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Trial Transcript, Vol. 35, Afternoon Session

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File # 142

4393

IN THE DISTRICT COURT FOR THE FIFTH JUDICIAL DISTRICT

WASHANIE COUNTY, STATE OF WYOMING

IN RE:	)
THE GENERAL ADJUDICATION OF RIGHTS TO USE WATER IN THE BIG HORN RIVER SYSTEM AND ALL OTHER SOURCES, STATE OF WYOMING.	) Civil No. 4993

FILED 5/11 19 81

Margaret V. Hampton CLERK

DEPUTY

VOLUME 35

Afternoon Session

Tuesday, April 14, 1981

ORIGINAL

THE SPECIAL MASTER: Okay, Mr. White.

Q. (By Mr. White) Mr. Kersich, I hand you what's been marked for identification as Plaintiff's Exhibit SK-41 and ask you whether or not you recognize that.

A. Yes, I do.

Q. Is it a chart that appears in the back of your report which has been previously admitted as --

MR. WHITE: -- and I have forgotten the exhibit number, Your Honor.

THE SPECIAL MASTER: Forty-three.

Q. (By Mr. White) -- Forty-three?

A. It appears to be, yes.

Q. Is it true that the lands that are shown on Exhibit 41, SK-45, as gravity -- let me start that over again. I dropped a verb some place. Is it true that the lands for which acreages are shown in SK-41 for gravity are shown on those exhibits, map exhibits, such as US WRIR C-46, which is the South Crowheart, in color?

In other words, are all the acreages shown on that Exhibit SK-41 for the South Crowheart area under gravity color on US Exhibit WRIR C-46?

A Yes, that was the intent to do that.

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Q. Let's turn back to Exhibit US WRIR C-45, which is a map that you classified as Sprinkler Four North Crowheart area, and I ask you if you can show me on that exhibit the 1,227 acres of additional sprinkler which are listed for North Crowheart on SK-41, where those lands are located?

A. Not on the exhibit by itself, no. You are saying take the lands from WRIR C-45 and point specifically to those lands which are called additional sprinkler on our total in Exhibit SK-41, am I correct, sir?

Q. That's correct.

A. No, I can't do that simply by using the exhibits.

Q. All right. Can you if I show you the North Crowheart sprinkler map, WRIR C-44?

THE SPECIAL MASTER: Which is not the sprinkler map. Which is what?

THE WITNESS: Gravity map.

MR. WHITE: I'm sorry. Gravity map. I apologize. Off the record.

(Whereupon an off-the-record discussion was held.)

Q. (By Mr. White) Can you locate the additional sprinkler lands on that exhibit?

A. The only way to locate the additional sprinkler lands is by the use of tabs, and we tabulated the information on acreages, and I believe we gave you a copy of those tabs at my last session. Isn't that correct, sir?

Q. Yes.

A. Everything that was additional sprinkler -- in other words, that did not have a valid classification, was sprinkler only, was circled on the acreages and that's how we determined the acreages.

Q. Al, do you have those tab sheets with you?

A. Yes, I do.

Q. May I look at them, please?

A. You sure can.

THE SPECIAL MASTER: While you are handing him those, Mr. Kersich, give us again the distinction between land that is classified as gravity and land classified as additional sprinkler -- I mean land classified as sprinkler and land classified as additional sprinkler.

THE WITNESS: Yes, sir. Those are lands, which some of the lands can have either a gravity or a sprinkler classification to them. Some lands can only have a sprinkler -- gravity sprinkler

classification to them, and some lands were not deemed acceptable for gravity irrigation but would meet the sprinkler standards and therefore, those are the lands that are called additional sprinkler.

Those are lands which were not covered in either the gravity classification, the sprinkler classification and gravity or any other type, in other words.

MR. WHITE: Your Honor, I didn't understand the answer. Could I ask the witness to explain it again?

THE SPECIAL MASTER: Why don't you read it and save him the trouble?

(Thereupon the following answer was read back as follows: "THE WITNESS: Yes, sir. Those are lands, which some of the lands can have either a gravity or a sprinkler classification to them. Some lands can only have a sprinkler -- gravity sprinkler classification to them, and some lands were not deemed acceptable for gravity irrigation but would meet the sprinkler standards and therefore, those are the lands that are called additional sprinkler.

Those are lands which were not covered in either the gravity classification, the sprinkler classification and gravity or any other type, in other words.")

THE SPECIAL MASTER: Is that distinction set forth any place else and the definitions set forth any place else in Exhibit C-43, to your knowledge?

THE WITNESS: There is no definition of that in there, sir, as such.

THE SPECIAL MASTER: Okay. Mr. White, I'm sorry.

MR. WHITE: Could we go off-the-record for just a minute?

(Whereupon an off-the-record discussion was held.)

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THE SPECIAL MASTER: Whenever you're ready, Mr. White.

MR. WHITE: Thank you, sir.

Q (By Mr. White) Mr. Kersich, is it true that within the tabulations which you have kindly provided me, those lands which are shown under the additional sprinkler heading in SK-41, have their acreage numbers circled?

A Yes.

Q That is the convention?

A That is the convention that we use, sir.

MR. WHITE: Your Honor, the United States has agreed that I can make copies of these on one condition, and that is that I admit that I made copies before but I lost the copies I made before.

(Laughter.

THE SPECIAL MASTER: Okay.

MR. WHITE: And having fulfilled my part of the bargain, we will now take them and make copies.

THE SPECIAL MASTER: Okay, if that's all we lose out of the loads of paperwork and material, we have, we'll be lucky.

Q (By Mr. White) Okay. Mr. Kersich, I hand you what

has been marked for identification purposes only, as SK-42, and ask you whether or not you recognize SK-42?

A Yes, I do.

Q That's another summary chart of a back of U.S. Exhibit WRIR C-43, is that correct?

A Page 26 from that report.

Q I note in the total columns -- excuse me, the total column under sprinkler lands on SK-42, there is the number 44,382.

A Yes. Under North Crowheart, sir.

Q Yes, for North Crowheart.

A Yes.

Q How do you derive that number from the information that's shown on SK-41?

A You can't derive that number from SK-41.

Q Well, I see that North Crowheart gravity, both SK-41 and SK-42, show 46,649 acres.

A Yes, sir.

Q But when we move onto the total, the two total columns under additional sprinkler, and additional arable lands, is there any correlation between the values shown there for North Crowheart and the total sprinkler lands for North Corwheart and

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SK-42?

It doesn't seem to be an arithmetic connection. Could you explain?

