

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: A43-11196
Date Received: 8/17/1999
Receipt No: 5022456
Received By: KRC

NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name: RICHARD MORANVILLE 208-638-5562
Address: HC 61 BOX 1376
ELBA ID 83326
AND/OR
Name: WENDY MORANVILLE 208-638-5562
Address: HC 61 BOX 1376
ELBA ID 83326

2. Date of Priority: APR 1, 1917

3. Source: FIRST HOLLOW Trib. to: CLYDE CREEK
SECOND HOLLOW CLYDE CREEK

4. Point of Diversion:

Township	Range	Section	1/4 of	1/4 of	1/4	Lot	County
13S	24E	36	SE	SW	NE		CASSIA
			NW	NE	SE		CASSIA

5. Description of diverting works:
DITCH CROSSING STREAM CHANNEL

6. Water is used for the following purposes:

Purpose	From	To	C.F.S	(or)	A.F.A.
IRRIGATION	04/01	10/31	0.720		
STOCKWATER	01/01	12/31	0.030		

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

8. Total consumptive use is Acre Feet Per Annum.

9. Non-irrigation uses:
STOCKWATER 100 HEAD RANGE CATTLE

10. Place of Use:

Township	Range	Section	1/4 of	1/4	Lot	Use	Acres
13S	24E	36	NE	SE		IRR	14.0
			NE	SE		STOCK	
			SE	SE		IRR	10.0
			SE	SE		STOCK	
						Section Acres	24.0
	25E	31	SW	SW		IRR	12.0
						Section Acres	12.0
						Total Acres	36.0

11. Place of use in counties: CASSIA

12. Do you own the property listed above as place of use? YES

13. Other Water Rights Used:
NONE

14. Remarks:

THE DELIVERY SYSTEM IS A DITCH THAT CROSSES FIRST AND SECOND HOLLOW AND RUNS ALONG THE EASTERN BOUNDARY OF THE PLACE OF USE

15. Basis of Claim: BENEFICIAL USE

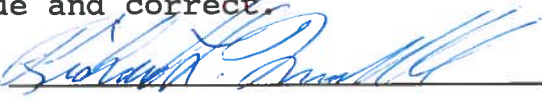
16. Signature(s)

(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 Individuals:

I/We do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant(s):  Date: 8/17/99

Date: _____

State of Idaho)
County of Twin Falls) SS.

Subscribed and sworn (or affirmed) before me this 17th day

of Aug 19 99

Kelly K Christensen
Notary Public

Seal

Residing at Twin Falls

My Commission Expires 3-11-04

RECEIVED

DEC 17 1999

Department of Water Resources
Southern Region

JUSTIN R. SEAMONS

ATTORNEY AT LAW

Falls Professional Center

1201 Falls Avenue East, Suite 30
Twin Falls, Idaho 83301

Office: (208) 736-0075
Facsimile: (208) 734-0858
Residence: (208) 733-3892

December 16, 1999

Richard and Wendy Moranville
HC 61, Box 1376
Elba, ID 83326

Re: Water Rights.

Dear Richard and Wendy:

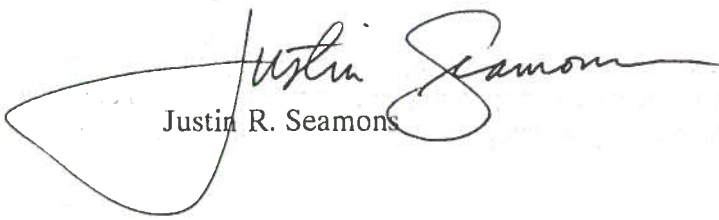
I have prepared this letter to confirm our telephone conversations on December 7, 1999. As you recall, I met with Kelly Christensen of the Department of Water Resources on December 6, 1999. He has now received the necessary information to make a "recommendation" regarding your water rights to the Snake River Basin Adjudication.

Mr. Christensen estimates that he will complete the recommendation in the spring of 2000. The Department of Water Resources will file the recommendation with the Snake River Basin Adjudication. You will receive a letter from the Department of Water Resources regarding the recommendation. I have enclosed a **sample** of such a letter for your review.

Please review the recommendations regarding your water rights as soon as you receive the actual letter from the Department of Water Resources; in addition, please call me as soon as possible so that we can determine the necessity of filing an objection to the recommendations regarding your water rights or the water rights of any other person, such as Tommy Hutchison.

Please call me or Mr. Christensen if you have any questions or comments. Thank you for your cooperation.

Respectfully yours,


Justin R. Seamons

cc: Kelly Christensen

COPY



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, P.O. Box 83720, Boise, Idaho 83720-0098

Phone: (208) 327-7900 FAX: (208) 327-7866

November 6, 1998

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
TWIN FALLS ID 83301

RE: Water Rights in Reporting Area 4, Basin 71
Snake River Basin Adjudication (SRBA)

Dear [REDACTED]:

Please find enclosed the Idaho Department of Water Resources recommendations for your water right(s) in basin 71 (the Stanley basin). We have also enclosed instructions for reviewing (1) your recommended water right(s), and (2) other recommended right(s) in your area. Water rights for nearly all domestic and/or stockwater rights were recommended separately in an earlier report, and most of those now have been decreed by the SRBA Court.

Note you have 60 days in which to review the water rights of other claimants and to file any objection to our recommendations. Information on the other water rights can be found at the county courthouse in Challis and Hailey and at all of the Idaho Department of Water Resources offices (see addresses in enclosure).

If the SRBA Court does not receive an objection to our recommendation from you and no other party objects to your water right, your water right will be decreed during the first part of next year as recommended. You will receive your decree from the SRBA Court.

Completion of the SRBA is important for the future of water management in Idaho. We invite you to contact our regional offices with any questions you have about your water right(s) or this adjudication process.

Sincerely,

Karl J. Dreher
Director

Enclosures

Claimant Acknowledgement of Change in Attorney in Snake River Basin Adjudication (SRBA)

Name(s) of Claimant (please print):

Richard or Wendy Moranville
I/we acknowledge (check one):

☐ The attorney formerly representing me has withdrawn and I/we will be representing myself/ourselves.

☒ I/we are now represented by the attorney at the address below.

JUSTIN R SEAMONS
1201 FALLS AVE E STE 30
TWIN FALLS ID

Attorney's Phone 736-0075

The SRBA water right claim notice(s) affected by this change are listed below or on the attached sheet(s).

A43-00288 00289 00290 00291 11196
11202 11203 00292 _____

For Individuals:

Authorized signature(s) Date 11/15/99
Wendy Moranville

For Organizations:

I am _____ of _____, and I

Title

Organization

have signed the foregoing document in the space below as

of _____.

Title

Organization

Signature of Authorized Agent _____

Title _____ Date _____

Organization _____

IDWR Use:

Date Received _____

Data Entry _____

Christensen, Kelly

Subject: Historical use for A43-11196 Moranville
Entry Type: Meeting
Contact: Justin Seemans

Start: Mon 12/6/99 2:00 PM
End: Mon 12/6/99 2:00 PM
Duration: 0 hours

Justin brought in a letter and map drafted by Tom Ottley regarding the historical use of water from 1st and 2nd Hollows. We reviewed the information submitted to date and I explained to Justin what I felt would be my recommendation for this claim. I told him that the recommendation would include the ground west of the center pivot as well as east of the center pivot. I further stated that the diversion rate recommendation would be either 1" per acre or the system capacity, whichever is least. I explained the logic behind recommending 1 day after the decree as the priority date as evidence submitted indicates that the system was developed prior to the decree. I explained that I have not completed the shape file for the place of use nor do I have information from the state office concerning the mannings analysis of the delivery system.

Robert T. Robinson
1525 South Highway 27
Oakley, ID 83346
(208) 862-3458

November 23, 1999

RECEIVED
NOV 30 1999
Department of Water Resources
Twin Falls, Idaho

Department of Water Resources
Attn: Kelly Christensen
1341 Fillmore Street, Suite 200
Twin Falls, ID 83301

Re: Richard and Wendy Moranville.

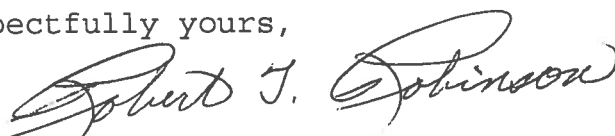
Dear Mr. Christensen:

I have prepared this letter at the request of Justin R. Seamons on behalf of Richard and Wendy Moranville. I used to own the property that Mr. and Mrs. Moranville currently own, located near Elba, Idaho. I owned the property from approximately 1981 to 1992.

With respect to the ditch that crosses First Hollow and Second Hollow, I used the ditch for purposes of irrigating part of the property. I have attached a map to this letter that shows the part of the property that I irrigated from the ditch, marked in yellow. It includes the property that lies south and east of the ditch, as well as the property that lies in the northwest corner of the pivot.

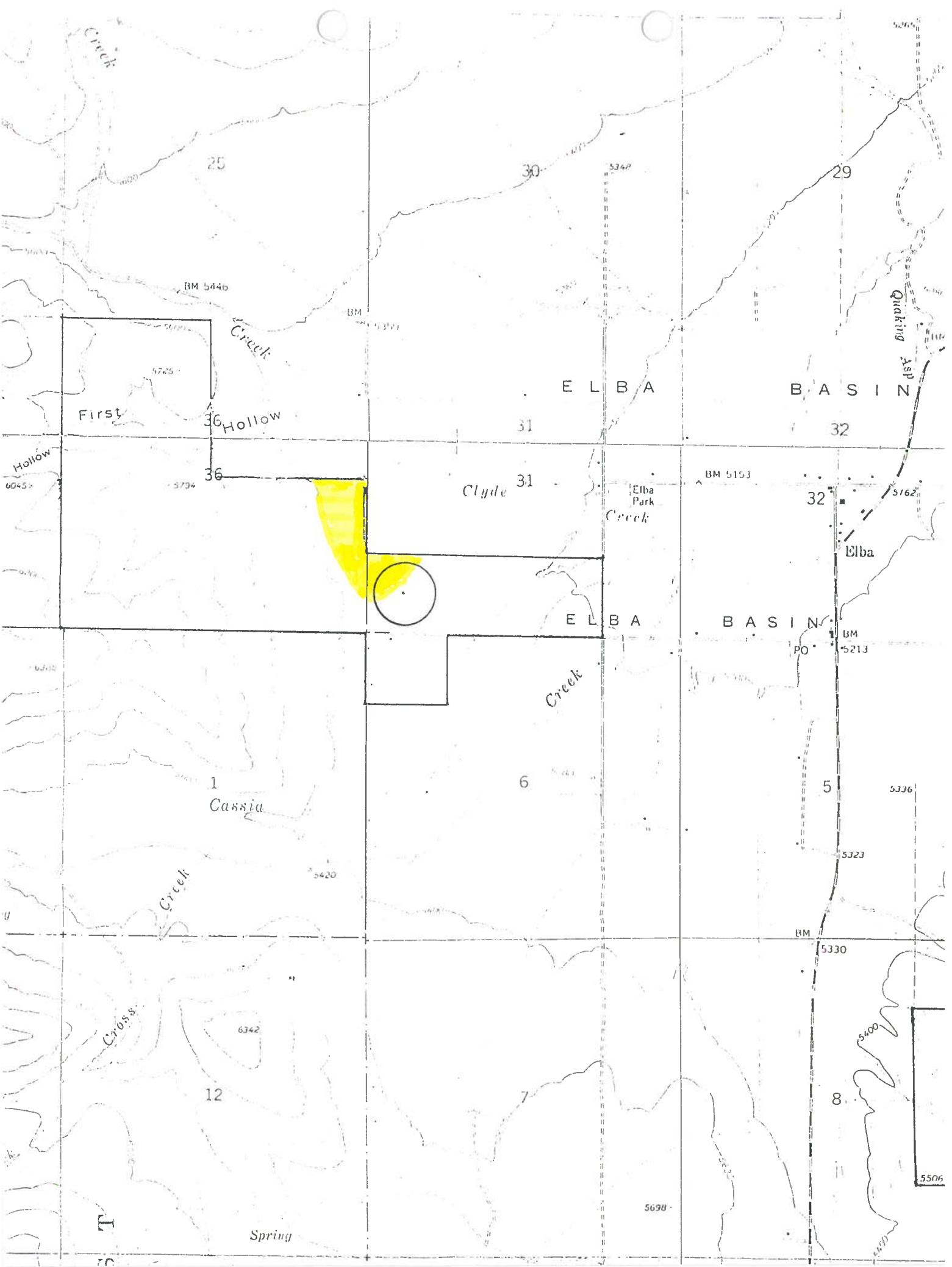
Please call me if you have any questions or comments.

Respectfully yours,



Robert T. Robinson

Attachment



RECEIVED

MAR 27 2000

Department of Water Resources
Southern Region

March 22, 2000

To Kelly Christensen

In Regard to your phone call about 1st and 2nd howoll water in Elba. Life long Elba Resident and respected member of the community Lewis Ottley told me that for at least 25 years no one has used this water except for the ranch I live on. The ditches were never maintained and the water naturally flows to this ranch. For the last 15 years that I have been running this place we have used 1st and 2nd hollow water on our meadows. Moranville has never used the water for irrigation since they moved on to their place. They use it for stock water only. I hope this will be of use.

Sincerely,



Tommy Hutchison

original in 43-10213

Tom Ottley
HC 61, Box 1348
Elba, ID 83326
(208) 638-5571

RECEIVED
DEC 06 1999
Department of Water Resources
Southern Region

November 23, 1999

Department of Water Resources
Attn: Kelly Christensen
1341 Fillmore Street, Suite 200
Twin Falls, ID 83301

Re: Richard and Wendy Moranville.

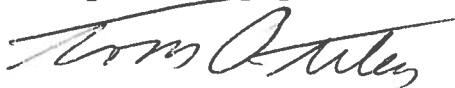
Dear Mr. Christensen:

I have prepared this letter at the request of Justin R. Seamons on behalf of Richard and Wendy Moranville. I operate the property that Mr. and Mrs. Moranville currently own, located near Elba, Idaho. I have operated the property since approximately 1996.

With respect to the ditch that crosses First Hollow and Second Hollow, the ditch provides water to part of the property. I have attached a map to this letter that shows the part of the property, marked in yellow. It includes the property that lies south and east of the ditch, as well as the property that lies in the "North Meadow." The North Meadow is next to the pivot.

Please call me if you have any questions or comments.

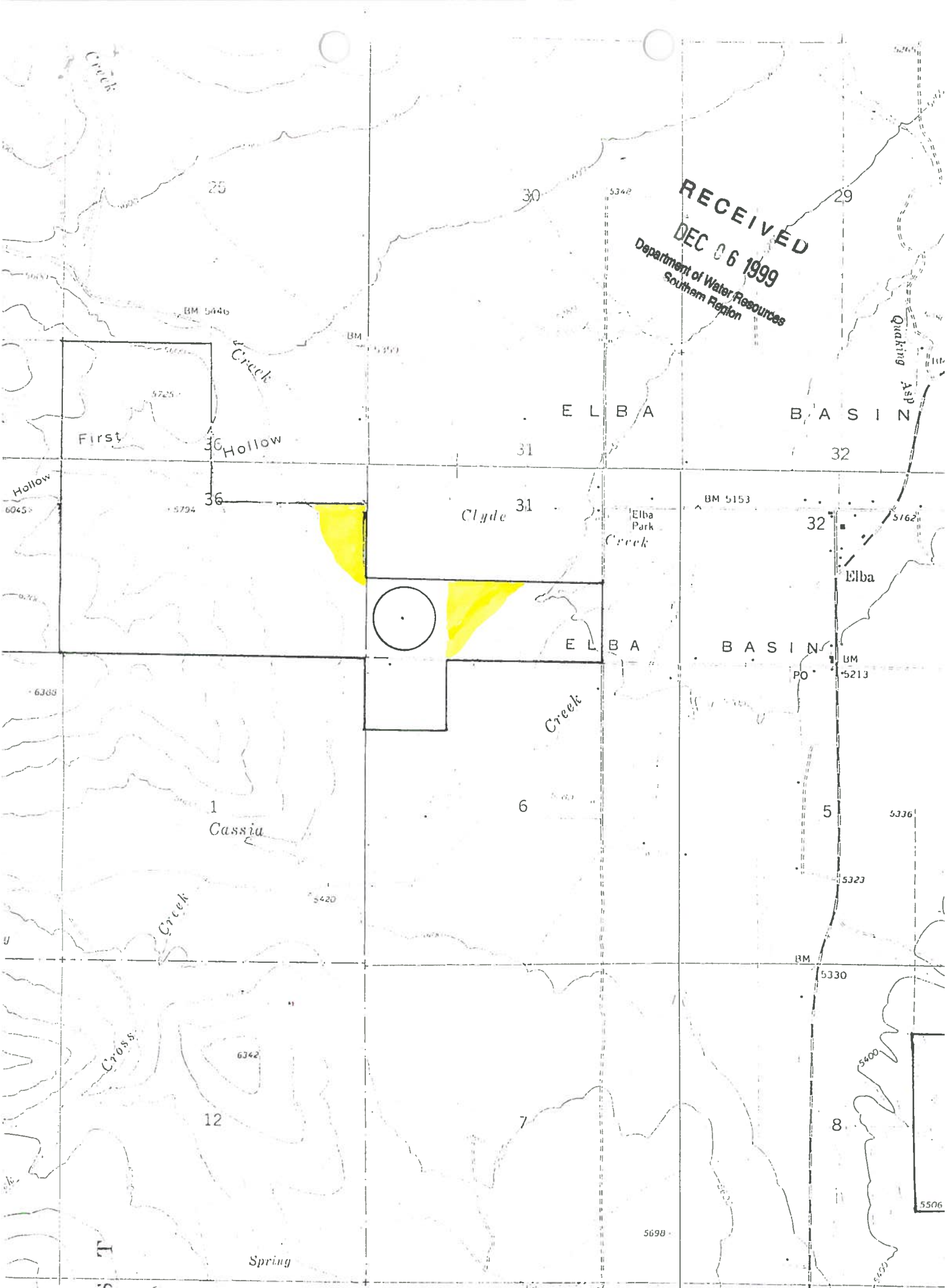
Respectfully yours,



Tom Ottley

Attachment

RECEIVED
DEC 06 1999
Department of Water Resources
Southern Region



RECEIVED

DEC 01 1999

Department of Water Resources
Southern Region

Orvil Sears
Box 1346
Elba, ID 83326
(208) 638-5533

November 24, 1999

Department of Water Resources
Attn: Kelly Christensen
1341 Fillmore Street, Suite 200
Twin Falls, ID 83301

Re: Richard and Wendy Moranville.

Dear Mr. Christensen:

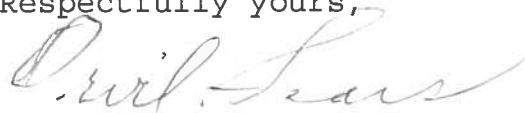
I have prepared this letter at the request of Justin R. Seamons on behalf of Richard and Wendy Moranville. I used to own the property that Mr. and Mrs. Moranville currently own, located near Elba, Idaho. I owned the property from approximately 1963 to 1981. My father owned the property from approximately 1917 to 1963. Dave Ward owned the property before my father.

With respect to the ditch that crosses First Hollow and Second Hollow, I believe that Mr. Ward constructed the ditch before my father bought the property from him in 1917; in fact, the ditch may date back to approximately 1874.

