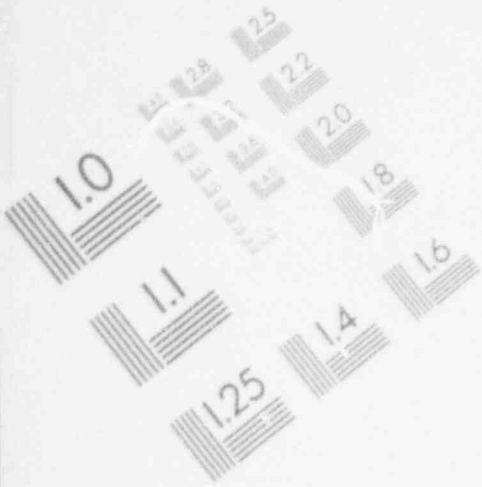
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## IMAGE EVALUATION TEST TARGET (MT-3)



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## IMAGE EVALUATION TEST TARGET (MT-3)



1 MR. SHAPIRO: No doubt.

2 BY MR. CHAPMAN:

3 Q I'm a little lost in my train of thought because I  
4 got off of it, but I believe I did ask you why you took it  
5 upon yourself to do this and you said because you felt this  
6 was somewhat germane to the issue being discussed. I guess,  
7 why would you feel it's germane to the SX matter?

8 A Because I knew that there were -- at some times in  
9 the past, there had been sample results that we couldn't do  
10 by the fluorometric, that we had to go to x-ray, so that the  
11 results -- the uranium levels were somewhat elevated. And I  
12 knew that there was a long history of these analyses and I  
13 thought this history would be very good in seeing what had  
14 been happening out in the SX yard.

15 Q And of course for the record, this is liquid  
16 samples, this is not solid samples.

17 A No, these are liquid samples.

18 Q Are they water samples, do you recall, or would it  
19 make a difference to us whether they were a water solution?

20 A They were an aqueous solution, not organic.

21 Q And I know this is probably stretching your  
22 recollection, but would these samples have any color to them  
23 that you can ever recall?

24 A I can't recall, it's been too long since I've  
25 actually seen them.

1           Q     And my main reason for asking that is I'm trying to  
2 understand if these samples are of the same type of yellow  
3 tint that was being noticed in the SX excavation.

4           A     I can't answer that definitely, I don't recall  
5 seeing the samples.

6           Q     Okay, sir.

7           A     Or remember the color of them.

8           Q     Okay, so just to kind of recap what I understand in  
9 my mind that you're saying, is that after this matter of the  
10 SX excavation became known to the NRC, through a means you  
11 don't know exactly, you knew that this type of information-  
12 was available in your laboratory, you took it upon your own  
13 volition to assimilate it to some degree and to put out a  
14 notice to Mr. Lacey that there was some data in your  
15 laboratory available which could very well have a bearing on  
16 the SX area itself.

17          A     The first part of that is all correct. The data  
18 wasn't necessarily available in my laboratory, it had been --  
19 most of it had been filed away in chronological order and  
20 was in dead file storage. That is the reason for the comment  
21 in there about the Health Physics file because it was --  
22 although I hadn't seen the file, I felt certain that there  
23 was one that had the entire history and with just the SX  
24 wells in one particular file folder, whereas mine would be  
25 scattered over one in each month of data, something of this

1 sort.

2 Q Okay. All right, Mr. Knoke, just so we have the  
3 record clear, there were no additional correspondence  
4 referencing this subject matter sent out by you after August  
5 30, up until probably the middle of September --

6 A About a week ago.

7 Q About a week ago. And the reason I asked that,  
8 during my tenure since I came here in September of '90, there  
9 was no more correspondence ongoing at the time that I've been  
10 here.

11 A No.

12 Q Okay. And you have not received any return  
13 correspondence from these individuals; Lacey, Mestepey or  
14 Nichols, nor have you had any conversation with these  
15 individuals in reference to this memo?

16 A Not until the past week.

17 Q Until the past week, sir. Did your discussions  
18 with these individuals in the past week -- did they indicate  
19 that they had been aware of this memo?

20 A No, the only person I've talked to in the past week  
21 concerning the memo -- the only two people I've talked to  
22 were Reau Graves, and I gave him a copy of the memo, and  
23 shortly thereafter I saw Jim Mestepey and he said did you --  
24 I hate to quote him because I don't know if I can quote him  
25 correctly -- did you inform me of SX sandwells and I said



1       yes, I sent you a copy of a memo that I submitted to Lacey on  
2       these things.

3             Q       Okay. Just so that I understand what the rest of  
4       the letter means, it has "VW3/sample/NPS", is that strictly  
5       identifiers or something or did you send some samples as  
6       attachments, or does that have any bearing?

7             A       No, this was identification by my secretary at the  
8       time Nancy Stone stating that the copy of this memo was filed  
9       in the VW3 which is Volkswriter 3 and sample is the name of  
10       the memo.