A Yes, sir, if I might.

Q If there is any explanation between the two graphs.

A May I approach the two exhibits?

Q Yeah, go ahead.

A SK-42 has the units of North Crowheart listed under gravity lands and under sprinkler lands. Under gravity lands the lands that are broken out on WRIR C-44, and those are lands which are acceptable to gravity irrigation, or as we later defined with hand moved sprinklers, things of that nature, and the location and the approximate size of the tracts and the land classifications are depicted pictorially on WRIR C-44. And, so, the 46,649 acres that are shown on SK-42 are the same 46,649 acres that you would find on WRIR C-44, as far as class, location and size of the tracts.

With regard to the sprinkler lands figure to WRIR C-44, and these are lands now which meet the sprinkler lands classification only, -- kersich-cross-white

THE SPECIAL MASTER: If you go to C-44 or C-45?

THE WITNESS: C-45, sir.

A If you go to SK-42, the total of 44,382 is equal to the figure that's shown on C-45 as a total lands, and these lands then are the lands that are both by class and location, located upon the exhibit pictorially.

Q (By Mr. White) Okay. Is there any other exhibit besides SK-41 that shows total arable land of 47,876 for the North Crowheart area, which is in the last column, first row of SK-41?

A I don't believe so, but I'll check.

What -- maybe I can explain this a little bit here.

Q Well, let me ask you to answer that question.

THE WITNESS: All right. Would you read the question back, please? I'm sorry.

(The above question was read
(back by the Reporter as
(follows: "Q Okay. Is there
(any other exhibit besides
(SK-41 that shows total arable
(land of 47,876 for the North
(Crowheart area, which is in
(the last column, first row
(of SK-41?"

A No, sir, not to my knowledge.

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Q (By Mr. White) Okay. Now, what did you want to explain, Al? You wanted -- you said, let me explain here a little bit and --

A Okay, I -- maybe I shouldn't be offering too much here, but all I'm saying is that what we tried to do is come up with a total of -- total arable lands and if land had both the gravity and the sprinkler classification to it, we didn't add them up together to get the total arable lands. We tried to just get those lands that met both sprinkler and gravity, and then just any additional sprinkler on top of that to develop the total arable base.

Q Okay. Now, you're saying then, that some lands, in some cases the same lands, are classified for both gravity and sprinkler?

A Yes.

Q Is that correct?

In all cases, or are lands given the same classification for gravity as they were for sprinkler?

A No.

Q Okay. Isn't it true that you have significant amounts of land that are classified 3 gravity

and 1 sprinkler?

A Yes.

Q How did you decide that the same land would be classified as 1 sprinkler when it had already been classified as 3 gravity?

A Well, the standards allow that. If you go back to the standards and you will see that under gravity, for example, slope is a consideration. Let's take slope for example, under gravity under Class 1, you're limited from zero to two percent. For sprinkler you could have an eight percent slope and still qualify as Class 1.

Q Okay. How did you decide that sprinklers -- excuse me, let me back up. How did you decide that land could be Class 1 --

A For sprinkler?

Q -- with an eight percent slope for sprinklers?

A I'm afraid I don't understand the question.

THE SPECIAL MASTER: Well, who set those standards you just testified about?

THE WITNESS: We set the standard.

THE SPECIAL MASTER: Well, who are we?

THE WITNESS: HKM.

MR. WHITE: I skipped a couple of questions,

I'm sorry, sir.

THE SPECIAL MASTER: That's okay.

Q (By Mr. White) HKM established the standards. How was it determined that the same land would go from Class 3 for gravity, to Class 1 for sprinkler at an eight percent grade? In other words, what determination did you make that would allow you to conclude that sprinklers on an eight percent grade would turn otherwise Class 3 lands into Class 1 lands?

A Well, if the lands met all of the other limitations that Class 1 has: The depth of soil, one thing and another, and the only deficiency, for example, would have been the slope, we know that we can handle steeper slopes. It is an accepted method of handling steeper slopes by putting sprinklers on. In our review of setting up the standards, why, those were the applicable slopes that we chose for Class 1.

Q Okay, the question is: Why did you choose those slopes for Class 1?

A Because they allow us to with sprinklers, where we can handle those slopes. We don't have to worry about the length of run, about the problems

with our ditches and our field sizes. As far as the slope is concerned, we didn't have to border dike, things of that nature.

Q Okay. On page 8 of Exhibit C-43 of your report, you define Class 1 lands as land being of high quality irrigation and will yield high returns on minimum production and management costs. How did you determine that an eight percent grade for sprinkler lands would yield high returns with a minimum production and management cost?

A One thing, when we go into the sprinkler for the first thing, we decrease our labor cost so our production costs decrease. The slopes in themselves, an eight percent slope by practice in the field, has not been -- is not an excessive slope for these types of lands. We've got good moisture holding capacity, we are assuming, we've got good workability, our soils are at least 36 inches in depth. The slope can be handled by the mechanical application because on a gravity system you begin at one spot and you have to run the water down the hill to the field. With a sprinkler system, ordinarily you carry the water through a pipe through the point you're going to

put the water on, so if you're down here at the tail end of a field that's, let's talk about a center pivot, it is 1,320 feet away from the source of water. You're putting on the water at the place that you want to put it on, you don't have to run it all the way down the field from a point 1,300 feet away.

Q Would you please turn to page 8?

A I'm there, sir.

Q Okay, what production costs, and I'll later ask you what management costs specifically, specific costs did you consider in establishing the eight percent slope standard for Class 1 sprinkler lands?

THE SPECIAL MASTER: Mr. White, may I inject before he answers that. Is that relevant to determining arable lands or is that more appropriately a question on irrigable lands?

MR. WHITE: Well, it might be, Your Honor, except that the witness has testified about arable land. He's testified about his classification of arable lands and he's testified through this report.

THE SPECIAL MASTER: But does the economics of that crop have any place in the question on kersich-cross-white

arable lands?

MR. WHITE: Well, I think we are about to find out, Your Honor, because the witness' own report says that it does. His own report speaks of minimum production and management costs and I think --

THE SPECIAL MASTER: Okay. He may answer.

Q (By Mr. White) Okay, specifically what production costs did you consider, Al, including the values in determining that an eight percent slope was appropriate for Class 1 sprinkler lands?

A We did not do a farm budget, if that's what you're asking me.

Q I'm asking you what cost you considered in compliance --

A Okay. What is the cost of delivering water with a sprinkler system? As I said before, you don't need the ditch system, you don't need the border dike, you don't need the water control measures.

