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Trial Transcript, Vol. 18, Morning Session

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IN THE DISTRICT COURT FOR THE FIFTH JUDICIAL DISTRICT
WASHAKIE 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
3-19 19 81
Margaret V. Hampton CLERK
DEPUTY

BEFORE: The Honorable TENO RONCALIO, Special Master
Presiding.

VOLUME 18

Morning Session

BE IT REMEMBERED that on this 9th day of March,
1981, at the Supreme Court Courtroom, Cheyenne, Laramie
County, Wyoming, the above-entitled matter came on for
trial before the Honorable Teno Roncalio, Special Master
Presiding, whereupon the following proceedings were had,
to wit:

PROCEEDINGS:

ORIGINAL

APPEARANCES

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FOR THE STATE OF
WYOMING:

MR. MICHAEL D. WHITE
Special Assistant Attorney General
2900 Energy One Building
717 17th Street
Denver, CO 80202
ALSO: MR. STUART RIFKIN

FOR THE UNITED STATES
OF AMERICA:

MS. REGINA SLEATER
Attorney at Law
Land and Natural Resources
Division
Department of Justice
Federal Building
Cheyenne, WY 82002

and

MR. TOM ECHOHAWK
Attorney at Law
Land and Natural Resources
Division
Department of Justice
1961 Stout Street
Denver, CO 80294

FOR THE ARAPAHOE
TRIBE:

WILKINSON, CRAGUN & BARKER
1735 New York Ave., N.W.
Washington, DC 20006
BY: MR. R. ANTHONY ROGERS

FOR THE SHOSHONE
TRIBE:

SONOSKY, CHAMBERS & SACHSE
200 M. Street, N.W.
Washington, DC 20006
BY: MR. WILLIAM PERRY

FOR THE ARAPAHOE
AND SHOSHONE TRIBES:

DRAY, MADISON & THOMSON
204 East 22nd Street
Cheyenne, WY 82001
BY: MR. WILLIAM THOMSON

APPEARANCES (CONTINUED)

1

2

3 FOR THE PRIVATE
4 WATER HOLDERS:

MR. LAWRENCE COZZENS
Attorney at Law
P.O. Box 470
Cody, WY 82414

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1 THE SPECIAL MASTER: Ladies and gentlemen,
2 we will please come to order, and while waiting to
3 begin, we'll have appearances. Mr. Thompson.

4 MR. THOMPSON: Mr. Master, I'm Bill Thompson,
5 local counsel for the Shoshone and Arapahoe Tribes,
6 and I would like to introduce and move the admission
7 to the Court for purposes of this case, Mr. Bill Perry
8 of Washington D.C. He's with the firm of Sonosky,
9 Chambers and Sachse. He is a member in good standing
10 of the bar in the District Court of Columbia. I've
11 known him personally and I believe him to possess the
12 knowledge and character to be a member of this bar for
13 purposes of this case.

14 MR. WHITE: The State of Wyoming would take
15 great pleasure in joining in the motion, Your Honor.

16 MR. PERRY: Thank you.

17 THE SPECIAL MASTER: Very well. Welcome to
18 the State of Wyoming and to this litigation. And you
19 are admitted for the purposes of this lawsuit.

20 THE SPECIAL MASTER: Mr. Rogers.

21 MR. ROGERS: Tony Rogers, representing the
22 Arapahoe Tribe.

23 MR. ECHOHAWK: Tom Echohawk for the United
24 States.

25 MS. SLEATER: Regina Sleater for the United

1 States.

2 THE SPECIAL MASTER: Anyone behind the
3 United States' table, any pro se?

4 State of Wyoming counsel.

5 MR. WHITE: Your Honor, I'm Michael White.
6 I am here on behalf of the State of Wyoming. I'm
7 joined at counsel table by Stewart Rifkin.

8 MR. COZZENS: Larry Cozzens, and I'm here
9 on behalf of individual water users. In addition, I
10 have been asked to appear on behalf of individual
11 water users represented by Webster, McCarty & Bormeth, Ruth Clare
12 Yonkee, Keene Bard and Steve Avery.

13 THE SPECIAL MASTER: Anyone behind you, Mr.
14 Cozzens?

15 All right. Regina, I'm not hurrying you,
16 but if you're ready to proceed.

17 MS. SLEATER: Yes, Your Honor. At this time
18 the United States would like to make a motion that
19 pursuant to Rule 201 of the Wyoming Rules of Evidence,
20 the Court take judicial notice of the Certificates of
21 Appropriation, Orders of the State Board of Control,
22 permanent applications and various documents attached
23 thereto relating to certain water rights on the Wind
24 River Indian Reservation, which water rights, rather
25 than reading them into the record at this time, I have

1 listed in the motion by permit number and by the
2 ditch name as carried by the Board of Control.

3 The purpose of this motion is so that the --
4 is these water rights are currently owned or attached
5 to land that is held by the United States in trust for
6 either the Shoshone and Arapahoe Tribes or for individual
7 Indians on the Wind River Indian Reservation. As you
8 know, the heart of this case is proving whether or not
9 land is irrigable, practicably irrigable. It is the
10 position of the United States that the recognition
11 officially by the State of Wyoming that this land is
12 entitled to what amounts to in Wyoming Law as a permanent
13 water right is a judicial admission under the Rules of
14 Evidence and this admission by the State of Wyoming to
15 admit the fact that under their records, these lands
16 are classified and carried as irrigable.

17 Now, I want to be very clear about what we
18 are doing here. The United States is not claiming
19 necessarily the State water right. What we are saying
20 is that for these lands the prima facie case that they
21 are irrigable is met by documents in the State
22 Engineer's office. This is an admission by a party
23 opponent as far as the State of Wyoming is concerned,
24 and it's admissible against other parties due to the
25 fact that they are public records regularly kept.

1 As to the date, we will, at a later time, after all
2 the title evidence is in and everything else is
3 cleared up, tie this into or at least through the
4 findings of fact, at the end, tie it into the date
5 we are claiming for those lands which have never left
6 government ownership. For the Indians we will, of
7 course, claim 1868; for those lands which came in
8 later, we will probably be claiming the date of the
9 water right. But at this time all we're putting --
10 for these rights, all of which are adjudicated water
11 rights under the Law of the State of Wyoming, we
12 are asking the Court to take judicial notice of those
13 documents and the information contained therein.

14 THE SPECIAL MASTER: At what time did you
15 place this in the hands of the counsel for the State
16 of Wyoming?

17 MS. SLEATER: This morning, Your Honor, is
18 the first time. So I realize Your Honor will not be
19 ruling on it this morning.

20 THE SPECIAL MASTER: Not unless I get a
21 waiver of the ten-day notice from somebody.

22 MR. WHITE: If we could have five days or
23 even just two or three, We were anticipating this.
24 I can't say that I'm surprised, but I'm not prepared
25 today to argue it, and I should say that if the United

1 States is offering these certificates as proof of
2 the water right which is associated with that particular
3 land, with a priority date assigned by the certificates,
4 the State will have no objection.

5 MS. SLEATER: That's not exactly the United
6 States' offer.

7 MR. WHITE: I think that we might have some
8 argument as to issues of relevancy and materiality if
9 they're offered for other purposes, and I'll have to
10 read the motion to see what purpose they're offered
11 for.

12 THE SPECIAL MASTER: If I also suspect that
13 the total demands of the United States on behalf of
14 the Indians for water for irrigation which is contained
15 in this document alone and none other, you'll be
16 delighted to let it in whether it's 1868 or not.

17 MR. WHITE: That's absolutely true, Your
18 Honor. In fact, I think the evidence will eventually
19 show that the United States has already agreed to that
20 back in the twenties.

21 THE SPECIAL MASTER: Tell me, Regina, is there
22 an acreage total on this?

23 MS. SLEATER: Your Honor, I'm afraid that
24 was omitted. However, the total acreage is 16,498 acres,
25 and this is, this acreage is in addition to the claims

1 that the United States is making through other
2 witnesses. This is just what we feel is a valid and
3 alternative motive, proving this right now rather
4 than having to drag out the trial.

5 THE SPECIAL MASTER: Proving that the land
6 is irrigable which is contained in the permits for
7 which they were issued?

8 MS. SLEATER: Yes, sir.

9 THE SPECIAL MASTER: All right. We will
10 reserve judgment on this motion until later this
11 week when it may be brought forth without objection
12 or otherwise not violate the ten-day rule.

13 MR. WHITE: Why don't we shoot for
14 Monday morning, that way I'll have time to get some-
15 thing in writing.

16 THE SPECIAL MASTER: First thing a week
17 from today.

18 Mr. Rogers.

19 MR. ROGERS: I would like to say on behalf
20 of the Arapahoe Tribe that we join in the motion of
21 the United States except for a portion of the motion
22 which would claim that there may be a different
23 priority date than 1868 for any of these water rights
24 associated with Tribal or individual Indian trust land.
25 The position of the Tribes is that any trust lands on

1 the Reservation all have a priority date of 1868.
2 And with that one exception we join in this motion
3 of the United States.

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1 THE SPECIAL MASTER: Well, we'll have to get
2 in sooner or later as to whether that date would apply
3 to those lands that were allotted lands, 1905 Cession
4 Act and other incidences that might have affected title,
5 but we understand that, and we will get to that motion a week
6 from today.

7 Next, Ms. Sleater?

8 MS. SLEATER: Your Honor, at this time the
9 United States would request the Court's indulgence. I
10 realize that Mr. Kersich had been on the stand being
11 cross-examined when we adjourned.

12 However, Mr. Kersich was obliged to appear in
13 another matter, and what the United States would propose
14 to do at this time is to put on another witness, Mr. Ron
15 Billstein, who will be testifying about another aspect
16 of the land that the United States is claiming is
17 irrigable.

18 And if we could put on Mr. Billstein, perhaps by
19 the time Mr. White is finished with his cross-examination
20 of Mr. Billstein, I anticipate Mr. Kersich will be
21 available and we could pick up where we left off if that
22 meets with the Master's agreement.

23 THE SPECIAL MASTER: I appreciate that and
24 will gladly permit Mr. Kersich to come back and resume
25 when he is through in the other water case, and I hope

1 that all of you can appreciate why it was necessary to
2 continue in this hearing without the one-week delay.

3 MS. SLEATER: Certainly, Your Honor.

4 MR. WHITE: The State of Wyoming has no
5 objection whatsoever to that sort of an arrangement.
6 We have already agreed with the United States that that
7 would be acceptable to the State of Wyoming.

8 We would ask that we could get a couple days'
9 notice before Mr. Kersich shows up so that we could
10 get our experts to sort of follow in the train of other
11 experts to be here when Mr. Kersich shows up.

12 MS. SLEATER: Your Honor, our intent is to
13 place Mr. Kersich on the stand when Mr. Billstein is
14 finished with cross-examination.

15 The only exception to that would be if Mr. White's
16 cross-examination of Mr. Billstein is over by Wednesday
17 and Mr. Kersich is not available. Then we would go
18 forward with another witness at that time.

19 MR. WHITE: My understanding is Mr. Kersich
20 will be available from Thursday following?

21 MS. SLEATER: Friday, I believe for sure.
22 We're hoping for Thursday.

23 MR. WHITE: Why don't you let us know as
24 the date becomes more firm and we will react accordingly.

25 THE SPECIAL MASTER: Very fine; very fine.

1 Is Mr. Billstein present?

2 MR. BILLSTEIN: Yes, sir.

3 THE SPECIAL MASTER: Will you come forward,
4 please Mr. Billstein?

5 Let's swear you in again even though you may
6 have been sworn in before in the proceedings.

7 RONALD E. BILLSTEIN

8 having been first duly sworn was examined and testified
9 as follows, to wit:

10 DIRECT EXAMINATION

11 BY MR. ECHOHAWK:

12 Q. Please state your name.

13 A. My name is Ronald E. Billstein.

14 Q. Mr. Billstein, where are you employed?

15 A. I'm employed at HKM Associates. It's a private
16 consulting firm in Billings, Montana.

17 Q. Is that the same place Mr. Kersich is employed?

18 A. That's correct.

19 Q. And what is your occupation?

20 A. I'm a civil engineer. I specialize in water
21 resource studies.

22 Q. And how long have you been employed at HKM?

23 A. Approximately ten years.

24 Q. What is your position at HKM?

25 Billstein - direct - echohawk

1 A. I'm a division director in charge of all water
2 resource studies. I'm responsible for the management
3 of the entire division. I'm not only a manager,
4 but I become technically involved in certain
5 components of the studies also.

