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DISTRICT COURT-SRBA
TWIN FALLS CO., IDAHO
FILED

REPORT REGARDING CLAIM TO WATER RIGHT NO. 36-00039E

In Re SRBA

Twin Falls County Civil Case No. 39576

Sub-Case No. 36-00039E

Report to the SRBA District Court

Prepared by the Idaho Department of Water Resources

Karl J. Dreher, Director

David B. Shaw, Adjudication Bureau Chief

David R. Tuthill Jr., Acting Adjudication Bureau Chief

July 1, 1996

COPY

REPORT REGARDING CLAIM TO WATER RIGHT NO. 36-00039E

The Director of the Idaho Department of Water Resources (IDWR) submits this report regarding claim to water right no. 36-00039E in response to the request of Special Master Haemmerle, pursuant to Idaho Code §42-1412(4) and the court's Order Re: Contested Claims for Amounts Claimed in Excess of .02 CFS. This report was prepared under the supervision of Karl J. Dreher, Director, David B. Shaw, Adjudication Bureau Chief, and David R. Tuthill Jr., Acting Adjudication Bureau Chief for IDWR. The following persons assisted in the preparation of the following portions of this report:

David B. Shaw, Adjudication Bureau Chief, reviewed and verified this Report Regarding Claim to Water Right No. 36-00039E. The Affidavit of David B. Shaw describes Mr. Shaw's education and work experience, and is incorporated by reference herein. Mr. Shaw also reviewed IDWR's Report Regarding Evaluation of Irrigation Diversion Rates, described below.

Jeff Peppersack, Adjudication Engineer, prepared and verified IDWR's Report Regarding Evaluation of Irrigation Diversion Rates, which is incorporated by reference herein. The Affidavit of Jeff Peppersack describes Mr. Peppersack's education and work experience, and is incorporated by reference herein. Mr. Peppersack also reviewed IDWR's Report Regarding Consumptive Use for Irrigation in the Hagerman Area, described below.

David R. Tuthill Jr., Acting Adjudication Bureau Chief, prepared IDWR's Report Regarding Consumptive Use for Irrigation in the Hagerman Area, which is incorporated by reference herein. Mr. Tuthill also reviewed this Report Regarding Claim To Water Right No. 36-00039E. The Affidavit of David R. Tuthill Jr. describes Mr. Tuthill's education and work experience, and is incorporated by reference herein.

Marci S. Sterling, Adjudication Engineer, prepared and verified Appendix B, which describes the application of IDWR's methodology for evaluation of irrigation diversion rates to claim no. 36-00039E. Appendix B is attached hereto and incorporated herein by reference. The Affidavit of Marci S. Sterling describes Ms. Sterling's education and work experience, and is incorporated by reference herein.

Steven C. Clelland, Senior Water Resource Agent, investigated and prepared the preliminary recommendation for claim no. 36-00039E, and prepared Appendix C, which is attached hereto and incorporated herein by reference. The Affidavit of Steven C. Clelland describes Mr. Clelland's education and work experience, and is incorporated by reference herein. The affidavit also includes a general description of his investigation of claims in the Hagerman area. The affidavit of Steven C. Clelland Regarding Claim No. 36-00039E describes Mr. Clelland's investigation of the quantity

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and place of use of this water right; it is attached hereto and incorporated herein by reference.

1. INVESTIGATION AND RECOMMENDATION OF CLAIMS GENERALLY

IDWR's general methodology for the investigation and recommendation of claims is described in Appendix A, which is incorporated herein by reference.

II. WATER RIGHT NO. 36-00039E

A. Basis of Claim

Claim no. 36-00039E was filed with IDWR by Frank L. And Jean Glauner on August 17, 1988.¹ The claim is to a portion of one of two rights decreed to E.W. Dilatush and others in the *New International Mortgage* decree, entered in 1932.² The water rights decreed to Dilatush are numbered in IDWR's files as water right nos. 36-00039 and 36-00040. Right no. 36-00039 is to water from Billingsley Creek; right no. 36-00040 is to water from an unnamed spring. Both were decreed for use on the same lands, and both were decreed, along with numerous other rights, for "irrigation, domestic, power and other purposes." Portions of right no. 36-00039 were claimed by and recommended to various claimants (some of which recommendations are contested), and are further described below.³

B. Name and Address of Claimant

The name and address of the claimant set forth in the claimant's motion for summary judgment is the same as recommended in the director's report.

C. Source of Water

¹ The original notice of claim is currently located in the files of the SRBA District Court, attached to IDWR's response to the claimant's objection.

² *New International Mortgage Bank v. Idaho Power Co., et al.*, Equity No. 1602 (D.S.Id. 1932), at pp. 3-4.

³ A portion of right no. 36-00040 was claimed as 36-00040A; claim no. 36-00040A was recommended for disallowal and no objection was filed to that recommendation. No claims were filed to the remainder of right no. 36-00040.

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The source of water set forth in the claimant's motion for summary judgment is Billingsley Creek. The source of water is described in the director's report as Billingsley Creek tributary to Snake River.

The director's report includes the body of water to which the source of the right is tributary for each water right in the director's report, except for rights to ground water. IDWR adopted this standard for the description of the source of water rights because there are so many instances, sometimes in the same administrative basin, where different surface water sources bear the same name.⁴

D. Date of Priority

The priority date set forth in the claimant's motion for summary judgment is the same as recommended in the director's report.

E. Point of Diversion

The point of diversion set forth in the claimant's motion for summary judgment is the same as recommended in the director's report. (The right was originally decreed in the New International Mortgage Decree for delivery through the Granger ditch. The right is now delivered through the Buckeye ditch, as a result of a change in use approved by IDWR in 1948.)

F. Purpose of Use

The purpose of use stated on the notice of claim and recommended in the director's report is irrigation. The objection did not contest the purpose of use. The claimant's motion for summary judgment now seeks to add stockwater, domestic, wildlife, recreation, aesthetics, and "diversion system maintenance."⁵

The description of the purposes of use of this right in the decree is ambiguous in that it describes the purposes of use for the two Dilatush rights and others in the

⁴ IDWR relied upon the following in reaching its conclusion: Idaho Code §42-1411(2) (which provides that the director shall determine the source of the right to the extent the director deems appropriate and proper to define and administer water rights acquired under state law.)