Q What value per acre-foot of water did you establish, if any, for the cost of delivering water?

A We did not sit down and do the economics out.

Q But, did you do the costs, not the economics, the

costs, did you come up with any dollar figures when you made this analysis?

A No, we worked with this and other specifications in the area which indicates what Class 1's are --

Q How did you know --

A -- Class 1 land is.

Q How did you know then that the cost, without using dollar figures, how did you know that the costs associated with an eight percent grade were indeed minimum costs as called for by your definition?

A How do I know that?

Q Yes, without using dollar figures?

A One place I do note, is from my experience in the business.

Q Okay. How much experience, prior to this study, did you have with the actual irrigation of land on the Wind River Indian Reservation, by sprinklers with a net eight percent grade?

A On the Wind River Indian Reservation, none. In other places, much.

Q Well, let me see if I've got it straight. You used no dollar values in determining your costs, is that correct?

A That's correct.

Q And you relied on your professional judgment, which was derived from experience in other places aside from the Wind River Indian Reservation, is that correct?

A That's one of the places, yes.

THE SPECIAL MASTER: Before you leave these exhibits -- are you about to leave them, these two?

MR. WHITE: I was going to ask a couple more questions. I couldn't let it go.

THE SPECIAL MASTER: I have one when you're through.

Q (By Mr. White) If you made a determination that eight percent slope resulted in minimum production and management costs, what was the slope which you used for the maximum production and management cost which you developed based on your professional experience?

A Well, first of all, it isn't just slope, of course, that affects production and cost.

Q I understand that, but I'm asking you --

A Okay, that's only one element. I just want that understood so that we both understand.

We allowed, in Class 3, up to 20 percent slopes.

Q Uh-huh. And was that again based on no dollar costs and professional opinions derived from experience outside the Wind River Indian Reservation?

A From professional experience outside the Wind River Indian Reservation and a review of what was going on in other areas, yes.

* * * * *

Q (By Mr. White) Did you use any dollar values for any of the percent slope standard for Class 1. Class 2, Class 3, or Class 4 as shown on Page 11 of your report?

A. No, we did not. Not directly.

MR. WHITE: I'm going to leave those exhibits, Your Honor.

THE SPECIAL MASTER: The last time, Mr. Kersich, that we dealt with Page 26 of the Exhibit C-43, which is the same as SK-42 that Mr. White is using now, I drew from my notes the fact that Mr. White either as much as said or so proved by what he brought out from you that about 9,500 acres of those 79,689 totals were parcels on which there had been no holes drilled of any kind to prove depth to barrier.

Do you recall that now, and can I ask you some questions about that?

MR. ECHOHAWK: Your Honor, I believe the 9,500 figure came from Mr. White's offer of proof.

MR. WHITE: That's correct, Your Honor.

THE SPECIAL MASTER: Well, I will throw it at him anyway. I would like to know a little more.

Ninety-five hundred was the total, was it not,

of the total that had no probe holes, whatever?

MR. ECHOHAWK: That was Mr. White's representation.

MR. WHITE: If you ask him about it, I would sure like to cross-examine him on that.

THE SPECIAL MASTER: I guess I had better stay in my own role and not yours, Mr. White, but the point that I wanted to make is that I'm trying to find a ratio or a percentage of human, understandable, marginal error, or profit and loss balances, as sometimes in the banking field -- you know, you put and you take. You lose one day and you gain the next, a clear accounting of some types for those odds and ins because in acreages this vast there has to be some kind of a debit and credit account of each day from which you can put a few acres, or draw a few acres, and I wonder, if you had put slope land into these, which you have been questioned now about, there would be a range of possible mistake as there is in the ratio of the 9,500 to 79,000?

THE WITNESS: Well, I don't agree with Mr. White on most of those. There are some holes in some of those parcels, but as I testified, you

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don't need a hole in every parcel. There are a number of other ways to determine barrier, and I believe that should be discussed further in the trial.

THE SPECIAL MASTER: Can you relate that to what you are testifying to here now?

THE WITNESS: With regard to these slopes, what you try to do is try to get a slope that you can handle easily with your system, and experience has taught us that the slopes that we have in there are reasonable for the types of system we are talking about.

There are other systems within the State of Wyoming -- for example, around Ten Sleep -- that have slopes up to twenty percent for a sprinkler. It's not uncommon in the Columbian Basin to find that. It's not uncommon in Montana to find that in work we have done.

A lot depends on what types of crops you grow and things of this nature. You certainly would go to more of a cover crop such as alfalfa in those types of slopes.

THE SPECIAL MASTER: Do you feel that a margin of differences, if not of error, is much less in

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this phase than it was in the matter of the probes?

THE WITNESS: Well, you asked me about slopes the last time I was here, and after an examination of our field notes, our drawings and the slopes that are listed on the log sheets, one of the duties of the classifier is to determine the major slope of the field. We had very few acres that were over ten percent. I have the figures with me, and if you would give me a moment, I could get those, but the slopes are mostly under ten percent for most of the lands.

THE SPECIAL MASTER: All right. Go ahead, please.

Q (By Mr. White) Mr. Kersich, I asked you before about the production cost associated with percentage of slope within your standard. If I asked you the same questions with respect to management costs, would your answers be the same as those which you gave for production costs?

A. Basically we assume good management. We didn't put a cost figure to each class for management.

Q. Okay. Let me go back and ask just another couple of questions about SK-41 and -42.

Specifically, the total column in SK-41, total

arable lands, and the total under that, the far right-hand column, if only sprinkler irrigation were used on these lands, would there still be a total of 47,876 acres of arable lands in the North Crowheart unit, only sprinkler irrigated?

A. Yes.

Q. Would there still be 6,704 Class 1 arable lands in the North Crowheart unit if only sprinkler irrigation were used?

A. As long as we define sprinkler irrigation as being able to include the hand moved and solid set sprinklers, I would say yes to that question.

Q. Now, let's exclude the hand move and solid set sprinklers. Would there still be 47,876 acres of arable lands using only sprinkler irrigation in the North Crowheart unit?

A. Well, you'll have to define sprinkler then for me because that's a different question entirely.

Q. Well, I'm asking about the term sprinkler as it is used on your tables, SK-41 and -42.

THE SPECIAL MASTER: Aren't you asking him to remove from there or subtract from that that land that could be irrigated by sideroll or center pivot systems, and use only those of a hand move

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or solid set? Is that what you are asking?

Q (By Mr. White) When you qualified your question, I thought you qualified it by saying that so long as you assumed that hand move or solid set are included in sprinkler. Wasn't that the way you answered the question?

