

AUG 08 2016

DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

DEPT OF WATER RESOURCES
SOUTHERN REGION

To appropriate the public waters of the State of Idaho

1. Name of applicant(s) Balsam Well Owners Association, Inc. Phone 208-788-9061
 Mailing address c/ Peter Madsen, PO Box 334, Hailey, Idaho, 83333 Email salongamine@salongamine.com
 Name connector (check one): ☐ and ☐ or ☐ and/or
2. Name of representative, if any James P. Speck Phone 208-726-4421
 Mailing address PO Box 987, Ketchum, Idaho, 83340 Email jim@speckandaanestad.com
 a. ☐ Send all correspondence for this application to the representative and not to the applicant OR
☒ Send original correspondence to the applicant and copies to the representative.
 b. ☒ The representative may submit information for the applicant but is not authorized to sign for the applicant OR
☐ The representative is authorized to sign for the applicant. Attach a Power of Attorney or other documentation providing authority to sign for the applicant.
3. Source of water supply ground water which is a tributary of _____
4. Location of point(s) of diversion:

Twp	Rge	Sec	Govt Lot	1/4	1/4	1/4	County	Source	Local name or tag #
10N	13E	36	3		SE	NW	Custer	ground water	

5. Water will be used for the following purposes:
 Amount 0.15 cfs for domestic purposes from Jan. 1 to Dec. 31 (both dates inclusive)
 (cfs or acre-feet per year)
 Amount 0.10 cfs for irrigation purposes from May 1 to Oct. 31 (both dates inclusive)
 (cfs or acre-feet per year)
 Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
 (cfs or acre-feet per year)
 Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
 (cfs or acre-feet per year)
6. Total quantity to be appropriated is (a) 0.25 cubic feet per second (cfs) and/or (b) _____ acre-feet per year (af).
7. Proposed diverting works:
 a. Describe type and size of devices used to divert water from the source. Well, pump, buried mainlines
 b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet. If the reservoir will be filled more than once each year, describe the refill plan in item 11. For dams 10 feet or more in height AND having a storage capacity of 50 acre-feet or more, submit a separate Application for Construction or Enlargement of a New or Existing Dam. Application required? ☐ Yes ☐ No
 c. Proposed well diameter is 8 inches; proposed depth of well is 150 feet.
 d. Is ground water with a temperature of greater than 85°F being sought? ☐ Yes ☒ No
 e. If well is already drilled, when? _____; drilling firm _____;
 well was drilled for (well owner) _____; Drilling Permit No. _____

For Department Use

Received by DM Date 8-8-2016 Time 12:40pm Preliminary check by _____
 Fee \$ 250 - Received by DM Receipt No. 5035648 Date 8-8-2016

8. Description of proposed uses (if irrigation only, go to item 8):

- Hydropower; show total feet of head and proposed capacity in kW. _____
- Stockwatering; list number and kind of livestock. _____
- Municipal; must complete and attach the Municipal Water Right Application Checklist.
- Domestic; show number of households 10
- Other; describe fully. _____

9. Description of place of use:

- If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
10N	13E	36					2			3									5
10N	13E	36					D			D									
							42			43									

Total number of acres to be irrigated: 5

10. Describe any other water rights used for the same purposes as described above. Include water delivered by a municipality, canal company, or irrigation district. If this application is for domestic purposes, do you intend to use this water, water from another source, or both, to irrigate your lawn, garden, and/or landscaping? 71-7095

- Who owns the property at the point of diversion? Linda Woodcock
- Who owns the land to be irrigated or place of use? Applicant's members
- If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: Well easement agreement

12. Describe your proposal in narrative form, and provide additional explanation for any of the items above. Attach additional pages if necessary. Develop a new well and water system to provide water to Lots 32 - 41 of Stanley Basin Cabin Sites #1 to provide water for domestic use and irrigation of a maximum of 0.5 acres on each such lot with a home

13. Time required for completion of works and application of water to proposed beneficial use is 5 years (minimum 1 year).

14. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½" x 11" map or maps clearly identifying the proposed point of diversion, place of use, section #, township & range. The map scale shall not be less than two (2) inches equal to one (1) mile.

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.

Signature of Applicant

Peter Madsen, President

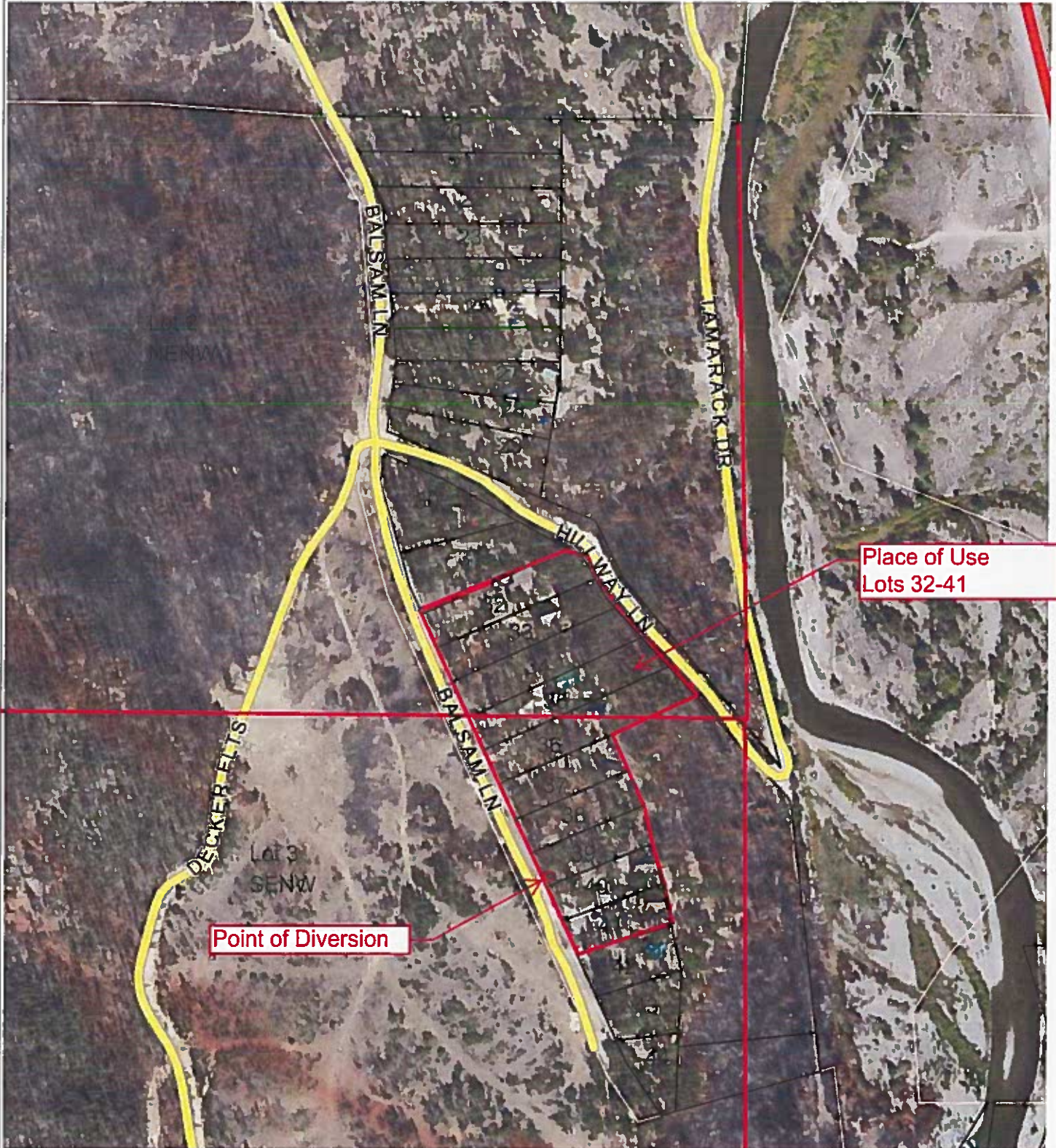
Print Name (and title, if applicable)

Signature of Applicant

Print Name (and title, if applicable)

Custer County Idaho MapServer

Section 36, T.10N., R. 13E., B.M.



Place of Use
Lots 32-41

Point of Diversion

- Highways
- County Road
- Other Road
- BLM
- US Forest Service
- State of Idaho
- Cities

2013 Aerial Photography

NORTH

This map/data is provided by Custer County, Idaho for display purposes only. Custer County invokes its sovereign and governmental immunity in allowing access to or use of this data, and makes no warranties as to the validity, and assumes no liability associated with the use or misuse of this information.

0 230 460 690 ft

1/21/2015

71-10959

Stanley Basin Cabin Sites #1
Lots 20-44

201



ARTICLES OF INCORPORATION (Non-Profit)

Title 30, Chapters 21 and 30, Idaho Code

Base Filing fee: \$30.00

Complete and submit the form in duplicate.

FILED EFFECTIVE

2016 MAR 29 AM 8:01

SECRETARY OF STATE
STATE OF IDAHO

Article 1: The name of the corporation shall be:

Balsam Well Owners Association, Inc.

Article 2: The purpose for which the corporation is organized is:

Any lawful purpose

Article 3: Registered agent name and address:

<u>James P. Speck</u>	<u>120 East Avenue North</u>	<u>Ketchum</u>	<u>ID</u>	<u>83340</u>
(Name)	(Address)	(City)	(State)	(Zipcode)

Article 4: The board of directors shall consist of no fewer than three (3) people. The names and addresses of the initial directors are:

<u>Betty W. Swanson</u>	<u>PO Box 4965</u>	<u>Ketchum</u>	<u>ID</u>	<u>83340</u>
(Name)	(Address)	(City)	(State)	(Zipcode)
<u>James K. Figge</u>	<u>PO Box 1876</u>	<u>Ketchum</u>	<u>ID</u>	<u>83340</u>
(Name)	(Address)	(City)	(State)	(Zipcode)
<u>Linda D. Woodcock</u>	<u>PO Box 2142</u>	<u>Ketchum</u>	<u>ID</u>	<u>83340</u>
(Name)	(Address)	(City)	(State)	(Zipcode)
<u>Peter Madsen</u>	<u>P.O. Box 834</u>	<u>Hailey</u>	<u>ID</u>	<u>83340</u>
(Name)	(Address)	(City)	(State)	(Zipcode)

Article 5: Incorporator name(s) and address(es):

<u>James P. Speck</u>	<u>PO Box 987</u>	<u>Ketchum</u>	<u>ID</u>	<u>83340</u>
(Name)	(Address)	(City)	(State)	(Zipcode)
_____ (Name)	_____ (Address)	_____ (City)	_____ (State)	_____ (Zipcode)
_____ (Name)	_____ (Address)	_____ (City)	_____ (State)	_____ (Zipcode)

Article 6: The mailing address of the corporation shall be:

<u>c/o James P. Speck, PO Box 987</u>	<u>Ketchum</u>	<u>ID</u>	<u>83340</u>
(Address)	(City)	(State)	(Zipcode)

Article 7: The corporation (☒ does ☐ does not) have voting members.

Article 8: Upon dissolution the assets shall be distributed: _____

Blaine County District Court

Signatures of all incorporators:

Printed Name: James P. SpeckSignature: [Signature]

Printed Name: _____

Signature: _____

Printed Name: _____

Signature: _____

Revised 07/2015

Secretary of State use only

IDAHO SECRETARY OF STATE

03/29/2016 05:00

CK: PREPAID CT: 91971 BH: 1520985

16 30.00 = 30.00 INC NONP #2

C209363



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

September 9, 2016

BALSAM WELL OWNERS ASSOCIATION INC
C/O PETER MADSEN
PO BOX 334
HAILEY, ID 83333

RE: Application For Permit No. 71-10959

Dear Applicant(s):

The Department of Water Resources has received your water right application. Please refer to the number referenced above in all future correspondence regarding this application.

A legal notice of the application has been prepared and is scheduled for publication in the **CHALLIS MESSENGER** on **9/15/2016** and **9/22/2016**. Protests to this application may be submitted for a period ending ten (10) days after the second publication (**October 3, 2016**).

If the application is protested, you will be sent a copy of each protest. All protests must be resolved before the application can be considered for approval. If the protest(s) cannot be resolved voluntarily, the Department will conduct a conference and/or hearing on the matter.

If the application is not protested, the Department will process your application and notify you of any action taken on the application. If your application is approved, the Department will send you a copy of the permit.

Please contact this office if you have any questions regarding the application.

Sincerely,


Denise Maline
Administrative Assistant

cc:

JAMES P SPECK
SPECK & AANESTAD
PO BOX 987
KETCHUM, ID 83340

Maline, Denise

From: Maline, Denise
Sent: Friday, September 09, 2016 9:22 AM
To: Yenter, Cindy
Subject: Comment Letters for 71-10958 & 71-10959
Attachments: Comment Letter to WM170 for 71-10958 & 71-10959.docx; 71-10959.pdf; 71-10958.pdf

Hi Cindy,

Attached are copies of the 2 Applications for Permit referenced above, which are currently being processed. Please review the information and provide any necessary comments within 21 days.

Please let me know if you have any questions.

Thank you & have a great weekend,

Denise



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858
Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

September 8, 2016

CINDY YENTER
WATER DISTRICT #170
102 S WARPATH
SALMON, ID 83467

via e-mail

RE: Application for Permit No. 71-10958 & 71-10959

Dear Cindy:

A copy of the above referenced application is enclosed. Please review the application, then complete the enclosed recommendation form as necessary, and return it to this office within 21 days of the date of this letter.

If the application is approved, IDWR will include appropriate standard conditions of approval for a water right located within a water district, such as regulation by the watermaster, lockable controlling works, and/or measuring devices. Any special conditions or other concerns you have related to this application should be specifically addressed in your recommendation.

IDWR's regional offices can finish reviewing an unprotested application as soon as the protest period has past. Your prompt response to this request will ensure that your recommendation can be considered. If IDWR has not received your written recommendation within 21 days from the date of this letter, IDWR will presume that you do not oppose approval of the application and that you have no comments for IDWR to consider.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

September 8, 2016

WATER DISTRICT #71
MORGAN MILLER
3594 HOTSPRINGS RD
CHALLIS, ID 83226

RE: Application for Permit No. 71-10958 & 71-10959

Dear Morgan:

A copy of the above referenced application is enclosed. Please review the application, then complete the enclosed recommendation form as necessary, and return it to this office within 21 days of the date of this letter.

If the application is approved, IDWR will include appropriate standard conditions of approval for a water right located within a water district, such as regulation by the watermaster, lockable controlling works, and/or measuring devices. Any special conditions or other concerns you have related to this application should be specifically addressed in your recommendation.

IDWR's regional offices can finish reviewing an unprotested application as soon as the protest period has past. Your prompt response to this request will ensure that your recommendation can be considered. If IDWR has not received your written recommendation within 21 days from the date of this letter, IDWR will presume that you do not oppose approval of the application and that you have no comments for IDWR to consider.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

September 8, 2016

IDAHO DEPT OF FISH & GAME
ATTN: JEFF RICHARDS
99 HWY 93 N
SALMON, ID 83467

RE: Application for Permit No. 71-10958 & 71-10959

Dear Fish & Game:

The Department of Water Resources is seeking written comment and/or recommendations from your agency regarding the above referenced water right application. A copy of the application is enclosed for your reference. Please review the application, complete the enclosed recommendation form, and submit it to this office within 21 days.

The Department can publish notice of the application as soon as the initial review is completed. Therefore, your prompt response to this request is appreciated. If your agency desires to formally protest the approval of this application, you may do so after the notice is published by filing a written protest along with a \$25.00 filing fee within 10 days after final publication.

Please contact this office if you have any questions regarding the application, or you may visit our website at www.idwr.idaho.gov.

Sincerely,

Denise Maline
Southern Region

Enclosure(s)

Maline, Denise

From: Maline, Denise
Sent: Thursday, September 08, 2016 12:10 PM
To: Challis Messenger
Subject: LEGAL NOTICE
Attachments: Challis Messenger Cover Letter.docx; Challis Messenger Ad.docx.doc

Attached please find (1) legal notice being submitted for publication on September 15th & 22nd, 2016. Please feel free to contact me if you have any questions, or if you are not able to run the ad on the dates requested.

Thank you in advance,

*Denise Maline
Administrative Assistant I
Idaho Dept of Water Resources, Southern Region
650 Addison Ave W, Ste 500
Twin Falls, ID 83301
(208) 736-3033
denise.maline@idwr.idaho.gov*



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

September 8, 2016

LEGAL NOTICE DEPARTMENT
CHALLIS MESSENGER
PO BOX 405
CHALLIS, ID 83226

RE: Application For Permit No.(s): 71-10958, 71-10959

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before October 3, 2016. Your cooperation is appreciated.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

71-10958

STANLEY BASIN WELL OWNERS ASSOCIATION INC

C/O JED GRAY

PO BOX 326

SUN VALLEY, ID 83353

Point of Diversion L2(NWNENW) S36 T10N R13E CUSTER County Source GROUND WATER Tributary

Use: DOMESTIC 01/01 to 12/31 0.16 CFS

Use: IRRIGATION 05/01 to 10/31 0.12 CFS

Total Diversion: 0.28 CFS

Date Filed: 8/8/2016

Place Of Use: DOMESTIC, IRRIGATION

T10N R13E S36 L2(NENW)

Total Acres: 6

Application for permit for domestic (0.16 cfs, 12 homes) and irrigation (0.12 cfs, 6 acres) uses from an existing well, located approximately 4.0 miles south and 2.0 miles east of the intersection of State Highways 21 and 75 in Stanley, to supplement existing water right 71-7095. The proposed place of use is in the Stanley Basin Cabin Sites #1, Lots 20 thru 31, located approximately 4.0 to 4.2 miles south and 2.0 to 2.2 miles east of Stanley.

