

AGENDA ITEM SUMMARY

DATE: 1/7/13 DEPARTMENT: PW - Wastewater DEPT. HEAD SIGNATURE: *DB*

SUBJECT: Consideration of Resolution 2013-03 authorizing Task Order #5 with HDR Engineering for providing process operations assistance and support for NPDES permit requirements, including a not-to-exceed cost of \$20,000.

AUTHORITY: ID Code _____ IAR _____ City Ordinance/Code _____
(IF APPLICABLE)

BACKGROUND/SUMMARY OF ALTERNATIVES CONSIDERED:

With the revisions in our NPDES permit we are requesting assistance from HDR Engineering to provide technical assistance and assistance with updated NPDES permit requirements. The cost of these services is limited to \$20,000 with any additional costs subject to city council approval.

FISCAL IMPACT / PROJECT FINANCIAL ANALYSIS: Caselle # _____
Budget Line Item # _____ YTD Line Item Balance \$ _____
Estimated Hours Spent to Date: _____ Estimated Completion Date: _____
Staff Contact: _____ Phone # _____
Comments:

ACKNOWLEDGEMENT BY OTHER AFFECTED CITY DEPARTMENTS: (IF APPLICABLE)

- | | | |
|---|--|---|
| <input type="checkbox"/> City Administrator | <input type="checkbox"/> Library | <input type="checkbox"/> Benefits Committee |
| <input type="checkbox"/> City Attorney | <input type="checkbox"/> Mayor | <input type="checkbox"/> Streets |
| <input type="checkbox"/> City Clerk | <input type="checkbox"/> Planning | <input type="checkbox"/> Treasurer |
| <input type="checkbox"/> Building | <input type="checkbox"/> Police | _____ |
| <input type="checkbox"/> Engineer | <input type="checkbox"/> Public Works, Parks | _____ |
| <input type="checkbox"/> Fire Dept. | <input type="checkbox"/> P & Z Commission | _____ |

RECOMMENDATION FROM APPLICABLE DEPARTMENT HEAD:

Motion to approve Resolution 2013-03 authorizing Task Order #5 with HDR Engineering for a not to exceed amount of \$20,000.

ADMINISTRATIVE COMMENTS/APPROVAL:

City Administrator _____ Dept. Head Attend Meeting (circle one) Yes No

ACTION OF THE CITY COUNCIL:

Date _____

City Clerk _____

FOLLOW-UP:

*Ord./Res./Agrmt./Order Originals: Record
Copies (all info.): _____
Instrument # _____

*Additional/Exceptional Originals to: _____
Copies (AIS only)

**CITY OF HAILEY
RESOLUTION NO. 2013-03**

**RESOLUTION OF THE CITY COUNCIL FOR THE CITY OF HAILEY
AUTHORIZING THE EXECUTION OF A CONTRACT FOR SERVICES WITH
HDR ENGINEERING, INC.**

WHEREAS, the City of Hailey desires to enter into an agreement with HDR Engineering, Inc. (HDR) under which HDR will perform technical assistance for process operations and support for the NPDES permit requirements for a not-to-exceed amount of \$20,000.

WHEREAS, the City of Hailey and HDR have agreed to the terms and conditions of the Task Order Number 5, a copy of which is attached hereto.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HAILEY, IDAHO, that the City of Hailey approves the Task Order Number 5 between the City of Hailey and HDR Engineering, Inc. and that the Mayor is authorized to execute the attached Agreement,

Passed this 7th day of January, 2013.

City of Hailey

Fritz X. Haemmerle, Mayor

ATTEST:

Mary Cone, City Clerk

Heather Dawson

From: Falconer, Haley <Haley.Falconer@hdrinc.com>
Sent: Wednesday, January 02, 2013 8:57 AM
To: Heather Dawson; Roger Parker
Cc: Tom Hellen; Zeltner, Michael
Subject: Operations and NPDES Support - draft scope
Attachments: HDR Scope_Ops_Support_Spring12013_2013-01-02_Final_TechServices_ToCity.pdf

Heather and Roger,

I've attached a revised draft scope of work for as-requested operations and NPDES technical support. The new Task 300 in this version includes as-requested, on-call support for NPDES permit related items like O&M plan update and temperature monitoring.

Please let me know if you have any questions or comments.

Happy New Year,

Haley

From: Tom Hellen
Sent: Monday, December 31, 2012 9:22 AM
To: Falconer, Haley
Cc: Heather Dawson; Roger Parker

Haley,

Attached are my rough thoughts for amending Task Order #5. As I'm out of the office until 1/8 please revise this and send it to Heather and Roger for inclusion in the 1/7 council packet. Heather will need it by Thursday am.

Heather, I am writing the agenda item summary based on these revisions. It's under PW/PW/Council/agendas if you need to revise it.

Tom Hellen
Public Works Director/City Engineer
(208) 788-9830 X14

Please be aware that all email correspondence is public record

From: Falconer, Haley [mailto:Haley.Falconer@hdrinc.com]
Sent: Friday, December 28, 2012 9:31 AM
To: Tom Hellen
Subject: RE: Draft Ops Support Scope

Will do.

Just to confirm, the way this scope is written right now is to provide to-be-determined technical services. The items that are listed out are just examples of what could be included, but aren't hard scope items. We wrote it this way after discussing with the City the different types of support that may be required but are not yet defined.

Should I remove some of the detail that's in there now, add the items below as examples, but keep it as an open technical services scope? This allows flexibility if anything comes up later. This is a time and materials scope – we would only initiate work as it is requested.

Please let me know if you have any questions and I will get you a revised scope by Monday.

Thanks, Haley

From: Tom Hellen [mailto:tom.hellen@haileycityhall.org]
Sent: Friday, December 28, 2012 11:18 AM
To: Falconer, Haley
Subject: RE: Draft Ops Support Scope

Haley,

Please add assistance with the NPDES permit, specifically the temperature sensors, the Quality Assurance Plan, O&M Plan update and the WET test protocol to this scope of work. I'd like to get the council to approve on 1/7.

I need the revision by 12/31 as I'm gone Jan 2 – 7.

Tom Hellen
Public Works Director/City Engineer
(208) 788-9830 X14

From: Falconer, Haley [mailto:Haley.Falconer@hdrinc.com]
Sent: Tuesday, November 13, 2012 10:02 PM
To: Roger Parker
Cc: Tom Hellen; Zeltner, Michael
Subject: Draft Ops Support Scope

Roger,

Per our conversation last week, I've attached a revised operations support scope. Rather than listing out specific activities that we would anticipate helping with, this scope is left as a technical support task order that will allow us to provide you the services and support you request. We will document our activities on a monthly basis and provide them to you in a monthly progress report with the invoice. We will only perform work that you request and the fee will not exceed the amount in the task order, unless an amendment is issued.

Please let me know if you have any questions or if you need any additional information. I will be in the office tomorrow if you would like to chat.

HALEY FALCONER
EIT

HDR Engineering, Inc.
Water/Wastewater Project Engineer

EXHIBIT A

TASK ORDER NO. 5**TECHNICAL SERVICES FOR PROCESS OPERATIONS AND NPDES PERMIT
SUPPORT FOR THE WOODSIDE WASTEWATER TREATMENT PLANT
CITY OF HAILEY, IDAHO**

This Task Order pertains to an Agreement by and between City of Hailey, Idaho, and HDR Engineering, Inc. ("HDR"), dated August 10, 2009, ("the Agreement"). HDR shall perform services on the project described below and in the Agreement. This Task Order shall not be binding until it has been properly signed by both parties. Upon execution, this Task Order shall supplement the Agreement as it pertains to the technical services described below.

BACKGROUND

The City of Hailey has experienced wastewater treatment process challenges, including ammonia nitrogen effluent excursions and reduced sludge settleability, in part due to microthrix parvicella growth during cold weather months, in their sequencing batch reactor (SBR) system. The City is also faced with new National Pollutant Discharge Elimination System (NPDES) permit requirements that became effective August 2012. The new requirements and special conditions include lower effluent total phosphorus limits, revising the existing operations and maintenance and quality assurance plans, and additional surface water monitoring of the Big Wood River including continuous temperature monitoring.

The purpose of this task order is to provide the City of Hailey with as-requested technical support on a time-and-materials basis to address the NPDES permit requirements. Services that could be requested through this task order may include the development of customized process control parameters and procedures for plant operations so that capital investments may be deferred and permit compliance consistency may be improved; on-site training and technical support to help prepare for upcoming phosphorus removal, improve ammonia nitrogen reduction and sludge settleability; update operations and maintenance and quality assurance plans; and provide recommendations for surface water monitoring.

SCOPE OF SERVICES

This scope of services is for HDR to assist the City of Hailey with plant operations and NPDES permit support. Services will be on-call and will vary depending on requests from the City. The proposed scope of services are identified in the following tasks. HDR will commence with services upon written notice to proceed.

TASK 100 - PROJECT MANAGEMENT**Objective**

Prepare and implement a project management plan; provide scope, schedule, and cost control services.

Approach

The approach involves completing necessary project management tasks.

- Monitor scope, budget, and schedule; delegate task assignments and responsibilities by discipline; and coordinate issues with City of Hailey's Project Manager.

- 1-hour conference calls between HDR and the City of Hailey as needed for the duration of the task order schedule.
- Prepare monthly progress reports and invoices that summarize the work progress and the budget expenditures to date.
- Monitor status of quality control reviews of project deliverables.
- Prepare agenda and notes for conference calls and/or meetings.

City of Hailey Involvement

- Interface with HDR on project issues.

Assumptions

- Monthly progress reports for the duration of the task order.
- If the scope changes during the life of the project, modification to the original contract agreement will be required per the terms and conditions of the agreement.
- Invoice format will follow standard HDR format.
- Quality control reviews will be conducted with each task.

Deliverables

- Progress reports and invoices (one (1) hard copy each month).
- Conference call agenda and notes (electronic copy in .pdf format transmitted via email).

TASK 200 - TECHNICAL SERVICES FOR PROCESS OPERATIONS SUPPORT**Objective**

Provide the City of Hailey with technical services and operations support related to ammonia control, microthrix control, chemical phosphorus removal, or other as-requested operations support.

Approach

Examples of technical services and operations support that could be provided under this task include:

- Provide operations support through conferences calls and site visits, as requested.
- Provide assistance with the development of technical information required in the new NPDES permit.
- Develop a Sampling and Testing Itinerary that briefly describes the plan for onsite sampling and testing assistance.
- Provide onsite training related to implementation of the Sampling and Testing Itinerary, including:
 - Development of monitoring and process controls related to nitrification and denitrification performance.
 - Optimization of nitrification control and performance to maintain effluent concentrations within the permit limits.

- Review of dissolved oxygen (DO) readings, blower control, and aeration utilization (efficiency versus consistent ammonia removal).
- Advise City of Hailey treatment plant operators of treatment processes to be temporarily modified for implementation of the Sampling and Testing Itinerary.
- Sample process streams and test for parameters included in the Sampling and Testing Itinerary.
- Assist with the modification of process control operating strategies, as needed.
- Review and provide comment on the current daily sampling sheet to identify the parameters that should be sampled and analyzed by City of Hailey staff each day.
- Provide additional assistance with regard to sampling and process control through site visits.
- Provide remote operational process review and data compilation to track process control and effluent quality performance.
- Update plant performance data in Microsoft Excel spreadsheet to graphically view and analyze process trends.
- Report observations from analysis of data before and after process control changes were implemented.

City of Hailey Involvement

- Interface with HDR on project issues.
- Review and provide comment on Sampling and Testing Itinerary.
- Provide written authorization for each site visit and interface with HDR.
- Be available during site visit to work with HDR staff, conduct sampling, and perform analysis.
- Make arrangements for required sampling and analysis equipment to be onsite for HDR site visit.
- Provide available process data to HDR for discussion/troubleshooting purposes.
- Share the process control and effluent performance data with HDR on a monthly basis.