A At that point in time, yes.

Q Now, if you exclude hand move and solid set sprinklers and you use only sprinkler irrigation, excluding those two methodologies, how many acres are left?

A Okay. If you limit then -- as I understand your question, you are going to limit the sprinkler to sideroll or center pivot systems?

Q Right.

A There would probably be some acres less than that.

Q Do you know how many?

A Not without going back to the tab sheets and the aerial photographs and working it all out.

Q Did you make any determination of the management and operation cost associated with hand moved sprinklers?

A No. I have some idea.

Q What are hand moved sprinklers?

A. Hand moved sprinklers normally are pipes, aluminum pipe, that you can take out in the field and set with risers on them. They are picked up manually and moved to the next set, either through mechanical means -- they have trailers, trucks, or whatever.

THE SPECIAL MASTER: I can't help but interpose that I learned my first lesson by dropping one on my foot in Wheatland about twenty years ago. I learned about moving those.

MR. WHITE: Off-the-record.

(Whereupon an off-the-record discussion was held.)

MR. WHITE: Back on the record.

Q (By Mr. White) Al, isn't it true that you concluded that the operation costs for hand moved or solid set sprinklers and the management costs for those sprinklers were roughly the same as gravity irrigation?

A. No, I don't recall I concluded that.

Q. What did you conclude with respect to those two types of sprinkler systems in terms of the relative management and operation costs contrasted with sideroll or center pivot sprinklers?

A. Are you talking about management costs or labor costs? There's a difference in my mind between the two.

Q. I will use the terms that you used, and that's management and operation.

MR. ECHOHAWK: I believe Mr. Kersich designated that as labor costs when he discussed that earlier.

MR. WHITE: No, the report refers to production and management.

MR. ECHOHAWK: Mr. Kersich, in testifying about the hand move and solid set, his testimony was discussing labor costs.

MR. WHITE: Well, I'm going to ask a different question, Your Honor. I'm going to ask him about production and management costs associated with hand moved or solid set sprinklers and -- let me start again.

Q. (By Mr. White) With respect to hand moved and solid set sprinklers, are management costs greater than for sideroll or center pivot sprinklers?

A. You are talking about management costs as normally referred to in irrigation?

Q. Well, as you refer to it here.

A. Okay. The management costs may or may not be

greater and may or may not be less. There is a difference in the sprinkler labor costs which would be part of production costs but not a management cost.

Q. But let's turn to production costs.

A. Okay.

Q. Is there a relative difference between the production costs associated with hand moved or solid set sprinklers as opposed to sideroll or center pivot sprinklers?

A. On an acre-by-acre difference, if you look at an acre of sprinkler labor for hand moved versus an acre of labor for intermittent move there is some difference, normally the hand move being somewhat higher.

Q. How were those differences in production and management costs reflected in the soil classification standards?

A. Well, they are not really involved in the land classification costs because if you have 47,876 acres of arable land and of that you irrigate 40,000 acres by intermittent move or center pivot and another -- well, let's say 40,000 by center pivot and 40,000 acres by intermittent move and

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a few thousand acres or less than that that you would get with hand move or solid set, the total cost of production would be raised only minimally, if anything at all.

Q. But your classification was done on a virtual acre-by-acre basis, wasn't it?

A. It was -- but there were projectized specifications.

Q. And you are saying that your land classification standards did not reflect the difference based on the differing production costs between the two different types of sprinklers, is that correct?

A. Sprinkler labor is not usually a function of the land classification standards. There are other production costs which are built into the standards that I testified to previously.

Other people -- when the final design is done, other people will be putting in the sprinkler labor costs.

Q. Okay. I didn't mention labor costs. You did. That's why I was asking about it.

A. I'm trying to define this between labor costs and management costs because the two are not synonymous.

Q. Let's talk about production cost. That's what I was hoping we were talking about.

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Is labor cost a part of production cost?

A. It can be considered that, yes.

Q. What other costs are associated or assumed within the rubric of production costs?

THE SPECIAL MASTER: Is he a competent witness for this since he excluded the economics of irrigating and crop yields totally from his professional work as a land classifier?

MR. WHITE: I would think that he would not be competent if we could agree to strike the cost portion of the definition of Class 1 lands, but that is his definition.

THE SPECIAL MASTER: What cost was the criteria that he took notice of in establishing the difference between a Class 1 and a Class 2 lands?

MR. WHITE: That's right, Your Honor.

THE SPECIAL MASTER: But he also has said several times, I believe, Mr. Kersich, that the economics of this classification and irrigability of land will be up to other witnesses, not up to him, and I wondered about your question in that light.

MR. WHITE: Let me see if I can solve the problem in a couple of questions.

Q (By Mr. White) Isn't it true, Mr. Kersich, that you did not consider costs or economics in establishing standards for which you used for the classification of arable lands?

A. Well, I believe I testified before we considered cost in a unique way. In other words, Class 1 lands that are deep that have good water-holding capacity but do not need to be irrigated on a very frequent basis, those are lands which will normally be less restrictive as far as farming practices.

In other words, you probably need less fertilization, things of this nature.

See, we tried to set up a set of standards that would take that into consideration so the person working with the farm budgets, the production costs, and such things, would understand that here are lands that are deep. They have good water-holding capacity. We have very little land development costs associated with them. We have very little surface undulation, no rock to pick, things of this nature.

That was put in a separate class and this was done. Then each class after that had some noted deficiencies which were brought to the

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attention of the other people on the team to utilize in their work.

* * * * *

Q I guess then that the answer is that you did consider, to some extent, the costs and economics

A Well, I said I did that. When you set up standards like this, you inherently build in some things.

THE SPECIAL MASTER: He used an excellent description of obliquely.

Q (By Mr. White) And it was so oblique that you considered no dollar values, is that correct?

THE SPECIAL MASTER: Well, that -- I think that's a little bit argumentative. I think he's answered the question, Mr. White, pretty well.

Q (By Mr. White) With respect to any of the land classification standards, in addition to those that we have already discussed dealing with slope, did you make any determination of the dollar values associated with costs, either production or management costs with respect to any of those standards for any of those classes?

A We did not do a farm budget analysis concurrent with the standards, no.

Q Did you consider dollar value costs?

A Again, they were considered obliquely or inherently in the standards.

Q But isn't it true that you considered no specific

dollar value costs? You can't --

THE SPECIAL MASTER: Well, he pretty much answered that, I think.

MR. WHITE: Well, it keeps waffling, Your Honor. I would like to get it one way or the other, either he did or did not.