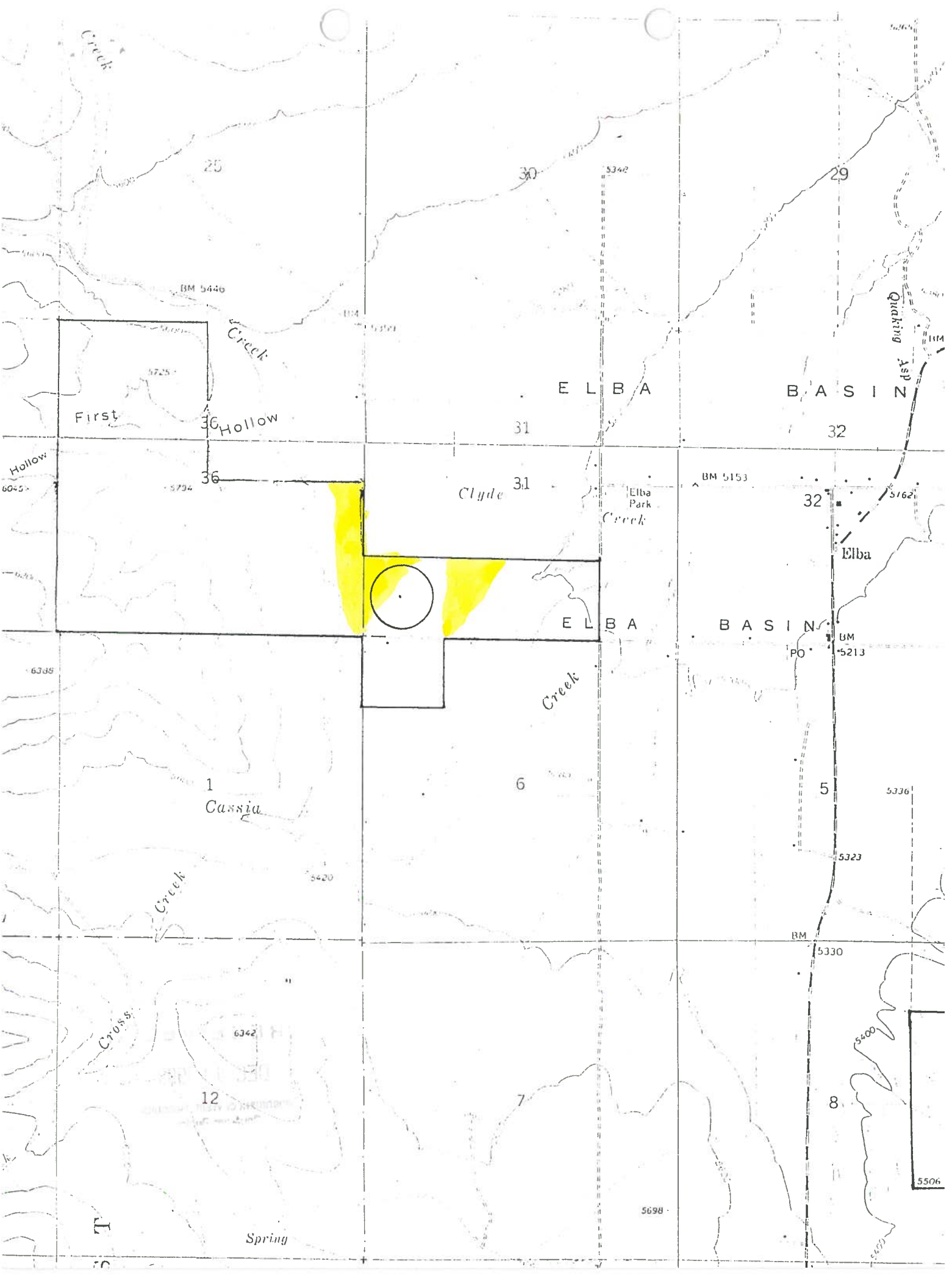
The ditch provided water to part of the property. I have attached a map to this letter that shows the part of the property, marked in yellow. It includes the property that lies south and east of the ditch, the property that currently lies in the northwest corner of the pivot, and the property that lies in the "North Meadow." The North Meadow is next to the pivot.

Please call me if you have any questions or comments.

Respectfully yours,


Orvil Sears

Attachment



Christensen, Kelly

Subject: New claim A43-11196
Entry Type: Meeting
Contact: Richard Moranville

Start: Tue 8/17/99 11:00 AM
End: Tue 8/17/99 11:00 PM
Duration: 0.5 days

They are anticipating a conflict with Tom Hutchison regarding a diversion from First and Second Hollow used for irrigation. They have heard that Tom intends on building a reservoir and possibly do major ditch maintenance. They indicated that they and their predecessors in ownership have irrigated from the same system for some time.

After discussing the situation with them they elected to file a beneficial use claim. We discussed evidence of priority and I suggested that they obtain as much evidence as possible to establish their use as there is a potential conflict between the two claimants.

I also described the adjudication process and pointed out that as a part of the resolution would be for the two claimants to meet and possibly resolve their differences between themselves. I suggested this as an option prior to the department recommendation of the rights.

We also discussed completing a change of ownership for the other decreed rights that are appurtenant to the property that they purchased. They are A43-00188, A43-00189, A43-00190, A43-00191, & A43-00192.

Christensen, Kelly

Subject: late claim review A43-11196
Entry Type: Meeting
Contact: Justis Seemans

Start: Tue 8/17/99 4:00 PM
End: Tue 8/17/99 4:00 PM
Duration: 0 hours

He was retained by the Moranvilles to represent them in their conflict with Tom Hutchison on the First & Second Hollow diversions. They share a ditch. I reviewed the information that I knew relating to the diversion system as it relates to both users. I also explained the priority date potential problems. Specifically, the Jobe Adams decree was in 1928 and this use was not part of the decree. The decree was for Cassia Creek and Tributaries. I also indicated that there seems to be small spring sources that generally never reached a live stream that may have been ignored in the decree. Evidence is not conclusive.

I pointed out that Mr Moranville indicated that there probably was no irrigation in the SWSW of Sec 31 from this system since 1981. I also went through the requirements for evidence of priority. For this system I stressed that as there was a potential conflict, the stronger the evidence the better it would be for his clients.

We then discussed the decreed rights as it relates to the center pivot. The claims indicate 25 irrigated acres in the SWSW of Sec 31 whereas there is approximately 35 to 38 irrigated acres. The 1987 NAPP photos show the center pivot but the 1976 ortho photo does not. We discussed two options, one being filing a new enlargement claim, and the other being an application for permit.

Justin indicated that his claimant does not have a problem with Tom's water use from the 2 Hollows but does not want him to come onto his property and build reservoirs and other structures.

05/10/2001

**NOTICE OF ERROR
REPLY**

Please type or print clearly, fill out this form completely and mail.

Return this reply form to IDWR by the deadline date printed below if you want IDWR to change your recommendation or you want to let IDWR know that you agree with its recommendation.

YOUR DEADLINE FOR RETURNING A NOTICE OF ERROR REPLY IS: June 15, 2001

Water right number: 43-11196

WENDY MORANVILLE

HC 61 BOX 1376

ELBA ID 83326

Telephone Number: (208) 638-5562

RICHARD MORANVILLE

HC 61 BOX 1376

ELBA ID 83326

Telephone Number: (208) 638-5562

RECEIVED

JUN 19 2001

**Department of Water Resource
Southern Region**

1. Describe the portion of the proposed recommendation with which you disagree (e.g. priority date, period of use, source):

2. Describe the changes you wish to make in the proposed recommendation:

3. Give a brief explanation as to why you disagree with these portions:

☒ I AGREE with this proposed recommendation: no changes need to be made.

DATE:

6/8/01

SIGNATURE:

Richard Moranville *Wendy Moranville*

Please print your name:

RICHARD & WENDY MORANVILLE

IDWR Regional Office, 1341 Fillmore St, Suite 200, Twin Falls, ID 83301, (208)736-3033

02/02/2001

IDAHO DEPARTMENT OF WATER RESOURCES
PRELIMINARY RECOMMENDATION OF WATER RIGHTS ACQUIRED UNDER STATE LAW

RIGHT NUMBER: 43-11196

NAME AND ADDRESS: RICHARD MORANVILLE
WENDY MORANVILLE
HC 61 BOX 1376
ELBA, ID 83326

VERIFIED BY KKC

SOURCE: FIRST HOLLOW
SECOND HOLLOW

TRIBUTARY: CLYDE CREEK
CLYDE CREEK

QUANTITY: 0.72 CFS

THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE SHALL NOT
EXCEED 13,000 GALLONS PER DAY.

USE OF THE RIGHTS LISTED BELOW IS LIMITED TO A TOTAL COMBINED DIVERSION
RATE OF 3.12 CFS. COMBINED RIGHTS; 43-288, 43-289, 43-290, 43-291, 43-292,
43-11202 AND 43-11196.

PRIORITY DATE: 10/19/1928

POINT OF DIVERSION:	T13S R24E S36	NESWNE	Within CASSIA County
	T13S R24E S36	NWNESE	Within CASSIA County

PURPOSE AND PERIOD OF USE:

<u>PURPOSE OF USE</u>	<u>PERIOD OF USE</u>	<u>QUANTITY</u>
IRRIGATION	4-01 10-31	0.72 CFS
STOCKWATER	1-01 12-31	0.03 CFS

PLACE OF USE:

IRRIGATION Within CASSIA County			
T13S R24E S36	NESE	13	T13S R24E S36 SESE 8.1
T13S R25E S31	SWSW	7.9	
STOCKWATER Within CASSIA County			
T13S R24E S36	NESE		T13S R24E S36 SESE
T13S R25E S31	SWSW		

29 ACRES TOTAL

USE OF THE RIGHTS LISTED BELOW IS LIMITED TO THE IRRIGATION OF A
COMBINED TOTAL OF 146.3 ACRES IN A SINGLE IRRIGATION SEASON. COMBINED RIGHT
NOS. 43-288, 43-289, 43-290, 43-291, 43-292, 43-11202 AND 43-11196.

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR STOCKWATER USE IS
NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR
THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE
WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN
TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-
1412(6), IDAHO CODE.

EXPLANATORY MATERIAL: BASIS OF CLAIM - Beneficial Use

STOCKWATER 100 HEAD RANGE CATTLE

THE FLOW RATE QUANTITY RECOMMENDED ABOVE INCLUDES 0.14 CFS FOR
CONVEYANCE LOSS BETWEEN THE POINT OF DIVERSION AND THE FIELD HEADGATE

Water Right Number - R43-11196

Prefix Translation: RESEARCH

Old (D) Number -

+ - - - - Last Name - - - - +

+ - First Name - - +

+ - - - - Address - - - - +

*** A - ATTORNEY ***
SEAMONS

JUSTIN R

1 - 1201 FALLS AVE E STE 30
2 -
3 -
City- TWIN FALLS
Phone - 208-736-0075

VERIFIED BY KKC
State- ID Zip- 83301

*** C - CURRENT OWNER ***
MORANVILLE

RICHARD

1 - HC 61 BOX 1376
2 -
3 -
City- ELBA
Phone - 208-638-5562
1 - HC 61 BOX 1376
2 -
3 -
City- ELBA
Phone - 208-638-5562

State- ID Zip- 83326
State- ID Zip- 83326

MORANVILLE

WENDY

+ - - Priority Date - - +
10/19/1928

+ - - - - Region - - - +
17 SOUTHERN

+ - - - - Stage - - - +
J - BENEFICIAL USE

+ - - - - Status - - - +

+ - - - - Source - - - - +
FIRST HOLLOW
SECOND HOLLOW

+ - - - - Tributary - - - - +
CLYDE CREEK
CLYDE CREEK

+ - - - - Point of Diversion - - - - +
Twn Rng Sec Tract Lot Rflg County
13S 24E 36 NE SW NE (31) CASSIA FIRST HOLLOW
NW NE SE (31) CASSIA SECOND HOLLOW

+ - - - - Water Use - - - - +
Code Description Period From Period To Diversion Rate Diversion Volume

01 - IRRIGATION 04/01 10/31 0.720
04 - STOCKWATER 01/01 12/31 0.030

+ - Total Div. Rate - + + - Total Div. Volume - + + - Total Consumptive Use - + + - KW Usage - +
0.720 0.0

+ - - - - Place of Use - - - - +
Twn Rng Sec Tract Lot Acres Code Description County
13S 24E 36 NE SE 13.0 01 IRRIGATION (31) CASSIA
13S 24E 36 SE SE 8.1 01 IRRIGATION (31) CASSIA
13S 25E 31 SW SW 7.9 01 IRRIGATION (31) CASSIA
13S 24E 36 NE SE 04 STOCKWATER (31) CASSIA
13S 24E 36 SE SE 04 STOCKWATER (31) CASSIA
13S 25E 31 SW SW 04 STOCKWATER (31) CASSIA

Total Acres: 29.0

Prefix Translation: RESEARCH

+ - - Other Rights for Same Use - NONE

POU1 USE OF THE RIGHTS LISTED BELOW IS LIMITED TO THE IRRIGATION OF
A COMBINED TOTAL OF 146.3 ACRES IN A SINGLE IRRIGATION SEASON.
COMBINED RIGHT NOS. 43-00288, 43-00289, 43-00290, 43-00291,
43-00292, 43-11202 AND 43-11196.

EXP STOCKWATER 100 HEAD RANGE CATTLE
THE FLOW RATE QUANTITY RECOMMENDED ABOVE INCLUDES 0.14 CFS FOR
CONVEYANCE LOSS BETWEEN THE POINT OF DIVERSION AND THE FIELD
HEADGATE.

Conditions of Approval

Conditions of Approval

N05 - THE QUANTITY OF WATER UNDER THIS RIGHT FOR STOCKWATER USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.

N08 - THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR STOCKWATER USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL

- C18 - THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS
- NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT
- ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY
- DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE
- ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE

+-----+
 |Comments|
 +-----+

05/19/00 KCHRISTE

Court Report Filing	- 00/00/0000	Field Inspection Made	- 08/17/1999	Civil Case Number	-
Objection Filed Date	- 00/00/0000	Field Inspection Flag	-	Old Case Number	-
Response Filed Date	- 00/00/0000	Verified Date	- 05/19/2000	Old Judicial District	-

Water right number - R43-11196

Prefix Translation: RESEARCH

+ - - - - Adjudication Rights Dates and Flags Area - - - - - +

Claim Received Date	- 08/17/1999	Last Amended Date	- 00/00/0000	Temporary Right	- P
Receipt Number			- S022456	Water District	-
POU Ownership Flag			- Y	Federal/State Indicator	- S
Name Connector			-	Presumption Flag	-
				Notice of Error Flag	-

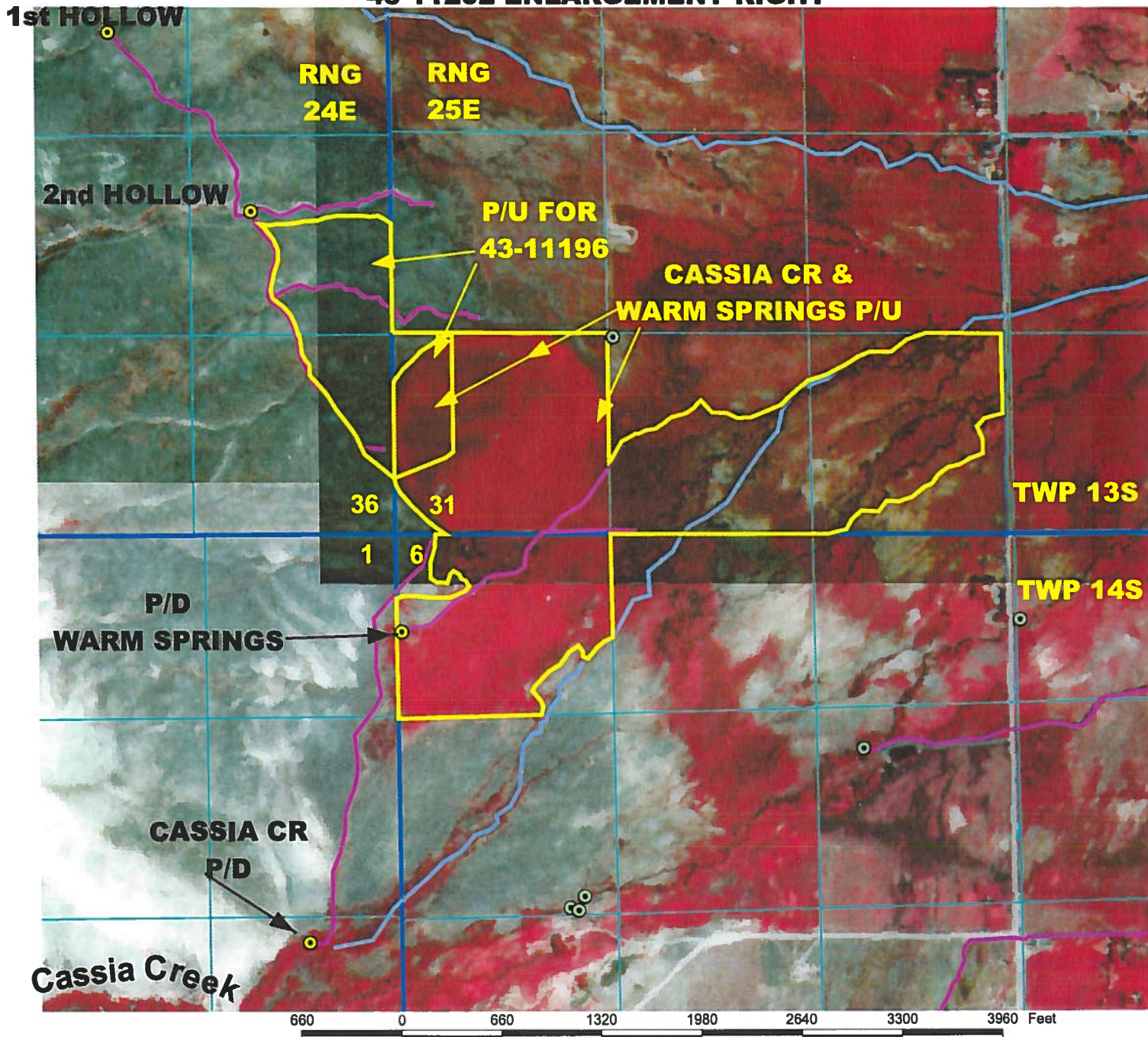
IDAHO DEPARTMENT OF WATER RESOURCES

**RECOMMENDED PLACE OF USE FOR
43-11196 FIRST & SECOND HOLLOW**

43-00288 WARM SPRINGS

43-00289, 43-00290, 43-00291, & 43-00292 CASSIA CR.

43-11202 ENLARGEMENT RIGHT



PLACE OF USE

TWP 13S RNG 24E, SEC 36

TWP 13S RNG 25E, SEC 31

TWP 14S RNG 25E, SEC 6

data entry on: April 20, 2000

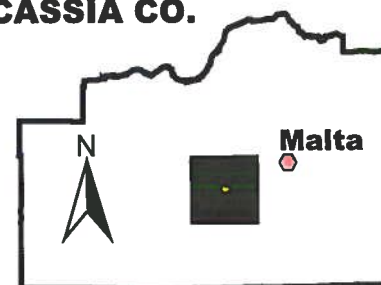
GIS PLACE OF USE PRESENTATION

1987 AND/OR 1988 NAPP PHOTOGRAPHY

DATA ENTRY BY KELLY K CHRISTENSEN

- POINT OF DIVERSION**
- PLACE OF USE**
- SECTION LINES**
- QUARTER/QUARTER LINES**

CASSIA CO.