⁵ The filing fee for claims other than small domestic and stockwater claims consists of a \$50.00 flat fee, plus a variable fee of \$1.00 per acre for any claimed irrigation use, plus a per cfs variable for for other claimed purposes of use. The filing fee paid for this claim was limited to the purposes of use claimed in the notice of claim and the number of acres claimed in the notice of claim. Filing fees are set forth in Idaho Code §42-1414 and IDWR's Adjudication Rules, IDAPA 37.03.01.

same list collectively as "irrigation, domestic, power and other purposes," rather than specifically identifying each purpose of use for each right.⁶ IDWR's investigation confirmed the use of water for irrigation, as further described below in the section addressing quantity. Neither the claimant nor IDWR's investigation has yielded information that would confirm the beneficial use of water for the other purposes listed in the motion, either pursuant to the right as originally appropriated or as currently used.⁷ Such information is necessary not only to confirm the use but to quantify the amount of water beneficially used for that purpose.

G. Quantity of Water Used

The notice of claim states a quantity of 0.04 cfs for irrigation of one acre. The quantity recommended in the director's report is 0.03 cfs for irrigation of one acre. The objection states a quantity of 2 cfs for irrigation of 1.25 acres. The claimant's motion for summary judgment states a quantity of 0.04 cfs for irrigation of 1.25 acres.

1. Splits of Water Right No. 36-00039

As noted above, various portions of right no. 36-00039 were claimed by and recommended to various claimants. The splits are listed below. The first column shows the quantity claimed; the second column shows the quantity recommended in the director's report. Water rights listed with an asterisk are contested.

⁶ IDWR relied upon the following in reaching its conclusion: *Morgan v. Udy*, 58 Idaho 670, 79 P.2d 295 (1938) (a water right decree that omitted the description of the point of diversion necessarily determined the point of diversion but was ambiguous as to its location).

⁷ IDWR relies upon the following in reaching this conclusion: Idaho Code §42-1427 (which allows an ambiguity in a prior decree or license to be resolved based on current beneficial use); the statement of the Presiding Judge that this section "cannot change or exceed the previously decreed or recorded element of the decreed or licensed right" nor "be used to claim an expansion of use beyond the beneficial use existing at the time the right was originally memorialized in a decree or license," Revised Memorandum Decision and Order on Basin-Wide Issue 4, dated May 17, 1995, at page 9; and the statement of the Presiding Judge that, "the purpose of use is defined by the intentional application of water to an intended beneficial use of water," Memorandum Decision and Order Re: Basin-Wide Issue 5, dated April 26, 1996, at page 8.

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<u>Right no.</u>	<u>Claim</u>	<u>Report</u>	
36-00039B	0.12	0.03	
36-00039C*	0.28	0.06	This right is part of the group for which 706 reports are due 07/01/1996.
36-00039D*	0.26	0.06	This right is not part of the group for which 706 reports are currently scheduled.
36-00039E*	0.04	0.03	
36-00039F*	0.12	0.03	This right is part of the group for which 706 reports are due 09/01/1996.
36-00039G	0.10	0.04	
36-00039H	0.28	0.04	
36-00039J*	0.28	0.04	This right is part of the group for which 706 reports are due 07/01/96.
36-00039K	0.20	0.20	
36-00039L	0.12	0.03	
36-00039M*	0.12	0.04	This right is part of the group for which 706 reports are due 09/01/1996.
36-00039N*	0.12	0.04	This right is part of the group for which 706 reports are due 07/01/1996.
36-00039P*	0.12	0.04	This right is part of the group for which 706 reports are due 09/01/1996.
Total	2.16	0.68	

The quantity decreed for right no. 36-00039 in the *New International Mortgage* decree is 2.4 cfs. The total quantity of water claimed in all claims based on the decreed is 2.16 cfs, which does not exceed the decreed amount. IDWR recommended a total of 0.68 cfs pursuant to claims to portions of right no. 36-00039; this amount has not changed as a result of further proceedings in the various subcases.

The claimant's lands as described in the notice of claim and the deed attached to the motion for summary judgment consist of 4 Hagerman townsites. The lands described in the deed are not within the decreed place of use for this right, and the deed does not identify the water rights appurtenant to the deeded place of use. IDWR does not have information indicating whether or how any portion of no. 36-00039 came to be appurtenant to the claimant's lands. IDWR did not previously request this information from the claimants of the portions of right no. 36-00039 because the total amount IDWR found to be beneficially used under all the claimed portions of right no. 36-00039 did not exceed the decreed 2.4 cfs.⁸

⁸ IDWR does not require all claimants to submit information showing a "chain of title" demonstrating ownership of all or part of a previously decreed or licensed right in its investigation of the claims. Generally, IDWR requires information as to ownership as part of the investigation of claims only where there are competing claims to the same water right.

2. Quantity for irrigation

As noted above, the director's report recommended a quantity of 0.03 cfs for irrigation of 1 acre. IDWR's recommendation is based in part on the fact that the lands are sprinkler-irrigated, and in part on IDWR's standards for small irrigation systems.

As noted in Appendix A, IDWR has developed standards for various types of uses, requiring less information to support a claim within those standards and more to support a claim outside those standards. One of those standards is the statutory 0.02 cfs per acre standard for irrigation.⁹ Because it has been IDWR's experience that small irrigation systems are typically operated less efficiently than larger systems, IDWR has adopted a standard of 0.03 cfs per acre for systems that irrigate 5 or fewer acres.

It has been IDWR's experience that the on-farm requirement for sprinkler systems is rarely greater than 0.02 cfs per acre; indeed, many sprinkler systems are designed with an application rate of 5/8 or 3/4 inch per acre (0.0125 or 0.015 cfs per acre). Although small systems are typically operated less efficiently, the on-farm requirement for small sprinkler systems is rarely greater than 0.03 cfs. Subsequent to the filing of the director's report, IDWR obtained further information indicating that some of those rare instances in which more than 0.02 cfs is reasonably necessary for sprinkler irrigation may exist in some cases in the Hagerman area, raising the possibility that more than 0.03 cfs may reasonably be necessary for some small systems. IDWR therefore requested, and the claimant has agreed to provide, the information necessary for IDWR to conduct further analysis of the on-farm requirement for this right. This information has not been received; IDWR will supplement this report with the results of that analysis as soon as the information is received and it can complete the analysis.

IDWR's methodology for investigating and recommending claims to water for irrigation in excess of 0.02 cfs per acre is described in IDWR's Report Regarding Evaluation of Irrigation Diversion Rates. The application of that methodology to this claim is described in Appendix B.

⁹ IDWR relied upon the following in reaching its conclusions: Idaho Code §42-220 (which provides that no license or decree will be issued confirming a right to more than 0.02 cfs per acre for irrigation unless it can be shown that a greater amount is necessary) and Idaho Code §42-1402 (which limits the amount of water allotted by a decree to the amount of water beneficially used).