THE SPECIAL MASTER: I think you got an honest answer, and it is hard for me to see how you could move him from his position.

MR. WHITE: Well, let me try one more time, Your Honor.

THE SPECIAL MASTER: I don't know whether I'll let you, but go ahead.

Q (By Mr. White) Mr. Kersich, are there any specific dollar values which you use for production or management costs in connection with the formulation of the land classification standards for any class of arable lands?

A No, not a specific dollar value.

MR. WHITE: Thank you.

Q Did you happen to run into Mr. Saunders memo?

A I was working on your stuff at noon. I'm sorry -- I'm trying.

Q Did you finish the other stuff at noon?

A I'm about two-thirds of the way through.

Q Okay.

A I'll get that done tonight.

Q Mr. Kersich, would you please describe the sampling and lab analysis which you conducted, the results of which formed the basis of your professional opinion?

A When the land classifiers were in the field, they would, on a periodic basis, sample the soils when they were making an auger test or drilling an auger hole. The samples were taken sometimes from the entire horizon, sometimes from a portion of the horizon depending upon what the land classifiers saw there. Certain holes were sampled the entire length of every different horizon, or any change in texture or color, things of that nature. Samples were taken, put in sample sacks and then sent to the lab in Billings for review. On that, basically five tests were run within the lab, and they are described on pages 18 and 19 and so on in my report, but I'll go through them very briefly: There were electrical conductivities which determines the total amount of soluble salt that might be present in that particular sample.

I measured the pH -- the alkalinity or acidity of the soil was checked. A settling volume test was run to determine the amount of fines that may be affected by sodium, and if there were any sodium present to affect those fines, and a test called the sodium adsorption ratio, which is an indication of the amount of exchangable sodium that might be held in the soil and which could cause permeability problems, was determined. SAR is a function of sodium, the magnesium and calcium cations in the soil.

Let's see, that's four. The last one is the mechanical analysis, a particle size analysis to determine the soils texture. This was run on a number of samples.

Q What instructions did you give your field classifiers as to when and where they would sample?

A Well, they were to use their judgment primarily. That's one of the reasons we use people with quite a bit of experience out there, and if there were areas that, because of structure or texture or obvious grease spots on the surface where you might have grease wood or slick spots or it appears that the drainage might be a problem, they took

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samples in those areas.

Q What instructions did you give them, if any?

THE SPECIAL MASTER: I think he answered that question.

Do you feel like you answered it?

THE WITNESS: I think so, yes.

MR. WHITE: Would you read the question back, Lamont, or the answer back?

(The above answer was read
(back as follows: "A Well,
(they were to use their
(judgment primarily. That's
(one of the reasons we use
(people with quite a bit of
(experience out there, and if
(there were areas that,
(because of structure or
(texture or obvious grease
(spots on the surface where
(you might have grease wood or
(slick spots or it appears
(that the drainage might be a
(problem, they took samples in
(those areas."

Q (By Mr. White) Those were your instructions to them?

A My instructions were to go out and do a good job and let us know what problems are out there.

Q How many samples were collected in the field?

A I would have to go back and check my figures. I don't have that here right now. I believe it's

in the report. I don't know how many samples were collected in the field, but a total of about 4,400 analyses were performed.

Q What quality control did you establish to verify the results of those 4,400 analyses?

A We had people checking them. Carol Snow checked random check samples which I would go out and take in the lab and pick out and say, these are to be checked. The samples were checked by two different ways, because during the period of time that we were working on this project we obtained an atomic adsorption unit and so some of the chemical work was done with that.

We used the normal measures that you would expect in a lab like this.

Q How many samples were checked as part of your quality control effort?

THE SPECIAL MASTER: May I hear the question again, please?

(The above question was read back by the Reporter as follows: "Q How many samples were checked as part of your quality control effort?"

A Well there was a number of them, but I can't kersich-cross-white

give you the exact number right now, Some were checked for one thing, some were checked for the whole series, others were checked for just parts of the series.

Q (By Mr. White) Did you retain those samples and the results of your checks?

A I don't know that we retained the results of the checks, we've got what's left of the samples. You sometimes use up part of the sample in the process.

Q Are the remainder of those samples available?

A Yes.

Q In Billings?

Would you provide those to the State of Wyoming?

A I would --

MR. ECHOHAWK: Your Honor, that is a request more properly directed to the attorneys.

MR. WHITE: No, it is not, Your Honor.

MR. ECHOHAWK: It is a matter of discovery.

MR. WHITE: At this point then, Your Honor, I'll ask for an order directing them to produce those samples. I think we are entitled to take a look at them.

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THE SPECIAL MASTER: If you want to do that, I can't stop you.

MR. WHITE: What's that?

THE SPECIAL MASTER: If you want to do that, I can't stop you.

MR. WHITE: Well, they are not letting the witness tell me whether or not he will produce them and I'm asking you for an order directing that they be produced.

THE SPECIAL MASTER: Well, your evidence so far before us, is that there are 43 -- there were 44,400 analyses that would have been performed. Out of that, how many are still in organic condition and still such that they can be separately identified in the event you are called to come up with either five or ten or fifteen of each of these seven categories?

THE WITNESS: Well, I would say the majority of the samples are still available and they are marked. They were put back in the sacks that they come in from and --

THE SPECIAL MASTER: Well, if the State wants to send somebody up to Billings and look some of them over, would you permit it without my order?

I know you will if I order it, but --

THE WITNESS: I want to put out one thing: Some of the samples may have been damaged. We had a bad winter -- we had -- a year ago and we had a pipeline break and some of those samples have been soaked. But, I mean, with that understanding the rest of the answer is up to counsel.

MR. ECHOHAWK: We have no objection.

THE SPECIAL MASTER: All right.

MR. ROGERS: Your Honor, I can only observe it is curious for them to be asking for them at this time. The State has known these samples have been there for months and months and months. Why do they --

MR. WHITE: Well, for Washington, D.C. Counsel, this case gets curiouser and curiouser all along.

THE SPECIAL MASTER: I don't know whether the question asked, but if Mr. White or someone else from the State was to look at a few samples, I see no objection to them looking them over and I presume you don't either. If you do object, say so now and maybe it is a good -- maybe it is an area to cross-examine, I don't know.

I don't think the case gets curiouser and

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curiouser as we go along, but it sure as hell gets more complicated, scientific and exact and difficult.

THE WITNESS: Could we take a short break?

THE SPECIAL MASTER: We'll now -- after those unfortunate words, we will take a ten minute break.