6 Q. Mr. Billstein, what's your relationship in HKM
7 in the water resources division? What's your
8 relationship to Mr. Kersich?

9 A. Mr. Kersich is a principal in the firm.
10 Specifically, he's a principal in charge of water
11 resources, so for all practical purposes, he's
12 my immediate supervisor. I can work for him on
13 projects; I can work with him on projects; or I
14 can work mutually exclusive from him, although I
15 do report to him.

16 Q. Would you please describe for us your educational
17 background?

18 A. Yes, I have a Bachelor of Science in Civil
19 Engineering, 1970, from Montana State University.
20 I have a Master of Science in Civil Engineering,
21 1971, from Montana State University.

22 Q. Mr. Billstein, if you haven't already, would you
23 please describe for us your duties at HKM?

24 A. Basically, I'm a manager. I function in terms
25 billstein - direct - echohawk

1 of coordinating all water resource studies in
2 the division. I lay out the programs, set up
3 the work efforts, and review the final results
4 and conclusions.

5 Q. Are you a member of any professional societies
6 or organizations?

7 A. Yes. I'm the past president of the Eastern Branch
8 of the American Society of Civil Engineers. I'm
9 president-elect now of the State Section of the
10 American Society of Civil Engineers.

11 I am a member of two honoraries, Tau Beta Phi
12 and Chi Epsilon.

13 Q. Is that all of them?

14 A. That's correct.

15 Q. Mr. Billstein, have you been previously accepted
16 as an expert in this case?

17 A. That's right.

18 Q. When was that?

19 A. That was at, I believe, the June 23 hearing.

20 Q. Do you recall what you were accepted in, what
21 area?

22 A. Water resource planning. My testimony involved
23 the analysis of water rights and irrigated acreage.

24 Q. Describe for us generally what water resource

25 billstein - direct - echohawk

1 planning means?

2 A. Okay. Well, conceptually, water resource planning
3 evaluates the components of water supply and water
4 demand and establishes whether water is available
5 to meet current or future needs. A necessary
6 study element is a review and analysis of water
7 rights and irrigated use because this establishes
8 the current level of existing use.

9 Q. So in water resources planning you have occasion
10 to analyze water rights or areas that are
11 currently being irrigated?

12 A. That's a major part of water resource planning.

13 Q. Mr. Billstein, apart from your previous testimony
14 in June, what has been your involvement with the
15 general adjudication since that time?

16 A. Well, I'm the overall project manager for the HKM
17 work effort. I'm in charge of setting up our
18 programs, also coordinating the efforts of exchange
19 of information between the other consultants in the
20 government's case. Specifically, I was involved
21 technically in the historic land study.

22 Q. Could you describe for us what is meant by the
23 historic land study?

24 A. The historic land study was an investigation of
25 billstein - direct - echohawk

1 all the areas of historic use on the Reservation.
2 These areas were composed of water rights of record.
3 By that we're talking about the water rights
4 on file with the State Engineer's Office with the
5 State of Wyoming. Those records contained reports
6 by the Bureau of Indian Affairs specific to the
7 use areas on the Wind River Indian Reservation,
8 and I also became involved in reviewing unrecorded
9 use areas.

10 These are areas that were defined as being
11 in irrigation by previous irrigated land inventories
12 on the Reservation.

13 Q. Does the historic land study have various components
14 or breakdowns within it?

15 A. That's right. There are three basic categories that
16 we evaluated. We took a look at the historic use
17 area, and we broke it into those lands contained
18 within certificates of appropriation of the State
19 of Wyoming.

20 We then took a look at all the areas outside
21 of the certificated service areas and established
22 which areas were in current use.

23 The final component was just the identification
24 of the lands in the remaining portion of the study

25 billstein - direct - echohawk

1 area base which are in current idle status.

2 Q. Is there additional work to be done on the lands
3 in idle status?

4 A. That's right. These are areas which will be
5 beyond what I'm going to testify to. The idle
6 lands were evaluated in terms of arability,
7 and then they will undergo engineering and economic
8 studies to establish their irrigability.

9 Q. You said they were evaluated as to arability.
10 Do you know who did that?

11 A. That was accomplished by the soils scientists team
12 at HKM Associates under the direction of
13 Mr. Kersich. Specifically, the primary investigator
14 was Mr. Waples.

15 Q. Mr. Kersich had previously testified several weeks
16 ago concerning arability of lands on the Wind
17 River Indian Reservation. Would those be the same
18 lands that are included in the historic lands,
19 or are those different?

20 A. These are different. They are mutually exclusive
21 from the areas that Mr. Kersich was testifying to.

22 Mr. Kersich was involved in undeveloped
23 land or future land development areas. We are
24 talking about areas of historical use.

25 billstein - direct - echohawk

1 THE SPECIAL MASTER: Could I ask a definition
2 of historical use?

3 THE WITNESS: Very good. Yes, Special Master,
4 that would include all the service areas of the
5 permits of record from the State Engineer's Office.
6 This would be not only adjudicated water rights
7 permits, but other permits.

8 It would also include the areas of service
9 associated with ditch systems documented by the
10 Bureau of Indian Affairs that weren't a matter of
11 record with the State Engineer's Office and also
12 unrecorded use areas that were found either from
13 previous inventory work such as the SCS 1968 to
14 '70 study or with interviews with the local
15 residents that fell outside of the service areas
16 defined by the first two categories I described.

17 Q. (By Mr. Echohawk) Mr. Billstein, what is your
18 specific involvement with areas composed of the
19 historic lands program?

20 A. My specific involvement is this: I set up the study
21 area base. I'm now giving conclusions relative
22 to those lands which are in current use which fall
23 outside of the service areas of adjudicated water
24 rights of record.

25 billstein - direct - echohawk

1 Q. You are discussing only the lands that are
2 currently irrigated that are apart from the
3 adjudicated land base; is that right?

4 A. That's correct.

5 Q. How did you go about establishing the lands that
6 were currently in use outside the adjudicated base?

7 A. Well, first of all, we had to take the study area
8 base and place them on a mode of investigation.
9 By this we are talking about an aerial photograph.

10 We obtained aerial photographs, the most recent
11 that were available for the Reservation. These were
12 taken in the fall of 1979 and the early summer of
13 1980.

14 We asked that these photographs be scale
15 rectified, and this accommodated accurate plotting
16 of the service areas.

17 Q. What do you mean by "scale rectified"?

18 A. By scale rectified we're talking about obtaining
19 photographs from a flight contractor that have
20 been modified or rectified to a prescribed scale
21 that we chose to use.

22 Q. Did HKM make any efforts to check the reliability
23 of the scale?

24 A. Yes, we did. We made several efforts. Included --
25 billstein - direct - echohawk

1 Q. Would you please describe those?
2 A. Okay. Included was the fact that we checked
3 into the contractor that made the flights. This
4 particular contractor is a government-certified
5 contractor, Horizons, Incorporated, and the work
6 that was being done was being done under a
7 government contract with government specifications.
8 It was under a contract for the Agricultural
9 Stabilization and Conservation Service and, therefore,
10 we felt confident that this particular company
11 was competent and that the means of carrying out
12 the flight were standard and acceptable to the
13 profession.

14 We next sent a representative to the lab of
15 Horizons, Incorporated, to work with their lab
16 people so we understood their rectification process.

17 We established procedures that we wanted the
18 photos individually rectified rather than to
19 look at a series of photos along a strip and have
20 them set a scale on a series of photos.

21 And, lastly, as we obtained the photos by
22 strip from the contractor, we performed our own
23 sectionizing work and checked the scale, and if
24 there were problems, we worked it out with the lab

25 billstein - direct - echohawk

1 for the flight contractor.

2 Q. So in your opinion would the aerial photographs
3 be an accurate representation of the lands on
4 the Reservation?

5 MR. WHITE: Objection, Your Honor. Calls
6 for speculation. The correct way to do that is
7 to find out what the lands look like, show him
8 what the photograph is, and then ask him whether
9 or not that particular photograph is an accurate
10 representation. We haven't even seen the
11 photographs yet.

12 THE SPECIAL MASTER: Well, I'll sustain
13 the objection. You can go around it.

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billstein - direct - echohawk

1 Q (By Mr. Echohawk) (Continued) Mr. Billstein,
2 you left off with you'd obtained these aerial
3 photographs and done some checking on them. How
4 did you use the aerial photographs?

5 A The aerial photographs were used to plot the
6 service areas of the water rights of record, the
7 ditches as defined by reports of the Bureau of
8 Indian Affairs and also the unrecorded use areas
9 that fell in neither of these categories. Those
10 were located on the aerial photographs as well
11 as the service concepts associated with those.
12 You take those from the maps accompanying the
13 permit, from the State Engineer's office. For
14 the BIA reports, there were actually ditch
15 layouts, and for the unrecorded use areas, we took
16 a look at that area and established how those
17 lands were being served.

18 THE SPECIAL MASTER: Being what?

19 THE WITNESS: Served.

20 Q (By Mr. Echohawk) So all this information was
21 then plotted on the aerial photographs?

22 A That's correct.

23 Q Mr. Billstein, I show you what has been marked
24 as United States' Exhibit WRIR C-55.

25 billstein-direct-echohawk

1 THE SPECIAL MASTER: What's the number
2 again, please?

3 MR. ECHOHAWK: C-55.

4 THE SPECIAL MASTER: Off the record, please.
5 (Off-the-record discussion.)

6 THE SPECIAL MASTER: All right, back on
7 the record, Merissa.

8 Q (By Mr. Echohawk) Mr. Billstein, would you
9 please identify United States' Exhibit WRIR C-55.

10 A Yes. This is a map of the Reservation showing
11 the external boundaries of the Reservation. It
12 also includes the Padlock Ranch area extending
13 north, as well as Merrill and Curtis.

14 THE SPECIAL MASTER: What did you call that
15 ranch?

16 THE WITNESS: Padlock, as well as the Merrill
17 and Curtis land acquisition areas that were
18 acquired in the 1940's. These cumulatively
19 are called the Arapahoe Ranch area.

20 Within this boundary, we have a title called
21 Historic Lands Investigation Study Area Base
22 Map, Wind River Indian Reservation, from 1979-1980,
23 USDA Aerial Photo Index.

24 We have the primary watersheds delineated on
25 billstein-direct-echohawk

1 the map as well as gray blocked out areas.
2 These gray blocked out areas show the boundaries
3 of the respective photographs that were used to
4 evaluate land bases within certain segments of
5 the Reservation. The photographs are identified
6 by a number such as 7-209. The seven refers to
7 the flight strip; the 209 refers to an
8 identification number which appears on the USDA
9 photograph.

10 THE SPECIAL MASTER: Is it a number that
11 appeared on the ground?

12 THE WITNESS: No, sir, on the photograph
13 itself.

14 Cumulatively, these grayed out areas
15 reflect those portions of the Reservation that
16 underwent study as part of the historic lands
17 work.

18 Q (By Mr. Echohawk) Mr. Billstein, was this map
19 prepared under your direction?

20 A Yes, it was.

21 Q Would you say it's an accurate representation of
22 the study area, to the best of your knowledge?

23 A To the best of my knowledge, yes.

24 Q You can be seated.

25 billstein-direct-echohawk

1 MR. ECHOHAWK: Mr. Master, can you see that
2 exhibit good enough?

3 THE SPECIAL MASTER: Yes.

4 MR. WHITE: Tom, we're having a devil of
5 a time seeing it because of the light. I wonder
6 if we could take it and set it over a little bit.