As described in Appendix B, the application of IDWR's methodology for evaluation of irrigation diversion rates did not result in the recommendation of an additional amount for conveyance losses. IDWR determined the total conveyance losses for the ditch through which this right is delivered, and allocated that total among the various rights to water delivered through the same ditch. The portion allocable to this right is so small as to be insignificant, and does not warrant recommendation of an additional amount for conveyance losses beyond the 0.03 cfs per acre already recommended.

3. Quantity for other purposes

As to the quantity for other purposes of use stated in the claimant's motion for summary judgment, neither the claimant nor IDWR's investigation has yielded information that would confirm the beneficial use of water for other purposes, as noted in section F above. Therefore, IDWR does not have information that would confirm the quantity used for the other purposes.

4. Other rights delivered through same ditch

As noted in Appendix B, IDWR determined the total conveyance losses for the ditch through which this right is delivered, and allocated that total among the various rights to water delivered through the same ditch. For this reason, IDWR previously proposed that contested water rights in the Hagerman area be grouped by ditch for scheduling purposes to facilitate resolution of quantity issues for those rights. Water right 36-00039E is delivered through the Buckeye ditch. Appendix C is a schematic which shows the water rights delivered through the Buckeye ditch, and which includes a variety of information as to the water rights listed.

H. Period of Year Water is Used for Each Purpose of Use

Both the notice of claim and director's report state a period of use of 3/15 to 11/15 for irrigation. The claimant's objection states a period of use of 1/1 to 12/31. The claimant's motion for summary judgment states the period of use as "the irrigation season." The *New International Mortgage* decree does not state a period of use for irrigation.

The recommended season of use is consistent with season of use standards for irrigation developed by IDWR for various climatic regions throughout the state, which are based on a 75% chance of a 24 degree Fahrenheit frost. In addition, the director's report included general provision 12b, which allowed use of water for irrigation outside the season of use stated in the description of the individual right

subject to certain conditions. In the Memorandum Decision and Order Re: Basin-Wide Issue 5, the Presiding Judge concluded that general provision 12 is not necessary and would not be decreed. This decision further provided that "all decrees for irrigation in the SRBA shall set the period of use as the "irrigation season." Order, pp. 15-16. The district court denied a subsequent motion for permission to appeal the decision. Pending any further proceedings on the decision, any further statement of the basis for IDWR's recommendation as to the season of use for irrigation appears to be unnecessary.

As to the season of use for other purposes of use stated in the claimant's motion for summary judgment, neither the claimant nor IDWR's investigation has yielded information that would confirm the beneficial use of water for other purposes, as noted in section F above. Therefore, IDWR does not have information that would confirm the season of use for the other purposes.

I. Legal Description of the Place of Use

The legal description under item 8 in the claimant's motion for summary judgment is the same as the legal description of the place of use for irrigation recommended in the director's report. The number of acres following the legal description is different than the number of irrigated acres per 40-acre subdivision recommended in the director's report. The notice of claim and the director's report state 1 acre. The claimant's objection and motion for summary judgment state 1.25 acres.

The claimant's lands as described in the notice of claim and the deed attached to the motion for summary judgment consist of 4 Hagerman townsites.¹⁰ These townsites are each 50' by 125', as shown by the plat map of the Hagerman townsite, a copy of which IDWR obtained from the Gooding County Recorder's Office. Based upon these dimensions, the 4 townsites contain a total of approximately 0.57 acres. Rounded up to the nearest acre, the place of use consists of 1 acre.

As to the legal description of the place of use for other purposes of use stated in the claimant's motion for summary judgment, neither the claimant nor IDWR's investigation has yielded information that would confirm the beneficial use of water for other purposes, as noted in section F above. Therefore, IDWR does not have information that would confirm the place of use for the other purposes.

¹⁰ The judgment attached to the claimant's motion for summary judgment describes a fifth lot (Lot 5, Block 14) which was not included in the notice of claim. There is no delivery system in place to delivery water from the Buckeye ditch to this lot.

J. Annual Volume of Consumptive Use

The notice of claim does not state an annual volume of consumptive use. The director's report states an annual volume of consumptive use of 3 AFY for one acre. The claimant's objection contests the recommended consumptive use, but does not state an amount. The claimant's motion for summary judgment states an amount of 5.64 AFY, or 4.5 AFY per acre. The Affidavit of Charles E. Brockway, submitted by the claimant in support of the motion for summary judgment, states "that 3.75 acre feet per acre per annum is the amount of consumptive use that is reasonable [in the Hagerman area] based upon a yield of ten tons [of alfalfa] per acre." Applying this standard, the total annual consumptive use volume would be 3.75 for the one recommended acre, or 4.69 AFY for the 1.25 acres stated in the claimant's motion for summary judgement.

IDWR developed standards for annual volume of consumptive use for the various climatic areas throughout the state. The standard for the area in which the claimant's place of use is located is 3.0 AFY. IDWR's recommendation is based on this standard. The development of IDWR's standards for annual volume of consumptive use is described in IDWR's Report Regarding Evaluation of Irrigation Diversion Rates. IDWR has conducted further analysis of the annual volume of consumptive use based on further information IDWR received subsequent to its original analysis. The further analysis is described in IDWR's Report Regarding Consumptive Use for Irrigation in the Hagerman Area. Based on this further analysis, IDWR recommends an annual volume of consumptive use of 3.5 AFF per acre, for a total of 3.5 AFY for the one acre claimed and recommended.

K. Conditions on the Exercise of the Right and Other Necessary Matters

The recommendation of this right in the director's report includes the following remarks:

WATER IS DELIVERED THROUGH THE BUCKEYE DITCH.
PROPERTY IS ALSO KNOWN AS LOTS 13-16, BLK 24 HAGERMAN
TOWNSITE.

The claimant's objection does not contest the remarks. The claimant's motion for summary judgment seeks deletion of both remarks.

In response to the request of the Presiding Judge, IDWR submitted IDWR's Report for September 19, 1995 Status Conference. In this report, IDWR indicated that it had reviewed its use of remarks in the description of the individual water right,

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both to address concerns identified by the court, and to separate explanatory material from material the Director recommends be included in the decree of water rights pursuant to the 1994 amendments to the adjudication statute.¹¹ Both remarks are explanatory material.

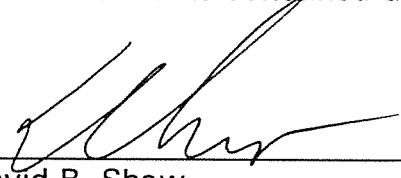
¹¹ See Idaho Code §42-1411 (which addresses the form and content of director's reports).

REPORT REGARDING CLAIM TO WATER RIGHT NO. 36-00039E

State of Idaho)
) ss.
County of Ada)

David B. Shaw, being first duly sworn, upon oath, deposes and says:

That I am the Adjudication Bureau Chief for IDWR, that I have read the foregoing report, know its contents, and that the statements contained therein are true to the best of my knowledge and belief.



