



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

January 6, 2017

JERRY L ISAAC / KAYLA G ISAAC
28283 SHOO-FLY CUT-OFF RD
BRUNEAU ID 83604

RE: Expiration of Water Supply Bank Rental Agreement for water rights: 51-13071, 51-13073

Renter,

This letter is to inform you that your rental agreement(s) to rent the above listed water rights from the Water Supply Bank (Bank) expired at the end of 2016.

Once the rental agreement concludes, any diversion or use of water under the rental agreement will no longer be authorized and, if occurring, may be subject to an enforcement action.

If you wish to rent water in the future, please download a rental application from: <http://idwr.idaho.gov>. You may submit rental applications on November 1 of the year prior to the intended use of rental water. **YOU ARE ENCOURAGED TO FILE AN APPLICATION AT LEAST 3 MONTHS PRIOR TO THE DATE YOU DESIRE TO USE RENTAL WATER.**

If you have any questions about this matter, please contact me at (208) 287-4918.

Sincerely,

A handwritten signature in black ink, appearing to read 'RB' followed by a long horizontal stroke.

Remington Buyer
Water Supply Bank Coordinator

Enclosures:

RECEIVED

This is to certify that: **JERRY L ISAAC**
KAYLA G ISAAC
28283 SHOO-FLY CUT-OFF RD
BRUNEAU ID 83604

APR 26 2016

DEPARTMENT OF
WATER RESOURCES

filed an application to rent water from the Water Supply Bank ("Bank"). The Idaho Water Resource Board ("Board"), being authorized to operate a Bank and to contract by and through the Director of the Idaho Department of Water Resources ("Director, Department") for rental of water from the Bank, agrees to rent water as follows:

Summary of Water Rights or Portions Rented from the Bank

Water Right	Priority Date	Source	Tributary	Rented Rate	Annual Rented Volume	Acre Limit	Total Rented Acres
51-13071	9/3/1976	GROUND WATER	NA	0.2 cfs	39.0 af	NA	7.8 ac
51-13073	1/25/1963	GROUND WATER	NA	0.01 cfs	1.0 af	NA	0.2 ac
Total Annual Combined Limit				0.21 cfs	40.0 af	NA	8.0 ac

Annual Combined Rental Totals

0.21 cfs 40.0 af NA 8.0 ac

Term of Rental: This rental is in effect from the day the Idaho Water Resource Board signs the rental agreement and shall be in effect until December 31, 2016.

Rental Fee: \$68.00

The fee for rental of the above-described water is \$680.00 per year. Because you own the above referenced water rights you are obligated to pay ten percent (\$68.00) to the Department for administrative costs only.

No administrative fees will be refunded once the fee is collected.

Detailed water right conditions are attached.

SUPPORT DATA

IN FILE # 51-13071

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WATER SUPPLY BANK RENTAL AGREEMENT

The undersigned renter agrees to use the water rented under this agreement in accordance with the Water Supply Bank rules and in compliance with the limitations and conditions of use described in this agreement:

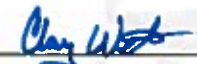
 Jerry L Isaac 4-23-16
Signature of Renter Printed Name and Title* Date

Signature of Renter Printed Name and Title* Date

*Please provide title of signatory if signing on behalf of a company or organization or with power of attorney

Having determined that this agreement satisfied the provisions of Idaho Code § 42-1763 and IDAPA 37.02.03.030 (Water Supply Bank Rule 30), for the rental and use of water under the terms and condition herein provided, and none other, I hereby execute this Rental Agreement on behalf of the Idaho Water Resource Board.

By  Date 4/26/2016
BRIAN PATTON, Acting Administrator
Idaho Water Resource Board

Rental Approved by IDWR  Date 4-26-2016

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WATER SUPPLY BANK RENTAL AGREEMENT

WATER USE DETAILS

LOCATION OF POINT(S) OF DIVERSION

GROUND WATER NW¼SW¼ Sec. 14 Twp 07N Rge 04E OWYHEE County

BENEFICIAL USE

IRRIGATION

SEASON OF USE

03/15 TO 11/15 FOR WATER RIGHT 51-13071

04/01 TO 10/31 FOR WATER RIGHT 51-13073

RENTER'S PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07S	04E	14										8.0							8.0

Total Acres: 8.0

CONDITIONS APPLICABLE TO ALL RENTED WATER RIGHTS

1. The use of water under this agreement shall be subject to the provisions of Idaho Code § 42-1766.
2. Rental of the specified right from the bank does not, in itself, confirm the validity of the right or any elements of the water right, or improve the status of the right including the notion of resumption of use. It does not preclude the opportunity for review of the validity of this water right in any other department application process.
3. Use of water under this agreement does not constitute a dedication of the water to renter's place of use, and upon expiration of this agreement, the points of diversion and place of use of the water shall revert to those authorized under the water right and/or again be available to rent from the bank.
4. This rental does not grant any right-of-way or easement to use the diversion works or conveyance works of another party.
5. Use of water under this agreement shall not prejudice any action of the Department in its consideration of an application for transfer or permit filed by the applicant for this same use.
6. Renter agrees to comply with all applicable state and federal laws while using water under this agreement.
7. Renter agrees to hold the Board, the Director and the state of Idaho harmless from all liability on account of negligent acts of the renter while using water.
8. Renter acknowledges and agrees that the Director may terminate diversion of water if the Director determines there is not a sufficient water supply for the priority of the right or portion thereof being rented.
9. Failure of the renter to comply with the conditions of this agreement is cause for the Director to rescind approval of the rental agreement.
10. This rental agreement does not authorize the construction of a well.
11. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.0 afa per acre at the field headgate for irrigation of the lands above.
12. The use of water for irrigation right 51-13071 may begin as early as March 1 and may continue to as late as November 15, provided other elements of the right are not exceeded. The use of water before March 15

under this remark is subordinate to all water rights having no subordinated early or late irrigation use and a priority date earlier than the date a partial decree is entered for this right.

13. The use of water for irrigation right 51-13073 may begin as early as March 1 and may continue to as late as November 15, provided other elements of the right are not exceeded. The use of water before April 1 and after October 31 under this remark is subordinate to all water rights having no subordinated early or late irrigation use and a priority date earlier than the date a partial decree is entered for this right.



Idaho Water Resource Board
Water Supply Bank Rental Agreement

Effective until December 31, 2016

This map depicts the **rental place of use** pursuant to the rental agreement and is attached to the agreement solely for illustrative purposes.



-  Authorized Rental Point of Diversion
-  Authorized Rental Place of Use
-  Townships
-  PLS Sections
-  Quarter Quarters



0 500 Feet

STATE OF IDAHO
WATER RESOURCE BOARDAPPLICATION TO RENT WATER
FROM THE BOARD'S WATER SUPPLY BANKRECEIVED
JAN 13 2016
DEPARTMENT OF
WATER RESOURCESApplicant Name: Jerry Isaac

Is this application being submitted with a lease application as a lease/rental package?

Yes ☒ No ☐

If yes, specify companion water rights in Section 4

This application must be completed according to the minimum requirement checklist below. This checklist is part of the rental application and must be included with the rental application. Applications that do not meet the minimum requirements will not be placed in the processing queue and may be returned until all minimum requirements have been met.

Rental applications should be submitted well in advance of the desired start date for the use of rental water. Rental applications may be processed as early as November 1 of the year prior to the intended use of rental water. Any rental application received on or before November 1 for use in the next year will be assigned a received date of November 1. Rental applications submitted more than one year in advance of the proposed start date for the use of rental water will not be accepted and will be returned to applicants. Rental applications may be returned to applicants if the desired start date for the use of rental water cannot be accommodated by the Water Supply Bank. Rental requests will not be accepted once the rental season of use period has concluded.

One rental application per beneficial use of water. For multiple beneficial uses of water, separate rental requests should be submitted for each unique beneficial use of water. One rental application can be submitted if you propose to rent water from multiple sources.

For additional instructions on completing a rental application, visit the Bank's website at http://idwr.idaho.gov/water_supply_bank.

MINIMUM REQUIREMENT CHECKLIST

Check All Items as Either Attached (Yes) or Not Applicable (N/A)

Yes

- ☒ Completed Application to Rent Water from the Board's Water Supply Bank
- ☒ Confirmation that this form has been printed single sided, per requirement of the Water Supply Bank

Attachment N/A Yes

- 2 ☒ A map showing the proposed point(s) of diversion, place(s) of use, and water diversion and distribution systems proposed to be used with your rental request
- 3A ☐ ☒ Detailed information on a proposed use of rental water
- 3F ☒ ☐ Authorization from the owner/operator of the rental point(s) of diversion
- 3H ☒ ☐ Water modeling to account for the impacts of the rental request
- 3J ☒ ☒ Documents justifying a rate of flow greater than 0.02 cfs/acre
- 3K ☒ ☐ Authorization from the owner/operator of the property at the proposed rental place(s) of use
- 4B ☐ ☒ Explanation of how the rental water will sufficiently accomplish your rental purposes
- 4C ☒ ☐ Explanation of consumptive use amounts for water rights experiencing a change in nature of use

Department Use Only – Proposed Water Right(s)

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

1. CONTACT INFORMATION

A. Applicant Jerry Isaac
 Mailing Address 28283 Shoofly Cut-off Rd Bruneau 10 83604
Street City State Zip Code
 Email Address _____ Phone Number 208-573-4550

B. Is this application being completed by an authorized representative on behalf of the applicant? Yes ☐ No ☒
 If yes, representatives (includes company employees if the applicant is a corporation, as well as legal counsel or consultants) should provide their information below if they desire to be included on correspondence with the rental applicant.