(Recess 2:29 p.m.

* * * * *

THE SPECIAL MASTER: All right. We stand convened. Go ahead, Mr. Echohawk.

MR. ECHOHAWK: You recall that at the close of Mr. Billstein's testimony, we introduced the hydrographic photos, Mr. Billstein's back-up information, and since that time there has been a problem or a question of access to those.

The State has checked them out for, I think, a week and then we got them back for a week, and we gave them back to the State.

THE SPECIAL MASTER: Yes, I got caught in that cross fire a couple of weeks ago.

MR. ECHOHAWK: Well, it's erupted again.

THE SPECIAL MASTER: It's like Mount St. Helen's.

MR. ECHOHAWK: Right. We would like access to those copies. We need them to continue our work, and I was advised by the State that they won't be finished with them until Friday. And I was wondering whether there's a way we could speed up and get a portion of them before Friday or --

MR. KROB: Your Honor, if I might respond to it. I realize you have been caught in that cross fire.

THE SPECIAL MASTER: Give your name for the record.

MR. KROB: I'm sorry. I'm Scott Krob for the

State, and if you will recall the phone conversation we had, Mr. Billstein at the end of his testimony said that he would take three weeks for HKM, who have made the changes necessary on these photos, and I asked that we be given those three weeks, even though we weren't as familiar with those photos as HKM and it might take us a little longer, and at the time the Master ordered that we, having had the photos for the one week, would give them to the United States, and they were to be returned to them on the 3rd.

Some of them came back on the 3rd and some of them didn't, but we haven't had the figures for all of two weeks.

At the time of the telephone hearing with the Master, you indicated that we would have them for this past week and then for the first week of trial to make up the full three weeks that Mr. Billstein had indicated that it would take to make these changes.

I just checked with our experts. They are still using the photographs, especially since we just received some more updated exhibits with regard to Mr. Waples today, and there simply is no way that they can get them done before Friday, not knowing what parcels we have to go back and recheck again and not knowing -- well, they simply haven't completed their work.

THE SPECIAL MASTER: Why don't we ask them to take a look through the remainder of today and tomorrow, and if they are through with a portion of them by tomorrow, Wednesday afternoon, maybe they can be delivered Thursday and they can help out.

MR. ECHOHAWK: That would help some.

THE SPECIAL MASTER: Maybe they can and maybe they can't. Why don't we do the best we can?

MR. KROB: I will check.

THE SPECIAL MASTER: We will see if we can have some by Thursday and some Friday.

MR. ECHOHAWK: Thank you.

THE SPECIAL MASTER: Mr. White -- off the record.

(Whereupon an off-the-record discussion was held.)

THE SPECIAL MASTER: Let's go back on the record.

Before you begin, Mr. White; Mr. Kersich, have you made any adjustments, allowances, in your testimony and your studies on this Reservation from the very beginning to now for those areas that have a capacity or a tendancy or historic record of going into alkalinization and failure to stay as a viable irrigated land?

THE WITNESS: That was an important part of the study, sir. Yes, we did.

THE SPECIAL MASTER: How much of that such land is included in your figures?

Are you going to allow that question? No, please strike that.

What did you do with those?

MR. WHITE: That's a good question, Your Honor. We will allow it.

THE WITNESS: We threw it out.

THE SPECIAL MASTER: You feel certain that what you have left is land that will not, under the standards where you have alluded to -- and they are in the record -- end up being susceptible to alkaline destruction and low yield, failure -- with proper drainage and proper water management, that's correct.

Okay. Go ahead, Mr. White. I just thought I wanted to ask about that.

Q (By Mr. White) In your answer to the last question, what did you mean by proper management?

A Well, one of the most important things in any area where you may have a trace of alkalinity/salinity is that you apply the water properly and not over apply water, especially if the water itself has any salts which would be added to the total salts and cause a saline or a saline sodium condition.

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Q Mr. Kersich, I direct your attention to Page 27 -- excuse me -- 21 of your report, Exhibit US WRIR C-43 and specifically that paragraph entitled, "Laboratory Procedure," and specifically the last sentence, and ask you whether or not that last sentence refers to what I am handing you that has been marked for identification as SK-40?

A. This appears to be the same manual that we used, yes.

Q. Are you absolutely certain that the techniques for laboratory procedures which you used are those that are set forth in what's been marked for identification as SK-40?

A. Well, if there's a question, I can go back and check with our lab people, but this was the basic manual that we used for the work that we were doing on the project, yes.

Q. Would you please turn to page 517.37F? I'll run through that again, 573.3 -- excuse me -- 517.37F, and that may be a fifth of the way down from the top.

THE SPECIAL MASTER: Mr. White, I don't have any 517.3s. All I have is 517-1s.

MR. WHITE: The top left-hand corner, Your

Honor, of this page.

THE SPECIAL MASTER: Oh, you are doing that to me. I have to take the hook off.

MR. WHITE: The State is up to its usual tricks, Your Honor.

Your Honor, that's 517.3.7F.

Q (By Mr. White) Al, did you find it in your copy?

A Yes,

THE SPECIAL MASTER: Go ahead with your question. I'll find it.

MR. WHITE: I would like you to have it in front of you, Your Honor, when I ask the question, if you don't mind.

THE SPECIAL MASTER: How far down are you?

MR. WHITE: If I can look at that, I will try to find it.

THE SPECIAL MASTER: All right, you are welcome to.

Okay. Thank you.

Q (By Mr. White) Paragraph G, it says, quote, areas which appear to be normal and well adapted to irrigation should have these confirming tests.

Do you find that portion?

A Yes, sir.

Q Isn't it true that you conducted no bulk density test?

A. No, I don't recall that, that we did or not. I don't believe so.

Q Isn't it true that you did conduct a particle size analysis?

A. Yes, we did.

Q But isn't it true that that particle size analysis was not a pipette analysis? It was something other than a pipette analysis?

THE SPECIAL MASTER: Something other than a what?

MR. WHITE: Pipette, p-i-p-e-t-t-e.

A. (By the witness) It may have been something else, yes.

Q (By Mr. White) I would ask you to turn to the very next page, 517.4.1, which deals with particle size analyses.

A. Yes.

Q And paragraph .2 describes the pipette analysis and indicates that that's the approved procedure?

A. I believe there are two procedures which are approved. I would have to go back and check.

Q Would you find the procedure that you used and

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indicate and show the Court where it's indicated as being approved in Exhibit SK-40?

A. Well, I'd have to get my copy of the manual out. It's marked up. I'm having some problems here, but -- can I look at my notebook for a minute?