David B. Shaw

Subscribed and sworn to before me this 1st day of July, 1996.

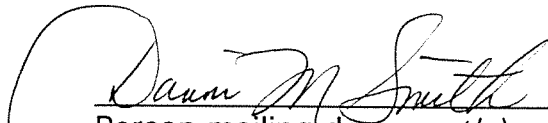


Notary Public for Idaho
Residing at: Boise ID
My commission expires: 11-14-1998

Certificate of Service

I certify that on the 1st day of July, 1996, I hand delivered copies of the foregoing document, including all attachments, to the following:

Patrick D. Brown
133 Shoshone St North
Twin Falls, ID 83303



Person mailing document(s)

APPENDIX A

A. INVESTIGATION AND RECOMMENDATION OF CLAIMS GENERALLY

To promote the accuracy and consistency of water right decrees, and to minimize the burden on the court and the claimants in a water right adjudication, the state has made the specialized expertise of IDWR available through IDWR's investigation and reporting function.¹

The resources the state has made available for this function, however, are limited. IDWR has the duty to conduct a reasonable investigation within the spending authority granted by legislative appropriation. Those resources are not sufficient for IDWR to exhaustively investigate each and every potentially relevant fact regarding each and every claim and to make a conclusive determination of the water right. Rather, IDWR reviews the claim and the information already available to IDWR, and conducts such further investigation as is reasonable to determine whether there is sufficient information to support recommendation of the water right to be decreed.

To make the most efficient use of the available resources, IDWR must make determinations as to what is a reasonable level of investigation for various classes of claims prior to making a recommendation to the court regarding any particular claim. IDWR has employed two primary mechanisms to identify a reasonable level of investigation. First, the statutes set criteria and IDWR has developed standards for various types of uses, requiring less information to support a claim to water within those standards and more information to support a claim outside those standards. Second, IDWR has adopted a "tier" approach, identifying classes of claims which for various reasons merit further investigation.

Generally, with claims based on beneficial use², IDWR conducts a "licensing type" field exam, which includes confirmation of the source, point(s) of diversion, purpose(s) of use, place(s) of use, and an examination of the water delivery system and the quantity of water beneficially used. IDWR also contacts the claimant to obtain information supporting the priority date claimed. This level of examination is conducted because there has been no prior administrative or judicial

¹ Idaho Code §§ 42-1410 and 42-1411.

² Water rights based on beneficial use are sometimes referred to as constitutional rights or grandfather rights.

confirmation of the existence and extent of a water right based on beneficial use.³

Generally, for water rights that have been previously confirmed by license or decree, IDWR begins its examination by comparing the claim to information already available to IDWR. Other information includes, for example, IDWR's decree files; license, permit and transfer files; remotely sensed data, including Landsat imagery of irrigated acres and aerial photography; watermaster reports; applicable laws and IDWR's interpretation of those laws in light of the water resource policies of the state; etc. If there are discrepancies between the claim and information already available to IDWR, IDWR conducts further investigation to resolve the discrepancy, which generally includes a field exam and/or contacting the claimant for further information. Thus, where there has been a prior judicial or administrative confirmation of the existence and extent of a water right, IDWR uses information already available to IDWR to limit its review to issues identified by its discrepancy analysis.

Finally, IDWR uses both the court-ordered notice of error process⁴ and the statutory objection process to identify claims which merit further review. If this further review yields new information that supports a different description of the water right, then IDWR will revise its recommendation (in the case of a notice of error) or submit a supplemental director's report or offer a standard form 5 (in the case of an objection), consistent with the new information.⁵

Further information as to IDWR's standards and procedures for the investigation and recommendation is set forth in IDWR's Claim Investigation Manual, Field Examiner's Handbook, Administrative Memorandums, and

³ IDWR conducts a more summary investigation of beneficial use claims limited to domestic and/or stockwater use up to 0.24 cfs.

⁴ The notice of error process, as originally conceived and implemented, was limited to disagreements between the claimant and IDWR as to fairly straight-forward "errors", such as clerical errors or other readily verifiable matters. Based on its experience in the test basins, IDWR has subsequently recommended that the notice of error process be expanded to address any type of perceived error, as well as to address disagreements between claimants.

⁵ This "tiered" approach to determining a reasonable level of investigation is embodied in the statutory framework for water right adjudications. See §42-1410 (which provides for the discretion of the director in determining the level of IDWR's investigation, and allows but does not require the agency to conduct hearings), and §42-1412 (which authorizes IDWR to submit supplemental reports, and authorizes the court or the parties to request further investigation by IDWR in contested subcases). The tiered approach embodied in the statutory framework promotes efficiency and minimizes the burden on the court and the claimants by providing a report/objection process to identify disputed matters, and reserving the highest level of investigation for disputed matters.

B. METHODOLOGY TO DETERMINE IRRIGATED ACREAGE

The area of irrigated acreage can be determined by information obtained from scaled and non-scaled photographs of the place of use supplied by one of several U.S. government agencies. The use of aerial photography by the U.S. government dates back to 1937, when the U.S. Department of Agriculture, Agricultural Stabilization and Conservation Service (ASCS, now known as the Farm Service Agency, or FSA) began photographing selected counties of the United States on a repetitive basis. This coverage continues today and aerial photos are used by the ASCS (FSA) to figure acreage planted on farms for purposes of managing farm programs. Photos used by IDWR typically include: ASCS photos and 35 mm color slides⁷; NAPP photos⁸; ortho-photoquads⁹; and U2

⁶ These documents set forth general standards and procedures and do not address all possible exceptions to the general standards and procedures. In addition, as a result of its experience in the test basins, statutory changes, judicial decisions, etc., IDWR has identified refinements and revisions to its standards and procedures for the investigation and recommendation of claims that have not yet been included in these documents.

⁷ Both the photos and slides are high oblique and vertical aerial photography. The ASCS photos are scaled and have selected features, such as roads, section lines, ditches, and field acreage superimposed on them by the ASCS. The color slides are simply color slides frequently taken with hand-held 35mm equipment. IDWR staff typically obtain copies (which are not scaled) of maps for lands claimed as the place of use during the investigation of the claims, either from the claimant or from the local ASCS office. Color slides may also be checked-out from the local ASCS office as needed; IDWR sometimes obtains the color slides as they are discarded by the local ASCS office.

