

SD-0605-2		Township: 10N		Range: 18E		Section: 31		Tract: SWSWSW		Lot: 43	
S	L	R	STATE		O	S	Max # Records		43		
E	O	D	Water		Name	W	T	Priority	Total		
L	Tract	T	V	Right No.	Last, First	N	G	Date	Source	Diversion	
	SWSWSW			R72-10532	FISH & GAME,	K	J	05/01/1964		0.57	
	SWSWSW	4		A72-00201F	GOICOECHEA, JE	C	D	05/01/1888	SALMON RIVE	0.17	
					PEDRINI, CATER	O					
					GOICOECHEA, JU	C					
	SWSWSW	4		A72-00202D	PEDRINI, CATER	O	D	05/01/1936	SALMON RIVE	0.52	
					BAKER, DICK L	C					
					BAKER, BETTY L	C					
	SWSWSW	4	B	A72-11760	GOICOECHEA, JE	C	J	05/01/1888	SALMON RIVE	0.02	
					GOICOECHEA, JU	C					
	SWSWSW	4	E	A72-11760	GOICOECHEA, JE	C	J	05/01/1888	SALMON RIVE	0.02	
					GOICOECHEA, JU	C					
	SWSWSW	4		R72-00202D	PEDRINI, CATER	O	D	05/01/1936	SALMON RIVE	0.52	
					BAKER, DICK L	C					
					BAKER, BETTY L	C					

END OF DATA...ENTER MENU OPTION AND/OR PRESS ENTER TO CONTINUE
 (Enter=Continue) (GOLD7=This Query)

(Menu)

- 0020/B
 - 0020/F

RTS
 THRU
 PD

-00202A
 -00202D
 -00202E

-11760

SD-0605-2		Township: 10N		Range: 18E		Section: 31		Tract: SWSWSW		Lot:	
S	L	R	STATE		O	S	Max # Records		43		
E	O	D	Water	Name	W	T	Priority	Total			
L	Tract	T	V	Right No.	Last, First	N	G	Date	Source	Diversion	
—	SWSW	4	A72-00202	PEDRINI, CATER	O			05/01/1936	SALMON RIVE	1.50	
—				SPLIT RIGHT,	C				SPLIT RIGHT		
—	SWSW	4	A72-00201B	PEDRINI, CATER	O	D		05/01/1888	SALMON RIVE	0.05	
—				KUCKHOFF, F. A	C				PINE CREEK		
—	SWSW	4	A72-00201	PEDRINI, CATER	O			05/01/1888	SALMON RIVE	4.50	
—				SPLIT RIGHT,	C				PINE CREEK		
—									SPLIT RIGHT		
—	SWSW	4	R72-00201B	PEDRINI, CATER	O	D		05/01/1888	SALMON RIVE	0.05	
—				KUCKHOFF, F. A	C				PINE CREEK		
—	SWSW	4	A72-00202A	PEDRINI, CATER	O	D		05/01/1936	SALMON RIVE	1.50	
—				MOUDY, DOROTHY	C						
—	SWSW	4	R72-00202A	PEDRINI, CATER	O	D		05/01/1936	SALMON RIVE	1.50	
—				MOUDY, DOROTHY	C						
—	SWSW	4	A72-00202E	BAKER, DICK	C	D		05/01/1936	SALMON RIVE	0.22	
—				BAKER, BETTY	C						
—	SWSWSW		R72-10532	STATE OF IDAHO	C	J		05/01/1964	SALMON RIVE	0.57	

(Enter=Continue)

(GOLD7=This Query)

(Menu)

NAME:

F & G

CLAIM: A 72-10532

CORRESPONDENCE

EVIDENCE OF

PRIORITY

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

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

Ident. Number: A72-10532
Date Received: 8/16/1990
Receipt No: T017346
Received By: _____

NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name: STATE OF IDAHO 208-334-3700
Address: DEPT. OF FISH & GAME
P.O. BOX 25
BOISE, ID 83720

2. Date of Priority: DEC 03, 1959

3. Source: EAST FORK OF SALMON RIVER Trib. to: SALMON RIVER

4. Point of Diversion:

Township	Range	Section	1/4 of	1/4 of	1/4	Lot	County
10N	18E	31	SE	SW			CUSTER

5. Description of diverting works:
CONCRETE STRUCTURE, DITCH & BYPASS PIPE

6. Water is used for the following purposes:

Purpose	From	To	C.F.S	(or)	A.F.A.
FISH PROPAGATION	03/15	11/15	0.800		

7. Total Quantity Appropriated is:
0.800 C.F.S. (and/or) A.F.A.

8. Total consumptive use is Acre Feet Per Annum.

9. Non-irrigation uses:
FISH/ BYPASS PIPE AT FISH SCREEN

10. Place of Use:

Township	Range	Section	1/4 of	1/4	Lot	Use	Acres
10N	18E	31	SE	SW		FISH	

11. Place of use in counties: CUSTER

12. Do you own the property listed above as place of use? NO

13. Other Water Rights Used:
NONE

14. Remarks:
EASEMENT AGREEMENT EF-13, FILED AT CUSTER CO. COURTHOUSE ON
12/3/59, PAGES 541, 542, 571-574, BOOK 33.
DITCH OWNERS--PEDRINI BROS.

15. Basis of Claim: BENEFICIAL USE

16. Signature(s)

(a.) By signing below, I/We acknowledge that I/We have received, read and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do _____ do not _____ wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments: _____

For Organizations:

I do solemnly swear or affirm that I am _____ of

Title
_____, that I have signed the foregoing
Organization
document in the space below as _____ of

Title
_____ and that the statements contained in the
Organization
foregoing document are true and correct.

Signature of Authorized Agent

Title and Organization

Date

State of Idaho)
County of _____) SS.

Subscribed and sworn (or affirmed) before me this _____ day

of _____ 19 _____

Notary Public

Seal

Residing at _____

My Commission Expires _____

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

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM

CIVIL CASE NUMBER: 39576

Ident. Number

Date Received

Receipt Number

A72-10532

4/19/90

J017346

NOTICE OF CLAIM
TO A
WATER RIGHT
ACQUIRED UNDER STATE LAW

Please type or print clearly

1. Name of Claimant (s) Idaho Department of Fish & Game Phone (208) 334-3700
Mailing Address 600 South Walnut, Box 25, Boise, Idaho Zip 83707

2. Date of Priority (Only one (1) per claim) December 3, 1959

3. Source of water supply (a) East Fork of Salmon River
which is tributary to (b) Salmon River

4. a. Location of existing point of diversion is: Township 10 N. Range 18 E. Section 31,
1/4 of SE 1/4 of SW 1/4, Govt. Lot, B.M., County of Custer

Additional points of diversion if any: _____

b. If instream flow, beginning point of claimed instream flow is:

Township _____ Range _____ Section _____, _____ 1/4 of _____ 1/4 of _____ 1/4,

Govt. Lot _____ B.M., County of _____

ending point is: Township _____ Range _____ Section _____, _____ 1/4 of _____ 1/4 of _____

_____ 1/4, Govt. Lot _____ B.M., County of _____

5. Description of existing diversion works (Dams, Reservoirs, Ditches, Wells, Pumps, Pipelines, Headgates, Etc),
including the dates of any changes or enlargements in use, the dimensions of the diversion works as
constructed and as enlarged and the depth of each well.

Concrete structure with metal screen which prevents fish from
entering irrigation ditch. Structure includes a bypass pipe which
returns water to the mainstream

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MAR 19 1993

EF-13

6. Water is claimed for the following purposes:

(both dates are inclusive)

(cfs)

(acre feet)

For fish propagation purposes from 3/15 to 11/15 amount 0.800 or _____

For _____ purposes from _____ to _____ amount _____ or _____

For _____ purposes from _____ to _____ amount _____ or _____

For _____ purposes from _____ to _____ amount _____ or _____

7. Total quantity claimed (a) 0.800 (cfs) and/or (b) _____ (acre feet)

8. Total consumptive use claimed is 0 acre feet per annum.

9. Non-irrigation uses; describe fully (eg. Domestic: Give number of households served; Stockwater: Type and number of livestock Etc.) Fish propagation - bypass pipe at fish screen to provide for

fish passage

10. Description of place of use:

a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.

b. If water is used for other purposes, place a symbol of use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RNG	SEC	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	
10N	18E	31												H					

Total number of acres irrigated _____

11. In which county (ies) are lands listed above as place of use located? Custer

12. Do you own the property listed above as place of use? Yes _____ No ☒
If your answer is No, describe in Remarks below the authority you have to claim this water right.

13. Describe any other water rights used at the same place and for the same purposes as described above.
_____ or None (☒)

14. Remarks: Easement Agreement EF-13, filed at Custer Co. Courthouse
on 12/3/59 Pages 541, 542, 571-574, Book 33.
Ditch owners - Pedrini Bros.