Assumptions

- The itinerary could provide the basis for onsite support; activities performed during onsite visit could change based on the outcome from each day.
- The laboratory equipment and supplies are capable of testing for pH, dissolved oxygen, TSS, ammonia, nitrate, and phosphate concentrations.
- Site visits will be conducted by the HDR's Operations Specialist at the City of Hailey's request.
- Each site visit will typically consist of up to eight (8) hours by HDR's Operations Specialist with the Woodside Boulevard Wastewater Treatment Plant staff, plus associated travel costs.

Deliverables

- Conference call notes (electronic copy in .pdf format transmitted via email).

- Engineer and Operations Specialist site visit reports (electronic copy in .pdf format transmitted via e-mail), if requested by the City of Hailey.

TASK 300 - TECHNICAL SERVICES FOR NPDES PERMIT SUPPORT

Objective

Provide the City of Hailey with technical services related to new or revised NPDES permit requirements or other as-requested permit support.

Approach

Examples of technical services and support that could be provided under this task include:

- Development of the updated quality assurance plan.
- Development of the updated operations and maintenance plan.
- Provide technical support for the development and establishment of new surface water temperature monitoring.
- Development or review of whole effluent toxicity (WET) testing protocol.

City of Hailey Involvement

- Interface with HDR on project issues.
- Provide copies of current operations and maintenance plan and quality assurance plan.
- Provide written authorization for individual NPDES permit support tasks.
- Review all draft documentation and provide one unconflicting set of comments within 14 days.
- Interface with regulatory agencies on issues related to temperature monitoring in the stream.

Assumptions

- Quality assurance plan must be updated by January 31, 2013.
- Operations and maintenance plan must be updated by January 31, 2013.

Deliverables

- Draft updated quality assurance plan (.pdf form)
- Draft updated operations and maintenance plan (.pdf form)
- Final updated quality assurance plan (.pdf form)
- Final updated operations and maintenance plan (.pdf form)
- Temperature monitoring deliverable as requested by the City's Public Works Director.

PROJECT SCHEDULE

**TECHNICAL SERVICES FOR PROCESS OPERATIONS AND NPDES PERMIT
SUPPORT FOR THE WOODSIDE WASTEWATER TREATMENT PLANT
CITY OF HAILEY, IDAHO**

The schedule for performing the services in this task order is as follows:

Task	Schedule*
Task 100 - Project Management	Through May 3, 2013
Task 200 - Technical Services for PProcess Operations Support	Through May 3, 2013
Task 300 - Technical Services for NPDES Permit Support	Through March 29, 2013**

*This schedule is based upon an assumed notice to proceed of January 8, 2013. If the notice to proceed is delayed, the project schedule will shift the corresponding number of calendar days.

**Except as noted for specific services within Task 300.

COMPENSATION**TECHNICAL SERVICES FOR PROCESS OPERATIONS AND NPDES PERMIT
SUPPORT FOR THE WOODSIDE WASTEWATER TREATMENT PLANT
CITY OF HAILEY, IDAHO**

HDR will invoice the City of Hailey for professional services described in this task order on a time and materials basis. For the activities described, and explicitly requested by the City of Hailey's project manager, HDR will not exceed a professional services fee of up to \$20,000 without written authorization from the City of Hailey.

This Task Order is executed this _____ day of _____, 20____.

City of Hailey, Idaho

HDR ENGINEERING, INC.

“OWNER”

“ENGINEER”

BY:

BY:

NAME:

NAME:

Karen M. Doherty, P.E.

TITLE:

TITLE:

Vice President

ADDRESS:

115 Main Street S.

ADDRESS:

412 E. Parkcenter Blvd.
Suite 100

Hailey, ID 83333

Boise, ID 83706

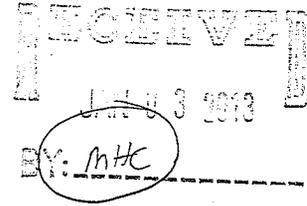
TELEPHONE:

TELEPHONE:

(208) 387-7000



SPF WATER
ENGINEERING



January 2, 2013

Tom Hellen, P.E., Public Works Director
City of Hailey
115 Main St. S., Suite H
Hailey, ID 83333

Re: Water Right Permit Application
Lions Park and Hop Porter Park

Dear Tom,

Please find enclosed a permit application to be signed and filed with the Idaho Department of Water Resources (IDWR). The permit will authorize irrigation of Lions Park and Hop Porter Park using a shallow well to be drilled in Lions Park. Mitigation for the new application will be non-use of a portion of the City's water rights historically diverted from the Hiawatha Canal. Please have the application signed and returned to SPF for submittal.

There is a \$250.00 application fee which must be submitted with the application form. Please let me know if you wish SPF to provide a check for the fee (to be billed to the City at a later date).

Please contact me with any questions concerning this process.

Best Regards,

A handwritten signature in cursive script that reads "Roxanne Brown".

Roxanne Brown
Sr. Water Rights Specialist

CC:

Enclosures

SPF Job No. 330.0140

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT
To appropriate the public waters of the State of Idaho

Ident. No. _____

1. Name of applicant(s) City of Hailey Phone (208) 788-4221
Name connector (check one): and or and/or

Mailing address: 115 S. Main St., #H City Hailey

State ID Zip 83333 Email: _____

2. Source of water supply groundwater which is a tributary of _____

3. Location of point(s) of diversion:

Twp	Rge	Sec	Govt Lot	¼	¼	¼	County	Source	Local name or tag #
2N	18E	9		NW	SE	SW	Blaine	groundwater	new well

4. Water will be used for the following purposes:

Amount 0.49 cfs for irrigation purposes from 4/15 to 10/31 (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)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per year)

5. Total quantity to be appropriated is (a) 0.49 cubic feet per second (cfs) and/or (b) _____ acre-feet per year (af).

6. Proposed diverting works:

a. Describe type and size of devices used to divert water from the source. The diversion works will consist of a shallow well located approximately 50' from the mean high water mark in the Big Wood River.

b. Height of storage dam n/a feet; active reservoir capacity n/a acre-feet; total reservoir capacity n/a 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 OR reservoirs with a total 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 10" inches; proposed depth of well is 50 feet.

d. Is ground water with a temperature of greater than 85°F being sought? Yes No

e. If well is already drilled, when? n/a; drilling firm n/a;
Well was drilled for (well owner) n/a; Drilling Permit No. n/a

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

a. Hydropower; show total feet of head and proposed capacity in kW. _____

b. Stockwatering; list number and kind of livestock. _____

c. Municipal; show name of municipality or the applicant's qualifications as a municipal provider. _____

d. Domestic; show number of households _____

e. Other; describe fully. _____

8. Description of place of use:

- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- b. If water is used for other purposes, place a symbol of 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	
2N	18E	9									3.0			3.2					6.2

Total number of acres to be irrigated: 6.2

9. 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? The two sites (Hop Porter Park and Lions Park) are currently irrigated with water delivered through the City of Hailey potable water supply system.

10. a. Who owns the property at the point of diversion? City of Hailey (applicant)
 b. Who owns the land to be irrigated or place of use? City of Hailey (applicant)
 c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: n/a

11. Describe your proposal in narrative form, and provide additional explanation for any of the items above. Attach additional pages if necessary. See Attachment 1 - Narrative Description of Project & Mitigation Plan

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

13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½" x 11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.

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

 Print Name (and title, if applicable)

 Signature of Applicant

 Print Name (and title, if applicable)

For Department Use:

Received by _____ Date _____ Time _____ Preliminary check by _____
 Fee \$ _____ Received by _____ Receipt No. _____ Date _____

T02N R18E S9



-  Proposed Point of Diversion
-  Hop Porter Park Boundary
-  Proposed Place of Use (Hop Porter Park)
-  Lions Park Boundary
-  Proposed Place of Use (Lions Park)

Map of Proposed Project
2011 NAIP Photography

500 Feet



Attachment 1 – Narrative Description of Project and Mitigation Plan

Attachment 1 – Narrative Description of Project and Mitigation Plan

Background. The City of Hailey (Hailey, or City) currently delivers irrigation water to Hop Porter Park and Lions Park from its potable water supply system using its existing groundwater wells and water distribution facilities. With this application, the City proposes drilling a shallow well on the Lions Park site which will provide an irrigation water supply for both parks using a shared pump system. The new system will irrigate a total of 6.2 acres. The permit to use groundwater for irrigation of Lions Park and Hop Porter Park will be mitigated by non-diversion and non-use of water rights currently owned by the City and delivered in the Hiawatha Canal.

Well Construction. Well construction details are as follows:

- The proposed well will be constructed at least 50' from the mean high water mark in the Big Wood River to comply with Rule 25.01(d) of the Idaho Well Construction Standards Rules (IDAPA 37.03.09).
- The proposed well will be approximately 50' deep (see Attachment 2, titled "Lions Park Irrigation Well Conceptual Design"). The well is expected to have a direct hydraulic connection to the Big Wood River, as evidenced by the attached analysis prepared by SPF Water Engineering (see Attachment 3, a memo regarding stream depletion analysis).

Proposed Diversion Rate. Hailey has existing pressurized irrigation facilities at both Lions Park and Hop Porter Park. These facilities require diversion rates in excess of 0.02 cfs per acre in order to irrigate landscaping during short periods in the evening hours, thus avoiding interference with the public's normal enjoyment of the parks. In addition, the City actively enforces City Ordinance 13.08.010 which prohibits irrigation within City limits between the hours of 10:00 am and 6:00 pm. Thus Hailey must deliver irrigation water to its parks at a sufficient rate to irrigate turf and landscaping after normal activity ceases in the evening, but before the following day begins and irrigation is prohibited.

The current irrigation system demands are 100 gpm (0.22 cfs) for Hop Porter Park, and 120 gpm (0.27 cfs) for Lions Park (a total of 0.49 cfs). The City's application proposes the diversion of 0.49 cfs from groundwater to supply the existing irrigation system demands for both parks.

Proposed Mitigation Plan. The City of Hailey is the owner of water right nos. 37-22773, 37-22774, 37-22775 and 37-22776. These water rights were historically delivered in the Hiawatha Canal to irrigate farm land northwest of the original site of the City of Hailey, but the rights are currently appurtenant to streets and roadways within the Northridge Subdivision development (see Attachment 4). Partial decrees for the parent rights were issued by the SRBA Court in August 2011, and the rights are currently in the name of the City of Hailey. The City of Hailey intends to reserve these rights for use in support of irrigation of its parks, schools and landscaped areas through administrative transfer or mitigation of new permit applications.

For IDWR's record-keeping purposes, the City suggests the existing place of use (which cannot physically be irrigated) be treated as a permissible place of use for mitigation purposes. In other

words, the GIS “shape” of the water rights will not be changed, but the elements of the water rights (diversion rate, place of use area, etc.) will be reduced or conditioned by each application until such time the entire right is either transferred, or used for mitigation. Unused portions of the water rights will be placed in the Idaho Water Supply Bank in the future, as necessary.

The City proposes non-irrigation of 6.2 acres of the 22.8-acre area currently authorized by the City’s water rights 37-22773, 37-22774, 37-22775, and 37-22776 to mitigate for the consumptive use of groundwater at the new location. A summary of the water rights prior to any changes is shown in Table 1.

Table 1. Water Rights before Use for Mitigation

WR No.	Priority Date	Irrigated Area (acres)	Diversion Rate (cfs)
37-22776	3/24/1883	22.8	0.235
37-22775	6/30/1884		0.387
37-22774	9/18/1885		0.195
37-22773	5/1/1888		0.194
TOTAL		22.8	1.011

The City proposes non-diversion of 80% of each 6.2-acre portion of the four water rights be dedicated to mitigation of the proposed permit. The City also proposes that 20% of each 6.2-acre portion of the water rights continue to be diverted into the Hiawatha Canal in recognition of the existing conveyance losses in the canal. The City will convey a 20% portion of each portion of the water rights used for mitigation to the Hiawatha Canal Water Users Association of Lateral or Laterals (Hiawatha) upon issuance of the approved permit. The portions of each right to be retained by either the City, or Hiawatha, are summarized in Table 2 below.