⁸ NAPP (National Aerial Photography Program) photos are all color-infrared aerial photography. IDWR obtained coverage for most of the Snake River Basin, including all of the test basins; the photos are primarily from flights during 1987 and 1988, though some are from 1986 or 1989. The date of the flight is shown on the photo. NAPP photography is available from the U.S. Geological Survey Earth Resources Observation Systems (EROS) data center in Sioux Falls, South Dakota.

⁹ The full name for an ortho-photoquad is "orthographic photograph quadrangle." These are black and white photoimages prepared from aerial photographs that have been rectified to eliminate image displacement due to terrain relief that cover a systematically subdivided area of latitude and longitude. IDWR obtained coverage for most of the Snake River Basin, including all the test basins; the photos are primarily from flights during the 1970's. The date of the flight is shown on the quad sheet. Most of the orthophotos were obtained from the U.S. Geological Survey National Cartographic Information Center (NCIC) in Menlo Park, California. In some areas, maps were not available from U.S.G.S. but were available from other agencies, such as the United States Department of Agriculture, Forest Service.

aerial photos¹⁰.

A photographic "scale," like a map scale, is an expression that states that one unit of distance on a photograph represents a specific number of units of actual ground distance.

$$S = \text{Photo scale} = \frac{\text{Photo distance}}{\text{Ground distance}} = \frac{d}{D}$$

The scale may be expressed as unit equivalents, representative fractions, or ratios. For example, if 1 mm on a photo represents 25 m on the ground, the scale of the photo can be expressed as 1 mm = 25 m (unit equivalents), or 1/25,000 (representative fraction), or 1:25,000 (ratio).

The photo(s) used by IDWR personnel have varying scales. The ASCS photographs have map features drawn in by the ASCS. These photos are stated to be "not to scale," but do include the field acreage as determined by ASCS written on the places of use. NAPP photography is at a nominal scale of 1:40,000; U2 aerial photography is at a nominal scale of 1:120,000; and ortho-photoquads have a scale of 1:24,000.

To determine the area used, IDWR staff employed various transparent overlays, known as grid templates. These templates are available at most blueprint supply stores. One type consists of lines forming rectangles or squares of known area in the same scale that is utilized in the scaled photograph. The grid is placed over a scaled photograph and the area of a ground unit is estimated by counting grid units that fall within the unit to be measured.

Another commonly used grid is the dot grid, which is composed of uniformly spaced dots on a transparent overlay. The grid is placed over the photograph and the dots falling within the region to be measured are counted. The value assigned to each dot is dependent on the scale of the photograph. First, the number of acres per centimeter (or other measuring unit) is computed. This figure is then divided by the number of dots per measuring unit on the grid to obtain the acreage represented by each dot. For instance, a square 3.4 cm on each side containing 640 dots will cover 160 acres on a photo with a nominal

¹⁰ These photos are color-infrared aerial photography obtained by the National Aeronautics and Space Administration (NASA) Airborne Instrumentation Research Project, and available from EROS. IDWR obtained coverage of most of the southern portion of the Snake River Basin, most of which was flown in 1977. In addition, because the State of Idaho was part of an ongoing project with NASA to photograph selected areas, photography from various areas in various years is also available. The date of the flight is shown on the photo.

scale of 1:24000; 640 dots divided by 160 acres equals 4 dots to the acre, thus 1 dot equals 0.25 acres.

Because of its simplicity, the grid system is a practical method to determine the size of irrigated areas; it nonetheless requires some training and experience to be used effectively.

For non-scaled photos, such as the ASCS 35 mm photos, IDWR did not directly make acreage determinations. Instead, these photos were used to confirm whether the place of use and amount of irrigated acreage had changed for that year according to common landmarks visible in the photographs.

APPENDIX B

CONVEYANCE LOSSES

CLAIM NUMBER: 36-00039E

CONVEYANCE LOSS

When water is conveyed through an earthen delivery ditch, a certain portion of the total flow is lost through seepage into the ground. The method used to estimate seepage losses is referred to as the Worstell method, which is further explained in the CONVEYANCE LOSS section of IDWR's Methodology Report. The Worstell method relies on the characteristics of the soil, the ditch width, and the ditch length to estimate the actual seepage losses of the ditch. IDWR has developed a spreadsheet which calculates the total conveyance loss estimate on a ditch and prorates that loss among the reaches of the ditch based on the total amount of water removed from each reach of the ditch and the location of each reach.

In the original analysis of conveyance loss for the Buckeye Ditch, delivery locations were identified along the entire ditch. In some cases, more than one right is supplied from a single reach of the ditch. The total conveyance loss estimate for all water use from that reach of the ditch was calculated using the spreadsheet based upon the Worstell method. If there were found to be multiple users removing water from the same reach of the ditch, the conveyance loss estimate for that reach was divided equally among those users. This approach was used along the entire length of the Buckeye Ditch.

It would not be practical or meaningful for IDWR to re-evaluate the conveyance loss attributable to this right for two primary reasons. First, because the Worstell method does not depend on total flow in a ditch, but rather the top width of the water surface and the ditch length, the total conveyance loss estimate for the ditch would not change even if the determinations of individual water rights were to vary from IDWR's recommendations. The only change might be the allocation of the total conveyance loss among the individual water rights. However, not all of the water rights on the ditch are contested, and of those that are contested, not all are presently before the special master. In addition, no historical method for allocation of conveyance loss exists to use as a basis for distribution of conveyance losses for water rights along this ditch.

The portion of the total conveyance loss allocable to this right was not sufficient to warrant recommendation of an additional amount for conveyance losses. Because this right is delivered near the head of the ditch, conveyance loss of the ditch

in this reach was very small. Because several rights are delivered within this reach, the portion allocable to this right was so small as to be insignificant.

State of Idaho)
) ss.
County of Ada)

Marci S. Sterling, being first duly sworn, upon oath, deposes and says:

That I am an Engineer for the Adjudication Bureau of IDWR, that I prepared the foregoing appendix, know its contents, and that the statements contained therein are true to the best of my knowledge and belief.

Marci S. Sterling
Marci S. Sterling

Subscribed and sworn to before me this 1st day of July, 1996.