11            Q       So there was no attachments to this memo?       -

12            A       No.

13            MR. SHAPIRO: Could I add one question?

14            MR. CHAPMAN: Certainly.

15            MR. SHAPIRO: Since Mr. Chapman has tried to  
16       explore what prompted you to write the memo in the first  
17       place, do you think you could have been responding to the  
18       fact that in the period around August 22 when the decision  
19       was made by Sequoyah to notify the NRC, there was also a  
20       decision made to begin immediately characterizing the site --  
21       were you aware of that?

22            THE WITNESS: I was aware of that. I still feel  
23       that what prompted this memo was the -- following the exit  
24       meeting with the NRC -- and I'm not sure what the dates of  
25       these meetings were, right in this last week of August -- and

1 again, being challenged by the NRC and by management to  
2 remember things in the past, is what prompted this.

3 BY MR. CHAPMAN:

4 Q While he's jotting that down, I guess one thing  
5 that just occurred to me is why didn't you clue Mr. Graves in  
6 as a copy of this letter?

7 A I was walking through the office, and I can't put a  
8 date on this, but one day last week and he called -- he was  
9 in Mr. Lacey's office --

10 Q No, sir, I'm sorry --

11 MR. SHAPIRO: He means originally. -

12 Q I meant originally, why didn't you give Mr. Graves  
13 a copy of this memo.

14 A I gave it to my boss, my next in command and I  
15 filled him in on it just because I felt that he should know  
16 what I was doing.

17 Q Your boss being?

18 A Jim Mestepey. And I didn't go further than that.  
19 And there was no reason for not doing it.

20 MR. CHAPMAN: Okay. Any more questions?

21 MR. SHAPIRO: No. Thanks.

22 MR. CHAPMAN: Is there anything else -- since this  
23 is somewhat of a surprise to me and I haven't had a chance to  
24 chase down all the avenues around it, is there any additional  
25 information so that we may not have to get you back up here

1 again for further discussions that have a bearing on this, or  
2 something you know should be brought to light?

3 THE WITNESS: No, I think we've covered everything  
4 on these two items that I could shed any light on.

5 MR. CHAPMAN: Okay, sir, do you have any additional  
6 information regarding anything? And I'll give you an  
7 opportunity even to discuss something we've mentioned in our  
8 earlier conversation a couple of days ago if you feel it's  
9 germane?

10 THE WITNESS: There's been one -- I don't know if  
11 it's germane or not, but there's been one thing that I -- one  
12 question that I answered that I really didn't care for the  
13 way I answered it.

14 MR. CHAPMAN: All right, sir.

15 THE WITNESS: And that goes back to -- I think you  
16 were asking me if following the August 7 meeting, if I told  
17 Jim Mestepey about this. And I was sitting here shaking my  
18 head and I realize that that wouldn't go too well with the  
19 recorder and so I came out with a definite "no". And as I  
20 thought about it later that evening, I really wasn't  
21 satisfied with that and I would rather have said "I don't  
22 think so" or "not to my knowledge" did I tell him. I thought  
23 that "no" was too positive a statement.

24 MR. SHAPIRO: Are we talking now about the  
25 aftermath of the meeting when you returned with some lab

1 data?

2 THE WITNESS: Yes, I told several people and I  
3 think the question come up did I tell Jim and I made no  
4 special effort to tell him, but I don't know whether I did or  
5 not.

6 MR. SHAPIRO: For the record, I recall that you say  
7 you told Lacey and Adkisson.

8 THE WITNESS: And Adkisson.

9 MR. SHAPIRO: And then there were others who might  
10 have been there before.

11 THE WITNESS: There were -- Richard Parker and a-  
12 few other people were still in the conference room, but I  
13 told -- Adkisson and Lacey were told separately outside the  
14 conference room.

15 BY MR. CHAPMAN:

16 Q It probably comes as no surprise to you neither one  
17 of these two gentlemen recall your conversation.

18 A I've heard that.

19 Q But you feel very confident in your statement?

20 A Absolutely.

21 Q Absolutely.

22 A Absolutely.

23 Q Anything else, Mr. Knoke?

24 A No, sir.

25 Q Mr. Knoke, have I or any other NRC representative

1 threatened you in any manner or offered you any reward in  
2 return for this statement?

3 A No, sir.

4 Q Have you given this statement freely and  
5 voluntarily?

6 A Certainly.

7 Q Is there anything further you care to add to the  
8 record at this time?

9 A No, sir.

10 MR. CHAPMAN: The time is now 11:30 a.m., and the  
11 interview is now closed. Thank you, Mr. Knoke. -

12 (Whereupon, the interview was closed at 11:30  
13 a.m.)

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C E R T I F I C A T E

This is to certify that the attached proceedings before the  
U. S. Nuclear Regulatory Commission in the matter of:


Name: Investigative interview of Donald R. Knoke

Docket Number:

Place: Gore, Oklahoma

Date: March 5, 1991

were held as herein appears, and that this is the original  
transcript thereof for the file of the United States Nuclear  
Regulatory Commission taken stenographically by me and,  
thereafter reduced to typewriting by me or under my  
direction, and that the transcript is a true and accurate  
record of the foregoing proceedings.

  
\_\_\_\_\_  
William L. Warren  
Official Reporter

Ann Riley & Associates