This application proposes the diversion and use of water tributary to a federally designated Wild & Scenic River.

The decreed minimum stream flow rights for the federal Wild & Scenic Rivers are subordinate to certain categories of water use and to specific amounts of water use established after the minimum stream flow. The water use proposed in this application will benefit from the subordination provision because the diversion rate and acres will be applied to the subordination amounts specified in the decree for the Salmon River Wild & Scenic River.

71-10959

BALSAM WELL OWNERS ASSOCIATION INC

C/O PETER MADSEN

PO BOX 334

HAILEY, ID 83333

Point of Diversion L3(SENW) S36 T10N R13E CUSTER County Source GROUND WATER Tributary

Use: DOMESTIC 01/01 to 12/31 0.15 CFS

Use: IRRIGATION 05/01 to 10/31 0.1 CFS

Total Diversion: 0.25 CFS

Date Filed: 8/8/2016

Place Of Use: DOMESTIC, IRRIGATION

T10N R13E S36 L2(NENW) L3(SENW)

Total Acres: 5

Application for permit for domestic (0.15 cfs, 10 homes) and irrigation (0.10 cfs, 5 acres) uses from a new well, located approximately 4.3 miles south and 2.0 miles east of the intersection of State Highways 21 and 75 in Stanley, to supplement existing water right 71-7095. The proposed place of use is in the Stanley Basin Cabin Sites #1, Lots 32 thru 41, located approximately 4.1 to 4.3 miles south and 2.0 to 2.2 miles east of Stanley.

This application proposes the diversion and use of water tributary to a federally designated Wild & Scenic River.

The decreed minimum stream flow rights for the federal Wild & Scenic Rivers are subordinate to certain categories of water use and to specific amounts of water use established after the minimum stream flow. The water use proposed in this application will benefit from the subordination provision because the diversion rate and acres will be applied to the subordination amounts specified in the decree for the Salmon River Wild & Scenic River.

Permits will be subject to all prior water rights. For additional information concerning the property location, contact Southern Region office at (208) 736-3033; or for a full description of the right(s), please see www.idwr.idaho.gov/WaterManagement/WaterRights/#NewListings. Protests may be submitted based on the criteria of Idaho Code § 42-203A. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resources, Southern Region, 650 Addison Ave W, Ste 500, Twin Falls, ID 83301 together with a protest fee of \$25.00 for each application on or before October 3, 2016. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published on September 15th & 22nd, 2016

Bitzenburg, James

From: Bitzenburg, James
Sent: Thursday, September 01, 2016 11:37 AM
To: Clark, Cynthia (Bridge)
Subject: Permit applications near Stanley
Attachments: 71-10959.pdf; 71-10958.pdf

Cynthia-

I have attached two applications for permit which we will be submitting for advertising next week. They are for ground water near the Salmon River south of Stanley and the uses are domestic and irrigation. If you have any comments, concerns, or questions, don't hesitate to contact me. Thanks.

Jim

Jim Bitzenburg
Water Resource Agent
Idaho Department of Water Resources
Southern Regional Office
Phone (208)-736-3033
Fax (208)-736-3037
james.bitzenburg@idwr.idaho.gov

Bitzenburg, James

From: Jim Speck [jim@speckandaanestad.com]
Sent: Wednesday, August 31, 2016 11:50 AM
To: Bitzenburg, James
Cc: Jed Gray
Subject: RE: RE: RE: Stanley Basin Well Owners Association & Balsam Well Owners Association - Applications for Permit

Jim,

Please proceed with advertising as soon as possible. I doubt that anything other than the Brockway Analyses will be submitted. Thank you.

Jim

-----Original Message-----

From: Bitzenburg, James [mailto:James.Bitzenburg@idwr.idaho.gov]
Sent: Wednesday, August 31, 2016 11:40 AM
To: Jim Speck
Subject: RE: RE: RE: Stanley Basin Well Owners Association & Balsam Well Owners Association - Applications for Permit

Jim-

If you wish to proceed with the advertising of the Stanley Basin Well Owner's Association, Inc and Balsam Well Owner's Association, Inc applications for permit 71-10958 and 71-10959, without submitting any additional information as was requested in the letters to you dated August 12, 2016, concerning the effect of the applications on the local public interest, we can do so. Just send me an email requesting that we move ahead with the processing of the applications. Any information supplied later can be added to the file as needed. I will get them to Denise this week and she will get them submitted. Thanks.

Jim

Jim Bitzenburg
Water Resource Agent
Idaho Department of Water Resources
Southern Regional Office
Phone (208)-736-3033
Fax (208)-736-3037
james.bitzenburg@idwr.idaho.gov

-----Original Message-----

From: Jim Speck [mailto:jim@speckandaanestad.com]
Sent: Tuesday, August 30, 2016 3:11 PM
To: Bitzenburg, James
Cc: Jed Gray
Subject: FW: RE: RE: Stanley Basin Well Owners Association & Balsam Well Owners Association - Applications for Permit

Jim,

IDFG has all of the materials but I have not heard back from them.
Can we start the advertising process. We are hoping to drill the well this Fall. Thanks for your help.

Jim

-----Original Message-----

From: Jim Speck [mailto:jim@speckandaanestad.com]
Sent: Thursday, August 25, 2016 9:04 AM
To: 'jeff.richards@idfg.idaho.gov'
Cc: Jed Gray (jed@svassociates.com); 'Peter Madsen (salongamine@salongamine.com)'; 'Jim Bitzenburg (james.bitzenburg@idwr.idaho.gov)'
Subject: FW: RE: RE: Stanley Basin Well Owners Association & Balsam Well Owners Association - Applications for Permit

Jeff,

At the request of Tom Bassista I am forwarding this e-mail to you.
Please reply to confirm you received these materials and let me know if you have any questions or concerns about the applications. Thank you.

Jim

James P. Speck
SPECK & AANESTAD
A Professional Corporation
120 East Avenue North
P.O. Box 987
Ketchum, ID 83340
208.726.4421
208.726.0752 (fax)
jim@speckandaanestad.com

CONFIDENTIAL COMMUNICATION

This email message and any attachments are intended only for the use of the addressee named above and may contain information that is privileged and confidential. If you are not the intended recipient, any dissemination, distribution, or copying is strictly prohibited. If you received this email message in error, please immediately notify the sender by replying to this email message or by telephone. Thank you.

-----Original Message-----

From: Jim Speck
Sent: Monday, August 15, 2016 5:37 PM
To: 'Bassista,Tom'
Cc: Jed Gray (jed@svassociates.com); 'Peter Madsen (salongamine@salongamine.com)'; 'Jim Bitzenburg (james.bitzenburg@idwr.idaho.gov)'

Tom,

The original Applications for Permit were withdrawn. Two completely separate and distinct well owners associations were then formed for two parts of the Subdivision. Those separate parts will be served by two physically separate wells and water supply systems. We have now filed two new Applications for Permit in the names of the two Associations (copies attached). The Associations also retained Brockway Engineering to complete hydrologic impact analyses for the two systems. Their Reports are also attached. I believe they adequately

address the questions and concerns you expressed for the previous applications in your e-mail below.

Please contact me if you have any questions or concerns. Thanks you.

Jim

-----Original Message-----

From: Bassista, Tom

Sent: Friday, April 24, 2015 2:49 PM

To: 'Jim Speck'

Cc: Curet, Tom; Case, Morgan (Morgan.Case@idwr.idaho.gov); Poole, Walt; Luke, Tim

Dear Jim:

Thank you for providing all relevant information pertaining to this proposal. Please excuse my delay in getting back to you.

The Idaho Department of Fish and Game (Department) has reviewed the Stanley Basin Well Owners Association Inc. proposals for improving an existing well and for drilling a new well within the subdivision (North well 0.27 cfs; South well 0.32 cfs). These new groundwater developments are intended to service up to 44 lots (lots 20-44). The Department has preliminarily assessed these proposals for potential effects of water use on aquatic habitat for fish and wildlife resources of the Upper Salmon River. The Department, along with partners, spend considerable financial resources restoring and monitoring fisheries and aquatic habitat in this area. We understand water resource development is part of the landscape in the Upper Salmon River. The Department needs to ensure the proposal will have minimal or no effect on water flow of the Salmon River or any adjacent tributary streams of the Salmon River, particularly during summer and winter low flow time periods.

The Department does not have profession groundwater staff or expertise to quantitatively determine if the groundwater source may be impacting flows from the Salmon River or adjacent tributary streams. It appears that the well location is approximately 120 feet above the Salmon River. The well drilling proposal is to drill the well to approximately 150 feet. A beneficial use report from 1985, of the existing subdivision well, indicated that a pump test was performed at 119.6 feet (pumping water level). We are concerned that the ground water source may have a hydrologic connection to the Salmon River. The Department highly recommends that the Stanley Basin Well Owners Association seek expertise from a professional groundwater specialist prior to having the Idaho Department of Water Resources (IDWR) advertise the permit application. The intention should be to provide data or expert opinion on the impacts of the proposed wells on the Salmon River or adjacent tributaries. That information should be included in the application to help the Department, IDWR, Idaho Water Resource Board, and other reviewers determine potential impact to the local public interest.

Thank you for the opportunity to review and comment on the 2 applications. Please contact me if you have additional questions or concerns.

Sincerely,

Tom Bassista

Environmental Staff Biologist

Idaho Department of Fish and Game
Upper Snake and Salmon Regions
4279 Commerce Circle

Idaho Falls, ID 83401
208.525.7290

-----Original Message-----

From: Jim Speck [mailto:jim@speckandaanestad.com]
Sent: Wednesday, April 08, 2015 12:25 PM
To: Bassista, Tom
Subject: Re: Stanley Basin Well Owners/Water Rights

Tom,

Thanks for taking the time to talk about my client's two pending applications for permit. I have attached copies of those applications, the March 5, 2015 IDWR request for ESA impact information and the Eaton Drilling proposal for the new well for the South Well application. The existing, North Well was drilled around 1965 and we don't have any specific information on its depth other than the somewhat cryptic notes in the attached beneficial use field report for the original water right - 71-7095. We would like a letter from IDFG to submit to IDWR in response to the March 5 letter. Please call if you have more questions.

Thank you.

Jim

James P. Speck
SPECK & AANESTAD
A Professional Corporation
120 East Avenue North
P.O. Box 987
Ketchum, ID 83340
208.726.4421
208.726.0752 (fax)
jim@speckandaanestad.com

CONFIDENTIAL COMMUNICATION

This email message and any attachments are intended only for the use of the addressee named above and may contain information that is privileged and confidential. If you are not the intended recipient, any dissemination, distribution, or copying is strictly prohibited. If you received this email message in error, please immediately notify the sender by replying to this email message or by telephone. Thank you.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 12, 2016

BALSAM WELL OWNERS ASSN INC
C/O PETER MADSEN
PO BOX 334
HAILEY ID 83333

RE: Applications to Appropriate Water in the Upper Salmon River Basin 71-10959

Dear Water Right Applicant:

The Department of Water Resources' (IDWR) records show you filed an application to establish a new use of water in the upper Salmon River basin. Idaho Code § 42-203A(5) requires IDWR to determine whether each water right application satisfies all the criteria necessary for appropriating water in Idaho. One statutory criterion requires IDWR to determine the local public interest relative to the proposed water use. Idaho Code § 42-202B(3) defines the local public interest as "the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource." The local public interest has many facets, including the effects of a proposed water use on aquatic habitat for fish and wildlife resources.

The upper Salmon River basin is home to stocks of chinook salmon, sockeye salmon, steelhead trout, and bull trout, all of which are listed as threatened or endangered under the Endangered Species Act (ESA). Since the early 1990s, local water users, conservation districts, and federal and state agencies have cooperated to implement conservation measures intended to protect and restore habitat for ESA-listed species in the upper Salmon River watershed. For example, at the request of local water users the Idaho Legislature directed the Idaho Water Resource Board (IWRB) to establish a minimum stream flow in the lower Lemhi River for fish passage. The minimum stream flow is maintained through a water supply bank and temporary or permanent acquisition of additional water supplies by willing buyers from willing sellers.

Pursuant to the Snake River Water Rights Agreement of 2004, Idaho has been developing a long term conservation plan for the benefit of ESA-listed species in the Lemhi River basin. Improving conditions in flow-limited river reaches and streams is a fundamental component of the Lemhi plan. In addition to IDWR, numerous state agencies, including the Office of Species Conservation, Idaho Department of Fish and Game, Idaho Department of Environmental Quality, Idaho Soil and Water Conservation Commission, and Idaho Department of Lands, have committed and continue to commit significant resources toward this objective under the following programs:

- Columbia Basin Water Transactions Program
- National Marine Fisheries Service Pacific Coastal Salmon Recovery Fund
- U. S. Fish & Wildlife Service Aquatic Species Conservation Fund
- Salmon and Clearwater River Basins Habitat Fund
- 2008 Columbia Basin Fish Accords

A myriad of habitat restoration projects are being constructed/implemented in other parts of the upper Salmon River basin. These projects have been coordinated with the local communities and water users through the Upper Salmon River Basin Watershed Program and predecessor programs, including the model watersheds. Furthermore, the Snake River Water Rights Agreement of 2004 contemplates the development of additional conservation plans for other upper Salmon River basin watersheds. Accordingly, the draft Comprehensive State Water Plan under revision by the IWRB contains policies for the Salmon River basin that focus on the protection and restoration of instream habitat for ESA-listed species through voluntary participation in conservation programs.

Because of the ESA-listed species recovery efforts in the upper Salmon River basin, IDWR must determine on a case-by-case basis whether it is in the local public interest to authorize proposed water uses that would further deplete flow-limited stream reaches.

Pursuant to Rule 40.04.c of the Water Appropriation Rules (IDAPA 37.03.08.040.04.c), the applicant has the ultimate burden of persuasion regarding the items that must be evaluated in connection with each water right application. Before proceeding further with your application, IDWR requests you submit additional information about how your proposal invokes any local public interest concerns for ESA species recovery. Within 30 days, please submit any additional information you believe IDWR may need to evaluate and determine the local public interest in the water you propose to divert and use. If IDWR has not received a response from you within 30 days, IDWR will assume you have no comment regarding the local public interest, and processing of your application will resume with the information currently on file. Processing will include public notice and the potential for formal protests by other interested parties. Applications that are not in the local public interest will be denied. If you wish to withdraw your application before it is processed, please notify IDWR in writing.

If you have any questions, please call Shelley Keen at 208-287-4947, or email him at shelley.keen@idwr.idaho.gov. For applications in administrative basins 71 or 72, you may also contact IDWR's Southern Region office in Twin Falls at 208-736-3033.

Sincerely,



Jim Bitzenburg
Water Resource Agent

Cc: Jim Speck

Bitzenburg, James

From: Jim Speck [jim@speckandaanestad.com]
Sent: Thursday, August 11, 2016 3:32 PM
To: Bitzenburg, James
Subject: RE: Stanley Basin WOA and Balsam WOA applications for permit

Jim,

You are right – sorry for the omission.

Jim

From: Bitzenburg, James [mailto:James.Bitzenburg@idwr.idaho.gov]
Sent: Thursday, August 11, 2016 3:09 PM
To: Jim Speck
Subject: Stanley Basin WOA and Balsam WOA applications for permit

Jim-

I'm doing the data entry for the two new applications for permit south of Stanley, and everything looks pretty good, but on both applications, the POU in 9.(b) for the domestic portion isn't filled out. I'm assuming that it is in the same QQs as the irrigation, I just wanted to confirm with you. So, for the Stanley Basin WOA, the domestic POU would be **T10N, R13E, Section 36, NENW, Government Lot 2.**

For the Balsam WOA, it would be **T10N, R13E, Section 36, NENW, Government Lot 2, and SENW Government Lot 3.**

Thanks for your assistance.

Jim

Jim Bitzenburg
Water Resource Agent
Idaho Department of Water Resources
Southern Regional Office
Phone (208)-736-3033
Fax (208)-736-3037
james.bitzenburg@idwr.idaho.gov

SPECK & AANESTAD
A PROFESSIONAL CORPORATION
ATTORNEYS

JAMES P. SPECK
jim@speckandaanestad.com
DOUGLAS J. AANESTAD
doug@speckandaanestad.com

120 EAST AVENUE
POST OFFICE BOX 987
KETCHUM, IDAHO 83340

TELEPHONE
(208) 726-4421
FACSIMILE
(208) 726-0752

August 4, 2016

RECEIVED

AUG 08 2016

**DEPT OF WATER RESOURCES
SOUTHERN REGION**

Corey Skinner
Idaho Department of Water Resources
650 Addison Ave. W, Suite 500
Twin Falls, Idaho 83301

***Re: Stanley Basin Well Owners Association, Inc. - Application for Permit
Balsam Well Owners Association, Inc. - Application for Permit***

Dear Corey:

Enclosed you will find the original and one copy each of the above-referenced Application for Permit for new water rights for two separate water systems serving lots within the Stanley Basin Cabin Sites #1 Subdivision just south of the turnoff to Red Fish Lake in Custer County, Idaho. I have also included for each Application an Analysis of Water Supply Availability and Hydrologic Impact prepared by Brockway Engineering to support the requirements for issuing these new water rights. I have also enclosed my firm's check payable to the Department in the amount of \$500.

Please review the enclosures and call me right away if you have any questions or comments.

Thank you.

Sincerely yours,

SPECK & AANESTAD
A Professional Corporation

By: 
James P. Speck

Enclosures

cc: Clients w/encl.
Charles G. Brockway w/encl.