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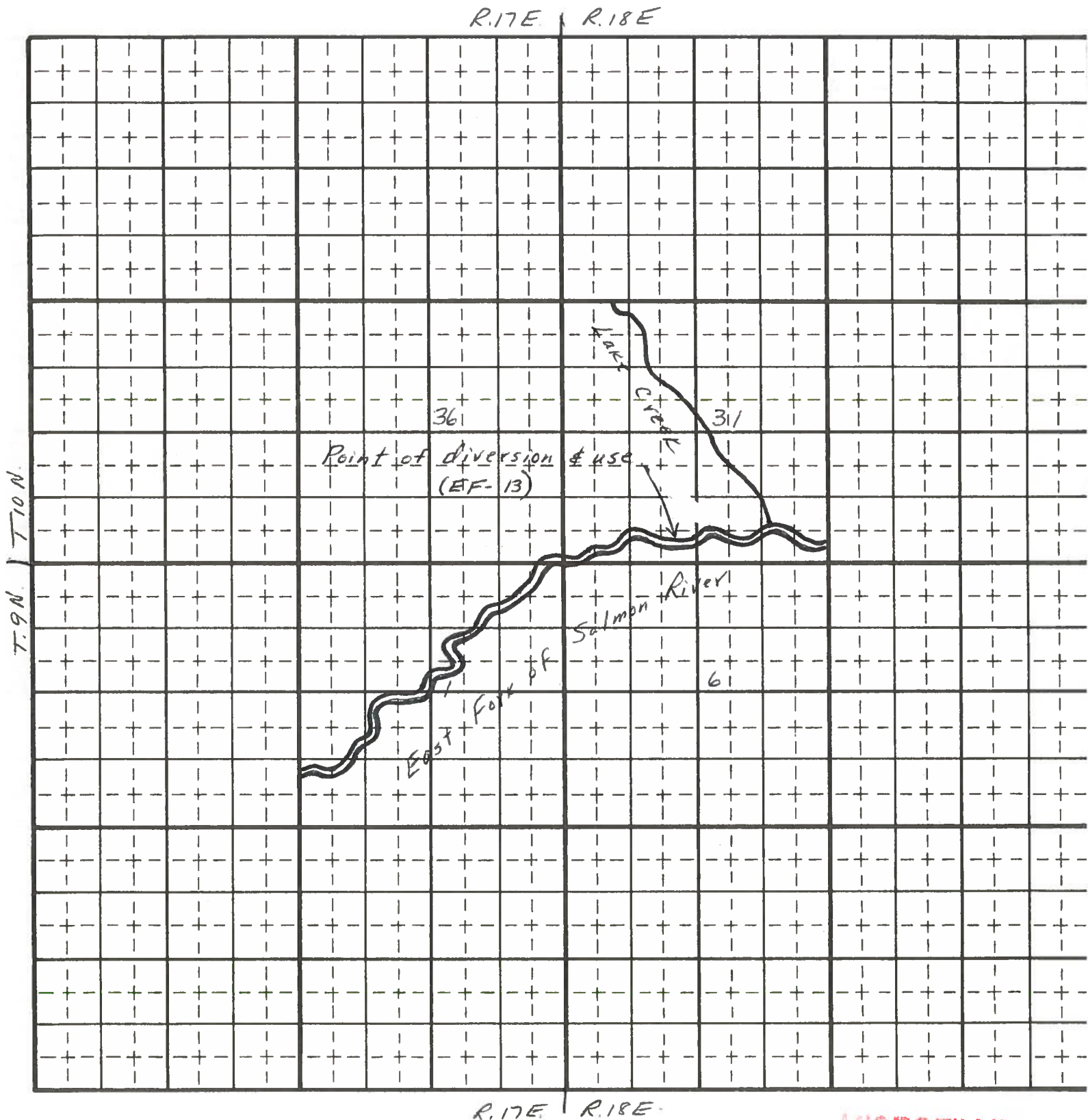
MAR 19 1993

Last Name IDF#G Ident No. _____

Copies: White -State, Yellow-Claimant

Map of Project: show clearly the point of diversion, place of use, section number, township, and range number.

Scale: 2 inches equals 1 mile



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MAR 19 1993

Last Name IDF&G.

Ident No. _____

Copies: White-State, Yellow-Claimant

15. Basis of Claim (check one) Beneficial Use ☒ Posted Notice _____ License _____ Permit _____
Decree _____
If applicable provide IDWR Water Right Number _____
Court _____ Case Number _____ Decree Date _____
Plaintiff vs Defendant _____

16. Signature (s)

(a.) By signing below, I/We acknowledge that I/We have received, read, and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do _____ do not _____ wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments _____

For Individuals: I do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant (s) _____ Date _____
_____ Date _____

For Organizations: I do solemnly swear or affirm that I am Assistant Director
of IDAHO DEPT. OF FISH & GAME Title _____, that I have signed the foregoing
document in the space below as Acting Director of IDAHO DEPT. OF FISH & GAME
Organization _____ Title _____ Organization _____
and that the statements contained in the foregoing document are true and correct.

Signature of Authorized Agent Emmett D. Morris
Title and Organization Assistant Director Date 3-13-90
IDAHO DEPT. OF FISH & GAME

State of Idaho/or Idaho)
County of Ada) SS.

Subscribed and sworn (or affirmed) before me this 13th day of March 19 90

SEAL

Notary Public Larry J. Verhulst

Residing at Emmett, ID

My Commission Expires 8-15-93

Please Print Name

17. Notice of Appearance:

Notice is hereby given that I, _____ will be acting as attorney at law on behalf of the claimant signing above, and that all notices required by law to be mailed by the director to the claimant signing above should be mailed to me at the address listed below.

Signature _____

Address _____

Date _____

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MAR 19 1993

Last Name IDF#G Ident. Number _____

Copies White-State, Yellow-Claimant

Date Received _____

State of Idaho
Department of Water Resources

REQUEST FOR EXTENSION OF TIME
TO FILE ADJUDICATION CLAIM(S)

The Idaho Department of Water Resources will consider this form as a request that the claimant be granted an additional period of time in which to file claim(s) beyond the 90 days allowed by Section 42-1409(10), Idaho Code.

Idaho Department of Fish and Game
Name of Claimant

P. O. Box 25, 600 South Walnut
Post Office Address

Boise, ID 83707
City, State, Zip Code

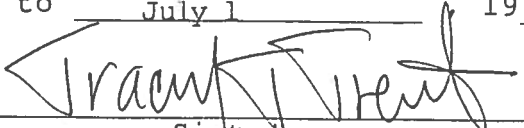
County(s) where Place of Use is located

Date Claim Originally Due

Identify water right(s) for which extension is requested
State reason(s) why an extension of time is requested:

Changes in personnel responsible for filing claims have resulted in
delays in completing applications.

Claimant requests an extension to July 1 1990.


Signature

Chief, Bureau of Program Coordination
Title

=====

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

The above request for extension of time is hereby
X granted _____ denied,
and the filing deadline extended to June 30, 1990.

Signed this 2 day of June, 1990.


Director or his designated agent
DAVID B. SHAW

MICROFILMED
MAR 19 1993

4/5/1989

SRBA CLAIMS RECEIVING CHECKLIST 2

CLAIMANT'S NAME

IDFG

CLAIM IDENT. NO.

A72-10532

DATE RECEIVED

6/19/90

CK #

TD17346

AMOUNT \$

58 applied

YES

NO

Require Info?

1. Is the name and address complete with zip code? ☒ YES ☐ NO *
2. Is a priority date entered? ☒ YES ☐ NO *
- Is the priority date acceptable in view of mandatory filing dates? ☒ YES ☐ NO *
- See Adjudication Memos #1 and #4 to determine if a Permit is required. ☒ YES ☐ NO *
3. (a) Is a source entered? ☒ YES ☐ NO *
- (b) Is a tributary to entered? (if required) ☒ YES ☐ NO N/A ☐ NO *
4. Is the legal description of the p.d. sufficient? ☒ YES ☐ NO *
5. Is there a description of the diverting works? ☒ YES ☐ NO *
6. Are the water uses appropriate for the form? The short form is limited to domestic and stockwater uses with direct diversion. All claims that include storage or instream stockwater must use long form. ☒ YES ☐ NO *
- Is the period of use included? ☒ YES ☐ NO *
- Is a quantity claimed for each use? ☒ YES ☐ NO *
7. Is a total quantity claimed entered? ☒ YES ☐ NO *
8. If required is a consumptive use entered? ☒ YES ☐ NO N/A ☐ NO *
- Is the consumptive use correct? ☒ YES ☐ NO N/A ☐ NO *
9. Are the non-irrigation uses listed properly? If this claim is on the short form, and more than one domestic use is listed, single ownership must be stated. If not under single ownership, see Adjudication Memo # 4. ☒ YES ☐ NO N/A ☐ NO *
10. Is (are) the place(s) of use and purpose(s) indicated? ☒ YES ☐ NO *
11. Is (are) the county(ies) entered? ☒ YES ☐ NO *
12. Is the ownership of p.u. checked? ☒ YES ☐ NO *
13. Are other water rights listed or "none" indicated? ☒ YES ☐ NO *
14. If required, are remarks correct? (If the claimant does not own the place of use, authority for filing the claim must be explained in the remarks.) ☒ YES ☐ NO N/A ☐ NO *
15. Is the basis of the claim indicated? ☒ YES ☐ NO *
16. If the claimant requested a monthly docket sheet, is payment enclosed? (If yes, describe payment status in "Comments" below.) ☒ YES ☐ NO N/A ☐ NO *
17. Is the claim signed by the claimant, and is the signature appropriate? Organizations must complete the organization block. ☒ YES ☐ NO *
18. Has the claim been signed, sealed, and dated by a notary? ☒ YES ☐ NO *
19. Was this claim filed on time, or was an extension granted? ☒ YES ☐ NO *
20. Is the fee enclosed correct? ☒ YES ☐ NO Exempt ☐ NO *
21. If this claim is based on an existing water right, has the identification number been entered? ☒ YES ☐ NO N/A ☐ NO *
22. Should this claim be data entered? ☒ YES ☐ NO *

Claim checked by: ROT

Date:

8-1-90

Claim must be returned to claimant:

(Yes) ☐ (No) ☐

Claimant must be notified of modifications:

(Yes) ☐ (No) ☐

Receipt Prepared by:

Date:

Claim data entered by:

Date:

Sent to claimant by:

Date:

Checked by:

Date:

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Comments:

MAR 19 1993



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 736-3033

CECIL D. ANDRUS
Governor

March 2, 1992

R. KEITH HIGGINSON
Director

A72-10532
STATE OF IDAHO
DEPT. OF FISH & GAME
P.O. BOX 25
BOISE

ID 83720

RE: Evidence of Priority

RESPONSE DEADLINE

MAY 1, 1992

Dear Claimant:

The Notice(s) of Claim identified with the number shown above your name on the mailing label has been filed in the Snake River Basin Adjudication (SRBA). The Notice(s) indicate your water usage is based on "Beneficial Use" or a "Statutory Claim". Water rights of this type are established by the historical use of water, dating back to when water was first used for the purpose claimed. **The date of first use, known as the priority date, has not been confirmed by a License, Decree or Permit.** The Department will soon conduct reviews &/or field exams for the claims in your area. Since the priority date of a beneficial use water right can not be confirmed by field examination, **proof must be provided supporting the priority date you have claimed.**

The Department will not recommend the Notice(s) be decreed by the court as claimed if no evidence of a priority date is submitted.