Table 2 summarizes the water rights after implementation of the mitigation plan. The proposed mitigation plan will result in non-diversion of 0.22 cfs from the Big Wood River, and non-use for the irrigation of 6.2 acres. The City agrees to be limited to an annual diversion volume from groundwater of 21.7 acre-feet (3.5 acre-feet per acre on 6.2 acres).

Although the proposed diversion rate is in excess of the existing rights to be used for mitigation, the effect on the water resource in the area is not enlarged:

1. The annual volume will be limited to no more than could have historically been used for the irrigation of 6.2 acres under the original rights.
2. The consumptive use from the Big Wood River system remains the same because the irrigated area before and after the proposed change remains the same.
3. An instantaneous flow of 0.22 cfs is left in the Big Wood River (non-diversion to the Hiawatha Canal) each and every day. The City’s new pump station will divert 0.49 cfs from the Big Wood River for approximately 8 hours per day. This results in an increased flow in the Big Wood River of 0.22 cfs on non-irrigation days, and a decrease

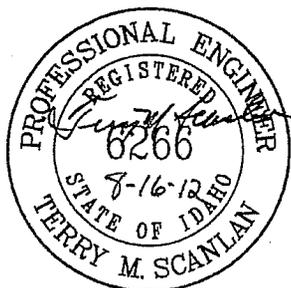
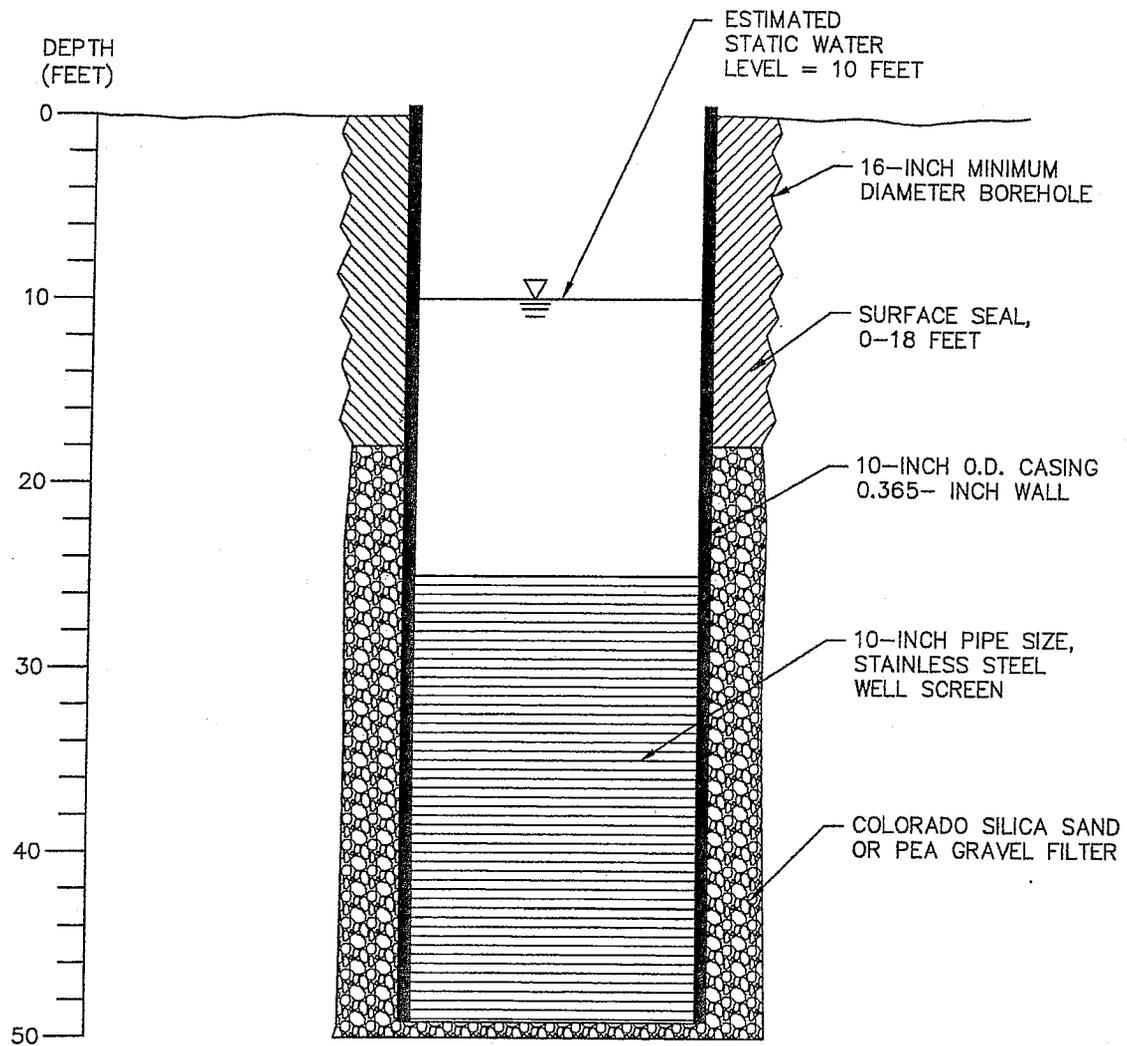
in actual diversion for the 24-hour period of the authorized irrigation day (0.49 cfs diverted for 8 hours = 0.16 cfs diverted over a 24-hr period).

Table 2. Water Rights after Use for Mitigation

WR No.	Priority Date	Mitigation		Conveyance		Remainder	
		Irrigated Area (acres)	Diversion Rate - 80% (cfs)	Irrigated Area (acres)	Diversion Rate - 20% (cfs)	Irrigated Area (acres)	Diversion Rate (cfs)
37-22776	3/24/1883	6.2	0.051	0.0	0.013	16.6	0.171
37-22775	6/30/1884		0.084		0.021		0.282
37-22774	9/18/1885		0.042		0.011		0.142
37-22773	5/1/1888		0.042		0.011		0.141
TOTAL		6.2	0.220	0.0	0.055	16.6	0.736

The combined use of the four water rights is for irrigation of 22.8 acres with a diversion rate of 1.011 cfs both before and after implementation of the proposed mitigation plan.

Attachment 2 – Well Conceptual Design



SPF WATER
ENGINEERING

300 East Mallard Drive, Suite 350
Boise, Idaho 83706
Tel (208) 383-4140 Fax (208) 383-4156

LIONS PARK IRRIGATION WELL
CONCEPTUAL DESIGN

SCALE: NTS
DRAWN BY: SCB

FIGURE 2

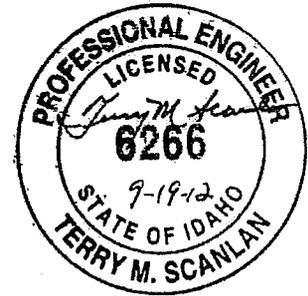
PROJ # 330.0140

Attachment 3 – Stream Depletion Analysis



MEMORANDUM

DATE: September 19, 2012
TO: Idaho Department of Water Resources
FROM: Terry Scanlan, P.E., P.G., Roxanne Brown
RE: Stream Depletion Analysis – City of Hailey, Lions Park
Job No.: 330.0140



The purpose of this analysis is to determine the theoretical rate of stream depletion in the Big Wood River due to pumping from a proposed well to be drilled by the City of Hailey (City) and used to irrigate two City-owned parks (Lions Park and Hop Porter Park). This process is necessary in order to meet IDWR's requirement that a water right transfer from surface water to groundwater be supported by a finding that at least 50 percent (by volume) of the water pumped from the proposed well will be depleted from the river within 24 hours.

The new City well will be located in Blaine County, in the SESW of Section 9, T2N R18E, and will be situated approximately 50 feet from the mean high water (MHW) mark in the Big Wood River. The proposed well will be approximately 50 feet deep, will be completed with 10-inch casing to an approximate depth of 25 feet, and a 10-inch stainless steel well screen will be installed from approximately 25 feet to total depth.

The stream depletion analysis is based on a spreadsheet provided by IDWR (Mat Weaver, modified March 27, 2012), which uses the Glover and Balmer method to calculate stream depletion rates and volumes. Using the Glover and Balmer Method, stream depletion rate is dependent on the following factors: (1) duration of pumping, (2) transmissivity (the product of the hydraulic conductivity and saturated thickness of the aquifer), (3) specific yield, (4) distance from the stream source, and (4) pumping rate. In this case, the duration of pumping is one day (the critical time period for 50 percent depletion is 24 hours), distance is 50 feet, and the pumping rate used is 0.49 cfs. The determination of transmissivity and specific yield values required additional analysis which is discussed below.

Transmissivity

By examining information from well driller's reports and IDWR water right records, we were able to identify 21 wells with lithologic log information within approximately one quarter-mile distance of the proposed well. These driller's reports are summarized below in Table 1 and driller's reports are attached. Included are five shallow wells (Wells 10-14) drilled on the Lions Park site as water-quality monitoring wells prior to construction of the park.

Well Key	Well Tag/No.	Owner-of-Record	Well Depth (ft)	SWL (ft)
1	37-83-C-0009-000	Pete Trojan	41	6
2	37-83-C-0007-000	Paul Boyd	42	7
3	unknown	Richard Winkler	32	11.2
4	unknown	Bill Hair	45	18
5	43074	Jesse German	55	12
6	unknown	Frank Cavanaugh	39	8
7	unknown	Vern Boyd	33	5
8	34239	Larry Swider	38	12
9	37-99-5-0133-000	Charles Shabacker	35	11
10	50499	IDEQ	20	10.7
11	50500	IDEQ	20	10.4
12	50501	IDEQ	20	11.7
13	D0050795	Wood River Land Trust	20	6
14	D0050796	Wood River Land Trust	20	6
	unknown	Calvin Robertson	50	7
	unknown	B.C. Evely	32	4.5
	37-88-5-002	Paul O'Connell	38	7
	unknown	Frank Bashita	33	12
	unknown	John Adams	43	10
	unknown	W.A. Lewis	42	10
	unknown	Alva Temple	33	2

Table 1. Local Area Wells (Wells with known locations shown on map)

The alluvial aquifer likely extends to an estimated depth of approximately 50 feet at the well site. Only two of the 21 wells for which well logs are available extended to bedrock (although several logs penetrate through layers described as clay or gravel set in clay). The two deepest wells at 50 and 55 feet did not reach bedrock. For purposes of this analysis, we are assuming that the saturated zone extends from the static water level (approximately 10 feet) to the proposed well depth of 50 feet, for a saturated alluvial aquifer thickness of 40 feet.

Transmissivity of the water table aquifer in Hailey vicinity is reported to range from 30,000 to 70,000 ft²/day (Brockway and Kahlow, 1994). Using more site specific data, SPF calculated the average hydraulic conductivities for the saturated materials listed in each of the 21 well logs. Conductivities were estimated based on approximate values for materials

described in Table 2 below. These estimated conductivities are similar with those listed in Tables 2 and 3 of the stream depletion spreadsheet.

Hydraulic Conductivity (ft/day)	Specific Yield	Material descriptions
0.01	0.05	clay, hard pan, granite, shale
0.1	0.05	gravel set in clay, top soil
1	0.1	gravel and clay, clay & boulders, sandy clay
100	0.15	clay, gravel, and sand
500	0.25	gravel and sand, sand and pea gravel, sandy gravel
2500	0.2	large gravel and coarse sand, water gravel, gravel and boulders, gravel

Table 2. Hydraulic conductivity and specific yield values assigned to various material descriptions

The hydraulic conductivity values for the saturated zones in each of the 14 wells were then averaged (806 ft/day) and multiplied by 40 feet to obtain an estimated transmissivity (32,200 ft²/day) for the upper 40 feet of the alluvial aquifer. This transmissivity is at the low end of the range published for the local area (Brockway and Kahlown, 1994). Lower transmissivity values result in less rapid stream depletion, and are therefore conservative.

Specific Yield

Specific yield was determined in much the same way as transmissivity. Each layer within the saturated zone for surrounding wells was assigned a specific yield (based on the material description in Table 1 of the updated stream depletion spreadsheet), and then averaged across the saturated zone. Using this method, the average specific yield for the local area aquifer is estimated to be 0.17.