Project No. 1325-01B-2015

Analysis of Water Supply Availability and Hydrologic Impact for the Balsam Well Owners Association Water System

June 27, 2016

For information concerning this report, contact
Charles G. Brockway, Ph.D., P.E.

RECEIVED

AUG 08 2016

**DEPT OF WATER RESOURCES
SOUTHERN REGION**



CHARLES E. BROCKWAY, PH.D., P.E.
CHARLES G. BROCKWAY, PH.D., P.E.

2016 NORTH WASHINGTON, SUITE 4
TWIN FALLS, IDAHO 83301

Project No. 1325-01B-2015

Analysis of Water Supply Availability and Hydrologic Impact for the Balsam Well Owners Association Water System

June 27, 2016

For information concerning this report, contact
Charles G. Brockway, Ph.D., P.E.



CHARLES E. BROCKWAY, Ph.D., P.E.
CHARLES G. BROCKWAY, Ph.D., P.E.

2016 NORTH WASHINGTON, SUITE 4
TWIN FALLS, IDAHO 83301

Background

Balsam Well Owners Association, Inc. is a water company pertaining to Lots 32-41 in the Stanley Basin Subdivision, a residential development located south of Stanley, Idaho. A water permit application is being submitted to the Idaho Department of Water Resources, requesting a new appropriation for domestic and domestic irrigation purposes to serve these 10 lots, which are located within the southern portion of the subdivision. Water will be supplied by a single well to be drilled on Lot 39, and a common distribution system with service connections at each lot as shown on the attached aerial map.

This purpose of this report is to provide supplemental information in support of the permit application pursuant to IDAPA 37.03.08.040 ("Rule 40"), specifically relating to the sufficiency of the water supply and the effect on existing water rights.

Water Demand

An analysis of water requirements was made to determine the maximum daily, peak hourly, and annual average diversion requirements, and total consumptive use of the project.

Homes within the Stanley Basin Subdivision are vacation homes or second homes utilized almost exclusively in the summertime. There are no full-time residents. Based on observation of occupancy patterns, the president of the homeowners association has estimated that peak summertime occupancy could be as high as 80%, while wintertime occupancy is not more than 10% (owners winterize their cabins and generally do not return except on rare occasions). The summertime figure is probably high as an average, since most owners are present only on weekends, with occupancy peaking around the July 4 holiday. However, to be conservative an 80% occupancy was assumed for the entire summer season from May 1 through October 31.

Irrigation within the subdivision will be minimal. No owner has expressed a desire to irrigate more than incidentally around his or her cabin. However, the permit application would theoretically allow up to 0.5 acres of irrigation per lot, so this amount was assumed for the analysis.

Domestic water demand was based on a per-capita average in-house demand of 75 gpcd. This is the figure suggested by IDWR guidance for "luxury cabins." An average of 2.5 persons per unit was assumed. To estimate maximum day and peak hour in-house requirements, peaking factors of 3 and 9, respectively, were applied.

Irrigation water requirements were based on evapotranspiration data from Allen and Robison (2012), the dataset commonly used by IDWR for these types of analyses. Precipitation deficit figures for the Stanley station for a crop of Grass Hay were used. Peak day irrigation requirements were based on the 20% exceedance value for the 3-day

moving average figure. An irrigation efficiency of 70% was assumed for both seasonal and peak day analyses.

The results of the analysis are shown on the attached spreadsheet. The total annual diversion volume requirement is 9.8 acre-feet, and the peak diversion requirement is 53 gpm or 0.12 cfs. Consumptive use is 6.3 acre-feet annually, which equates to an average depletion of 0.017 ac-ft/day or 0.0088 cfs.

Hydrogeologic Analysis

The project is located within the Stanley Basin, a region characterized by three primary geologic units: intrusive rock formations, primarily granitic in nature; glaciated features and depositions (moraines) consisting chiefly of granite in various states of decomposition along with some finer-grained material; and valley-fill alluvium consisting of sand, gravel, and cobble. These units are delineated on the geologic map prepared by the U.S. Geological Survey (USGS, 1992). This map indicates that the Stanley Basin Subdivision is situated on the glacial moraine forming the eastern boundary of the Redfish Lake valley. Topographically, the subdivision is elevated above the valley floor by approximately 100 feet.

A more localized investigation was made using data from all available well drilling records within approximately 5 miles of the project site. A total of 30 logs were found in the IDWR database (see attached map for well locations; logs are provided in the Appendix). The lithology indicated on the well records agrees closely with the geologic configuration indicated by USGS (1992). The valley-fill alluvium is confirmed consistently by drilling records to a depth of up to 150 feet below the valley floor. Further west, two wells at campgrounds around Little Redfish Lake confirm the presence of very deep valley-fill alluvium to a depth exceeding 155 feet below the valley floor. The estimated limit of alluvium was delineated and is shown on the attached figure. Specific geologic data at the project site is limited to one well record for a well completed in 2015 on Lot 42. This well confirms the decomposed granite composition beneath the project to a depth of 94 feet below ground. Somewhat surprisingly, the log also indicates a sand and gravel (alluvium) strata from 94 to 169 feet below ground, underlain by the bedrock granite formation. This would situate it at precisely the same elevation as the valley-fill alluvium along the Salmon River, accounting for the topographic elevation of the subdivision.

This evidence suggests that the valley-fill alluvium is not bounded by the glacial moraine, but the glaciation occurred later in time and the moraine overlies the alluvium to some extent. It is possible that the alluvium extends under the entire moraine, but more likely the alluvium follows a boundary similar to that shown on the attached figure. This evidence was used to develop the geologic cross-section at the location shown on the attached map.

Water is present in the alluvium, which forms the water supply for the wells in the vicinity of the Sawtooth Fish Hatchery (numbers 14 through 19). In addition, the 2015

well in the Stanley Basin Subdivision (number 23) draws water from the alluvium (minimal water is present in the glacial deposits). Static water levels in the hatchery wells are very shallow, ranging from 3 feet to 10 feet below ground, suggesting that the water table is probably coincident with the adjacent level of the Salmon River. In Well 23, the static water level is 135 feet. In the north subdivision well (no log), the water level was measured by an IDWR field examiner in July 1985 to be 119.6 feet. These levels are about 20 to 35 feet below the adjacent elevation of the Salmon River. This appears to indicate that the groundwater gradient is away from the river, i.e. the river is a losing reach. Wells further up-river (numbers 28 through 30) have static water levels of 2 to 4 feet below ground.

Immediately downstream of the project area, there are few wells which are within the Salmon River valley alluvium and are unequivocally completed in the alluvium (some tap into rock formations or are cased through the alluvium). These are wells 1, 2, 6, 7, 8, and 10. These wells have reported static water levels of 76, 6, 30, 6, 32, and 27 feet. Accounting for approximate elevation of the well based on a best estimate of its location, the water table appears to be generally at or near the adjacent elevation of the Salmon River.

Aquifer Sufficiency

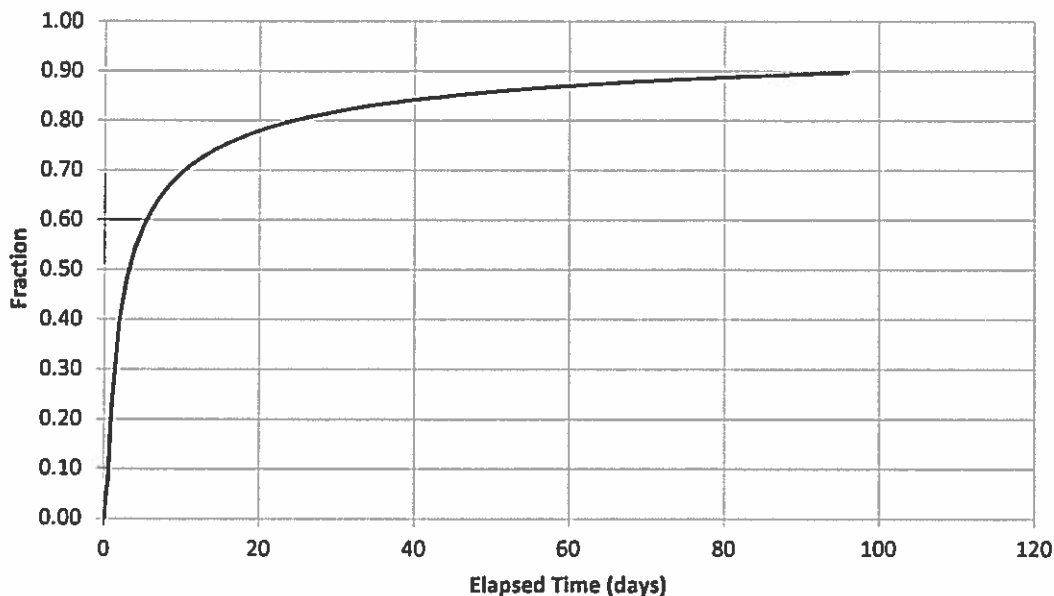
The water source for the proposed well will be the water-bearing valley-fill alluvial strata described above. The characteristics of this strata indicated by the log for well 23 are assumed to prevail at other potential well locations within the subdivision. The strata is 75 feet in thickness and is comprised of "sand and gravel" according to the well 23 log, and water exists under unconfined conditions. Saturated thickness is 34 feet assuming a static water level of 135 feet below ground. Logs for wells 17 through 20 are more precise as to the composition, indicating sandy gravel with rounded particles to 3/8" in diameter (well 17), large gravel & sand (well 18), and sand & gravel (well 19). Formations of this nature have been shown to have hydraulic conductivity values ranging from 100 to 1000 ft/day (USBR, 1977). Experience with actual well testing in similar formations suggests the hydraulic conductivity is likely on the order of 200 ft/day. With this assumption, applying the Theis equation to the well assuming a pumping rate of 70 gpm yields an equilibrium drawdown of 2.7 feet. Even accounting for well inefficiency the drawdown is not likely to exceed 5 feet. The aquifer is clearly adequate for development of a well of this magnitude. The well will be drilled to the bottom of the alluvial strata at approximately 170 feet.

Depletion Analysis

The evidence indicates that there is likely a hydraulic connection between the groundwater source at the subdivision and the Salmon River. Water drawn from the well will cause a small local drawdown in the aquifer, increasing in magnitude with time and decreasing with distance from the well. Because the well is in close proximity with the river, this drawdown is expected to decrease the reach gain (or increase the reach loss). It

is likely that all of the depletion will be realized in the river above the end of the narrows, near the ranger station. The timing of the impact was estimated using an analytical approach developed by Glover and Balmer (1954) as described in Todd (1980). This simplified approach uses the Theis assumptions and the method of images to estimate the fraction of groundwater pumping derived from an adjacent, hydraulically connected stream acting as a hydraulic boundary.¹ To make this analysis, the aquifer was assumed to have a hydraulic conductivity of 200 ft/day (typical of sand and gravel aquifers), an average thickness of 112 feet, and a storativity of 0.12 (typical of unconfined alluvial aquifers). With a pumping well located 660 feet from the stream bank, the analysis indicates that 50% of the pumping will appear in the river in 3.25 days, and 90% will appear within 100 days. This is a relatively rapid response, and indicates that all of the influence will be seen within the same season.

Estimated Fraction of Pumping Supplied by Streamflow

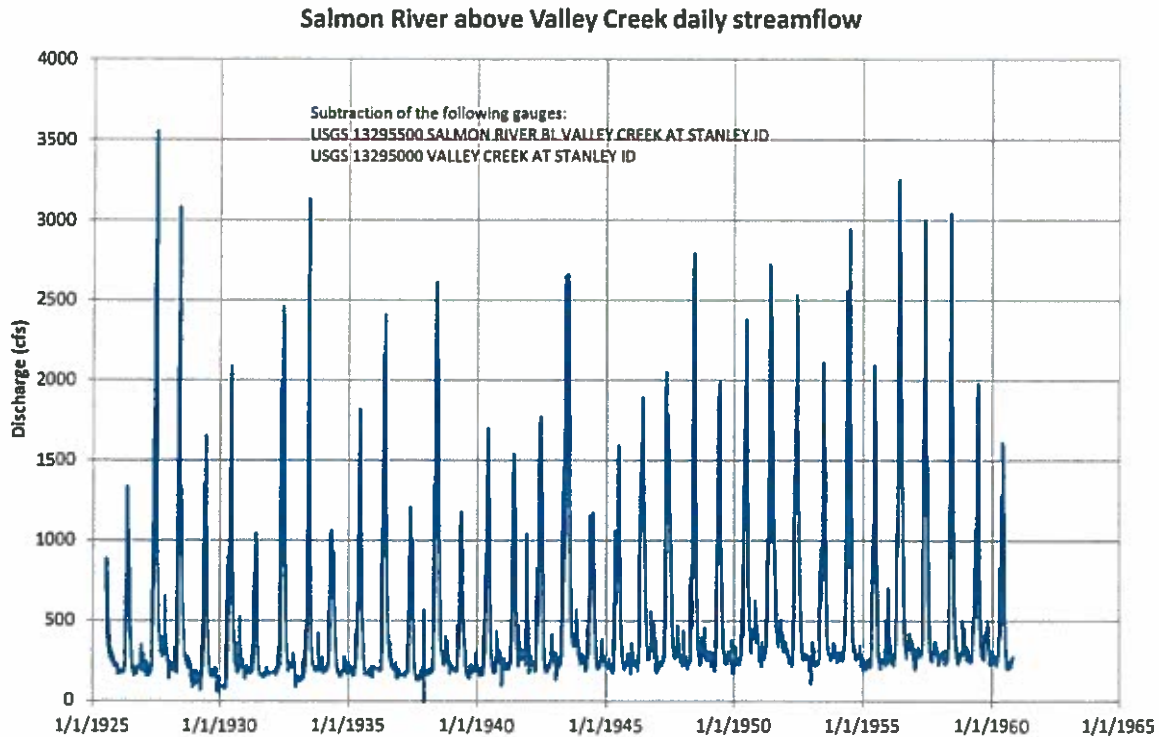


The annual magnitude of the depletion may be determined using the results of the water requirements study described above. The depletion is equal to the consumptive use of 6.3 ac-ft per year, which equates to an average annual depletion of 0.0088 cfs, or 0.017 cfs if averaged over the 184-day active season of the subdivision.

The magnitude of the depletion relative to streamflow in the Salmon River is important in assessing the impact of the proposed permits. There has been no long-term stream gauge in the vicinity of the project from which data can be derived; therefore two stream gauges with overlapping records were combined to estimate the flow above Stanley: USGS gauge 13295500 (Salmon River below Valley Creek) and USGS gauge 13295000 (Valley Creek at Stanley). The overlap between these two gauges is 36 years (1925 – 1960),

¹ The AWAS model adopted by IDWR for analysis of water supply bank transactions in the Big Wood River valley uses the same underlying theory.

which spans a good representation of dry and wet periods. Subtracting the Valley Creek daily flow from the river flow below the confluence yielded a daily record of Salmon River flow above Stanley. This record is also representative of the flow just below Redfish Lake Creek, since no significant tributary inflows exist between that point and Stanley, which is particularly true after the runoff period. A plot of this record is shown below and the following table shows the monthly mean streamflow.



Month	Mean Streamflow (cfs)
Jan	233
Feb	227
Mar	227
Apr	448
May	1145
Jun	1324
Jul	578
Aug	279
Sep	257
Oct	288
Nov	268
Dec	240
Nov-Mar avg	239

The data shows that the base flow in the river below Redfish Lake Creek is 239 cfs, i.e. this is the minimum flow during the winter months when runoff is nonexistent. The

highest depletion will occur during the summertime when flows are higher, but may also extend into the lower streamflow periods. The expected seasonal pattern of depletion was estimated on a monthly basis using the calculated river response curve and the principle of superposition. The total seasonal depletion of 6.3 ac-ft was assigned to each month from May to October based on the fraction of total evapotranspiration occurring in that month. The calculated response curve was then applied to each month's depletion to compute the river depletion in that month plus all months in the future. Finally, the total contribution from all months of pumping was added to arrive at the total monthly response curve in the river.

The results are summarized in the table below. The maximum absolute impact of 2.40 ac-ft occurs in July, representing the accumulated effect from May-July pumping. Expressed in terms of a flow rate, 2.40 ac-ft over 31 days in July is 0.039 cfs. The most meaningful column in this table is the depletion as a percentage of average river flow. The maximum percentage occurs in August, and is equal to 0.0083% or less than one-ten thousandth of the flow. This depletion is negligible and will not be detrimental to other water rights or any other value afforded by the Salmon River.