CLAIM NUMBER 43-11196 DATE 3-15-00 TRANSFER NUMBER _____
 AGENT KKC CLAIMED ACRE TOTAL 36
 GIS ACRE TOTAL 29

				NE				NW				SW				SE			
	TWP	RNG	SEC	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE
CLAIM	13S	24E	36													14			10
GIS																13			8.1
RECOM																13			8.1
CLAIM	13S	25E	31											12					1
GIS														7.9					
RECOM														7.9					7
CLAIM																			
GIS																			
RECOM																			

B43-POU.SHP The recommended P/U is ground east of a ditch the
 SHAPE NOS. auto across the east 1/2 of the SE 1/4 and then ends
205 at the W boarder of Sec 36 SWSW. The claimant is
206 the renter (Tom Ottley) indicated that the use
 B43-POD.SHP in Sec 36 was to improve the grass pasture. The
 NOS. DESCRIPTION irrigated p/u has never been farmed or leveled. Altho
147 Sec 36 all of the recommended P/U is lower in elevation to
NE S W NE the ditch; not all of the ground can be covered by wa
 (First Hollow) it is virtually impossible to map in or non in this
146 Sec 36 area therefore I am recommending all acres within
N W NE SE this Area.
 (Second Hollow) the ir P/U in sec 31 overlaps with irrigation und
 DBF TABLES UPDATED the center Pivot. Again the claimant is Tom indicated that
 B43-DBPOU.DBF 4-20 the practice was to just ir the west part of the Q.Q. Land
 B43-DBPOD.DBF " slope would allow most all of the Quarter to be ir when wa
 JPEG LAYOUT was available. The Recommendation However is for the area
 indicated by the claimant.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

16:25:59
04/21/00

PAGE: 16
QUICKLOOK INFORMATION

16
CLAIM NUMBER: A43-11196

WR ELEMENT	DATA DISCREPANCY Y/N	CORRESPONDENCE SENT/RECEIVED BY WHOM/DATE	FIELD EXAM BY WHOM/DATE	CHANGE CLAIM Y/N	ELEMENT DOCUMENTED WHOM/DATE	COMPLETED REVIEW WHOM/DATE	COMPLETED DATA ENTRY WHOM/DATE	VERIFIED DATE WHOM/DATE
PRIORITY DATE	Y		8-17-99 K K C	Y	K K C 4-20-00	K K C 4-24-00	K K C 5-1-00	
POINT OF DIV	Y				"			
SOURCE	Y				"			
PLACE OF USE	Y				K K C 4-24-00			
DIV. AMOUNT CFS/VOLUME	Y							
CONSUMPTIVE USE	-							
PURPOSES OF USE	Y							
PERIOD OF USE	Y							
BASIS OF CLAIM	Y							
REMARKS	Y							

BARCODE UPDATED
WHOM/DATE

K K C
5-1-00

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

16:25:59
04/21/00

PAGE: 1
GENERAL INFORMATION

1
CLAIM NUMBER: A43-11196

LAST: MORANVILLE FIRST: RICHARD
ADDRESS: HC 61 BOX 1376
CITY: ELBA STATE: ID ZIP: 83326
PHONE NUMBER: 208-638-5562

OWNER CODE: C

LAST: MORANVILLE FIRST: WENDY
ADDRESS: HC 61 BOX 1376
CITY: ELBA STATE: ID ZIP: 83326
PHONE NUMBER: 208-638-5562

OWNER CODE: C

LAST: SEAMONS FIRST: JUSTIN R
ADDRESS: 1201 FALLS AVE E STE 30
CITY: TWIN FALLS STATE: ID ZIP: 83301
PHONE NUMBER: 208-736-0075

OWNER CODE: A

FIELD EXAM REQUIRED?

DATABASE

FIELD
EXAMINER

VERIFICATION REQUIRED DUE TO REMARKS?

Y

Y() N()

CLAIM REMARKS: GEN THE DELIVERY SYSTEM IS A DITCH THAT CROSSES FIRST AND SECOND
HOLLOW AND RUNS ALONG THE EASTERN BOUNDARY OF THE PLACE OF USE

CONTACT PERSON: Mr & Mrs Moraville owners
Tom O'Hay - Renter

PHONE NUMBER: () -

DATE OF FIELD EXAM: 8/17/99

APPOINTMENT MADE: Y() N()

TIME: : A() P()

ACCOMPANIED BY: Cindy Bird; Scott King

PHONE NUMBER: () -

RELATIONSHIP TO CLAIMANT: IDWR employees (conducted manning measurement)

DIRECTIONS TO PROPERTY / NOTES:

A. AJ CLAIM: # A43-11196 PRIORITY DATE: 04-01-1917 STAGE: J

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

C. CAN THE PRIORITY DATE CLAIMED BE CONFIRMED BY A DECREE OR LICENSE?

Y() N(☒)

D. HAS THERE BEEN A LATER COURT DECREE OF THE WATER RIGHT(S) FROM THIS WATER SOURCE?

Y() N(☒)

E. IS THERE ANY INDICATION THAT THERE HAS BEEN A FIVE YEAR PERIOD OF CONTINUOUS NONUSE?
(IF YES, DESCRIBE BELOW)

Y(☒) N()

F. IF THIS CLAIM IS BASED ON A PERMIT, WHERE IS THE PERMIT IN THE LICENSING PROCESS?

PROOF OF BENEFICIAL USE SUBMITTED

N/A() Y() N()

FIELD EXAM COMPLETED

N/A() Y() N()

FIELD EXAM SENT TO STATE OFFICE

N/A() Y() N()

LICENSE ISSUED

N/A() Y() N()

* IF THE PERMIT WILL NOT BE LICENSED PRIOR TO THE DIRECTOR'S REPORT,
USE CONDITION CODE A01 AND RECOMMEND AS PERMITTED.

G. IF THIS CLAIM IS BASED ON BENEFICIAL USE, IS ADDITIONAL EVIDENCE
OF THE PRIORITY DATE REQUIRED?

N/A() Y(☒) N()

* FOR CLAIMS BASED ON BENEFICIAL USE, DESCRIBE THE EVIDENCE OF PRIORITY SUBMITTED,
INCLUDING THE ANALYSIS OF THE EVIDENCE.

H. IS THE STAGE OF THE CLAIM CODED CORRECTLY?

Y(☒) N()

NOTES:

A former owner submitted evidence that indicates the system was developed prior to the decree. As this use was not specifically identified in the decree I am accepting the priority date of 1 day after the decree date.

Tom Hutchison submitted a letter indicating that irr has not occurred for approx 15 yrs. This conflicts with the former owner & Tom Otley who both state that they have irr the Prop. At this time I am accepting this right as valid.

RECOMMENDED PRIORITY DATE:

10-19-1928

REVIEWED BY

KAC

DATE

4-20-00

A. AJ CLAIM POINT OF DIVERSION AND SOURCE:

RIGHT	TWP. RGE.	SEC.	1/4	1/4	1/4	LOT	POD FLAG	COUNTY	DIVERSION NAME	DIVERSION NUME
A43-11196	13S 24E	36	~~SE~~ NE	SW	NE			CASSIA		
A43-11196	13S 24E	36	NW	NE	SE			CASSIA		

OTHER AJ CLAIMS WITH SAME AJ POD
A PREFIX R PREFIX
NONE NONE

WR RECORDS IN SAME 40 ACRE TRACT
NONE

SOURCE: FIRST HOLLOW
SECOND HOLLOW

TRIB: CLYDE CREEK
CLYDE CREEK

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. IS THE CLAIMED POD WITHIN THE SAME 40 ACRE TRACT THAT IS DESCRIBED IN THE WATER RIGHT FILE? N/A(☒) Y(☐) N(☐)

* IF NO, AND IF THE CHANGE IS VERIFIED AS AN ACCOMPLISHED CHANGE IN POD, DESCRIBE THE INJURY ANALYSIS PERFORMED AND ENTER FLAG "C" WITH THE APPROPRIATE EXPLANATORY CODE.

D. CAN THE CLAIMED POD BE VERIFIED USING THE WATER RIGHT FILE OR GPS DATA? N/A(☒) Y(☐) N(☐)

E. SHOULD THE CLAIMED POD BE VERIFIED BY FIELD EXAM? Y(☒) N(☐)

F. IS THE CLAIMED SOURCE THE SAME AS DESCRIBED IN THE WATER RIGHT FILE? N/A(☒) Y(☐) N(☐)

* IF NO, AND IF THE CHANGE IS VERIFIED AS AN ACCOMPLISHED CHANGE IN SOURCE, DESCRIBE THE INJURY ANALYSIS PERFORMED AND ENTER FLAG "C" WITH THE APPROPRIATE EXPLANATORY CODE.

G. CAN THE CLAIMED SOURCE BE VERIFIED USING THE WATER RIGHT FILE? Y(☐) N(☒)

H. SHOULD THE CLAIMED SOURCE BE VERIFIED BY FIELD EXAM? Y(☒) N(☐)

I. HOW WAS THE POD AND SOURCE VERIFIED?

LICENSING FIELD EXAM (DATE OF FIELD EXAM _____) Y(☐) N(☐)

AJ FIELD EXAM (DATE OF FIELD EXAM 8-17-99 NAME OF EXAMINER KKC) Y(☐) N(☐)

OTHER (DESCRIBE IN NOTES BELOW)

NOTES: While doing a manning's data collection run the 2 pds were GPSed. as the sites are ditches crossing drainage no side tags were installed.

RECOMMENDED POINT(S) OF DIVERSION AND SOURCE: CHECK HERE IF RECOMMENDED AS CLAIMED (___)

TWP.	RGE.	SEC.	POD	1/4	1/4	LOT	FLAG	COUNTY	DIVERSION NAME	DIVERSION NO
13S	24E	36	~~NW~~ SE	SW	NE			CASSIA	First Hollow	
13S	24E	36	NW	NE	SE	OK		CASSIA	Second Hollow	

SOURCE: Fst & 2nd Hollow TRIB: Clyde Cr.

REVIEWED BY: KKC DATE: 4-20-00

SYSTEM DESCRIPTION: DESCRIBED BELOW (___), SEE LICENSE FILE (___), OR SEE ATTACHMENT (___)

The system is a ditch that crosses the two claimed drainages and eventually ends along the west side of Sec 31 SWSW. The irrigation application is wild flooding. The recommended P/4 (excluding the acres in the SWSW Sec 31) ~~are~~ is natural grass. The ground has a significant slope and the water has a tendency to collect into numerous channels as it crosses the pasture. Not all ground within the recommended P/4 is covered by water but that ground would be difficult to identify accurately, therefore it has been included within the recommendation.

A. ROOT WATER RIGHT NUMBERS: A43-11196

B. POU LISTING

TWP	RNG	SEC	1/4	1/4	LOT	NAME	AJ #/ACRES	WR #/ACRES	LANDSAT DATA	FIELD EXAM.	RECOMM. ACRES
13S	24E	36	NE	SE		MORANVILLE, RICHARD	A43-11196 / 14.0	- /			
13S	24E	36	NE	SE		MORANVILLE, RICHARD	A43-11196 /	- /			
13S	24E	36	SE	SE		MORANVILLE, RICHARD	/ 10.0	- /			
13S	24E	36	SE	SE		MORANVILLE, RICHARD		- /			
13S	25E	31	SW	SW		MORANVILLE, RICHARD					
			SW	SW	4	MORANVILLE, RICHARD	A43				
			SW	SW	4	MORANVILLE, RICHARD	R43-00288				
			SW	SW	4	MORANVILLE, RICHARD	R43-00292 /				
			SW	SW	4	MORANVILLE, RICHARD	R43-11202 / 41.0				
			SW	SW	4	MORANVILLE, RICHARD	A43-00288 / 25.0				
			SW	SW	4	MORANVILLE, RICHARD	A43-00289 / 25.0	43-00288			
			SW	SW	4	MORANVILLE, RICHARD	A43-00290 / 25.0	43-00290	/		
			SW	SW	4	MORANVILLE, RICHARD	A43-00291 / 25.0	43-00291	/		
			SW	SW	4	MORANVILLE, RICHARD	A43-11202 / 16.0	- /			
			SW	SW	4	MORANVILLE, RICHARD	R43-00289 / 41.0	- /			
			SW	SW	4	MORANVILLE, RICHARD	R43-00290 / 41.0	- /			
			SW	SW	4	MORANVILLE, RICHARD	R43-00291 / 41.0	- /			
			SW	SW	4	CASSIA CREEK IRRIGATION CO.		43-00015 /			

SEE GIS LAYOUT AND LAND LIST FORM
SHOWING ACRE COMPARISON AND
RECOMMENDATION
KKC

ADDITIONAL POU FOUND

TOTAL ACRES A43-11196 36.00

POU COUNTY: CASSIA

C. IS WATER USAGE FOUND IN TRACTS OTHER THAN THOSE CLAIMED?

Y() N(☒)

* IF YES, ARE THESE TRACTS LISTED ABOVE (), OR ARE THEY LISTED ON AN ATTACHED SHEET ()

LIST OF ALL RIGHTS WITH A SAME POU AND IRRIGATION USAGE

CLAIM NO.	SOURCE	NAME	DIV. RATE	DIV. RATE/ACRE	DIV. VOL.	DIV. VOL./ACRE
A43-11196	FIRST HOLLOW	MORANVILLE, RICHARD	0.720	0.020		
	SECOND HOLLOW					
A43-00288	WARM SPRINGS	MORANVILLE, RICHARD	0.300	0.002		
R43-00288	WARM SPRINGS	MORANVILLE, RICHARD	0.300	0.002		
R43-00289	CASSIA CREEK	MORANVILLE, RICHARD	0.500	0.004		
A43-00289	CASSIA CREEK	MORANVILLE, RICHARD	0.500	0.004		
A43-00290	CASSIA CREEK	MORANVILLE, RICHARD	1.200	0.010		
R43-00290	CASSIA CREEK	MORANVILLE, RICHARD	1.200	0.009		
A43-00291	CASSIA CREEK	MORANVILLE, RICHARD	0.600	0.005		
R43-00291	CASSIA CREEK	MORANVILLE, RICHARD	0.600	0.004		
A43-00292	CASSIA CREEK	MORANVILLE, RICHARD	0.400	0.003		
R43-00292	CASSIA CREEK	MORANVILLE, RICHARD	0.400	0.003		
R43-11202	CASSIA CREEK	MORANVILLE, RICHARD	0.290	0.002		
	WARM SPRINGS					
A43-11202	CASSIA CREEK	MORANVILLE, RICHARD	0.320	0.020		
	WARM SPRINGS					

NO RIGHTS WITH SAME POU BUT NOT USED FOR IRRIGATION

D. ARE OTHER WATER RIGHTS USED FOR THE SAME PURPOSE?

Y(☒) N()

* IF YES, COMPLETE OVERLAP REVIEW:

OTHER RIGHTS LISTED IN CLAIM: NONE

*see attached
narrative
dated 3-16-2000*

E. IS THE CLAIMED POU THE SAME AS DESCRIBED IN THE WATER RIGHT FILE?

N/A(☒) Y() N()

* IF NO, AND IF THE CHANGE IS VERIFIED AS AN ACCOMPLISHED CHANGE IN POU, DESCRIBE THE INJURY ANALYSIS PERFORMED AND ENTER FLAG "C" WITH THE APPROPRIATE EXPLANATORY CODE.

F. CAN THE CLAIMED POU BE VERIFIED USING THE WATER RIGHT FILE AND AVAILABLE AERIAL PHOTOS?

N/A(☒) Y() N()

G. SHOULD THE CLAIMED POU BE VERIFIED BY FIELD EXAM?

Y(☒) N()

H. IS THERE ANY INDICATION THAT THERE HAS BEEN A FIVE YEAR PERIOD OF CONTINUOUS NONUSE OF THIS RIGHT, OR ANY PORTION OF THIS RIGHT?

Y(☒) N()

CHECK DOCUMENTS USED TO VERIFY POU: () ORTHOPHOTOQUAD, IDWR NO. DD-30; () TOPOGRAPHIC QUAD, IDWR NO. _____

() NAPP, IDWR NO. GIS Rectified; () ASCS PHOTO; () OTHER _____
1988-88

NOTES: _____

RECOMMENDATIONS:

TOTAL ACRES: 29 N/A()

REVIEWED BY: XKC

DATE: 4-24-00

A. AJ CLAIMED USES:

PURPOSE OF USE	PERIOD OF USE (MONTH/DAY)	DIV. RATE FOR EACH USE	DIV. VOL. FOR EACH USE
A43-11196 IRRIGATION	FROM 04-01 TO 10-31	0.720 CFS	
A43-11196 STOCKWATER	FROM 01-01 TO 12-31	0.030 CFS	
TOTAL DIVERSION RATE/VOLUME		0.720 CFS	

B. WR RECORDED USES:

PURPOSE OF USE	PERIOD OF USE (MONTH/DAY)	DIV. RATE FOR EACH USE	DIV. VOL. FOR EACH USE
----------------	---------------------------	------------------------	------------------------

C. DOES THE CLAIMED PURPOSE OF USE CORRECTLY DESCRIBE THE WATER USE?

Y(☒) N(☐)

D. IS THE CLAIMED PURPOSE OF USE THE SAME AS DESCRIBED IN THE WATER RIGHT FILE?

N/A(☒) Y(☐) N(☐)

* IF NO, AND IF THE ACTUAL WATER USE IS VERIFIED AS AN ACCOMPLISHED CHANGE IN PURPOSE OF USE, DESCRIBE THE INJURY ANALYSIS PERFORMED AND ENTER FLAG "C" WITH THE APPROPRIATE EXPLANATORY CODE.

E. SHOULD THE CLAIMED PURPOSE OF USE BE VERIFIED BY FIELD EXAM?

Y(☒) N(☐)

F. DOES THE CLAIMED PERIOD OF USE CONFORM TO IDWR STANDARDS?

Y(☒) N(☐)

G. SHOULD THE PERIOD OF USE BE RECOMMENDED TO IDWR STANDARDS?

Y(☒) N(☐)

* IF THE RECOMMENDED PERIOD OF USE IS DIFFERENT THAN IDWR STANDARDS, EXPLAIN IN NOTES BELOW.

H. IS THE CLAIMED DIVERSION RATE FOR EACH USE THE SAME AS DESCRIBED IN THE WATER RIGHT FILE?

N/A(☒) Y(☐) N(☐)

* IF NO, DESCRIBE IN NOTES BELOW HOW THE RECOMMENDED DIVERSION RATE FOR EACH USE WAS DETERMINED.

I. SHOULD THE CLAIMED DIVERSION RATE FOR EACH USE BE VERIFIED BY FIELD EXAM?

N/A(☐) Y(☒) N(☐)

J. IS THE CLAIMED DIVERSION VOLUME FOR EACH USE THE SAME AS DESCRIBED IN THE WATER RIGHT FILE?

N/A(☒) Y(☐) N(☐)

* IF NO, DESCRIBE IN NOTES BELOW HOW THE RECOMMENDED DIVERSION VOLUME FOR EACH USE WAS DETERMINED.

K. SHOULD THE CLAIMED DIVERSION VOLUME FOR EACH USE BE VERIFIED BY FIELD EXAM?

N/A(☒) Y(☐) N(☐)

NOTES:

Recommend the current dept standard as this is a beneficial use right.

The system was not in operation during the field visit on 8-17-99. Manning measurement was taken and a system capacity calculated.