Stream Depletion Results

Using a transmissivity of 32,000 ft²/day, aquifer saturated thickness of 40 feet, and a specific yield of 0.17, the theoretical stream depletion volume for the proposed well after 1 day of pumping was calculated to be approximately 87 percent. This volume exceeds the minimum 50 percent depletion volume required by IDWR for water right transfers from surface water to ground water sources. The complete results are shown in the attached stream depletion analysis table.

A sensitivity analysis shows the following.

1. Arbitrarily reducing the aquifer transmissivity to 3200 ft²/day (a factor of 10 below the calculated and published minimum values) reduces the 24-hour stream depletion volume to 66 percent.
2. Raising the specific yield value to 0.35 (the maximum potential value for gravelly sand) reduces the 24-hour stream depletion volume to 83 percent.
3. Increasing the distance of the well from the river to 100 feet reduces the 24-hour stream depletion volume to 76 percent.
4. Changing the pumping rate has no impact on the percent depletion volume.

The sensitivity analysis demonstrates that the 24-hour depletion volume is above 50 percent for any reasonable range of transmissivity and specific yield values. The high depletion rate is attributable partly to the close proximity of the proposed well to the river.

References

Brockway, C.E., and Kahlow, M.A., 1994, Hydrologic evaluation of the Big Wood River and Silver Creek watersheds Phase I: Kimberly, University of Idaho Water Resources Research Institute, Kimberly Research Center, 53 p. plus 5 appendixes.

Weaver, Mathew, 2012, Stream Depletion Analysis Spreadsheet Tool: for evaluation and estimation of stream depletion due to the pumping of a nearby well., Idaho Department of Water Resources, March 27, 2012 modification.

**Stream Depletion Analysis Spreadsheet Tool:
for evaluation and estimation of stream depletion
due to the pumping of a nearby well.**

Worksheet (tab) 1: **About** the Stream Depletion Analysis Tool & Worksheet Index

Worksheet (tab) 2: Stream Depletion Analysis **Tool**

Worksheet (tab) 3: Tabular Summaries of **Published Soil Properties**

Notes:

This spreadsheet may be used to support the analysis of hydraulic connectivity between the ground water and the surface water in conjunction with meeting the "50% depletion requirement" of Transfer Processing Memo No. 24 dated January 21, 2009 (refer to section 5c (7), pg. 26).

This spreadsheet is not universally applicable. In addition to the need to satisfy the underlying assumptions of this analysis method, its applicability is further constrained to instances where the authorized diversion rate is substantially less

DISCLAIMER: This spreadsheet tool was created for internal use by Department staff. However, the Department is not opposed to the use of this tool by the public. Public users should be aware that the use of this tool does not imply or guarantee review approval by the Department. Furthermore, this tool is provided with no warranty expressed or implied. The user has full responsibility to verify all assumptions, relationships, and calculations contained within.

Prepared By: Mathew Weaver, PE

Created: December 10, 2008

Modified: March 27, 2012

Please contact Mathew Weaver for questions on use, requests for added features, or required corrections to the spreadsheet.

Stream Depletion Analysis Tool

Read Me

Project Title

City of Hailey - Lions Park Site

Definition of Variables

Calculation of Stream Depletion Rate & Volume

User Defined Input Variables

t =	1	duration of pumping (days)
K =	806.00	hydraulic conductivity (ft/day)
b =	40.00	saturated thickness (ft)
Sy =	0.17	specific yield in decimals (unitless)
a =	50.00	distance (ft)
Q =	0.49	pumping rate (ft ³ /s)

Calculated Input Variables

T =	32,240	transmissivity (ft ² /day)
Sy/T =	0.00000527	component of sdf (unitless) for observation only
Q =	42336	pumping rate (ft ³ /day)
Qt =	42336	pumped volume (ft ³)
	0.97	pumped vol. (ac-ft)

Table Values

sdf =	0.0132	stream depletion factor (units of time)
t/sdf =	75.86	(unitless)
q/Q =	0.933	(unitless)
v/Qt =	0.873	(unitless)

Stream Depletion Rate

q =	0.457	stream depletion rate (ft ³ /s)
% Total =	93.3	contribution of total flow rate from stream (%)

Stream Depletion Volume

v =	36,943	vol. strm depletion (ft ³)
	0.8481	vol. strm depletion (ac-ft)
% Total =	87.3	contribution of total volume from stream (%)

Notes and Discussion

Reference:

The Glover & Balmer method utilized in analysis is recreated in part from Jenkins, C.T., 1968. Book 4 Hydrologic Analysis and Interpretation Chapter D1 Computation of Rate and volume of Stream Depletion by Wells. Techniques of Water-Resources Investigations of the United States Geological Survey.

Tabular Summaries of Published Soil Properties

Table 1
Sy, Specific Yields of Various Soil Types (units: vol %vol.)

Material	Maximum	Minimum	Average
Clay	0.05	0.00	0.03
Sandy Clay	0.12	0.03	0.08
Silt	0.19	0.03	0.11
Fine Sand	0.28	0.10	0.19
Medium Sand	0.32	0.15	0.24
Coarse Sand	0.35	0.20	0.28
Gravelly Sand	0.35	0.20	0.28
Fine Gravel	0.35	0.21	0.28
Medium Gravel	0.26	0.13	0.20
Coarse Gravel	0.26	0.12	0.19

Notes:
 1) This table is recreated from Fetter 2001, pg. 79.
 2) The source material for this table is Johnson et al 1967.
 3) Specific yield (Sy) is the ratio of the volume of water that drains from a saturated rock owing to gravity to the total volume of rock.

Table 2
K, Hydraulic Conductivity of Saturated Soils (ft/day)

Material	Maximum	Minimum	Average
Clean Gravel	288,000	2,880	145,440
Coarse Gravel	2,880	29	1,454
Fine Sand	29	3	16
Silty Clay	2.88	0.03	1.45
Clay	0.0029	0.0000	0.0014

Notes:
 1) This table is recreated from Das 2002, pg. 143.
 2) These values are representative of a geotechnical engineering reference and vocabulary.
 3) Hydraulic conductivity is the coefficient of proportionality describing the rate at which water can move through a permeable medium.
 4) Transmissivity (T) is the product of the hydraulic conductivity and the saturated thickness of the aquifer.

Table 3
K, Hydraulic Conductivity of Unconsolidated Sediments (ft/day)

Soil Type	min.	max.	avg.
Well-sorted gravel	28	2,835	1,431
Well-sorted sands, glacial wash	2.83	283	143
Silty sands, fine sands	0.0283	2.83	1.43
Silt, sandy silts, clayey sands, fill	0.0028	0.2835	0.1431
Clay	2.83E-06	0.0028	0.0014

Notes:
 1) This table is recreated from Fetter 2001, pg. 85.
 2) These values are representative of a hydrogeologic science reference and vocabulary.
 3) Hydraulic conductivity is the coefficient of proportionality describing the rate at which water can move through a permeable medium.
 4) Transmissivity (T) is the product of the hydraulic conductivity and the saturated thickness of the aquifer.

References:

Das, B. M. Principles of Geotechnical Engineering - Fifth Edition. Pacific Grove, CA: Brooks/Cole, 2002.
 Fetter, C. W. Applied Hydrogeology - Fourth Edition. New Jersey: Prentice Hall, 2001.
 Johnson, A.I. 1967. Specific Yield-Compilation of specific yields for various materials. U.S. Geological Survey Water Supply Paper 1662-D.



Proposed Well



Hop Porter Park



Recorded Well



Lions Park

Location of Recorded Wells
within 1/4-mile of Proposed Well



500

Feet



SPF WATER
ENGINEERING

RECEIVED

JUL 28 1984

STATE OF IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

USE TYPEWRITER OR BALLPOINT PEN

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: Pete Trogan Address: Hailey 83333 Owner's Permit No. 32-83-C-0009-000

7. WATER LEVEL Static water level: 6 feet below land surface. Flowing? No G.P.M. flow: Artesian closed-in pressure: p.s.i. Controlled by: Valve Cap Plug Temperature: OF. Quality: Describe artesian or temperature zones below.

2. NATURE OF WORK [X] New well [] Deepened [] Replacement [] Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

8. WELL TEST DATA [] Pump [X] Bailor [] Air [] Other Discharge G.P.M.: 23 Pumping Level: 13 Hours Pumped: 1

3. PROPOSED USE [X] Domestic [] Irrigation [] Test [] Municipal [] Industrial [] Stock [] Waste Disposal or Injection [] Other (specify type)

9. LITHOLOGIC LOG 71975

Table with columns: Bore Diam., Depth (From, To), Material, Water (Yes, No). Rows: 0-4 Top soil, 4-16 gravel and clay, 16-25 Gravel set in clay, 25-35 Gravel and sand, 35-41 large gravel + coarse sand.

4. METHOD DRILLED [] Rotary [] Air [] Hydraulic [] Reverse rotary [X] Cable [] Dug [] Other

5. WELL CONSTRUCTION Casing schedule: [X] Steel [] Concrete [] Other Thickness: 2.50 inches Diameter: 6 inches From: 1 feet To: 41 feet Was casing drive shoe used? [X] Yes [] No Was a packer or seal used? [] Yes [X] No Perforated? [] Yes [X] No How perforated? [] Factory [] Knife [] Torch Size of perforation: inches by inches Number perforations: feet to feet Well screen installed? [] Yes [X] No Manufacturer's name: Type: Model No. Diameter: Slot size: Set from: feet to: feet Gravel packed? [] Yes [X] No [] Size of gravel: Placed from: feet to: feet Surface seal depth: 20 Material used in seal: [] Cement grout [X] Bentonite [X] Puddling clay [] Sealing procedure used: [] Slurry pit [X] Temp. surface casing [] Overbore to seal depth Method of joining casing: [] Threaded [X] Welded [] Solvent Weld [] Cemented between strata Describe access port:

6. LOCATION OF WELL Sketch map location must agree with written location. Subdivision Name: Lot No.: Block No.: County: Blaine NE 1/4 SW 1/4 Sec. 9 T. 20 S. R. 18 E.W.

10. Work started 7/7/1983 finished 7/15/1983

11. DRILLERS CERTIFICATION [X] We certify that all minimum well construction standards were complied with at the time the rig was removed. Ken Smith Well Drilling Firm Name: Ken Smith Firm No. 205 Address: Box 1165 Hailey Id. Date: 8/20/1983 Signed by (Firm Official): Ken Smith and (Operator):

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

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.

<p>1. WELL OWNER</p> <p>Name <u>Richard Winkler</u> P. O. Box 645 Address <u>Hailey, ID 83333</u></p> <p>Owner's Permit No. _____</p>	<p>7. WATER LEVEL</p> <p>Static water level <u>11' 2 1/2"</u> feet below land surface. Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug Temperature <u>46</u> °F. Quality _____ <i>Describe artesian or temperature zones below.</i></p>																																																										
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<p>11. DRILLERS CERTIFICATION</p> <p>I/We certify that all minimum well construction standards were complied with at the time the rig was removed.</p> <p><u>Walker Water Systems, Inc.</u> Firm Name <u>624 Pierce Street</u> Firm No. <u>15</u> <u>Twin Falls, Idaho 83301</u> Address _____ Date <u>2/13/87</u> Signed by (Firm Official) <u>Paul Webb</u> and (Operator) <u>Paul Webb</u></p>																																																											

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

App 895830
IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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

5

1. WELL TAG NO. D 0043074
 DRILLING PERMIT NO. 841217
 Water Right or Injection Well No. _____

2. OWNER:
 Name German Jessie
 Address P.O. Box 1054
 City Shoshone State ID Zip 83352

3. LOCATION OF WELL by legal description:
 You must provide address or Lot, Blk, Sub. or Directions to well.
 Twp. 02 North or South
 Rge. 18 East or West
 Sec. 09 1/4 NE 1/4 SW 1/4
 Gov't Lot _____
 County Blaine
 Lat: 43 : 31 : 074 'N Long: 114: 19: 293 'W
 Address of Well Site 120 Little Indio Lane
 City Hailey
 Lt. 35A amended Sub. Name Little Indio

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
Bentonite	6	19	25Sks	Overbore

Was drive shoe used? Y N Shoe Depth(s) 55'
 Was drive shoe seal tested? Y N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1 1/2	55'	.25	Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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
						<input type="checkbox"/>	<input type="checkbox"/>

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
12 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
20			1 Hour

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	Water	Y	N
10	0	1	Top Soil			X
10	1	19	Sand & Gravel & Clay			X
6	19	55	Sand & Gravel		X	

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AUG 22 2006
DEPT. OF WATER RESOURCES
SOUTHWEST REGION

Completed Depth 55' (Measurable)
 Date: Started 08-08-06 Completed 08-08-06

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 Wood River Drilling & Pump, Inc. Firm No. 265
 Principal Driller Ken Smith Date 08-17-06
 and Driller or Operator II Rick McManis Date 08-17-06
 Operator I _____ Date _____

Principal Driller and Rig Operator Required.
 Operator I must have signature of Driller/Operator II.
 FORWARD WHITE COPY TO WATER RESOURCES

USE TYPEWRITER OR BALL POINT PEN

State of Idaho Department of Water Administration WELL DRILLER'S REPORT

RECEIVED

6

JUL 8 1976

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.