A. Sherman
Notary Public for Idaho
Residing at: Boise ID
My commission expires: 11-14-1998

64B- OBJ.- Flegler- 9/10/1884

(Brown, atty.)
claimed- irr.- 4.52 for 51 ac.
stock- accidental
rec'd- irr.- 0.72 for 19 ac.
D.R. = 0.56
C.L. = 0.16

3E- OBJ.- Vargo- 9/10/1884

HUBBLE
(Brown, atty.)
claimed- irr.- 0.20 for 10 ac.
rec'd- irr.- 0.20 for 5 ac.
D.R. = 0.20

**BUCKEYE
DITCH**
(lower)

(cat'd
from
stock)

91A no obj. (Ellston)- 9/10/1884

HUBBLE
claimed- irr.- 0.64 for 16 ac.
rec'd- irr.- 0.64 for 12 ac.
D.R. = 0.64

91B- no obj. (Fobes)- 9/10/1884

HUBBLE
claimed- irr.- 0.16 for 4 ac.
rec'd- irr.- 0.16 for 4 ac.
D.R. = 0.13
C.L. = 0.03

108M- Messersmith/Bothwell- 9/10

HUBBLE
claimed- no records found
rec'd- irr.- 2.95 for 53 ac.
D.R. = 2.81
C.L. = 0.41

108N- Brooks- 9/10/1884

HUBBLE
claimed- irr.- 0.06 for 2.3
rec'd- irr.- 0.16 for 2.3
D.R. = 0.15
C.L. = 0.01

108L- Gridlev- 9/10/1884

HUBBLE
claimed- irr.- 1.46 for 5 ac.
rec'd- irr.- 0.17 for 3 ac.
D.R. = 0.16
C.L. = 0.01

3J- OBJ.- Jerd- 9/10/1884

(Brown, atty.)
claimed- irr.- 0.40 for 20 ac.
rec'd- irr.- 0.12 for 3 ac.
C.L. = 0.03

35J- OBJ.- Simcoe- 9/10/1884

(Brown, atty.)
claimed- no record found
rec'd- irr.- 0.40 for 9 ac.
D.R. = 0.34
C.L. = 0.06

26- OBJ.- Brown- 3/30/1884

HUBBLE
claimed- irr.- 2.40 for 40 ac.
stock- 0.05 (125 range)
rec'd- irr.- 1.05 for 40 ac.
stock- 0.05 summer
0.24 winter
C.L. = 0.19
D.R. = 0.86

34- no obj. (Peterson)- 3/30/1884

claimed- irr.- 2.40 for 34 ac.
rec'd- irr.- 0.87 for 34 ac.
C.L. = 0.19

3C- OBJ.- Babington- 9/10/1884

(Brown, atty.)
claimed- irr.- 0.30 for 10 ac.
rec'd- irr.- 0.30 for 10 ac.
C.L. = 0.10

3- OBJ.- Simcoe- 9/10/1884

(Brown, atty.)
claimed- irr.- 0.30 for 40 ac.
rec'd- irr.- 0.80 for 40 ac.

35E- OBJ.- Brown- 9/10/1884

AMNESTY
claimed- 3/8/1902
irr.- 0.24 for 8 ac.
rec'd- irr.- 0.10 for 3 ac.
C.L. = 0.04
(combined with 34E)
(8 ac. place of use)

35G- no obj. (Vargo)- 9/10/1884

claimed- 3/8/1902
irr.- 0.02 for 0.5 ac.
rec'd- dom.- 0.02

35C- no obj. (Hoffman)- 9/10/1884

claimed- 9/4/1884
dom.- 0.02
rec'd- dom.- 0.02

35H- no obj. (Drage)- 9/10/1884

claimed- records not found
rec'd- irr.- 0.20 for 5 ac.
C.L. = 0.10

87- no obj. (Peterson)- 3/30/1884

HUBBLE
claimed- irr.- 2.40 for 31 ac.
rec'd- irr.- 2.40 for 31 ac.
D.R. = 1.55
C.L. = 0.35

3A- OBJ.- Rea- 9/10/1884

(Brown, atty.)
claimed- irr.- 1.60 for 13 ac.
stock- 0.04 (19 range)
rec'd- irr.- 0.41 for 13 ac.
stock- 0.02 summer
0.17 winter
C.L. = 0.15

35B- OBJ.- Sturtevant- 9/10/1884

claimed- irr.- 0.60 for 13 ac.
rec'd- irr.- 0.30 for 13 ac.
C.L. = 0.04

3K- no obj. (Gardner)- 9/10/1884

(Brown, atty.)
claimed- irr.- 0.71 for 10 ac.
rec'd- record not found

3L- no obj. (Babington)- 9/10/1884

(Brown, atty.)
claimed- irr.- 1.97 for 27.5 ac.
stock- 0.04
fish- 4.00
rec'd- record not found

3M- no obj. (Simcoe)- 9/10/1884

(Brown, atty.)
claimed- irr.- 1.32 for 18.5 ac.
rec'd- record not found

3B- OBJ.- Kingston- 9/10/1884

(Brown)
claimed- irr.- 7.16 for 129 ac.
stock- 0.05 (200 range)
fish- 7.16
rec'd- irr.- 5.00 for 129 ac.
stock- 0.05 summer
1.80 winter
D.R. = 3.25
C.L. = 1.75