Representative _____ Professional Title _____
 Organization _____ Relationship to Applicant _____
 Mailing Address _____
 Email Address _____ Phone Number _____

2. MAP

Create a map of the proposed point(s) of diversion, place(s) of use and water diversion, delivery and distribution systems. Make sure the rental place of use is outlined and annotated with legal land descriptions (Township, Range, Section and Quarter-Quarters) or with GPS coordinates. For irrigation purposes, mark the number of acres you desire to irrigate. Attach the map to this application and label it Attachment 2.

3. DESCRIPTION OF PROPOSED USE FOR RENTAL WATER

A. Describe why you desire to rent water and provide a detailed description of your proposed use. If the proposed use is not for irrigation, describe in detail how you determined the amount of rental water required. If the space below is insufficient, attach additional sheets as required and label them Attachment 3A:

I want to rent water to irrigate 8 acres while getting a transfer for point of diversion on my water rights. This water will come from an existing well & water system to be sprinkled on the designated acres.

B. Enter the desired and/or minimum rates of flow, volume, or irrigable acres requested for your rental purposes:

Desired Rate (Cubic Feet/Second)	Desired Volume (Acre-Foot)	Minimum Rate* (Cubic Feet/Second)	Minimum Volume* (Acre-Foot)	Desired Acres (if applicable)
<u>0.21</u> CFS	<u>40</u> AF	CFS	AF	<u>8</u> AC

* Sometimes water rights provide an exceptionally low rate per acre and/or low volume per acre. This section is meant to establish an acceptable range of water sufficient for your proposed water use. Please see question 4B and complete if necessary.

C. This section must be completed in full. Enter the proposed start date and latest possible start date for using rental water as well as the number of years you would like to rent water. The latest possible start is the latest possible date by which you would be willing to pay for a rental and be able to benefit from utilizing rental water.

Desired Start Date (month/day/year)	Latest Possible Start Date (month/day/year)	*Mark Desired Rental Duration (Calendar Years)					**Applicant's preference if rental application cannot be processed prior to the latest possible start?	
<u>03/15/16</u>	<u>04/01/16</u>	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5	☒ Process application as soon as possible	☐ Return application to applicant

* The number of years permissible for a rental is subject to the lease contract duration for the water right(s) being rented.

** Per Idaho Code 42-201, it is unlawful to divert or use water without a valid water right. Water Supply Bank rental applicants are not authorized to utilize rental water prior to the execution of an approved rental agreement. Rental requests may be returned to applicants if no water is available from the Bank to fulfill a rental request.

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

- D. Describe your water distribution system and how rental water will be delivered from the point(s) of diversion (POD) to the proposed place of use (POU):

The water comes from a well thru underground mainline to valve to an above ground valve then into a mainline and into headline sprinklers.

- E. Describe the type and location of the POD from which rental water is proposed to be diverted:

POD Description	Water Source	Other Water Rights Diverted from this POD
<u>well</u>	<u>underground</u>	<u>none</u>

If the POD(s) above are located where water is turned into a canal, lateral or ditch, or if they are located on your property but are serviced by water that is delivered via a canal, lateral or ditch, your rental request must include documented authorization from all relevant canal companies, irrigation districts and/or water delivery entities, confirming that they consent to your diversion of water from their system.

- F. Has documented consent from all relevant water delivery entities been obtained? Yes ☐ N/A ☒
If yes, include documented consent as Attachment 3F.

- G. Do any POD(s) identified in Question 3E divert from a water source that may require water modeling? Yes ☐ No ☒
Refer to the Water Modeling Requirements Information Sheet to determine if a rental POD may require water modeling.

- H. Has water modeling been provided with your rental request? Yes ☐ N/A ☒
If yes, label modeling Attachment 3 H.
Rental applications that require modeling will be returned if modeling is not provided.

- I. Specify the desired beneficial use of water and the requested season of use or number of acres required:

☒ Irrigation 8 (number of acres) Duration: Subject to IDWR standard seasons of use
☐ Commercial from: _____ (mm/dd) to: _____ (mm/dd)
☐ Stockwater from: _____ (mm/dd) to: _____ (mm/dd)
☐ Industrial from: _____ (mm/dd) to: _____ (mm/dd)
☐ Other: _____ from: _____ (mm/dd) to: _____ (mm/dd)

- J. For irrigation uses, do you propose to divert water at a rate greater than 0.02 cfs/acre? N/A ☐ Yes ☒ No ☐
If yes, justify the rate of flow and attach any supporting documents as Attachment 3J. Justification may include information on soil composition, conveyance losses, crop type, irrigation systems, public access areas, etc. A rate of 0.03 cfs/acre is permissible for irrigation of 5 acres or less.

The water right I want to rent has a diversion rate greater than 0.02 cfs/acre.

- K. Do you own the land at the proposed rental place of use (POU)? Yes ☒ No ☐
If no, attach documentation from the POU owner/operator confirming your authorization to use the POU and label it Attachment 3K.

- L. List all other water rights and sources of water at the rental place of use for the same purpose, including privately owned water rights and water received from a municipal supplier, an irrigation district, a canal company or any other water delivery entity. Explain why additional water is required:

None

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

4. RENTAL REQUESTS FOR SPECIFIC WATER RIGHTS

A. Are you requesting to rent specific water rights?

Yes ☒ No ☐

If yes, specify below the elements of the water rights you are requesting to rent. If no, continue to Question 4B.

Important Information: Diversion rates and volumes sought for rent must be proportionate to the per acre diversion rates and per acre volume limits of the water right under lease contract to the Water Supply Bank. Prior to completing this section, applicants should review all water right lease contracts and any active rental agreements to determine which elements of a water right are available to satisfy a rental request. Lease and rental documents are searchable via [IDWR's website](#).

Water rights identified below must either already be leased to the Bank or a lease proposal should accompany this rental request. Rental requests for water rights not yet leased to the Bank will be returned if companion lease applications are not provided with the rental request. For leased rights featuring combined limits, applicants should request to rent against the combined diversion rate, volume or acre limits. Combined limits should be listed on a row below water right numbers.

Water Right Elements Leased to Water Supply Bank					Leased totals, minus water right elements involved in active rental agreements, equals water right elements available for rent	Water Supply Bank Rental Request		
Water Right Number (leave blank if sub-total of combined limits)	Nature of Use	Diversion Rate (CFS)	Volume (AF)	Acres (AC)		Diversion Rate (CFS)	Volume (AF)	Acres (AC)
51-13071	irrigation	0.200	39	8		0.200	39	8
51-13073	irrigation	0.010	1	8		0.010	1	8
Applicants must ensure the requested rate per acre and volume per acre do not exceed the rate per acre and volume per acre limits of water rights leased to the Water Supply Bank					TOTAL	0.210 CFS	40 AF	8 AC

*Attach multiple copies of this page if space above is insufficient to list all water rights requested to be rented on this application.

B. If water right conditions, combined limits, or the sum of all water right elements being requested provide an unconventional duty of water (e.g., an unusually low rate per acre or volume per acre for irrigation use), explain how your proposed rental will sufficiently accomplish your intended purposes. Attach a separate page if space is insufficient and label it **Attachment 4B**:

C. Does your rental request propose to change the nature of use for any water right(s) being rented?

Yes ☐ No ☒

If yes, explain how the water right(s) will be converted to new uses. Include the historic, consumptive use amounts for the water right being rented if you have it, as well as the new consumptive use amount for your proposed beneficial use. If space below is insufficient, attach a separate page and label it **Attachment 4C**:

STATE OF IDAHO
WATER RESOURCE BOARD

Application to Rent Water (Continued)

5. ADDITIONAL INFORMATION

- A. Is this the first time that rental water is being requested for this purpose at the rental place of use? Yes ☐ No ☒

If no, list previous rental requests/agreements and explain why you have not secured a permanent water right for your needs:

I rented water for this land when a point of diversion transfer failed because of the difference in water temp between the two POD's. We are now in the process of a transfer on the POD.

- B. Have you or do you intend to submit an application for permit or transfer proposing a similar use as this rental? Yes ☒ No ☐

If yes, describe:

I am applying to transfer my water rights to a different point of diversion but there is not enough time before the irrigation season, so this is why I want to rent the water rights

- C. Was this rental application submitted in response to a Notice of Violation (NOV) or a pending NOV? Yes ☐ No ☒

If yes, describe the date and location of the NOV.