Department of Water Resources Southern District Office

1. WELL OWNER
Name FRANK CAVANAUGE JUL 12 1976
Address HAILEY, IDAHO
Owner's Permit No. _____

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 39 feet
Casing schedule: Steel Concrete
Thickness Diameter From To
.250 inches 6 inches +1 feet 39 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 _____
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 18 Material used in seal Cement grout
 Puddling clay Well cuttings
Sealing procedure used Slurry pit Temporary surface casing
 Overbore to seal depth

6. LOCATION OF WELL
Sketch map location must agree with written location. (37)
Subdivision Name _____
Lot No. _____ Block No. _____
County BLAINE
NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 9, T. 2N N/S, R. 18E E/W

7. WATER LEVEL
Static water level 8 feet below land surface
Flowing? Yes No G.P.M. flow _____
Temperature _____ ° F. Quality GOOD
Artesian closed-in pressure _____ p.s.i.
Controlled by Valve Cap Plug

8. WELL TEST DATA
 Pump Bailer Other
Discharge G.P.M. 40GPM + Draw Down _____ Hours Pumped _____

9. LITHOLOGIC LOG 033632
Hole Diam. Depth From To Material Water Yes No
8 0 2 TOP SOIL
8 2 9 GRAVEL & CLAY
6 9 26 SAND & GRAVEL
6 26 38 GRAVEL SET IN CLAY
38 38 39 WATER GRAVEL

10. Work started 29 MAY 75 finished 30 MAY 75

11. DRILLERS CERTIFICATION
Firm Name KEN SMITH WELL DRILLING Firm No. 265
Address BOX 1165 HAILEY, IDAHO Date 10 SEPT 75
Signed by (Firm Official) Ken Smith
and
Operator Claude Nicholson

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

App 884365

Form 238-7
11/97

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 0034239
 DRILLING PERMIT NO. 823638
 Other IDWR No. ID 394288

2. OWNER:
 Name Swider Larry & Diane
 Address P.O. Box 711
 City Hailey State ID Zip 83333

3. LOCATION OF WELL by legal description:
 Sketch map location must agree with written location.

N
 W E S
 Twp. 02 North or South
 Rge. 18 East or West
 Sec. 9 1/4 NW 1/4 SW 1/4
 Gov't Lot _____ County Blaine
 Lat: _____ Long: _____
 Address of Well Site 341 Little Indio Lane
 City Hailey
(Give full legal name of road + Distance to Road or Landmark)

Lt. 13 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 Replace

6. DRILL METHOD
 Air Rotary Cable Mud Rotary Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	19	12Sks	Overbore

Was drive shoe used? Y N Shoe Depth(s) 38'
 Was drive shoe seal tested? Y N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1 1/2	38'	250	Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
 Perforations Method _____
 Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
12 ft. below ground Artesian pressure _____ lb.
 Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:
 Pump Bailor Air Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
60			1 hour

Water Temp. _____ Bottom hole temp. _____
 Water Quality test or comments: _____
 Depth first Water Encounter _____

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

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
10	0	6	Top Soil		X
10	6	19	Gravel & Boulders		X
6	19	36	Gravel & Boulders	X	
6	36	38	Clay	X	

RECEIVED
 AUG 19 2004
 Department of Water Resources
 Southern Region

Completed Depth 38' (Measurable)
 Date: Started 08-14-04 Completed 08-16-04

13. DRILLER'S CERTIFICATION
 We certify that all minimum well construction standards were complied with at the time the rig was removed.
 Company Name Wood River Drilling Firm No. 265 & Pump Inc.
 Firm Official Ken Smith Date 08-17-04
 and Driller or Operator [Signature] Date _____
(Sign once if Firm Official & Operator)

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only

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

1. WELL TAG NO. D 0050499
 DRILLING PERMIT NO. 853718 appl. 906340
 Water Right or Injection Well No. _____

2. OWNER:
 Name IDAHO DEC
 Address 1445 N Orchard
 City BOISE State ID Zip 83706

3. LOCATION OF WELL by legal description:
 You must provide address or Lot, Blk, Sub. or Directions to well.
 Twp. 2 North or South
 Rge. 13 East or West
 Sec. 9 NW 1/4 SE 1/4 SW 1/4
 Gov't Lot _____
 County Blaine
 Lat: : : Long: : :
 Address of Well Site Lions Park
 City Hailey
(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 Direct Push

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Bentonite chips	8	2	25 lbs	pur

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
3/4"	0	10	40	PVC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Length of Headpipe 0 Length of Tailpipe N/A
 Packer Y N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method Machine slot
 Screen Type & Method of Installation PVC / Stainless pre-pack

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
10	20	.01	8	3/4	PVC	<input type="checkbox"/>	<input type="checkbox"/>

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
8-12 / 20-40 5/8" gravel	20	8	25 lbs	pur

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
10.7 ft. below ground Artesian pressure N/A 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
25 GPM			

Water Temp. 50° F Bottom hole temp. 50°
 Water Quality test or comments: _____

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

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
2"	0	5	Fill with sand & gravel		<input checked="" type="checkbox"/>
2"	5	20'	Sandy gravel	<input checked="" type="checkbox"/>	

RECEIVED
 NOV 10 2008
 DEPT. OF WATER RESOURCES
 SOUTHERN REGION

Completed Depth 20' BGS (Measurable)
 Date: Started 10-10-2008 Completed 10-10-2008

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 Terra Graphics Firm No. 463
 Principal Driller [Signature] Date 11-7-08
 and Driller or Operator II _____ Date _____
 Operator I _____ Date _____
 Principal Driller and Rig Operator Required.
 Operator I must have signature of Driller/Operator II.

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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

1. WELL TAG NO. D 0050500
 DRILLING PERMIT NO. 853719 appl. 906341
 Water Right or Injection Well No. _____

2. OWNER:
 Name IDAHO DEQ
 Address 1445 N Orchard
 City Boise State ID Zip 83706

3. LOCATION OF WELL by legal description:
 You must provide address or Lot, Blk, Sub. or Directions to well.
 Twp. 2 North or South
 Rge. 18 East or West
 Sec. 9 NW 1/4 SE 1/4 SW 1/4
 Gov't Lot _____ County Blaine
 Lat: : : Long: : :
 Address of Well Site Cross Park City Hailey
(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 Direct Push

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Bentonite chips	8	2	25 lbs	Push

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
3/4"	0	10'	40	PVC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Length of Headpipe 0 Length of Tailpipe N/A
 Packer Y N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE
 Perforation Method Machine
 Screen Type & Method of Installation PVC / stainless prepack

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
10	20	.01		3/4	PVC	<input type="checkbox"/>	<input type="checkbox"/>

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
8-12/16-20 silica	20	8	25 lbs	Push

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
10.4 ft. below ground Artesian pressure N/A lb.
 Depth flow encountered _____ ft. Describe access port or control devices: _____

12. WELL TESTS:
 Pump Baller Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
25 GPM			

Water Temp. 50° F Bottom hole temp. 50° F
 Water Quality test or comments: _____

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

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
2"	0	5	Fill - trash silty gravel		X
2"	5	20	sandy brown gravel	X	

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NOV 10 2008
 DEPT. OF WATER RESOURCES
 SOUTHERN REGION

Completed Depth 20' (Measurable)
 Date: Started 10-10-2008 Completed 10-10-2008

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 TerraGraphics Firm No. 663
 Principal Driller [Signature] Date 11-7-08
 and _____
 Driller or Operator II _____ Date _____
 Operator I _____ Date _____
Principal Driller and Rig Operator Required.
 Operator I must have signature of Driller/Operator II.

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only

Well ID No. _____

Inspected by _____

Twp _____ Rge _____ Sec _____

1/4 1/4 1/4

Lat: : : Long: : :

12

1. WELL TAG NO. D 0050501
 DRILLING PERMIT NO. 853720 appl. 906342
 Water Right or Injection Well No. _____

2. OWNER:
 Name IDAHO DEQ
 Address 1445 N Orchard
 City BOISE State ID Zip 83706

3. LOCATION OF WELL by legal description:
 You must provide address or Lot, Blk, Sub. or Directions to well.
 Twp. 2 North or South
 Rge. 18 East or West
 Sec. 9 NW 1/4 SE 1/4 SW 1/4
 Gov't Lot _____ County Blaine
 Lat: : : Long: : :
 Address of Well Site Long Peak
 City Healey
 (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 Direct Push

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>Bentonite Chips</u>	<u>8</u>	<u>2</u>	<u>25 lbs</u>	<u>Post</u>

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>3/4"</u>	<u>0</u>	<u>10</u>	<u>40</u>	<u>PK</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Length of Headpipe N/A Length of Tailpipe N/A
 Packer Y N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method Mechanic
 Screen Type & Method of Installation PVC / Stainless pie-pack

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>10</u>	<u>20</u>	<u>.01</u>		<u>3/4"</u>	<u>PVC</u>	<input type="checkbox"/>	<input type="checkbox"/>

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
<u>8/12/20-40 s: washed</u>	<u>20</u>	<u>8</u>	<u>25 lbs</u>	<u>post</u>

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
11.7 ft. below ground Artesian pressure 1/4 lb.
 Depth flow encountered _____ ft. Describe access port or control devices: _____

12. WELL TESTS:

Pump Bailer Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>.25 gpm</u>			

Water Temp. 50° F Bottom hole temp. 50° F
 Water Quality test or comments: _____

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

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water
				Y N
<u>2"</u>	<u>0</u>	<u>5</u>	<u>Fill w/ trash silty gravel</u>	<input checked="" type="checkbox"/>
<u>2"</u>	<u>5</u>	<u>20</u>	<u>Brown sandy gravel</u>	<input checked="" type="checkbox"/>

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NOV 10 2008

DEPT. OF WATER RESOURCES
SOUTHERN REGION

Completed Depth 20' BGS (Measurable)
 Date: Started 10-10-2008 Completed 10-10-2008

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 TerraGraphics Firm No. 663
 Principal Driller [Signature] Date 11-7-08
 and
 Driller or Operator II _____ Date _____
 Operator I _____ Date _____

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

FORWARD WHITE COPY TO WATER RESOURCES

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6/07

SEP 30 2009 DAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

RECEIVED 13
SEP 25 2009
DEQ-IDAHO FALLS

DEPT. OF WATER RESOURCES
SOUTHERN REGION

1. WELL TAG NO. D DO050795
Drilling Permit No. 856739 appl. 908195
Water right or injection well # _____

2. OWNER: Wood River Land Trust
Name _____
Address 119 East Bullion Street
City Hailey State ID Zip 83333

3. WELL LOCATION:
Twp. 02N North or South Rge. 18 East or West
Sec. 9 SW 1/4 SE 1/4 SW 1/4

Gov't Lot _____ County _____
Lat. _____ (Deg. and Decimal minutes)
Long. _____ (Deg. and Decimal minutes)