Please find enclosed a computer printout of your Notice(s) and the pamphlet entitled **"Evidence of Priority"**. The pamphlet describes the types of evidence required and suggests which documents will fulfill this requirement. I direct your attention to the two sections entitled **"What Kind of Evidence is Required"** and **"Some Examples of Documents Which May Be Evidence of the Priority Date"**.

Please submit the required evidence supporting the priority date(s) by **May 1, 1992**, referencing all documents with the corresponding Notice number(s). If you have any questions not covered by this letter or the enclosed pamphlet, please contact this office.

Respectfully submitted,

Allen Merritt, P.E.
Water Rights Supervisor

Enclosures

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MAR 19 1993

EVIDENCE OF PRIORITY DATES FOR SALMON RIVER
FISH SCREEN WATER RIGHT CLAIMS
(Continued)

Water Right No.	Screen No.	Proposed Priority Date	Proof of Priority Documentation
A72-10515	EF-BBC-3	1965	C.R.P. construction records (1965)
A72-10516	EF-BBC-2	1965	C.R.P. construction records (1965)
A72-10520	EF-28	1964	C.R.P. construction records (1964)
A72-10521	EF-27	1964	C.R.P. construction records (1964)
A72-10522	EF-25	1964	C.R.P. construction records (1964)
A72-10527	EF-19	1964	IDFG photo files
A72-10528	EF-18	1963 (rebuilt in 1991)	C.R.P. construction records (1963)
A72-10529	EF-16	1963 (rebuilt in 1983)	IDFG photo file
A72-10530	EF-17	1963 (rebuilt in 1983)	C.R.P. construction records (1963) and IDFG photo file
A72-10531	EF-15	1963 (rebuilt in 1988)	C.R.P. construction records (1963) and IDFG photo file
A72-10532	EF-13	1964	C.R.P. construction records (1964) and IDFG photo file
A72-10533	EF-12	1964	C.R.P. construction records (1964) and IDFG photo file
A72-10534	EF-11	1963 (rebuilt in 1989)	C.R.P. construction records (1963) and IDFG photo file
A72-10535	EF-1	1963 (rebuilt in 1982)	IDFG photo file
A72-10536	EF-2	1963	C.R.P. construction records (1963) and IDFG photo file

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MAR 19 1993



IDAHO FISH & GAME

600 South Walnut / Box 25
Boise, Idaho 83707

April 15, 1992

RECEIVED

APR 15 1992

Department of Water Resources
Montpelier, Idaho 83250

Mr. Allen Merritt, P.E.
Water Rights Supervisor
Idaho Department of Water Resources
Southern Region
222 Shoshone St., East
Twin Falls, ID 83301

Re: Evidence of Priority for Water Right Claims A72-10491 through A72-10541

Dear Mr. Merritt:

Enclosed please find evidence supporting the priority dates for the above-referenced water right claims. Priority dates for these claims have been amended to reflect the years the fish screens were actually constructed, not the date easement agreements were filed with Custer County, as was reported on the original claims. The evidence comes from Columbia River Program (C.R.P.) construction notebooks (1963-1965) and Salmon River Fish Screen Program photo records. These are unpublished documents on file at the Department of Fish and Game regional office in Salmon. I have included a list of the water right claims, proposed priority dates (year screens were built), descriptions of the documentation submitted to verify the priority dates, and photo copies of the pertinent records for each claim.

In searching through our records to establish evidence of priority dates, I found some screens were not built until several years after the easement agreements were finalized. Some of the screens were not constructed until after 1971 and thus adjudication claims for these water rights were erroneously filed. I have included a separate list of these claims that should be dropped and will submit applications for permits for them instead.

If you have questions regarding the attached information, please contact me at 334-2597.

Sincerely,

Cindy Robertson

Cindy Robertson
Sr. Fishery Research Biologist

CR:tlv

Enclosures

cc: Jim Blake, Salmon
Engineering
Cecil D. Andrus / Governor
Jerry M. Conley / Director



Working for wildlife · since 1938

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MAR 19 1993

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APR 16 1992

Department of Fish and Game Resources
Boise, Idaho Office

CERTIFICATION

I, Cynthia A. Robertson, Sr. Fishery Research Biologist for the Idaho Department of Fish and Game, and custodian of the records of the Department's water rights, do hereby certify that the attached pages are true records pertaining to water right claims to the best of my knowledge.

Dated this 15 day of April, 1992.

Cynthia A. Robertson
Cynthia A. Robertson
Sr. Fishery Research Biologist

State of Idaho)
) S.S.
County of Ada)

On this 15th day of April, 1992, personally appeared before me, Terry L. Vernholm, a notary public, Cynthia A. Robertson, whose identity is personally known to me and who by me duly sworn, is a Sr. Fishery Research Biologist for the Idaho Department of Fish and Game and said attached information is true and accurate to the best of her knowledge.

Terry L. Vernholm
Notary Public for Idaho
Residing in Emmett, Idaho
Commission Expires 8-15-93

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MAR 19 1993

RECEIVED

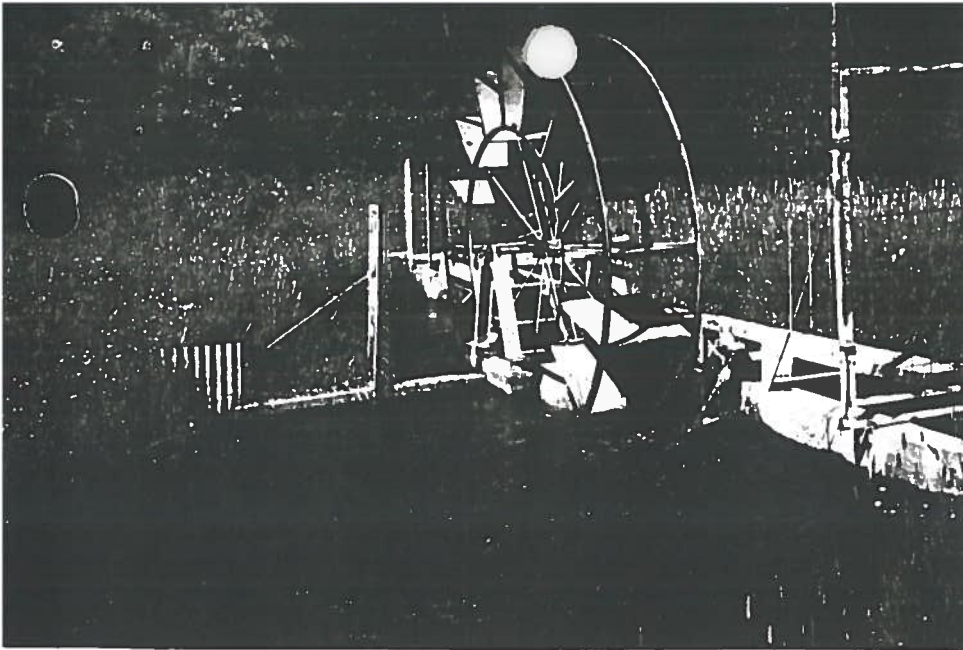
APR 16 1992

Department of Water Resources
Southern Region Office

EVIDENCE OF PRIORITY DATE FOR ADJUDICATION CLAIM NO. **A72-10532**

MICROFILMED

MAR 19 1993



Bul 1963

SCREEN 1 SEF 13

APPROACHMENT DITCH SIZE 2'X4'

USE In yes

TYPE OF SCREEN Wiper Water Wheel

SIZE OF SCREEN 3'X8'

MODIFIED No

STRUCTURE Poor

CATWALKS Poor

HANDRAILS None

BYPASS SIZE ~~None~~ 4"

HOW REDUCED

APPROX. LENGTH 100'