7 (Off-the-record discussion.)

8 Q (By Mr. Echohawk) Mr. Billstein, what was done
9 next after you established your study area?

10 A We performed an office analysis where we attempted
11 to establish current use by means of stereoscopic
12 analysis.

13 Q What do you mean by stereoscopic analysis?

14 A Stereoscopic is a science of producing a three
15 dimensional effects from two dimensional objects
16 or pictures that in fact have three dimensions.
17 Probably the easiest way of relating this is a
18 common view master. Common view master has a
19 picture, a two dimensional picture associated
20 with each lens. As you look through each lens
21 at the common or respective two dimensional
22 pictures, the image as it is transmitted back to
23 the brain shows up in three dimension. It's the
24 same type of concept with respect to aerial

25 billstein-direct-echohawk

1 photography. If you look at a photograph you
2 basically see two dimensions. It's the same as
3 if you covered up one of your eyes, you only
4 see two dimensions, but with photography there
5 is a number of exposures mapped along a fly line
6 or flight line and you get an overlap and they're
7 basically pictures of the same location. So it's
8 the same concept of having your eyes placed at
9 two different locations looking at the same point.
10 Again, by use of stereoscope it allows those images
11 to be transformed back to three dimensions.

12 Q Mr. Billstein, how did you use the stereoscopic
13 analysis?

14 A The stereoscopic analysis was used to plot service
15 areas, service concepts. By that you can use
16 stereoscope to define locations of ditches, laterals.

17 THE SPECIAL MASTER: These were actual
18 ditches and laterals, not proposed?

19 THE WITNESS: That's correct. And also it
20 enables one to evaluate vegetative cover in these
21 areas and assist in establishing land use
22 boundaries.

23 Q (By Mr. Echohawk) What do you mean by land use
24 boundaries?

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1 A Basically a breakout of whether a tract of land
2 is being irrigated or not being irrigated.

3 Q Is there any magnification of procedure used
4 with the stereoscope?

5 A One of the major benefits of using stereoscope
6 is that you can use magnification to help your
7 interpretation. In our particular case we had
8 magnification of roughly three power. And based
9 on the scale of the photographs, which were one
10 inch equals a thousand feet or roughly 5.28 inches
11 per mile, that magnification brought the
12 photograph up to roughly 16 inches per mile. And
13 an accomplished stereo expert can photo interpret
14 quite accurately from a scale of that size.

15 MR. ECHOHAWK: Mr. Master, would it help you
16 to understand the stereoscope work if you saw an
17 example of how the stereoscope works? We've
18 brought with us a small stereoscope and a small
19 photo that works with it to let you see.

20 THE SPECIAL MASTER: You're welcome to offer
21 it, it might help. I don't think I need any help
22 to the stereoscopic understanding, but you might
23 if you want to present it you're welcome to.

24 MR. ECHOHAWK: I thought for your own --

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1 THE SPECIAL MASTER: I don't think it's
2 necessary.

3 Q (By Mr. Echohawk) Mr. Billstein, in determining
4 the layout of the ditches and areas of land use,
5 is stereoscopic analysis an accurate way to
6 determine that?

7 A It's a very accurate way of determining it.

8 One, at the scale that we are talking about
9 you can analyze depth of ditches, condition of
10 ditches, whether there's any breaks in the ditch
11 systems such as washouts, the relationship between
12 a ditch system to a diversion point. You can
13 also evaluate vegetation as to whether it's low
14 growing vegetation such as grasses versus shrubs,
15 sagebrush, this type of thing to trees. This
16 type of interpretation is certainly possible for
17 those people who have extensive experience with
18 it.

19 Q Is this stereoscopic process commonly used and
20 relied upon by engineers and water rights
21 analysts?

22 A Yes. It's a very necessary first step in any type
23 of determination of water rights and use.

24 Q Who did the stereoscopic work involved in this
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1

project?

2

A In our particular project, Mr. Ralph Saunders
3 was our analyst.

3

4

Q Does Mr. Saunders work at H.K.M.?

5

A Yes, he does?

6

Q Does Mr. Saunders have any experience in
7 stereoscopic analysis?

7

8

A Yes. Mr. Saunders has extensive experience in
9 stereoscopic analysis. For approximately four
10 years he used stereoscope work to evaluate water
11 rights in the Powder River Basin in Montana.

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Under the Montana Water Use Act of 1973,
the Powder River Basin was the first Basin to
undergo a formal adjudication process. Mr.
Saunders was hired by the State of Montana to set
up the field program, work with the investigators
in the field and check their results. And one
of the principal means that he utilized to check
their results was a stereoscopic analysis to see
if he could pinpoint by means of office analysis,
areas of questionable usage. And if he did find
those, his investigators would then go back out
and confirm or modify their findings.

He's also used it in a lot of other
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1 environmental permit work, Northern Tier Pipeline,
2 for example, work. We had to do land use
3 analysis to evaluate the impacts of that fly line
4 being built across the State of North Dakota, as
5 part of their compatibility study and route
6 permit applications. He also, when he worked for
7 the State, did extensive work in what they call
8 their water resources surveys, which again was
9 a plotting of land use and water rights relative
10 to each county of investigation.

11 Q Did Mr. Saunders perform stereoscopic analysis
12 on all the areas contained in the historic lands
13 program?

14 A Yes, he did, except as defined by Exhibit 55,
15 that's correct.

16 Q Did he perform stereoscopic analysis within the
17 Federal Irrigation Projects?

18 A No, that would be the single exception. He was
19 not asked to do stereoscopic work in the Wind
20 River Federal Irrigation Projects because we had
21 undertaken land use mapping study in 1978. This
22 was later updated for 1980, and also that the
23 project lands have very complete maps on irrigation
24 facilities.

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1 THE SPECIAL MASTER: Doesn't the Exhibit
2 WRIR C-55 reflect that there are some aerial
3 photography done precisely on areas that are in
4 the Federal Irrigation Projects?

5 THE WITNESS: Special Master, that's correct.
6 He did not do the stereoscopic analysis on it.
7 We did do field work for those areas, so therefore,
8 the aerial photograph defined on Exhibit 55 were
9 in fact utilized and the results of those studies
10 shown on those aerials.

11 Q (By Mr. Echohawk) Is the stereoscopic work more
12 reliable than just straight photo interpretation
13 from pictorial coverage?

14 A Stereoscopic analysis is a major improvement over
15 just pure pictorial analysis. It allows the
16 analyzer to follow the ditch by contour, be
17 familiar with the relief of the area and this is
18 particularly important as you're crossing divides
19 and reviewing distribution of irrigation on long
20 irrigation systems. It just enables you to
21 accurately depict how the service is actually
22 being carried out in the field.

23 * * * * *

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1 Q. (By Mr. Echohawk) Was the stereoscopic analysis
2 supplemented by use of any other aerial photographs
3 other than the 1980 photographs you used?

4 A. Yes, it was. There's a fairly complete history
5 of use by photograph on the Wind River Reservation,
6 and these aerials were consulted if we felt they
7 were necessary to help reinforce the service
8 concepts of the analyzer who was using the
9 stereoscope.

10 By that, if we were interested in a particular
11 tract of land, we had photos out of 1939, for
12 instance, or 1948, and we dug out those photos
13 and took a look at how those particular lands
14 were being served, and that just helped assist
15 making the interpretations that we felt we needed
16 as part of the office study.

17 Q. Okay. Have you described for us everything that
18 was included within the office study or office
19 analysis?

20 A. Previous to field work, yes.

21 THE SPECIAL MASTER: Mr. Echohawk, let me
22 ask a question.

23 Did you find in looking over the aerial
24 photographs of the '40's to which you just referred,
25 billstein - direct - echohawk

1 perhaps some in the '50's -- were you able to
2 determine whether there had been an addition
3 to irrigated lands used in the last thirty years
4 on the Reservation or has the figure of total
5 irrigable lands been about constant the last
6 thirty years, or do you know?

7 THE WITNESS: We looked at certain tracts
8 of lands, and it was -- we could make conclusions
9 relative to those areas whether there had been an
10 expansion of use. It really wasn't a component
11 part of the study to assess how lands in the 1939
12 timeframe matched with 1980.

13 THE SPECIAL MASTER: So am I correct in
14 concluding that perhaps you don't know what the
15 growth pattern has been in the use of land or
16 how much acreage has been put to irrigation over
17 the past five decades?

18 THE WITNESS: Not on an individual decade
19 basis, Mr. Master.

20 THE SPECIAL MASTER: Do you have the answer
21 to that question in mind on any basis?

22 THE WITNESS: In the Wind River Federal
23 Irrigation Projects, those records that we compiled
24 and looked at showed a gradual increase in

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1 usage on the Reservation. We found a multitude
2 of areas that were previously unrecorded on the
3 Reservation. This would indicate to us that
4 there was an additional irrigation base being
5 developed.

6 Another example is just to simply look at
7 the Midvale Project. In the late 60's at the
8 time of the irrigated land inventory of the State
9 of Wyoming, they had something of the order of
10 64,000 acres of documented irrigated land.

11 The conclusions of that study shows approximately
12 73 or 74,000 acres actually receiving water
13 at that point in time. Midvale then went out
14 and updated and committed a five-year program
15 to update their records.

16 THE SPECIAL MASTER: Could you tell me how
17 much of that was for Indian or non-Indian?

18 THE WITNESS: The vast majority in that
19 case was non-Indian.

20 THE SPECIAL MASTER: Then it doesn't hardly
21 have any application to our work, does it?

22 THE WITNESS: Just a comment about the basin.

23 THE SPECIAL MASTER: Okay. Go ahead, Mr.

24 Echohawk.

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1 Q. (By Mr. Echohawk) Mr. Billstein, after Mr. Saunders
2 would make these photographic and stereoscopic
3 analyses, would he record his findings anywhere?

4 A. Yes, he recorded his findings on the work aerial
5 photographs.

6 By that I'm talking about that we obtained
7 three sets of photographs: one set to do hydrographic
8 work on, one set for HKM personnel to do their
9 soils work on, and an extra set for a stereo set
10 of photographs.

11 Relative to his mapping of land use, he
12 plotted his results on the hydrographic stereo
13 copies.

14 Q. How would he record those?

15 A. He would show them by irrigated tract boundaries,
16 and he would also show the primary service facilities
17 associated with those boundaries.

18 Q. And what was done with the results of the stereoscopic
19 analysis? What's the next step in the program?

20 A. Although stereoscopic analysis is a very valuable
21 tool in defining irrigation use, we felt it was
22 necessary to confirm those findings by means of
23 field studies.

24 Q. Before we discuss the field program, was there any
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1 effort made to determine what land was trust land
2 and what land was fee land?

3 A. That's correct. We screened the overall study
4 area base as shown by Exhibit 55 by ownership,
5 and that ownership was received from the realty
6 office of the Bureau of Indian Affairs.

7 They expressed to us that they felt it was
8 current as of April of 1980. This ownership base
9 was plotted on our respective area photographs
10 and that portion of the office study area that
11 was to undergo field work was based on trust land
12 ownership.

13 Q. Was the delineation of ownership done before
14 or after the stereoscopic analysis was performed?

15 A. It was done after.

16 Q. Were any major additions found so far as ownership,
17 any major changes found as to ownership at a later
18 time?

19 A. There was only one major change that we encountered,
20 and this was by means of an interview with tribal
21 representatives. This had to do with a relatively
22 current or recent tribal purchase in the Sioux
23 Ditch area of the North Fork of the Popo Agie.

24 The particular tract was purchased under the name
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1 of Harpoon Realty, and it was transferred back to
2 trust ownership from fee.

3 Q. You have been mentioning a field program.

4 MR. WHITE: Your Honor, excuse me. I would
5 move to strike that last answer based on hearsay.
6 He is testifying as to what happened to certain
7 lands based on an out-of-court statement offered
8 for the truth of its contents by a person that is
9 not before the Court, some tribal representative.

10 THE SPECIAL MASTER: I had doubts about it,
11 I'm going to let it stand. I had doubts as to
12 its value. I wasn't satisfied with it, and I
13 meant to ask some questions, but thought I would
14 let it go.

15 I don't understand all the motioning going
16 on either.

17 THE WITNESS: I could shed -- Mr. Special
18 Master, I could shed some additional light on that.

19 THE SPECIAL MASTER: Perhaps you should.

20 MR. WHITE: I think that meant, "Keep going,
21 counsel. I know the answer to the next few
22 questions."

23 THE SPECIAL MASTER: Go ahead.

24 A. (By the Witness) Once we were informed of that
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general area, we went to the realty office of the Fort Washakie Branch of the Bureau of Indian Affairs and asked them to confirm whether that particular tract of land had been purchased by the tribe. They went through their records and confirmed that and resubmitted the legal description to us.

THE SPECIAL MASTER: Confirmed that it had been purchased by the tribes?

THE WITNESS: That's right. It's now in trust ownership.

THE SPECIAL MASTER: But it was not -- when was it purchased by the tribes?

THE WITNESS: Within the last couple of years.

THE SPECIAL MASTER: From whom?

THE WITNESS: That I don't know, Special Master.

MR. WHITE: I would renew my motion, Your Honor.

THE SPECIAL MASTER: I would sustain the objection. It's simply -- if it is fee land and it was purchased within the last several years, it has no place in this hearing. That is, it

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certainly has no place in being adjudicated a date for a water right.

MR. ECHOHAWK: Your Honor, I don't think it's offered for the date. It's just as to the ownership at this point.

THE SPECIAL MASTER: Is it offered to prove the accuracy of the work of the witness in doing his work? I will certainly accept it for that, but I believe he said he's including the acreage.

MR. ECHOHAWK: He's including the acreage as being trust acreage.

THE SPECIAL MASTER: Well, that may be all right, but the fact that it's trust acreage doesn't permit it to be included in my deliberations as to a report regarding water rights issues.

MS. SLEATER: That's true, Your Honor. At this point Mr. Billstein is just setting up his base. Further evidence will be offered if this acreage is included in it relative to its use or possible use. Right now Mr. Billstein is just saying that in his investigations he discovered that this additional acreage had been purchased by the tribes and is, in fact, being held by the
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1 United States in trust for the tribes.

2 THE SPECIAL MASTER: Right, and you agree
3 with my observation on this?

4 MS. SLEATER: Yes, Your Honor, that you need
5 something more than that before you can adjudicate
6 a water right for it.

7 THE SPECIAL MASTER: We don't have any problem
8 yet, Mr. White.

9 MR. WHITE: Well, I was just going to say the
10 best evidence rule -- that I think Ms. Sleater
11 helped us out on that because I don't believe the
12 testimony is for the truth of the contents, is
13 that correct, because if it's supposed to be
14 offered for the truth of the contents, then I do
15 have the hearsay objection.

16 THE SPECIAL MASTER: Let's leave it as it is
17 now, and when additional matters are introduced
18 regarding the purpose for that referral, we'll pass
19 judgment on it at that time.

20 Go ahead, Mr. Echohawk.

21 Q. (By Mr. Echohawk) Mr. Billstein, you have been
22 mentioning a field program. Why was it necessary
23 to conduct a field program over and above the
24 stereoscopic analysis?

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1 A. Again, the stereoscopic analysis is a valuable
2 initial step in establishing land use, but it's
3 far from being able to answer all the questions
4 relative to a tract of land.

5 Therefore, we committed to a field
6 investigation to resolve any gray areas and
7 confirm the results of the office analysis.

8 Q. Would you please describe for us what exactly was
9 involved in the field program?

10 THE SPECIAL MASTER: Is your question
11 directed to the entire field program to which
12 Mr. Kersich testified for more than a week and
13 all the previous exhibits that were introduced?

14 MR. ECHOHAWK: No.

15 THE SPECIAL MASTER: Or to his specific --

16 MR. ECHOHAWK: His specific field program.

17 THE SPECIAL MASTER: As distinguished from
18 that that is already in the record as far as
19 field work?

20 MR. ECHOHAWK: That's correct.

21 THE SPECIAL MASTER: Okay.

22 A. (By the Witness) The first step in a field study
23 was to take a look at and review the results of
24 the office analysis by stereoscopic work. This
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1 is extremely important because it allows the
2 field men to derive an initial concept of the
3 water delivery to an area as well as to review
4 the tract boundaries associated with the service
5 to the land base.

6 If one were to simply go out cold into an
7 area without having this type of information,
8 there's a good chance that some particular ditch
9 system or use area might be overlooked, and it
10 also allows for a quality control check whether all
11 the field areas are, in fact, covered relative to
12 the original office analysis, so after the field
13 personnel were briefed and work undertaken to gain
14 a familiarity with respective ditch systems, they
15 were then committed to a field program that was
16 carried out in August, September and October of
17 1980, where they were to visit each tract and
18 confirm the condition of the facilities and then
19 evaluate the land use mapping as defined by the
20 office study, and if they found changes, to report
21 those changes and we would make final conclusions
22 on the results of the field component.

23 * * * *

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- 1 Q (By Mr. Echohawk) (Continued) This field
2 program took place on lands other than those
3 which Mr. Kersich testified about; is that
4 right?
- 5 A That's correct.
- 6 Q And the purpose of that was what?
- 7 A It was to confirm the results or make modifications
8 to those results as defined by the stereoscopic
9 work.
- 10 Q Did the field personnel take with them the
11 aerial photographs?
- 12 A Yes. The aerial photographs as we've previously
13 discussed, a complete set was purchased for that
14 very reason. Those particular use areas had to
15 be carried into the field by means of these
16 photos so that an accurate analysis could be made
17 of, first of all, the office established use
18 area, and finally any modifications to that use
19 area.
- 20 Q Mr. Billstein, is there -- was there an additional
21 field program carried out on the historic lands
22 land base other than the one that you've just
23 briefly described?
- 24 A Well, all the tracts were investigated, both the
25 billstein-direct-echohawk

1 Wind River Federal Irrigation Project as well
 2 as the private ditches that fell without those
 3 areas. After these studies were completed, we
 4 established interviews on the Reservation with
 5 the respective water users. These interviews
 6 were set up so that each individual who is
 7 affected might have a chance to review our
 8 findings. And with respect to the Wind River
 9 Federal Irrigation Project, we interviewed the
 10 Irrigation Department of the Bureau of Indian
 11 Affairs, specifically the head of their water
 12 delivery or ditchrider group, and we reviewed
 13 those respective tracts to ascertain whether they
 14 in fact, had been delivered water.

15 Q Mr. Billstein, would you describe for us how
 16 the field people, field personnel visited each
 17 tract, what they did.

18 A Okay. The night before it was established what
 19 flight lines that they were going to evaluate.
 20 These flight lines were layed out and the systems
 21 were reviewed by the investigators based on the
 22 office analysis. Then we either entered the use
 23 areas by means of surface vehicle or helicopter.
 24 The first component of the field study was to

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1 review the condition of the facilities. This
2 would establish if there were any blowouts in
3 the ditches, the location of those blowouts,
4 then the condition of diversion facilities. Once
5 this was done and the investigator had a firm
6 picture in his mind as to the condition of the
7 service facility, he then looked at the use area
8 and if there was a blowout, for example, in his
9 evaluation on the ditch system and the use area
10 was shown active, he would certainly modify
11 something of that nature.

12 THE SPECIAL MASTER: At this point, would
13 you describe a blowout in the service area.

14 THE WITNESS: Okay.. A blowout would be a
15 washout in a ditch system, or there would be a
16 cross drainage that dissected a ditch system
17 which would preclude service from continuing.

18 Q (By Mr. Echohawk) What was done after the
19 facilities were checked?

20 A After the facilities were checked, the use areas
21 were inspected in terms of what we found out
22 relative to the facilities, and the boundaries
23 as established in the office study were either
24 accepted or modified.

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1 Q What sort of determination or parameters were
2 used in determining whether the land was actually
3 being put to use, was it always full irrigation?

4 MR. WHITE: Your Honor, I would object to
5 the question. If it was based on his personal
6 knowledge of what the field inspectors actually
7 did, I have no objection, or if it's the
8 instruction he gave the field inspectors I have
9 no objection, but if it's based on speculation
10 of what they may have done or what he thought
11 they have done, I would object.

12 THE SPECIAL MASTER: Would you read the
13 question back to me, please.

14 (Thereupon the following
15 (question was read back as
16 (follows: "Q What sort of
17 (determination or parameters
18 (were used in determining
19 (whether the land was
20 (actually being put to use,
21 (was it always full
22 (irrigation?"

23 THE SPECIAL MASTER: Overruled, you may
24 answer.

25 THE WITNESS: The field people were allowed
to make interpretations of the use areas relative
to whether they felt that the service lands were
receiving full service irrigation over the entire

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1 base or whether there was a portion of the
2 service area, for example, that was only
3 receiving partial service or if there were lands
4 that were lying within the service areas that
5 were basically being served at this particular
6 point in time from seepage from the canal
7 systems.

8 THE SPECIAL MASTER: In other words, your
9 answer was each person was using the determination,
10 was to use his own professional judgment; is that
11 right?

12 THE WITNESS: No. Criteria were set up in
13 terms of land use types, descriptions. And they
14 were to interpret from those descriptions.

15 Q (By Mr. Echohawk) Would you give us a little
16 more detail of what type of descriptions were
17 used.

18 A Well, those lands that were felt to be in full
19 service and had relatively high return crops
20 associated with them, showed good physical
21 systems were typed a I. Type II were defined
22 basically as lands that had the same physical
23 characteristics but perhaps didn't have the higher
24 return crops.

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THE SPECIAL MASTER: How do you determine the higher return crops from aerial photos?

THE WITNESS: Those weren't determined from aerial photographs. Those were basically interpreted from review of information compiled by the economist in the study, plus any records that we were able to come up with in terms of previous studies in the area.

THE SPECIAL MASTER: Mr. Echohawk, we've been at it an hour. The Reporters want a break, why don't we take a ten minute recess.

(Thereupon a ten minute recess was taken.

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1 THE SPECIAL MASTER: Allright. We'll
2 please come to order and continue, Mr. Echohawk.

3 Q (By Mr. Echohawk) Mr. Billstein, who at H.K.M.
4 did the field work that's involved in the
5 determination of lands that are currently being
6 irrigated?

7 A The primary investigators were Mr. Ralph Saunders,
8 Bill Johnston, and Ross Waples.

9 Q Would you please describe for us Mr. Johnston's
10 background?

11 A Mr. Johnston?

12 MR. COZZENS: Your Honor, I object. I don't
13 thank he's the person --

14 THE SPECIAL MASTER: Mr. Johnston should be
15 able to do that, or perhaps your question might
16 not be necessary. He's not going to testify to
17 what Mr. Johnston knows, is he? This is not the
18 witness to give Mr. Johnston's background.

19 MR. ECHOHAWK: Your Honor, what we are
20 trying to show is that Mr. Billstein in his
21 setting up the program and his supervision review
22 is able to rely on certain people, and it's just
23 not any person that he chose to go out to make
24 these determinations. It's certain highly

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1 qualified people.

2 THE SPECIAL MASTER: Did you rely on Mr.
3 Johnston?

4 THE WITNESS: Yes, sir.

5 THE SPECIAL MASTER: Why?

6 THE WITNESS: We're talking about an
7 extensive land use base. Certainly one individual
8 cannot study personally himself all the land
9 tracts.

10 Therefore, the field teams were composed of
11 those persons who have expertise in this area.

12 Q (By Mr. Echohawk) What expertise does Mr.
13 Johnston have in this mapping?

14 MR. COZZENS: Let me just say for the record
15 I think they could get Mr. Johnston here to
16 answer that. If we are relying on his expertise,
17 then let's have his expertise rather than --

18 THE SPECIAL MASTER: Are you familiar with
19 Mr. Johnston's background?

20 THE WITNESS: Yes, sir.

21 THE SPECIAL MASTER: Is it one of the reasons
22 you relied on him?

23 THE WITNESS: That's right. That's why he
24 was hired.

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1 THE SPECIAL MASTER: Go ahead with the
2 question.

3 MR. ECHOHAWK: Okay.

4 THE WITNESS: Mr. Johnston has a Bachelor
5 of Science from the University of Wisconsin.

6 THE SPECIAL MASTER: You don't have to tell
7 us that. You testified that you relied on him.
8 That's fine with us.

9 THE WITNESS: Okay. Great.

10 Q (By Mr. Echohawk) Mr. Billstein, you mentioned
11 earlier that interviews were conducted with
12 certain farmers or people that were irrigating
13 this land; is that correct?

14 A That's correct.

15 Q Would you please describe for us what type of
16 information was obtained from these people?

17 A Well, the identification of the people was made
18 after the field study was completed. The land
19 areas were mapped.

20 I then traveled to the realty office of
21 Fort Washakie to obtain the names of the
22 associated people. We then sent letters to all
23 these people and hired local residents to further
24 contact them to ensure that they were knowledgeable

25 billstein-direct-echohawk

1 of the forthcoming meetings and asked them a
2 personal invitation to attend.

3 We then set up meeting places on the
4 Reservation. One was in Crowheart, which handles
5 the Upper Basin people. One was in Fort Washakie,
6 which handles the Little Wind River people, and
7 one was in Arapahoe, which handles the Wind
8 River and Lower Wind River area people.

9 And we conducted interviews for three days
10 and with three sets of interview teams from H.K.M.,
11 and these individuals came in and went over the
12 findings as mapped on our hydrographic copies
13 and gave us backup information relative to the
14 accuracy of those findings.

15 THE SPECIAL MASTER: Would you go back and
16 read the question again, please, to the witness?

17 (Thereupon the following
18 (question was read: "Q
19 (Would you please describe
20 (for us what type of
21 (information was obtained from
22 (these people?"

23 THE SPECIAL MASTER: You didn't answer that
24 question. You told us everything -- what type
25 of information was obtained from these people?

THE WITNESS: If they irrigate this land.

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1 And they confirmed yes or no relative to the
2 actual use carried out by them on these tracts.

3 Q (By Mr. Echohawk) So your interviews then would
4 either confirm your findings or give you some
5 cause for further review of your work?

6 A If we had modifications based on those interviews,
7 the tract was reassessed.

8 Q Mr. Billstein, you have been talking about
9 the various aspects of your program, so far
10 compiling the water right information, the
11 stereoscopic analysis, and then the field work.

12 Would you please describe for us what your
13 involvement was in each of those areas?

14 A Okay. Relative to the stereoscopic analysis,
15 I participated in the setting up of the study
16 area. We went over the procedures relative to
17 what kind of output I wanted from the stereo
18 work previous to the time that the field people
19 were to go into the areas to evaluate the individual
20 tracts.

21 Relative to the field program, I performed
22 a review with Mr. Waples at BIA offices in
23 June of 1979 after the first land use mapping
24 study was accomplished in the Wind River Federal

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1 Irrigation Project. At that time each tract
2 was evaluated with the BIA personnel and the
3 ditchrider to confirm the proper delineation of
4 use for those tracts.

5 With respect to work that was done in the
6 field, I checked their work by means of cross-
7 referencing with assessment records. For instance,
8 in LeClair Irrigation District that portion that
9 is being delivered water for tract lands, the
10 official records are contained in the Bureau of
11 Indian Affairs offices. I cross-checked the
12 results of the study with those records.

13 We did the same type of study with the Midvale
14 Irrigation Project relative to the lands that they
15 are now preparing formal adjudication claims for.

16 I also obtained the assessability records
17 which are in terms of maps for the Wind River
18 Federal Irrigation Project and compared our
19 findings against those assessability records.

20 THE SPECIAL MASTER: When you say the Wind
21 River Federal Irrigation Project, you mean all
22 six of them?

23 THE WITNESS: That's correct, all the units
24 are part of the project.

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1 A (By the Witness) I also used available tools
2 such as the results of the SCS Irrigated Lands
3 Inventory, reviewed what was found at that
4 particular time against the findings now.

5 We also obtained infrared photography at
6 approximately quadrangle scale for the time
7 periods of '74 through '78, and again our
8 findings were reviewed against those kinds of
9 infrared photographs, again just as a quality
10 control check.

11 Q (By Mr. Echohawk) Mr. Billstein, excuse me. Let
12 me interrupt you. Did you make this review of
13 the infrared photography?

14 A Yes. Yes, I did.

15 Q Okay. Go ahead.

16 A And I also participated in a field review with
17 the principal investigators, Mr. Saunders and
18 Mr. Johnston. It was a three-day helicopter
19 field review where they explained to me their
20 findings and we went through the tracts on each
21 of the hydrographic copies and they proved to me
22 the reliability of their findings.

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- 1 Q (By Mr. Echohawk) (Continued) Once you made your
2 final field review, were any of the results or
3 their results changed as a result of your review?
- 4 A Yes, I've changed several tracts. One in
5 particular, during the interview a gentleman
6 established that he was pumping from the river.
7 I think it was in the Boyd Ditch area, and that
8 he was not using a diversion work and he delineated
9 on his interview form and map exactly where he
10 said he was irrigating. I reviewed from all the
11 sources I had and could not believe there was any
12 irrigation being carried out there, so there in
13 the fieldwork we visited that tract, found out
14 that, yes, in fact, he was pumping from the river.
15 Unfortunately, it was about an eighth of a mile
16 downstream, so, therefore, we had to modify the use
17 areas to properly reflect what was, in fact,
18 occurring in the field.
- 19 Q Were you able to determine whether the field
20 verification program or field verification work
21 that was conducted by Mr. Saunders, Mr. Waples
22 and Mr. Johnson was done in an accurate and
23 professional type manner?
- 24 A After my review it was my conclusion that it was,
25 billstein - direct - echohawk

1 Q Is this the type of work program that you set
2 up and the work product generated as a result
3 of that program, the type normally relied upon
4 by you in water resource planning?

5 A Yes, It's an essential step in water resource
6 planning.

7 Q Had you prepared under your direction certain
8 exhibits that reflect the location that trust
9 lands that are currently under irrigation and
10 receiving water?

11 A Yes, I have.

12 Q Mr. Billstein, I show you what has been marked
13 as United States Exhibit WRIR C-55-A. Would you
14 please identify Exhibit 55-A.

15 A Yes. This is a table. It's identified by
16 description, Table 2, acres in use by photograph.
17 It then identifies the respective aerial
18 photograph and the acres in use associated with
19 those photographs.

20 Q And these are the acres, under the column "Acres",
21 those are the results of your findings of your
22 historic lands programs; is that right?

23 A That's correct.

24 THE SPECIAL MASTER: Does the number of the
25 billstein-direct-echohawk

1 aerial photographs tabulated in this exhibit
2 correspond to the increased numbers of the
3 WRIR Exhibits from C-55 up to the C-high 90's
4 before me?

5 THE WITNESS: They should be in that order,
6 Special Master.

7 THE SPECIAL MASTER: Mr. Echohawk, is there
8 a reason that the number of the exhibit is not
9 put along side the number of the aerial photograph
10 in the exhibit or was that done to confound the
11 Special Master?

12 MR. ECHOHAWK: It was a mere oversight, Your
13 Honor. However, I do have, I do have a list of
14 my own prepared along --

15 THE SPECIAL MASTER: One for you, but not for
16 me.

17 MR. WHITE: I think it was done to confound
18 the State.

19 MR. ECHOHAWK: And I could make a copy of
20 that available.

21 THE SPECIAL MASTER: My thought is if we
22 just add the exhibit number along side the
23 exhibit it would sure help in whatever purpose
24 that it would serve.

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1 MR. ECHOHAWK: Mr. Master, for your
2 convenience, this is the exhibit list that has
3 the photograph number and the exhibit number
4 along side.

5 THE SPECIAL MASTER: Well, is there any
6 reason why this US Exhibit, three-page document
7 you just handed to me ought not be also introduced
8 into evidence?

9 MS. SLEATER: Your Honor, if I could
10 suggest that perhaps at a later time -- the page
11 that was just handed to you is the exhibit list
12 that counsel for the United States were using
13 to keep track of which exhibits were in and out,
14 and as such, there's no witness who at this time
15 could testify concerning that.

16 THE SPECIAL MASTER: We'll need them both
17 because obviously the second one doesn't have
18 the acres in use and acreage total, and the first
19 one doesn't have the number of the exhibit.

20 MR. WHITE: Your Honor, we would have no
21 objection to the admission of this exhibit for
22 illustrative purposes. I think that's all the
23 Master wants it for.

24 THE SPECIAL MASTER: Yes, definitely that's
25 billstein-direct-echohawk

1 all it's wanted for. If the purpose of offering
2 this exhibit is to -- if that figure, 34,850
3 acres is to be all trust lands eligible for
4 early date priority, I would find it not
5 appropriate for that purpose or inadmissible
6 until it's been proven by this witness or someone
7 that all 34,850 acres does not include lands
8 to which early date may not apply, lands that
9 have been sold or terminated or went into fee
10 ownership and then reacquired, matters of that
11 kind, but those lands may end up with a high
12 date, but we ought to have a distinction between
13 those lands and those lands that have stayed in
14 ownership of the Reservation from 1868 to date.

15 MR. WHITE: I have got the cart ahead of
16 the horse, and I'm afraid I may have unintentionally
17 confused things. What I was offering to stipulate
18 in was the list of exhibits that Mr. Echohawk
19 handed you to -- just for illustrative purposes
20 so everybody can keep track of it. We're going
21 to cross-examine the devil out of this C-55-A.

22 THE SPECIAL MASTER: That's what's before us
23 now.

24 MR. WHITE: I thought Mr. Echohawk handed
25 billstein-direct-echohawk

1 you another exhibit.

2 THE SPECIAL MASTER: I handed that back
3 right now. Since they're not going to be
4 combined, let's go the way you're going and use
5 55-A only.

6 MR. ECHOHAWK: Your Honor, perhaps after
7 the lunch break, maybe we could correct that.

8 MR. WHITE: We have no objection to Mr.
9 Echohawk's latest list coming in for illustrative
10 purposes so that everybody can have the photograph
11 number and exhibit number together. It seems
12 we'd save several hours during the course of the
13 week.

14 THE SPECIAL MASTER: I would think so too.

15 MS. SLEATER: Your Honor, why don't I have
16 one of our people go and copy it now so they
17 can come back and hand that out and we can
18 continue with what we are doing.

19 THE SPECIAL MASTER: You don't want to put
20 in acres on each one and that way have only one
21 exhibit instead of two or do you want to leave
22 them the way they are? It makes no difference
23 to me.

24 That will take some collating, take an hour

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1 or so to do.

2 MS. SLEATER: Your Honor, we'll have my
3 secretary do it over the lunch break if that's
4 convenient.

5 THE SPECIAL MASTER: We'll give an early
6 lunch break.

7 MR. WHITE: Why don't we just take about
8 four minutes, write the exhibit number next to
9 the aerial photograph number on 55-A. We'll
10 have no objection to that modification of the
11 exhibit and we can go from there.

12 THE SPECIAL MASTER: We can appreciate that.
13 It can be done during the lunch hour, and it
14 will take more than four minutes. There's 95
15 of them, and we want to make sure you line up
16 each number with each one. So go ahead, Mr.
17 Echohawk.

18 MR. ECHOHAWK: Okay. We'll modify the
19 exhibit then.

20 Q (By Mr. Echohawk) Mr. Billstein, the acreage
21 figures listed on C-55-A, do those accurately
22 reflect the amount of acreage that is currently
23 in use found on each aerial photograph?

24 MR. WHITE: Objection, no foundation, Your
25 billstein-direct-echohawk

1 Honor,

2 THE SPECIAL MASTER: Well, why don't you
3 ask the witness what they represent, let him
4 tell us.

5 Q (By Mr. Echohawk) Mr. Billstein, what do the
6 figures under acres in use, what do those
7 figures represent?

8 A They represent the acreage determined as being
9 in current use for trust lands on tracts lying
10 outside of adjudicated land service boundaries.

11 MR. WHITE: Your Honor, I would move to
12 strike on the basis of relevancy.

13 THE SPECIAL MASTER: I don't understand the
14 answer to that question at all. Pardon me, Mr.
15 White. We're both objecting to it. I don't
16 understand what your answer portends.

17 MR. WHITE: My objection was based on
18 relevancy. I don't see how this ties into the
19 Statement of Claim. The Statement of Claim is
20 by source on pages 1, 2, 3 and 15, and this is
21 by an aerial photograph that hasn't even been
22 tied to a source.

23 THE SPECIAL MASTER: I will object to the --
24 I would overrule the objection without prejudice
25 billstein-direct-echohawk

1 to it being raised if the issue isn't met.
2 But now let's get to my objection because I
3 got one. How can you define, in an aerial
4 photo, that area that is in historical use
5 growing crops that is in an adjudicated area
6 with a permit on it from one that is not in an
7 adjudicated area with a permit on it which is
8 taking water by virtue of the right that Indians
9 have to irrigate their own lands?

10 THE WITNESS: We plotted out the service
11 areas for the Certificates of Appropriation.
12 Those acreages are mutually exclusive from the
13 service area.

14 THE SPECIAL MASTER: Where did you
15 mutually exclude them, what exhibit did you
16 mutually exclude them from, through others or
17 was that done through the entire batch of 95
18 exhibits we have before us?

19 THE WITNESS: That's correct, Special Master.
20 The lands are broken out by adjudicated lands,
21 by unadjudicated lands in current use.

22 THE SPECIAL MASTER: And you're using the
23 term unadjudicated now, you mean land on which
24 the State of Wyoming had granted a water right

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1 at some time or another?

2 THE WITNESS: That's correct.

3 THE SPECIAL MASTER: And from the State
4 Engineer's office?

5 THE WITNESS: That's right, Board of
6 Control.

7 THE SPECIAL MASTER: And you separated those
8 from lands which were being in use that did not
9 have a state permit on them, is that what you're
10 saying?

11 THE WITNESS: Did not have a state permit
12 on them.

13 THE SPECIAL MASTER: Yes. And you're
14 saying that in each of these photographs the
15 acreage figure you show was the land in use,
16 trust land in use on which there was not an
17 adjudication or which there was adjudication?

18 THE WITNESS: There was not an adjudication.

19 THE SPECIAL MASTER: So you're saying that
20 the 34,850 acres is the total land in use on
21 the Reservation for irrigation purposes on which
22 there was no adjudicated water right issued by
23 the state permit -- by the State Engineer, rather,
24 is that right?

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1 THE WITNESS: That's right.

2 THE SPECIAL MASTER: All right. I've had
3 my objection removed and I will overrule Mr.
4 White's, pending the fact that you tie in this
5 a little closer than I have in meeting his
6 objections.

7 MR. WHITE: Your Honor, I also have an
8 objection based on foundation. I think it got
9 lost when you and I were talking at the same
10 time. I assume that's overruled also pending --

11 THE SPECIAL MASTER: Let me hear that
12 objection to the foundation, that he has not
13 laid the necessary foundation in what way?

14 MR. WHITE: Well, Your Honor, what we have
15 in 55-A is a number of acres in use according
16 to Mr. Billstein, off of certain aerial photographs.
17 We have not, don't yet have the aerial photographs
18 in evidence. We don't yet have a description
19 how on each aerial photograph you came up with
20 the number of acres on use. I see an aerial
21 photograph which is Exhibit 56, it's on the
22 board, and it's got three colors on it, adjudicated
23 lands, unadjudicated lands in use, unadjudicated
24 lands irrigable. Blue, green --

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1 THE SPECIAL MASTER: He's only hitting
2 with the first two so far. I appreciate that.
3 Let me interrupt long enough now to ask this
4 question. What basis did you have for
5 determining, for example, that in aerial
6 photograph "7"-209 there were only ten acres?
7 Can you show us how many acres were under
8 irrigation totally in that picture? How did you
9 determine that only ten are on nonappropriated
10 lands? In other words, Mr. White has a point.
11 How did you determine the conclusions you have in
12 your exhibit?

13 THE WITNESS: Quite simply.

14 THE SPECIAL MASTER: In addition to having
15 meetings with the farmers and the Indians in the
16 area and asking them, as you said in your
17 interview. Did you say this is another land
18 and how much do you have under irrigation?

19 THE WITNESS: Let's go back to the idea of
20 a study area. When we established the study
21 area, that was based on water rights of record
22 of the State Engineer's office, also documented
23 use areas as defined in the Bureau of Indian
24 Affairs publications as well as these unrecorded

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1 use areas that we established from previous
2 studies or our own work. In information, the
3 service areas of those water rights were plotted
4 on our hydrographic work copies so those areas
5 are delineated.

6 THE SPECIAL MASTER: Are those work copies
7 with you in Court. --

8 THE WITNESS: Yes.

9 THE SPECIAL MASTER: Or are they part of
10 your files or are they part of the evidence?

11 MR. ECHOHAWK: We have them here.

12 THE SPECIAL MASTER: Are they available for
13 Mr. White's examination if he wishes to see them?

14 THE WITNESS: He has copies of them.

15 MR. ECHOHAWK: He's been furnished copies
16 through discovery.

17 THE SPECIAL MASTER: In that case I'll over-
18 rule the objection. Go right ahead, Mr.
19 Echohawk.

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1 Q (By Mr. Echohawk) Mr. Billstein, in order to clear
2 this up just a bit more, let me show you what's been
3 marked as United States Exhibit -- this is somewhat
4 out of order -- C-61.

5 MR. ECHOHAWK: Do you want to move a little
6 closer, Sandy? Why don't you come up?

7 THE SPECIAL MASTER: This is just as a matter
8 of illustration?

9 MR. ECHOHAWK: Illustration as to what went
10 on.

11 THE SPECIAL MASTER: All right. Not quite so
12 close. Let the others view this too, while you are
13 at it. Back a little more, please. You don't have
14 to get too close to me.

15 Q (By Mr. Echohawk) Mr. Billstein, would you please
16 identify for the record Exhibit C-61?

17 A. Yes, this is an exhibit which defines the claims of
18 the United States relative to lands evaluated on
19 Photo "8" 379-185, which is identified as U.S.
20 Exhibit 61.

21 THE SPECIAL MASTER: Give me that number again,
22 please. There are all sorts of tricks around here.

23 MR. ECHOHAWK: Sixty-one.

24 THE SPECIAL MASTER: Now, is this 8-185?

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THE WITNESS: Yes, sir.

THE SPECIAL MASTER: There are two more figures that you gave us that are not on Exhibit 55-A. Read it one more time, please.

THE WITNESS: "8" 379-185.

THE SPECIAL MASTER: There is no 379 on C-55-A to tell us what that exhibit is. All this Exhibit C-55-A says is that exhibit aerial photographs "8"-185 contains 190 acres in use.

THE WITNESS: Special Master, that can be easily explained. The "8" refers to the flight number. The 185 refers to a photo number. The 379 is an extraneous identification number that the ASCS utilizes for use of presentation. We omitted the 379 from the photo identification description.

THE SPECIAL MASTER: Okay, I'm glad it made it easy for somebody, but it confuses it for me if you have a different number on the exhibit than you have on the list of these exhibits.

Okay. Go ahead with 185.

A. There are three distinct claim areas shown on Exhibit 61. The area in red is shown as adjudicated lands.

Q. (By Mr. Echohawk) Mr. Billstein, how was the adjudicated land base that is shown in red -- how was that

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1 determined?

2 A. It was determined by use of the official records of
3 the State Engineer's office. We obtained the certi-
4 ficate of appropriation with accompanying map from
5 the State Engineer's office, and that portion of the
6 certified land base that fell upon trust land was
7 mapped upon this particular exhibit. That is known
8 as the adjudicated land base. It's shown in red,
9 which differentiates it from any other land tract
10 base shown on this exhibit.

11 The second area of that---

12 THE SPECIAL MASTER: What date of adjudicated
13 land is that? Did you care to give us the answer to
14 that question also, or did you concern yourself with
15 what the date of the adjudicated water right -- what
16 priority date does that red land have? That's my
17 question.

18 THE WITNESS: At this particular point in time
19 that was not a consideration for me.

20 A. The area in blue, which there are several tracts,
21 distributed throughout the photograph, refers to
22 lands which are currently being irrigated which fall
23 outside of the adjudicated boundaries shown in red.

24 And, as you see, there's no overlap between blue

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1 and red, so back to the definition. These are lands
2 in unadjudicated areas which are currently in use.

3 THE SPECIAL MASTER: How many acres are there
4 in those lands not in adjudicated areas currently in
5 use on that exhibit? Does not the exhibit show that?
6 I see you reaching for another source to answer my
7 question. Doesn't the exhibit show us how many acres
8 are totaled in blue?

9 THE WITNESS: No, this exhibit does not show
10 acreage. It's cross-referenced to a table.

11 MR. ECHOHAWK: That's Exhibit C-55-A that it's
12 cross-referenced to.

13 THE SPECIAL MASTER: Go ahead. How many acres
14 are there?

15 THE WITNESS: There are 190 acres.

16 Let's see. Are we in C-61? One eighty-five --
17 190 acres have been identified.

18 THE SPECIAL MASTER: Thank you.

19 Q. (By Mr. Echohawk) Mr. Billstein, I also notice that
20 there are certain areas delineated in green. Would
21 you happen to know what those mean?

22 A. Yes, I do. Those are areas in idle status which fall
23 outside of adjudicated boundaries which are defined
24 in red which have undergone arability studies by HKM

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1 soil scientists and irrigability analysis by Stetson
2 Engineers and David M. Dornbusch & Company, and they
3 have been established to be irrigable.

4 Q Mr. Billstein --

5 THE SPECIAL MASTER: How do you know that?
6 Isn't that what they are supposed to tell this Court?

7 MR. WHITE: Your Honor, I hadn't objected because
8 I thought it was for illustrative purposes.

9 THE WITNESS: They will be making the conclusions.
10 I will not speak at all to the unadjudicated irrigable
11 land base.

12 Q (By Mr. Echohawk) Mr. Billstein, I direct your atten-
13 tion to the legend at the bottom, three columns.
14 Would you please describe for us what the column on
15 the right-hand side is all about?

16 A It refers to the water supply sources that serve the
17 respective tracts. For example, those lands in Sec-
18 tion 9 of Township 5 North, Range 5 West, have an
19 A identification in them.

20 Cross-referencing those to the water supply
21 sources, we see that the source of supply for these
22 tracts is Dinwoody Creek.

23 There are also areas identified by Code B.
24 Code B refers to the Wind River. Therefore, lands

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that are identified as Code B lands are served from the surface water supplies of the Big Wind River.

Q Mr. Billstein, the areas that you have been discussing today, the lands in use, those are lands reflected in the blue; is that correct?

A That's right.

Q Okay. I think we're all set.

Mr. Billstein, I direct your attention back to Exhibit 55, C-55-A, which is the table entitled, "Acreage in Use by Photo".

Would you please explain the relationship of C-55-A to the exhibit so that we have here before us beginning with C-56 that run through C-136?

A Yes. The acreage defined in Exhibit C-55-A reflects the findings which are depicted in blue on the respective Exhibits 56 through 136.

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MR. ECHOHAWK: Your Honor, may I have one moment?

THE SPECIAL MASTER: Yes, of course.

(Brief pause.)

Q. (By Mr. Echohawk) Mr. Billstein, you had been discussing earlier that information that was reported on the aerial photos through the stereoscopic work was then carried with the field personnel into the field; is that correct?

A. That's correct.

Q. And the results were field checked; is that correct?

A. They were field verified.

Q. Field verified. What was done then from that information to prepare these exhibits, how was that information transferred?

A. The aerials were brought back into the office, the acreages associated with the tract in use was quantified by planimeter methods and the use areas were mapped by means of these overlays, which are presented as part of Exhibits 56 through 136.

Q. Mr. Billstein, I notice that these exhibits, 56 through 136 are -- consist of an overlay on top of an aerial photograph; is that right?

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1 A. That's correct.

2 Q. Please describe for us where you obtained the
3 aerial photographs.

4 A. These aerial photographs were part of the series
5 of sets of photographs that we obtained at the
6 initiation of this study. The photograph is an
7 unmarked copy of the same aerial that was used
8 in the field. They were developed to be at the
9 same scale and, therefore, the overlays developed
10 from the field copy reflect the findings on the
11 photo used for the exhibit purposes.

12 THE SPECIAL MASTER: Are these photos the
13 photos that you refer to on C-55 -- just lift off
14 that 56 and you'll see what 55 is -- when you
15 were discussing -- No, lift the entire Exhibit 56.
16 That's it.

17 You were talking about stereoscopic photography.
18 Is that the basis for photography, that is first
19 sheet of all the remaining exhibits?

20 THE WITNESS: The aerial photography that
21 we had claims on from this base is reflected on
22 these photographs, Special Master. Not all of the
23 photographs that we studied had claims. Those that
24 did, the photographs should be one in the same.

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1 THE SPECIAL MASTER: Very good.

2 Q. (By Mr. Echohawk) Mr. Billstein, referring to
3 Exhibit C-56 through C-136, did you supervise
4 the transfer of the information from the field
5 work to these aerial photographs?

6 A. Yes, I did.

7 Q. The depictions of the adjudicated lands and
8 unadjudicated lands in use, are those depictions
9 accurate, to the best of your knowledge?

10 A. To the best of my knowledge they're correct.

11 THE SPECIAL MASTER: Is each exhibit exactly
12 the same, does each exhibit cover exactly the
13 same, relatively the same square miles?

14 THE WITNESS: That's right, Special Master.
15 These respective exhibits were developed at a
16 scale and size that we could utilize for field
17 work, therefore, the size of each one of the
18 photographs is roughly the same. However, there
19 may be variances of a couple of inches.

20 THE SPECIAL MASTER: So the scale is the
21 same in aerial photographs "13" 104 in which you
22 concluded that there was 3,303 acres as you used
23 in 255 where you concluded there was one acre?

24 THE WITNESS: That's correct.

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1 THE SPECIAL MASTER: Doesn't that leave you
2 with a reasonable doubt that the accuracy in
3 ascertaining 3,303 acres on a map of the same area
4 where you ascertained one acre might leave something
5 wanting in the measure of accuracy in the 3,300
6 acre test or does it not?

7 THE WITNESS: It does not.

8 THE SPECIAL MASTER: That's all I wanted to
9 know. Thank you.

10 Q. (By Mr. Echohawk) Mr. Billstein, I direct your
11 attention to Exhibit C-56, which is on the easel.
12 Was that exhibit prepared under your direction?

13 A. Yes.

14 Q. And does it reflect certain acreage found by you
15 to be currently in use?

16 A. Yes, it does.

17 Q. Do you know how many acres is on that?

18 A. Ten acres.

19 THE SPECIAL MASTER: If US Exhibit WRIR C-56
20 shows ten acres in use, why doesn't it say that
21 there's ten acres in use on it? Can anybody
22 answer that question for me among the attorneys
23 for the United States or the tribes or the witness?

24 MR. ECHOHAWK: Your Honor, I have to
25 billstein - direct - echohawk

1 fess up to that one. I felt it would be much
2 more manageable if we had that in one table
3 alone.

4 THE SPECIAL MASTER: Very well.

5 MR. ECHOHAWK: So I accept whatever comes
6 from that decision.

7 THE SPECIAL MASTER: I'm not -- I have
8 no right to be too critical of it, but I thought
9 if the exhibit shows ten acres of irrigable lands,
10 it ought to say so. If one shows 3,000 it ought
11 to say so on the face of each exhibit, and again,
12 for each piece of work, a one page total would
13 be in order, but I'm not criticizing, I just want
14 an answer, I appreciate that.

15 Q. (By Mr. Echohawk) Okay. Mr. Billstein, are all
16 the exhibits from 56 through 136 the same, prepared
17 the same?

18 A. They're prepared in the same manner.

19 MR. ECHOHAWK: Your Honor, at this time I
20 would ask the Court's indulgence as to the Court's
21 preference, whether they would prefer to go through
22 each individual exhibit or have the exhibit offered
23 in a package since they all purport to be prepared
24 the same, in the same manner, reflect the same type

25 billstein - direct - echohawk

1 of information.

2 THE SPECIAL MASTER: Well, I think Mr. White
3 should voir dire and let's work on the assumption
4 that each will be numbered on 55A, and you want to
5 offer all exhibits from WRIR C-56 through C-136
6 at this time?

7 MR. ECHOHAWK: I'll offer them in just about
8 a minute, shortly after that. The question is
9 whether we need to go through and lay the foundation,
10 the same question for each exhibit.

11 THE SPECIAL MASTER: You have stated,
12 Mr. Billstein, that each of the maps was prepared
13 exactly the same, same work scheduling, the same
14 professional criteria applying to each picture
15 and each overlay of each of these exhibits?

16 THE WITNESS: That's correct.

17 THE SPECIAL MASTER: All done under your
18 supervision and direction and your control?

19 THE WITNESS: That's correct.

20 THE SPECIAL MASTER: No, you don't have
21 to go through them individually, Mr. Echohawk.

22 Q. (By Mr. Echohawk) Okay. Mr. Billstein, I've
23 showed you what has been marked as United
24 States Exhibit C-138. Would you please describe for
25 billstein - direct - echohawk

- 1 us what that exhibit is?
- 2 A. This exhibit is called Historic Land Study Claims
3 for Acreage in Use.
- 4 Q. Was this report prepared by you?
- 5 A. Yes, it was.
- 6 Q. Would you please describe briefly what is contained
7 within the report.
- 8 A. The report has a discussion of the type of study
9 that was carried out, the procedures that were
10 utilized and the results that were obtained.
- 11 Q. Mr. Billstein, I show you what has been marked
12 as United States Exhibit WRIR C-137. Would you
13 please describe for us what that exhibit purports
14 to show.
- 15 A. That exhibit, which matches table 1 in Exhibit 138,
16 delineates the acres in use by location. Those
17 acres were broken out by project lands and non-project
18 lands. Projects lands refer to those lands
19 contained within the Wind River Federal Irrigation
20 Project broken out by the Little Wind unit,
21 Upper Wind unit, the Johnstown unit and the
22 Left Hand unit, and also trust lands being irrigated
23 in the Midvale Irrigation District.
- 24 THE SPECIAL MASTER: Can you let me interrupt
25 billstein - direct - echohawk

1 you long enough to ask if you break up the
2 Wind River Federal Irrigation Project into four
3 components, Johnstown, Left Hand, Upper Wind and
4 Little Wind, can you clarify for me the facts
5 that I was of the opinion that the North Crowheart,
6 South Crowheart, Big Horn Flats, Riverton, Owl
7 Creek and the Arapahoe were the units of the
8 Federal Irrigation Project on the Reservation.

9 THE WITNESS: That's not correct.

10 THE SPECIAL MASTER: What's not correct?

11 THE WITNESS: That the future lands -- could
12 you show me the report that you're looking at,
13 Special Master?

14 THE SPECIAL MASTER: I'm looking at Exhibit
15 WRIR C-43, which is a land classification exhibit
16 of the six units of what I thought were the
17 Federal Irrigation Project of the Reservation.

18 THE WITNESS: That's not correct.

19 THE SPECIAL MASTER: Have you told Mr. Kersich
20 that, that this is not correct? He spent one week
21 telling us that it is correct.

22 THE WITNESS: I don't believe that's the case,
23 sir.

24 THE SPECIAL MASTER: I'd like to be straightened
25 billstein - direct - echohawk

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out on this is all.

2

THE WITNESS: Would you like me to explain,

3

sir?

4

THE SPECIAL MASTER: I'd like you to try it

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if you think you can tackle it.

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THE WITNESS: I don't have any problem with

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it.

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THE SPECIAL MASTER: All right, please proceed.

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1 THE WITNESS: The Wind River Federal
2 Irrigation Project Units reflect areas where
3 there have been historic use. In no way would
4 they have been delineated as lands in an
5 undeveloped category. Those particular terms
6 should not have occurred until my presentation.
7 Those units that you have in that particular
8 exhibit refer to undeveloped lands or future
9 lands, mutually exclusive from any existing
10 projects. I'm talking about existing.

11 THE SPECIAL MASTER: You've helped me very,
12 very much. You are saying, and your testimony
13 is that there is no historic use in present
14 irrigated land in these six units, North Crowheart
15 through Arapahoe designated in the land
16 classification exhibit called C-43; is that
17 correct? That this deals only with potential
18 arable lands, is that your testimony?

19 THE WITNESS: That's primarily correct.
20 There may have been a tract or two evaluated
21 that was superimposed over a permit, some old
22 permit of record, but to the best of my knowledge
23 they're mutually exclusive and should be regarded
24 as mutually exclusive by the Court.

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1 THE SPECIAL MASTER: So the existing BIA
 2 Federal Irrigation now in existence with acreage
 3 and production are the four you mentioned on this
 4 exhibit you're now discussing, and that's the
 5 A, B, C, D, Little Wind through Lefthand; is
 6 that correct?

7 THE WITNESS: That's correct. Those are the
 8 four basic breakouts for the Wind River Federal
 9 Irrigation Project.

10 THE SPECIAL MASTER: Do you, in your work,
 11 identify Midvale Irrigation District as a part
 12 of the Wind River Indian Reservation ... Federal
 13 Project lands?

14 THE WITNESS: No, I do not.

15 THE SPECIAL MASTER: You do have it listed
 16 here, Number 2. Would you explain why it's there.

17 THE WITNESS: Yes. It is a project, and
 18 it's numbered 2 to differentiate it from Wind
 19 River Federal Irrigation Project.

20 THE SPECIAL MASTER: But if it's not a
 21 project that's part of the Wind River Indian
 22 Reservation Federal Irrigation Project, why is
 23 it in here?

24 THE WITNESS: There are trust lands located
 25 billstein-direct-echohawk

1 within the boundaries of the Midvale Irrigation
2 District. Midvale Irrigation District is
3 regarded by me as a project.

4 THE SPECIAL MASTER: If the Midvale
5 Irrigation District is already receiving water
6 for those trust lands from a 1905 or 1906 grant,
7 why do you include them in the study?

8 THE WITNESS: My study was to include all
9 trust lands, Special Master.

10 THE SPECIAL MASTER: It's a good question
11 and a very good answer. I thank you.

12 Q (By Mr. Echohawk) Mr. Billstein, would you
13 please continue with your explanation of C-137.

14 A We've now discussed items 1 and 2. We now go to
15 the LeClair Irrigation District. These would
16 be trust lands contained within the service area
17 of the LeClair Irrigation District. Again, I
18 consider that a project, that's why it's under
19 the project delineation.

20 The second major breakout in the table
21 refers to nonproject lands. These are private
22 or individual system lands, and those are broken
23 out by basins and sub-basins. We have five major
24 breakouts; Wind River Basin, Little Wind River

25 billstein-direct-echohawk

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Basin, Big Horn River Basin, Popo Agie River Basin and Owl Creek Basin with respective tributaries which contain trust land claims delineated below the respective Basin that they fall into or drain into.

* * * * *

1 Q. (By Mr. Echohawk) Mr. Billstein, are the results
 2 of your investigation also depicted on that
 3 exhibit?

4 A. Yes, they are.

5 Q. What is the total amount found by you to be in use?

6 A. The total acreage in use is 34,850 acres, which
 7 matches the total presented for the breakout
 8 by the individual photo contained in Exhibit No. 138.

9 Q. Mr. Billstein, are the acreage results depicted
 10 on Exhibit C-55A which breaks it out by photo
 11 and the acreage results on C-137 -- do those
 12 acreage totals represent your professional opinion
 13 as to the amount of acres on the Wind River Indian
 14 Reservation that are trust lands that are currently
 15 in use?

16 MR. WHITE: Objection, Your Honor. The
 17 objection goes to the issue of whether this is
 18 an appropriate subject for an expert opinion.

19 What's happening, according to the testimony
 20 of the witness, is in the final analysis people
 21 from his office went out and made views in the
 22 field, saw what was happening in the field, and
 23 made a determination whether or not the land was
 24 being irrigated. It wasn't Mr. Billstein. It was
 25 billstein - direct - echohawk

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people in his office.

2

Second, interviews were conducted with the operators of the systems which serve that land. Again, statements made by persons other than Mr. Billstein and outside of his personal knowledge.

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I have no quarrel with the fact that Mr. Billstein is an expert. I do quarrel with whether or not this is an appropriate subject for an expert opinion.

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11

It appears that an expert opinion is being used to bring hearsay to the Court, and I do not believe that this expert opinion is appropriate.

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What's happened here, Your Honor, is that Mr. Billstein is saying that his field investigators went out to the field and saw this land was irrigated and, therefore, it's his professional opinion that it was irrigated.

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No, because witnesses told me.

Well, at that point the proceedings would stop and there would be no opinion because it is clearly hearsay and it's not appropriate for an opinion.

There are three cases that I can give the Court that go to this general issue, and they stand for the proposition that the Court can decide whether an expert opinion is needed and that it's not needed when the subject matter of the opinion is something that is ascertainable by lay witnesses or by the Court.

Now, I suspect that in this court there's no difficulty with the Court being able to determine for itself based on eye witness testimony whether or not land is, in fact, or has, in fact, been historically or currently irrigated.

And I would refer the Court to Salem vs. The United States Lines Company, 370 US 31, 82 Supreme Court 119; United States Smelting vs. Parry. It's a Tenth Circuit Case, 166 Fed --

THE SPECIAL MASTER: Not too fast, let Leo get it.

MR. WHITE: -- 166 F. 407; United States vs. billstein - direct - echohawk

1 Brown, 540 Fed. 1048; Cohen vs. Western Hotels,
2 276 Fed. 26.

3 THE SPECIAL MASTER: Mr. White, does your
4 objection go to the total figure only by saying
5 that we can count as well as he can, or does it
6 go to more than that?

7 MR. WHITE: It goes to more than that.

8 What's happened is that Mr. Johnson,
9 Mr. Saunders, and I believe Mr. Waples were the
10 three field investigators. They went out and they
11 saw what was going on in the field, and they came
12 back and reported to Mr. Billstein.

13 Now, if they were here testifying that they
14 saw that that land was actually under irrigation,
15 we could have no possible objection, personal
16 knowledge, but what's happening here is that they
17 are just passing on their personal knowledge to
18 Mr. Billstein. He's making -- it's not data that
19 he's crunching as an expert. He's simply passing on,
20 acting as a pipeline for those personal observations
21 by the field investigators.

22 I don't think that's an appropriate opinion,
23 and I believe the cases support the fact that if
24 you are just passing on facts that somebody else

25 billstein - direct - echohawk

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saw, it's not an appropriate opinion.

In fact, the Advisory Committee's notes to that Rule 702, I believe, specifically refer to an opinion of an accidentologist who based his opinion on eye witnesses to the accident. He said that's not an opinion. That's using hearsay. That's just being a pipeline for hearsay.

And what I'm suggesting here is that we have a terribly competent expert who is being used by the United States not as an expert to give an opinion, but simply as a pipeline for observations made by others without application of his professional expertise necessarily to those observations made by others. Those are the raw product that he's working with.

It's the same situation as the accidentologist referred to in the Committee comment to Rule 702,

THE SPECIAL MASTER: I would like to hear from the other side -- well --

MR. COZZENS: Very briefly, I would like to join in that objection, and also state I believe that the witness testified that these people that actually did the study themselves formed professional opinions, made interpretations

billstein - direct - echohawk

1 and judgments and conclusions.

2 Clearly, we have no way of getting to the
3 basis of their purportedly expert opinions unless
4 they are here to testify, and so I join in the
5 objection and add that ground.

6 MR. PERRY: I think that this morning's
7 testimony showed that Mr. Billstein did far more
8 than act as just a conduit for other people's
9 information.

10 He set up this entire program. It was done
11 under his direction from start to finish. He
12 was actually out there in the field for a number
13 of days reviewing the work done under his direction.

14 He actually made changes in some of the analyses
15 done by the people under his direction, and I think
16 it's far from accurate to say that he's just serving
17 as a conduit for other people's information.

18 This is clearly something that he has worked
19 on from start to finish, unlike an accidentologist
20 who is taking hearsay that is not under his direction
21 or under a program set up by him.

22 And I can't understand what Mr. White is
23 suggesting after hearing all this testimony about
24 Mr. Billstein's personal involvement in this.

25 billstein - direct - echohawk

1 THE SPECIAL MASTER: Mr. Echohawk?

2 MR. ECHOHAWK: That's my point exactly. It
3 appears from the cases cited by Mr. White that
4 those were all old cases before the new rules
5 came in. I would have to check that.

6 MR. ROGERS: I would like to add something
7 to this, and Mr. Billstein has also testified
8 that this is an essential step in any water
9 resource planning project.

10 So, in fact, it's precisely this sort of
11 thing that an expert in his qualifications would
12 do in a project of this nature or in planning
13 other work, so it, in fact, does fall within the
14 expertise which he is testifying under this
15 morning.

16 MR. WHITE: Your Honor, since it's my
17 objection, maybe I could have just the last word
18 and say that the careful program which Mr. Billstein
19 very skillfully set up led up to the field
20 investigators going out and seeing things with
21 their own eyes and forming their own opinions.
22 Those opinions were passed on to Mr. Billstein.

23 Now, I don't see any way that he can be said
24 to be acting as anything but a pipeline for the
25 billstein - direct - echohawk

1 opinions or observations, personal observations
2 of others, except perhaps in the one case, which
3 has not been particularly identified, where he
4 made some adjustment because he disagreed with it.

5 In fact, I believe the adjustment that he
6 testified to was that he disagreed with an
7 interviewee who said that he was irrigating lands
8 out of a pump, not that he disagreed with the
9 findings of his field investigators, so our position
10 is, Your Honor. -- and it may be one of the most
11 important evidentiary issues or standards to be
12 set in this case because everyone, I'm sure, will
13 follow the ruling -- is that I believe in this
14 situation the United States is using Mr. Billstein,
15 clearly an expert, outside of his expertise, to
16 act as a pipeline for the personal observation and
17 personal knowledge of others and thereby deprive us
18 of the opportunity to cross-examine the people that
19 made those observations.

20 THE SPECIAL MASTER: I will be in recess for
21 five minutes and we will convene and I'll rule
22 on this.

23 MR. WHITE: Thank you, Your Honor.

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25 billstein - direct - echohawk

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THE SPECIAL MASTER: We'll come to order.

2

Mr. Billstein, you testified earlier that you've

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attended meetings with the farmers and other water

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users involved in determining the validity of some

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of the work that had gone into these overlays by

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those that were working under your supervision; is

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that correct?

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THE WITNESS: I attended a meeting with the BIA

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representative for the Wind River Federal Irrigation

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Project. The interviews for the private people were

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conducted in my absence.

12

THE SPECIAL MASTER: Did you go to any of the

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meetings then with the private people?

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THE WITNESS: I had no meetings with the private

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people.

16

THE SPECIAL MASTER: Did you have any meetings

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with the three who worked for you at the time they

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were doing the compilation of the materials with

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which they were working that resulted in these over-

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lays?

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THE WITNESS: Certainly, we had meetings

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throughout their work program establishing the pro-

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cedures upon which we were going to carry out the

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program and the points at which they were to make

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their final conclusions incorporating such things as

11-2

1 interviews, cross-referencing with available informa-
2 tion on use, such as assessment records. All these
3 were part of my review sessions with these individuals.

4 THE SPECIAL MASTER: Well, I'm ready to rule on
5 the motion. I don't feel as comfortable in the ruling
6 I'm about to make as I did in the case of Mr. Kersich,
7 who, I think, worked, much, much closer in coming to a
8 determination. He drilled some holes here and there,
9 he surveyed other facets on the field, he walked in
10 the field, he returned time and time again with his
11 people. And I felt that an objection like the one
12 that Mr. White made, had it been raised at that time,
13 I would certainly overrule it for the reasons I'm
14 inclined to overrule the objection now. I'm going
15 to overrule the State's objection. The cases cited
16 are prior to the establishment of the rule, and it
17 would appear to me that I must let this evidence
18 come in for whatever its worth, and its worth may
19 be affected by that degree of the person and exper-
20 tise that he gave it, but, in any event, I'm going
21 to permit it.

22 Are you making an offer now at this time of
23 the entire batch, Mr. Echohawk?

24 MR. ECHOHAWK: With the exception of one addi-
25 tional exhibit, and then I believe I'll offer them.

1 Your Honor, I believe we had a pending question
2 as to his professional opinion as to the acreage be-
3 fore Mr. White's objection.

4 MR. WHITE: Could I hear the question again,
5 Your Honor? I'm not certain I got all my objections
6 out on that one shot.

7 THE SPECIAL MASTER: Can we go all the way back
8 to that question, Merissa?

9 MR. ECHOHAWK: How about if I just rephrase it,
10 ask it again?

11 THE SPECIAL MASTER: Very good.

12 Q (By Mr. Echohawk) Mr. Billstein, do the acreage
13 totals reflected on Exhibit C-137 and C-55-A, do
14 those acreage totals represent your professional
15 opinion as to trust acres in use on the Wind River
16 Indian Reservation?

17 MR. WHITE: I would have further objection on
18 foundation, Your Honor. What trust acres, when were
19 they taken into trust status and how does he know
20 that they were in trust status?

21 THE SPECIAL MASTER: I would agree to the objec-
22 tion to the extent that I will not accept the 34,850
23 as being total lands upon which early priority date
24 can be given. I will permit the witness to answer

25 billstein - direct - echohawk

1 with a qualified understanding that trust lands
2 includes in it certain lands which may or may not
3 have an earlier date, which is a legal matter, not
4 an engineering one.

5 THE WITNESS: Those reflect my conclusion for
6 the areas that lie outside of the adjudicated bound-
7 daries as presented on those maps.

8 Q (By Mr. Echohawk) When you refer to those maps, do
9 you refer to Exhibit C-56 through C-136?

10 A That's correct.

11 THE SPECIAL MASTER: Mr. Billstein, at the
12 earlier hearing a year or so ago, we had a long
13 arduous bit of cross-examination of some state
14 engineers and what was done to look and not to
15 look at whether water rights to be used on these
16 specific acres were not, in fact, used down the
17 road a half a mile or whether some adjudicated
18 water got put on unadjudicated lands. Did your
19 studies go to anything like this in this case?

20 THE WITNESS: Special Master, we reviewed only
21 existing use areas. It was not important to us in
22 this case to look at any transfers.

23 THE SPECIAL MASTER: Do you want to go to lunch
24 now?

25 billstein - direct - echohawk

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MR. ECHOHAWK: I think --

THE SPECIAL MASTER: We are also looking forward to an assimilation of information on 55-A by your secretary.

MS. SLEATER: It's being prepared now, Your Honor.

THE SPECIAL MASTER: We will stand in recess for lunch until 1:30.

(Whereupon a lunch recess was taken from 11:45 a.m. until 1:30 p.m.)

* * * * *