For First Hollow Cindy Bird calculated a capacity of .5 CFS

For Second Hollow she calculated a capacity of 2.04 CFS

(notes attached)

I am recommending 29 acres @ .02 CFS/Ac = .58 CFS
 conveyance loss calculations = .14 CFS
.72 CFS

the claim was .72 CFS

Recommend 0.72 CFS

EXP RATE = .14 CFS conv. losses

AJ CLAIM TOTAL DIVERSION RATE: 0.72D CFS

WR ROOT RIGHT TOTAL DIVERSION RATE: CFS

A. IS THE CLAIMED TOTAL DIVERSION RATE THE SAME AS DESCRIBED IN THE WATER RIGHT FILE?

N/A() Y() N()

B. CAN THE CLAIMED TOTAL DIVERSION RATE BE VERIFIED USING THE WATER RIGHT FILE?

N/A() Y() N()

* ALL CLAIMS BASED ON BENEFICIAL USE (INCLUDING POSTED NOTICES AND STATUTORY CLAIMS) REQUIRE A FLOW MEASUREMENT.

C. IS THERE ANY INDICATION THAT THERE HAS BEEN A FIVE YEAR PERIOD OF CONTINUOUS NONUSE OF THIS RIGHT, OR ANY PORTION OF THE DIVERSION RATE?

Y() N()

* IF AN AMOUNT SMALLER THAN THE ORIGINAL DIVERSION RATE IS CLAIMED AND A FIELD EXAM IS NOT REQUIRED, EXPLAIN IN NOTES.

D. SHOULD THE CLAIMED DIVERSION RATE BE VERIFIED BY FIELD EXAM?

Y() N()

E. FLOW MEASUREMENT

MEASUREMENT METHOD See Pg 10, SEE ATTACHED CALCULATIONS.

F. RATE/VOLUME CALCULATIONS: (IRRIGATION)

1a. IRRIGATION RATE

ACRES 29 x 0.02 CFS/ACRE = 58 CFS
(Taken from pou review)

1b. CALCULATIONS

IS A DIVERSION RATE PER ACRE GREATER THAN 0.02 CFS/ACRE CLAIMED? Y() N()

IF YES, IS AN ADDITIONAL WATER USE FORM FILED AND ATTACHED? Y() N()

2. IRRIGATION DIVERSION VOLUME

CLAIMED DIVERSION VOLUME = AF/A

ACRES _____ x DIVERSION VOL. AF/A FOR AREA _____ =

TOTAL DIVERSION VOLUME _____ AF/A

3. IRRIGATION CONSUMPTIVE USE

CLAIMED CONSUMPTIVE USE = AF/A

ACRES _____ x CONSUMPTIVE VOL. AF/A FOR AREA _____ =

TOTAL CONSUMPTIVE USE _____ AF/A

4. CALCULATIONS FOR USES OTHER THAN IRRIGATION: SEE BELOW () OR SEE ATTACHMENT ()

PAGE: 12

12
CLAIM NUMBER: A43-11196

NOTES:

RECOMMENDATIONS: CHECK HERE IF RECOMMENDED AS CLAIMED (X)

REC. PURPOSE OF USE	REC. PERIOD		REC. DIV		REC. DIV		REC. CONS.	
	FROM	TO	RATE	CFS	VOL.	AF/A	USE	
IRRIGATION	04-01	10-31	0.720	_____	_____	_____	0.0	_____
STOCKWATER	01-01	12-31	0.030	_____	_____	_____	0.0	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
TOTAL FOR THIS RIGHT				_____	_____	_____	_____	_____

NON-IRRIGATION USES CLAIMED: STOCKWATER 100 HEAD RANGE CATTLE

observed stock on property but
did not count

NON-IRRIGATION USES RECOMMENDED: CHECK HERE IF RECOMMENDED AS CLAIMED (X)

to EXPRMK

REVIEWED BY: KKC

DATE: 4-24-00

FLAG: _____

STANDARD CONDITIONS (CODE):

Stockwater code
N05 N08

STANDARD REMARKS (CODE):

Comb. Rank PDU1
limit to ~~146.3~~ 146.3 ac
decrease & enlargement right to
QNT limit to 3.12 CFS

see narrative
for analysis.

EXPLANATORY CONDITIONS (CODE):

conv. loss = .14 CFS

EXPLANATORY REMARKS (CODE):

A. CHECK ONLY THE FOLLOWING THAT APPLY:

	ACCEPTED AS CLAIMED	NEEDS REVIEW
OWNERSHIP _____	☒	()
FORFEIT/ABANDON _____	()	()
ADDITIONAL DIV. AMOUNT _____	()	()

B. SPLIT WATER RIGHT REVIEW

ROOT WATER RIGHT NUMBER: 43-11196

DATABASE

EXAMINER

TOTAL DIVERSION RATE OF WR SPLITS

CFS

SPLITS:

OLD RIGHT NUMBERS	CURRENT CLAIM NUMBERS	DIVERSION RATE	CURRENT "R" CLAIM NUM.	"R" DIV. RATE	WR RIGHT NUMBERS	DIVERSION RATE
-	A43-11196	0.720	-	-	-	-
TOTAL CFS		0.720				

DIVERSION RATE REVIEW

DATABASE	FIELD EXAMINER
N	Y() N()

DO THE SUM CFS RATE OF THE SPLITS EQUAL THE ROOT RIGHT CFS RATE? (Y/N)
IF NO, IS THE WRITTEN REVIEW DESCRIBED BELOW () OR SEE ATTACHMENT ()?

NOTES:

AUTHENTICATION:

SIGNATURE: Kelly K. Christensen DATE: 4-24-00

NAME OF FIELD EXAMINER: _____ TITLE: Sr Water Resource Agt.

MAPS AND AERIAL PHOTOGRAPHS USED TO REVIEW THIS NOTICE OF CLAIM TO A WATER RIGHT

TYPE OF MAP OR PHOTOGRAPH (CHECK IF USED)	IF USED, SUPPLY APPROPRIATE DATE AND OTHER INFORMATION	COPY INCLUDED IN FILE
() ORTHOPHOTOQUAD	DATE OF PHOTO <u>1976</u> IDWR ID NO. <u>DD-30</u>	Y() N()
() TOPOGRAPHIC	DATE FIELD CHECKED _____ IDWR ID NO. _____	Y() N()
() NAPP	DATE OF PHOTO <u>GIS Rectified</u> IDWR ID NO. _____	Y() N()
	<u>1987-88</u>	
() ASCS AERIAL PHOTO	DATE OF PHOTO <u>1978</u>	Y() N()
() ASCS COLOR SLIDE	DATE OF PHOTO _____	Y() N()
() BLM OR USFS AERIAL PHOTO	DATE OF PHOTO _____	Y() N()
() TOWNSHIP SURVEY (GOVERNMENT PLAT)	DATE OF SURVEY _____	Y() N()
() SCS SOIL SURVEY MAP	DATE ISSUED _____	Y() N()
() SUBDIVISION PLAT MAP	DATE OF MAP _____	Y() N()
() OTHER _____	DATE _____	Y() N()
() OTHER _____	DATE _____	Y() N()
() OTHER <u>Letter From Tom Hutchison</u>	<u>3-22-2000</u> indicating no use since for 15 yrs	Y(<u>X</u>) N()

LIST OF ATTACHMENTS (CHECK IF ATTACHED)	IF ATTACHED, SUPPLY APPROPRIATE INFORMATION	NO. OF PAGES	NOTES
() LICENSING FIELD EXAM	DATE OF FIELD EXAM _____	_____	_____
() WATER RIGHT LICENSE	DATE LICENSE SIGNED _____	_____	_____
() IDWR APPROVED TRANSFER	DATE TRANSFER APPROVED _____	_____	_____
(X) SYSTEM DESCRIPTION	DATE ~~DRAWN~~ <u>3-16-00</u>	<u>3</u>	electronic file A43-00088 Mountain View
(X) PHOTOGRAPHS	DATE(S) PHOTOS TAKEN <u>8-17-99</u>	<u>1</u>	DIGITAL thumb nail photos. Phot can be viewed on computer at a larger scale.
() SPLIT RIGHT REVIEW	DATE REVIEW COMPLETED _____	_____	_____
() HUBBLE ANALYSIS	DATE ANALYSIS COMPLETED _____	_____	_____
(X) CONVEYANCE LOSS ANALYSIS	DATE ANALYSIS COMPLETED <u>4-20-00</u>	<u>1</u>	2nd Hollow includes photos & maps by
(X) FLOW MEASUREMENT CALCULATIONS	<u>manning wks hts</u> DATE SYSTEM MEASURED <u>8-17-99</u>	<u>18pgs</u> <u>14pgs</u>	Fst Hollow includes photos & maps by CB
(X) OTHER <u>GIS LAYOUT Recommendation</u>	DATE _____	_____	_____
() OTHER <u>LAND LISTING OF Rec P/U</u>	DATE _____	_____	_____

**A43-00288, A43-00289, A43-00290, A43-00291 & A43-00292
A43-11202, A43-11196 & A43-11221**

**RIGHTS DECREED FROM CASSIA CREEK
A43-00289, A43-00290, A43-00291 & A43-00292
RIGHT DECREED FROM WARM SPRINGS
A43-00288
ENLARGEMENT RIGHT OF CASSIA CREEK & WARM SPRINGS
A43-11202
WASTEWATER RIGHT
A43-11221
BENEFICIAL USE RIGHT FROM FIRST AND SECOND HOLLOW
A43-11196**

A43-00289, A43-00290, A43-00291 & A43-00292

The decreed rights are stacked rights for the same place of use. The historical delivery system was and is a dam in Cassia Creek diverting water into an earthen ditch running to the place of use. The recommended place of use has numerous natural channels running roughly southwest toward the northeast. Some of those channels are part of the irrigation delivery system. The diversions from those channels are not considered as diversion points, rather, as part of the irrigation system. Not all of the irrigated property owned by the Moranvilles is irrigated with Cassia Creek water. The irrigated ground in TWP 13S, RNG 24E is irrigated with First and Second Hollow water only (A43-11196). A triangular parcel of ground in the northwest end of Sec 31 SESW and SWSE is currently irrigated by wastewater only, although it has also historically been irrigated with Cassia Creek water. This ground is not being recommended under the Cassia Cr. claims.

**Sec 31 SWSW
MULTIPLE CLAIMS (SYSTEMS) OVERLAP**

In 1982 a pump was installed in one of the channels crossing the property and then piped to a center pivot that covers a majority of Sec 31 SWSW. Historically approximately 27 acres were irrigated from the ditch, gravity irrigation system in that quarter/quarter.

A43-11202 was filed as an expansion claim to add the acreage above the ditch system that was then being irrigated from Cassia Creek. That claim has Warm Springs as a second source being delivered through the same system to the same acres.

That ground has also been irrigated under a different gravity flood system. That system was claimed under A43-11196 for the irrigation of 12 acres in that same quarter/quarter as well as an additional 24 acres in Sec 36 (TWP 13S RNG 24E). That system is an earth ditch that cuts across both First and Second Hollow and eventually delivers water to Sec 31 SWSW which is at the end of the ditch.

WASTEWATER SYSTEM
A43-11221

The system for this right consists of a ditch running from the north to the south along the eastern border of Sec 31 NWSW. This quarter is irrigated with water from First and Second Hollow under one system and from Clyde Creek under a different system. The ditch enters the Morannville property at the NW corner of the SESW of Sec 31. The ditch then turns east and parallels the northern quarter/quarter boundaries of the SESW and SWSE quarters. Flood irrigation goes from the ditch southeasterly until the water reaches a natural drainage that then carries the water off the Moranville property in the SESW quarter. This ground was irrigated with Cassia Creek water under the historical delivery system but has not been irrigated through the Cassia Creek ditch system since the pump and pivot system was put in. Those acres were not claimed under the Cassia Creek decreed rights.

FIRST AND SECOND HOLLOW SYSTEM
A43-11196

This system is a ditch running from First Hollow to Second Hollow and continuing to the western edge of the center pivot found in Sec 31 SWSW. Tommy Hutchison under A43-10213 shares this source.

There is a diversion from Clyde Creek that is tied into this delivery system but Clyde Creek water is not part of this claim.

WARM SPRINGS SYSTEM
A43-00288 & A43-11202

The spring is located just south of the farmstead on the western edge of the irrigated place of use. The Cassia Creek main ditch is located uphill to the west of the spring. Water from the spring can be diverted south to irrigate most of Sec 6 NWNW or can be diverted into a natural drain and commingled with the Cassia Creek water for flood irrigation of the ground east of that drain. See Sec 31 SWSW above for the analysis of the pumping system and irrigation practices related to that pump. The right was decreed for 0.30 cfs, which would imply a 15-acre place of use at 1 inch per acre. However as this right is normally commingled with the Cassia Creek system and can cover approximately 79 acres (excluding the expansion acres) I am recommend 43-00288 be limited to the 79 acres within the Cassia Creek PPU.

REMARKS ANALYSIS

Warm Springs	43-00288
Cassia Creek	43-00289 thru 43-00292
Enlargement claim	43-11202
First and second Hollow	43-11196
Waste water	43-11221

The waste water system is recognized as an independent system and does not overlap with any other systems. No combined remarks are required for this right.

Under normal circumstances Warm Springs, Cassia Creek and the enlargement claim act as a system and are therefore recognized in one combined remark and limited to the total P/U of 124 acres. Warm springs is limited to 79 acres within the PP/U and the enlargement claim is limited to 16 acres within the same PP/U. The combined decreed rights from Cassia Creek are limited to 108 acres. This is the PP/U less the 16 enlargement acres. No diversion rate is associated with the 16 enlargement acres.

Warm Springs	43-00288	0.30 cfs	Cassia Creek	43-00289	0.50 cfs
Enlargement claim	43-11202	0.00 cfs		43-00290	1.20 cfs
First and second Hollow	43-11196	0.72 cfs		43-00291	0.60 cfs
Waste water	43-11221	0.40 cfs		43-00292	<u>0.40 cfs</u>
				Total	2.70 cfs

System of Cassia Creek, Warm Springs, and the Enlargement claim

Found irrigated 108 acres * 0.02 cfs/ac = .2.16 cfs

Conveyance losses for Cassia Creek div 0.24 cfs
Total 2.40 cfs

43-00288 is diverted at the source, therefore there are no conveyance losses calculated for this right.

A second combined remark is required when considering the First and Second Hollow overlap. When the claims identified in the 108 acre place of use are combined with this system, they are limited to 137 acres (108 ac + 29 ac). There is a 6.7 acre overlap between the two systems. First and Second Hollow claim is limited to 29 acres.

System of Cassia Creek, Warm Springs, and the Enlargement claim with First and Second Hollow.

Found irrigated 137 acres * 0.02 cfs/ac = 2.74 cfs

Conveyance losses for Cassia Creek div 0.24 cfs

Conveyance losses for 1st & 2nd Hollow div 0.14 cfs
Total 3.12 cfs

CONVEYANCE LOSS - WORSTELL

NAME OF DITCH: First and Second Hollow BY: kkc DATE: 4-20-00
 43-11196 Moranville; 43-10213 Hutchison

REACH	LENGTH (FT)	AVE WIDTH (FT)	SEEPAGE (FT/DAY)	WORSTELL LOSS (CFS)	DELIVERY (CFS)	DELIVERY LEFT (CFS)	LOSS FACTOR	DELIVERY LOSS (CFS)	FLOW (CFS)
1	1630	4.0	2.50	0.21	0.58	0.88	0.2340	0.14	1.17
2	1300	2.0	2.50	0.08	0.30	0.30	0.2737	0.15	0.38
3				0.00		0.00	0.0000	0.00	0.00
4				0.00		0.00	0.0000	0.00	0.00
5	Reach 1 = .21 CFS			0.00		0.00	0.0000	0.00	0.00
6	.58 $\times$ $\frac{1}{88}$ = .14 CFS Moranville			0.00		0.00	0.0000	0.00	0.00
7	.88 .21			0.00		0.00	0.0000	0.00	0.00
8	.30 $\times$ $\frac{1}{88}$ = .07 CFS Hutchison			0.00		0.00	0.0000	0.00	0.00
9	.88 .21			0.00		0.00	0.0000	0.00	0.00
10				0.00		0.00	0.0000	0.00	0.00
11				0.00		0.00	0.0000	0.00	0.00
12	Reach 2			0.00		0.00	0.0000	0.00	0.00
13	.08 Hutchison only			0.00		0.00	0.0000	0.00	0.00
14	TOTAL PER Right			0.00		0.00	0.0000	0.00	0.00
15	43-11196 - .14 CFS			0.00		0.00	0.0000	0.00	0.00
16	43-10213 - .15 CFS			0.00		0.00	0.0000	0.00	0.00
17				0.00		0.00	0.0000	0.00	0.00
18				0.00		0.00	0.0000	0.00	0.00
19				0.00		0.00	0.0000	0.00	0.00
20				0.00		0.00	0.0000	0.00	0.00
TOTALS	2930			0.29	0.88			0.29	

REACH = SECTION OF CHANNEL

LENGTH = LENGTH OF REACH, THE CHANNEL CAN BE DIVIDED INTO EQUAL LENGTH REACHES
 OR ACTUAL LENGTHS BETWEEN DELIVERY POINTS

AVE WIDTH = AVERAGE TOP WIDTH OF WATER SURFACE IN REACH

SEEPAGE = SOIL SEEPAGE RATE OF REACH

WORSTELL LOSS = CONVEYANCE LOSS IN REACH BASED ON WORSTELL METHOD

DELIVERY = TOTAL DELIVERIES IN REACH

DELIVERY LEFT = SUM(DELIVERIES OF CURRENT AND REMAINING REACHES)

LOSS FACTOR = WORSTELL LOSS/DELIVERY LEFT

DELIVERY LOSS = SUM(LOSS FACTORS OF CURRENT AND PREVIOUS REACHES) X DELIVERY;
 REPRESENTS THE LOSSES ASSIGNED TO THE DELIVERIES IN THE REACH;
 IF MULTIPLE RIGHTS WITHIN REACH, DELIVERY LOSSES SHOULD BE
 PRORATED BASED ON SIZE OF DELIVERY FOR EACH RIGHT WITHIN REACH

FLOW = TOTAL FLOW AT BEGINNING OF EACH REACH

Reach 1 is that portion of the ditch from First Hollow to Second Hollow. At that Point the Moranville ditch continues on contour roughly South and the irrigated pasture begins at this point.

Reach 2. is the Second Hollow channel which First Hollow water is dumped into to convey water to the P/U for 43-10213 water flows down the hill to eventually reach a ditch that runs southerly along the western border of the recommended P/U for this claim.

Summary Sheet

File Name:

maronville.xls

Water Right No.

A43-11196

Owner:

Source/Trib.

Richard & Wendy Moranville
First Hollow/Clyde Creek

Diversion Name:

maronville Ditch

Location:

Cassia County, 13S 24E 36

Document Description:

Channel cross-section surveys, 9/21/1999 by Kelly Christensen, Cindy Bird, & Scott King

Prepared by:

Cindy Bird

Date:

10/4/99

Maintained ditch:

Not maintained:

Measured Flow:

None cfs

None cfs

Average (Est.) Flow:

0.50 cfs

0.32 cfs

Average Velocity:

0.50 fps

0.30 fps

Slope:

0.0023

0.0023

Average Manning's n:

0.06

0.093

MANNING EQUATION - DATA COLLECTION

Claim Number(s): A43-11196
 Name of Claimant(s): Marionville ditch
 Name of Ditch Canal, or Stream: 1st Hollow ditch
 Date of Measurement: 9/21/99 Data Collected By: CB, SK, KC
 Measurement Location: 1/4 1/4 Section 36 T 13S R 24E

Cross Section Data

Basis: high water mark() maximum capacity()

Note: minimum of five depth or rod readings; first and last must be equal or zero

depth or rod reading	distance from initial point	depth or rod reading	distance from initial point
1. _____	_____	7. _____	_____
2. _____	_____	8. _____	_____
3. _____	_____	9. _____	_____
4. _____	_____	10. _____	_____
5. _____	_____	11. _____	_____
6. _____	_____	12. _____	_____

Slope Data

Basis: high water mark() channel bottom(X) land surface()

Level Readings:	upstream	downstream	
upper stadia	<u>7.39</u>	<u>7.69</u>	
center	<u>6.98</u>	<u>7.33</u>	
lower stadia	<u>6.56</u>	<u>6.97</u>	channel length
stadia difference	(<u>.83</u> + <u>.72</u>) x 100 =		<u>155'</u>

Note: for elevations, the downstream rod reading must be higher than the upstream rod reading

Comments

Are maps and/or photos attached? yes(X) 1 photo.

MANNING'S "n" (roughness coefficient)

BASIC "n" CHANNEL MATERIAL				CHANNEL OBSTRUCTIONS			
earth	.020		(1)	negligible	.000		(1)
rock	.025		(2)	minor	.010		(2)
fine gravel	.024		(3)		.015		(3)
coarse gravel	.028		(4)	appreciable	.020		(4)
<i>Coarse gravel, some large rocks, see attached photos</i>					.030		(5)
				severe	.040		(6)
					.050		(7)
					.060		(8)
SURFACE IRREGULARITY				VEGETATION			
smooth	.000		(1)	low	.005		(1)
minor	.005		(2)		.010		(2)
moderate	.010		(3)	medium	.015		(3)
<i>Cross-sections computed from station information shows some moderate irregularities in the channel.</i>	severe	.020	(4)		.020		(4)
					.025		(5)
				high	.030		(6)
					.040		(7)
					.050		(8)
				very high	.060		(9)
					.075		(10)
					.100		(11)
VARIATIONS IN SIZE AND SHAPE OF CROSS-SECTION				DEGREE OF MEANDERING			
gradual	.000		(1)	minor	1.00		(1)
occasional	.005		(2)	appreciable	1.15		(2)
frequent	.010		(3)	severe	1.30		(3)
	.015		(4)				

$$n = (n_1 + n_2 + n_3 + \dots) M = (.028 + .010 + .005 + .04 + 0.01) 1.49$$

$$n = .093$$

1st Hollow Ditch Survey

9/21/89

S. King
C. Bird
K. Christman p.1

From upstream to &/s near end of ditch / dump
into 2nd Hollow channel.

3:40

Station	Height	
0.0	5.80	
R. Top Bank	3.6	6.25
(RHW)	4.0	6.50
	4.9	6.79
Thalweg	6.0	T- 7.39
		C- 6.98 14°
		B- 6.56
	6.8	6.89
LHW	7.7	6.55
L Top Bank	10	6.36
	14	6.80

Station	Height	
0	5.85	
3.9	6.25	
RHW	5.0	6.48
	6.0	6.75
Thalweg	7.0	T 7.17
		C 6.93 37°
		B 6.74
LHW	8.1	6.60
	10.2	6.37
	13.1	6.61

Moranville. +lee. 9/21/93

C	1 st	Hollow Ditch Survey	P ² /2	
	Sta	Hgt		
	0.0	6.04		
RHW	3.7	6.64		
	4.8	7.09		
Thalweg	5.6	T 7.34		
		C 7.20	117°	
		B 7.05		
	6.3	7.09		
LHW	7.1	6.74		
L Top Bank	8.8	6.36		
	13.0	6.67		

D	0.0	6.45	<u>H ± 4.5</u>	
R Top Bank	2.4	6.41		
~~RHW~~ RHW	3.0	6.81		
~~RHW~~	3.9	7.04		
Thalweg	4.7	T- 7.69		
		C- ~~7.32~~ 7.33	163°	
		B- ~~6.96~~ 6.97		
	5.4	7.25		
LHW	6.5	6.91		
L Top Bank	9.0	6.54		
	12.0	7.1		

Maintained ditch

File Name: maconville.xls
Wtr Rt No: A43-11196

Owner: Richard & Wendy Moranville
Source/Trib: First Hollow/Clyde Creek

Diversion Name: First Hollow

Location: Cassia County, 13S 24E 36

Document Description: Channel cross-section surveys, 9/21/1999 by Kelly Christensen, Cindy Bird, Scott King

Prepared By: Cindy Bird

Date: 11/18/99

Arbitrary Datum: 1000 ft

HI: 4.5 ft

HI Elevation: 995.5 ft

Important Equations:

Manning's: $U = 1.49 \cdot R^{4/3} \cdot S^{1/2}$ / n
Froude No: $U / \sqrt{g \cdot D}$

Abbreviation Legend:

LTB / RTB: Left/Right Top Bank
LHW / RHW: Left/Right High Water Mark
LEW / REW: Left/Right Edge of Water
Thalweg: Bottom of channel

average slope: 0.0023

Constants:

U=velocity
R=hydraulic radius (A/P)
A=area
P=wetted perimeter
S=Slope
Q=flow
D=hydraulic depth=A/T
T=top width
g=gravitational const 32.2 ft/s

Cross-Section Station (ft)	Rod (cent-ft)	Rod (top-ft)	Rod (btm-ft)	Distance (ft)	Elevation (ft)	Description
A	0.0	5.80			994.20	
A	3.6	6.25			993.75	RHW
A	3.8	6.40			993.60	
A	4.0	6.50			993.50	
A	4.9	6.79			993.21	
A	6.0	6.98	7.39	6.56	993.02	Thalweg
A	6.8	6.89		83.00	993.11	
A	7.7	6.55			993.45	LHW
A	9.6	6.40			993.60	
A	10.0	6.36			993.64	LTB
A	14.0	6.80			993.20	

B	0.0	5.85			994.15	
B	3.9	6.25			993.75	
B	4.8	6.42			993.58	
B	5.0	6.48			993.52	RHW
B	6.0	6.75			993.25	
B	7.0	6.93	7.11	6.74	993.07	Thalweg
B	7.4	6.90		37.00	993.10	
B	8.1	6.60			993.40	LHW
B	9.7	6.42			993.58	
B	10.2	6.37			993.63	
B	13.1	6.61			993.39	

HW	HW	Wetted
Depth	Area	Perimeter

-0.15	0.065	
0.10	0.223607	
0.39	0.390	
0.58	0.551	
0.49	0.417	
0.15	0.206	
0.00	0.000	
	1.856071	

sum	1.629	5.909
est. n:	0.06	
Hyd Rad:	0.276 ft	
Est Flow:	0.82 cfs	
Froude no:	0.2	
Velocity:	0.5 ft/sec	

HW	HW	Wetted
Depth	Area	Perimeter

HW Surface (est)	-0.17	
Station (ft)	4.80	993.58
WSE (ft)	9.65	993.58
	0.06	0.0578
	0.33	0.3250
	0.50	0.3535
	0.48	0.2613
	0.18	0.1969
	0.00	0.762
	-0.05	1.560

sum:	1.194375	4.984
est. n:	0.06	
Hyd Rad:	0.240 ft	
Est Flow:	0.55 cfs	
Froude no:	0.2	
Velocity:	0.5 ft/sec	

Cross-Section Station (ft) Rod (cmt-ft) Rod (top-ft) Rod (btm-ft) Distance (ft) Elevation (ft) Arbitrary					Description			HW Surface (est)			HW	HW	Wetted
											Depth	Area	Perimeter
C	0.0	6.04			993.96								
C	3.7	6.64			993.36	RHW							
C	4.8	7.09			992.91								
C	5.6	7.20	7.34	7.05	992.80	Thalweg		3.80	993.31	-0.05	0.3800	1.188	0.808
C	6.3	7.09			992.91			7.30	993.31	0.40	0.3825	0.709	0.873
C	7.1	6.74			993.26	LHW				0.51	0.3000	0.873	0.206
C	7.3	6.69			993.31					0.40	0.0250	0.206	
C	8.8	6.36			993.64					0.05	0.0000		
C	13.0	6.67			993.33	LTB				0.00			
											-0.33		
sum:												1.0875	3.784
												est. n:	0.06
												Hyd Rad:	0.287 ft
												Est Flow:	0.56 cfs
												Froude no:	0.2
												Velocity:	0.5 ft/sec

D	0.0	6.45			993.55	RTB							
D	2.4	6.41			993.59								
D	3.0	6.81			993.19	RHW							
D	3.9	7.04			992.96								
D	4.7	7.33	7.69	6.97	992.67	Thalweg							
D	5.4	7.25			992.75								
D	6.5	6.91			993.09	LHW							
D	7.1	6.83			993.17								
D	9.0	6.54			993.46								
D	12.0	7.10			992.90	LTB							
												sum:	1.0645
												est. n:	4.241
												Hyd Rad:	0.251 ft
												Est Flow:	0.50 cfs
												Froude no:	0.2
												Velocity:	0.5 ft/sec

File Name: maronville.xls
 Wtr Rt No: A43-11196
 Owner: Richard & Wendy Moranville
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 Diversion Name: First Hollow
 Location: Cassia County, 13S 24E 3S
 Document Description: Channel cross-section surveys, 9/21/1999 by Kelly Christensen, Cindy Bird, Scott King
 Prepared By: Cindy Bird
 Date: 11/18/99
 Arbitrary Datum: 1000 ft
 HI: 4.5 ft
 HI Elevation: 995.5 ft

Important Equations:
 Manning's: $U = 1.49 \cdot R^{2/3} \cdot S^{1/2}$
 Froude No: $U / \sqrt{g \cdot D}$

Abbreviation Legend:
 LTB / RTB: Left/Right Top Bank
 LHW / RHW: Left/Right High Water Mark
 LEW / REW: Left/Right Edge of Water
 Thalweg: Bottom of channel
 average slope: 0.0023

Constants:
 U=velocity
 R=hydraulic radius (AP)
 A=area
 P=wetted perimeter
 S=slope
 Q=flow
 D=hydraulic depth=A/T
 T=top width
 g=gravitational const 32.2 ft/s

Cross-Section	Station (ft)	Rod (cnt-ft)	Rod (top-ft)	Rod (btm-ft)	Distance (ft)	Elevation (ft)	Description
A	0.0	5.80				994.20	Arbitrary
A	3.6	6.25				993.75	RHW
A	3.8	6.40				993.60	
A	4.0	6.50				993.50	
A	4.9	6.79				993.21	
A	6.0	6.98	7.39	6.56	83.00	993.02	Thalweg
A	6.8	6.89				993.11	
A	7.7	6.55				993.45	LHW
A	9.6	6.40				993.60	
A	10.0	6.36				993.64	LTB
A	14.0	6.80				993.20	

B	0.0	5.85				994.15	
B	3.9	6.25				993.75	
B	4.8	6.42				993.58	
B	5.0	6.48				993.52	RHW
B	6.0	6.75				993.25	
B	7.0	6.93	7.11	6.74	37.00	993.07	Thalweg
B	7.4	6.90				993.10	
B	8.1	6.60				993.40	LHW
B	9.7	6.42				993.58	
B	10.2	6.37				993.63	
B	13.1	6.61				993.39	

HW Surface (est)	Station (ft)	WSE (ft)	HW	HW	Wetted
			Depth	Area	Perimeter
-0.15					
0.10		0.065			
0.39		0.390			
0.58		0.551			
0.49		0.417			
0.15		0.206			
0.00		0.000			
		1.856071			
sum		1.629		5.909	
est. n:		0.093			
Hyd Rad:		0.276 ft			
Est Flow:		0.53 cfs			
Froude no:		0.1			
Velocity:		0.3 ft/sec			

HW Surface (est)	Station (ft)	WSE (ft)	HW	HW	Wetted
			Depth	Area	Perimeter
-0.17					
0.06		0.0578			
0.33		0.3250		0.209	
0.50		0.3535		1.036	
0.48		0.2613		1.016	
0.18		0.1969		0.401	
0.00				0.762	
-0.05				1.560	
sum:		1.194375		4.984	
est. n:		0.093			
Hyd Rad:		0.240 ft			
Est Flow:		0.35 cfs			
Froude no:		0.1			
Velocity:		0.3 ft/sec			

	HW	HW	Wetted
Depth	Area	Perimeter	
face (est)			
(ft)	WSE (ft)		
0	993.31	-0.05	1.188
0	993.31	0.40	0.3600
0	993.31	0.51	0.3825
		0.40	0.3000
		0.05	0.0250
		0.00	0.0000
		-0.33	
sum:		1.0875	3.784
	est. n:	0.093	
	Hyd Rad:	0.287 ft	
	Est Flow:	0.36 cfs	
	Froude no:	0.1	
	Velocity:	0.3 ft/sec	

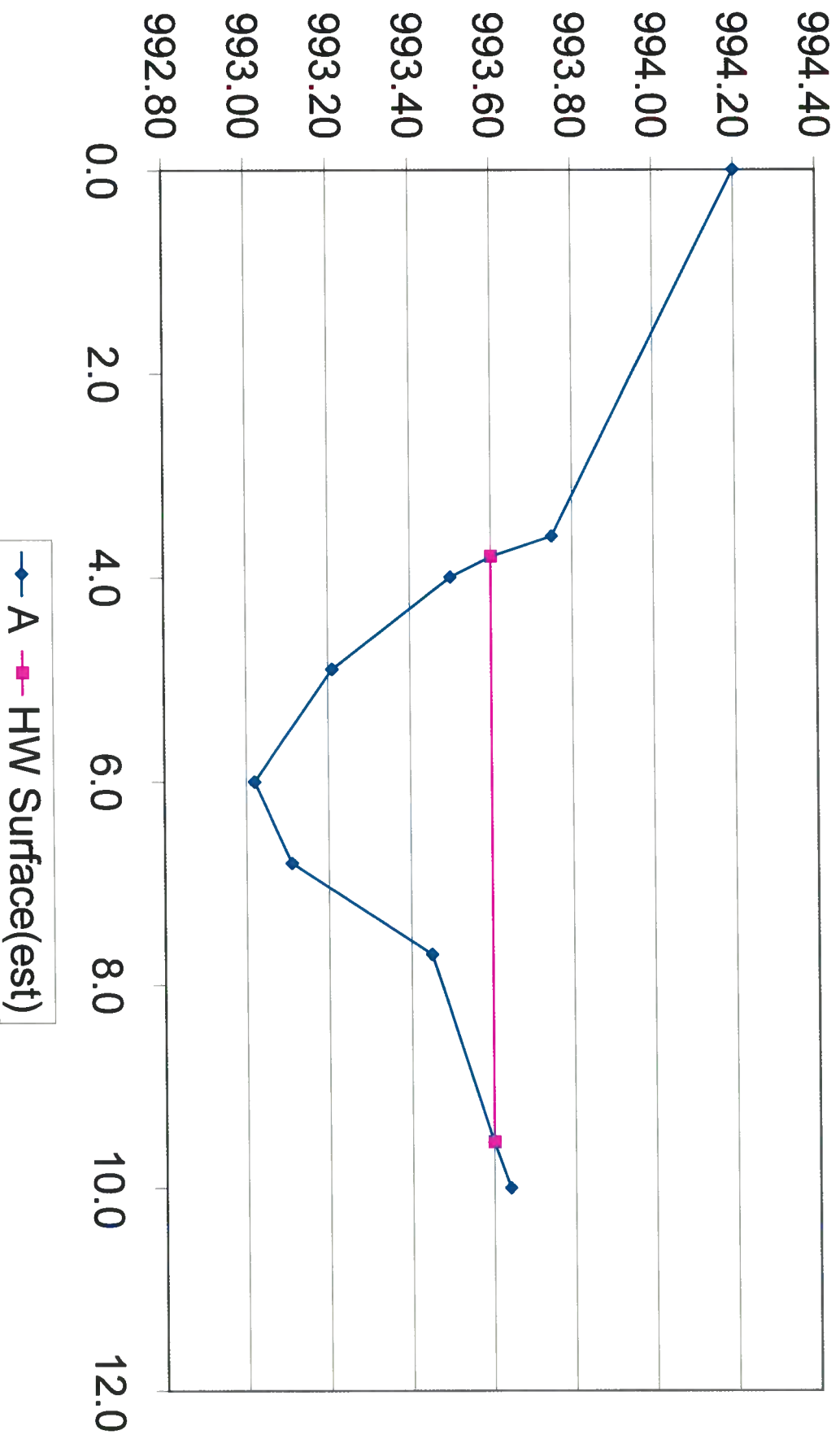
HW	HW	Wetted
Depth	Area	Perimeter
-0.05		1.168
0.40	0.3800	0.808
0.51	0.3825	0.709
0.40	0.3000	0.873
0.05	0.0250	0.206
0.00	0.0000	
-0.33		
sum:	1.0875	3.764
est. n:		0.093
Hyd Rad:		0.287 ft
Est Flow:		0.36 cfs
Froude no:		0.1
Velocity:		0.3 ft/sec
-0.42		
-0.02		0.929
0.21	0.1575	0.851
0.50	0.4500	0.705
0.42	0.3570	1.151
0.08	0.1000	0.605
0.00		
sum:	1.0645	4.241
est. n:		0.093

3-9-11

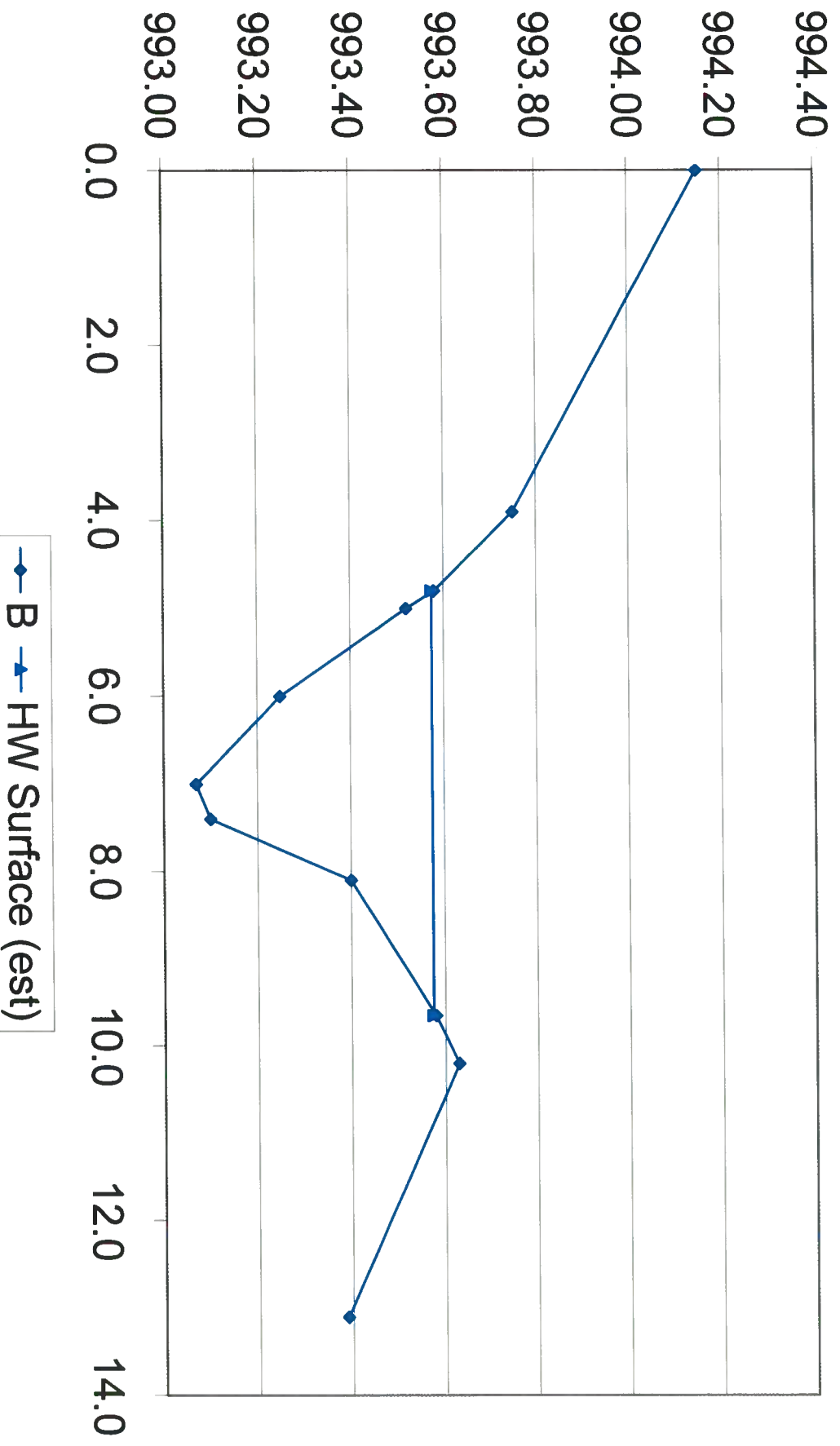
Instrument distance varied to produce this table-->>> for determining most likely slope.	Inst Dist Segment Slope			
	from ditch	ab	bc	cd
0	-0.010	0.004	0.003	
10	-0.010	0.004	0.003	
15	-0.010	0.005	0.003	
20	-0.010	0.005	0.003	
25	-0.010	0.006	0.002	

max slope = 0.24% if inst 25 ft from ditch
min slope = 0.23% if inst 0 ft from ditch
likely slope = 0.23% if inst 10 ft from ditch
Most likely instrument distance from ditch selected to be 10 feet
based on above analysis and personal recollection of survey procedure