- D. Additional Information

The Tilby well that my rights are from is approx. 900 feet deep, cased to 200 feet. My well is 300 feet deep, cased to 220 feet therefore it appears they would use some water out of the same aquifer and that is why I feel it should work to rent my own rights and also that the transfer will be successful.

DECLARATION

I hereby assert that the information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval. I understand that if this rental application is approved, it will be subject to the provisions of Section 42-1766, Idaho Code and all applicable state and federal laws. I understand that the submission of a rental application provides no guarantee for approval of a rental agreement. I also understand that, per Idaho Code 42-201, it is unlawful to divert or use water without a valid water right and that I am not authorized to utilize water as proposed in this application prior to the execution of an approved rental agreement.


Signature of Applicant

Jerry Isaac
Printed Name of Applicant

1-11-16
Date

Signature of Representative

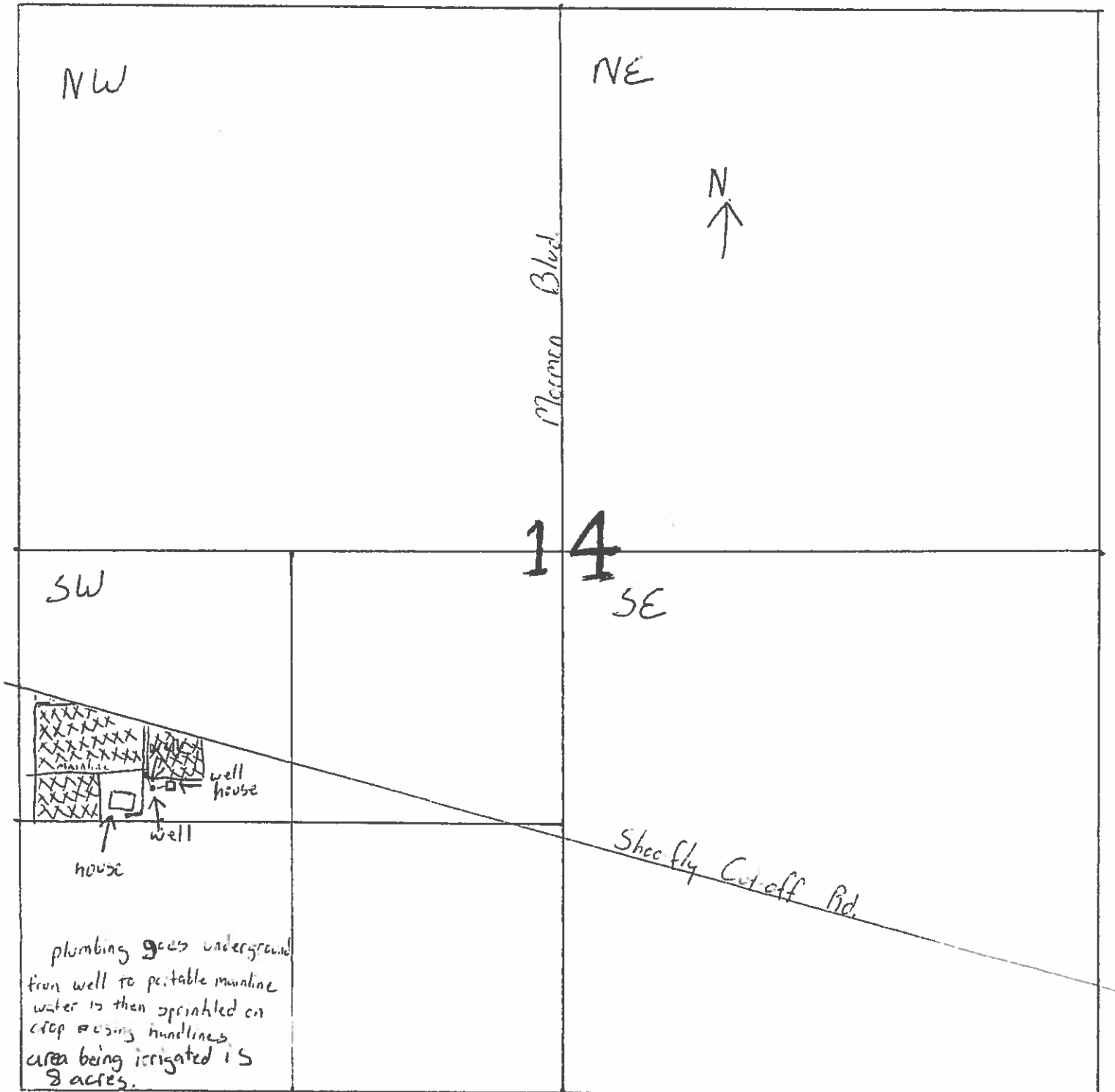
Printed Name of Representative

Date

Mail to:

Idaho Department of Water Resources
P.O. Box 83720
Boise, ID 83720-0098

Township 07S
Range 04E
Section 14
NW 1/4 SW 1/4



= area being irrigated

Attachment B



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

April 28, 2016

JERRY L ISAAC
KAYLA G ISAAC
28283 SHOO FLY CUT OFF RD
BRUNEAU ID 83604

**RE: RENTAL OF WATER FROM THE WATER SUPPLY BANK
WATER RIGHT NOS. 51-13071 and 51-13073**

Dear Renter:

Please find enclosed a receipt in the amount of \$68.00 and a copy of a fully executed Water Supply Bank Rental Agreement in connection with the rental of 40.0 acre-feet of water for irrigation of 8.0 acres during 2016. Upon receipt of this fully executed agreement, you are authorized to divert water in compliance with the conditions of water use described in the agreement.

Pursuant to the Water Supply Bank Rules, the rental fee will be retained by the Department to offset administrative costs since you are the owner of the rights.

If you have any questions, please contact me at (208) 287-4881.

Sincerely,

 Sandra Thiel
Sr. Water Resource Agent

Enclosures: Receipt No. C101924
Rental Agreement (copy)

c: Sascha Marston – Fiscal
Angie Grimm – IDWR Western Regional Office
Scott King – SPF Water Engineering



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

April 21, 2016

JERRY L ISAAC
KAYLA G ISAAC
28283 SHOO FLY CUT OFF RD
BRUNEAU ID 83604

**RE: APPLICATION TO RENT WATER FROM THE WATER SUPPLY BANK
WATER RIGHT NOS. 51-13071 and 51-13073**

*****TIME SENSITIVE RESPONSE REQUIRED*****

Dear Applicant:

The Department of Water Resources acknowledges receipt of your application to rent water from the Water Supply Bank. **I have enclosed a Water Supply Bank Rental Agreement for your review and signature.** Upon signature and return of the original agreement, together with the rental fee described below, the Department will also sign the original agreement and return an executed copy to you. Execution of the agreement and compliance with the conditions of approval authorize diversion and use of water as provided in the agreement.

A rental fee of **\$680.00** was calculated based on the current rental rate of \$17.00 per acre-foot times a diversion volume of 40.0 acre-feet. Since you are both the lessor and the renter of the rights, **you are only obligated to pay the 10% administrative fee or \$68.00.**

Please send a check for \$68.00 made payable to the Idaho Department of Water Resources, together with the signed rental agreement, within 14 days so I can complete processing.

If you have any questions, please contact me at (208) 287-4881.

Sincerely,

for Sandra Thiel
Sr. Water Resource Agent

Enclosure

c: IDWR Front Desk
Scott King – SPF Water Engineering

MEMORANDUM

To: File(s) 51-13071 and 51-13073
From: Sandra Thiel
Date: April 18, 2016
Re: Review of Application to Rent a Water Right from the State Water Supply Bank

PURPOSE/NARRATIVE:

On January 13, 2016 the Department received applications to lease and rent water from Jerry Isaac. In 2011 Mr Isaac applied for a transfer for rights 51-13071 and 51-13073. Western regional office denied the transfer because the two wells were considered separate sources.

Conversation with Jerry Isaac on February 1, 2016:

Jerry has consulted an engineer about the difference in wells. He wants to move his point of diversion from the Tilby well to the well on his property. We have not allowed him to do that because the Tilby well is geothermal and Jerry's well is cold water. Jerry said that he has been working with an engineer who found that the Tilby well is cased only to 200 feet. Jerry's well is also cased to about 220 feet. The engineer believes they are pulling from the same aquifer. I asked Jerry to have the engineer to submit something to use that might substantiate his claim that they are the same source.

On February 12, 2016, I sent a letter to Mr. Isaac requesting information supporting the assertion that the two wells are the same source. On March 14, 2016, the Department received a letter from Scott King of SPF Engineering. In the attached letter Scott provides an argument for allowing the lease and rental of this water. I requested that Mike McVay evaluate Scott's assertion. Mike responded that they can argue that both wells are from the same source.(see attachment) Based on these evaluations, we are assuming that the rental source is the same as the lease source.