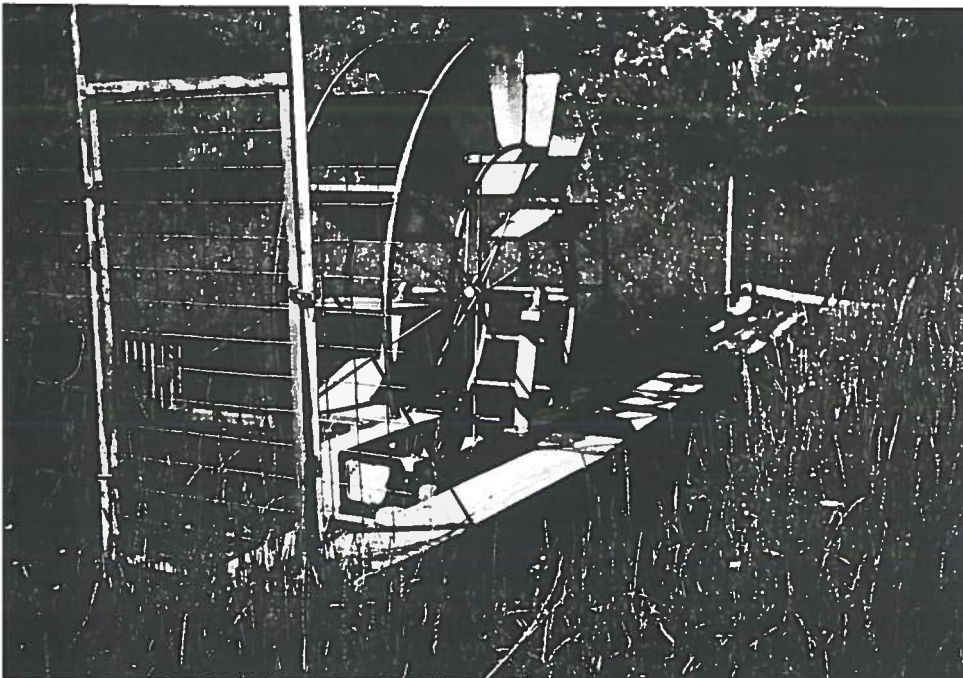
TRASH RACK

CONDITION OF ROAD

CONDITION OF GATES

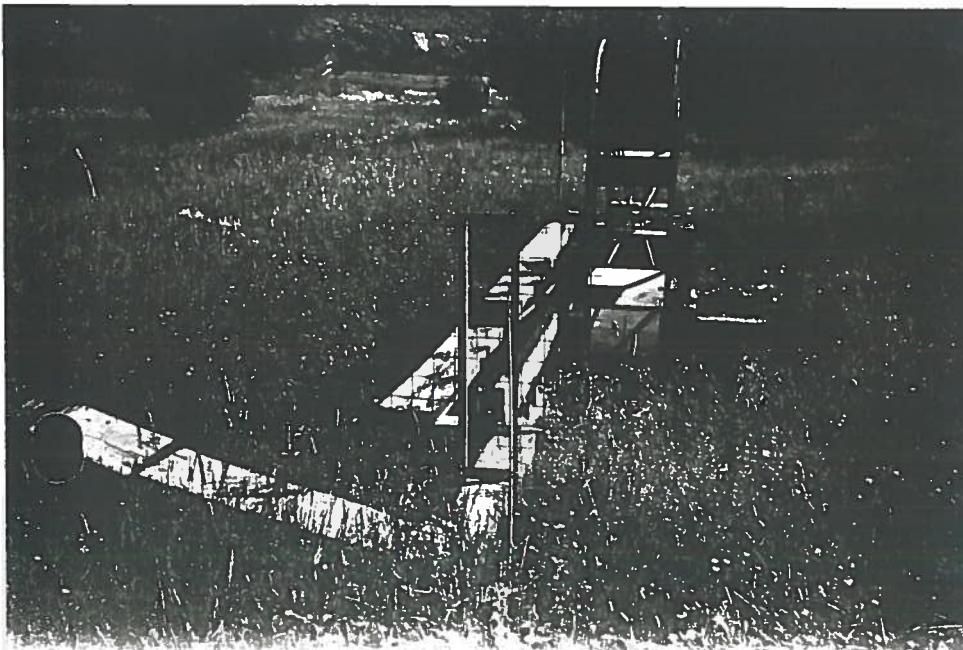
ADDITIONAL COMMENTS

Has Not Been Taken Care of
as per agreement by Ramblers.



SCHEDULED REPLACEMENT 1990-1995

A72-10532



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MAR 19 1993

C.R.P.

LEMHI-CUSTER COUNTY
STRUCTURES CONSTRUCTED
DURING YEAR

1964

A72-10532

RECEIVED
MAY 19 1993

S-15 S.E.F.-24
S-10-D S.E.F.-23
S-10-C S.E.F.-28
S-E.F.-30 S.E.F.-12.
S-E.F.-27 S.E.F.-9
S-E.F.-29
S-E.F.-26
S.E.F.-25
S.E.F.-13. A72-10532

R.R.-1

R.R.-2

R.R.-3

L5-1

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MAR 19 1993

CE = Crank Type Elec

CW = " " w/wheel

CGW Chaining w/wheel

CCE " " Elec.

A72-10532

L.R.P. 1964

S.E.T. - 13

LN³ 3x8' R.H.

Top Wall	99.31
Top Footer	95.27
Bot Footer	94.60

By: [Signature]

7" x 56'

Access Road

MICROFILMED
MAR 19 1993

13-67

R PROOF

CVR

MAPS

PHOTOS

MISC

UPDATE REMARKS
AFTER PINE CR.
SUBD. REVIEW

Water Right Number - R72-10532

Prefix Translation: RESEARCH

Old (D) Number -

+ - - - - Last Name - - - - + + - First Name - - - - + - - - - Address - - - - - +
*** C - CURRENT OWNER ***
STATE OF IDAHO
1 - DEPT OF FISH & GAME
2 - PO BOX 25
3 -
City- BOISE
Phone - 208-334-3700
State- ID Zip- 83702

*** K - ALSO KNOWN AS ***
FISH & GAME

1 -
2 -
3 -
City- X
Phone - 208-000-0000
State- ID Zip- 0

+ - - Priority Date - - + + - - - Region - - - + + - - - Stage - - - + + - - - Status - - - +
04/15/1964 17 SOUTHERN J - BENEFICIAL USE

+ - - - - Source - - - - - + - - - - Tributary - - - - - +
SALMON RIVER, EAST FORK SALMON RIVER

+ - - - - Point of Diversion - - - - - +
Twn Rng Sec Tract Lot Rflg County
10N 18E 31 SW SW SW (37) CUSTER

+ - - - - Water Use - - - - - +
Code Description Period From Period To Diversion Rate Diversion Volume
19 - FISH PROPAGATION 04/15 10/15 0.570

+ - Total Div. Rate - + + - Total Div. Volume - + + - Total Consumptive Use - + + - KW Usage - +
0.570 0.0

+ - - - - Place of Use - - - - - +
Twn Rng Sec Tract Lot Acres Code Description County
10N 18E 31 SE SW 19 FISH PROPAGATION (37) CUSTER

Total Acres:

+ - - Diversion Means - CONCRETE STRUCTURE, DITCH & BYPASS PIPE

+ - - Non-Irrigation Use - FISH/ BYPASS PIPE AT FISH SCREEN

+ - - Other Rights for Same Use - NONE

+ - - - - Remarks - - - - - +
THE FOLLOWING RIGHTS ARE ALSO DIVERTED THROUGH POINT OF DIVERSION DESCRIBED ABOVE: 72-00201B, 72-00201F, 72-00202A, 72-00202D, 72-00202E AND 72-11760.

Water right number - R72-10532

Prefix Translation: RESEARCH

+ - - - - Old Water Right Numbers - - - - -
+ - - - - Old Water Right Numbers - - - - -
+ - - - - No Old Water Right Numbers Found

+ - - - - Conditions of Approval - - - - -
+ - - - - No Conditions of Approval found.

+ - - - - Decree Plaintiff - - - + - - - - Decree Defendant - - - + - - - Decree Date - - +
00/00/0000

+ - - - - Comments - - - - -
Date: 12/15/1993 User Id: HITCHCO Subject: COPIED FROM REMARKS
EASEMENT AGREEMENT EF-13, FILED AT CUSTER CO. COURTHOUSE ON 12/3/59, PAGES 541, 542, 571-574, BOOK 33.
DITCH OWNERS--PEDRINI BROS.

+ - - Audit Fields - - +
03/16/95 FHITCHCO

+ - - - - Adjudication Rights Dates and Flags Area - - - - -
Court Report Filing - 00/00/0000 Field Inspection Made - 09/08/1993 Civil Case Number - 39576
Objection Filed Date - 00/00/0000 Field Inspection Flag - Old Case Number -
Response Filed Date - 00/00/0000 Verified Date - 00/00/0000 Old Judicial District -
Claim Received Date - 08/16/1990 Last Amended Date - 00/00/0000 Temporary Right - P
Receipt Number - T017346 Water District -
POU Ownership Flag - N Federal/State Indicator - S
Name Connector - OR Presumption Flag -
Notice of Error Flag -

STATE OF ILLINOIS
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

10:35:31
06/07/92

CLAIM NUMBER: A72-10532

WR ELEMENT	FIELD EXAM Y/N	CORRESPONDENCE SENT/RECEIVED BY WHOM/DATE	FIELD EXAM BY WHOM/DATE	CHANGE CLAIM Y/N	VERIFIED BY CODE	COMPLETED REVIEW WHOM/DATE	COMPLETED DATA ENTRY WHOM/DATE	VERIFIED DATE WHOM/DATE
PRIORITY DATE	Y		7/09-08-93	Y	1,5,6		12-15-93	
POINT OF DIV	Y			Y	1,5,6			
SOURCE	Y							
PLACE OF USE	Y							
DIV. AMOUNT CES/VOLUME	Y	MAKING TAIL 12-01-93-74		Y	5			
CONSUMPTIVE USE	-							
PURPOSES	Y							
PERIOD OF USE	Y							
BASIS OF CLAIM	Y			Y	5			
REMARKS	Y							

VERIFIED BY CODES

TOPO MAP/ORTHO-PQ = 1
 ASCS MAP = 2
 WATERMASTER RECORDS = 3
 NAPP PHOTOS = 4
 FIELD EXAM = 5
 OTHER (SEE REMARKS) = 6

THESE CODES ARE USED TO INDICATE HOW THE FIELD EXAMINER VERIFIED THE INFORMATION
USED FOR THIS FIELD EXAMINATION. INDICATED ARE ALL CODES WHICH APPLY.