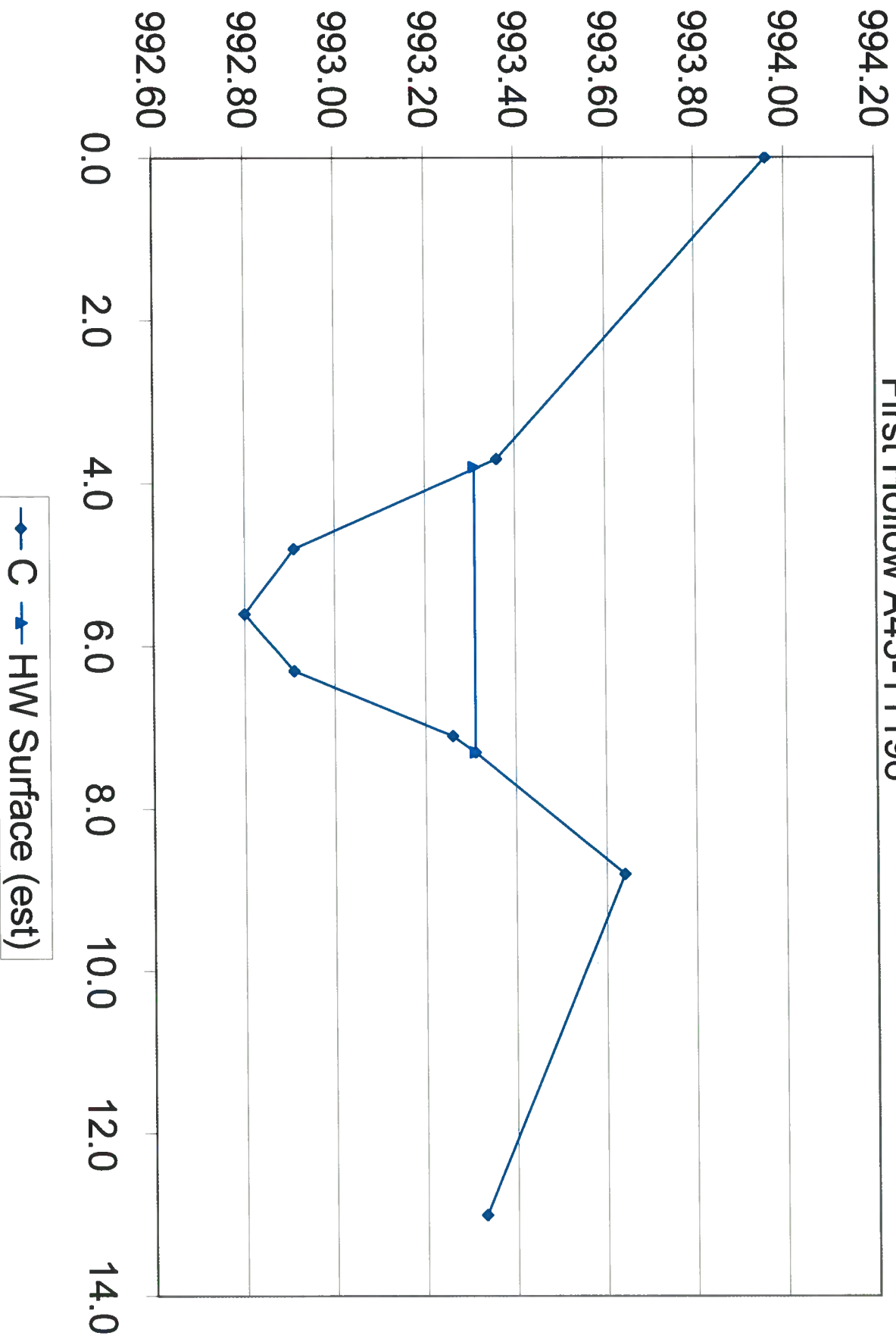
First Hollow A43-11196



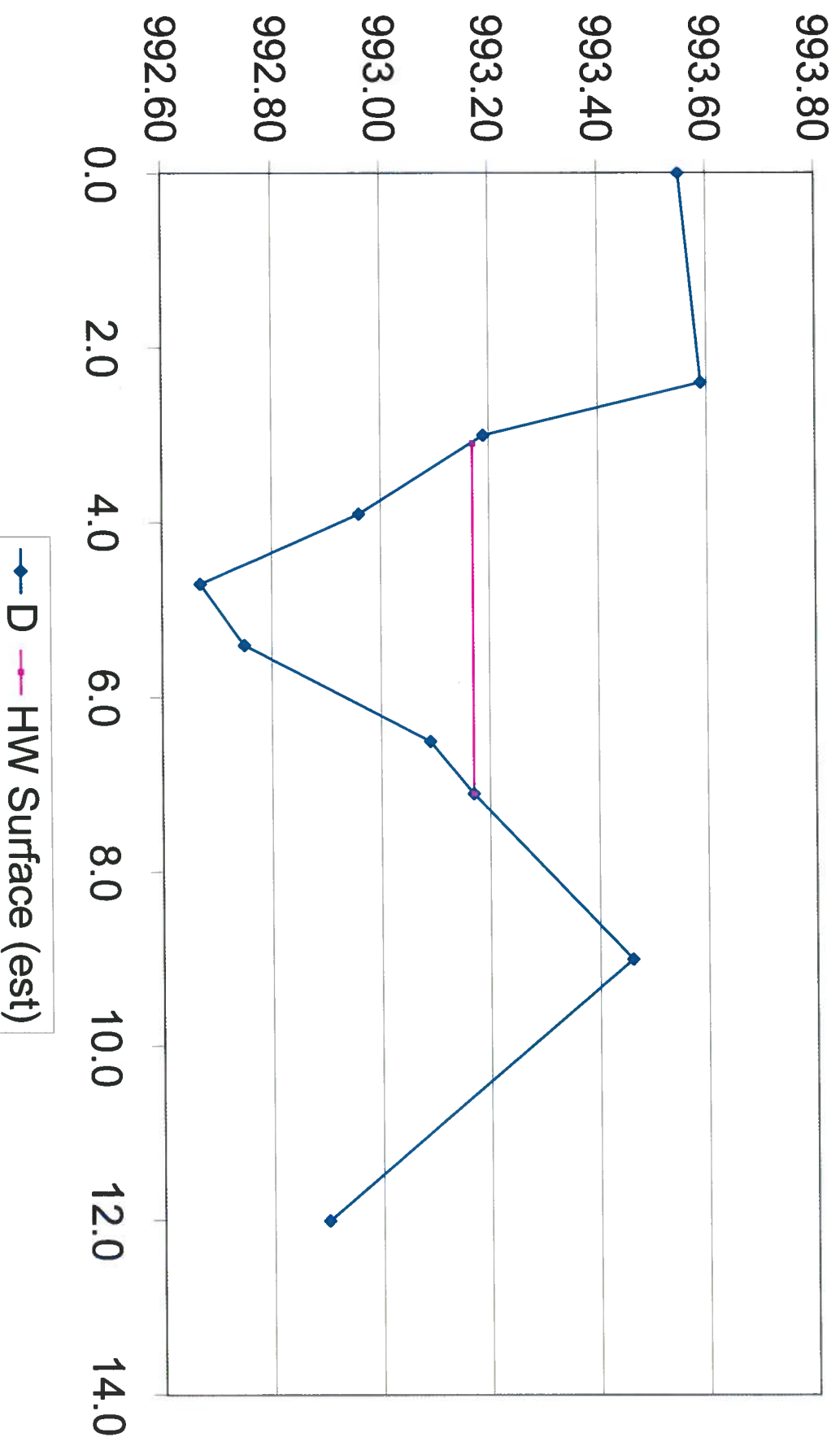
First Hollow A43-11196



First Hollow A43-11196

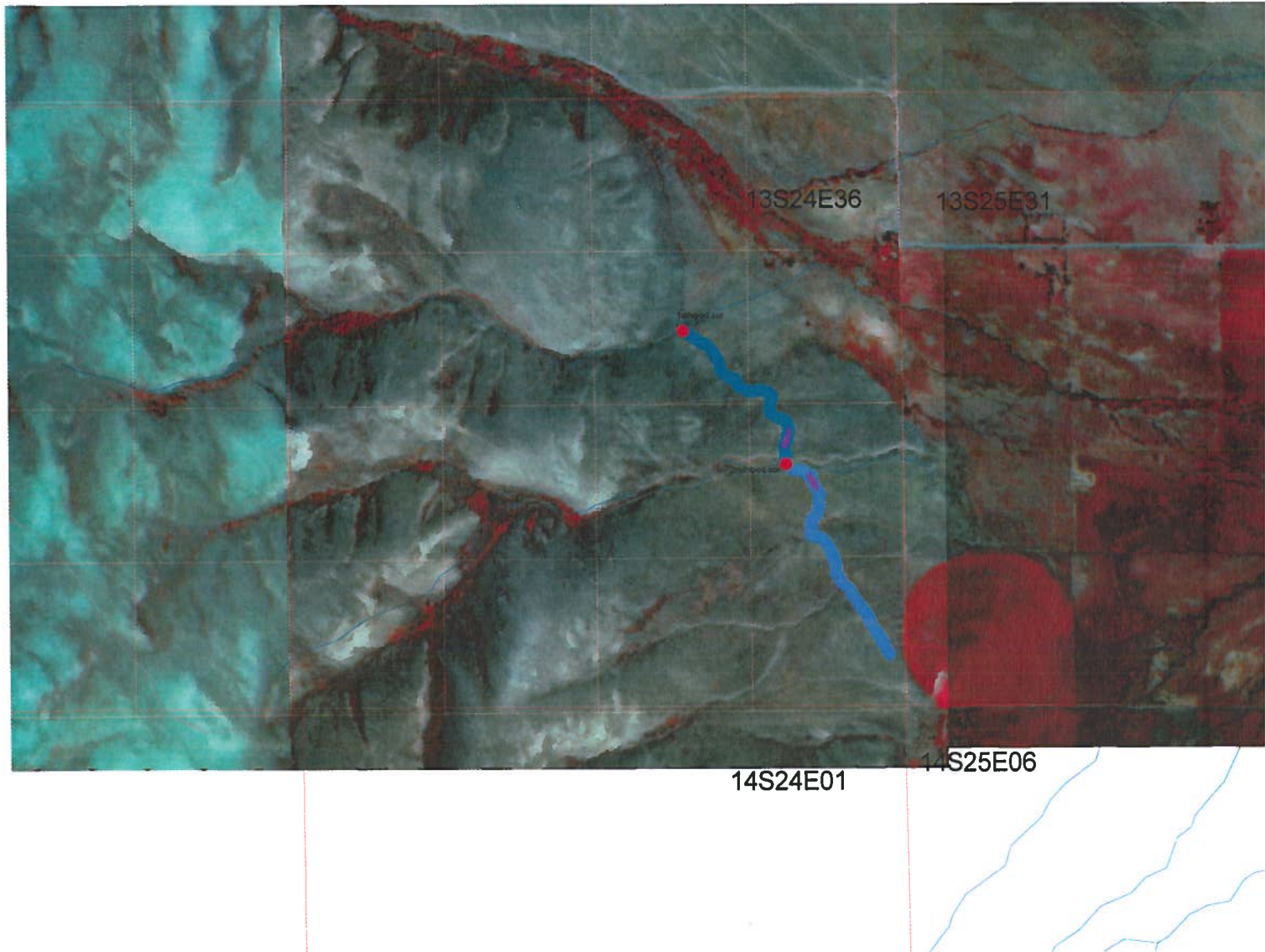


First Hollow A43-11196





1st & 2nd Hollow Ditches Basin 43



Summary Sheet

File Name:

maronville_2ndhollow.xls

Water Right No.

A43-11196

Owner:

Richard & Wendy Moranville

Source/Trib.

Second Hollow/Clyde Creek

Diversion Name:

2nd hollow Ditch

Location:

Cassia County, 13S 24E 36

Document Description:

Channel cross-section surveys, 9/21/1999 by Kelly Christensen, Cindy Bird, & Scott King

Prepared by:

Cindy Bird

Date:

12/6/99

Maintained ditch:

Not maintained:

Measured Flow:

None cfs

None cfs

Average (Est.) Flow:

2.04 cfs

1.13 cfs

Average Velocity:

1.40 fps

0.08 fps

Slope:

0.015

0.015

Average Manning's n:

0.05

0.09

MANNING EQUATION - DATA COLLECTION

Claim Number(s): A43-11196
 Name of Claimant(s): Marionville ditch
 Name of Ditch, Canal, or Stream: 2nd Hollow ditch
 Date of Measurement: 9/21/99 Data Collected By: SK, CB, KC
 Measurement Location: 1/4 1/4 Section T R

Cross Section Data

Basis: high water mark() maximum capacity()

Note: minimum of five depth or rod readings; first and last must be equal or zero

depth or rod reading	distance from initial point	depth or rod reading	distance from initial point
1. <u> </u>	<u> </u>	7. <u> </u>	<u> </u>
2. <u> </u>	<u> </u>	8. <u> </u>	<u> </u>
3. <u> </u>	<u> </u>	9. <u> </u>	<u> </u>
4. <u> </u>	<u> </u>	10. <u> </u>	<u> </u>
5. <u> </u>	<u> </u>	11. <u> </u>	<u> </u>
6. <u> </u>	<u> </u>	12. <u> </u>	<u> </u>

Slope Data

Basis: high water mark() channel bottom(☒) land surface()

Level Readings:	upstream	downstream	
upper stadia	<u>6.59</u>	<u>8.85</u>	
center	<u>6.05</u>	<u>8.55</u>	
lower stadia	<u>5.53</u>	<u>8.23</u>	channel length
stadia difference	(<u>1.06</u> + <u>.62</u>) x 100 =		<u>168'</u>

Note: for elevations, the downstream rod reading must be higher than the upstream rod reading

Comments

Are maps and/or photos attached? yes(☒) 3 photos

MANNING'S "n" (roughness coefficient)

BASIC "n" CHANNEL MATERIAL				CHANNEL OBSTRUCTIONS			
earth	.020		(1)	negligible	.000		(1)
rock	.025		(2)	minor	.010		(2)
fine gravel	.024		(3)		.015		(3)
coarse gravel	.028		(4)	appreciable	.020		(4)
					.030		(5)
				severe	.040		(6)
					.050		(7)
					.060		(8)
SURFACE IRREGULARITY				VEGETATION			
smooth	.000		(1)	low	.005		(1)
minor	.005		(2)		.010		(2)
moderate	.010		(3)	medium	.015		(3)
severe	.020		(4)		.020		(4)
					.025		(5)
				high	.030		(6)
					.040		(7)
					.050		(8)
				very high	.060		(9)
					.075		(10)
					.100		(11)
VARIATIONS IN SIZE AND SHAPE OF CROSS-SECTION				DEGREE OF MEANDERING			
gradual	.000		(1)	minor	1.00		(1)
occasional	.005		(2)	appreciable	1.15		(2)
frequent	.010		(3)	severe	1.30		(3)
	.015		(4)				

$$n = 0.05$$

$$\text{photo 3: } n = 0.09.$$

File Name: maronville_2ndhollow.xls
Wtr Rt No: A43-11196
Owner: Richard & Wendy Moranville
Source/Trib: Second Hollow/Clyde Creek
Diversion Name: Second Hollow
Location: Cassia County, 13S 24E 36
Document Description: Channel cross-section surveys, 9/21/1999 by Kelly Christensen, Cindy Bird, Scott King
Prepared By: Cindy Bird
Date: 11/23/99
Arbitrary Datum: 1000 ft
HI: 4.73 ft
HI Elevation: 995.27 ft

Maintained Ditch

Important Equations:

Manning's: $U = 1.49 \cdot R^{2/3} \cdot S^{0.5} / n$
Froude No: $U / \sqrt{g \cdot D}$

Abbreviation Legend:

LTB / RTB: Left/Right Top Bank
LHW / RHW: Left/Right High Water Mark
LEW / REW: Left/Right Edge of Water
Thalweg: Bottom of channel
average slope: 0.015 1.50%

Constants:

U=velocity
R=hydraulic radius (A/P)
A=area
P=wetted perimeter
S=Slope
Q=flow
D=hydraulic depth=A/T
T=top width
g=gravitational const 32.2 ft/s

Cross-Section					Arbitrary	Description		
Station (ft)	Rod (cntr-ft)	Rod (top-ft)	Rod (btm-ft)	Distance (ft)	Elevation (ft)			
A	0.0	4.74			995.26			
A	5.1	5.44			994.56		RHW	
A	5.2	5.56			994.44			
A	5.9	6.35			993.65			
A	6.2	6.03			993.60			
A	6.8	6.05	5.53	106.00	993.95		Thalweg	
A	7.9	5.99			994.01			
A	9.7	5.69			994.31		LHW	
A	11.2	5.56			994.44			
A	12.0	5.50			994.50			

HW Surface (est)			
Station (ft)	WSE (ft)		
5.22	994.44		
10.95	994.44		
0.01			
0.78			
0.417			
1.101635			
0.83			
0.48			
0.218			
1.824829			
0.42			
0.361			
1.505623			
0.13			
0.181			
-0.01			
sum	1.492	6.486	
est. n:	0.05		
Hyd Rad:	0.230 ft		
Est Flow:	2.04 cfs		
Froude no:	0.5		
Velocity:	1.4 ft/sec		

HW Surface (est)			
Station (ft)	WSE (ft)		
3.72	993.83		
9.95	993.83		
-0.22			
0.25			
0.46			
0.4323			
0.59			
0.5265			
0.42			
0.3943			
0.73			
1.1238			
0.00			
sum:	2.6483	6.771	
est. n:	0.05		
Hyd Rad:	0.391 ft		
Est Flow:	5.16 cfs		
Froude no:	0.5		
Velocity:	1.9 ft/sec		