Address of Well Site Croy Creek Road & Big
Wood River Park City Hailey, ID
(Name of local name of road - Distance to Road or Landmark)

4. USE:
 Domestic Municipal Monitor Irrigation Thermal Injection
 Other _____

5. TYPE OF WORK:
 New well Replacement well Modify existing well
 Abandonment Other _____

6. DRILL METHOD:
 Air Rotary Mud Rotary Cable Other Direct Push

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
<u>3/4 bentonite</u>	<u>9</u>	<u>0</u>	<u>30 lbs</u>	<u>Tremie pipe</u>
<u>Neat Cement</u>	<u>1</u>	<u>0</u>	<u>60 lbs</u>	<u>Power IX PAD</u>

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
<u>2"</u>	<u>10</u>	<u>0</u>	<u>40</u>	<u>PVC</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

9. PERFORATIONS/SCREENS:
Perforations Y N Method Machine
Manufactured screen Y N Type Machine Slotted
Method of installation Through Drill casing

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
<u>70</u>	<u>10</u>	<u>.010</u>	<u>10</u>	<u>2"</u>	<u>PVC</u>	<u>40</u>

Length of Headpipe _____ Length of Tailpipe _____
Packer Y N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
<u>10/20 silica</u>	<u>70</u>	<u>9</u>	<u>30 lbs</u>	<u>Tremie pipe</u>

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) 6 Static water level (ft) 6
Water temp. (°F) _____ Bottom hole temp. (°F) _____
Describe access port 7" Flush mount well cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Test method:			
			Pump	Boiler	Air	Flowing artesian
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
<u>4"</u>	<u>0</u>	<u>6"</u>	<u>Parking lot gravel</u>		<input checked="" type="checkbox"/>
<u>4"</u>	<u>6"</u>	<u>6'</u>	<u>landfill (garbage @ 6')</u>	<input checked="" type="checkbox"/>	
<u>4"</u>	<u>6</u>	<u>20</u>	<u>Sandy gravel with waste pan grade staining 10-20 Fines, Glass, and Ash</u>	<input checked="" type="checkbox"/>	

Completed Depth (Measurable) 70'
Date Started: 6/22/09 Date Completed: 6/22/09

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 Direct Push Services, LLC Co. No. 653
Principal Driller Saul E. Hubby Date 6/29/09
Driller _____ Date _____
Operator II _____ Date _____
Operator I _____ Date _____

*Signature of Principal Driller and rig operator are required.

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SEP 29 2009
DEQ TFRO

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Form 238-7

6/07

SEP 30 2009

IDAHO DEPARTMENT OF WATER RESOURCES

DEPT. OF WATER RESOURCES SOUTHERN REGION

WELL DRILLER'S REPORT

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SEP 25 2009

DEQ-IDAHO FALLS

1. WELL TAG NO. D D0050796

Drilling Permit No. 856740 appl. 908196

Water right or injection well # _____

2. OWNER: Wood River Land Trust

Name _____

Address 119 E Bullman Street

City Hailey State CO Zip 83333

3. WELL LOCATION:

Twp. 02 North or South Rge. 14 East or West

Sec. 9 SW 1/4 SE 1/4 SW 1/4

Gov'l Lot _____ County _____

Lat. _____ (Deg. and Decimal minutes)

Long. _____ (Deg. and Decimal minutes)

Address of Well Site Cray Creek Road & Big

Wood River Park City Hailey

Lot _____ Blk. _____ Sub. Name _____

4. USE:

Domestic Municipal Monitor Irrigation Thermal Injection

Other _____

5. TYPE OF WORK:

New well Replacement well Modify existing well

Abandonment Other _____

6. DRILL METHOD:

Air Rotary Mud Rotary Cable Other Direct Push

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
<u>30 Best-Chip</u>	<u>9</u>	<u>1</u>	<u>30 lbs</u>	<u>Tremie Pipe</u>
<u>Wheat Cement</u>	<u>1</u>	<u>0</u>	<u>60 lbs</u>	<u>pipe IXI PAD</u>

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
<u>2"</u>	<u>10</u>	<u>0</u>	<u>40</u>	<u>PVC</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

9. PERFORATIONS/SCREENS:

Perforations Y N Method Machine Slotted

Manufactured screen Y N Type Machine Slotted

Method of installation Through Probe Rods

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
<u>20</u>	<u>10</u>	<u>.010</u>	<u>10</u>	<u>2"</u>	<u>PVC</u>	<u>40</u>

Length of Headpipe _____ Length of Tailpipe _____

Packer Y N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
<u>10/20 Silica</u>	<u>20</u>	<u>9</u>	<u>30 lbs</u>	<u>Tremie Pipe</u>

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) 6 Static water level (ft) 6

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

Describe access port: 7' Flush-mounted well cap

Well test:			Test method:			
Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
<u>4 1/2</u>	<u>0</u>	<u>5</u>	<u>Packer lot Gravel</u>		<input checked="" type="checkbox"/>
<u>4</u>	<u>5</u>	<u>6</u>	<u>landfill garbage @ 6</u>	<input checked="" type="checkbox"/>	
<u>4</u>	<u>6</u>	<u>20</u>	<u>Sandy gravel, yellowish Brown, saturated, Graded 10% fines</u>		

Completed Depth (Measurable): 20'

Date Started 6/22/09 Date Completed: 6/22/09

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 Direct Push Services, LLC Co. No. 653

*Principal Driller Saul By Date 6/24/09

*Driller _____ Date _____

*Operator II _____ Date _____

Operator I _____ Date _____

*Signatures of Principal Driller and rig operator are required.

RECEIVED

SEP 25 2009

DEQ TFRO

USE TYPEWRITER OR BALL POINT PEN

State of Idaho Department of Water Administration WELL DRILLER'S REPORT

RECEIVED

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.

DEC 9 1976 Department of Water Resources Southern District Office

1. WELL OWNER Name John Adams Address Hailey, Idaho Owner's Permit No.

7. WATER LEVEL Static water level 10 feet below land surface Flowing? No G.P.M. flow Temperature Quality Good Artesian closed-in pressure p.s.i. Controlled by Valve Cap Plug

2. NATURE OF WORK [X] New well [] Deepened [] Replacement [] Abandoned (describe method of abandoning)

8. WELL TEST DATA [] Pump [X] Bailor [] Other Discharge G.P.M. 40 Draw Down 15 Ft. Hours Pumped 3

3. PROPOSED USE [X] Domestic [] Irrigation [] Test [] Other (specify type) [] Municipal [] Industrial [] Stock [] Waste Disposal or Injection

033629

4. METHOD DRILLED [X] Cable [] Rotary [] Dug [] Other

9. LITHOLOGIC LOG Table with columns: Hole Diam., Depth (From, To), Material, Water (Yes, No). Rows include: 8" 1-4 Top soil with rocks, 8" 4-18 Sandy clay, 6" 18-30 Sandy clay, 6" 30-36 Gravel, 6" 36-40 Clay with sand, 6" 40-43 Gravel.

5. WELL CONSTRUCTION Diameter of hole 6 inches Total depth 43 feet Casing schedule: [X] Steel [] Concrete Thickness 2.50 inches Diameter 6 inches From 1 feet To 43 feet Was a packer or seal used? [] Yes [X] No Perforated? [] Yes [X] No How perforated? [] Factory [] Knife [] Torch Size of perforation inches by inches Number perforations feet feet feet feet Well screen installed? [] Yes [X] 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 [X] No Size of gravel Placed from feet to feet Surface seal depth 118 Material used in seal [] Cement grout [X] Puddling clay [] Well cuttings Sealing procedures used [] Sherry pit [X] Temporary surface casing [] Overbore to seal depth

6. LOCATION OF WELL Sketch map location must agree with written location. Subdivision Name Lot No. Block No. County Blaine SW 1/4 SW 1/4 Sec. 9 T. 2N N/S. R. 18g E/W

10. Work started 6/7/76 finished 6/8/76

11. DRILLERS CERTIFICATION Firm Name Ken Smith Well Drilling Firm No. 265 Address Box 1165 Hailey, Idaho Date 7/26/76 Signed by (Firm Official) Ken Smith and Operator Bill Williams

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

RECEIVED

J7

SEP 2 1968

REPORT OF WELL DRILLER
State of Idaho

Department of Reclamation

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

WELL OWNER:
Name W A Lewis
Address 503 Seventh Ave S
Idaho

Owner's Permit No. _____
NATURE OF WORK (check): Replacement well
New well Deepened Abandoned
Water is to be used for: domestic

METHOD OF CONSTRUCTION: Rotary Cable
Dug Other _____ (explain)

CASING SCHEDULE: Threaded _____ Welded _____
"Diam. from 0 ft. to 140 ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
Thickness of casing: 250 Material:
Steel concrete wood other

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

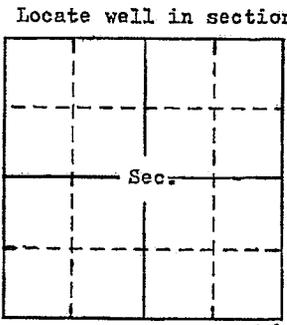
Size of perforations: _____ " by _____ "
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

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



LOCATION OF WELL: County Blaine
SW 1/4 SW 1/4 Sec. 9 T. 2 N. 8 R. 18 E. 4E

Size of drilled hole: 6 Total depth of well: 42 Standing water level below ground: 10 Temp. Fahr. 53 ° Test delivery: 20 gpm or _____ cfs Pump? Bail Size of pump and motor used to make test: _____

Length of time of test: 2 Hrs. _____ Min. Drawdown: light 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 FEET	TO FEET	YES OR NO	
0	1	Surface	
1	10	Gravel	
10	13	Gravel	yes
13	27	Gravel & clay	
27	40	Very little water	yes
40	45	Yellow clay	no
45	48	Broken Red Rock Shale	yes
48	49	Clay	
49	49	Red Rock Shale	yes

Work started: 24 July 1968
Work finished: 8 Aug 1968
Well Driller's Statement: This well was drilled under my supervision and this report is true to the best of my knowledge.
Name: Ernest H. Waller

Address: _____
Signed by: _____
License No. 15 Date: 29 Aug 1968

Use other side for additional remarks

USGS

REPORT OF WELL DRILLER
State of Idaho

Department of Reclamation

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

WELL OWNER:

Name CALVIN J. ROBERTSON

Address HAILEY, IDAHO

Owner's Permit No. _____

NATURE OF WORK (check): Replacement well

New well Deepened Abandoned

Water is to be used for: DOMESTIC

METHOD OF CONSTRUCTION: Rotary Cable

Dug Other _____

(explain)

CASING SCHEDULE: Threaded _____ Welded

6 5/8 Diam. from 0 ft. to 50 ft.

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

Thickness of casing: 258 Material: _____

Steel concrete wood other

(explain)

PERFORATED? Yes No Type of perforator used: MILLS

Size of perforations: 3/8 w " by 21 "

perforations from 39 ft. to 49 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: _____

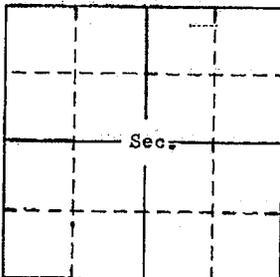
Depth of strata _____ ft. Method of sealing

strata off: _____

Surface casing used? Yes No

Cemented in place? Yes No

Locate well in section



LOCATION OF WELL: County BLAINE

FR NE SW 4 Sec. 9 T. 2 N 7 R. 18 E XX TAX LOT NO. 3480

Use other side for additional remarks

Size of drilled hole: 6" Total depth of well: 50' Standing water level below ground: 7' 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 39691 WATER

FROM TO 39691 YES OR NO

FEET FEET

0	2 1/2	TOPSOIL	
---	-------	---------	--

2 1/2	8	FINE GRAVEL	YES
-------	---	-------------	-----

8	18	BOULDERS OF FINE GRAVEL	YES
---	----	-------------------------	-----

18	38	HEAVY CLAY, BOULDERS AND GRAVEL	
----	----	---------------------------------	--

38	50	GRAVEL, SAND AND CLAY	YES
----	----	-----------------------	-----

Work started: 9-19-66

Work finished: 9-22-66

Well Driller's Statement: This well was drilled under my supervision and this report is true to the best of my knowledge.