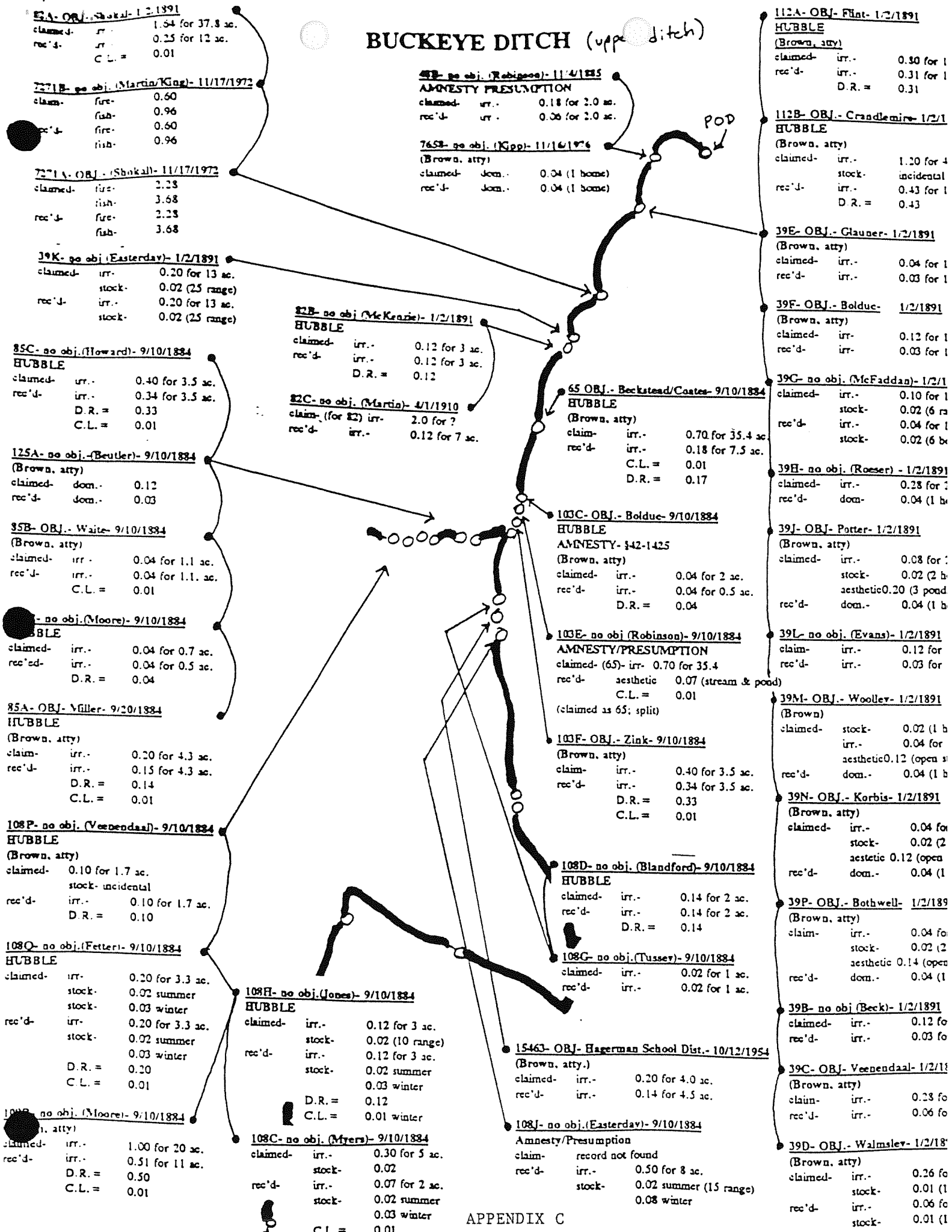
3D- no obj. (Harrison)- 9/10/1884

HUBBLE
claimed- irr.- 0.24 for 10 ac.
rec'd- irr.- 0.24 for 2 ac.
D.R. = 0.24

3H- OBJ.- Buckeye Farms- 9/10/1884

(Rosholt, atty.)
claimed- irr.- 12.0 for 445
rec'd- irr.- 3.37 for 224
C.L. = 3.89
(combined with I)

BUCKEYE DITCH (upper ditch)



82A- OBJ. (Shokal)- 1/2/1891
 claimed- irr.- 1.54 for 37.8 ac.
 rec'd- irr.- 0.25 for 12 ac.
 C.L. = 0.01

727B- go obj. (Martin/King)- 11/17/1972
 claim- fire- 0.60
 (sub- 0.96
 fire- 0.60
 fish- 0.96

727A- OBJ. (Shokal)- 11/17/1972
 claimed- fire- 2.23
 fish- 3.68
 rec'd- fire- 2.23
 fish- 3.68

39K- go obj. (Easterday)- 1/2/1891
 claimed- irr.- 0.20 for 13 ac.
 stock- 0.02 (25 range)
 rec'd- irr.- 0.20 for 13 ac.
 stock- 0.02 (25 range)

85C- go obj. (Howard)- 9/10/1884
HUBBLE
 claimed- irr.- 0.40 for 3.5 ac.
 rec'd- irr.- 0.34 for 3.5 ac.
 D.R. = 0.33
 C.L. = 0.01

125A- go obj. (Beutler)- 9/10/1884
 (Brown, atty)
 claimed- dom.- 0.12
 rec'd- dom.- 0.03

35B- OBJ. (Waite)- 9/10/1884
 (Brown, atty)
 claimed- irr.- 0.04 for 1.1 ac.
 rec'd- irr.- 0.04 for 1.1 ac.
 C.L. = 0.01

- go obj. (Moore)- 9/10/1884
HUBBLE
 claimed- irr.- 0.04 for 0.7 ac.
 rec'd- irr.- 0.04 for 0.5 ac.
 D.R. = 0.04

85A- OBJ. (Miller)- 9/20/1884
HUBBLE
 (Brown, atty)
 claim- irr.- 0.20 for 4.3 ac.
 rec'd- irr.- 0.15 for 4.3 ac.
 D.R. = 0.14
 C.L. = 0.01

108P- no obj. (Veenendaal)- 9/10/1884
HUBBLE
 (Brown, atty)
 claimed- 0.10 for 1.7 ac.
 stock- incidental
 rec'd- irr.- 0.10 for 1.7 ac.
 D.R. = 0.10

108Q- no obj. (Fetter)- 9/10/1884
HUBBLE
 claimed- irr.- 0.20 for 3.3 ac.
 stock- 0.02 summer
 stock- 0.03 winter
 rec'd- irr.- 0.20 for 3.3 ac.
 stock- 0.02 summer
 stock- 0.03 winter
 D.R. = 0.20
 C.L. = 0.01

108R- no obj. (Moore)- 9/10/1884
 (Brown, atty)
 claimed- irr.- 1.00 for 20 ac.
 rec'd- irr.- 0.51 for 11 ac.
 D.R. = 0.50
 C.L. = 0.01

108H- no obj. (Jones)- 9/10/1884
HUBBLE
 claimed- irr.- 0.12 for 3 ac.
 stock- 0.02 (10 range)
 rec'd- irr.- 0.12 for 3 ac.
 stock- 0.02 summer
 stock- 0.03 winter
 D.R. = 0.12
 C.L. = 0.01 winter

108C- no obj. (Myers)- 9/10/1884
 claimed- irr.- 0.30 for 5 ac.
 stock- 0.02
 rec'd- irr.- 0.07 for 2 ac.
 stock- 0.02 summer
 stock- 0.03 winter
 C.L. = 0.01

42B- go obj. (Robinson)- 11/4/1885
AMNESTY PRESUMPTION
 claimed- irr.- 0.18 for 2.0 ac.
 rec'd- irr.- 0.06 for 2.0 ac.

765E- go obj. (Kipp)- 11/16/1976
 (Brown, atty)
 claimed- dom.- 0.04 (1 boom)
 rec'd- dom.- 0.04 (1 boom)

82B- go obj. (McKenzie)- 1/2/1891
HUBBLE
 claimed- irr.- 0.12 for 3 ac.
 rec'd- irr.- 0.12 for 3 ac.
 D.R. = 0.12

82C- go obj. (Martin)- 4/1/1910
 claim- (for 82) irr.- 2.0 for ?
 rec'd- irr.- 0.12 for 7 ac.