Mr. Isaac's purpose in renting the water is to irrigate 8 acres. He still plans to file a transfer for the change in wells. This lease and rental 0.21 cfs and 40 af for one year.

AUTHORITY TO FILE: Jerry L & Kayla G Isaac, own the property at both the lease and the rental place of use.

WATER RIGHT VALIDITY: The Isaacs rented right 51-7027 from 2011 through 2015 to irrigate the place of use. There is evidence of irrigation on the 2010 Landsat imagery (see image below). The right appears to be valid.

INJURY TO OTHER WATER RIGHTS: None apparent.

ENLARGEMENT OF USE: The season of use and headgate requirement are the same for both the lease and rental points of diversion.

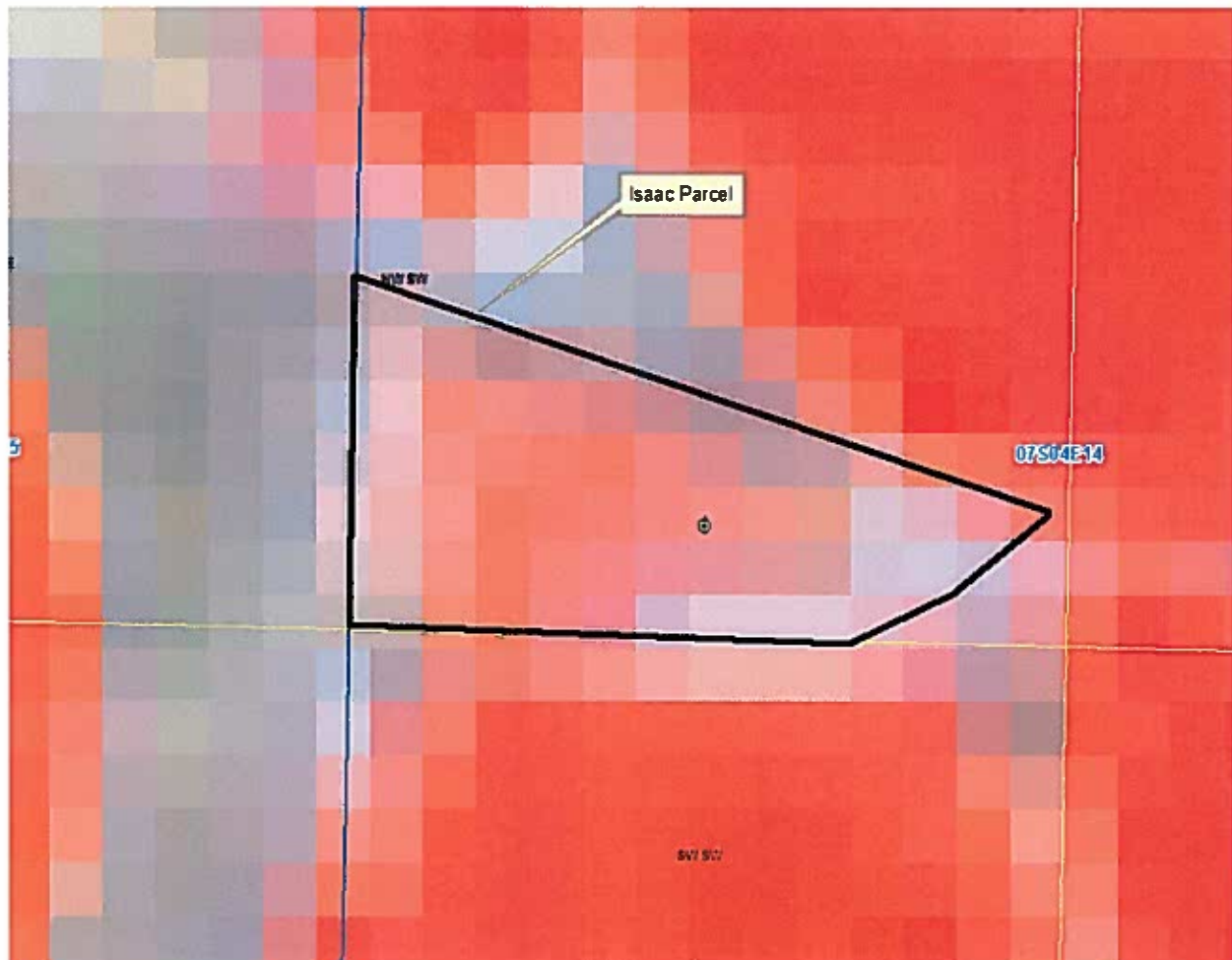
LOCAL PUBLIC INTEREST: Both points of diversion are within the Trust Water Area and the Bruneau-Grandview Ground Water Management area.

BENEFICIAL USE/CONSERVATION OF WATER RESOURCES:

The leases appear to be consistent with conservation of water resources in Idaho. The applicant/owner has been operating under an approved permit and a right licensed with the State of Idaho.

DEPARTMENT STAFF OR WATERMASTER COMMENTS:

Nick Van Dyke from Western had no concerns.



Thiel, Sandra

From: Van Dyke, Nick
Sent: Monday, April 18, 2016 9:41 AM
To: Thiel, Sandra
Subject: RE: Jerry Isaac water supply bank lease/rental

Sandy,

As we spoke over the phone earlier, I don't see anything from our end holding this rental up. Looks like Mike McVay concurs with what Scott King provided.

Nicholas Van Dyke

*Sr. Water Resource Agent
Idaho Department of Water Resources
Phone: (208) 334-2190
Fax: (208) 334-2348
Email: nick.vandyke@idwr.idaho.gov*

From: Thiel, Sandra
Sent: Friday, April 15, 2016 10:29 AM
To: Van Dyke, Nick
Subject: Jerry Isaac water supply bank lease/rental

Hello, The attached documents refer to water supply bank lease and rental applications submitted by Jerry Isaac. There has been some discussion about the actual source of the well for the existing point of diversion and the proposed point of diversion. I have attached documents from Mike McVay in hydrology that addresses the source. I have also included the Please let me know if you have any questions.

Sandra Beer Thiel

Idaho Department of Water Resources
322 East Front Street
Boise, Idaho 83720-0098
(208)287-4881
sandra.thiel@idwr.idaho.gov

Thiel, Sandra

From: McVay, Michael
Sent: Wednesday, April 06, 2016 10:05 AM
To: Thiel, Sandra
Subject: Jerry Isaac WSB rental
Attachments: ResearchSummaries_final.docx

Hi Sandy,

As I stated when we spoke the other day, the groundwater resources in this area are conceptualized as one regional resource that comprises two aquifers. As such, I think this rental should be allowed because these wells are withdrawing water from the same regional source, albeit from different aquifers within that source.

I have attached a summary of hydrogeological research in the area that might help you to visualize the aquifer system conceptualization.

Let me know if you have any questions.

Best regards,

Mike

MEMO

State of Idaho

Department of Water Resources

322 E Front Street, P.O. Box 83720, Boise, Idaho 83720-0098

Phone: (208) 287-4800 Fax: (208) 287-6700

Date: August 16, 2011

To: John Westra

From: Mike McVay

Subject: Review of hydrogeological research in the Bruneau-Grand View area

Per your request, I have reviewed all of the available hydrogeological research for the Bruneau-Grand View area. This memo presents summaries of the significant hydrogeological findings in published research, as well as summaries of correspondence regarding hydrogeology in the Bruneau-Grand View area.

Introduction

There have been several hydrogeological studies conducted in the Bruneau-Grand View area over the last 100 years. There has been considerable interest in the water resources of this area due to both the presence of geothermal water, and long-term declines in aquifer water levels. Not every study is reviewed in this memo. Some studies were omitted because they did not address the hydrogeology (or were not of a technical nature), and others were not available for review.

Research has been performed by several researchers over many years, and the definitions and nomenclature for hydrogeological features are different in each report. To facilitate understanding, naming conventions have been adjusted to match the terminology found in Berenbrock (1993). Furthermore, all reported temperatures have been converted to Fahrenheit, and the terminology, lithologies and aquifer designations referred to in the various publications have been interpreted to fit into the following definitions:

Cold-water aquifer – This aquifer is thin (approximately 100 feet), of limited areal extent and is generally composed of alluvium and occasionally the upper Idaho Group sediments. This aquifer exists primarily along stream channels and is located above the regional geothermal aquifer.

Geothermal aquifer system – This aquifer is thick (thousands of feet) and can be found beneath the entire groundwater management area. This is a geothermal flow system that is composed of two general lithologies: the sedimentary-rock

aquifer and the volcanic-rock aquifer. The geothermal aquifer conceptual model is illustrated in Figure 1.

Sedimentary-rock aquifer – This aquifer is up to 2,000 feet thick and is part of the larger geothermal aquifer system. It is composed of undifferentiated Idaho Group sediments, primarily unconsolidated clay, silt and fine sand.