6. IFC materials.
 6.2. BLM/USDA title.

LAST: DEPT. OF FISH & GAME
ADDRESS: X
CITY: X
PHONE NUMBER: 208-000-0000
OWNER CODE: K

FIRST:
STATE: ID ZIP: 0

STATE OF IDAHO
DEPT. OF FISH & GAME
P.O. BOX 25
CITY: KOISE
PHONE NUMBER: 208-334-3700

FIRST:
STATE: ID

ZIP: 83720

83702

OWNER CODE: C

FIELD EXAM REQUIRED?

DATABASE
Y

FIELD
EXAMINER

CLAIM REMARKS:

EASEMENT AGREEMENT EF-13, FILED AT CUSTER CO. COURTHOUSE ON
12/3/59, PAGES 541, 542, 571-574, BOOK 33.
DITCH OWNERS--PEDRINI BROS.

update
bold 7
fields in order.

CONTACT PERSON: _____

EF13

PHONE NUMBER: () - -

DATE OF FIELD EXAM: 07/21/93

APPOINTMENT MADE: Y() N()

TIME: : A() P()

ACCOMPANIED BY: _____

PHONE NUMBER: () - -

RELATIONSHIP TO CLAIMANT: _____

DIRECTIONS TO PROPERTY / REMARKS:

@ bottom of road from EF12 But before you reach bend road gate and road through and from gate. Go thru Raining's house and make first left go up to gate and thru onto station. Drive all the way and in back to turnaround. Stop and walk down down any trail to turnaround. Turn R. and walk in out of sight on grass with around edge of station
POD from where is the fire to walk to from across

A. AJ CLAIM: # A72-10532 PRIORITY DATE: 12-03-1959 STAGE: J

B. WR RECORD: NO WATER RIGHT RECORD TO MATCH THIS AJ CLAIM

C. FIELD EXAM REQUIRED?

DUE TO PRIORITY DATE DISCREPANCY? (Y/N) DATABASE ☒ FIELD EXAMINER

ARE THERE OBVIOUS REASONS TO QUESTION THE PRIORITY DATE CLAIMED? Y() N()

REMARKS: *Priority claimed in date of working document @ letter to. Actual that original was not 05-01-1964 was on January 17. Construction records. Date would be in migration record letter for the area.*

Revised next season of use to 4-15 to 10-15 03-16-1995 by 77.

RECOMMENDED PRIORITY DATE:

05-01-1964 4-15-1964

REVIEWED BY

77

DATE

12-15-1995

A. AJ CLAIM POINT OF DIVERSION AND SOURCE:

RIGHT	TWP.	RGE.	SEC.	1/4	1/4	1/4	LOT	CNTY
A72-10532	10N	18E	31		SE	SW		CUSTER

OTHER AJ CLAIMS WITH SAME AJ POD
A PREFIX NONE
R PREFIX NONE
WR RECORDS IN SAME 40 ACRE TRACT NONE

SOURCE: EAST FORK OF SALMON RIVER
TRIB: SALMON RIVER

B. WR POINT OF DIVERSION AND SOURCE:

THERE IS NO WATER RIGHT RECORD WITH THE SAME CLAIM NUMBER

SOURCE: NO SOURCE FOR RECORD
TRIB: NO TRIBUTARY FOR RECORD

C. FIELD EXAM REQUIRED?

DOE TO POD DISCREPANCY?	(Y/N)	DATABASE	FIELD EXAMINER
DOE TO SOURCE DISCREPANCY?	(Y/N)	Y	

REMARKS:

POD ADDRESS TO SW3W3W 31. Reopened USGS 089 1974 1-23. IT+G
TPO USGS QUAD. IT+G SURETY NOTATIONS; BEN ARNOLD IN 78-10N1
6164 DATE 16-06-23-1981.

RECOMMENDED POINT(S) OF DIVERSION AND SOURCE:

TWP.	RGE.	SEC.	1/4	1/4	LOT	COUNTY
10N	18E	31	SW	SW	SW	Butte

SOURCE: SALMON RIVER, EAST FORK TRIB: SALMON RIVER
REVIEWED BY: J
DATE: 12-15-1995

✓ up dated

A. ROOT WATER RIGHT NUMBERS: A72-10532

B. POU LISTING

TWP	RNG	SEC	1/4	1/4	LOT	NAME	AJ #/ACRES	WR #/ACRES	LANDSAT DATA	FIELD EXAM.	RECOMM. ACRES
10N	18E	31	SE	SW		DEPT. OF FISH & GAME	A72-10532 /	-	-	-	23.0
			SE	SW		BOWMAN, RICHARD L.	A72-10202 /	-	-	-	
			SE	SW		LIXON, EDWIN F.	A72-10203 /	-	-	-	
			SE	SW		MOUDY, DOROTHY M.	A72-00201A / 10.0	-	-	-	
			SE	SW		MOUDY, DOROTHY M.	A72-00202A / 4.0	-	-	-	
			SE	SW		GILLETTE, T. RANDY	A72-00201B / 2.5	-	-	-	
			SE	SW		GILLETTE, T. RANDY	A72-00202C / 2.5	-	-	-	
			SE	SW		PEDRINI, CATERINA	72-00201 /	-	-	-	
			SE	SW		PEDRINI, CATERINA	72-00202 /	-	-	-	
TOTAL ACRES							A72-10532				23.00

ARE IRRIGATED ACRES FOUND IN TRACTS OTHER THAN INDICATED ABOVE, Y () N ()
IF YES SEE ATTACHED SHEET:

C. FIELD EXAM REQUIRED?

DUE TO POU DISCREPANCY? (Y/N)

DATABASE
Y

FIELD
EXAMINER

POU COUNTY: CUSTER

PRESUMPTION FLAG:

REMARKS:

Recommend as claimed.

RECOMMENDATIONS:

TOTAL ACRES:

N/A

REVIEWED BY:

71

DATE:

12-15-1993

A. AJ CLAIMED USES:

☒ A72-10532 PURPOSES
FISH PROPAGATION

MONTH/DAY
FROM 03-15 TO 11-15

TOTAL DIVERSION RATE/VOLUME CLAIMED

DIVERSION QUANTITY
.800 CFS
.800 CFS

B. WR RECORDED USES:

PURPOSES

MONTH/DAY

DIVERSION QUANTITY

PRESUMPTION FLAG:

C. FIELD EXAM REQUIRED?

DUE TO WATER-USE DISCREPANCY? (Y/N)
DUE TO DIVERSION RATE DISCREPANCY? (Y/N)
DUE TO PERIOD FROM/TO DISCREPANCY? (Y/N)

DATABASE FIELD
EXAMINER
Y
Y
Y

D. PERIOD OF USE:

RECOMMEND AS CLAIMED?

RECOMMEND TO WR STANDARDS OR OTHER?

Y() N()
Y() N()

Explain in remarks, below.

REMARKS:

Change to standard irrigation season date 05-01 to 09-30.
Update to correct season of use 4-15 to 10-15 03-16-1995 by FH.

✓ update

A. DOES DIVERSION RATE CLAIMED AGREE WITH EXISTING RECORDS? *N/A* Y() N()

AJ TOTAL CLAIMED DIVERSION RATE: 0.800 CFS
WR ROOT RIGHT TOTAL DIVERSION RATE: CFS

*** IF NO or IF STATUTORY CLAIM or BENEFICIAL USE then flow measurement required. ***
** If an amount smaller than the original diversion rate is **
** claimed and an exam is NOT required, explain in remarks. **

FLOW MEASUREMENT REQUIRED?
DUE TO STAGE OR DIVERSION RATE DISCREPANCY? (Y/N) Y FIELD DATABASE EXAMINER

MEASUREMENT METHOD *MEANING'S* FLOW MEASUREMENT
SEE ATTACHED CALCULATIONS.

C. ARE OTHER WATER RIGHTS USED? Y() N() IF YES COMPLETE OVERLAP REVIEW.

OTHER RIGHTS LISTED IN CLAIM: NONE

LIST ALL RIGHTS WITH A SAME POU AND IRRIGATION USAGE:

CLAIM NO.	SOURCE	NAME	DIV. RATE	DIV. RATE/ACRE	DIV. VOL.	DIV. VOL./ACRE
A72-00201A	SALMON RIVER, EAST FORK	MOODY, DOROTHY M.	0.820	0.027		
A72-00201D	PINE CREEK SALMON RIVER, EAST FORK	GILLETTE, T. RANDY	0.150	0.030		
A72-00202A	PINE CREEK SALMON RIVER, EAST FORK	MOODY, DOROTHY M.	1.500	0.214		
A72-00202C	SALMON RIVER, EAST FORK	GILLETTE, T. RANDY	0.150	0.030		
T ALL RIGHTS WITH SAME POU BUT NOT USED FOR IRRIGATION.						
CLAIM NO.	PURPOSES	NAME	MONTH/DAY	RATE	VOLUME	
A72-10202	DOMESTIC	BOWMAN, RICHARD L.	FROM 01-01 TO 12-31	.040 CFS		
A72-10202	STOCKWATER	BOWMAN, RICHARD L.	FROM 01-01 TO 12-31	.020 CFS		

Diverts @ same POU: A72-00201 & -00202

Fds - standard amount

*B
A
D*

D. RATE/VOLUME CALCULATIONS: (IRRIGATION)

1a. IRRIGATION RATE
ACRES ----- X 0.02 CFS/ACRE = CFS
(Taken from p/u review)

DOES AMOUNT CLAIMED EXCEED 0.02 CFS/ACRE? Y() N() *N/A*

*** IF YES ADDITIONAL WATER USE FORM FILED AND ATTACHED? Y() N() ***

2. IRRIGATION CONSUMPTIVE USE
CLAIMED CONSUMPTIVE USE = AE/A

ACRES ----- X CONSUMPTIVE VOL. AE/A FOR AREA ----- =
TOTAL CONSUMPTIVE USE ----- AE/A

3. IRRIGATION DIVERSION VOLUME
CLAIMED DIVERSION VOLUME = AE/A

ACRES ----- X DIVERSION VOL. AE/A FOR AREA ----- =
TOTAL DIVERSION VOLUME ----- AE/A

4. CALCULATIONS FOR USES OTHER THAN IRRIGATION:
SEE ATTACHED SHEET? Y(☒) N()

REMARKS: (Include limitations on CONSUMPTIVE USE for combined rights.)