Name: SMITH DRILLING AND PUMP CO. INC.

Address: 365 WEST MAIN JEROME, IDAHO 83338

Signed by: [Signature]

License No. 1-91 Date: 1-10-67

RECEIVED

REPORT OF WELL DRILLER
State of Idaho

MAY 29 1969

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 B.C. EVELY
Address HAILEY, IDAHO

Owner's Permit No. _____
NATURE OF WORK (check): Replacement well
New well Deepened Abandoned

Water is to be used for: DOMESTIC
METHOD OF CONSTRUCTION: Rotary Cable
Dug Other _____ (explain)

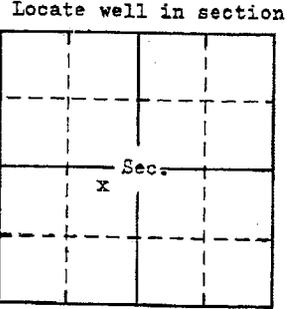
CASING SCHEDULE: Threaded _____ Welded
6" Diam. from 0 0 ft. to 32 ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
Thickness of casing: 250 Material:
Steel concrete wood other

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

Size of perforations: " by "
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: GROUPED WITH CLAY WHILE PUTTING CASING DOWN
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



LOCATION OF WELL: County BLAINE
NE 1/4 SW 1/4 Sec. 9 T. 2n N. 1/4 R. 18E

Size of drilled hole: 6" Total depth of well: 32ft Standing water level below ground: 4ft Temp. Fahr. _____ Test delivery: OVER 25 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 39687 WATER

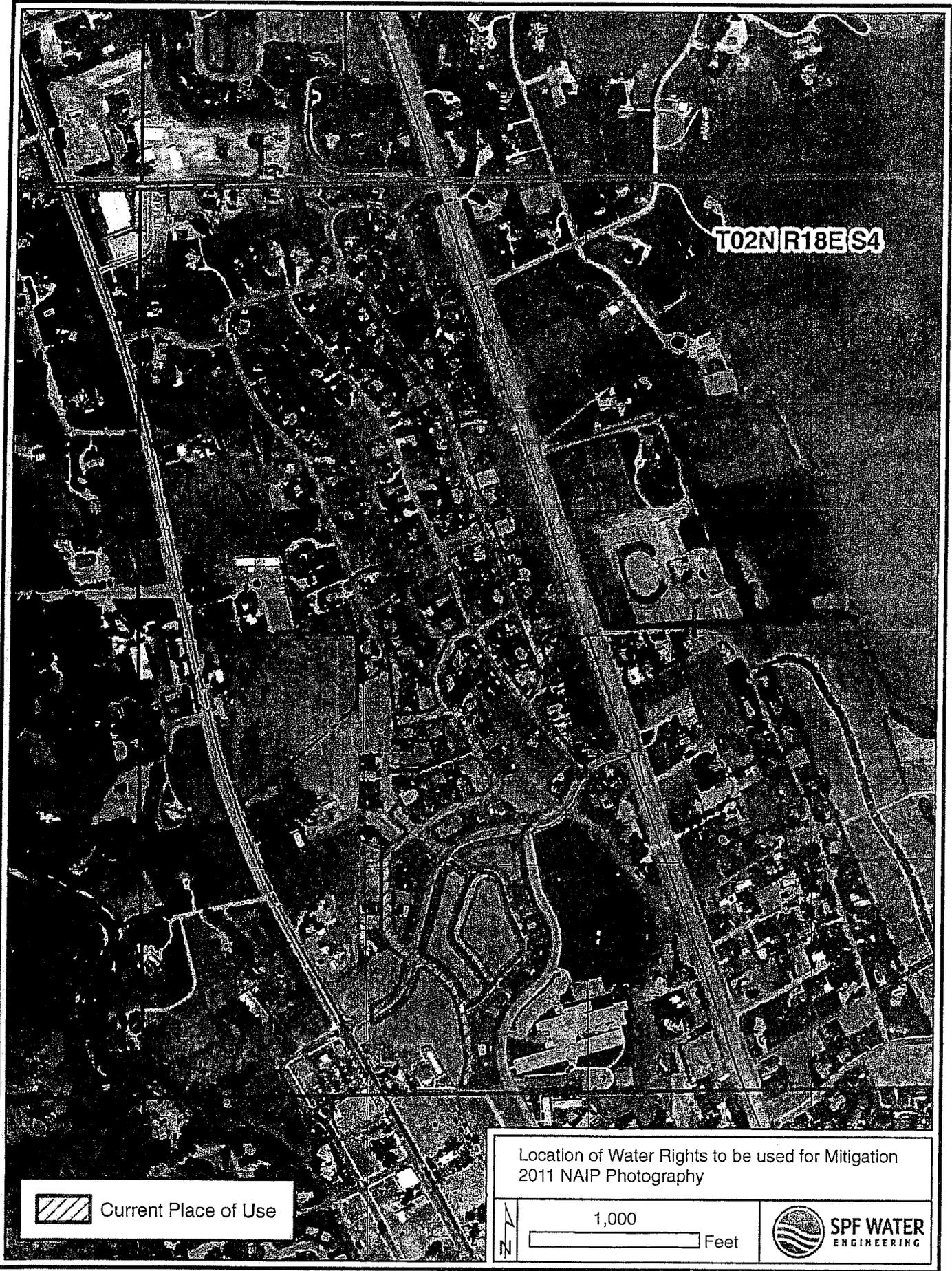
FROM	TO		YES OR NO
FEET FEET			
0	5	GRAVEL & BOULDERS	NO
5	21	GRAVEL & BOULDERS	YES
21	30	GRAVEL SET IN CLAY	NO
30	32	GRAVEL WITH WATER	YES

Work started: 17 APRIL 1969
Work finished: 18 APRIL 1969
Well Driller's Statement: This well was drilled under my supervision and this report is true to the best of my knowledge.
Name: CLAUDE NICHOLSON
Address: BOX 322 SHOSHONE, IDAHO
Signed by: Claude Nicholson
License No. 159 Date: 27 MAY 1969

Use other side for additional remarks

USGS

Attachment 4 – Water Rights to be Used for Mitigation



T02N R18E S4



Current Place of Use

Location of Water Rights to be used for Mitigation
2011 NAIP Photography



1,000

Feet



SPF WATER
ENGINEERING

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report 37-22773

WATER RIGHT NUMBER: 37-22773

<u>Owner Type</u>	<u>Name and Address</u>
Original Owner	WOOD RIVER VALLEY ASSOCIATES 2710 SUNRISE RIM RD BOISE, ID 83705 (208)344-8502
Previous Owner	EMB-HAILEY LP A CALIFORNIA LTD PTNR 9533 W PICO BLVD STE A LOS ANGELES, CA 90035 (213)271-2699
Current Owner	CITY OF HAILEY 115 S MAIN ST #H HAILEY, ID 83333 (208)788-4221

Priority Date: 05/01/1888
Basis: Decreed
Status: Active

<u>Source</u>	<u>Tributary</u>
BIG WOOD RIVER	MALAD RIVER

<u>Beneficial Use</u>	<u>From</u> _____ <u>To</u> _____	<u>Diversion Rate</u>	<u>Annual Volume</u>
IRRIGATION	04/15 to 10/31	0.19 CFS	
	<u>Total Diversion:</u>	0.19 CFS	

Location of Point(s) of Diversion

BIG WOOD RIVER SW1/4NW1/4 Sec. 20, Twp 03N, Rge 18E, B.M.
BLAINE County

Place of Use

IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
02N	18E	4	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	22.8
							3.1			3.4	8.9				7.4				
							L 3												

Total Acres: 22.8

Conditions of Approval:

1. E55 Right Nos. 37-22773, 37-22774, 37-22775 and 37-22776 are limited to the irrigation of a combined total of 22.8 acres in a single irrigation season.
2. This right is a split from former right 37-21811
3. The rights listed below, shall provide nor more than 3.5 afa per acre at the field headgate for irrigation of the lands in the place of use whenever sprinkler methods of irrigation are used. Combined Right Nos. 37-22773, 37-22774, 37-22775 and 37-22776.

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report 37-22773

4. C18 This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the Court at a point in time no later than the entry of a final unified decree. Section 42-1412(6), Idaho Code.
5. G05 Water diverted from Headgate #22 delivered through Hiawatha Canal.
6. The diversion rate of this right is .194 cfs.

Remarks:Comments:

1. dsmith 8/23/2012 Ownership Change
Comment: This water right split from 37-21811
2. dsmith 8/24/2012 12:19:03 PM POU
Comment: Updated Shape
3. dsmith 8/24/2012 12:21:54 PM POD
Comment: Updated Shape

Dates and Other Information:

Licensed Date:
Decreed Date: 8/30/2011
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
State or Federal: S
Owner Name Connector:
Water District Number:
Generic Max Rate Per Acre:
Generic Max Volume Per Acre:
Decree Defendant:
Decree Plaintiff:
Civil Case Number: 39576
Judicial District: FIFTH
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Carey Act Number:
Mitigation Plan: False

Combined Use Limits:

<u>Rate</u>	<u>Volume</u>	<u>Acres</u>
1		22,8

Combined Water Rights: 37-22773 , 37-22774 , 37-22775 , 37-22776

Water Supply Bank:

IDAHO DEPARTMENT OF WATER RESOURCES

Water Right Report 37-22774

WATER RIGHT NUMBER: 37-22774

<u>Owner Type</u>	<u>Name and Address</u>
Previous Owner	EMB-HAILEY LP A CALIFORNIA LTD PTNR 9533 W PICO BLVD STE A LOS ANGELES, CA 90035 (213)271-2699
Original Owner	WOOD RIVER VALLEY ASSOCIATES 2710 SUNRISE RIM RD BOISE, ID 83705 (208)344-8502
Current Owner	CITY OF HAILEY 115 S MAIN ST #H HAILEY, ID 83333 (208)788-4221

Priority Date: 09/18/1885

Basis: Decreed

Status: Active

<u>Source</u>	<u>Tributary</u>
BIG WOOD RIVER	MALAD RIVER

<u>Beneficial Use</u>	<u>From</u> <u>To</u>	<u>Diversion Rate</u>	<u>Annual Volume</u>
IRRIGATION	04/15 to 10/31	0.20 CFS	
	<u>Total Diversion:</u>		0.20 CFS

Location of Point(s) of Diversion

BIG WOOD RIVER SW1/4NW1/4 Sec. 20, Twp 03N, Rge 18E, B.M.
BLAINE County

Place of Use

IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
02N	18E	4	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	22.8
							3.1			3.4	8.9			7.4					
							L 3												

Total Acres: 22.8

Conditions of Approval:

1. The diversion rate of this right is .195 cfs.
2. This right is a split from former right 37-21813.
3. The rights listed below, shall provide nor more than 3.5 afa per acre at the field headgate for irrigation of the lands in the place of use whenever sprinkler methods of irrigation are used. Combined Right Nos. 37-22773, 37-22774, 37-22775 and 37-22776.

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report 37-22774

- 4. C18 This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the Court at a point in time no later than the entry of a final unified decree. Section 42-1412(6), Idaho Code.
- 5. E55 Right Nos. 37-22773, 37-22774, 37-22775 and 37-22776 are limited to the irrigation of a combined total of 22.8 acres in a single irrigation season.
- 6. G05 Water diverted from Headgate #22 delivered through Hiawatha Canal.