Volcanic-rock aquifer – This aquifer is beneath the sedimentary-rock aquifer and is composed of basalt (Banbury Basalt) and underlying, highly fractured silicic volcanic rocks.

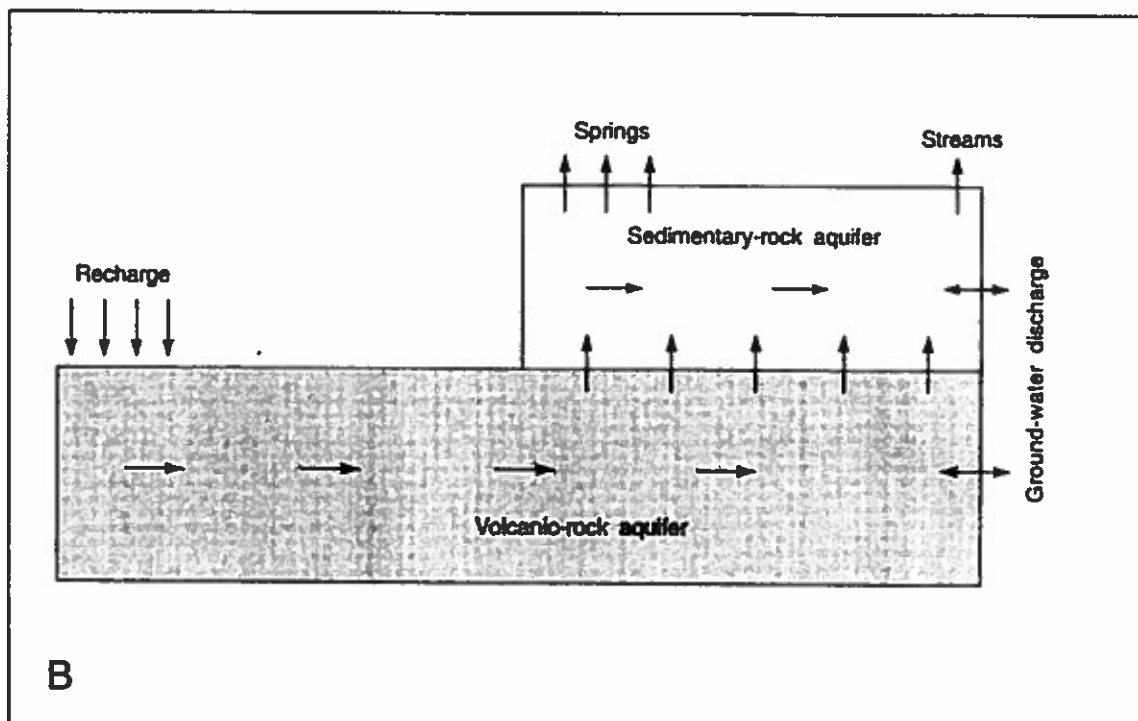
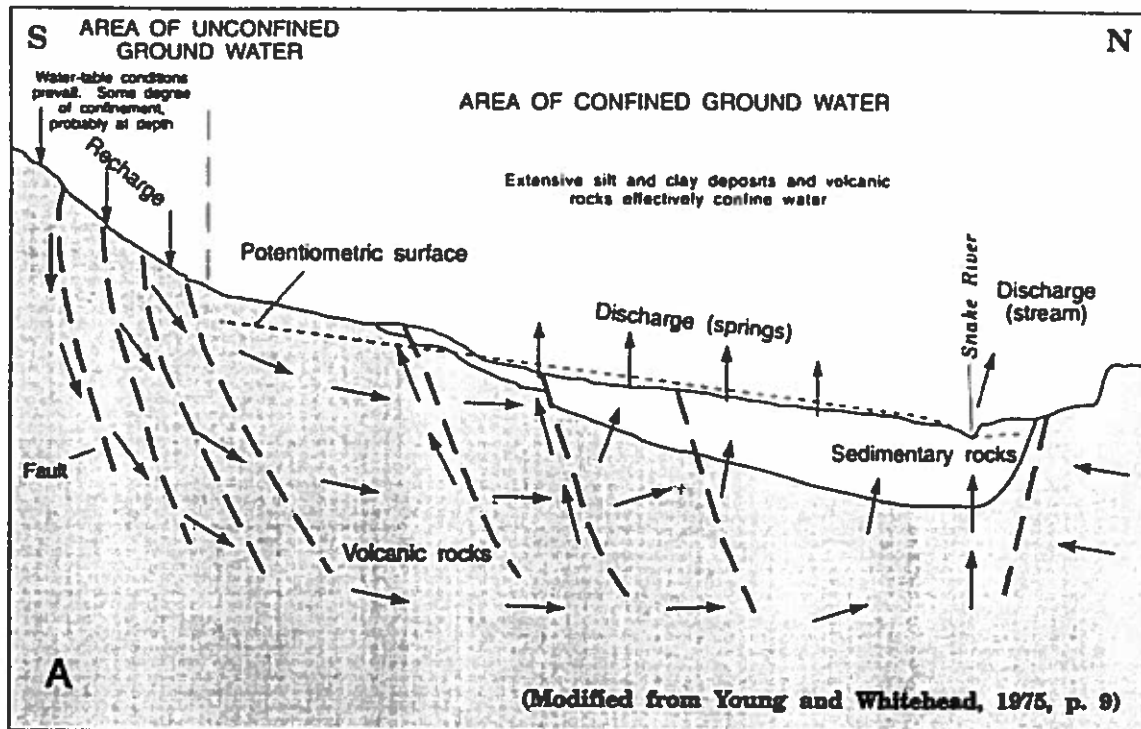


Figure 1. Conceptualization of the regional geothermal aquifer system in the Bruneau-Grand View area. A) Diagramatic section. B) Conceptual model with arrows indicating the direction of ground-water movement. Adapted from Berenbrock (1993).

Summaries of Published Research

1. Piper, A.M., 1924, *Geology and Water Resources of the Bruneau River Basin Owyhee County, Idaho*; Idaho Bureau of Mines and Geology Pamphlet 11.

This publication reports the results of a two-month study in the area investigating the development of additional water resources for irrigation. The investigation focuses on the lower Bruneau River basin and Little Valley, and consists of a ground water study and a cursory geological tour. The significant hydrogeological findings are:

- The majority of wells in the area are completed with only surface casing.
 - Artesian heads increase with depth.
 - Several wells have collapsed due to lack of casing through sedimentary materials, which may explain reduced production from wells completed in the sedimentary-rock aquifer.
 - Recharge to volcanic-rock aquifer is assumed to be from a distant area; most likely the mountains to the south.
 - Water is thought to recharge the volcanic-rock aquifer via fractures and faults, circulate to depths associated with higher temperatures, and percolate upward along faults. The water is confined by basalt, but fissures allow percolation into the overlying sedimentary-rock aquifer.
 - Considerable lateral leakage into the sedimentary-rock aquifer is probably occurring due to well construction.
 - Reference to what is assumed to be the Indian Bathtub thermal springs states that, in September 1922, the temperature of spring water was 94°–98.5° F, and discharge was estimated to be 3.96 cfs.
 - The Indian Bathtub springs appear to be of canyon type in which a sloping water bearing unit is truncated by a canyon.
2. Littleton, R.T. and Crosthwaite, E.G., 1957, *Ground-water Geology of the Bruneau-Grand View Area Owyhee County, Idaho*; USGS Water-Supply Paper 1460-D.

This study was initiated due to increasing interest in using groundwater for irrigation in southern Idaho. This publication reports the results of a geological and water-resource study addressing water-resource potential. The significant hydrogeological findings are:

- Recharge to the geothermal system occurs in the uplands to the south, where surface water percolates through highly faulted and fractured silicic volcanics.
- Recharge to the sedimentary-rock aquifer is from the volcanic-rock aquifer and occurs as upward movement along fault and fractures. Geothermal water then leaks upward through imperfect confining layers in the sedimentary-rock aquifer and migrates laterally through irregular, permeable sand lenses.
- The primary conduits for geothermal flow are permeable zones in the volcanic-rock aquifer.
- The primary confining units are fine-grained sediments in the sedimentary-rock aquifer.

- Groundwater movement is generally from south to north.
 - Many wells completed in the sedimentary-rock aquifer are defective in design or construction and allow the migration and mixing of water from multiple aquifers.
 - Temperature and water chemistry data from these wells are representative of an unknown combination of aquifers.
 - Many wells have collapsed, which may explain significant production losses in sedimentary-rock aquifer wells.
 - Geothermal water typically exhibits a high concentration of sodium.
 - Geothermal water from the sedimentary-rock aquifer is typically higher in sodium than from volcanic-rock aquifer.
 - Geothermal water is of marginal quality for irrigation.
 - The concentration of fluoride is higher than most natural waters of the Pacific Northwest.
 - Volcanic-rock aquifer temperatures range from 92° to 126°F.
 - Sedimentary-rock aquifer temperatures range from 59° to 108°F.
 - Wells with temperatures less than 70°F tap both the cold-water and sedimentary-rock aquifers.
 - The Indian Bathtub Springs flow was measured at 4.9 cfs in September of 1954.
3. Ralston, D.R. and Chapman, S.L., 1969, *Ground-Water Resource of Northern Owyhee County, Idaho*; Idaho Department of Reclamation Water Information Bulletin No. 14.