*Surface water diversion not N/A. Not in riparian/competitive
water stream to check.*

RECOMMENDATIONS:

REC.
PURPOSES

REC. PERIOD
FROM TO

REC. DIV
RATE CFS

REC. DIV
VOL. AF/A

REC. CONS.
USE

FISH REARRANGEMENT

05-01 09-01
4-15 10-15

.57 CFS

N/A

N/A

TOTAL FOR THIS RIGHT

REVIEWED BY: *71*

DATE:

12-15-1993

*Reviewed .57 CFS, allowed amt reviewed. Contacted the
possible amendment.*

A. CHECK ONLY THE FOLLOWING THAT APPLY:

OWNERSHIP
FOREFEIT/ABANDON
ADDITIONAL DIV. AMOUNT

ACCEPTED
AS CLAIMED
()
()
()

NEEDS
REVIEW
()
()
()

B. SPLIT WATER RIGHT REVIEW

ROOT WATER RIGHT NUMBER: 72-10532
TOTAL DIVERSION RATE OF WR SPLITS

DATABASE

EXAMINER

CFS

N/A SPLITS:

OLD RIGHT
NUMBERS

CURRENT
CLAIM NUMBERS

DIVERSION
RATE

CURRENT "R"
CLAIM NUM.

"R" DIV.
RATE

WR RIGHT
NUMBERS

DIVERSION
RATE

TOTAL CFS

0.800

DIVERSION RATE REVIEW

DO THE SUM CFS RATE OF THE SPLITS EQUAL THE ROOT RIGHT CFS RATE? (Y/N)
IF NO, is the written review sheet attached? (Y/N)

DATABASE

FIELD
EXAMINER

REMARKS:

AUTHENTICATION:
SIGNATURE: *[Signature]*

DATE: 12-15-1993
TITLE:

NAME OF FIELD EXAMINER:

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

11:03:50
06/07/92

PAGE: 12
PROFILE REPORT

CLAIM NUMBER: A72-10532

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	STATE OF IDAHO DEPT. OF FISH & GAME P.O. BOX 25 BOISE ID 83720 (208) 334-3700	12/03/1959	FISH PROPAGATION	03-15 11-15	0.80 CFS	
				TOTAL DIVERSION:	0.80 CFS	

Water Source: EAST FORK OF SALMON RIVER Tributary to: SALMON RIVER Stage: BENEFICIAL USE

Point(s) of Diversion: TION RIBE S31 SESW CUSTER County

Place of use Legal Description for: FISH PROPAGATION

	NE	NW	SE	SW
T R S	: Lt Ac	: Lt Ac	: Lt Ac	: Lt Ac
ION 18E 31	:	:	:	:

POU County: CUSTER

Non-Irrigation Uses: FISH/ BYPASS PIPE AT FISH SCREEN

Other Rights: NONE

Non-Irrigation Use: FISH/ BYPASS PIPE AT FISH SCREEN

Remarks: EASEMENT AGREEMENT EF-13, FILED AT CUSTER CO. COURTHOUSE ON
12/3/59, PAGES 541, 542, 571-574, BOOK 33.
DITCH OWNERS--PEDRINI BROS.

Dates: Exam Made Date: Verified Date:
Misc: Water District Number: Field Inspection Flag:
Presumption Flag:

RECEIVED

JUL 27 1993

Department of Water Resources
Southern Region Office

Jimmy Smith Lake

51

EF-12

EF-13

EF-15

EF-14

A72-10532

IFG TOP-USGS QUAD

EF-13

NW 1/4 SW 4-31

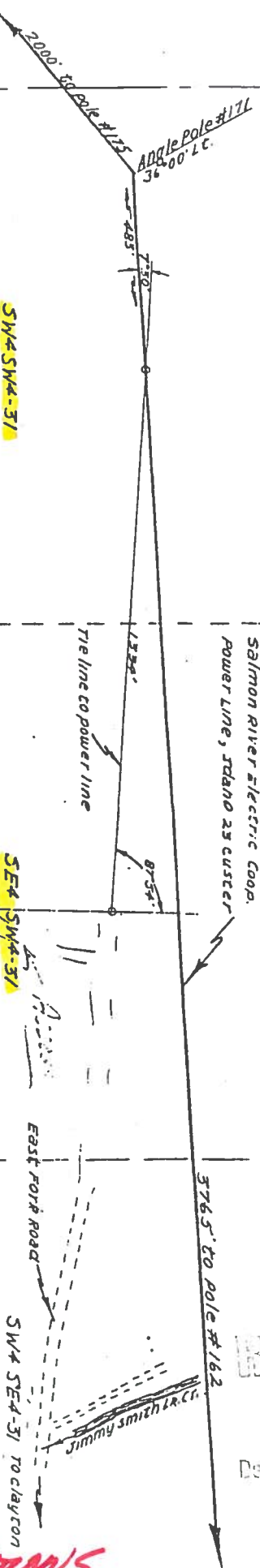
NE 1/4 SW 4-31

RECEIVED

JUL 22 1993

Department of Water Resource
Southern Region Office

EF-13



R-17E
R-18E

T-10N, R-18E BM
T-9N, R-18E BM

NW 1/4 NW 4-6

Swamp area

High water pickup
channels for ditch
additional water

FORK SALMON RIVER

Spillway to river

Spillway to

SCREEN SITE
EF-13

NE 1/4 NW 4-6

Access road from ranch
to site is along ditch
bank through sagebrush
which skirts hayfield
Approx. 1/4 mile.

Pedrini ditch

Hay & pasture

East Fork Road

SW 1/4 SE 4-31 to clayton

Access to Pedrini

Ranch is down lane
from EF-12 site approx
1/4 mile.

Bridge over east fork

Pedrini Ranch

NW 1/4 NE 4-6

Pine Creek



STATE OF IDAHO - FISH & GAME DEPARTMENT
FISHERIES DIVISION - COLUMBIA RIVER PROGRAM
SCREEN LOCATION MAP, EF-13

APPROVED

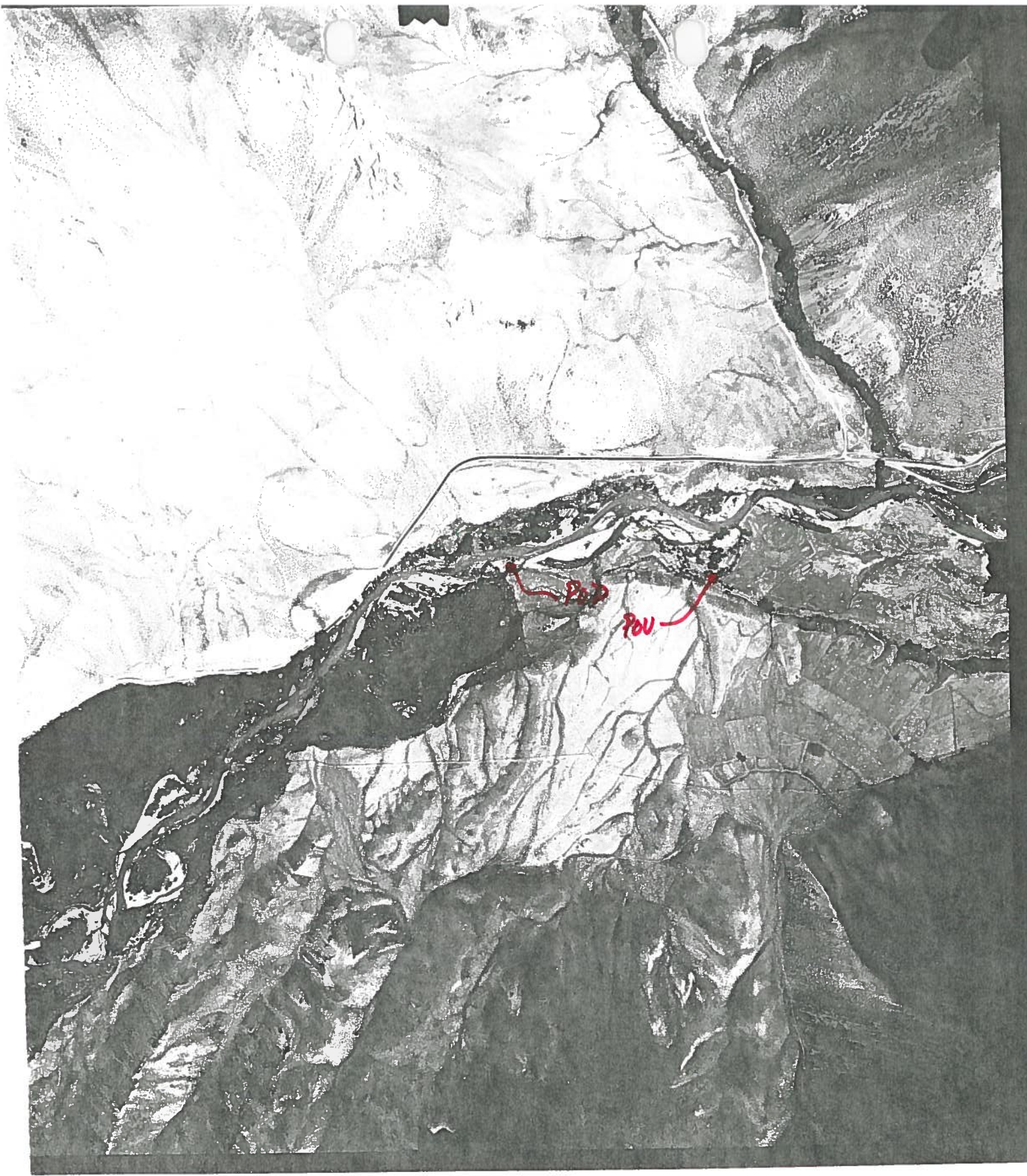
APPROVED

APPROVED

DRAWN BY M. GIBSON
CHECKED BY M. GIBSON
DATE

A72-10532

IF & G SCREEN LOCATIONS



06-23-1981 in depositary @ salmon office
A72-10532 BLM AERIAL LN7B-RN1 8164 plate 16 EF-13



SEE REVERSE
FOR TEXT



PIX # 10

EF-13

1255

SW towards ditch from POD-
EF

PIX # 12

EF-13

09-08-93

looking W. down ditch
over survey road

PIX # 13

EF-13

09-08-93

looking SE back to POD
over line of discharge pipe.