THE SPECIAL MASTER: You bet. Go right ahead.

* * * * *

A We used the hydrometer procedure, that's right. We did not use the pipette procedure.

Q Isn't it true that the procedure which you used is not listed as an approved procedure in the Bureau of Reclamation manual?

A I can't answer that right now.

Q Well, can you show me where it is?

A I say I can't answer it, that's why I tell you -- I would have to go through the whole manual before I try to answer.

The hydrometer analysis is an accepted particle size analysis.

Q According to the Bureau of Reclamation as set forth in this manual?

A As set forth in the manual, I'm not sure. That's what I said.

Q Well, let's go back to page 517.3.7 (f) paragraph G. Isn't it true that you conducted no percent lime test?

A We did a field line procedure, a field test to determine lime.

Q But you didn't do a laboratory analysis?

A No, normally they are not done.

Q You didn't do a laboratory analysis for percent

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lime that's described on page 517.3.7 (f), isn't that correct?

A That's correct.

Q Isn't it true that you did no tests for gypsum content?

A That's correct.

Q Isn't it true that you did no tests for percent free swell of clay-size particles?

A Well, we did a settling volume test, which gives us near the same results.

Q But, did you do the tests that called out in the (5) or G (5) on page 517.3.7 (f)?

A That's correct.

Q You did that test or you did not?

A No, I said I did not.

Q Oh. Although you did an SAR, isn't it true that you did not do an exchangeable sodium test that's described in (6) under G?

A No, because the SAR can be equated to the exchangeable sodium.

Q Is that the same test that's described in this manual?

A Which test now are you talking about?

Q The SAR.

A The SAR, did we do the SAR test?

Q No, is the SAR test the same test that is described in this manual?

A I think it is, yes. I would have to check it again.

Q Well, let's see --

MR. ROGERS: Your Honor, I think there is a confusion and the references back and forth have gotten a little confused here. The description of SAR test in the book is, I think, what Mr. Kersich just answered, is the same that he did, but that's not the same thing that Mr. White was talking about. I don't think the witness understood the question.

MR. WHITE: I think the witness is perfectly competent to testify by himself, Your Honor.

THE SPECIAL MASTER: Well, nobody is trying to assist him in testifying, I'm sure.

Go ahead, Mr. White.

Q (By Mr. White) Well, then, with respect to the test called out under paragraph G, you can't remember whether you did a bulk density test, you did do a particle size analysis, but not the pipette analysis, which is listed as approved in the manual,

you did not do a percent lime test, you did not do a gypsum content, you did not do a percent free swell of clay sized particle test and you did an SAR test, which you feel is roughly equivalent to an exchangeable sodium test called in (6), is that correct?

A You can use it to get the result for exchangeable sodium, yes.

THE SPECIAL MASTER: Mr. Kersich, is each of the techniques that you used for your laboratory procedure,described in this publication, called SK-40?

THE WITNESS: Most of them are. The others are described in our own lab manual.

THE SPECIAL MASTER: Okay.

Q (By Mr. White) Okay, Mr. Kersich, do you recall the Master's question about alkaline areas?

A Yes.

Q Or areas of high alkalinity?

A Uh-huh.

Q Would you turn back to the previous page, I guess it is page 517.3.7 (b)?

A Oh, okay. Three (b)?

Q 3.7 (b) and that page number is in the upper

right-hand corner.

A Okay.

MR. WHITE: Can I find it for Your Honor?

THE SPECIAL MASTER: I've got it.

Q (By Mr. White) I refer you to paragraph C: "Areas of alkali soil may be evaluated by these tests."

A Yes.

Q Isn't it true that you conducted no bulk density test?

A That's correct.

Q Isn't it true that you conducted no gypsum requirement test?

A Gypsum requirement, no, that's not true. We did it.

Q Okay. What test did you perform specifically?

A I'll have to go back and check our manual, but I -- we performed a gypsum requirement test.

Q Can you describe that test?

A I can't, no. I have people doing it for me.

THE SPECIAL MASTER: Was it a laboratory procedure or a field procedure?

THE WITNESS: It is a laboratory procedure.

Q (By Mr. White) Did you get any results from those kersich-cross-white

tests?

A Yes, we had them, uh-huh.

Q Do you have those results with you?

A Not with me, no.

Q Where are they?

A In my office.

MR. WHITE: Well, I'll ask Counsel for the United States if we can see the results of those tests, the gypsum requirement test.

MR. ECHOHAWK: Your Honor, could I have one minute, please?

(Brief pause.

MR. ECHOHAWK: We will make those available, Your Honor.

THE SPECIAL MASTER: All right.

Q (By Mr. White) Isn't it true that you conducted no exchange capacity test?

A No, we did not.

Q Isn't it true that you conducted no aggregate stability test?

A Well, here again, you might be able to use settling volumes for that. Settling volumes were run for all of --

Q Did your aggregate stability test conform to those

described in this manual?

A No, not under this particular number here.

Q Isn't it true that you have previously testified that you conducted no percent free swell of clay-sized material test?

A That's correct.

Q Isn't it also correct that you conducted no surface area studies in the lab?

THE SPECIAL MASTER: No surface area studies in the lab?

THE WITNESS: I don't recall that.

MR. WHITE: In the lab.

THE SPECIAL MASTER: That would be hard to do, to conduct area surface studies in the laboratory.

MR. WHITE: These are laboratory procedures, Your Honor, and --

THE SPECIAL MASTER: Well now, the areas of alkali soils may be evaluated by these tests and there are seven of them.

MR. WHITE: Uh-huh.

THE SPECIAL MASTER: The last one is a surface area study. And there is nothing here that says that's done in the laboratory, if it is then I've got to have a new definition of surface.

MR. WHITE: The whole manual deals with laboratory instructions and laboratory procedures, Your Honor. Up at the top you can see it says, "General laboratory instructions".

And I would point out that on page 517,3.7, which is the immediate preceeding page to the one we are on now, that these are all suggested laboratory tests.

I'm not competent to describe that test for you, but it is a laboratory test.

Your Honor, can I go ahead and ask him the question?

THE SPECIAL MASTER: Yes.

Q (By Mr. White) Isn't it true that within the context of Exhibit SK-40, you conducted no surface area studies in the laboratory?

A That's correct.

Q Isn't it true then with respect to the six tests set out under areas of alkali soils, you conducted only one?

A Well, the exchange sodium percentage, as I said before, the SAR is a measure of that also and the two could be interrelated, so I consider that while that particular test was not done, the kersich-cross-white

information was developed with regards to the gypsum requirement. That one was run. The bulk density was not, the aggregate stability -- that may come under your settling volumes and that was run on all the samples. So there was a screening done on some of the tests. Not all of these tests are run on every sample anyway.

Q But isn't it true that as described in the Bureau of Reclamation manual, you conducted only one of those six tests?

THE SPECIAL MASTER: He's answered that he's already done more than that, and he feels that he's done more than two. He also answered that not all seven are necessary to evaluate an alkali area. I don't know whether you made your case, but there have been some distinctions between these criteria and those that he used.

But I think the point is made and I would like to ask this question of the witness: What are the techniques that you used for the laboratory procedures in addition to those you admitted that are in the lab -- are in the SK-40?

THE WITNESS: Well, the techniques were -- for the most part we used the techniques that are

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in SK-40.

THE SPECIAL MASTER: Well, but, on the alkali tests that I asked you about, you have not?

THE WITNESS: Right. Right -- well, we used the gypsum requirement test to determine what might be needed from a land reclamation standpoint, if anything. We exchanged sodium percentage. As I pointed out, the SAR gives you a relationship of the ESP. I believe an aggregate stability, we did use the settling volumes which basically can be used to replace that test, so that three of those were basically used in the screening process.

THE SPECIAL MASTER: Okay.

Q (By Mr. White) Could you describe in detail how the settling volume test that you described works, and how it can be used to determine aggregate stability?

A Basically what happens with the settling volume test is, you have a cone-shaped flask, it looks like an ice cream cone, and you put a certain amount of the sample that you are examining in there and you fill that flask with water to a certain elevation, then you take air or you stir the kersich-cross-white

material up, you mix it up real well. Then, over a period of time, you read how long it takes for this material to settle out and if you happen to have a sample that has an awful lot of fines in it, and there's sodium reacting with those fines, clay fines I'm speaking of, you know the sodium has a tendency to disperse the fines and as a consequence when you read this at the end of the test, you may have a settlement volume up near, say, 27, 28, 29, 30, 35 -- I think I've seen some on lands which we did not classify as arable, much above 30, this gives you an indication that you should look at the soils a little bit more; that there is a potential here of sodium dispersion in it with the clay fines and that permeabilities and the movement of water through the soil would be affected.

Q Mr. Kersich, at the bottom of page 517,5.3 (e), there is a description of the soil aggregate stability test, which is the approved procedure. That doesn't sound anything like what you have described. Could you explain now, how what you described replaces that?

A 517 -- what was that, please?

Q 517.5.3 (e).

THE SPECIAL MASTER: I have no .3 (e). I go from 3 (c) to 4 (a).

MR. WHITE: Well, you're ahead of me, Your Honor, I don't even have a 4 (a) -- I'm sorry --

MR. ROGERS: I think what happened is the page may be reversed, 4 (a) -- I think 3 (e) is there.

MR. WHITE: Yes, it is. It is reversed, Your Honor.

THE SPECIAL MASTER: On the back of 4 (a)?

MR. WHITE: No, 4 (a) and 3 (e) are reversed in their order there. If you can find either one of those.

THE SPECIAL MASTER: You are correct. Thank you for calling my attention to that. I've got them, but they are transposed.

Now your question again was, what he testified to is different from what on 5.3 (e), Mr. White?

MR. WHITE: The approved procedure that's described towards the bottom and then continues on the next page on 4 (a).

THE WITNESS: Okay. Could I have the question back?

MR. WHITE: I'll ask it again just to make it faster.

Q (By Mr. White) Isn't it true that the test which you described is not the test which is described on pages 3 (e) and 4 (a) for soil aggregate stability?

A Well, some of the answers that you're getting out of the test that you're talking about here are the same answers that we are looking for under settling volumes. It is not the same test, no, that's correct.

Q It is not the approved procedure by the Bureau of Reclamation either, is it?

A It is not necessarily required procedure, that's right.

Q Mr. Kersich, does HKM have a laboratory manual which --

A Sure.

Q -- which sets out its testing approach?

A We have a laboratory manual, yes.

Q Do you have that with you?

A No.

Q How does it vary from the Bureau of Reclamation manual, which according to your report, your

techniques were described in?

A I would have to sit down and go through it test by test to be able to tell you that.

Q Isn't it true that your techniques that you used were not completely described in the Bureau of Reclamation manual?

A Some of the techniques may have not been described completely in the Bureau of Reclamation manual, that's correct.

MR. WHITE: Your Honor, until we receive the information from Mr. Kersich with respect to the areas that he was checking, that might be different on the photography to mosaics and the map --

THE SPECIAL MASTER: Right.

MR. WHITE: -- and until we receive his memorandum from Mr. Saunders concerning the accuracy checks and scale rectification of those mosaics, we are at a point where we can stop.

THE SPECIAL MASTER: All right, that being the case, can you proceed with your case this afternoon, Mr. Echohawk, or do you want to put your next witness on tomorrow?

MR. ECHOHAWK: No, Your Honor, I would rather

the State finish their cross-examination entirely of Mr. Kersich, and then I'll see whether or not I have any redirect.

THE SPECIAL MASTER: Well, that being the case, we will have to adjourn then and give you some time to work on the materials. He has to answer the schedule Mr. White gave him this morning. And you can use that to a good advantage this afternoon, can you not, if we were to adjourn now? And then perhaps we can convene in the morning at 9:15.

MR. WHITE: For the benefit of Counsel, Your Honor, I would expect to be done with the cross-examination of Mr. Kersich, unless something new comes up --

THE SPECIAL MASTER: By noon?

MR. WHITE: -- by noon.

THE SPECIAL MASTER: Yes. Then we can proceed with that tomorrow. So we will stand in recess now until tomorrow morning at 9:15.

(Recess, 3:14 p.m.

* * * * *

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REPORTERS' CERTIFICATE

State of Wyoming)
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We, Lamont Miller and Viola J. Lundberg, Registered Professional Reporters and Notaries Public, hereby certify that the facts as stated in the caption hereof are true; that we did at the time, date and place, as set forth, report the proceedings had before the Honorable Teno Roncalio, Special Master, in stenotype; that the foregoing pages, numbered 2980-3131, inclusive, constitute a true, correct and complete transcript of our stenographic notes as reduced to typewritten form under our direction.

We further certify that we are not agents, attorneys or counsel for any of the parties hereto, nor are we interested in the outcome thereof.

Dated this 14th day of April, 1981.

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Registered Professional
Reporter

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