This study was instigated due to concerns about over-appropriation in areas dependent on deep artesian aquifers. This publication addresses the quantity, quality and occurrence of groundwater for a study area approximately 3.7 times larger than the groundwater management area. The authors chose to divide the study area into subareas. The significant hydrogeological findings from the Bruneau subarea are:

- There are three major aquifer systems in the Bruneau subarea.
 - A hot, artesian aquifer in silicic volcanics and Banbury Basalt (volcanic-rock aquifer).
 - A warm, artesian aquifer in the Idaho Group (sedimentary-rock aquifer).
 - A cold, water-table aquifer in alluvium and upper Idaho Group (cold-water aquifer).
- Recharge to the silicic volcanics is from precipitation in the highlands to the south.
- Recharge to the Banbury Basalt and the sedimentary-rock aquifer is primarily due to upward vertical leakage from the silicic volcanics.
- Recharge to the cold-water aquifer is from direct precipitation, seepage from canals, irrigation, and sewage effluent.
- Water temperature in the Banbury Basalt ranges from 90° – 120°F, and water is typically sodium bicarbonate type.

- Water temperature in the sedimentary-rock aquifer ranges from 60° – 95°F, and water is typically of sodium bicarbonate type.
4. Young, H.W. and Whitehead, R.L., 1975, *Geothermal Investigations in Idaho Part 2 an Evaluation of Thermal Water in Bruneau-Grand View Area Southwest Idaho*; Idaho Department of Water Resources Water Information Bulletin #30.

This publication is a part of a larger geothermal investigation project. The report provides a description of the areal source, extent and chemical character of thermal water, as well as the surficial and subsurface geology in the Bruneau-Grand View area. The significant hydrogeological findings are:

- Recharge to the volcanic-rock aquifer (except Banbury Basalt) is from precipitation in the higher altitudes to the south and southwest.
 - Recharge to the Banbury Basalt is chiefly by upward movement of water from the volcanic-rock aquifer.
 - Recharge to the sedimentary-rock aquifer is chiefly by upward movement of water from the volcanic-rock aquifer.
 - Most of the thermal water (sedimentary-rock and volcanic-rock aquifers) is sodium bicarbonate type.
 - Dissolved-solids concentrations are usually greater than 600 mg/l in the sedimentary-rock aquifer, and dissolved-solids concentrations from the volcanic-rock aquifer are usually less than 500 mg/l.
 - Thermal water from the sedimentary-rock aquifer is nearly neutral in pH, and thermal water from the volcanic-rock aquifer water is alkaline with a pH greater than 8.5.
 - Chloride/Fluoride ratios are typically greater than 1.0 for sedimentary-rock aquifer water and less than 0.6 for the volcanic-rock aquifer.
 - Sedimentary-rock aquifer temperatures rarely exceed 95°F, and volcanic-rock aquifer temperatures range of 104° to 181°F.
 - It is difficult to determine a temperature gradient as many of the wells are completed as open holes in which water is entering the well at intermittent depths and of different temperatures.
 - There appears to be a northwest trending fault system in the Bruneau-Grand View area.
5. Rightmire, C.T., Young, H.W., and Whitehead, R.L., 1976, *Geothermal Investigations in Idaho Part IV Isotopic and Geochemical Analyses of Water from the Bruneau-Grand View and Weiser Areas, Southwest Idaho*; USGS Open-File Report 76-166.

This publication is a continuation of the work started by Young and Whitehead (1975) and reports the results of additional sampling for stable isotopes. The significant hydrogeological findings are:

- Recharge to the sedimentary-rock and volcanic-rock aquifers are from the same source. The recharge source is thought to be predominately snow in the higher elevations to the south and southwest.

- The recharge mechanism in the volcanic-rock aquifer is direct infiltration of precipitation, and the primary recharge mechanism for the sedimentary-rock aquifer is upwelling from the underlying volcanic-rock aquifer.
- Thermal groundwater is sodium bicarbonate type.
- Non-thermal spring water is typically calcium bicarbonate type.
- Isotopic data suggest geothermal water was recharged at a higher elevation or during a time when the climate was significantly colder than present day.
- It appears that geothermal water was recharged, and has accumulated, over a long period of time.

6. Young, H.W. and Lewis, R.E., 1982, *Hydrology and Geochemistry of Thermal Ground Water in Southwestern Idaho and North-Central Nevada*, USGS Professional Paper 1044-J.

This publication represents a portion of work done to better understand the geothermal resources of the United States. The study area encompasses 14,500 square miles, and includes the Bruneau-Grand View area. The significant hydrogeological findings are:

- There are three geologic units related to geothermal resources.
 - Undifferentiated Idaho Group sediments (sedimentary-rock aquifer) that can be up to 2,000 feet thick. The sedimentary-rock aquifer generally yields water that is 68° – 86°F.
 - Banbury Basalt (volcanic-rock aquifer) that varies in thickness from 100 – 1,200 feet. Wells deeper than 2,000 feet completed in the volcanic-rock aquifer yield water that is above 149°F.
 - Silicic volcanic rocks, the thickness of which is unknown, but may be up to 7,000 feet thick.
- The geothermal aquifer (including Northern Nevada and areas in Idaho outside of the Bruneau-Grand View area) is a large, complex, interconnected system in which water generally occurs in compartmented zones. The multitude of faults and different lithologies provide almost infinite pathways for deep circulation of thermal water.
- Residence time within the geothermal aquifer is calculated to be approximately 3,000 – 25,000 years.
- Groundwater movement is generally from south to north.
- Non-thermal waters are generally calcium bicarbonate type.
- Hot thermal waters are generally sodium carbonate or bicarbonate type.
- Warm thermal waters are generally sodium bicarbonate type.

7. Berenbrock, C., 1993, *Effects of Well Discharges on Hydraulic Heads in Spring Discharges from The Geothermal Aquifer System in the Bruneau Area, Owyhee County South Western Idaho*, USGS Water-Resources Investigations Report 93-4001.

This study is part of a cooperative effort between the USGS and the USFWS to study the hydrogeology, and determine the effects of discharge from wells on

hydraulic heads and spring flows in the Bruneau area. The significant hydrogeological findings are:

- There is a cold-water aquifer that is thin (less than 100 feet thick) and of limited areal extent.
- The cold-water aquifer is located in alluvium along stream channels.
- Cold-water sources are a calcium bicarbonate type with dissolved-solids concentrations less than 120 mg/L, and temperatures that range between 39° – 59°F.
- The area is underlain by a regional geothermal aquifer.
- Geothermal-water sources are a sodium bicarbonate type with dissolved-solids concentrations less than 400 mg/L, and temperatures that range from 80° to more than 176°F.
- The regional geothermal aquifer is formed of both sedimentary rocks and volcanic rocks.
- The regional geothermal aquifer can be subdivided into the sedimentary-rock aquifer and the volcanic-rock aquifer.
- The volcanic-rock aquifer is recharged by precipitation in the Jarbridge and Owyhee Mountains.
- The volcanic-rock aquifer consists of basalt and silicic volcanic rock, and has a probable thickness of 2,000 – 3,000 feet.
- The volcanic-rock aquifer is confined.
- The sedimentary-rock aquifer is primarily recharged by the volcanic-rock aquifer.
- The sedimentary-rock aquifer consists of fine sand, silt, clay of low permeability, and some embedded volcanic rock, and ranges in thickness from zero feet in the southern part of the study area to more than 3,000 feet thick in the northeast corner of the study area.
- The sedimentary-rock aquifer is confined-to-partially confined in coarser sedimentary material by fine-grained sediments.
- The volcanic-rock aquifer experienced significant water-level declines during the period from the early 1960s to the early 1990s.
- Water-level declines in the sedimentary-rock aquifer were more gradual during the period from the early 1960s to the early 1990s.
- Approximately 70% of total discharge in the Little Valley area is from wells open only to the volcanic-rock aquifer, and approximately 90% of total discharge in the Bruneau Valley area is from wells open only to the volcanic-rock aquifer.
- Wells open to both the sedimentary-rock aquifer and the volcanic-rock aquifer will produce most of the water from the volcanic-rock aquifer due to its greater transmissivity.
- Intense faulting and fracturing provide vertical and horizontal conduits for flow, and do not appear to be barriers to groundwater flow.
- Groundwater generally flows northward from recharge areas along the mountains, through the volcanic-rock aquifer, and into the sedimentary-rock aquifer.

- Aquifer response to pumping is complex. Declines in hydraulic head and declines in spring discharge are the most apparent responses to pumping.
- The source for the Indian Bathtub springs is the volcanic-rock aquifer.
- Water levels in the volcanic-rock aquifer near the Indian Bathtub springs declined more than 30 feet from 1964 to 1991, resulting in cessation of discharge.

8. Mink, R. and Lockwood, P., 1995, *Bruneau Valley Well Study*; Idaho Water Resources Research Institute.

This publication reports the results of an investigation into well construction as a factor in declining hydraulic heads in the Bruneau-Grand View area. The significant hydrogeological findings are:

- Partially cased and improperly sealed wells provide additional conduits for upward vertical leakage of geothermal water.
- Partially cased and improperly sealed wells facilitate cross-flow from the volcanic-rock aquifer into the overlying sedimentary-rock aquifer.
- Declining heads in the geothermal aquifer appear to be due to the combination of improperly designed or constructed wells and groundwater pumping.
- Increasing or stable heads in the sedimentary-rock aquifer may be bolstered by leakage from improperly designed or constructed wells.

Summaries of correspondence regarding Bruneau-Grand View area Hydrogeology

1. IDWR Inter-Department Memo to Glen Saxton and Hal Anderson from Shane Bendixsen, 7/15/2003.

The memo subject is an update to groundwater levels in the Bruneau-Grand View GWMA, and summarizes the following:

- Water-level trends appear to follow climatic patterns, but it is unknown if the aquifer is in equilibrium.
- Pumping patterns appear to follow government set-aside programs, and do not appear to follow climatic patterns.
- Indian Bathtub thermal springs are no longer measured because they no longer flow.
- All thermal springs exhibit a downward trend in flow.

2. IDWR Inter-Department Memo to Scott King from Shane Bendixsen, 01/21/04.

The memo subject is the application for permit 51-12990 in the Bruneau-Grand View area, and summarizes the following:

- Ground water flow is from south to north.
- Wells that were reviewed range from 165 to 1,750 feet in depth.
- The area is described as having two aquifers: a localized shallow, cold water aquifer, and the regional geothermal system.
- Ground-water temperatures range from 39° to 59° F in the cold water

aquifer, and from 80° to 176° F in the geothermal system.

- Water temperatures in six wells near the POD ranged from 64° to 89° F, and total dissolved-solids ranged from 221 to 2,320 mg/l.
- Although water temperatures from the six wells are lower than reported in Berenbrock (1993) for the geothermal system, water quality suggests that the wells derive water from the geothermal system.
- Applicant's POD is approximately 12 miles northwest and downgradient of the Bruneau Hot Springs; however, it is still in the area of decline.
- It is unclear whether the Kohring well is in the cold or thermal system; however, it makes little difference because pumping from one aquifer will affect the other.

3. IDWR Inter-Department Memo to John Westra from Scott King, 02/24/2004.

The memo subject is the water right application 51-12990, and summarizes the following:

- A review of 16 well logs associated with water rights within a 2-mile radius revealed that there are two deep wells in the geothermal aquifer that once provided artesian flow, but are no longer flowing.
- Graphing temperature verses well depth for 11 wells illustrates an increase of 1.0° F for every 100 foot of well depth.
- Temperature for the POD was reported to be 70° F measured at 800 feet depth with a bailer. Based on thermal gradients of other wells in the area, the temperature at 1,750 feet is likely between 79.5° and 98.5° F.
- Citing Young and Lewis (1982) and Berenbrock (1993):
 - There is a cold-water aquifer and a geothermal aquifer underlying the area.
 - The cold-water aquifer is thin (less than 100 feet) and of limited areal extent (alluvium along stream channels).
 - Underlying the cold-water aquifer is a regional geothermal aquifer.
 - Water generally flows northward from areas of recharge in the mountains, though the volcanic-rock aquifer, and into the sedimentary-rock aquifer.
 - Water is under artesian pressure in both the sedimentary-rock aquifer and the volcanic-rock aquifer.
 - Hydraulic head increases with depth and water moves upward from the volcanic-rock aquifer into the sedimentary-rock aquifer.
 - Aquifer response to pumping is complex. Declines in hydraulic head and declines in spring discharge are the most apparent responses to pumping.
 - Thirty percent of the total discharge from Little Valley and Sugar Valley is from wells open only to the sedimentary-rock aquifer. Most wells are located in the northern part of the study area.
- Since the ground water management area was created in 1982, only four non-domestic applications have been approved. They are:
 - 51-7281 JR Simplot Nonconsumptive fish propagation

51-12991	City of Bruneau	Water & Sewer District— restricted
57-7631	Parkinson	Stockwater
57-11590	Keppler	Wildlife storage pond

- Conclusions: Additional withdrawals will likely result in lower hydraulic heads in the volcanic-rock aquifer because withdrawals from the sedimentary-rock aquifer are expected to increase discharge from the volcanic-rock aquifer.
4. On October 07, 2008, the Department received a response to the ERO technical report from the Protestant's consultant Leland Mink. The summary of this document is not presented because it was created by a consultant for the protestant, commenting on work done for the applicant.
 5. On March 12 2010, the Department received a letter from the US Department of Interior Fish and Wildlife Office supporting the application and analysis outlined in the ERO Technical Report.
 6. On March 18, 2010, Paul Drury of ERO Resources submitted a rebuttal to Mr. Mink's October 10, 2008 submittal. The summary of this document is not presented because it was created by a consultant for the applicant, commenting on work done for the protestant.
 7. On February 18, 2011, the US Department of Interior Fish and Wildlife Office submitted a letter to the Department. The USGS –Idaho Water Science Center recently conducted a statistical analysis of water level data and measurements in 22 wells for a 20 year period. Average drawdown of well water levels from 1990-2009 were:

Bruneau Valley:	0.45 feet/year
Sugar Valley	: 0.35 feet/year
Little Valley	: 0.51 feet/year

The letter emphasized that the Fish and Wildlife Office was opposed to any ground water uses that may impact the Bruneau Hot Springsnail. The letter also states that benefits from conservation activities and taxpayer investments in the area need to be preserved.

8. On March 18, 2011 the Department received a Notice of Withdrawal of Protest from the protestant (Bruneau Groundwater Management District). The withdrawal argued that the applicant had not resolved the basis for the protest, and there is no need for additional discovery or hearing to deny the application. The withdrawal asserts that the applicant did not meet the evaluation criteria established under IC 42-203A(5).



RECEIVED

MAR 16 2016

DEPARTMENT OF
WATER RESOURCES

March 14, 2016

Idaho Department of Water Resources
PO Box 83720
Boise, Idaho 83720-0098

Attn: Sandra Thiel

Subject: *Jerry Isaac Water Supply Rental Application*

Dear Sandra,

On behalf of Jerry Isaac, this letter provides support for his proposed water bank rental applications. The proposed well for diverting under the rental application is identified by Well Tag No. D0057785. This well is constructed with 6 5/8" diameter casing from +1.5 ft to 200 ft below ground surface (bgs). The casing is sealed to 39 feet BGS. Below the casing, the well is open-hole from 200 to 300 ft BGS. The Driller's report identifies water bearing zones in the open-hole portion from 221 to 264 feet BGS. Water was first encountered at 212 feet. Static water level is 100 ft BGS, indicating confined aquifer conditions. Reported temperature is 64°F.

The well proposed for leasing from the water supply bank is identified as the "Tilby Well." This well is located approximately 1/4 mile SSE from Isaac's well. Isaac's application describes the well head ground elevations being approximately the same; USGS quadrangle maps indicate the Tilby well head may be somewhat lower elevation than Isaac's well, but likely less than 25 feet lower. The Tilby well is constructed to 950 ft BGS with 16-inch diameter casing from surface to 200 ft BGS with open-hole construction to 950 ft. Static water level is reported at 57 ft BGS. Water was first encountered at 35 to 40 ft with a temperature of 60°F. Warmer water is reported at greater depths. Lithologic logs for the two wells are similar.

The Tilby well was constructed to draw water from aquifer zones ranging from 200 to 950 feet. It is highly likely that the Tilby well draws water from the same water-bearing zone supplying Isaac's well and therefore both wells draw, at least partly, from the same aquifer zone.

March 14, 2016

Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Scott N. King". The signature is stylized with a large initial "S" and a trailing flourish.