545 PM

Roll 40

71

SEE REVERSE
FOR TEXT



CONSUMPTIVE IRRIGATION REQUIREMENT

based on the most water-consumptive crop in the area (Allen and Brockway, 1983), generally rounded to the next highest 0.5 afy/acre

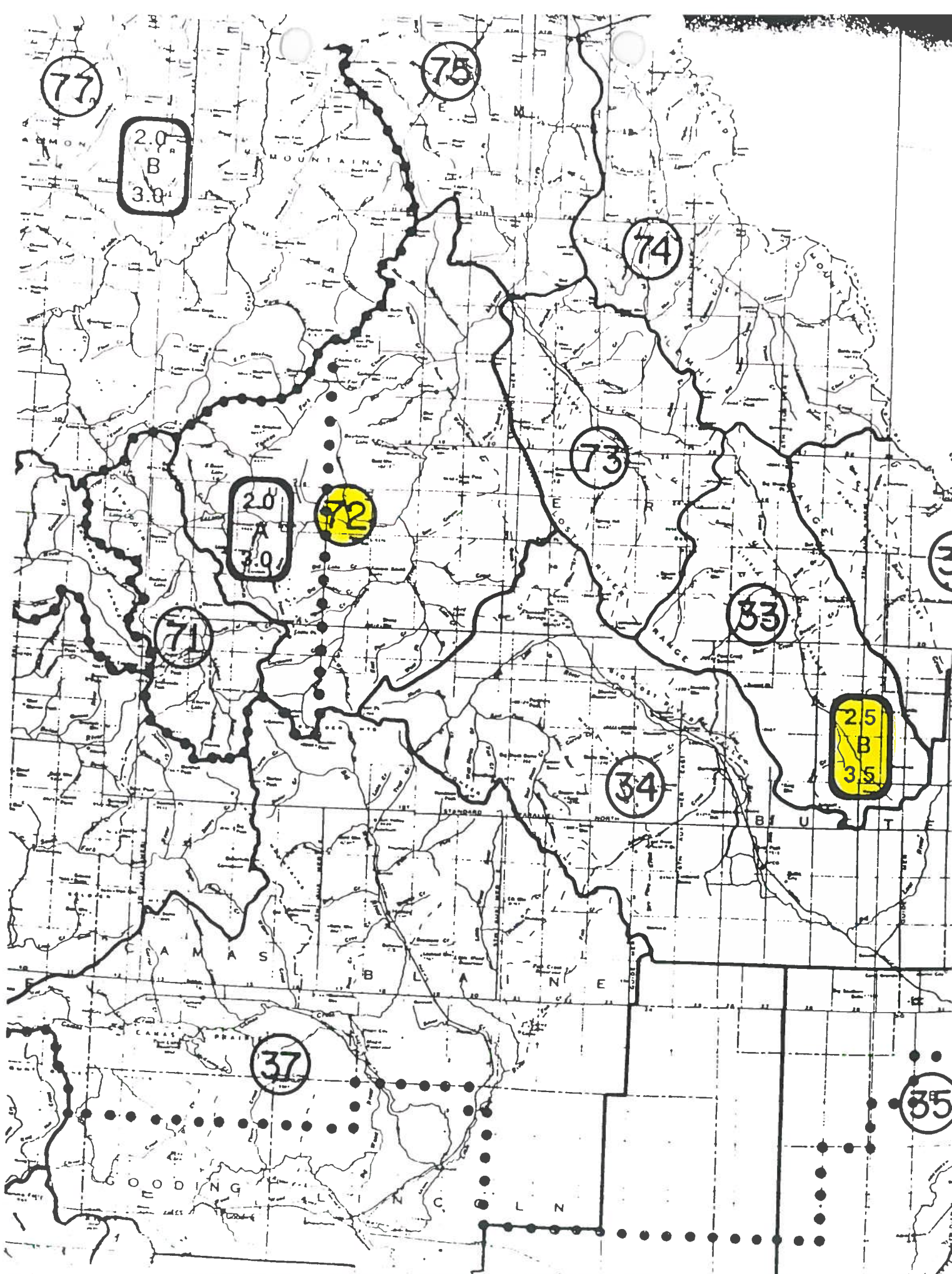
IRRIGATION SEASON OF USE

based on a 75 % chance of 24 degrees F. or lower occurring on or after the beginning date in the spring and on or before the ending date in the fall (Everson, Faubion, and Amos, 1978)

A	=	May 1	-September 30
B	=	April 15	• -October 15
C	=	April 1	-October 31
D	=	March 15	-November 15
E	=	March 1	-November 30

FIELD HEADGATE REQUIREMENT

consumptive irrigation requirement divided by irrigation application efficiency (70 - 75%) rounded to the nearest 0.5 afy/acre



A72-10532 IDWR SEASON BASIN MAP USGS 1968

EF-13



DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 736-3033

CECIL D. ANDRUS
Governor

R. KEITH HIGGINSON
Director

September 15, 1993

Chuck Keller
Department of Fish and Game
P.O. Box 1336 Highway 93
Salmon, Idaho 83467

Subject: Fish Screens

Dear Mr. Keller,

The attached sheets are a summary of the following diversion rates found in the bypass pipes at their respective fish screens. The head corresponds to the height of water from the middle of the pipe to the water surface.

The diversion rates were calculated by using an Polysonic ultrasound flowmeter whenever the bypass pipes were exposed enough. However, this was usually not the case. Therefore, I surveyed the water surfaces at the inlet and outlet. This enabled me to find the amount of head(energy per unit weight) consumed in the bypass pipe. The flow was then calculated by estimating a Manning's coefficient in the Manning's equation for head loss in a pipe. If the pipe was not full at the outlet, the diversion rate was calculated by treating the pipe as a submerged orifice with a particular discharge coefficient.

There were certain fish screens that we were unable to locate or found to be out of operation. Mel Schulte, Senior Water Resource Agent, will be contacting your department this fall about the status of these fish screens.

I am returning to Oregon State University on September 23. Therefore, if you have any particular questions, please be free to contact me at 736-3033.

Sincerely,

Brett Barry
Water Resource Agent

A72-10532

EF-13

145. Orifice Relationships.—Formulas (45) and (46) can be used to develop a formula for flow through an orifice (a hole in the side or bottom of a container of water (fig. 107)). To find the velocity of flow in the orifice, use formula (46), $v = \sqrt{2gh}$. Then using the size or area of the hole, the quantity of water being discharged, Q , can be determined using formula

310 WATER MEASUREMENT MANUAL

(45), $Q = Av$. This can be accomplished in one step, however, if the two formulas are combined.

Inserting the value $\sqrt{2gh}$ for v in $Q = Av$ gives

$$Q = A\sqrt{2gh}, \quad (47)$$

the formula for the *theoretical* discharge through an orifice. This formula assumes that the water is frictionless and is an ideal fluid. Since water is not an ideal fluid, a correction must be made.

The jet of water, after passing through the orifice, continues to contract, and if the orifice edges are sharp, the jet will appear as shown in figure 108. The maximum jet contraction occurs at a distance of one-half the orifice diameter, or $d/2$, downstream from the sharp edge, and the cross-sectional area of the jet will be only about six-tenths of the area of the orifice. Accordingly, formula (47) must contain a coefficient, C , to accurately determine the quantity of water being discharged. Thus, in actual practice,

$$Q = CA\sqrt{2gh} \quad (48)$$

For a sharp-edged orifice where full contraction occurs, the coefficient is about 0.61, and the formula becomes

$$Q = 0.61A\sqrt{2gh}$$

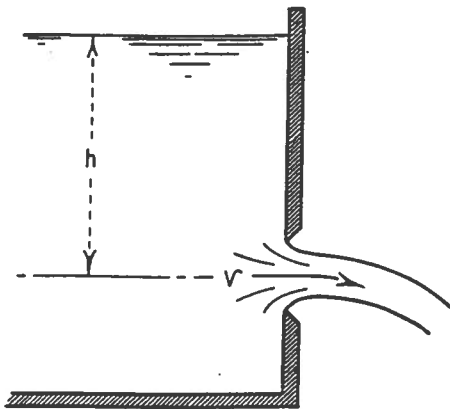


Figure 107.—Orifice flow. 103-D-986.

Water Measurement
Manual

United States Department of Interior
Bureau of Reclamation Denver 1967 pgs 309-310

Prepared by Brett Barry
on 9-3-93

TUBES, CULVERTS, AND SIPHONS

Cylindrical Tubes. A short cylindrical tube $2\frac{1}{2}$ to 3 diameters in length with sharp upstream corners (Fig. 43) is called a *standard short tube*. The sharp corner causes the jet to contract, but it soon expands and fills the tube. The space s surrounding the contracted jet is filled with air and eddying water. Since the velocity at m in the contracted

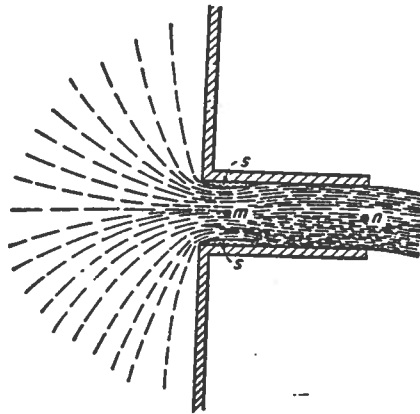


FIG. 43. Standard short tube.

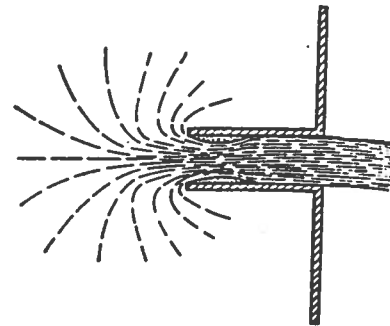


FIG. 44. Reentrant tube.

jet is greater than at the outlet n where pressure is atmospheric, it can be shown by Bernoulli's equation that the pressure at m is less than atmospheric pressure. The discharge of this tube is therefore greater than the discharge of a sharp-edged orifice of the same diameter under the same head. Since the tube flows full, the coefficient of contraction is unity, and the coefficient of discharge [Eq. (54)] equals the coefficient of velocity. From experiments, the average coefficient of discharge C is 0.82. Substituting this value of C , or C_v , in Eq. (58) gives as the head lost in discharge

$$h_l = 0.50 \frac{v^2}{2g} \quad (65)$$

where v is the mean velocity in the tube. The conditions of flow in a short tube correspond to the conditions at the entrance to a pipe.

A tube projecting into a body of water (Fig. 44) is called a *reentrant tube*. The contraction produced by this tube is greater than for the standard short tube. The behavior of the water in the two kinds of tubes is otherwise similar. From experiments, the coefficient of discharge $C = 0.75$ and the lost head $h_l = 0.78v^2/2g$.

Civil Engineering Handbook

Urquhart, Leonard

McGraw-Hill Book Company, Inc.

1959 pgs. 4-37-4-38

A72-10532

EF-k

Dept. of Fish and Game - Fish Screens

Basin 72			
Screen	Diversion Rate (cfs)	Head (ft)	
EF-1	1.72	1.76	
EF-2	1.95	2.00	
EF-3	1.39	1.21	
EF-4	1.63	1.39	
EF-5	0.77	1.96	
EF-7	1.68	1.48	
EF-8	0.87	2.47	
EF-9	0.60	1.17	
EF-10	1.64	1.42	
EF-11	1.17		
EF-12	1.00	1.40	
EF-13	1.52	2.77	
EF-15	1.52	1.46	
EF-16	1.24		
EF-17	0.75	1.76	
EF-18	1.05		
EF-19	1.74	1.60	
EF-20	0.82	1.50	
HC-1	0.73	1.75	
HC-2	0.46	0.69	
HC-3	0.71	1.40	
BBC-1	0.77	1.97	
BBC-2	0.78	2.00	
WSC-1	0.28	0.86	

A72-10532

EF-13

EF-13

9-8-93

06'
4.40'

Water Surface At Inlet

6.86' Water Surface At Outlet

Pipe Length 42'

4" plastic pipe

100% submerged outlet
runs into bypass irrigation ditch
which runs back into S.F. of Salween R.

2.6' height from water surface to top of pipe

A72-10532

EF-13

IDAHO DEPARTMENT OF WATER RESOURCES
WORKSHEET TO CALCULATE FISH SCREEN BYPASS

=====

PERMIT NUMBER:	(EF-13)	Lotus program: FISHSCRE.WK3
LOCATION:	East Fork of Salmon River	Created by: Allen Merritt
BY:	BRB	Date last revised:
DATE:	9-08-93	8-10-93 BY ADM

Plastic KIND OF PIPE

4.1 DIAMETER IN INCHES

2.8 HEAD IN FEET (DIFF BETWEEN HEAD & TAILWATER)

42 LENGTH OF PIPE IN FEET

0.009 MANNINGS ROUGHNESS COEF

2 MINOR LOSSES K VALUE

(INLET) RE-ENTRANT = 1, FLUSH = 0.10-0.50

(OUTLET) OPEN = 1, SUBMER = 1

(TRANSITION) 0.0-1.0

0.341667 dia in feet

0.170833 pipe radius in feet

0.085417 hydraulic radius in feet

0.066667 hydraulic slope

0.091685 cross section area of pipe

0.571287 CFS (DIRECTLY CALCULATED FROM MANNINGS)

A72-10532

EF-13

TELEPHONE MEMORANDUM

Incoming Call
 X
Outgoing Call 10.25 AM/10.50 AM

Returning Call

TO: Phyllis Rose, Technician, Fish & Game

DATE: 12-01-1993

FROM: FH

FILE: Fish & Game Fish Screen Claims

FILE NO: A72-10539, -10492, -10532, -10530, -10514, -10513, -10515, -10516

SUBJECT: measurements lower than claimed for diversion amounts

REMARKS: Gave advance notice on those claims where the measurements came
up lower than the claimed diversion amount.

Have Chuck call re: notice of error period during the court ordered reporting
for BASin 72.

Reviewed ditch measurements re: how to resolve pipe data and resultant measure-
ment vs. ditch flows if possible.

ROUTING
INSTRUCTIONS: _____

CALENDAR
DATES: _____

A72-10532

FEF-13

SEF-13

06/01/93	15.0	1.5F	Overtopping
07/14/93	10.0	1.4F	n/a
09/10/93	18.3 @ P of D	-	-
	5.2 Water diverted back to river	-	-
	13.3 Below Screen	-	Springs in area
09/16/93	18.2 @ P of D	-	-
	18.7 Above Screen	-	-
	11.8 Below Screen	-	-
	6.6 Water diverted back to river above bypass outfall		
	7.6 Water diverted back to river below bypass outfall		
	Springs in area		
08/20/59	9.0	-	-

SEF-15

05/27/93	15.9 Above	1.4	n/a
07/13/93	16.7 Above	1.46	n/a
09/15/93	12.9 Above	1.26	n/a
09/09/93	~IDWR 14.5 Above		
08/11/59	24.7 Above	-	-

Not able to stop log; backs water out of ditch.

SEF-16

05/27/93	14.1	-	n/a
07/14/93	14.0	1.16	n/a
09/20/93	20.5	1.26-1.35F	n/a
08/27/59	11.6	-	-

SEF-17

05/27/93	9.9	2.25	n/a
07/14/93	9.0	2.52	85% Sub.
09/20/93	8.3	2.14-2.15F	n/a
08/24/59	15.0	-	-

SEF-18

06/01/93	7.1	2.38	n/a
07/14/93	4.4	1.97F	n/a
09/20/93	1.0	-	n/a
08/24/59	19.3	-	-

One irrigation channel below screen has been filled in, NIU.

RECEIVED

NOV 23 1993

Department of Water Resources
Southern Region Office

A72-10532 IF+G 1993/1959 DATA

EF-13

SD-0605-2 Township: 10N Range: 18E Section: 31 Tract: SWSW Lot: SWSW

STATE	Water Right No.	Name Last, First	O S W T N G	Priority Date	Source	Max # Records	Lot: 39
S	A72-00202	PEDRINI, CATER	O	05/01/1936	SALMON RIVE	1.500	
E	A72-00201B	SPLIT RIGHT, PEDRINI, CATER	C	05/01/1888	SALMON RIVE	0.050	
L	A72-00201	KUCKHOFF, F. A	C	05/01/1888	PINE CREEK	4.500	
		PEDRINI, CATER	O		SALMON RIVE		
		SPLIT RIGHT,	C		PINE CREEK		
	R72-00201B	PEDRINI, CATER	O	05/01/1888	SALMON RIVE	0.050	
	A72-00202A	KUCKHOFF, F. A	C	05/01/1936	PINE CREEK	1.500	
		PEDRINI, CATER	O		SALMON RIVE		
	R72-00202A	MOUDY, DOROTHY	C	05/01/1936	SALMON RIVE	1.500	
		PEDRINI, CATER	O		SALMON RIVE		
	A72-00201F	MOUDY, DOROTHY	C	05/01/1888	SALMON RIVE	0.170	
		GOICOECHEA, JE	C				
		PEDRINI, CATER	O				
		GOICOECHEA, JU	C				

(Enter=Continue)

(GOLD7=This Query)

(Menu _____)

SD-0605-2 Township: 10N Range: 18E Section: 31 Tract: SWSW Lot: SWSW

STATE	Water Right No.	Name Last, First	O S W T N G	Priority Date	Source	Max # Records	Lot: 39
S	A72-00202D	PEDRINI, CATER	O	05/01/1936	SALMON RIVE	0.520	
E		BAKER, DICK L	C				
L	B A72-11760	BAKER, BETTY L	C	05/01/1888	SALMON RIVE	0.020	
		GOICOECHEA, JE	C	05/01/1888	SALMON RIVE	0.020	
	E A72-11760	GOICOECHEA, JU	C	05/01/1888	SALMON RIVE	0.020	
		GOICOECHEA, JE	C	05/01/1888	SALMON RIVE	0.020	
	R72-00202D	GOICOECHEA, JU	C	05/01/1936	SALMON RIVE	0.520	
		PEDRINI, CATER	O				
		BAKER, DICK L	C				
		BAKER, BETTY L	C				

END OF DATA...ENTER MENU OPTION AND/OR PRESS ENTER TO CONTINUE
 (Enter=Continue) (GOLD7=This Query)

(Menu _____)

AJQ5