Cross-Section					Arbitrary	Description		
Station (ft)	Rod (cntr-ft)	Rod (top-ft)	Rod (btm-ft)	Distance (ft)	Elevation (ft)			
B	0.0	5.48			994.52			
B	3.6	5.95			994.05			
B	3.9	6.34			993.58		RHW	
B	5.0	6.63			993.37			
B	5.8	6.76			993.24		Thalweg	
B	6.8	6.59			993.41			
B	7.7	6.25			993.10			
B	9.9	6.17			993.83			
B	10.7	5.93			994.07		LHW	
B	13.0	6.26			993.58			

File Name: maronville_2ndhollow.xls

Wtr Rt No: A43-11196

Owner: Richard & Wendy Moranville

Source/Trib: Second Hollow/Clyde Creek

Diversion Name: Second Hollow

Location: Cassia County, 13S 24E 36

Document Description: Channel cross-section surveys, 9/21/1998 by Kelly Christensen, Cindy Bird, Scott King

Prepared By: Cindy Bird

Date: 11/23/99

Arbitrary Datum: 1000 ft

HI: 4.73 ft

HI Elevation: 995.27 ft

Important Equations:

Manning's: $U = 1.49 \cdot R^{2/3} \cdot S^{1/2} / n$
Froude No: $U / \sqrt{g \cdot D}$

Abbreviation Legend:

LTB / RTB: Left/Right Top Bank
LHW / RHW: Left/Right High Water Mark
LEW / REW: Left/Right Edge of Water
Thalweg: Bottom of channel

average slope: 0.015 1.50%

Constants:

U=velocity
R=hydraulic radius (A/P)
A=area
P=wetted perimeter
S=Slope
Q=flow
D=hydraulic depth=A/T
T=top width
g=gravitational const 32.2 ft/s

HW Depth

HW Wetted Area Perimeter

Cross-Section	Station (ft)	Rod (cmt-ft)	Rod (top-ft)	Rod (btm-ft)	Distance (ft)	Elevation (ft)	Arbitrary	Description
A	0.0	4.74				995.26		RHW
A	5.1	5.44				994.56		
A'	5.2	5.56				994.44		
A'	5.9	6.35				993.65		
A	6.2	6.03				993.60		
A	6.8	6.05	6.59	5.53	106.00	993.95		Thalweg
A	7.9	5.99				994.01		
A	9.7	5.69				994.31		LHW
A'	11.2	5.56				994.44		
A	12.0	5.50				994.50		

sum

est. n: 1.492 6.486
Hyd Rad: 0.230 ft
Est Flow: 1.13 cfs
Froude no: 0.3
Velocity: 0.8 ft/sec

HW Depth

HW Wetted Area Perimeter

B	0.0	5.48				994.52		
B	3.6	5.95				994.05		
B	3.9	6.34				993.58		RHW
B	5.0	6.63				993.37		
B	5.8	6.76	7.14	6.4	74.00	993.24		Thalweg
B	6.8	6.59				993.41		
B	7.7	6.25				993.10		
B'	9.9	6.17				993.83		
B	10.7	5.93				994.07		LHW
B	13.0	6.26				993.58		

sum:

est. n: 2.6483 6.771
Hyd Rad: 0.391 ft
Est Flow: 2.86 cfs
Froude no: 0.3
Velocity: 1.1 ft/sec

Cross-Section Station (ft) Rod (cmt-ft) Rod (top-ft) Rod (btm-ft) Distance (ft) Arbitrary Elevation (ft) Description

C	0.0	5.78			994.22	
C	2.5	6.39			993.61	RHW
C	2.8	6.65			993.35	
C	3.8	7.18			992.82	
C	4.5	7.36	7.53	7.19	992.64	Thalweg
C	5.4	7.30			992.70	
C	6.3	6.85			993.31	LHW
C	11.0	6.26			993.74	
C	14.0	6.83			993.17	
sum:						
						2.3755
						4.241
						est. n:
						0.09
						Hyd Rad:
						0.560 ft
						Est Flow:
						3.26 cfs
						Froude no:
						0.4
						Velocity:
						1.4 ft/sec

HW Surface (est)
Station (ft) WSE (ft)
2.70 993.46
7.80 993.46

HW Depth
-0.15
0.11
0.64
0.82
0.76
0.15
-0.28

HW Area
0.397
1.132
0.0715
0.5440
0.6560
0.902
1.087

Wetted Perimeter
0.397
1.132
0.0715
0.5440
0.6560
0.902
1.087

D	0.0	6.68			993.32	
D	3.3	7.12			992.88	RTB
D	3.9	7.50			992.50	RHW
D	5.3	7.96			992.04	
D	6.0	7.95	8.11	7.79	992.05	Thalweg
D	7.6	7.79			992.21	
D	8.2	7.50			992.50	LHW
D	10.8	7.13			993.17	LTB
D	14.1	7.50			992.50	
sum:						
						1.4880
						est. n:
						0.09
						Hyd Rad:
						0.335 ft
						Est Flow:
						1.45 cfs
						Froude no:
						0.3
						Velocity:
						1.0 ft/sec

HW Surface (est)
Station (ft) WSE (ft)
3.90 992.50
8.20 992.50

HW Depth
-0.38
0.00
0.46
0.45
0.29
0.00
-0.67

HW Area
1.474
0.700
0.5290
0.4950
0.4640
0.0000
4.448

Wetted Perimeter
1.474
0.700
0.5290
0.4950
0.4640
0.0000
4.448

E	0.0	7.16			992.84	
E	2.0	7.39			992.61	
E	3.8	7.65			992.35	RTB
E	4.4	7.96			992.04	RHW
E	4.9	8.37			991.63	
E	5.9	8.55	8.85	8.23	991.45	Thalweg
E	6.9	8.35			991.65	
E	7.5	8.32			991.68	
E	7.7	7.19			993.17	LHW
E	10.0	7.70			992.30	LTB
E	14.0	8.06			991.94	
sum:						
						3.6370
						est. n:
						0.09
						Hyd Rad:
						0.500 ft
						Est Flow:
						4.63 cfs
						Froude no:
						0.28
						Velocity:
						1.3 ft/sec

HW Surface (est)
Station (ft) WSE (ft)
2.00 992.61
7.65 992.61

HW Depth
0.00
0.25
0.57
0.98
1.15
0.96
-0.56

HW Area
1.819
0.675
0.3060
0.3108
1.016
0.7640
7.281

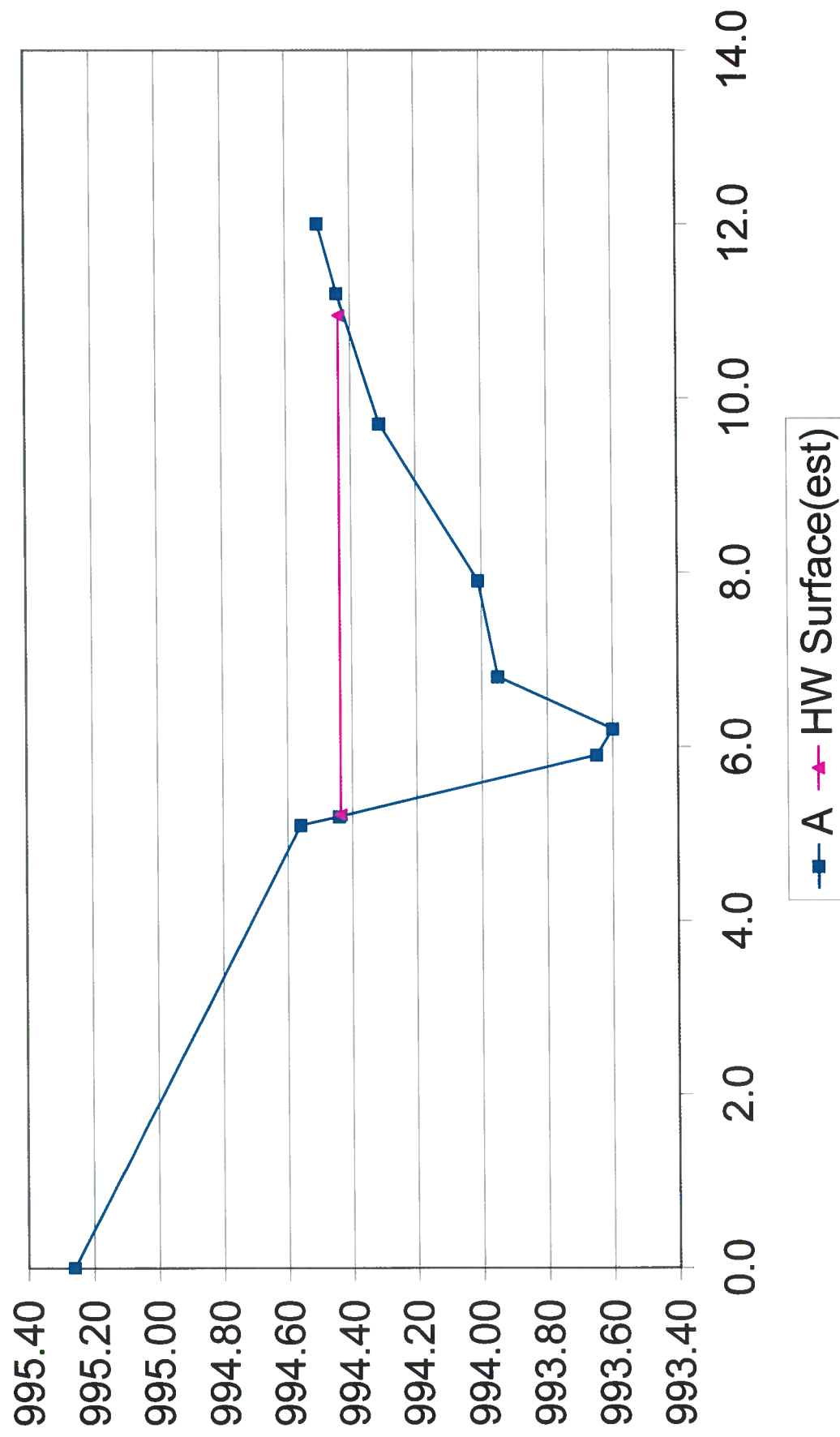
Wetted Perimeter
1.819
0.675
0.3060
0.3108
1.016
0.7640
7.281

Second Hollow Ditch Page 3

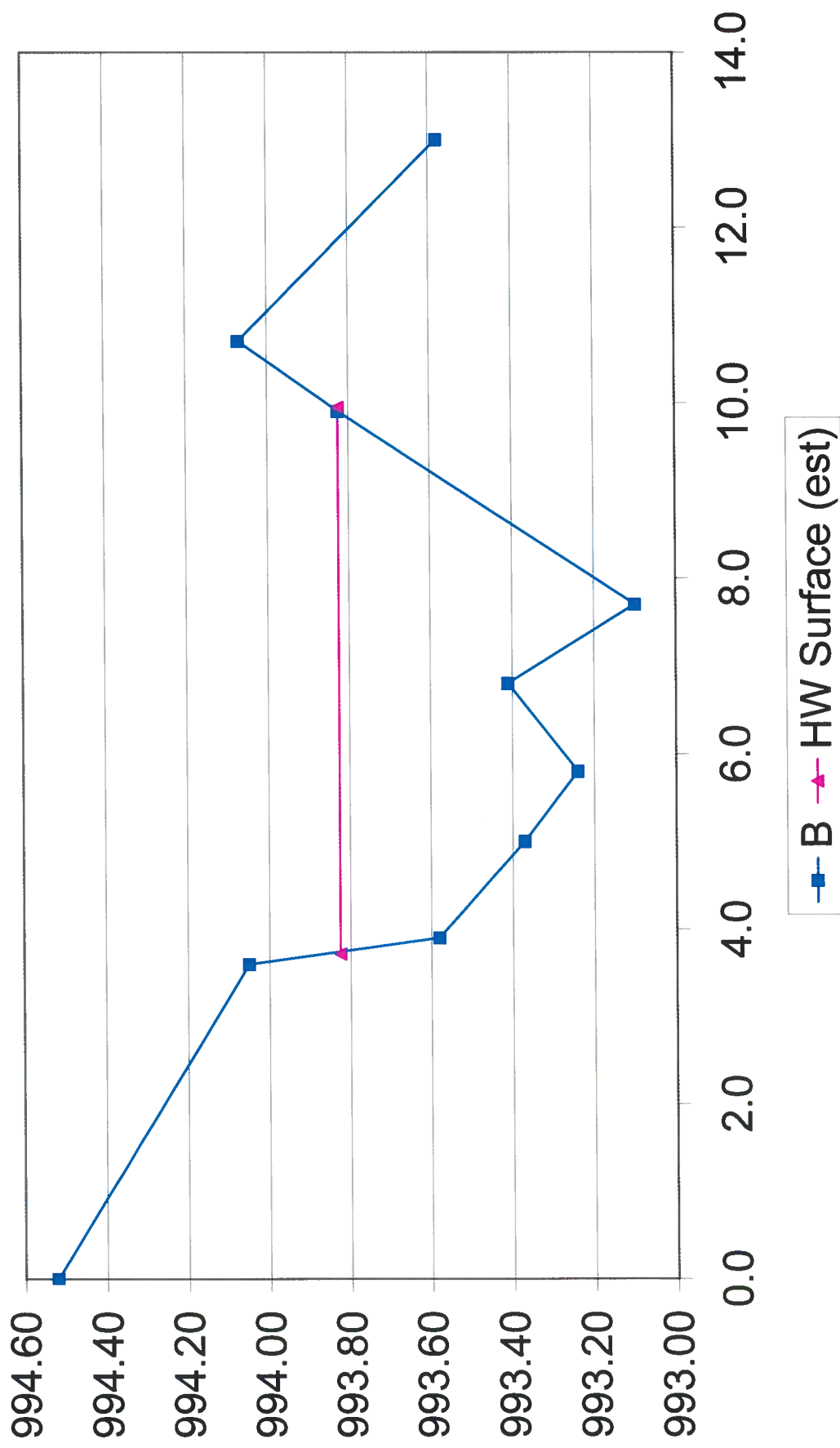
FROM	TO	if inst. 0 ft from ditch		if instrument:		10 ft from ditch		Inst Dist from ditch	Segment Slope		cd	de
		D Elev (ft)	Dist (ft)	SLOPE	Dist (ft)	SLOPE	Instrument distance varied to produce this table-->>> for determining most likely slope.		ab	bc		
A	B	0.71	32.00	2.2%	32.2	2.2%	Instrument	0	0.022	0.015	0.009	0.020
B	C	0.60	40.00	1.5%	40.8	1.5%	distance varied	10	0.022	0.015	0.009	0.019
C	D	0.59	66.00	0.9%	62.9	0.9%	to produce	20	0.022	0.014	0.011	0.018
D	E	0.60	30.00	2.0%	30.8	1.9%	this table-->>> for determining most likely slope.	30	0.021	0.012	0.022	0.014
A	D	2.50	168.00	1.49%	166.7	1.50%						
Instrument	A	106.00										
Instrument	B	74.00										
Instrument	C	34.00										
Instrument	D	32.00										
Instrument	E	62.00										

max slope = 1.60% if inst 30 ft from ditch
min slope = 1.49% if inst 0 ft from ditch
likely slope = 1.50% if inst 10 ft from ditch
Most likely instrument distance from ditch selected to be 10 feet
based on above analysis and personal recollection of survey procedure.