Remarks:

Comments:

- 1. dsmith 8/23/2012 Ownership Change
Comment: Split from 337-21813
- 2. dsmith 8/24/2012 1:17:51 PM POD
Comment: Updated Shape
- 3. dsmith 8/24/2012 1:22:20 PM POU
Comment: Updated Shape

Dates and Other Information:

Licensed Date:
Decreed Date: 8/30/2010
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
State or Federal: S
Owner Name Connector:
Water District Number:
Generic Max Rate Per Acre:
Generic Max Volume Per Acre:
Decree Defendant:
Decree Plaintiff:
Civil Case Number: 39576
Judicial District: FIFTH
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Carey Act Number:
Mitigation Plan: False

Combined Use Limits:

<u>Rate</u>	<u>Volume</u>	<u>Acres</u>
1		22.8
Combined Water Rights: 37-22773 , 37-22774 , 37-22775 , 37-22776		

Water Supply Bank:

IDAHO DEPARTMENT OF WATER RESOURCES

Water Right Report 37-22775

WATER RIGHT NUMBER: 37-22775

<u>Owner Type</u>	<u>Name and Address</u>
Original Owner	WOOD RIVER VALLEY ASSOCIATES 2710 SUNRISE RIM RD BOISE, ID 83705 (208)344-8502
Previous Owner	EMB-HAILEY LP A CALIFORNIA LTD PTNR 9533 W PICO BLVD STE A LOS ANGELES, CA 90035 (213)271-2699
Current Owner	CITY OF HAILEY 115 S MAIN ST #H HAILEY, ID 83333 (208)788-4221

Priority Date: 06/30/1884

Basis: Decreed

Status: Active

<u>Source</u>	<u>Tributary</u>
BIG WOOD RIVER	MALAD RIVER

<u>Beneficial Use</u>	<u>From</u> <u>To</u>	<u>Diversion Rate</u>	<u>Annual Volume</u>
IRRIGATION	04/15 to 10/31	0.39 CFS	
	<u>Total Diversion:</u>	0.39 CFS	

Location of Point(s) of Diversion
 BIG WOOD RIVER SW1/4NW1/4 Sec. 20, Twp 03N, Rge 18E, B.M.
 BLAINE County

Place of Use
 IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
02N	18E	4	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	22.8
							3.1			3.4	8.9			7.4					
							1.3												

Total Acres: 22.8

Conditions of Approval:

1. The rights listed below, shall provide nor more than 3.5 afa per acre at the field headgate for irrigation of the lands in the place of use whenever sprinkler methods of irrigation are used. Combined Right Nos. 337-22773, 37-22774, 37-22775 and 37-22776.
2. G05 Water diverted from Headgate #22 delivered through Hiawatha Canal.
3. E55 Right Nos. 37-22773, 37-22774, 37-22775 and 37-22776 are limited to the irrigation of a combined total of 22.8 acres in a single irrigation season.

IDAHO DEPARTMENT OF WATER RESOURCES

Water Right Report 37-22775

4. C18 This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the Court at a point in time no later than the entry of a final unified decree. Section 42-1412(6), Idaho Code.
5. The diversion rate of this right is .387 cfs.
6. This right is a split from former right 37-21815.

Remarks:Comments:

1. dsmith 8/24/2012 Ownership Change
Comment: Split from 37-21815

2. dsmith 8/24/2012 1:39:15 PM POU
Comment: Updated Shape

3. dsmith 8/24/2012 1:40:12 PM POD
Comment: Updated Shape

Dates and Other Information:

Licensed Date;
Decreed Date: 8/30/2010
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
State or Federal: S
Owner Name Connector:
Water District Number:
Generic Max Rate Per Acre;
Generic Max Volume Per Acre:
Decree Defendant:
Decree Plaintiff:
Civil Case Number: 39576
Judicial District: FIFTH
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Carey Act Number:
Mitigation Plan: False

Combined Use Limits:

<u>Rate</u>	<u>Volume</u>	<u>Acres</u>
1		22.8

Combined Water Rights: 37-22773 , 37-22774 , 37-22775 , 37-22776

Water Supply Bank:

IDAHO DEPARTMENT OF WATER RESOURCES

Water Right Report 37-22776

WATER RIGHT NUMBER: 37-22776

<u>Owner Type</u>	<u>Name and Address</u>
Original Owner	WOOD RIVER VALLEY ASSOCIATES 2710 SUNRISE RIM RD BOISE, ID 83705 (208)344-8502
Previous Owner	EMB-HAILEY LP A CALIFORNIA LTD PTNR 9533 W PICO BLVD STE A LOS ANGELES, CA 90035 (213)271-2699
Current Owner	CITY OF HAILEY 115 S MAIN ST #H HAILEY, ID 83333 (208)788-4221

Priority Date: 03/24/1883

Basis: Decreed

Status: Active

<u>Source</u>	<u>Tributary</u>
BIG WOOD RIVER	MALAD RIVER

<u>Beneficial Use</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Annual Volume</u>
IRRIGATION	04/15	10/31	0.23 CFS	
	<u>Total Diversion:</u>		0.23 CFS	

Location of Point(s) of Diversion
 BIG WOOD RIVER SW1/4NW1/4 Sec. 20, Twp 03N, Rge 18E, B.M.
 BLAINE County

Place of Use
 IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
02N	18E	4	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	22.8
							3.1			3.4	8.9							7.4	
							L 3												

Total Acres: 22.8

Conditions of Approval:

1. The diversion rate of this right is .235 cfs.
2. The rights listed below, shall provide nor more than 3.5 afa per acre at the field headgate for irrigation of the lands in the place of use whenever sprinkler methods of irrigation are used. Combined Right Nos. 37-22773, 37-22774, 37-22775 and 37-22776.

IDAHO DEPARTMENT OF WATER RESOURCES

Water Right Report 37-22776

3. C18 This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the Court at a point in time no later than the entry of a final unified decree. Section 42-1412(6), Idaho Code.
4. This right is a split from former right 37-21817 .
5. E55 Right Nos. 37-22773, 37-22774, 37-22775 and 37-22776 are limited to the irrigation of a combined total of 22.8 acres in a single irrigation season.
6. G05 Water diverted from Headgate #22 delivered through Hiawatha Canal.

Remarks:Comments:

1. dsmith 8/24/2012 Ownership Change
Comment: Split from 37-21817
2. dsmith 8/24/2012 1:40:56 PM POD
Comment: Updated Shape
3. dsmith 8/24/2012 1:42:00 PM POU
Comment: Updated Shape

Dates and Other Information:

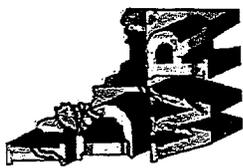
Licensed Date:
 Decreed Date: 8/30/2010
 Enlargement Use Priority Date:
 Enlargement Statute Priority Date:
 State or Federal: S
 Owner Name Connector:
 Water District Number:
 Generic Max Rate Per Acre:
 Generic Max Volume Per Acre:
 Decree Defendant:
 Decree Plaintiff:
 Civil Case Number: 39576
 Judicial District: FIFTH
 Swan Falls Trust or Nontrust:
 Swan Falls Dismissed:
 DLE Act Number:
 Carey Act Number:
 Mitigation Plan: False

Combined Use Limits:

<u>Rate</u>	<u>Volume</u>	<u>Acres</u>
1		22.8

Combined Water Rights: 37-22773 , 37-22774 , 37-22775 , 37-22776

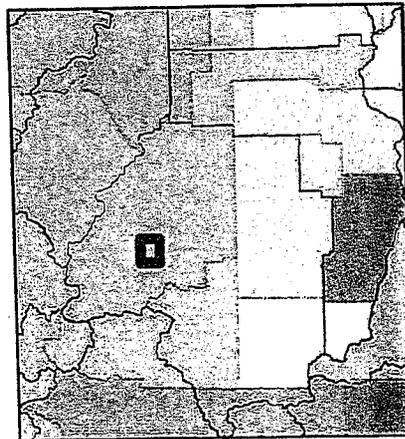
Water Supply Bank:



Idaho Department of Water Resources

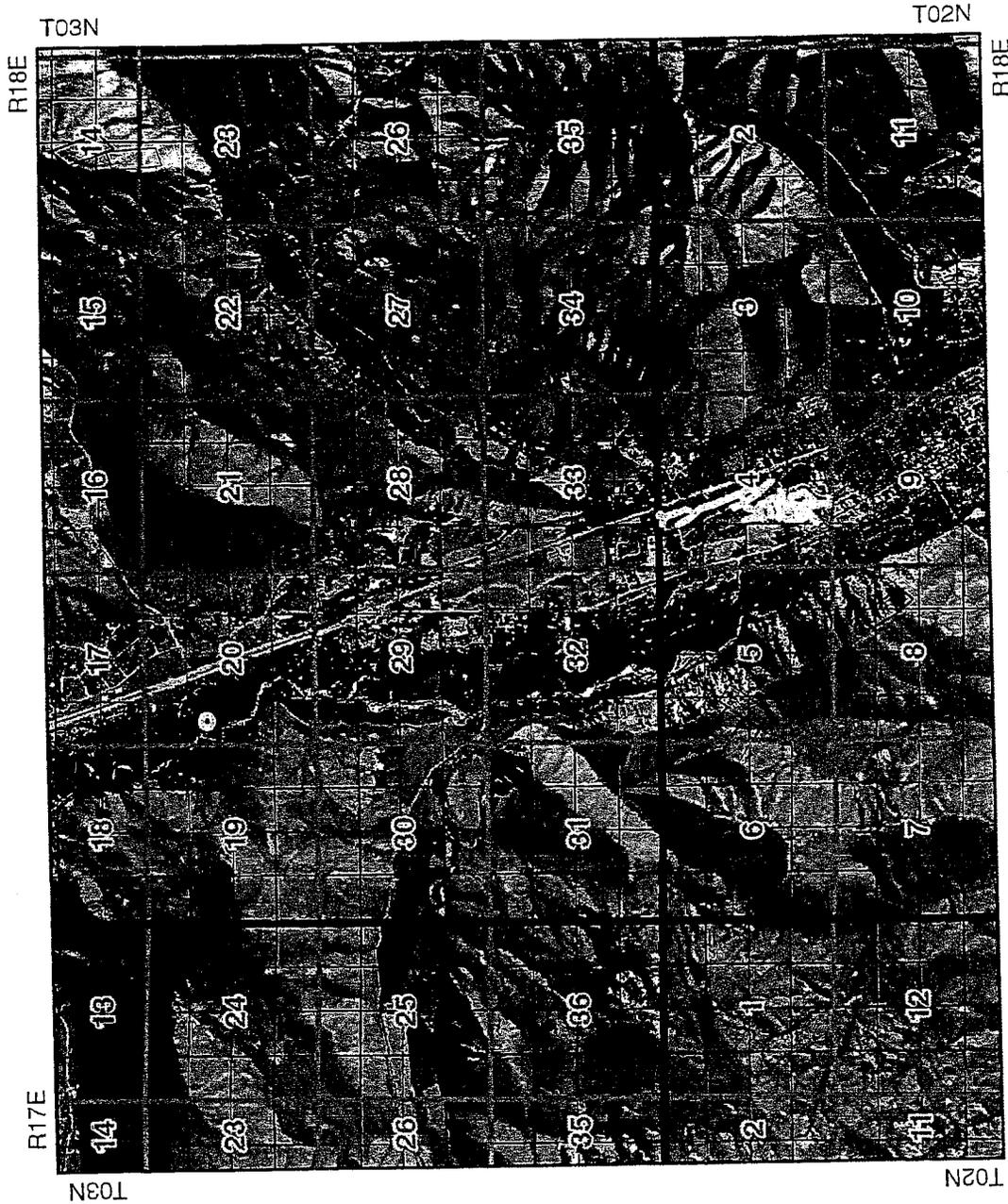
Water Right
 37-22773
 37-22774
 37-22775
 37-22776
 (IRRIGATION)

- ⊙ Point of Diversion
- ▭ Place of Use
- ▭ State Outline
- ▭ Townships
- ▭ PLS Sections
- ▭ Quarter Quarters



Blaine County
 IDWR Basin 37

Prepared by Smith, Danni
 On August 24, 2012
 2009 Aerial Photography



Owner: City of Hailey
 NOTE: Only one owner is listed. There may or may not be more than this in the IDWR database.