Month forward	Response function	Total river response (ac-ft)	Mean streamflow		Depletion % of river flow
			cfs	ac-ft	
May	0.8180	0.21	1145	70394	0.0003%
June	0.0520	1.25	1324	78778	0.0016%
July	0.0236	2.40	578	35514	0.0068%
August	0.0142	1.42	279	17148	0.0083%
September	0.0098	0.27	257	15267	0.0018%
October	0.0072	0.15	288	17730	0.0008%
November	0.0056	0.07	268	15943	0.0004%
December	0.0046	0.05	240	14782	0.0003%
January	0.0038	0.04	233	14351	0.0003%
February	0.0032	0.03	227	12583	0.0002%
March	0.0028	0.02	227	13945	0.0002%
April	0.0024	0.02	448	26647	0.0001%

Conclusions

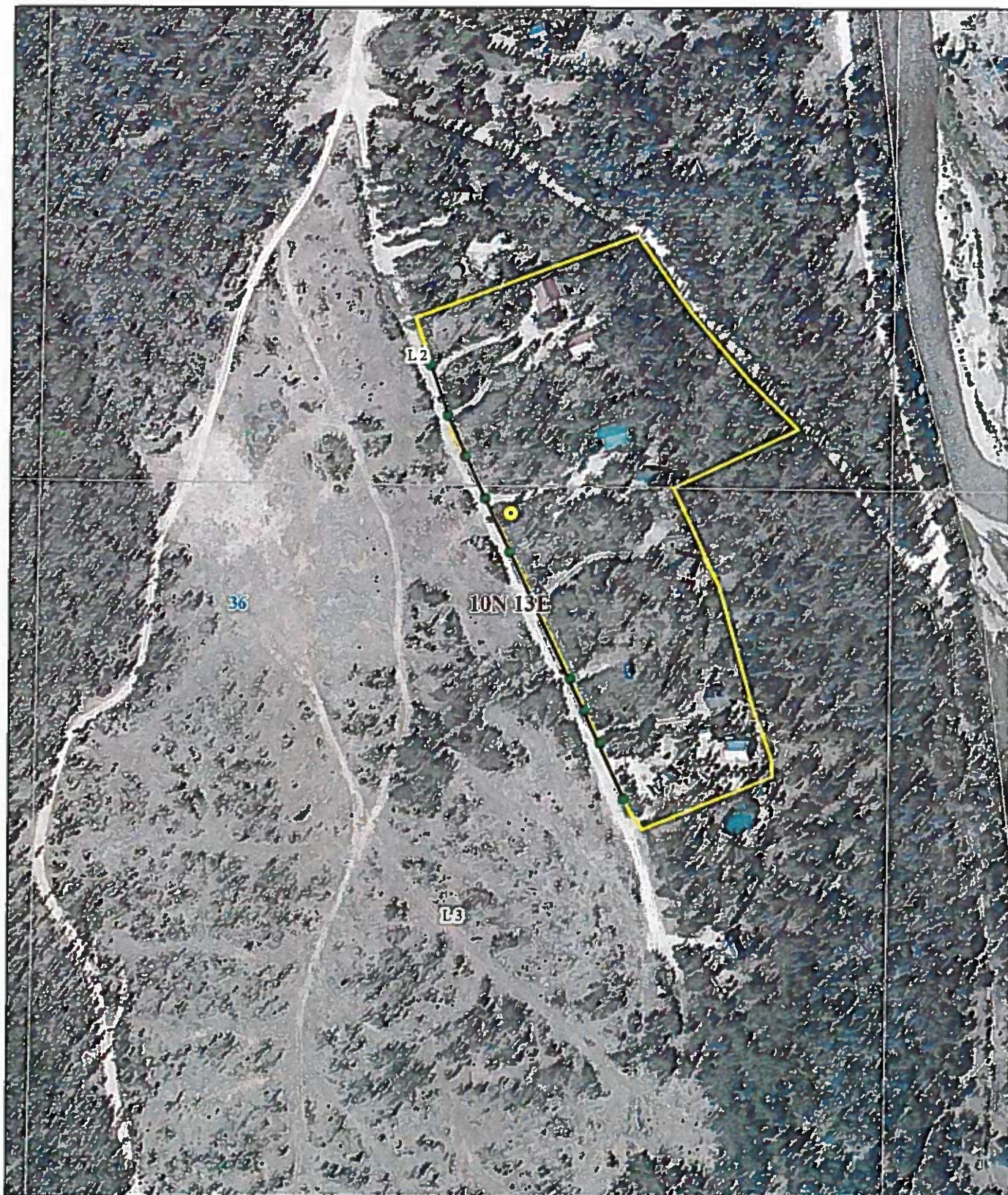
The overall conclusion of the study is that the proposed project is feasible and will not adversely affect the water supply for other water rights in the Salmon River or other values supported by the river. Specific conclusions supported by the data and analyses are as follows:

- The proposed diversion for the Balsam Well Owners Association will require a well with a depth of 170 feet. The high-permeability alluvial strata from approximately 94 to 170 feet will be tapped as the source.

- A maximum discharge of 53 gpm is anticipated based on a peak hourly demand analysis. The aquifer is clearly sufficient for the development of a proposed well of this yield.
- The alluvial strata to be tapped is likely the same strata found beneath the valley floor adjacent to the Salmon River.
- A hydraulic connection likely exists between the groundwater present in the alluvium and the Salmon River.
- Total annual depletion is estimated to be 6.3 acre-feet, which will be distributed almost entirely through the May – October usage period.
- The maximum depletion of the river will occur in July and is estimated to be 2.4 ac-ft or 0.039 cfs. As a percentage of the mean river flow, the maximum depletion will occur in August and is estimated to be 0.0083% or less than one-ten thousandth of the river flow.

References

- Fisher, F.S., McIntyre, D. H., and K. M. Johnson (1992). Geologic Map of the Challis 1° x 2° Quadrangle, Idaho. U. S. Geological Survey Miscellaneous Investigations Survey Map I-1819.
- Glover, R. E. and G. G. Balmer (1954). River depletion resulting from pumping a well near a river. Trans. Amer. Geophysical Union, v. 35, pp. 468-470.
- Todd, D. K. (1980). Groundwater Hydrology. 2nd ed., 535 pp.
- U. S. Bureau of Reclamation (1977). Ground Water Manual. Water Resources Technical Publication, 480 pp.



0 75 150 300 Feet

STANLEY BASIN SUBDIVISION
BALSAM WELL OWNERS SYSTEM
ESRI AERIAL PHOTO

Legend

- Service Connection South System POU
- Proposed Well
- Mainline
- twnshp
- Sections
- ladesc



STANLEY BASIN SUBDIVISION - SOUTH SYSTEM (BALSAM WELL OWNERS)

WATER REQUIREMENTS ESTIMATION

Two components: in-house demand and irrigation demand

Brockway Engineering PLLC 6/27/2016

DOMESTIC

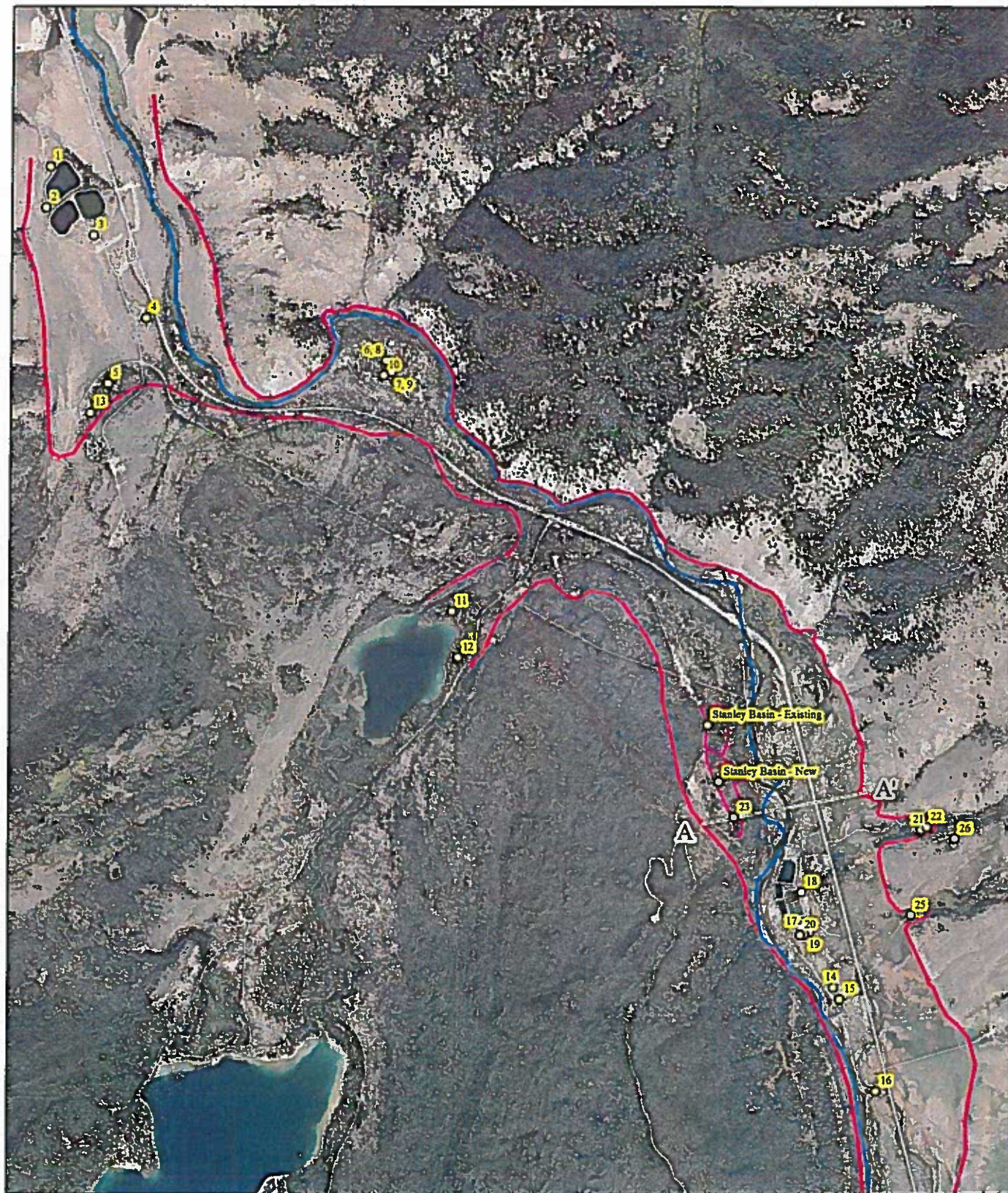
Number of units	10	
Average per-capita demand	75 gpcd (state guidance for "luxury cabins")	
Average persons per unit	2.5	
Average per-unit demand	187.5	
Average daily demand	1875 gpd	
Occupancy rate - May through October (184 days)	80%	
Occupancy rate - November through April (181 days)	10%	
Total annual withdrawal	0.95 acre-feet/year	
Consumptive use fraction	0.15	
Total consumptive use	0.14 acre-feet/year	
Max day : average factor	3	
Peak hour : average factor	9	
Max daily withdrawal	5625 gpd	3.9 gpm
Peak hourly withdrawal	16875 gpd =	11.7 gpm

IRRIGATION

Project irrigated area - number of lots	10	
Average irrigated area per lot	0.5 acres	
Project irrigated area - common areas	0	
Project irrigated area - TOTAL	5 acres	
Seasonal ET - Grass-Turf (lawns) Irrigated*	14.88 inches or	6.2 acre-feet
Irrigation application efficiency	0.7	
Irrigation water requirement	21.26 inches	
Total annual irrigation volume	8.9 acre-feet	
Design peak ET: 20% exc of 3-day MA in July	0.307 in/day	
Design peak application rate	0.439 in/day	
Design peak flow rate	0.09 cfs	
	41 gpm	
	0.0184 cfs/acre	

* Precipitation deficit from ET Idaho (2012), Stanley station, Grass hay

TOTAL DIVERSION VOLUME	9.81 ac-ft/year	
TOTAL CONSUMPTIVE USE	6.3 ac-ft/year	
AVERAGE ANNUAL DEPLETION	0.0174 af/day or	0.0088 cfs
PEAK DIVERSION RATE REQUIREMENT	53 GPM or	0.12 cfs



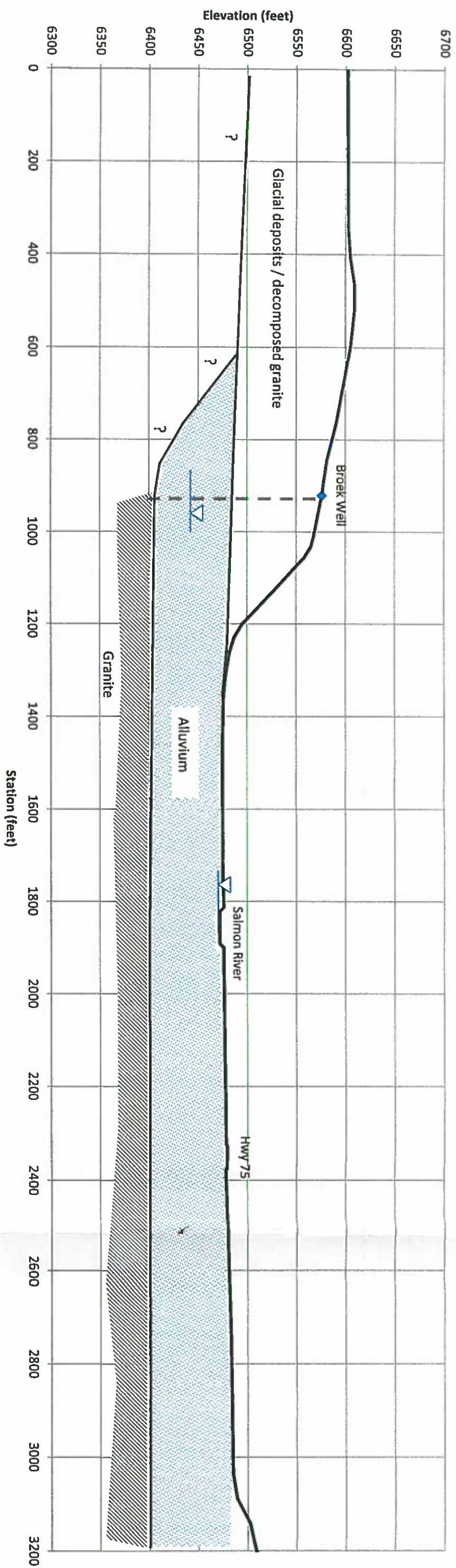
0 0.125 0.25 0.5 Miles

STANLEY BASIN SUBDIVISION
HYROLOGICAL ANALYSIS MAP
NAIP 2013 AERIAL

Legend

- Wells
- Salmon_River
- Alluvium
- Geo. Section
- POU

Geologic Cross-Section A-A' at Stanley Basin Subdivision (looking downstream)



Appendix Well Drilling Records

Form 238-7
11/97

#1 well
App 84137
Per 764130

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 1/4 1/4
Lat _____ Long _____

1. WELL TAG NO. D 00008485
DRILLING PERMIT NO. _____
Other IDWR No. _____

2. OWNER:
Name Stanley Sewer
Address _____
City Stanley State SD Zip _____

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
W
E
S
Twp. 10 North ☒ or South ☐
Rge. 13 East ☒ or West ☐
Sec. 21 NE 1/4 NW 1/4
Gov't Lot _____ County CUSTER 1/4
Lat: _____ Long: _____

Address of Well Site
Off Highway 75 W 1/4 mile City STANLEY
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☒ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or	Barrels	
<u>bentonite</u>	<u>0</u>	<u>4 1/2</u>	<u>11</u>		<u>over bore</u>

Was drive shoe used? ☒ ☐ N Shoe Depth(s) 98
Was drive shoe seal tested? ☐ ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6 + 2</u>	<u>98</u>	<u>250</u>	<u>ated</u>		☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations _____ Method _____
Screens _____ Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>80</u>	<u>90</u>	<u>20</u>		<u>4"</u>	<u>PVC</u>	☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

76 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: well cap

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
<u>18</u>	<u>0</u>	<u>76</u>	<u>1 hr</u>

Water Temp. 48° Bottom hole temp. _____

Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>8</u>	<u>0</u>	<u>20</u>	<u>boulders + clay</u>		☒
<u>8</u>	<u>20</u>	<u>32</u>	<u>gravel & sand</u>		☒
<u>8</u>	<u>32</u>	<u>40</u>	<u>boulders + clay</u>		☒
<u>6</u>	<u>40</u>	<u>62</u>	<u>2" gravel & sand</u>		☒
<u>6</u>	<u>62</u>	<u>75</u>	<u>boulders + clay</u>		☒
<u>6</u>	<u>75</u>	<u>80</u>	<u>1" gravel & sand</u>	☒	
<u>6</u>	<u>80</u>	<u>98</u>	<u>1" gravel & clay</u>	☒	

RECEIVED

NOV 21 2000

Department of Water Resources
Southern Region

RECEIVED

NOV 29 2000

Department of Water Resources

Completed Depth 98 (Measurable)
Date: Started 9-12-00 Completed 9-29-00

13. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name High Plains Firm No. 299

Firm Official Marcus Franke Date 10-12-00

and
Driller or Operator Mike Franke Date 10-12-00
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

☐ Air ☐ Flowing Artesian

FORWARD WHITE COPY TO WATER RESOURCES

WELL LOG AND REPORT TO THE
STATE RECLAMATION ENGINEER OF IDAHO

Division of Reclamation

SUBMIT WITHIN 30 DAYS AFTER COMPLETION OF WELL: SEE IDAHO STATUTES 42-238

Permit No. 6-2 Well No. 1 County Custer

Owner United States Department Of Agriculture- Forest Service

Address Challis, Idaho

Driller Cushman & Johnson Drilling Contractors

Address 215 So. Birch, Blackfoot, Idaho

Well location 1/4 Sec. 22, T. 10 N. N. S. R. 13 E. 1/4

Size of drilled hole Eight

Two Hundred Twenty Five Feet Total depth of well

Give depth to standing water from the ground 33 Water temp. 52 °Fahr.

Test delivery was 5 g.p.m. or — c.f.s. Drawdown was 100 feet. Pump? — Bail? Y

Size of pump and motor used to make test No Pump Test Run

Length of time of test — hours — minutes.

If flowing well, give flow — c.f.s. or — g.p.m. and of shut off pressure —

If flowing well, described control works — (TYPE AND SIZE OF VALVE, ETC.)