Scott N. King, P.E.
Supervising Engineer

cc: Jerry Isaak

099094

RECEIVED
NOV 8 1963WELL LOG AND REPORT OF THE
STATE RECLAMATION ENGINEER OF IDAHO Department of ReclamationPermit No. 8-28462 Well No. 1 County OWNEEOwner Byron TilbyAddress Bruneau, IdahoDriller Byron TilbyAddress Bruneau, IdahoWell location SW 1/4 Sec 14 T. 7 S. R. 4 E. S. 24Size of drilled hole 16 in. 200 ft. 15 in. 455 ft. 12 in. 295 ft.Total depth of well 950Give depth to standing water from the ground 57 ft Water temp. 90 °Fahr.On "Pumping Test" delivery was 2970 g.p.m. or c.f.s. Drawdown was 138 feet.Size of pump and motor used to make test 1 1/2 in. 400 h.p.Length of time of test 3 hours minutes.If flowing well, give flow c.f.s. or g.p.m. and of shut off pressure If flowing well, describe control works (TYPE AND SIZE OF VALVE, ETC.)Water will be used for Irrigation Weight of casing per lineal foot 4 lb.Thickness of casing 1/4 Casing material Steel
(STEEL, CONCRETE, WOOD, ETC.)Diameter, length and location of casing 16" First 200'
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

CASING RECORD

Diam. Casing	From Feet	To Feet	Length	Remarks—seals, grouting, etc.
16	0	200	200'	Gravel filled around pipe 200'

Number and size of perforations None located feet to feet from groundDate of commencement of well June 2, 1962 Date of completion of well October 17, 1963

SESW S. 14 75 4E

uad8

2

WELL LOG

From Feet	To Feet	Type of Material	Water-bearing Formations Ass. Test No.	Casing Perforated Ass. Test No.
0	5	Soil and gravel		
5	10	" " "		
10	15	" " "		
15	20	Tan clay		
20	25	" "		
25	30	" "		
30	35	" "		
35	40	Slate gray - 60° water		
40	45	" "		
45	50	" "		
50	55	" "		
55	60	" "		
60	65	" "		
65	70	" "		
70	75	" "		
75	80	" "		
80	85	" "		
85	90	" "		
If more space is required use Sheet No. 2				

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is true and correct to the best of my knowledge and belief.

Signed Byron Tilly

By _____

Dated June 7, 1963

License No. 238

099095

SHEET NO. 2

Well Owner Byron Tilby

Well Driller Byron Tilby

Well Location Braneau

WELL LOG

From Feet	To Feet	Type of Material	Water-bearing Formation Ans. Yes or No	Casing Perforated Ans. Yes or No
90	95	Slate gray		
95	100	" "		
100	105	" "		
105	110	" "		
110	115	" "		
115	120	" "		
120	125	" "		
125	130	" "		
130	135	" "		
135	140	" "		
140	145	" "		
145	150	" "		
150	155	" "		
155	160	" "		
160	165	Black sand		
165	170	" "		
170	175	" "		
175	180	Yellow rusty clay		
180	185	Black sand		
185	190	" "		
190	195	" "		
195	200	" "		
200	205	Rusty shale		
205	210	Black rock		
210	215	Blue shale		
215	220	" "		
220	225	" "		

SHEET NO. 2

Well Owner Byron Tilby

Well Driller Byron Tilby

Well Location Braneau

WELL LOG

From Feet	To Feet	Type of Material	Water-bearing Formation Ans. Yes or No	Casing Perforated Ans. Yes or No
225	230	Rusty rock		
230	235	Gravel		
235	240	"		
240	245	" - light brown	Q.L.	
245	250	Clay and sand		
250	255	Clay - yellow	S.I.	
255	260	" "		
260	265	" "		
265	270	" "		
270	275	" "		
275	280	" "		
280	285	" "		
285	290	Black sand	L	
290	295	" "		
295	300	Sand and clay		
300	305	" " "		
305	310	" " "		
310	315	" " "		
315	320	" " "		
320	325	" " "		
325	330	Gravel		
330	335	"		
335	340	Sand		
340	345	"		
345	350	Sand and gravel		
350	355	Sand and clay		
355	360	Gravel and clay		

S65 W 5.14 75 4E

U.A.W.

099096

SHEET NO. 3

WELL OWNER Byron TilbyWELL DRILLER Byron TilbyWELL LOCATION Branson

W E L L L O G		
From Feet	To Feet	Type of Material
360	365	Sand and clay
365	370	" "
370	375	" "
375	380	" "
380	385	" "
385	390	" "
390	395	Gravel and clay
395	400	" "
400	405	" "
405	410	" "
410	415	" "
415	420	" "
420	425	" "
425	430	" "
430	435	" "
435	440	" "
440	445	" "
445	450	" "
450	455	Black sand and clay
455	460	" "
460	465	Black rock
465	470	" "
470	475	Black rock and black sand
475	480	" " " " "
480	485	" " " " " -- Water 86°
485	490	" " " " "
490	495	Gray rock and black sand
495	500	" " " " "
500	505	Black rock

WELL DRILLER Byron Tilby
 WELL OWNER Byron Tilby
 WELL LOCATION Branson

well log

FROM FEET	TO FEET	TYPE OF MATERIAL
505	510	Black rock
510	515	" "
515	520	" "
520	525	Red Clay
525	530	" "
530	535	Rusty brown rock
535	540	" " "
540	545	" " "
545	550	" " "
550	555	" " "
555	560	Grey rock
560	565	" "
565	570	" "
570	575	" "
575	580	" "
580	585	" "
585	590	" "
590	595	" "
595	600	" "
600	605	" "
605	610	Red clay and gravel
610	615	" " "
615	620	" " "
620	625	" " "
625	630	" " "
630	635	" " "
635	640	" " "
640	645	" " "
645	650	" " "
650	655	" " "
655	660	" " "
660	665	Rusty brown clay
665	670	" " "

SES W S. 14 T. 54 E

well.

SHEET NO. 099097

 WELL OWNER Byron Tilby
 WELL DRILLER Byron Tilby
 WELL LOCATION Branson

WELL LOG		
FROM FEET	TO FEET	TYPE OF MATERIAL
670	675	Light grey clay
675	680	" " "
680	685	Purple cinders
685	690	" "
690	695	" "
695	700	" "
700	705	" "
705	710	" "
710	715	" "
715	720	Light grey clay
720	725	" " "
725	730	Grey rock
730	735	" "
735	740	" "
740	745	" "
745	750	" "
750	755	" "
755	760	" "
760	765	" "
765	770	" "
770	775	" "
775	780	Grey and brown rock
780	785	" " " "
785	790	" " " "
790	795	" " " "
795	800	Brown rock
800	805	" "
805	810	" "
810	815	" "
815	820	" "
820	825	" "
825	830	" "
830	835	" "
835	840	" "

SESW S. 14 75 4 E

USGS

WELL OWNER Byron Tilby
 WELL DRILLER Byron Tilby
 WELL LOCATION Bremen

well log

FROM FEET	TO FEET	TYPE OF MATERIAL
840	845	Brown rock
845	850	Grey rock
850	855	" "
855	860	" "
860	865	Brown rock
865	870	" "
870	875	" "
875	880	Brown and grey rock
880	885	" " " "
885	890	" " " "
890	895	" " " "
895	900	" " " "
900	905	" " " "
905	910	" " " "
910	915	" " " "
915	920	" " " "
920	925	Black and brown rock
925	930	" " " "
930	935	Lost cuttings
935	940	Black and brown rock
940	945	" " " "
945	950	" " " " -- Water 90°

Residue
Water

used



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Web Site: www.idwr.idaho.gov

GARY SPACKMAN
Director

C.L. "BUTCH" OTTER
Governor

February 12, 2016

JERRY L ISAAC
28283 SHOO-FLY CUT-OFF RD
BRUNEAU, ID 83604

RE: Water Supply Bank Rental Application for rights 51-13071 and 51-13073

Dear Applicant:

On January 13, 2016, the Idaho Department of Water Resources (Department) received your Water Supply Bank (Bank) lease and rental applications. You included two lease applications for rights 51-13071 and 51-13073. According to your rental application you intend to rent water to irrigate eight acres while waiting for a transfer to move the point of diversion to a well on your property. Currently the rights are diverted from the Tilby well which is considered geothermal. During our conversation on February 1, 2016, you said that you had consulted an engineer about the difference in the wells. We also talked about the engineer submitting information that would show that the water in the Tilby well and the well on your property are the same source.

Please provide the requested documentation about the source of the two wells within thirty (30) days of the date of this letter so the Department may continue processing your applications. If the Department does not receive the requested information timely, your applications will be returned. Please contact me if you have any questions.

Sincerely,

Sandra Thiel
Sr. Water Resource Agent
(208) 287-4881
sandra.thiel@idwr.idaho.gov

RECEIVED

JAN 13 2016

DEPARTMENT OF
WATER RESOURCES

1-11-16

Dear Sir or Madam,

Enclosed is an application both to lease my water rights to the Water Bank and also to rent the same rights back.

I tried earlier to transfer these rights to my well but ~~was~~ denied because the rights come from the Tilby well which is geothermal.

In talking to an engineer it was found that the Tilby well is approx. 900 feet deep and was cased to only 200 ft. My well which is the same elevation is 300 ft. deep and is cased to 220 ft. Therefore it is quite likely that a portion of the water in the Tilby well is coming from the same aquifer as my well.

We are applying to transfer these rights to my well in light of this fact, and it seems possible that the rental would also work while we get the transfer done.

Thankyou for your consideration,



Jerry Isaac