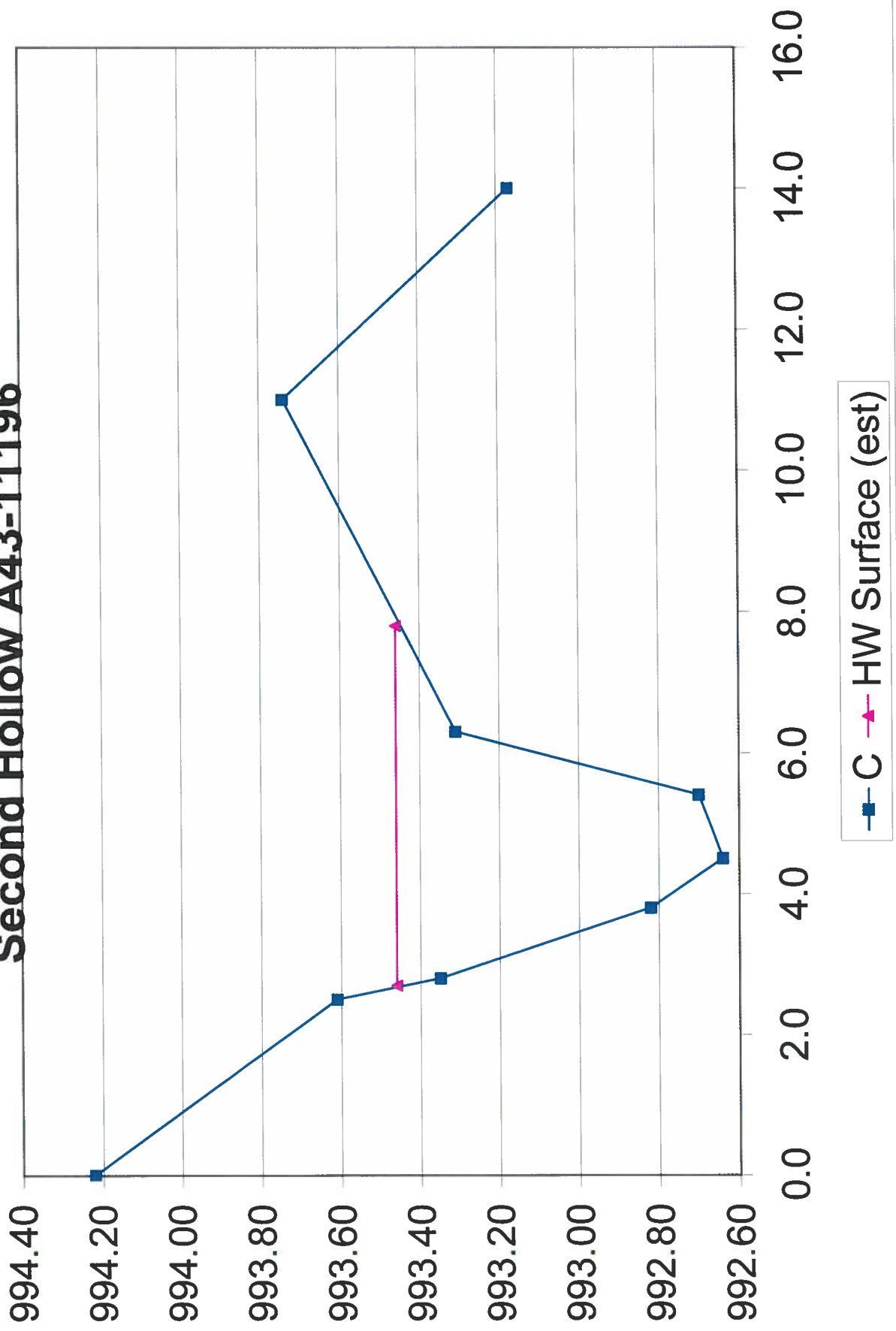
Second Hollow A43-11196



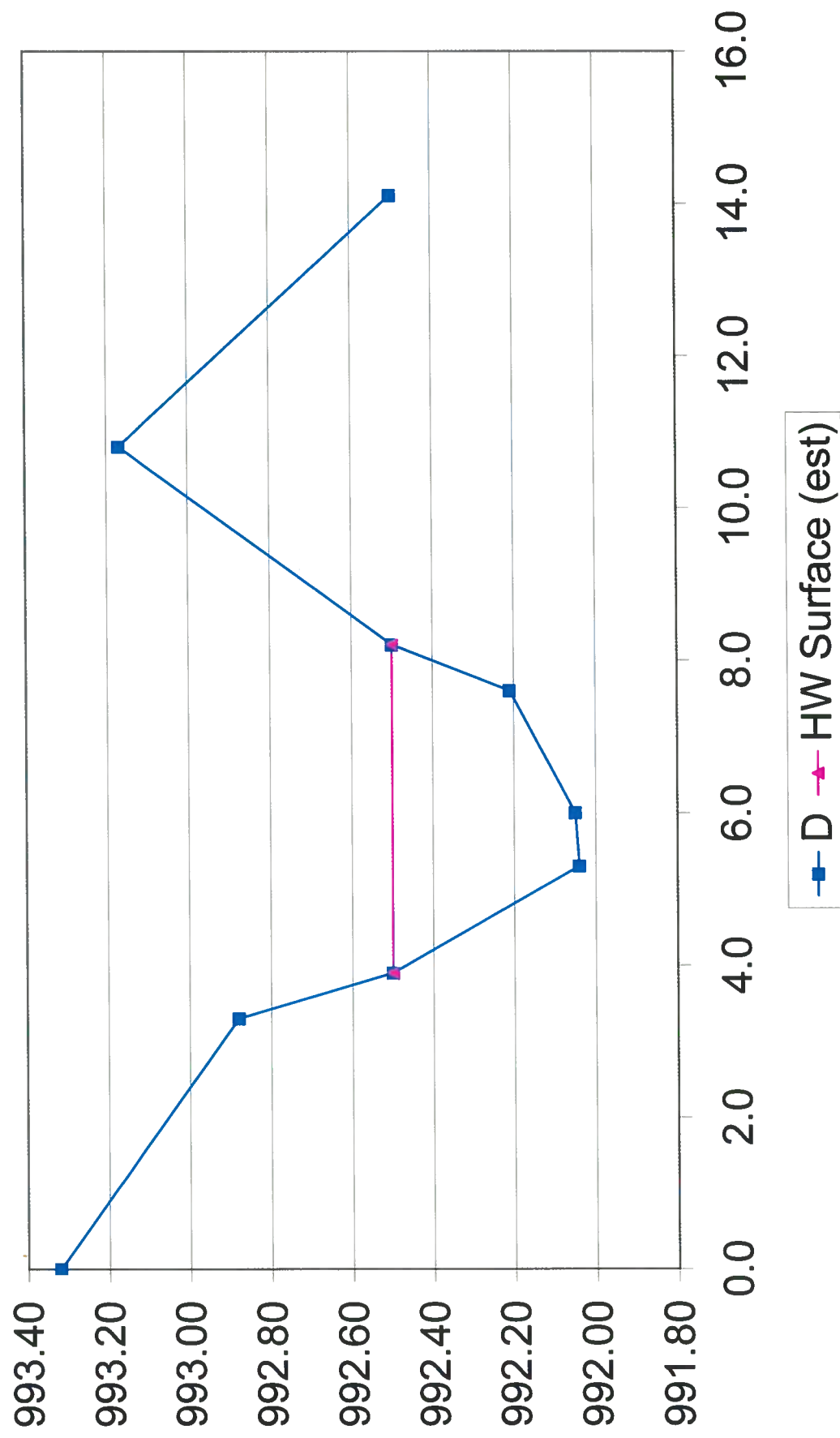
Second Hollow A43-11196



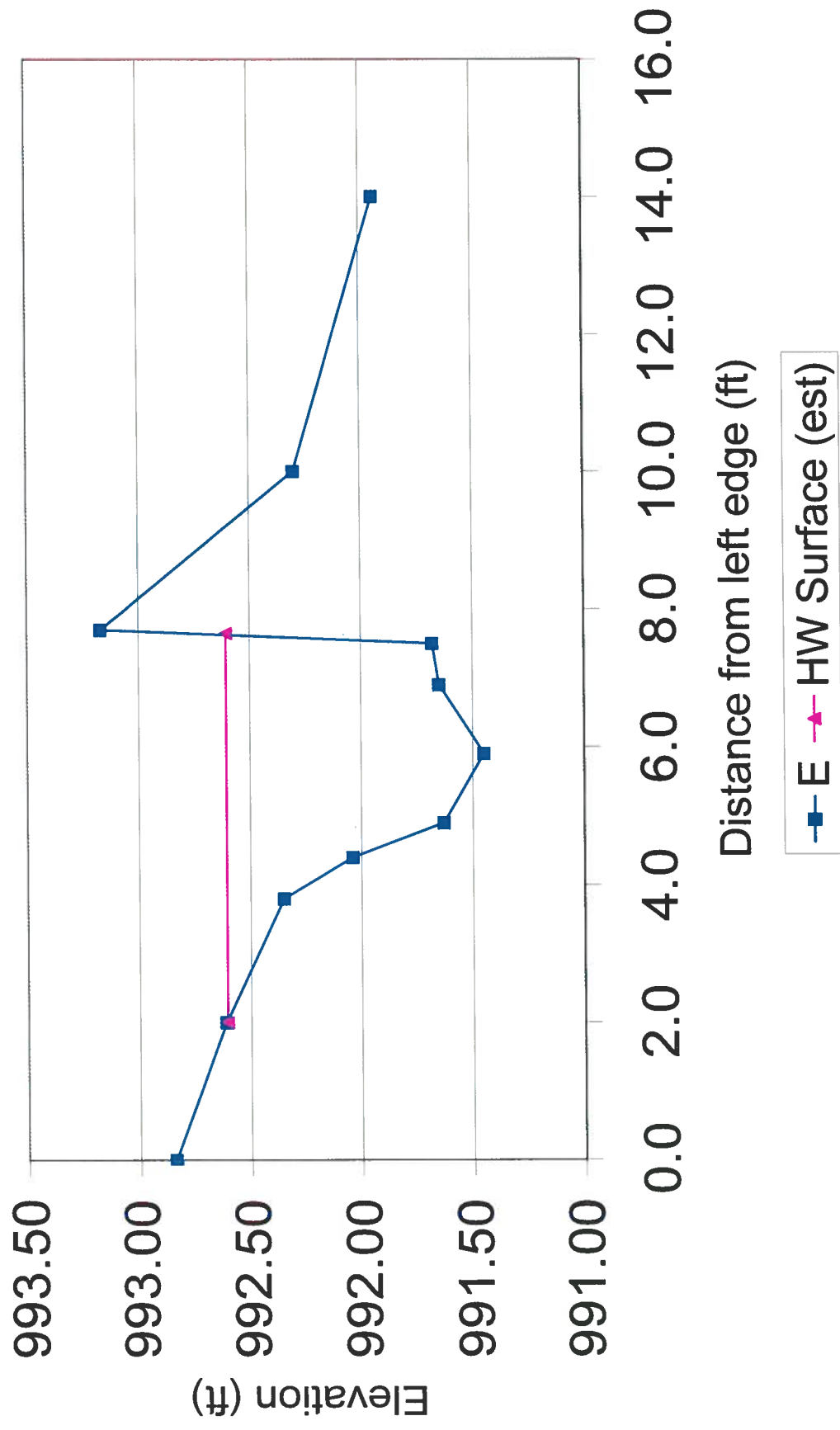
Second Hollow A43-11196



Second Hollow A43-11196



Second Hollow A43-11196



Maronville ditch.

A 43-11/96

2nd Hollow Ditch

9/21/99
S. King
C. Bird
K. Christensen
p 1/3
T Cindy B.
S. King.

upstream 4.73' = Height of Instrument

(A)

	Station	height	
	0.0	4.74	
RHW	5.1	5.44	
	6.2	6.03	
	6.8	T 6.59	
		C 6.05	250
		B 4.53	5.53 CB 11/23/99
	7.9	5.99	
LHW	9.7	5.69	
	12.0	5.50	

(B)

	0.0	5.48	
	3.6	5.95	
RHW	3.9	6.34	
	5.0	6.63	
Thelwes	5.8	T 7.14	
		C 6.76	
		B 6.40	
	6.8	6.59	
LHW	7.7	6.25	
	10.7	5.93	
	13.0	6.26	

p2/3

manville p2/3

© Station Height

0.0 5.78

RHW 2.5 6.39

2.8 6.62

3.8 7.18

Thalweg 4.5 T 7.53

C ~~7.35~~ 7.36

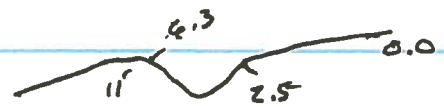
B ~~7.18~~ 7.19

5.4 7.30

LHW 6.3 6.85

11.0 6.26

14.0 6.83



Typical

281°

① 0.0 6.68

RHigh BK 3.3 7.12

RHW 3.9 7.50

5.3 7.96

Thalweg 6.0 T 7.905 8.11

C 7.95 12.5°

B 7.79

7.6 7.79

LHW 8.2 7.50

Top L. Bank 10.8 7.13

14.1 7.50

Manorville

p3/3

2nd Hollow Ditch Survey

②

Station

height

0.0

7.16

R. Top Bank

3.8

7.65

RHW

4.4

7.96

4.9

8.37

thalweg

5.9

T 8.85

M 8.55

38°

B 8.23

6.9

8.35

7.5

8.32

LHW

7.7

8.19

L Top Bank

10

7.70

14

8.06

3:22 PM

8.85



Photo #1



Photo #2



Photo #3

BASIC "n" - CHANNEL MATERIAL

choose the material type that best represents the channel being analyzed.

SURFACE IRREGULARITY

- smooth - for surfaces comparable to the best obtainable for the materials involved
- minor - good dredged channels; slightly eroded or scoured side slopes of canals or drainage channels
- moderate - fair to poor dredged channels; moderately sloughed or eroded side slopes of canals or drainage channels
- severe - badly sloughed banks of natural channels; badly eroded or sloughed sides of canals or drainage channels; unshaped, jagged and irregular surfaces of channels excavated in rock

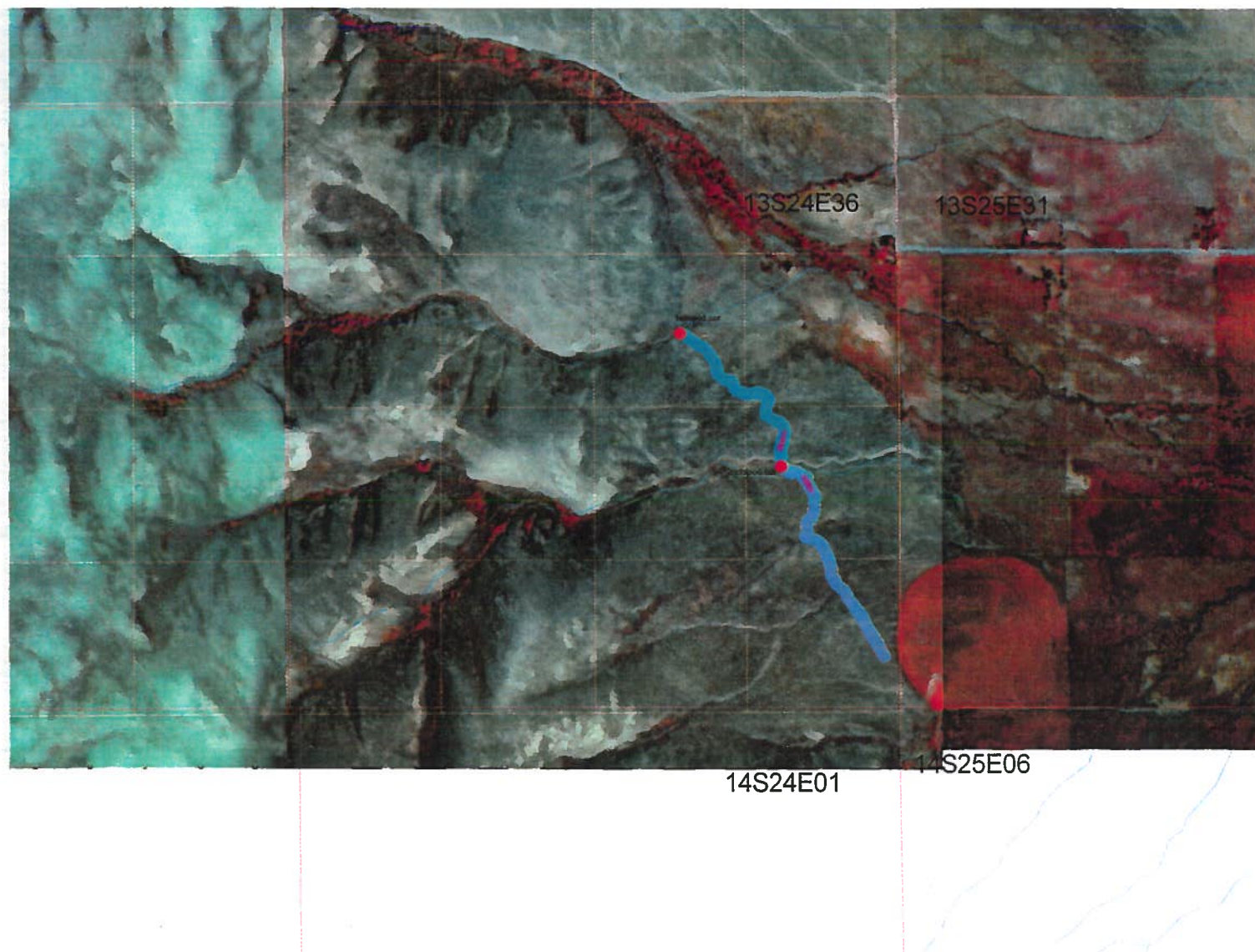
VARIATIONS IN SIZE AND SHAPE OF CROSS-SECTION

- gradual - changes in size or shape occurring gradually
- occasional - large and small sections alternating occasionally or shape changes causing occasional shifting of main flow from side to side
- frequent - large and small sections alternating frequently or shape changes causing frequent shifting of main flow from side to side

CHANNEL OBSTRUCTIONS

In judging the relative effect of obstructions, consider: the degree to which the obstructions occupy or reduce the average cross sectional area at various stages; the character of obstructions, (sharp-edged or angular objects induce greater turbulence than curved, smooth-surfaced objects); the position and spacing of obstructions transversely and longitudinally in the reach under consideration.

1st & 2nd Hollow Ditches Basin 43



0.5 0 0.5 1 Miles

43-10213 and 43-11196 mannings measurement location south of the point where the main ditch crosses the Second Hollow channel. The measurements were made starting in the north and going south. Four cross sections were made. Measurements made on 08-17-1999 by Scott King, Cindy Bird & Kelly K Christensen.



First Mannings measurement



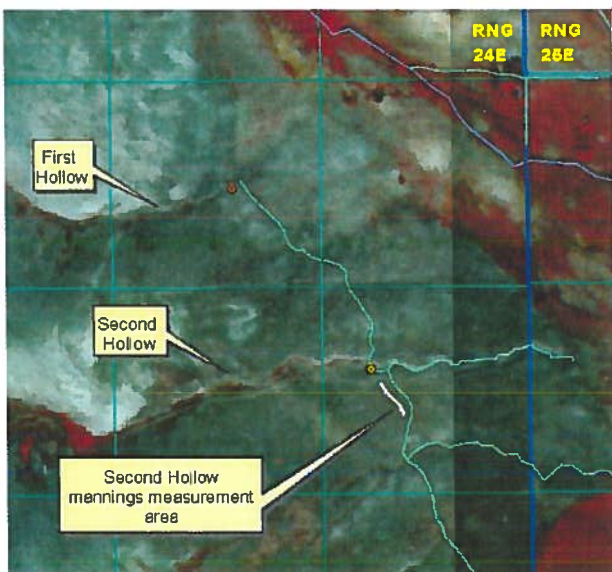
Second Mannings measurement



Third Mannings measurement

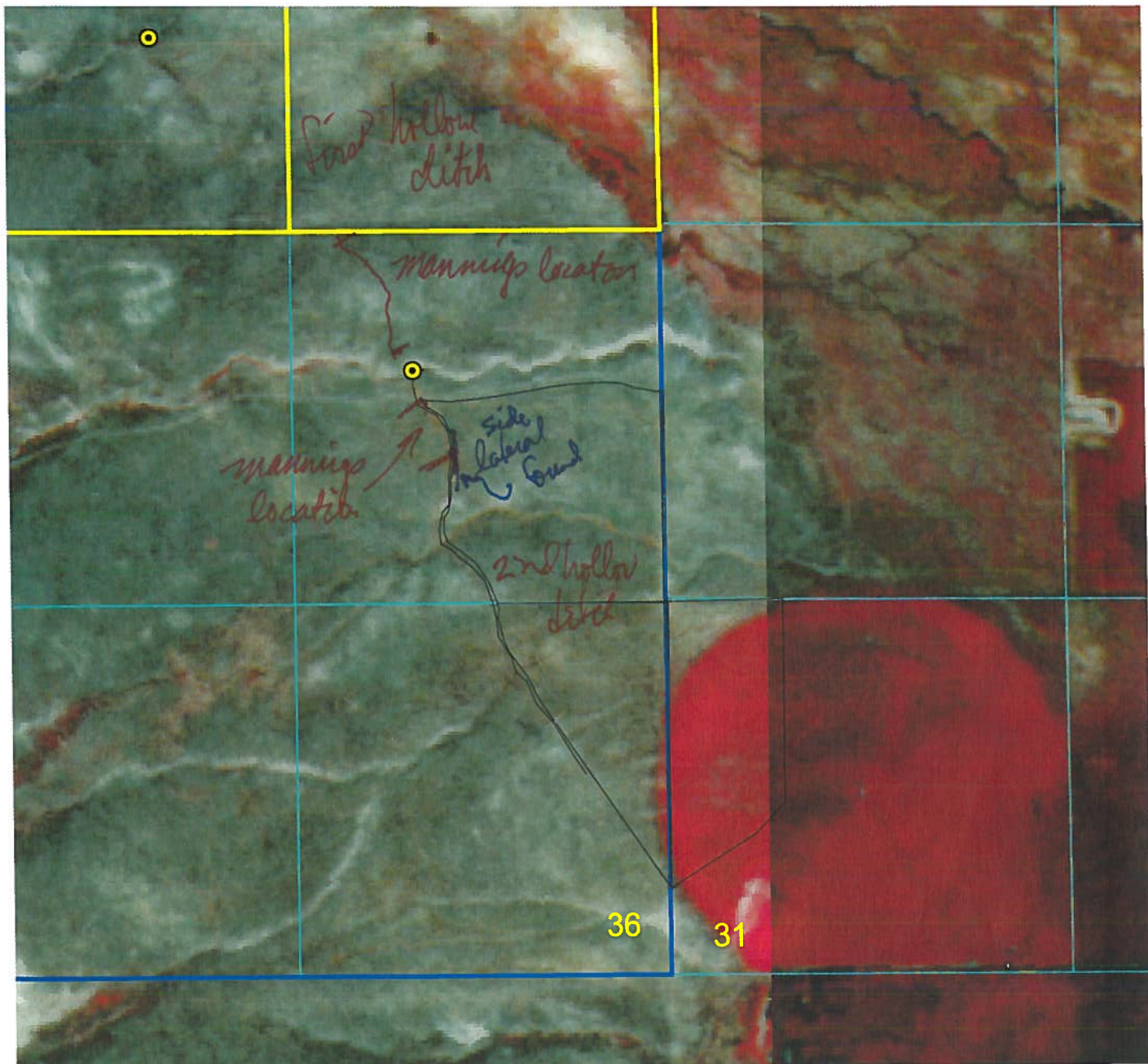


Fourth Mannings measurement



This shows the overview of the system and the general location for the Second Hollow mannings measurement location.

File: x43-10213 - 11196 mannings meas locations
Prepared: February 1, 2000



13S 24E SEC 36 Map prepared 8-17-99
 outline shows irrigated place of use claimed under
 KKC
 A43-11196