Water will be used for No Enough Water To Use Weight of casing per lineal foot 22

Thickness of casing 1/4 Casing material Steel (STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing 8 inch From 0 to 76
(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.
8 in.	0	76		Steel drive shoe welded on to bottom

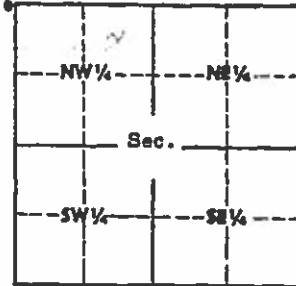
Number and size of perforations None located — feet to — feet from ground

Date of commencement of well Jan. 3, 1964 Date of completion of well Feb. 18, 1964

NENW 1/4 S. 22 10 N 13 E

uhs

4
MAR 9 1964



024662

WELL LOG

[illegible]

WELL DRILLER'S STATEMENT

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

Signed Cynthia E. Johnson

By

Dated Mar. 3, 1964, 1964

License No. 16

Well Driller's Helper Duane Denning

FEB 15 1978 WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources, within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>Sawtooth National Forest</u> #144-77-10 Address <u>Twin Falls, Idaho</u> Owner's Permit No. <u>FEB 27 1978</u>		7. WATER LEVEL Department of Water Resources Southern District Office Static water level <u>90</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																											
2. NATURE OF WORK Department of Water Resources Southern District Office ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning)		8. WELL TEST DATA ☒ Pump ☐ Bailer ☐ Other Discharge G.P.M. <u>Approx. 18</u> Draw Down <u>126</u> Hours Pumped <u>8</u>																																																											
3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type) _____ ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection		9. LITHOLOGIC LOG <table border="1"><thead><tr><th rowspan="2">Hole Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>10</td><td>0</td><td>12</td><td>Top Soil w/ small boulders</td><td></td><td>X</td></tr><tr><td>10/8</td><td>12</td><td>49</td><td>Clay & Sand & Small Gravel</td><td></td><td>X</td></tr><tr><td>8/6</td><td>49</td><td>61</td><td>Clay w/Heavy sand/some small gravel</td><td></td><td>X</td></tr><tr><td>6</td><td>61</td><td>80</td><td>Clay w/Broken Find Rock (Pee Size)</td><td></td><td>X</td></tr><tr><td></td><td>80</td><td>90</td><td>Clay w/broken rock & fine sand</td><td></td><td>X</td></tr><tr><td></td><td>90</td><td>102</td><td>Pee Size Gravel semi cemented</td><td></td><td>X</td></tr><tr><td></td><td>102</td><td>120</td><td>Broken Rock w/sand</td><td></td><td>X</td></tr><tr><td></td><td>120</td><td>200</td><td>Decomposed Granite w/placed crushed rock</td><td></td><td>X</td></tr></tbody></table>		Hole Diam.	Depth		Material	Water		From	To	Yes	No	10	0	12	Top Soil w/ small boulders		X	10/8	12	49	Clay & Sand & Small Gravel		X	8/6	49	61	Clay w/Heavy sand/some small gravel		X	6	61	80	Clay w/Broken Find Rock (Pee Size)		X		80	90	Clay w/broken rock & fine sand		X		90	102	Pee Size Gravel semi cemented		X		102	120	Broken Rock w/sand		X		120	200	Decomposed Granite w/placed crushed rock		X
Hole Diam.	Depth		Material		Water																																																								
	From	To		Yes	No																																																								
10	0	12	Top Soil w/ small boulders		X																																																								
10/8	12	49	Clay & Sand & Small Gravel		X																																																								
8/6	49	61	Clay w/Heavy sand/some small gravel		X																																																								
6	61	80	Clay w/Broken Find Rock (Pee Size)		X																																																								
	80	90	Clay w/broken rock & fine sand		X																																																								
	90	102	Pee Size Gravel semi cemented		X																																																								
	102	120	Broken Rock w/sand		X																																																								
	120	200	Decomposed Granite w/placed crushed rock		X																																																								
4. METHOD DRILLED ☒ Cable ☒ Rotary ☐ Dug ☐ Other		<i>Lower Part of Hole Back Filed to 130'</i>																																																											
5. WELL CONSTRUCTION Diameter of hole <u>5</u> inches Total depth <u>130</u> feet Casing schedule: ☒ Steel ☐ Concrete Thickness Diameter From To <u>.250</u> inches <u>10</u> inches <u>+</u> <u>5</u> feet <u>15</u> feet <u>.250</u> inches <u>6.5/80</u> inches <u>+</u> <u>1</u> feet <u>90</u> feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches Number From To _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☒ Yes ☐ No Manufacturer's name <u>IPO Johnson</u> Type <u>6" Tek SS /K Packer Model No 304</u> Diameter <u>6</u> Slot size <u>15</u> Set from <u>128</u> feet to <u>132</u> feet Diameter <u>6</u> Slot size <u>15</u> Set from <u>106</u> feet to <u>170</u> feet Gravel packed? ☐ Yes ☒ No Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>55</u> Material used in seal ☒ Cement grout ☐ Puddling clay ☐ Well cuttings Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☒ Overbars to seal depth																																																													
6. LOCATION OF WELL Sketch map location must agree with written location. Stanley Administrative Site Water System Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Idaho</u> Custer				10. Work started <u>9/21/77</u> finished <u>10/30/77</u>																																																									
11. DRILLERS CERTIFICATION Firm Name <u>SMITH DRILLING & PUMP CO., INC.</u> Firm No. <u>11</u> Address <u>328 West Avenue A, Jerome, Idaho</u> Date <u>11/77</u> Signed by (Firm Official) <u>[Signature]</u> and <u>[Signature]</u> (Operator)																																																													

REPORT OF WELL DRILLER
State of Idaho

RECEIVED

JUL 26 1968

State law requires that this report shall be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well. Department of Reclamation

WELL OWNER:
Name Y. A. D. P.

Address Sanary, French Canyon

Stanley, Idaho

Owner's Permit No. _____

NATURE OF WORK (check): Replacement well ☐

New well ☒ Deepened ☐ Abandoned ☐

Water is to be used for: Irrigation

METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒

Dug ☐ Other _____

(explain)

CASING SCHEDULE: Threaded ☐ Welded ☒

6 "Diam. from 0 ft. to 47 ft.

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

Thickness of casing: 280 Material:

Steel ☒ concrete ☐ wood ☐ other ☐

(explain)

PERFORATED? Yes ☒ No ☐ Type of perforator used: Drills

Size of perforations: 1/4 " by 2 " "

12 perforations from 37 ft. to 47 ft.

perforations from _____ ft. to _____ ft.

perforations from _____ ft. to _____ ft.

perforations from _____ ft. to _____ ft.

WAS SCREEN INSTALLED? Yes ☐ No ☒

Manufacturer's name _____

Type _____ Model No. _____

Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

CONSTRUCTION: Well gravel packed? Yes ☐

No. ☐ size of gravel _____ Gravel

placed from _____ ft. to _____ ft. Surface seal

provided? Yes ☐ No ☐ To what depth?

_____ ft. Material used in seal: _____

Did any strata contain unusable water? Yes ☐

No. ☒ Type of water: _____

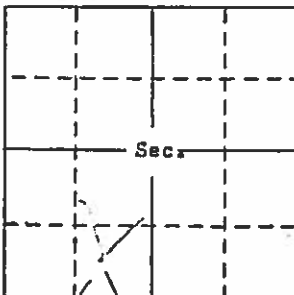
Depth of strata _____ ft. Method of sealing

strata off: gravel around 6" pipe 16' down

Surface casing used? Yes ☐ No. ☐

Cemented in place? Yes ☐ No ☐

Locate well in section



LOCATION OF WELL: County CHUSTER
SE 1/4 SW 1/4 Sec. 23 T. 10 N. 13 E. 10

Use other side for additional remarks

Size of drilled hole: 6 " Total

depth of well: 47 Standing water

level below ground: 30 Temp. _____

Fahr. 96 " Test delivery: 60 gpm

or _____ cfs Pump? ☒ Bail ☐

Size of pump and motor used to make test:

2 H.P. 5" Pump

Length of time of test: 8 Hrs. _____ Min.

Drawdown: None ft. Artesian pressure: ft.

above land surface _____ Give flow _____ cfs

or _____ gpm. Shutoff pressure: _____

Controlled by: Valve ☐ Cap ☒ Plug ☐

No control ☐ Does well leak around casing?

Yes ☐ No ☒

DEPTH MATERIAL WATER

FROM TO YES OR NO

FEET FEET

0 2 Dirt

2 37 Large Boulders & Clay NO

37 47 Gravel & Fine gravel YES

Bottom of well 47'

Work started: June 21 66

Work finished: July 15 66

Well Driller's Statement: This well was

drilled under my supervision and this report

is true to the best of my knowledge.

Name: Jack Culham

Address: 1405 So Broadway

Signed by: Jack Culham

License No. 200 Date: July 68

Sunny Baldo
#2

REPORT OF WELL DRILLER
State of Idaho

RECEIVED
AUG 15 1968

State law requires that this report shall be filed with the State Engineer within 30 days after completion or abandonment of the well.

WELL OWNER:
Name _____
Address _____

Owner's Permit No. _____
NATURE OF WORK (check): Replacement well ☐
New well ☒ Deepened ☐ Abandoned ☐
Water is to be used for: irrigation
METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒
Dug ☐ Other _____ (explain)

CASING SCHEDULE: Threaded _____ Welded _____
6" Diam. from 0 ft. to 42 ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
Thickness of casing: _____ Material: _____
Steel ☒ concrete ☐ wood ☐ other ☐

(explain)
PERFORATED? Yes ☐ No ☒ Type of perforator used: _____

Size of perforations: _____ " by _____ "
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

WAS SCREEN INSTALLED? Yes ☐ No ☐
Manufacturer's name _____

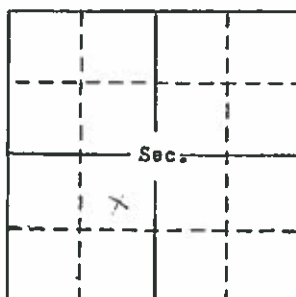
Type _____ Model No. _____
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

CONSTRUCTION: Well gravel packed? Yes ☐
No ☐ size of gravel _____ Gravel placed from _____ ft. to _____ ft. Surface seal provided? Yes ☐ No ☐ To what depth? _____ ft. Material used in seal: _____

Did any strata contain unusable water? Yes ☒
No ☐ Type of water: _____
Depth of strata _____ ft. Method of sealing strata off: _____

Surface casing used? Yes ☒ No ☐
Cemented in place? Yes ☐ No ☐

Locate well in section



LOCATION OF WELL: County Custer
SE 1/4 SW 1/4 Sec. 23 T. 11 N. R. 13 E. W.

Size of drilled hole: 6" Total
depth of well: 42' Standing water
level below ground: 6' Temp. _____
Fahr. _____ Test delivery: _____ gpm
or _____ cfs Pump? ☐ Bail ☐
Size of pump and motor used to make test: _____

Length of time of test: _____ Hrs. _____ Min.
Drawdown: _____ ft. Artesian pressure: _____ ft.
above land surface _____ Give flow _____ cfs
or _____ gpm. Shutoff pressure: _____
Controlled by: Valve ☐ Cap ☐ Plug ☐
No control ☐ Does well leak around casing?
Yes ☐ No ☒

DEPTH MATERIAL WATER
FROM TO YES OR NO
FEET FEET

0 42' Sand & Gravel in
diameter of 1" to 3"
in diameter
water stands @ 6'
below ground level

Work started: Aug 15 1968
Work finished: Aug 21 1968
Well Driller's Statement: This well was drilled under my supervision and this report is true to the best of my knowledge.
Name: Archie Manning Drilling
Address: _____
Signed by: Archie Manning
License No. 10 Date: July 1968

Use other side for additional remarks

copy for file

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

WELL TAG NO. D 0027023
DRILLING PERMIT NO. 803341
Water Right or Injection Well No. _____

2. OWNER:

Name Forest Service, Sawtooth National Forest
Address 8847 Kimberly Rd E
City Twin Falls State ID Zip 83301

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 10 North ☒ or South ☐
Rge. 13 East ☒ or West ☐
Sec. 23 1/4 SE 1/4 SW 1/4
Gov't Lot _____ County Custer

Lat: _____ Long: _____
Address of Well Site Stanley Id Sunny Gulch Camp Ground
City Stanley Id
Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other Camp Ground
Hand Pump

5. TYPE OF WORK check all that apply

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>Cement</u>	<u>9'</u>	<u>25'</u>		<u>over Bore</u>
<u>Bentonite</u>	<u>0'</u>	<u>9'</u>	<u>1550 LBS</u>	<u>over Bore</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 100'

Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6" + 1/2"</u>	<u>100'</u>	<u>250'</u>		<u>Steel</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☒ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method Air Percutator Holte

Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>80'</u>	<u>100'</u>	<u>1/4 x 2</u>	<u>4 rows</u>	<u>Continuous</u>		☒	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

32' ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

12. WELL TESTS:

☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encounter _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>12"</u>	<u>0</u>	<u>10'</u>	<u>Clay Gravel Boulders</u>		☒
<u>12"</u>	<u>10'</u>	<u>25'</u>	<u>Sand Gravel Boulders</u>	☒	
<u>6"</u>	<u>25'</u>	<u>31'</u>	<u>Boulder</u>		☒
<u>6"</u>	<u>31'</u>	<u>68'</u>	<u>Sand Boulders</u>	☒	
<u>6"</u>	<u>68'</u>	<u>72'</u>	<u>Boulder</u>		☒
<u>6"</u>	<u>72'</u>	<u>80'</u>	<u>Sand Gravel Boulders</u>	☒	
<u>6"</u>	<u>80'</u>	<u>88'</u>	<u>Boulder</u>		☒
<u>6"</u>	<u>88'</u>	<u>96'</u>	<u>Sand Gravel Boulders</u>	☒	
<u>6"</u>	<u>96'</u>	<u>100'</u>	<u>Rock Brown</u>		☒

RECEIVED

AUG 13 2003

Department of Water Resources
Southern Region

RECEIVED

JUL 29 2003

Department of Water Resources
Eastern Region

Completed Depth 100' (Measurable)

Date: Started 6-11-03 Completed 6-19-03

14. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Denning Drilling Firm No. 518

Principal Driller Denning Drilling Date 6-19-03

Driller or Operator II Denning Drilling Date 6-19-03

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

WELL TAG NO. D 0027024
DRILLING PERMIT NO. 803316
Water Right or Injection Well No. _____

1. OWNER:

Name Forest Service Sawtooth National Forest
Address 2847 Kimberly Rd E
City Timber Falls State Id Zip 83301

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

wp. 10 North ☒ or South ☐
Tge. 13 East ☒ or West ☐
Sec. 23 1/4 SE 1/4 SW 1/4
Gov't Lot _____ County Custer
Lat: _____ Long: _____
Address of Well Site Sunny Gulch Camp Ground
City Stanley
t. _____ Blk. _____ Sub Name _____

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other Camp Ground
Hand Pump

5. TYPE OF WORK check all that apply

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>Bentonite</u>	<u>0</u>	<u>60'</u>		<u>After Bore</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6"</u>	<u>2</u>	<u>103'</u>	<u>250"</u>	<u>Steel</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____
Packer ☒ Y ☐ N Type Triple K 6" x 8" placed @ 6'

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method Touch
Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>82'</u>	<u>100'</u>	<u>1/4 X 3"</u>	<u>4 Rows</u>	<u>1" apart</u>		☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

19' ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

Office Use Only			
Well ID No.	_____		
Inspected by	_____		
Twp	Rge	Sec	
1/4	1/4	1/4	
Lat:	:	Long:	:

12. WELL TESTS:

☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encounter: _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>12"</u>	<u>0</u>	<u>19'</u>	<u>Clay Sand Gravel Boulders</u>		☒
<u>12"</u>	<u>19'</u>	<u>30'</u>	<u>Sand Gravel Boulders</u>	☒	
<u>12"</u>	<u>30'</u>	<u>61'</u>	<u>Rock Brown</u>		
<u>8"</u>	<u>61'</u>	<u>80'</u>	<u>Rock Brown</u>		
<u>8"</u>	<u>80'</u>	<u>85'</u>	<u>Broken Rock Red</u>		
<u>8"</u>	<u>85'</u>	<u>96'</u>	<u>Rock Red</u>		
<u>8"</u>	<u>96'</u>	<u>98'</u>	<u>Broken Rock Red</u>		
<u>8"</u>	<u>98'</u>	<u>102'</u>	<u>Rock</u>		

RECEIVED

AUG 13 2003

Department of Water Resources
Southern Region

RECEIVED

JUL 29 2003

Department of Water Resources
Eastern Region

Completed Depth 102' (Measurable)

Date: Started 6-20-03 Completed 6-27-03

14. DRILLER'S CERTIFICATION

We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Denning Drilling Firm No. 518

Principal Driller Denning Date 6-27-03

Driller or Operator II Denning Date 6-27-03

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0037025
DRILLING PERMIT NO. 803317
Water Right or Injection Well No. 11

2. OWNER:

Name Forest Service Sawtooth National Forest
Address 2847 Kimberly Rd. E
City Twin Falls State Id Zip 83301

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 10 North ☒ or South ☐
Rge. 13 East ☒ or West ☐
Sec. 23 1/4 SE 1/4 SW 1/4
Gov't Lot _____ County Cluster

Lat: _____ Long: _____
Address of Well Site Sunny Gulch Camp Ground
City Stanley

(Give at least name of road & distance to road or landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other Camp Ground
Hand Pump

5. TYPE OF WORK check all that apply

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____
(Replacement etc.)