65 OBJ.- Beckstead/Coates- 9/10/1884
HUBBLE
 (Brown, atty)
 claim- irr.- 0.70 for 35.4 ac.
 rec'd- irr.- 0.18 for 7.5 ac.
 C.L. = 0.01
 D.R. = 0.17

103C- OBJ.- Bolduc- 9/10/1884
HUBBLE
AMNESTY- 142-1425
 (Brown, atty)
 claimed- irr.- 0.04 for 2 ac.
 rec'd- irr.- 0.04 for 0.5 ac.
 D.R. = 0.04

103E- no obj. (Robinson)- 9/10/1884
AMNESTY/PRESUMPTION
 claimed- (65)- irr.- 0.70 for 35.4
 rec'd- aesthetic 0.07 (stream & pond)
 C.L. = 0.01
 (claimed as 65; split)

103F- OBJ.- Zink- 9/10/1884
 (Brown, atty)
 claim- irr.- 0.40 for 3.5 ac.
 rec'd- irr.- 0.34 for 3.5 ac.
 D.R. = 0.33
 C.L. = 0.01

108D- no obj. (Blandford)- 9/10/1884
HUBBLE
 claimed- irr.- 0.14 for 2 ac.
 rec'd- irr.- 0.14 for 2 ac.
 D.R. = 0.14

108G- no obj. (Tussey)- 9/10/1884
 claimed- irr.- 0.02 for 1 ac.
 rec'd- irr.- 0.02 for 1 ac.

15463- OBJ.- Hagerman School Dist.- 10/12/1954
 (Brown, atty)
 claimed- irr.- 0.20 for 4.0 ac.
 rec'd- irr.- 0.14 for 4.5 ac.

108J- no obj. (Easterday)- 9/10/1884
Amnesty/Presumption
 claim- record not found
 rec'd- irr.- 0.50 for 8 ac.
 stock- 0.02 summer (15 range)
 stock- 0.08 winter

112A- OBJ.- Flint- 1/2/1891
HUBBLE
 (Brown, atty)
 claimed- irr.- 0.30 for 1
 rec'd- irr.- 0.31 for 1
 D.R. = 0.31

112B- OBJ.- Cradlewire- 1/2/1891
HUBBLE
 (Brown, atty)
 claimed- irr.- 1.20 for 4
 stock- incidental
 rec'd- irr.- 0.43 for 1
 D.R. = 0.43

39E- OBJ.- Glauner- 1/2/1891
 (Brown, atty)
 claimed- irr.- 0.04 for 1
 rec'd- irr.- 0.03 for 1

39F- OBJ.- Bolduc- 1/2/1891
 (Brown, atty)
 claimed- irr.- 0.12 for 1
 rec'd- irr.- 0.03 for 1

39G- no obj. (McFadden)- 1/2/1891
 claimed- irr.- 0.10 for 1
 stock- 0.02 (6 ra
 rec'd- irr.- 0.04 for 1
 stock- 0.02 (6 ba

39H- no obj. (Roeser)- 1/2/1891
 claimed- irr.- 0.28 for 1
 rec'd- dom.- 0.04 (1 ba

39J- OBJ.- Potter- 1/2/1891
 (Brown, atty)
 claimed- irr.- 0.08 for 1
 stock- 0.02 (2 ba
 aesthetic 0.20 (3 pond
 rec'd- dom.- 0.04 (1 ba

39L- no obj. (Evans)- 1/2/1891
 claim- irr.- 0.12 for 1
 rec'd- irr.- 0.03 for 1

39M- OBJ.- Woolley- 1/2/1891
 (Brown)
 claimed- stock- 0.02 (1 ba
 irr.- 0.04 for
 aesthetic 0.12 (open si
 rec'd- dom.- 0.04 (1 ba

39N- OBJ.- Korbis- 1/2/1891
 (Brown, atty)
 claimed- irr.- 0.04 for 1
 stock- 0.02 (2
 aesthetic 0.12 (open
 rec'd- dom.- 0.04 (1

39P- OBJ.- Bothwell- 1/2/1891
 (Brown, atty)
 claim- irr.- 0.04 for 1
 stock- 0.02 (2
 aesthetic 0.14 (open
 rec'd- dom.- 0.04 (1

39B- no obj. (Beck)- 1/2/1891
 claimed- irr.- 0.12 for 1
 rec'd- irr.- 0.03 for 1

39C- OBJ.- Veenendaal- 1/2/1891
 (Brown, atty)
 claim- irr.- 0.23 for 1
 rec'd- irr.- 0.06 for 1

39D- OBJ.- Walmsley- 1/2/1891
 (Brown, atty)
 claimed- irr.- 0.26 for 1
 stock- 0.01 (1
 rec'd- irr.- 0.06 for 1
 stock- 0.01 (1

ALAN G. LANCE
Attorney General
State of Idaho

CLIVE J. STRONG
Deputy Attorney General
Chief, Natural Resources Division

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Fax: (208)327-5400

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT
OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	Subcase No. 36-00039E
	)	
Case No. 39576	)	AFFIDAVIT OF STEVE CLELLAND
	)	REGARDING CLAIM NO. 36-00039E
_____	)	
STATE OF IDAHO	)	
	) ss.	
County of Twin Falls	)	

I, STEVE CLELLAND, being first duly sworn on oath, depose and state as follows:

1. I am a Senior Water Resource Agent with the Idaho Department of Water Resources (IDWR).

2. My work address is Idaho Department of Water Resources (IDWR), Southern Regional Office, 222 Shoshone St. East, Twin Falls, ID 83301-6105. I reside in Twin Falls, Idaho.

3. My educational background and work history both outside and within IDWR are detailed in my Affidavit of Steve Clelland as to the Investigation of Claims in the Hagerman Area.

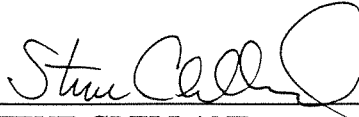
4. As part of my duties as a senior water agent, I investigated claim no. 36-00039E. The pertinent details of that investigation are as follows:

A. On July 8, 1992, I conducted a field examination to verify certain aspects of claim no. 36-00039E.

B. During that field examination, I observed that water pursuant to this claim was applied to the place of use solely by means of sprinkler irrigation.

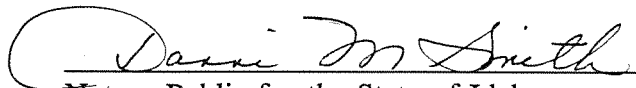
C. During that field examination, I observed that water was not delivered to Block 14, Lot 5. Claimants had identified this lot as part of the claimed place of use pursuant to claim no. A36-00039E in their Motion for Summary Judgment. I observed no delivery system in place to divert water out of the Buckeye ditch to this parcel claimed as part of the place of use.

DATED this 1st day of July, 1996.



STEVE CLELLAND

SUBSCRIBED AND SWORN to before me this 1st day of July, 1996.



Notary Public for the State of Idaho
Residing at: Boise
My commission expires: 12-5-2000