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>Bentonite</u>	<u>0</u>	<u>25'</u>	<u>1750 LBS</u>	<u>over Base</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____

Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Casing	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6"</u>	<u>+2</u>	<u>102'</u>	<u>29"</u>	<u>Steel</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☒ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method Air Perforator

Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>78'</u>	<u>98'</u>	<u>1/4" x 2"</u>	<u>4 rows</u>	<u>Continuous</u>		☒	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

27' ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

12. WELL TESTS:

☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>12"</u>	<u>0'</u>	<u>26'</u>	<u>Clay Gravel Boulders</u>		☒
<u>6"</u>	<u>26'</u>	<u>35'</u>	<u>Gravel Boulders</u>	☒	
<u>6"</u>	<u>35'</u>	<u>42'</u>	<u>Boulder</u>		☒
<u>6"</u>	<u>42'</u>	<u>95'</u>	<u>Gravel Boulders</u>	☒	
<u>6"</u>	<u>95'</u>	<u>102'</u>	<u>Bed Rock (Brown)</u>		☒

RECEIVED

AUG 13 2003

Department of Water Resources
Eastern Region

RECEIVED

JUL 29 2003

Department of Water Resources
Eastern Region

Completed Depth 102' (Measurable)

Date: Started 6-28-03 Completed 7-3-03

14. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Denning Drilling Inc Firm No. 518

Principal Driller Denning Drilling Date 7-7-03

Driller or Operator II Denning Drilling Date 7-7-03

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

WELL LOG AND REPORT TO THE
STATE RECLAMATION ENGINEER OF IDAHO

025522

RECEIVED
OCT 27 1960
Department of Reclamation

Log No. _____
Rec. _____, 19____
Well No. _____
Permit No. _____

(DO NOT FILL IN)

Owner Sawtooth Farm Address Trueno Falls, Idaho
Driller Bob Drilling Address Gooding Idaho Lic. No. 53
Location of Well: 1/4 1/4 Sec. 26, T. 10N N. 13E E. 1/4 1/4 Sec. _____ County, _____
and _____ feet N/S, and _____ feet E/W from _____ Corner of _____ 1/4 1/4 Sec. _____
Size of Drilled Hole 6 1/4 Total depth of Well 40'
Give depth of standing water from surface 6' Water Temp. 40 °Fahrenheit
On pumping test delivery was 3000 g.p.m. or 3000 gal per hr. Drawdown was _____ feet.
Size of pump and motor used to make the test _____
Length of time pumped during check was _____ hr., _____ minutes.
If flowing well, give flow in c.f.s. _____ or g.p.m. _____ and shut in pressure _____
If flowing well, describe control works _____
(TYPE AND SIZE OF VALVE, ETC.)
Water will be used for Camp use Weight of casing per linear foot 21.25
Thickness of casing 1/4 Casing material Steel
E.G., PIPE, CONCRETE, WOOD.
Diameter, length and location of casing 6 1/4 0 to 40
(CASING 12" IN DIAMETER AND UNDER GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER GIVE OUTSIDE DIAMETER.)
Number and size of perforations 40 1/4 25 located 25 feet to 40 feet
from surface of ground.
Other perforations none
Date of commencement of well Sept 9-60 Date of completion of well Sept 10-60
Type of well rig Briggs

CASING RECORD

DIAM. CASING	FROM FEET	TO FEET	LENGTH	"REMARKS" -- SEALS, GROUTING, ETC.
<u>6 1/4</u>	<u>0</u>	<u>40</u>	<u>40'</u>	

GENERAL INFORMATION—Pumping Test, Quality of Water, Etc.

S. 26 10N 13E

025523

WELL LOG

[illegible]

WELL DRILLERS STATEMENT

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

Signed Blanche H. Cole

By _____

Dated 10-25, 1940.

License No. 53

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

RECEIVED

30 FEB 18 1973

1. WELL OWNER
Name Forest Service
Address Chinook Bay
Owner's Permit No. _____

7. WATER LEVEL
Department of Water Resources
Static water level 12' feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Temperature _____ ° F. Quality _____
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

2. NATURE OF WORK
☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

3. PROPOSED USE
☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type) _____
☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED
☐ Cable ☒ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION
Diameter of hole 6" inches Total depth 150' feet
Casing schedule: ☒ Steel ☐ Concrete
Thickness .280 inches Diameter 6 inches From 1 feet To 143 feet
_____ inches _____ inches _____ feet _____ feet
_____ inches _____ inches _____ feet _____ feet
_____ inches _____ inches _____ feet _____ feet
_____ inches _____ inches _____ feet _____ feet
Was a packer or seal used? ☒ Yes ☐ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches
Number _____ From _____ To _____
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
Well screen installed? ☐ Yes ☒ No
Manufacturer's name Johnson
Type Stainless steel Model No. _____
Diameter 6" Slot size _____ Set from 143' feet to 147' feet
Diameter _____ Slot size _____ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20' Material used in seal ☐ Cement grout
☒ Pudding clay ☐ Well cuttings
Sealing procedure used ☐ Sherry pit ☐ Temporary surface casing
☐ Overbore to seal depth

6. LOCATION OF WELL
Sketch map: location must agree with written location.

N
W E

Subdivision Name _____
Lot No. _____ Block No. _____
County Custer

SE 1/4 Sec. 26, T. 10 N, R. 13 E

8. WELL TEST DATA
☒ Pump ☐ Bailor ☐ Other
Discharge G.P.M. 87 Draw Down 108' Hours Pumped 8

9. LITHOLOGIC LOG
39970

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
6"	0	25	Boulders & clay		X
	25	90	Sand	X	
	90	91	Gravel	X	
	91	134	Sand	X	
	134	150	Gravel & sand	X	

10. Work started July 1974 finished September 1974

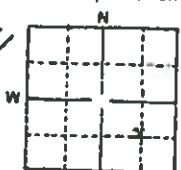
11. DRILLERS CERTIFICATION
Firm Name Paul Vollmer & Son Firm No. 67
Address Aberdeen, Idaho Date Jan 1975
Signed by (Firm Official) Paul Vollmer Jr
and Paul Vollmer Jr (Operator)

WELL DRILLER'S REPORT

T10N R13E Sec. 26 NWSWSE

State law requires that this report be filed with the Director, Department of Water Administration, within 30 days after the completion or abandonment of the well.

By: segbert 2012-03-09

1. WELL OWNER Name <u>Forest Service</u> Address <u>Mountain View</u> Owner's Permit No. _____		7. WATER LEVEL Department of Water Resources Static water level <u>9</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																									
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____		8. WELL TEST DATA ☐ Pump ☐ Bailor ☐ Other <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Draw Down</th><th>Hours Pumped</th></tr></thead><tbody><tr><td>140</td><td>96'</td><td>4</td></tr></tbody></table>		Discharge G.P.M.	Draw Down	Hours Pumped	140	96'	4																																		
Discharge G.P.M.	Draw Down	Hours Pumped																																									
140	96'	4																																									
3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type) _____ ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection		9. LITHOLOGIC LOG 39969 <table border="1"><thead><tr><th rowspan="2">Hole Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>6"</td><td>0'</td><td>28'</td><td>Boulders & clay</td><td></td><td>x</td></tr><tr><td></td><td>28'</td><td>81'</td><td>Sand</td><td>x</td><td>x</td></tr><tr><td></td><td>81'</td><td>110'</td><td>Clay & gravel</td><td>x</td><td></td></tr><tr><td></td><td>110'</td><td>140'</td><td>Sand</td><td>x</td><td></td></tr><tr><td></td><td>140'</td><td>155'</td><td>Gravel & sand</td><td>x</td><td></td></tr></tbody></table>		Hole Diam.	Depth		Material	Water		From	To	Yes	No	6"	0'	28'	Boulders & clay		x		28'	81'	Sand	x	x		81'	110'	Clay & gravel	x			110'	140'	Sand	x			140'	155'	Gravel & sand	x	
Hole Diam.	Depth		Material		Water																																						
	From	To		Yes	No																																						
6"	0'	28'	Boulders & clay		x																																						
	28'	81'	Sand	x	x																																						
	81'	110'	Clay & gravel	x																																							
	110'	140'	Sand	x																																							
	140'	155'	Gravel & sand	x																																							
4. METHOD DRILLED ☐ Cable ☒ Rotary ☐ Dug ☐ Other																																											
5. WELL CONSTRUCTION Diameter of hole <u>6</u> inches Total depth <u>155</u> feet Casing schedule ☒ Steel ☐ Concrete <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>280 inches</td><td>6" inches</td><td>1 feet</td><td>146 feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table> Was a packer or seal used? ☒ Yes ☐ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches <table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table> Well screen installed? ☒ Yes ☐ No Manufacturer's name <u>Johnson</u> Type <u>Stainless steel</u> Model No. _____ Diameter <u>6</u> Slot size _____ Set from <u>146</u> feet to <u>150</u> feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>18</u> Material used in seal ☐ Cement grout ☒ Pudding clay ☐ Well cuttings Sealing procedure used ☐ Sherry pit ☐ Temporary surface casing ☐ Overbars to seal depth		Thickness	Diameter	From	To	280 inches	6" inches	1 feet	146 feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet						
Thickness	Diameter	From	To																																								
280 inches	6" inches	1 feet	146 feet																																								
_____ inches	_____ inches	_____ feet	_____ feet																																								
_____ inches	_____ inches	_____ feet	_____ feet																																								
_____ inches	_____ inches	_____ feet	_____ feet																																								
_____ inches	_____ inches	_____ feet	_____ feet																																								
Number	From	To																																									
_____ perforations	_____ feet	_____ feet																																									
_____ perforations	_____ feet	_____ feet																																									
_____ perforations	_____ feet	_____ feet																																									
6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Custer</u> _____ 1/4 SE 1/4 Sec. 26 T. 10 N. 13 R. 13 E. 1/4		10. Work started <u>July 1974</u> finished <u>September 1974</u> 11. DRILLERS CERTIFICATION Firm Name <u>Paul Vollmer & Son</u> Firm No. <u>67</u> Address <u>Aberdeen, Idaho</u> Date <u>Jan 1975</u> Signed by (Firm Official) <u>Paul Vollmer Jr.</u> and <u>Paul Vollmer Jr.</u> (Operator)																																									

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Well ID No. 807277
Inspected by _____
Twp _____ Rge _____ Sec _____
_____ 1/4 _____ 1/4 _____ 1/4
Lat: _____ : _____ : _____ Long: _____ : _____ : _____

1. WELL TAG NO. D D0000472
DRILLING PERMIT NO. 807277
Water Right or Injection Well No. _____

2. OWNER:

Name USDA - Sawtooth National Forest
Address 2647 Kimberly Rd. 83301
City Twin Falls State Id Zip _____

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 10 North X or South ☐
Rge. 13 East X or West ☐
Sec. 27 NW 1/4 NE 1/4 NW 1/4
Gov't Lot _____ County Custer

Lat: _____ : _____ : _____ Long: _____ : _____ : _____
Address of Well Site 3 miles S. of Stanley - Stanley
Danger Station City Stanley, Id.

Lot _____ Blk. _____ Sub. Name _____

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>Bentonite</u>	<u>3'</u>	<u>11'</u>	<u>450 lbs</u>	<u>slow Pour</u>
<u>Type 5 Portland</u>	<u>11'</u>	<u>98'</u>	<u>2068 lbs</u>	<u>pump</u>

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____

Was drive shoe seal tested? ☐ Y ☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>8"</u>	<u>+2'</u>	<u>98'-6"</u>	<u>32.2</u>	<u>Steel</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☐ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____

Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

80 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

12. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal/mc	Drawdown	Pumping Level	Time
<u>less than</u> <u>2 gpm</u>			<u>5 hrs</u>

Water Temp. _____ Bottom hole temp. _____

Water Quality test results: clear & cold

Depth 1st Water Encounter _____

13. LITHOLOGY LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12"	0	23'	glacial till cobbles, boulders		
	23'	30'	fine sand w/ small gravel		
	30'	40'	coarse sandy silt w/ 1/4" gravel		
	40'	48'	sand gravel w/ cobbles-boulders		
	48'	57'	sand-small 1/2" gravel		
	57'	65'	fine grained sandy clay		
	65'	67'	silty sand-broken rock		
	67'	74'	silty sand-small gravel		
	74'	98'	brown coarse decomposed granite		
8"	98'	120'	brown granitic sand decomposed granite		
	120'	140'	coarse, decomposed granite		
	140'	157'	fine grained weathered granite		

RECEIVED

AUG 17 2004

WATER RESOURCES
WESTERN REGION

Completed Depth 157 (Measurable)

Date: Started 6-15-04 Completed 7-20-04

14. DRILLER'S CERTIFICATION

We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Robert P. Jones Co. Firm No. 453

Principal Driller Christopher P. Jones Date 7/26/04

Driller or Operator Temp. J. Edwards Date 8/2/04

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

RECEIVED

SEP 24 2015

DEPT OF WATER RESOURCES
SOUTHERN REGIONForm 238(4)-2 09/2010
Page 2 of 2NAME: Ranger Station ID NUMBER: 876341

ABANDONMENT REPORT

DA

ABANDONMENT PROCEDURES:

Must describe all details of work performed, including perforations, sealing materials, and how casing was removed.

PROCEDURE:	FROM:	TO:	WEIGHT/VOLUME:
6.4 - 50 lb. bags	1	112	3200 lbs
of bentonite (First			
15 were coated)			
1 bag of concrete for plug	0	1	80 lbs

DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with:

Drilling Company: _____ License # _____
Principal Driller: Shawn Robnett, P.E. Date: 09/18/2015
Operator: _____ Date: _____

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>ARMY CORP. OF ENGINEERS</u> Address <u>STANLEY, IDAHO 83278</u> Owner's Permit No. _____	7. WATER LEVEL Static water level <u>3</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>44</u> °F. Quality <u>good</u>																																																										
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____	8. WELL TEST DATA ☐ Pump ☐ Bailer ☐ Air ☐ Other _____																																																										
3. PROPOSED USE ☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other <u>FISH HATCHERY</u> (specify type)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr> <td><u>UNKNOWN</u></td> <td></td> <td></td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>UNKNOWN</u>																																																						
Discharge G.P.M.	Pumping Level	Hours Pumped																																																									
<u>UNKNOWN</u>																																																											
4. METHOD DRILLED ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____	9. LITHOLOGIC LOG <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Hole Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>13</td> <td>0</td> <td>3</td> <td>TOP SOIL</td> <td></td> <td>☒</td> </tr> <tr> <td></td> <td>3</td> <td>7</td> <td>CEMENTED COARSE GRAVEL</td> <td></td> <td>☒</td> </tr> <tr> <td></td> <td>7</td> <td>12</td> <td>COARSE GRAVEL</td> <td></td> <td>☒</td> </tr> <tr> <td></td> <td>12</td> <td>20</td> <td>PEA GRAVEL</td> <td></td> <td>☒</td> </tr> <tr> <td></td> <td>20</td> <td>26</td> <td>COARSE SAND GRAVEL</td> <td></td> <td>☒</td> </tr> <tr> <td></td> <td>26</td> <td>40</td> <td>WHITE SAND & PEA GRAVEL</td> <td></td> <td>☒</td> </tr> <tr> <td></td> <td>40</td> <td>63</td> <td>COARSE GRAVEL</td> <td></td> <td>☒</td> </tr> <tr> <td></td> <td>63</td> <td>68</td> <td>SAND & PEA GRAVEL</td> <td></td> <td>☒</td> </tr> </tbody> </table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No	13	0	3	TOP SOIL		☒		3	7	CEMENTED COARSE GRAVEL		☒		7	12	COARSE GRAVEL		☒		12	20	PEA GRAVEL		☒		20	26	COARSE SAND GRAVEL		☒		26	40	WHITE SAND & PEA GRAVEL		☒		40	63	COARSE GRAVEL		☒		63	68	SAND & PEA GRAVEL		☒
Hole Diam.	Depth		Material	Water																																																							
	From	To		Yes	No																																																						
13	0	3	TOP SOIL		☒																																																						
	3	7	CEMENTED COARSE GRAVEL		☒																																																						
	7	12	COARSE GRAVEL		☒																																																						
	12	20	PEA GRAVEL		☒																																																						
	20	26	COARSE SAND GRAVEL		☒																																																						
	26	40	WHITE SAND & PEA GRAVEL		☒																																																						
	40	63	COARSE GRAVEL		☒																																																						
	63	68	SAND & PEA GRAVEL		☒																																																						
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>3/8</u> inches</td> <td><u>12</u> inches</td> <td><u>1</u> feet</td> <td><u>68</u> feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☐ No Perforated? ☒ Yes ☐ No How perforated? ☒ Factory ☐ Knife ☐ Torch Size of perforation <u>1/4</u> inches by <u>2</u> inches <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>864</u> perforations</td> <td><u>23</u> feet</td> <td><u>63</u> feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>18</u> Material used in seal: ☒ Cement grout ☐ Puddling clay ☐ Well cuttings Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☐ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata Describe access port _____	Thickness	Diameter	From	To	<u>3/8</u> inches	<u>12</u> inches	<u>1</u> feet	<u>68</u> feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	<u>864</u> perforations	<u>23</u> feet	<u>63</u> feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	RECEIVED JAN 25 1980 Department of Water Resources RECEIVED JAN 14 1980 Department of Water Resources Eastern District Office JAN 16 1980 Department of Water Resources Western Regional Office																										
Thickness	Diameter	From	To																																																								
<u>3/8</u> inches	<u>12</u> inches	<u>1</u> feet	<u>68</u> feet																																																								
_____ inches	_____ inches	_____ feet	_____ feet																																																								
_____ inches	_____ inches	_____ feet	_____ feet																																																								
_____ inches	_____ inches	_____ feet	_____ feet																																																								
Number	From	To																																																									
<u>864</u> perforations	<u>23</u> feet	<u>63</u> feet																																																									
_____ perforations	_____ feet	_____ feet																																																									
_____ perforations	_____ feet	_____ feet																																																									
6. LOCATION OF WELL Sketch map location must agree with written location. Subdivision Name _____ <u>APPROX. 5/4 MI. SOUTH OF STANLEY, IDAHO</u> Lot No. _____ Block No. _____ County <u>C. USTER</u> <u>SW 1/4 SE 1/4 Sec. 36, T. 10 N. R. 13 E. M.</u>	10. Work started <u>11/8/79</u> finished <u>11/21/79</u>																																																										
11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>GUTHRIE WELL DRILLING</u> Firm No. <u>226</u> Address <u>ARCO, IDAHO</u> Date <u>1/7/80</u> Signed by (Firm Official) <u>G. T. Guthrie</u> and (Operator) <u>James H. Hagen</u>	11. Work started <u>11/8/79</u> finished <u>11/21/79</u>																																																										

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT1. WELL TAG NO. D 0051186Drilling Permit No. 859620

Water right or injection well # _____

2. OWNER: US Fish & Wildlife ServiceName Division of EngineeringAddress 911 NE 11th AvCity Portland State OR Zip 97232-4181

3. WELL LOCATION:

Twp. 10 North ☒ or South ☐ Rge. 13 East ☒ or West ☐Sec. 36 1/4 S/E 1/4Gov't Lot _____ County Custer

Lat. _____ (Deg. and Decimal minutes)

Long. _____ (Deg. and Decimal minutes)

Address of Well Site Sawtooth Fish Hatchery 1200'City Stanley ID

Lot _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection☒ Other fish propagation

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☐ Air Rotary ☐ Mud Rotary ☒ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
entonite chip	0	8	650#	poured
entonite grout	8	19	650#	pumped

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
16"	2	29	375	steel	☒	☒	☐
16"	64	67'6"	375	steel	☒	☒	☐

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____Manufactured screen ☒ Y ☐ N Type Johnson v wireMethod of installation pull back 20" casing

From (ft)	To (ft)	Slot size	Number	Diameter (nominal)	Material	Gauge or Schedule
29'	64'	50		16	stainless	

Length of Headpipe 31' Length of Tailpipe 2'6"Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 8 Static water level (ft) 8

Water temp. (°F) _____ Bottom hole temp. (°F) _____

Describe access port _____

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
see attached			☒	☐	☐	☐

Test method:

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dls. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
21"	0	1	sandy topsoil & gravel		X
	1	8	sand, gravel, boulders		X
	8	27	cemented sand gravel	X	
	27	63	sand & gravel	X	
	63	68	compacted sand, gravel		X

RECEIVED

SEP 27 2010

RECEIVED

DEPT. OF WATER RESOURCES
SOUTHERN REGION

SEP 24 2010

WATER RESOURCES
WESTERN REGIONCompleted Depth (Measurable): 67'6"
Date Started: 8/17/10 Date Completed: 9/14/10

14. DRILLER'S CERTIFICATION:

We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Stevens & Sons Co. No. 153Principal Driller [Signature] Date 9/22/10Driller [Signature] Date 9/22/10

Operator II _____ Date _____

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

Sawtooth Hatchery Well 1A Step-Rate Test: September 10, 2010

Test Observed by: Kevin Boggs (SPF) and Nick Stevens (Stevens)

Flow rate measured with 9" by 6" orifice and pitot tube

Water-Level Measurement Point: top of sounding tube; 2.55 feet above ground surface

Static Water Level: 6.30 feet below ground surface (feet bgs) at 9:58 on 9/10/2010

[illegible]

Sawtooth Hatchery Well 1A Constant-Rate Test: September 10-11, 2010

Test Observed by: Kevin Boogs (SPF) and Nick Stevens (Stevens)

Flow rate measured with 9" by 6" orifice and pilot tube

Water-Level Measurement Point: top of sounding tube; 2.55 feet above ground surface

Static Water Level: 6.30 feet below ground surface (feet bgs) at 9:58 on 9/10/2010

Date	Time	Elapsed Time (min)	t' (min)	U'	DTW (ft bgs)	Drawdown (ft)	Remarks
9/10/10	13:52				6.59	0.00	Pump not on (static water level); well not fully recovered from slug test
9/10/10	14:00	0.5			28.85	20.55	pump on at 14:00; Q ~ 1100 gpm
9/10/10	14:01	1			27.60	21.30	
9/10/10	14:02	2			27.95	21.85	
9/10/10	14:03	3			28.06	21.78	
9/10/10	14:04	4			28.09	21.79	
9/10/10	14:05	5			28.12	21.82	No Sand (Imhoff Cone)
9/10/10	14:06	6			28.15	21.85	
9/10/10	14:07	7			28.16	21.86	
9/10/10	14:08	8			28.18	21.88	Q ~ 490 gpm
9/10/10	14:09	9			28.18	21.88	
9/10/10	14:10	10			28.18	21.88	Q ~ 1100 gpm
9/10/10	14:12	12			28.19	21.89	
9/10/10	14:15	15			28.22	21.92	
9/10/10	14:18	18			28.24	21.94	Q ~ 1100 gpm
9/10/10	14:21	21			28.26	21.96	
9/10/10	14:25	25			28.29	21.99	
9/10/10	14:30	30			28.33	22.03	Q ~ 1100 gpm
9/10/10	14:35	35			28.36	22.06	No Sand (Imhoff Cone)
9/10/10	14:40	40			28.36	22.08	
9/10/10	14:51	51			28.43	22.13	
9/10/10	15:08	68			28.51	22.21	15.03; pH=7.48,EC=122.1 µS/cm,SC=191.6 µS/cm,T=6.1 deg C
9/10/10	15:27	87			28.59	22.29	
9/10/10	15:40	100			28.63	22.33	Q ~ 1100 gpm
9/10/10	15:50	110			28.66	22.36	No Sand (Imhoff Cone)
9/10/10	16:00	120			28.69	22.39	Q ~ 1100 gpm
9/10/10	16:15	135			28.75	22.45	
9/10/10	16:45	165			28.83	22.53	16.48; pH=7.80,EC=122.7 µS/cm,SC=191.7 µS/cm,T=6.2 deg C
9/10/10	16:58	176			28.84	22.54	Q ~ 1100 gpm
9/10/10	17:30	210			28.95	22.65	
9/10/10	18:00	240			29.03	22.73	18:10; pH=7.82,EC=122.7 µS/cm,SC=191.7 µS/cm,T=6.2 deg C
9/10/10	19:30	330			29.25	22.95	Q ~ 1100 gpm
9/10/10	20:40	400			29.45	23.15	Q ~ 1100 gpm
9/10/10	21:30	450			29.55	23.25	Q ~ 1100 gpm
9/10/10	22:45	525			29.65	23.35	Q ~ 1100 gpm
9/10/10	23:45	585			29.78	23.48	Q ~ 1100 gpm
9/11/10	12:50	650			29.87	23.57	Q ~ 1100 gpm
9/11/10	2:00	720			30.08	23.78	Q ~ 1100 gpm
9/11/10	3:30	810			30.15	23.85	Q ~ 1100 gpm
9/11/10	4:30	870			30.15	23.85	
9/11/10	6:00	960			30.20	23.90	Q ~ 1100 gpm
9/11/10	7:30	1050			30.26	23.96	Q ~ 1100 gpm
9/11/10	7:57	1077			30.26	23.95	No Sand (Imhoff Cone)
9/11/10	8:30	1110			30.23	23.93	08:40; pH=7.24,EC=121.1 µS/cm,SC=190.7 µS/cm,T=5.8 deg C
9/11/10	9:00	1140			30.23	23.93	Q ~ 1100 gpm
9/11/10	9:30	1170			30.23	23.93	09:15; pH=7.74,EC=119.7 µS/cm,SC=189.1 µS/cm,T=5.8 deg C
9/11/10	10:00	1200			30.23	23.93	Q ~ 1100 gpm
9/11/10	10:30	1230			30.20	23.90	10:10; pH=7.78,EC=119.0 µS/cm,SC=187.5 µS/cm,T=5.9 deg C
9/11/10	11:00	1260			30.19	23.89	Q ~ 1100 gpm
9/11/10	11:30	1290			30.17	23.87	11:40; pH=7.82,EC=119.4 µS/cm,SC=187.4 µS/cm,T=5.9 deg C
9/11/10	11:58	1318			30.18	23.88	No Sand (Imhoff Cone)

Sawtooth Hatchery Well 1A Constant-Rate Recovery Test; September 11, 2010

Test Observed by: Kevin Boggs (SPF) and Nick Stevens (Stevens)

Flow rate measured with 8" by 6" orifice and pitot tube

Water-Level Measurement Point: top of sounding tube; 2.55 feet above ground surface

Static Water Level: 6.30 feet below ground surface (feet bgs) at 9:58 on 9/10/2010

[illegible]

3

150' 16" 1982 09N 13E 014

SUMMARY BOREHOLE RECORD

(OFFICE USE ONLY)

DEPTH OF HOLE 150		OF O.B. 150		DIAMETER OF HOLE 16	
ROCK DRILLED		% REC		DATE STARTED 7-13-82	
AZIMUTH HOLE		MADE 02		DATE COMPLETED 10-3-82	
INITIALS KCH DRS				CONTRACT NO. DACW68-82-C-0144	
SURFACE EL 6494		HOLE NO WELL 43		N 242,010 E 931,508	
ELEVATIONS	GRA PHIC LOG	CORE % 8	DESCRIPTION OF MATERIALS	REMARKS	
10			SILTY SANDY GRAVEL WITH COBBLES - ROUNDED 3/8 TO 7 INCH MATERIAL, LOOSE COMPACTION.	SWL (10-8-82)	
20				BOTTOM OF 24 INCH CASING	
30			SANDY GRAVEL - ROUNDED GRAVELS TO 3/8 INCHES IN DIAMETER, LOOSE COMPACTION.	BOTTOM OF 20 INCH CASING	
40				16 INCH CASING MILL SLOTTED 3/8 x 3" SLOTS, 8 PER ROW, ROWS ON 9 INCH CENTERS SLOTTED FROM 33 TO 73 FEET	
50					
60			SCATTERED SILT SEAMS FROM 75 TO 150 FEET.	BOTTOM OF 16 INCH CASING WITH 2-FOOT CONCRETE PLUG	
70					
80					
90					
100					

Driller Marc
Friedman
#299

P. 1 of 6

NE 4
Sec 1
T 9 N
R 13 E

NFW 62
May 77SAWTOOTH NAT. ELISH HATCHERY
SITE AND PROJECTWELL 43
HOLE NO.

09N 13E 01A

OFFICE USE ONLY

ELEVATION	DEPTH FEET	GRA PHIC LOG	CORE % S	DESCRIPTION OF MATERIALS	REMARKS
6394				GRAVELLY SAND - ROUNDED MATERIAL TO 3/8 INCHES IN DIAMETER, SCATTERED SILT SEAMS, LOOSE TO MED. COMPACTION	HOLE BACKFILLED 75 TO 150 FEET
6344				BO' OM OF HOLE EL. 6344	NE 1/4 Sec 1 T 9N R 13E

Pg 2 of 6
MF #299

22

62
17

**SAWTOOTH NAT. FISH HATCHERY
SITE AND PROJECT.**

WELL #3
HOLE NO.

#3

DRILLING LOG		DIV. NPD	INSTALLATION NPN	SHEET 1 OF 2 SHEETS
1. PROJECT European Nat. Fish Hatchery		10. SIZE AND TYPE OF BIT 2 1/2" - 2 1/2" - 1 1/2" - 1 1/2"		
2. LOCATION (County or State) Alaska 931, 508		11. SURFACE ELEVATION (Feet) 10-8-82		
3. DRILLING AGENCY Risky Mtn Well Drilling		12. MANUFACTURER'S DESIGNATION OF DRILL 546 R Miller Deep Churn Drill		
4. HOLE NO. (As shown on ground map and site number) No 3		13. TOTAL NO. OF CORES DISTURBED 18 UNDISTURBED —		
5. NAME OF DRILLER Marvin Fenderson		14. TOTAL NUMBER CORE BOXES —		
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED — DEG. FROM VERT.		15. ELEVATION GROUND WATER 9-5		
7. THICKNESS OF OVERBURDEN 150'		16. DATE HOLE STARTED 9-13-82 COMPLETED 10-8-82		
8. DEPTH DRILLED INTO ROCK 0		17. ELEVATION TOP OF HOLE 6494		
9. TOTAL DEPTH OF HOLE 150'		18. TOTAL CORE RECOVERY FOR BORING —		
		19. SIGNATURE OF INSPECTOR —		

ELEVATION F.	DEPTH F.	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Testing time, water level, depth of weathering, etc., if significant)
	0					
	10		Silty Sandy Gravel			
	20		with Cobbles			
	27					
	30					material 3/4" minus Gravel 1/4" minus
	40					Soil test @ 40' no fine gravel Soil test, water chopped from 11' to 22'
	50					(Soil test 12' to 15')
	60		Sandy Gravel			Soil test @ 62' on 9-13-82. Soils 8' from top. 3 1/2 bags full of sand. (Soil test 11' to 14')
	70					(Soil test 10 1/2' to 14' in.)
	80					(Soil test 10 1/2' to 14' in.)
	90					(Soil test 10 1/2' to 14' in.)
	100					(Soil test 10 1/2' to 14' in.)
	110					(Soil test 10 1/2' to 14' in.)
	120					(Soil test 10 1/2' to 14' in.)
	130					(Soil test 10 1/2' to 14' in.)
	140					(Soil test 10 1/2' to 14' in.)
	150					(Soil test 10 1/2' to 14' in.)

P₉₃₀F₆
MF#2.99
Sec 1
T9N R13E

#3

DRILLING LOG		INSTALLATION		Hole No. <i>W-11-3</i>		
1. PROJECT		12. DATE AND TYPE OF HNT		SHEET 2 OF 2 SHEETS		
2. LOCATION (Continuation of Section)		13. DATE AND ELEVATION DOWN HNT OR HNT				
3. DRILLING AGENCY		14. MANUFACTURER'S DESIGNATION OF DRILL				
4. HOLE NO. (As shown on drawing and map)		15. TOTAL NO. OF OVER-DRIVEN SAMPLES TAKEN		16. TOTAL NUMBER CORE BOXES		
5. NAME OF DRILLER		17. ELEVATION SURROUND WATER		18. ELEVATION TOP OF HOLE		
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ☐ REG. FROM VERT.		19. DATE HOLE		20. STARTED		
7. THICKNESS OF OVERBURDEN		21. ELEVATION TOP OF HOLE		22. TOTAL CORE RECOVERY FOR BORING		
8. DEPTH DRILLED INTO ROCK		23. SIGNATURE OF INSPECTOR				
9. TOTAL DEPTH OF HOLE						
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	1. CORE RECOVERY	2. CORE SAMPLE NO.	REMARKS (Drilling time, water level, depth of penetration, etc., if significant)
110			Sand		107-11 to 111" dia)	107-11 to 111" dia)
					108-11 to 112" dia)	108-11 to 112" dia)
					109-11 to 113" dia)	109-11 to 113" dia)
					110-11 to 114" dia)	110-11 to 114" dia)
					111-11 to 115" dia)	111-11 to 115" dia)
					112-11 to 116" dia)	112-11 to 116" dia)
					113-11 to 117" dia)	113-11 to 117" dia)
					114-11 to 118" dia)	114-11 to 118" dia)
					115-11 to 119" dia)	115-11 to 119" dia)
					116-11 to 120" dia)	116-11 to 120" dia)
120			Bottom of hole		121-11 to 122" dia)	121-11 to 122" dia)
					122-11 to 123" dia)	122-11 to 123" dia)
					123-11 to 124" dia)	123-11 to 124" dia)
					124-11 to 125" dia)	124-11 to 125" dia)
					125-11 to 126" dia)	125-11 to 126" dia)
					126-11 to 127" dia)	126-11 to 127" dia)
					127-11 to 128" dia)	127-11 to 128" dia)
					128-11 to 129" dia)	128-11 to 129" dia)
					129-11 to 130" dia)	129-11 to 130" dia)
					130-11 to 131" dia)	130-11 to 131" dia)
130			Bottom of hole		131-11 to 132" dia)	131-11 to 132" dia)
					132-11 to 133" dia)	132-11 to 133" dia)
					133-11 to 134" dia)	133-11 to 134" dia)
					134-11 to 135" dia)	134-11 to 135" dia)
					135-11 to 136" dia)	135-11 to 136" dia)
					136-11 to 137" dia)	136-11 to 137" dia)
					137-11 to 138" dia)	137-11 to 138" dia)
					138-11 to 139" dia)	138-11 to 139" dia)
					139-11 to 140" dia)	139-11 to 140" dia)
					140-11 to 141" dia)	140-11 to 141" dia)
140			Bottom of hole		141-11 to 142" dia)	141-11 to 142" dia)
					142-11 to 143" dia)	142-11 to 143" dia)
					143-11 to 144" dia)	143-11 to 144" dia)
					144-11 to 145" dia)	144-11 to 145" dia)
					145-11 to 146" dia)	145-11 to 146" dia)
					146-11 to 147" dia)	146-11 to 147" dia)
					147-11 to 148" dia)	147-11 to 148" dia)
					148-11 to 149" dia)	148-11 to 149" dia)
					149-11 to 150" dia)	149-11 to 150" dia)
					150-11 to 151" dia)	150-11 to 151" dia)
150			Bottom of hole		151-11 to 152" dia)	151-11 to 152" dia)
					152-11 to 153" dia)	152-11 to 153" dia)
					153-11 to 154" dia)	153-11 to 154" dia)
					154-11 to 155" dia)	154-11 to 155" dia)
					155-11 to 156" dia)	155-11 to 156" dia)
					156-11 to 157" dia)	156-11 to 157" dia)
					157-11 to 158" dia)	157-11 to 158" dia)
					158-11 to 159" dia)	158-11 to 159" dia)
					159-11 to 160" dia)	159-11 to 160" dia)
					160-11 to 161" dia)	160-11 to 161" dia)

P, 4 of 6
MF # 299
Sec 1
T 9 N
R 13 E

MAR 31 1936 DAYTON

COMPLETE

W-11-3

P95046
MF #299
See
T9N
R13E

DRILLING LOG		DATE		INSTALLATION		SHEET	
PROJECT		LOCATION		NO. AND TYPE OF BIT		ELEVATION	
1. PROJECT		2. LOCATION		3. NO. AND TYPE OF BIT		4. ELEVATION	
5. DRILLING METHOD		6. NO. AND TYPE OF BIT		7. ELEVATION		8. ELEVATION	
9. DIRECTION OF HOLE		10. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		11. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		12. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN	
13. DIRECTION OF HOLE		14. TOTAL NUMBER CORE BONES		15. ELEVATION GROUND WATER		16. ELEVATION GROUND WATER	
17. THICKNESS OF OVERBURDEN		18. ELEVATION TOP OF HOLE		19. ELEVATION TOP OF HOLE		20. ELEVATION TOP OF HOLE	
21. DEPTH DRILLED INTO ROCK		22. TOTAL CORE RECOVERY FOR BORING		23. TOTAL CORE RECOVERY FOR BORING		24. TOTAL CORE RECOVERY FOR BORING	
25. TOTAL DEPTH OF HOLE		26. SIGNATURE OF INSPECTOR		27. SIGNATURE OF INSPECTOR		28. SIGNATURE OF INSPECTOR	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	1. CORE	2. BOX OR SAMPLE NO.	REMARKS	
5	10		large gravel	24"		4pm-8pm	4-13-82
10	15		large gravel	24"		8pm-9pm	9-13-82
15	20		gravel & sand	24"		9am-11am	9-14-82
20	25		gravel & sand	24"		11am-4pm	9-14-82
25	30		gravel	20"		4pm-7pm	9-15-82
30	35		gravel	20"		13pm-4pm	9-15-82
35	40		gravel	16"		6pm-8pm	9-15-82
40	45		gravel	16"		11pm-1pm	9-15-82
45	50		gravel	16"		1pm-3pm	9-15-82
50	55		gravel	16"		3pm-7pm	9-15-82
55	60		gravel	16"		4pm-11pm	9-15-82
60	65		gravel	16"		2pm-7pm	9-15-82
65	70		gravel	16"		14pm-1pm	9-15-82
70	75		gravel	16"		2pm-1pm	9-15-82
75	80		gravel	16"		3pm-7pm	9-15-82
80	85		gravel	16"		8pm-7pm	9-15-82
85	90		gravel	16"		1pm-1pm	9-15-82
90	95		gravel	16"		3pm-7pm	9-15-82
95	100		gravel	16"		8pm-7pm	9-15-82
100	105		gravel	16"		1pm-1pm	9-15-82
105	110		gravel	16"		3pm-7pm	9-15-82
110	115		gravel	16"		8pm-7pm	9-15-82
115	120		gravel	16"		1pm-1pm	9-15-82
120	125		gravel	16"		3pm-7pm	9-15-82
125	130		gravel	16"		8pm-7pm	9-15-82
130	135		gravel	16"		1pm-1pm	9-15-82
135	140		gravel	16"		3pm-7pm	9-15-82
140	145		gravel	16"		8pm-7pm	9-15-82
145	150		gravel	16"		1pm-1pm	9-15-82
150	155		gravel	16"		3pm-7pm	9-15-82
155	160		gravel	16"		8pm-7pm	9-15-82
160	165		gravel	16"		1pm-1pm	9-15-82
165	170		gravel	16"		3pm-7pm	9-15-82
170	175		gravel	16"		8pm-7pm	9-15-82
175	180		gravel	16"		1pm-1pm	9-15-82
180	185		gravel	16"		3pm-7pm	9-15-82
185	190		gravel	16"		8pm-7pm	9-15-82
190	195		gravel	16"		1pm-1pm	9-15-82
195	200		gravel	16"		3pm-7pm	9-15-82
200	205		gravel	16"		8pm-7pm	9-15-82
205	210		gravel	16"		1pm-1pm	9-15-82
210	215		gravel	16"		3pm-7pm	9-15-82
215	220		gravel	16"		8pm-7pm	9-15-82
220	225		gravel	16"		1pm-1pm	9-15-82
225	230		gravel	16"		3pm-7pm	9-15-82

SUMMARY BOREHOLE RECORD

(OFFICE USE ONLY)

Well #4

17

DEPTH OF HOLE 60 OF O.B. 60 DIAMETER OF HOLE 8 INCH
 ROCK DRILLED % REC DATE STARTED 8-20-82
 AZIMUTH HOLE MADE 0° DATE COMPLETED 8-28-82
 INITIALS KCH, DRS CONTRACT NO. DACW68-82-C-0144

SURFACE EL. 6481

HOLE NO. WELL #4

N 244,675
 E 930,345

ELEVATIONS	DEPTH	GRAPHIC LOG	CORE %	DESCRIPTION OF MATERIALS	REMARKS
6476	10			SILTY SANDY GRAVEL WITH COBBLES - ROUNDED, 3/8 TO 6 INCH MATERIAL, LOOSE COMPACTION	SWL (8-28-82)
	20			SANDY GRAVEL - ROUNDED GRAVEL TO 3/8 INCHES IN DIA., LOOSE COMPACTION	
	30				BOTTOM OF 12 INCH CASING
	40				BOTTOM OF 10 INCH CASING
	50				8 INCH PVC SLOTTED SCREEN SLOTTED FROM 26 TO 55 FEET .040 SLOT SIZE
6421	60			BOTTOM OF HOLE EL. 6421	
	70				

Marcus Frandsen
 #299

Pg 1 of 3

MICROFILMED

OCT 14 1988

V 62
 72

SAWTOOTH NAT. FISH HATCHERY
 SITE AND PROJECT

WELL #4
 HOLE NO.

SE 1/4
 Sec 36
 T10N
 R13E

DRILLING LOG		INSTALLATION		Hole No. <u>Well #4</u>		
PROJECT		SHEET		OF 1 SHEETS		
1. PROJECT <u>San Juan National F.H.</u>		10. SIZE AND TYPE OF BIT <u>16" - 12" - 10" Cable Tool</u>				
2. LOCATION (Coordinates or Station) <u>N 244.675 E 930.345</u>		11. DATUM FOR ELEVATION SHOWN (TBM or BSS)				
3. DRILLING AGENCY <u>Rocky Mtn. Well Drilling</u>		12. MANUFACTURER'S DESIGNATION OF DRILL <u>BE 22-W</u>				
4. HOLE NO. (As shown on drawing title and file number) <u>No. 4</u>		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN		DISTURBED <u>8</u> UNDISTURBED <u>—</u>		
5. NAME OF DRILLER <u>M. Frander</u>		14. TOTAL NUMBER CORE BOXES		<u>—</u>		
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.		15. ELEVATION GROUND WATER <u>2'</u>				
7. THICKNESS OF OVERBURDEN <u>60'</u>		16. DATE HOLE		STARTED <u>8-20-82</u> COMPLETED <u>8-28-82</u>		
8. DEPTH DRILLED INTO ROCK <u>0</u>		17. ELEVATION TOP OF HOLE <u>6481</u>				
9. TOTAL DEPTH OF HOLE <u>60</u>		18. TOTAL CORE RECOVERY FOR BORING		<u>—</u>		
		19. SIGNATURE OF INSPECTOR				
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
	0'					
	5'		Silty Sandy Gravel with Cobbles			
	10'					
	20'					
	25'		Sandy Gravel		20' <u>5a#1</u>	.07 mill. to 3/8" dia. material
	30'				25' <u>5a#2</u>	.07 mill. to 3/8" dia. material
	35'				30' <u>5a#3</u>	.07 mill. to 3/8" dia. material
	40'				35' <u>5a#4</u>	.07 mill. to 3/8" dia. material
	45'				40' <u>5a#5</u>	.07 mill. to 3/8" dia. material
	50'				45' <u>5a#6</u>	.07 mill. to 3/8" dia. material
	55'				50' <u>5a#7</u>	.07 mill. to 3/8" dia. material
	60'		Bottom of hole		55' <u>5a#8</u>	.07 mill. to 3/8" dia. material
					60'	Total Wash Size to 60'
						Note: 2 bailing tests run. 1st. test at 40' Bailed 4 times, 60 gal. ea. for 6 min. Water dropped from 3' to 37'. Took 45 min. to recover. 2nd. test at 60' Bailed 7 times in 9 1/2 min 10 gal. ea. Water dropped from 3' to 56'. Took 1 1/2 hrs. to recharge.
			Marcus F #299 Pg 2 of 3 Sec 36 T10N R13E	MICROFILMED OCT 14 1988		

DRILLING		DIV. 1	INSTALLATION	SHEET 1 OF 1 SHEETS
1. PROJECT			10. SIZE AND TYPE OF BIT 16"-17"-18"	
2. LOCATION (Coordinates of Station)			11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY			12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)			13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	
5. NAME OF DRILLER			14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE			15. ELEVATION GROUND WATER	
7. THICKNESS OF OVERBURDEN			16. DATE HOLE	
8. DEPTH DRILLED INTO ROCK			17. ELEVATION TOP OF HOLE	
9. TOTAL DEPTH OF HOLE			18. TOTAL CORE RECOVERY FOR BORING	
			19. SIGNATURE OF INSPECTOR	

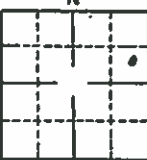
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	1. CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
	5'		large gravel & sand	16"	-	2:PM - 6:PM 4 hrs. 8-20-82
	10'		pea gravel & sand	16"		8:30 AM - 10:30 AM 1 1/2 hrs. 8-21-82
	15'		pea gravel & sand	16"		10:30 - 12 NOON 1 1/2 hrs. 8-21-82
	20'		pea gravel & sand	16"		12 NOON - 2:30 PM 2 1/2 hrs. 8-21-82
	25'		pea gravel	12"	1st 25 lbs	3 PM - 5 PM 5 hrs. 8-25-82
	30'		pea gravel	10"	2nd 25 lbs	8 AM - 12 NOON 4 hrs. 8-26-82
	35'		pea gravel	10"	3rd 25 lbs	12 NOON - 3 PM 3 hrs. 8-26-82
	40'		pea gravel	10"	4th 25 lbs	3 PM - 7 PM 4 hrs. 8-26-82
	45'		pea gravel	10"	5th 25 lbs	8:30 AM - 10 AM 1 1/2 hrs. 8-27-82
	50'		pea gravel & sand	10"	6th 25 lbs	10 AM - 12 NOON 2 hrs. 8-27-82
	55'		pea gravel & sand	10"	7th 25 lbs	12 NOON - 4:30 PM 4 1/2 hrs. 8-27-82
	60'		pea gravel & sand Finished drilling	10"	8th 25 lbs	8 AM - 12 NOON 4 hrs. 8-28-82
		1.	done bailer test at 40' water stood at 3' pulled 4 loads out of well @ 60 gal. per load in 16 min. water level when finished was 37' took 15 min for it to recharge.			MF #299 Pg 3 of 3 See 36 T 10N R 13E.
		2.	done bailer test at 60' water stood at 3' pulled 7 loads out of well in 9 1/2 min. @ 60 gal. per load water level when finished was 56 ft. took 1 1/2 hrs. for it to recharge. 1 gravel pulled up			

OCT 14 1988

STATE OF ID. HO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE TYPEWRITER OR
ALPINE PEN
21State law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

MAR 28 1985

Department of Water Resources
Sawtooth District Office

1. WELL OWNER Name <u>George E. Black</u> Address <u>Castleford, Idaho</u> Owner's Permit No. _____	7. WATER LEVEL Static water level <u>42'</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>50°F.</u> Quality _____																																					
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____	8. WELL TEST DATA ☐ Pump ☒ Bailer ☐ Air ☐ Other _____ <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>	Discharge G.P.M.	Pumping Level	Hours Pumped																																		
Discharge G.P.M.	Pumping Level	Hours Pumped																																				
3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <table border="1"><thead><tr><th rowspan="2">Hole Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th rowspan="2">Water Yes No</th></tr><tr><th>From</th><th>To</th></tr></thead><tbody><tr><td> </td><td>1</td><td>24</td><td>Boulder & Sandy clay</td><td> </td></tr><tr><td> </td><td>24</td><td>37</td><td>Hard pzn</td><td> </td></tr><tr><td> </td><td>37</td><td>60</td><td>Sandy clay</td><td> </td></tr><tr><td> </td><td>60</td><td>63</td><td>Decomposed G. 2 nit</td><td> </td></tr><tr><td> </td><td>63</td><td>80</td><td>clay</td><td> </td></tr><tr><td> </td><td>80</td><td>90</td><td>Decomposed G. 2 nit</td><td> </td></tr></tbody></table>	Hole Diam.	Depth		Material	Water Yes No	From	To		1	24	Boulder & Sandy clay			24	37	Hard pzn			37	60	Sandy clay			60	63	Decomposed G. 2 nit			63	80	clay			80	90	Decomposed G. 2 nit	
Hole Diam.	Depth		Material	Water Yes No																																		
	From	To																																				
	1	24	Boulder & Sandy clay																																			
	24	37	Hard pzn																																			
	37	60	Sandy clay																																			
	60	63	Decomposed G. 2 nit																																			
	63	80	clay																																			
	80	90	Decomposed G. 2 nit																																			
4. METHOD DRILLED ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____																																						
5. WELL CONSTRUCTION Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____ Thickness _____ inches Diameter _____ inches + _____ feet To _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☒ Yes ☐ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation <u>5/8</u> inches by <u>1/8</u> inches Number _____ From _____ feet To _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☒ Yes ☐ No ☐ Size of gravel <u>1/4" to 1/2"</u> Placed from <u>60</u> feet to <u>80</u> feet Surface seal depth <u>20</u> Material used in seal: ☒ Cement grout ☐ Puddling clay ☒ Well cuttings Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata Describe access port <u>Well Cap 1 1/4 Plug</u>	10. Work started <u>8-3-83</u> finished <u>8-10-83</u> 11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>B+B Drilling</u> Firm No. <u>171</u> Address <u>Rt 1 Hazelton</u> Date <u>10-10-83</u> Signed by (Firm Official) <u>Ronald R. Rink</u> and (Operator) <u>Leon B. Bunk</u>																																					
6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Luster</u> <u>SE 1/4 NE 1/4 Sec. 36, T. 10 N, R. 13 W.</u>																																						

RECEIVED

NAR 29 *72*

USE ADDITIONAL SHEETS IF NECESSARY – FORWARD THE WHITE COPY TO THE DEPARTMENT

876314

RECEIVED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESUSE TYPEWRITER OR
BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

25

1. WELL OWNER

Name Cliff Hansen
Address Stanley, Idaho
Owner's Permit No. _____

7. WATER LEVEL

Static water level 5 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

8. WELL TEST DATA

☒ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M. _____ Pumping Level _____ Hours Pumped _____

unk.

3. PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

9. LITHOLOGIC LOG

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
14	0	5	topsoil	x	
14	5	13	river boulder & clay	x	
12	13	27	"	x	
12	20	59	gravel & sand		x

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
<u>1.250</u> inches	<u>12</u> inches	<u>1</u> feet	<u>59</u> feet
<u>.250</u> inches	<u>12</u> inches	<u>1</u> feet	<u>59</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ NoWas a packer or seal used? ☐ Yes ☒ NoPerforated? ☒ Yes ☐ NoHow perforated? ☐ Factory ☒ Knife ☐ TorchSize of perforation 1/4 inches by 2 inches

Number	From	To
<u>328</u> perforations	<u>20</u> feet	<u>58</u> feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter _____ Slot size _____ Set from _____ feet to _____ feet

Diameter _____ Slot size _____ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____

Placed from _____ feet to _____ feet

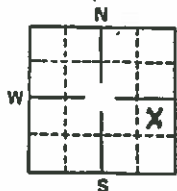
Surface seal depth 13 Material used in seal: ☐ Cement grout☒ Puddling clay ☐ Well cuttingsSealing procedure used: ☐ Slurry pit ☒ Temp. surface casing☐ Overbore to seal depthMethod of joining casing: ☐ Threaded ☒ Welded ☐ Solvent

Weld

☐ Cemented between strataDescribe access port threaded pipe welded to casing with cap

6. LOCATION OF WELL

Sketch map location must agree with written location. (97)



Subdivision Name _____

Lot No. _____ Block No. _____

County _____ Custer

NE 1/4 SE 1/4 Sec. 36, T. 12 N, R. 13 W.

10.

Work started 8/25/77 finished 9/3/77

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Ken Smith Well Firm No. 255

Drilling

Address Bx. 1165 Hailey, Ida. 10/7/77Signed by (Firm Official) Ken Smith

and

(Operator) Wayne Bell

* Signature of Principal Driller and rig operator are required.

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

[illegible]

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

RECEIVED

28

[illegible]

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT

RECEIVED

5-1972

FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT