

**STARTING
LEFT
SIDE OF
FILE**

SCANNED

6/11

11/11

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-32225

Priority: September 16, 2005

Maximum Diversion Rate: 10.00 CFS
Maximum Diversion Volume: 1,815.0 AF

This is to certify, that INTERMOUNTAIN SEWER & WATER CORP
660 E FRANKLIN RD
MERIDIAN ID 83642

has applied for a permit to appropriate water from:

Source: GROUND WATER

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
MUNICIPAL	01/01 to 12/31	10.00 CFS	1,815.0 AF

LOCATION OF POINTS OF DIVERSION:

GROUND WATER	NE¼ NE¼ Sec. 28, Twp 01N, Rge 04E, B.M.	ADA County
GROUND WATER	SE¼ NW¼ Sec. 28, Twp 01N, Rge 04E, B.M.	ADA County
GROUND WATER	NW¼ SE¼ Sec. 28, Twp 01N, Rge 04E, B.M.	ADA County
GROUND WATER	SE¼ SE¼ Sec. 28, Twp 01N, Rge 04E, B.M.	ADA County
GROUND WATER	NE¼ NW¼ Sec. 33, Twp 01N, Rge 04E, B.M.	ADA County

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before **February 01, 2012**.
2. Subject to all prior water rights.
3. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
4. Water bearing zone to be appropriated is from 300 to 1000 feet.
5. The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.
6. Prior to the diversion of water in connection with this right, the right holder shall provide the department with a plan for monitoring ground water levels in the vicinity of the place of use for this water right. The monitoring should occur in parallel with development and production and should include identification of non-productions wells and timelines for measuring and reporting. The right holder shall not divert water in connection with this right until the monitoring plan is approved by the Department. Failure to comply with the monitoring plan once it is accepted shall be cause for the Department to cancel or revoke this right.
7. Prior to or in connection with the proof of beneficial use statement to be submitted for municipal water use under this right, the right holder shall provide the department with documentation showing that the water supply system is being regulated by the Idaho Department of Environmental Quality as a public water supply and that it has been issued a public water supply number.

State of Idaho
Department of Water Resources
Permit to Appropriate Water
NO. 63-32225

8. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
9. Place of use is within the area served by the public water supply system of Intermountain Sewer & Water, Corp. The place of use is generally located within Township 1N, Range 4E, Sections 28, 29, 32 and 33.
10. Common areas, parks, school grounds, golf courses, and any other large parcels may only be irrigated under this water right with wastewater that has been previously beneficially used for potable or culinary purposes, has been treated in a wastewater treatment plant, and is delivered from the wastewater treatment plant to the parcel to be irrigated.
11. Water diverted under this right may be used for direct irrigation of up to 1/2 acre per residential lot upon which a home has been constructed.
12. A map depicting the place of use boundary for this water right at the time of this approval is attached to this document for illustration purposes.
13. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 16 day of February, 2007.

For 

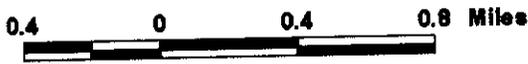
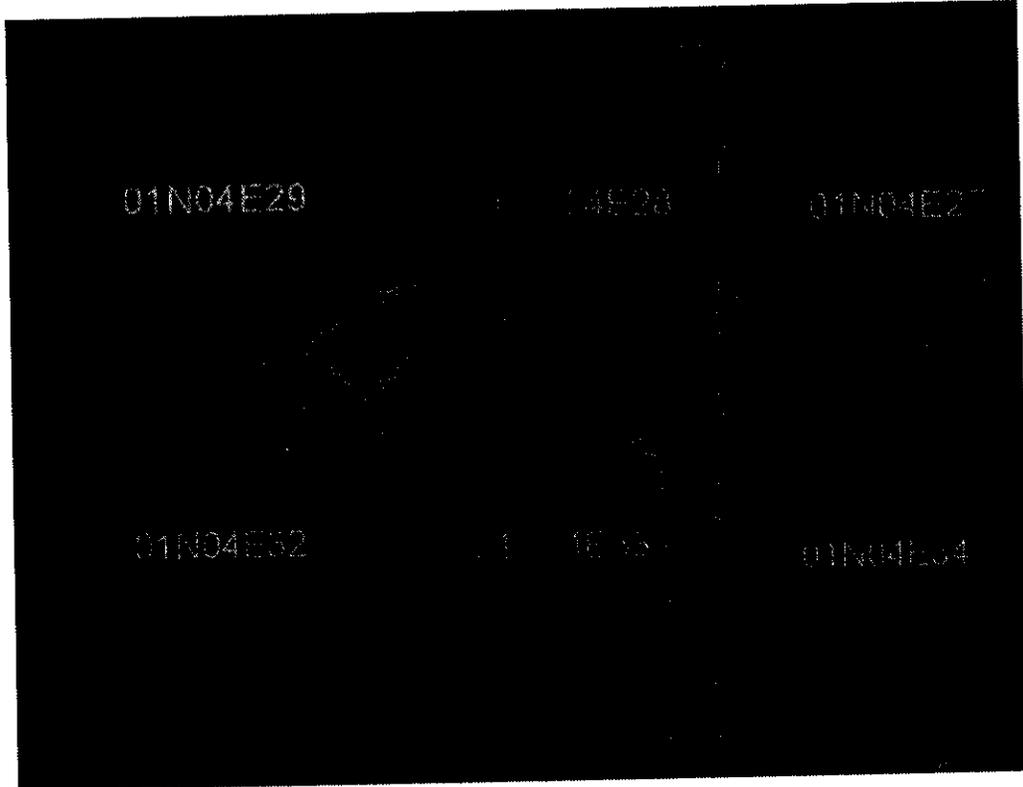
DAVID R. TUTHILL, JR., Interim Director

State of Idaho
Department of Water Resources
Permit to Appropriate Water

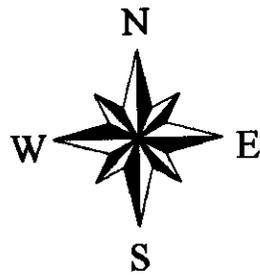
NO. 63-32225

Digital Boundary for Intermountain Sewer and Water, Corp.

February 14, 2007



-  Digital Boundary - Intermountain Sewer and Water
-  Township/Range
-  Sections
-  QQ



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

RECEIVED
SEP 16 2005
WATER RESOURCES
WESTERN REGION

1. Name of Applicant Intermountain Sewer & Water, Corp. Phone (208) 888-9771
Mailing address 660 East Franklin Road, Meridian, ID 83642

2. Source of water supply ground water which is a tributary of NA

3. Location of point of diversion is Township 1N Range 4E Sec. 33, in the _____ 1/4,
NE 1/4, NW 1/4, Govt. Lot _____, B.M., Ada County;

additional points of diversion if any: NENE, SENW, NWSE and SESE of Section 28, T1N R4E, Ada County

4. Water will be used for the following purposes:
Amount 10.0 cfs for municipal purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5. Total quantity to be appropriated is (a) 10.0 and/or (b) _____
cubic feet per second acre feet per annum

6. Proposed diverting works:
a. Describe type and size of devices used to divert water from the source Up to five wells with electric pumps.

b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet

c. Proposed well diameter is 16 inches; proposed depth of well is 1000 feet

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

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

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

8. Description of proposed uses (if irrigation only, go to item 9):
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. Mayfield Springs Planned Community
d. Domestic; show number of households. _____
e. Other; describe fully. _____

9. 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													
1N	4E	28	M	M	M	M				M	M	M	M	M	M	M	M	M	
		29																	M
		32	M																
		33	M	M	M	M	M	M	M	M				M	M	M		M	

JK
12/23/05
JK 12/23/05

Total number of acres to be irrigated _____

10. Describe any other water rights used for the same purposes as described above. None

11. a. Who owns the property at the point of diversion? Applicant or related business entity

b. Who owns the land to be irrigated or place of use? Applicant or related business entity

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: _____

12. Remarks: Applicant proposes a new public water system to provide water for municipal purposes that will include domestic, fire protection, commercial, and industrial uses in a proposed planned unit development. Diversion rate is estimated assuming domestic for 2000 homes (2.50 cfs) each with 0.15 acres landscape irrigation (6.00 cfs), commercial (0.50 cfs), industrial (0.5 cfs), and miscellaneous uses (0.5 cfs). Fire protection flows will be met from storage tanks. Water-bearing zone to be appropriated is 300 to 1000 feet.

13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½"x11" 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.)

BE IT KNOWN that the undersigned hereby makes this application for permit to appropriate the public waters of the State of Idaho as herein set forth.


 Signature of Applicant (and title, if applicable) President

Received by *AK* Date 9/16/05 Time 10:11am Preliminary check by *JK*
 Fee \$ 610.00 Received by *AK* # W033432 Date 9/16/05
 Publication prepared by *AK* Date 1-5-12-06 Published in THE IDAHO STATESMAN
 Publication approved *sk* Date 1-23-06

1/5 12/2006

LEGEND



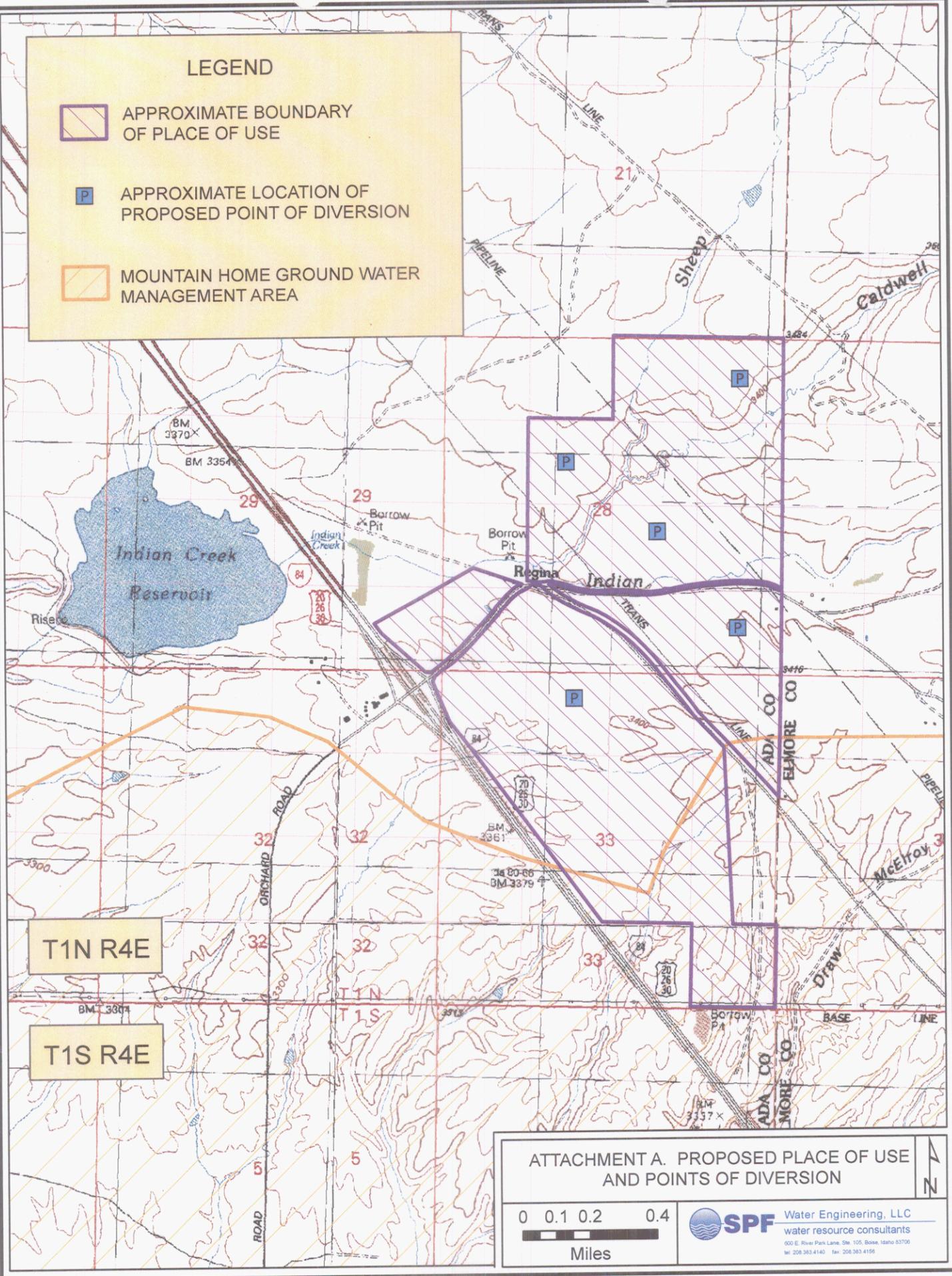
APPROXIMATE BOUNDARY OF PLACE OF USE



APPROXIMATE LOCATION OF PROPOSED POINT OF DIVERSION



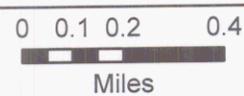
MOUNTAIN HOME GROUND WATER MANAGEMENT AREA



T1N R4E

T1S R4E

ATTACHMENT A. PROPOSED PLACE OF USE AND POINTS OF DIVERSION



Water Engineering, LLC
water resource consultants
600 E. River Park Lane, Ste. 105, Boise, Idaho 83706
tel: 208.383.4140 fax: 208.383.4156



63-32225



IDAHO SECRETARY OF STATE Viewing Business Entity

Ben Ysursa, Secretary of State

[[New Search](#)] [[Back to Summary](#)]
[[Get a certificate of existence for INTERMOUNTAIN SEWER & WATER, CORP.](#)]

INTERMOUNTAIN SEWER & WATER, CORP.

660 E FRANKLIN RD STE 240
MERIDIAN, ID 83642

Type of Business: CORPORATION, GENERAL BUSINESS

Status: GOODSTANDING 11 Aug 2005

State of Origin: IDAHO

Date of 11 Aug 2005

Origination/Authorization:

Initial Registered Agent: GREGORY B JOHNSON
660 E FRANKLIN RD STE 240
MERIDIAN, ID 83642

Organizational ID / Filing Number: C161920

Number of Authorized Stock 1000

Shares:

Date of Last Annual Report:

Amendments:

Amendment filed 11 Aug 2005 INCORPORATION

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[Idaho Secretary of State's Main Page](#)

[State of Idaho Home Page](#)

Comments, questions or suggestions can be emailed to: sosinfo@idsos.state.id.us

REQUEST TO PROCESS

**COMPLETE REQUEST IF YOU WANT YOUR APPLICATION TO BE PROCESSED
USING ONE OF THE THREE ALTERNATIVES BELOW**

Name of Applicant Intermountain Sewer and Water Company

Mailing Address 660 East Franklin Road

Meridian, ID 83642

Application No. _____
(if known)

IN LOCAL PUBLIC INTEREST

Yes, I want my application processed and before it is advertised, I will amend my application to demonstrate that the proposed appropriation is in the local public interest including the need to preserve flows in the Snake River during the migration periods of anadromous fish.

PROPOSE MITIGATION NOW

Yes, I want my application processed and before it is advertised, I will amend my application to include proposed mitigation to offset anticipated depletions in the Snake River during periods of anadromous fish migration.

WILL AGREE TO MITIGATION IN THE FUTURE IF NECESSARY

Yes, I want my application processed at this time, and I will accept a condition of approval that will require mitigation should the Director of the Idaho Department of Water Resources determine that mitigation is necessary to offset depletions from this appropriation to flows in the Snake River during periods of anadromous fish migration. I understand that mitigation is not required now but may be needed in the future. I also understand that the Director will not require mitigation until I have an opportunity to review the process by which the need for mitigation is established and the amount of water required is quantified.

Signature

Gregory B. Johnson

Date

9/14/05

Please return this form to:

Idaho Department of Water Resources
Western Regional Office
2735 Airport Way
Boise, ID 83705-5082

Idaho Department of Water Resources Receipt

Receipt ID W033432

Payment Amount \$610.00 Date Received 9/16/2005 11:17:09 AM Region Western Status

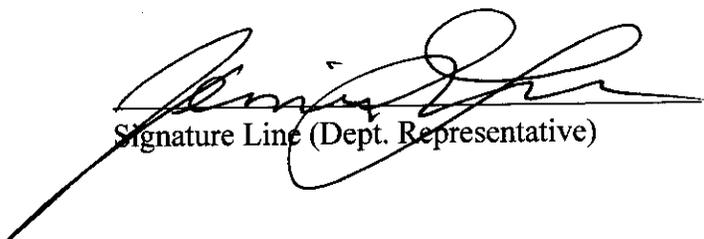
Payment Type Check Check Number 1683

Payer SPF WATER ENGINEERING LLC

Comment APPLICATION FOR PERMIT FILING FEE FOR INTERMOUNTAIN SEWER & WATER CORP. C/O SPF WATER ENGINEERING LLC

Fee Detail

Amount	Description	Fund	FD	PCA	SO
\$610.00	PERMITS	0229	21	62103	1155



Signature Line (Dept. Representative)

**NOW
STARTING
RIGHT
SIDE OF
FILE**



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street, P.O. Box 83720, Boise, ID 83720-0098
Phone: (208) 287-4800 Fax: (208) 287-6700 Web Site: www.idwr.idaho.gov

JAMES E. RISCH
Governor

KARL J. DREHER
Director

February 20, 2007

INTERMOUNTAIN SEWER & WATER CORP
660 E FRANKLIN RD
MERIDIAN ID 83642

RE: Permit No. 63-32225

Permit Approval Notice

Dear Permit Holder:

The Department of Water Resources has issued the enclosed permit authorizing you to establish a new water right. Please be sure to thoroughly review the conditions of approval and remarks listed on your permit.

The permit is a PRELIMINARY ORDER issued by the Department pursuant to Section 67-5243, Idaho Code. It can and will become a final order without further action by the Department unless a party petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

As a permit owner you must commence the excavation or construction of the diverting works within one year of the date the permit was issued, and you must proceed diligently until the project is completed. The date shown under condition no. 1 is the date when the project must be completed.

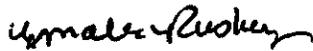
The Department will send you a 'Proof Due Notice' approximately 60 days prior to the above referenced date requesting you to file either a Proof of Beneficial Use form or a Request for Extension of Time form.

The right to drill a well is not a part of this permit to appropriate water. Beginning in July of 1987, a statute was enacted which requires a drilling permit for new well construction and deepening of existing wells. If the well(s) proposed for use under this water right permit were drilled or deepened after July 1, 1987, a separate drilling permit must be obtained from this Department. Please contact the Ground Water Protection Section located here at this office or our regional office nearest you.

Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

If you have any questions, please contact me at 208-287-4947.

Sincerely,



for Shelley Keen, Acting Section Manager
Water Right Permits Section

Enclosure(s)

cc: SPF WATER ENGINEERING LLC

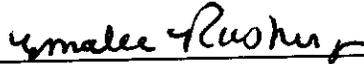
CERTIFICATE OF SERVICE

I hereby certify that on February 20, 2007 I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER(Approved Permit) to the person(s) listed below:

RE: WATER RIGHT NO. 63-32225

**INTERMOUNTAIN SEWER & WATER CORP
660 E FRANKLIN RD
MERIDIAN ID 83642**

**SPF WATER ENGINEERING LLC
C/O TERRY SCANLAN
600 E RIVER PARK LN STE 105
BOISE ID 83706**



**Emalee Rushing
Technical Records Specialist**

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its issuance if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

- (a) the petition for reconsideration is disposed of; or
- (b) the petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

Statement of Available Procedures and Applicable Time Limits

RESPONDING TO PRELIMINARY ORDERS ISSUED BY THE IDAHO DEPARTMENT OF WATER RESOURCES (To be used in connection with actions when a hearing was not held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "Preliminary Order" issued by the department pursuant to section 67-5243, Idaho Code. **It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:**

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. **Note: the petition must be received by the department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

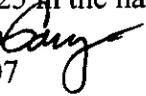
REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

MEMORANDUM

To: File no. 63-32225 in the name of Intermountain Sewer and Water
From: Gary Spackman 
Date: January 11, 2007

Re: Recommended Conditions of Approval

I reviewed the file after it was submitted to the state office. In particular, I reviewed the additional information report submitted by SPF Engineers.

The SPF report estimated a ground water boundary, applied average precipitation over the boundary, and roughly calculated average annual recharge volume to the deep regional aquifer. Because the actual computation of the actual recharge was low, SPF increased its estimate of recharge based on the initial coarse computations.

In the water balance computation, SPF assumed that all recharge attributed to flowing streams would reach the deep regional aquifer. In the report, however, SPF also recognizes shallow, perched aquifers associated Indian Creek. The geologic stratum that creates the shallower water table impedes downward movement of water. A significant portion of the perched water in the Indian Creek Drainage may migrate away from the regional aquifer without ever percolating and recharging the deep aquifer. As a result, the low estimate of 8,000 acre feet of aquifer recharge may be high. The average annual recharge to the designated boundary could be as low as approximately 4,000 to 5,000 acre-feet.

Significant additional development is proposed in the vicinity of the development proposed by Intermountain. Presently, there are no sources of recharge through delivery of surface water, and ground water is the sole source of culinary/potable water in the area. IDWR has not been approving new applications for irrigation in basin 63. As a result, irrigation of common areas, large parks, and in particular, irrigation of an 18 hole golf course should not be allowed under the proposed appropriation unless the land is irrigated with water already used for culinary/potable use, captured and treated in the waste water treatment plant.

I recommend the following conditions of approval:

Common areas, parks, school grounds, golf courses, and any other large parcels may only be irrigated with wastewater that has been previously beneficially used for potable or culinary purposes, has been treated in a wastewater treatment plant, and is delivered from the wastewater treatment plant to the parcel to be irrigated.

Water diverted under this right may be used for direct irrigation of up to one half acre per residential lot upon which a home has been constructed.

(Other conditions)

additional concerns

limited resource - municipal area
might increase to serve more homes and
utilize the 10 cfs to fullest extent.

If similar applications in the area
are approved, the expansions could
surpass the recharge available.

Should approval be conditioned to require
wells in the deep aquifer?

well monitoring?

up to
 $10 \times 1.98 \times 365$
 $\approx 7200 \text{ cf}$

Memorandum

To: File #63-32225

From: J. Westra JFW

Date: 12/04/06

RE: Application for Permit 63-32225

I would recommended the approval of the above application based on the following:

- The point of diversions are not located in a groundwater management area
- Municipal applications can be processed in basin 63
- SO Hydrology section has reviewed the hydrology information provided.
- There were no protests presented.

As there is really no data to prove the sustainability of the aquifer in this area, I would recommend that well monitoring and reporting be a condition of approval for this permit.

MEMORANDUM

September 16, 2006

To: Steve Lester *SL*

Rec'd via email

From: Shane Bendixsen

Reviewed by: Garth Newton

Subject: Application For Permit 63- 32225, Mayfield Planned Community and Report by SPF Water Engineering LLC.

The applicant is proposing to divert 10 cfs for an estimated 2,000 Households north of Mountain Home, T01N-R04E, sec 33 (see Attachment #1). The site is located on the northern edge hydrologic unit code (HUC), which is also the northern boundary for the Mountain Home Ground Water Management Area (GWMA). The following is a brief hydrologic review.

Attachment #2 presents a ground water level change map for the GWMA. As presented, the GWMA can be characterized by two areas: the southern part where the water table has dropped by as much as 60 feet and the northern part where the water table rises two to four inches per year.

While the exact reason for one area declining while the adjacent increases have never been totally explained, part has to do with land use. The southern area is characterized by ground water pumping for agricultural use while the northern area is characterized by limited domestic use. Attachment #3 presents cumulative use in cfs based on priority date for the entire HUC. As shown, agricultural use far exceeds other uses.

SPF has assumed that 80 percent of water used for domestic use returns to the aquifer. For the Eastern Snake River Plain Model, it has been assumed that 90 percent returns to the aquifer. Therefore it can be assumed that 80 to 90 percent of water for domestic use is non-consumptive. Agricultural use is almost totally consumptive.

Effects on the GWMA boundary should be minimal. Attachment #1 presents the ground water flow direction based on the 1980 RASA work. It is the most comprehensive work for the Western Snake Plain (WSP). The ground water flow direction is southwest and approximately the same as presented by SPF. Water flowing through the proposed

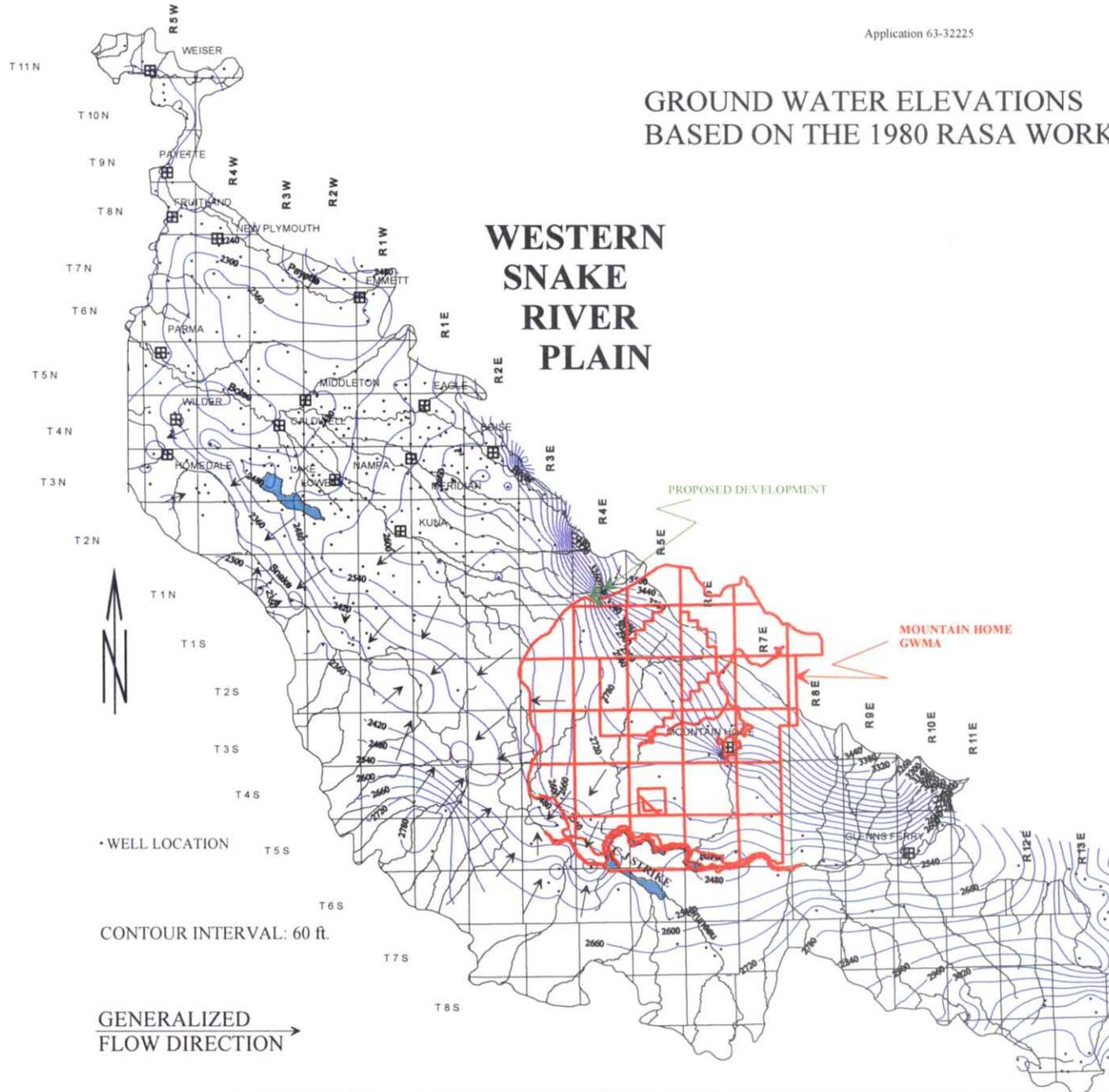
development area does not flow into the GWMA. Therefore effects on the boundary will be extremely minimal.

The protestants refer to the area as a limited ground water resource area. The GWMA is one of these areas to the south, but farther north water levels are increasing not decreasing.

In closing, the proposed development should have limited effects on ground water. This is based on rising ground water levels and the limited consumptive use of domestic development. It is recommended that the applicant should begin some type of ground water monitoring. One up gradient monitoring well and two down gradient would be preferable.

GROUND WATER ELEVATIONS BASED ON THE 1980 RASA WORK

WESTERN SNAKE RIVER PLAIN



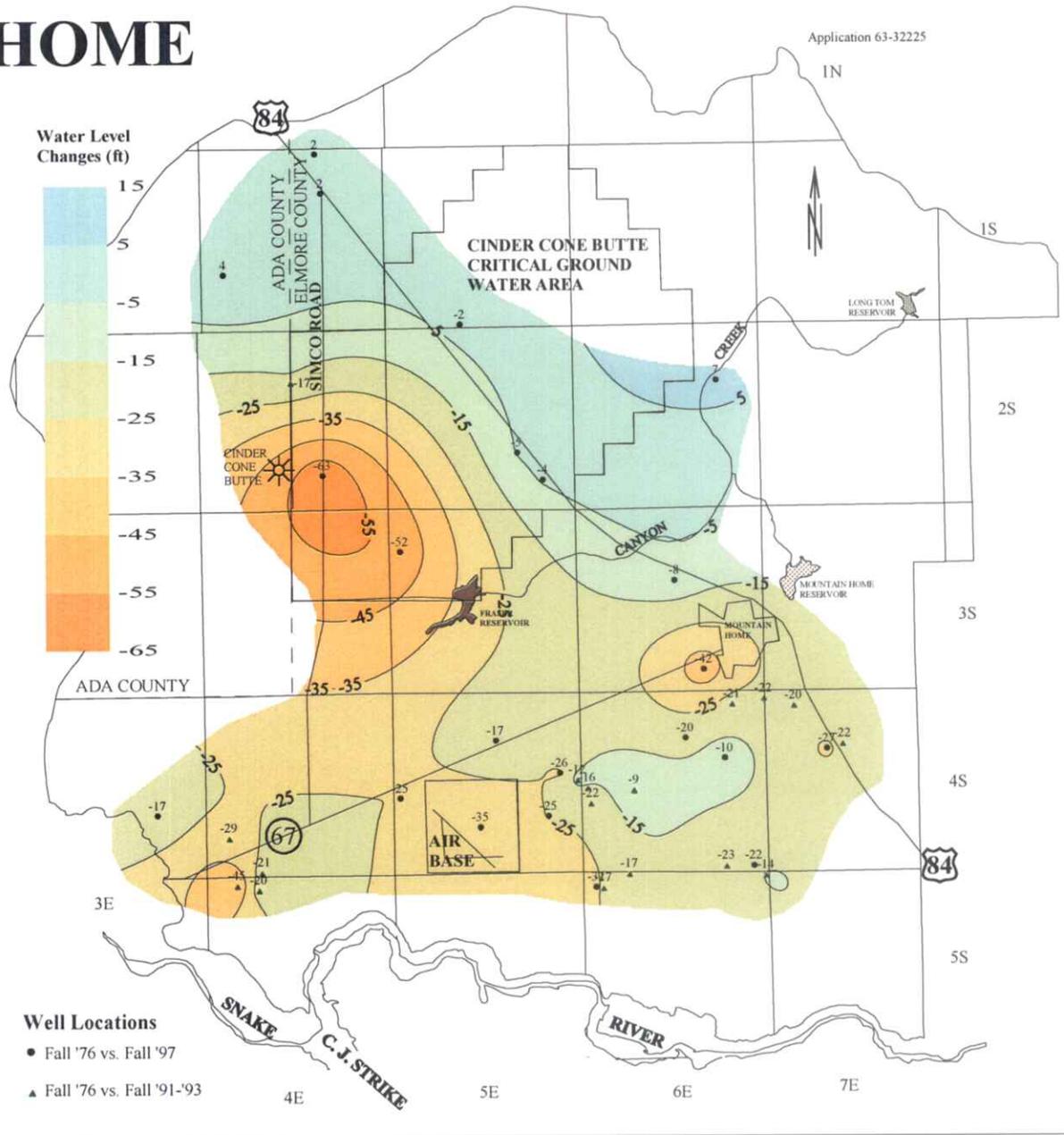
WELL LOCATION

CONTOUR INTERVAL: 60 ft.

GENERALIZED
FLOW DIRECTION

MOUNTAIN HOME GWMA

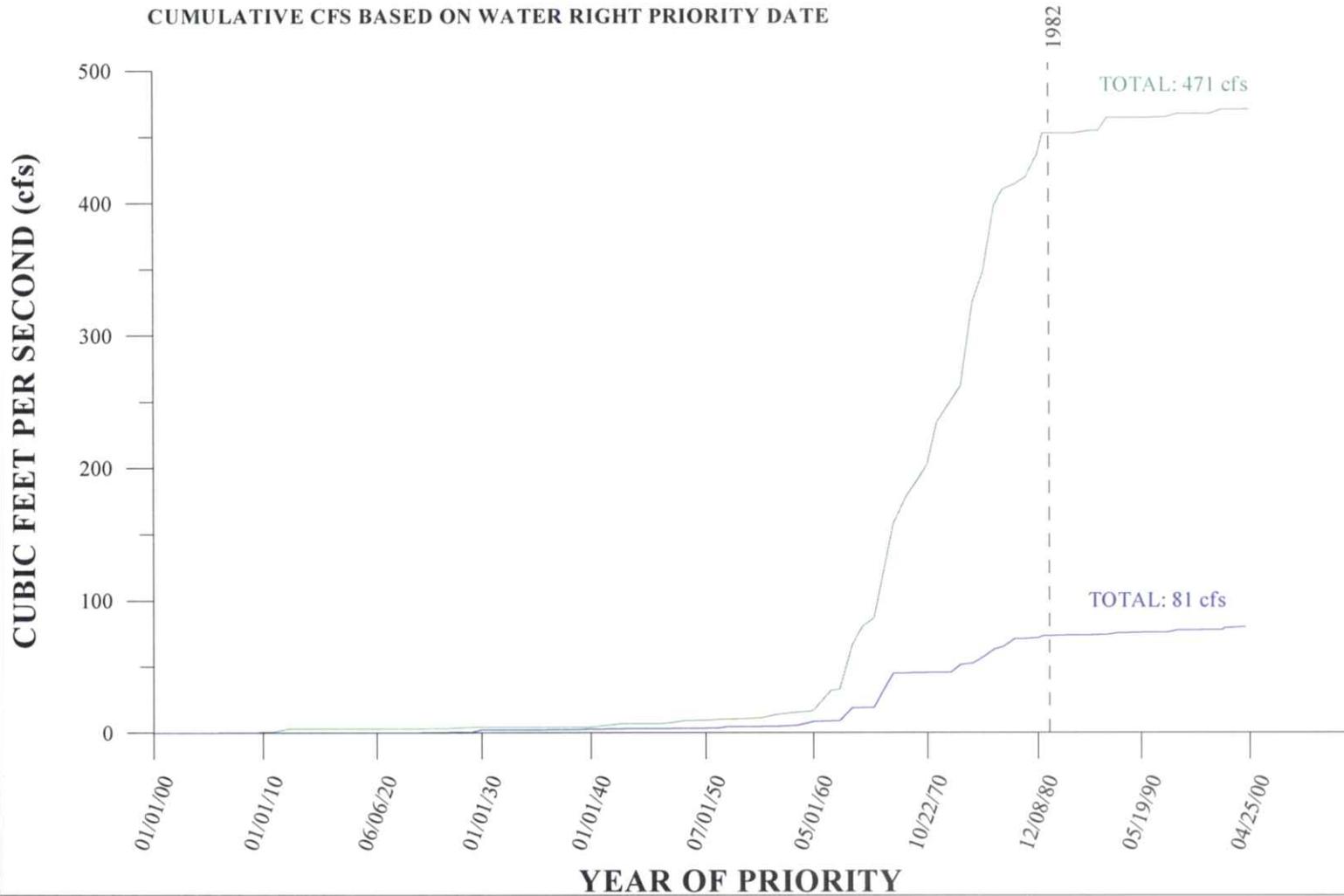
GROUND WATER LEVEL CHANGE MAP



GROUND WATER USE IN THE MOUNTAIN HOME GWMA

LEGEND
— IRRIGATION
— OTHER USES

CUMULATIVE CFS BASED ON WATER RIGHT PRIORITY DATE



Westra, John

From: James Bledsoe [jbledsoe@kellerassociates.com]
Sent: Thursday, June 08, 2006 7:20 AM
To: Charles.Ariss@deq.idaho.gov; Westra, John
Cc: 'Taylor Merrill'; Gary Carroll; Roland Rocha; Jim Keller
Subject: Mayfield Springs Meeting Minutes from Meeting on June 6, 2006

Chas and John,

I appreciate your time in visiting with us yesterday to discuss the Mayfield Springs project. I thought that I would spend a few minutes and document what we talked about yesterday. If you have any corrections or additional clarifications, please respond back to this email.

Project Overview / Flow projections

- Phasing – The development will likely see approximately 300 homes the first year and 400-500 homes each year thereafter. For planning purposes, Keller Associates is assuming approximately 500 homes per year. This would result in the first phase being built out in five years. In reality growth in Elmore County may begin before the end of the five years and some of the lots in Ada County may take longer than five years to sell. All things considered, assuming about 500 homes per year is our best estimate of what might happen.
- Density – A correction to the agenda was made. The density anticipated in Elmore County is 3.5 homes/acre. This correction would result in a projected average day demand of about 1.3 MGD to 1.4 MGD for the currently planned developments in approximately 875 acres in Ada County and about 1000 acres in Elmore County.
- Future Phases – Other property owners have approached the developers about the possibility of getting sewer service. The sewer sheds are such that a few interceptor pipelines should be oversized to accommodate future growth "upstream"

Wastewater Treatment

- It is our intent to use a MBR facility for treatment.
- We will be looking at a minimum of Class B effluent, but will be considering seriously Class A effluent because fewer restrictions are placed on its used.

Wastewater Disposal

- Several alternatives were considered. It is unlikely that we will pursue an alternative that would require an NPDES permit. Chas explained that to obtain an NPDES permit for a private development, we might see a 5 year waiting period.
- Land application appears to be the most promising use of the treated water. Initially, we hope to use most/all of the water for the golf course. As flows increase, the golf course will not be able to use all of the annual flow from the development. Reuse on common areas, private residential landscape, and agricultural irrigation will all be considered.
- Chas indicated that to reuse the water, we would need a reuse permit and that this permit would likely take 6 months to obtain. Greg Johnson directed Keller Associates to begin on this as soon as feasible.
- Chas also indicated that we would need a Class A effluent if we intended to discharge to an unlined conveyance or storage facility. The point of compliance for Class A effluent is after treatment and adequate disinfectant contact time and before discharge to the storage or unlined conveyance system.
- Use of class A effluent on private residences is only allowed during periods of "non-use (i.e. night-time) would likely require special CC&Rs and "Non-potable" labeling. Chas indicated that early morning would be an acceptable time period for irrigation.
- Most likely we will pursue rapid infiltration as a means to dispose of excess treated water – especially in the winter time when water would otherwise have to be stored. Regarding RI:
 - John Westra indicated that this would be viewed very favorably by IDWR because of its location in the Mountain Home groundwater management area
 - Chas indicated that we would need a permit with DEQ for RI and that there may be additional treatment requirements imposed on the WWTP in order to meet the requirements of the Groundwater

6/8/2006

Quality Rule. Specifically, a nitrate level of 5ppm may be imposed, unless background data and possibly a nutrient path study were able to document that a higher concentration would not violate the groundwater quality rules.

- John Westra was not aware of any perched aquifers in the area south of the interstate. Greg Johnson reported that the static groundwater level is around 350 feet below ground surface at a well near the golf course. Groundwater levels south of the interstate and further away from Indian Creek are reportably deeper.
- South of the interstate, there are reportably a lot of sands above the basalt. Greg Johnson directed Keller Associates to compile a list of geotechnical data that we will need to gather as part of our pre-design efforts. This geotechnical information will be collected by Klienfelder.

Treated Storage

- A lined golf course pond will provide some storage and will likely serve as the winter storage for the first couple years.
- Surplus water in the winter will likely be sent to a storage facility south of the Interstate. This storage facility may or may not be lined. Conveyance may be via natural channel or pipe. Water stored in the lower pond will likely be used for agricultural irrigation or allowed to enter the groundwater via infiltration.

Natural Conveyance and Earth Dam Option

- Discussed at the meeting was the possibility of constructing an earth dam and use the natural drain to convey and store the water.
- IDWR indicated that if we collected the storm water from this drainage (which is relatively small), we would need a surface water right. It may not be difficult to obtain this right, but it would likely require 6 months. Greg Johnson directed Keller Associates to begin this process with IDWR.
- Chas indicated that EPA may or may not consider this natural draw as "waters of the US." Keller Associates will pursue a determination from the Army Corp of Engineers and will then pursue a regulatory determination from EPA. Our local EPA contact is Maria Lopez (373-5616).
- In the event that EPA requires an NPDES permit for use of the natural draw as our conveyance, Greg Johnson indicated that we would probably just pipe the effluent to the storage pond and keep the storage pond separate from the drainage system.
- BLM's approval will be required if the project involves there land. As a minimum, we will likely be looking at getting an easement for our treated water to cross their land. It is possible that the land may be purchased at a future date, depending on the designation of this section of land post 2008. At this point, we are not planning on obtaining the land for the use of a natural storage facility.

James Bledsoe, PE
Keller Associates, Inc.
(208) 288-1992

MEETING NOTES

Mayfield Springs Dev.

From: J. Westra

Date 6/6/06

Location: Keller Eng. Offices, Meridian

Parties: Greg Johnson

James Bledsoe

Chaz Ariss—DEQ

Mr. Keller

Several other related business parties.

RE: Water and Waste Water Discussion

-The discussion began with Mr. Bledsoe presenting the project, phases, and boundaries. See attached maps and outlines.

- Development will utilize treated waste water (cat.A) for irrigation of yards and golf course any excess will be used for Ag. land irrigation—parcel south of I-84 owned by Johnson

-Discussed options of treated waste storage in natural draw with dam—lined and unlined. winter storage and pump back to place of use.

-If there is collection of surface water from natural draw, a water right is needed. IDWR will process an application.—draw flows are minimal.

-Looked at possibilities of obtaining permits for discharge into draw----not real good response from DEQ.—Was not that familiar with lingo/Chaz stuff.

-Discussed treatment of waste by membrane and water quality standards.

-Updated group on water application status—not protested, continue to process. Lots of questions about water supply—area well production. Referred them to Scanlan.

Related IDWR Actions:

-James B. will implement the filing of a water right with IDWR for surface water storage from natural draws—assist with details.

Attachments: Meeting Agenda, Maps

Mayfield Springs

Meeting with IDWR and DEQ
June 6, 2006

Purpose of Meeting

- Make DEQ and IDWR aware of wastewater disposal issues of Mayfield Springs project
- Review / identify permit requirements, special constraints, and other pertinent issues that will need to be addressed as part of the agency review and approval process

Overview of Project

- Location – near truck stop, between Mountain Home and Boise
- Maps – see attached
- 1st Phase – Ada County
 - 875 total acres
 - Approx. 2400 EDUs (Res. & Commercial)
 - 175 acre, 18 hole golf course
- 2nd Phase – Elmore County
 - Add'l 1000 acres
 - 2.5 homes/acre
- Future Phase – Elmore County

Wastewater Flow Projections

Phase 1 (Ada County Only) = 0.53 MGD Average Day Flow

Phase 2 (Elmore County Plus Ada County) = 1.1 MGD Average Day Flow

Future Phases = 0.22 MGD per 1000 EDUs 1.4

5 yrs. 400-500 homes / yr.

Wastewater Treatment

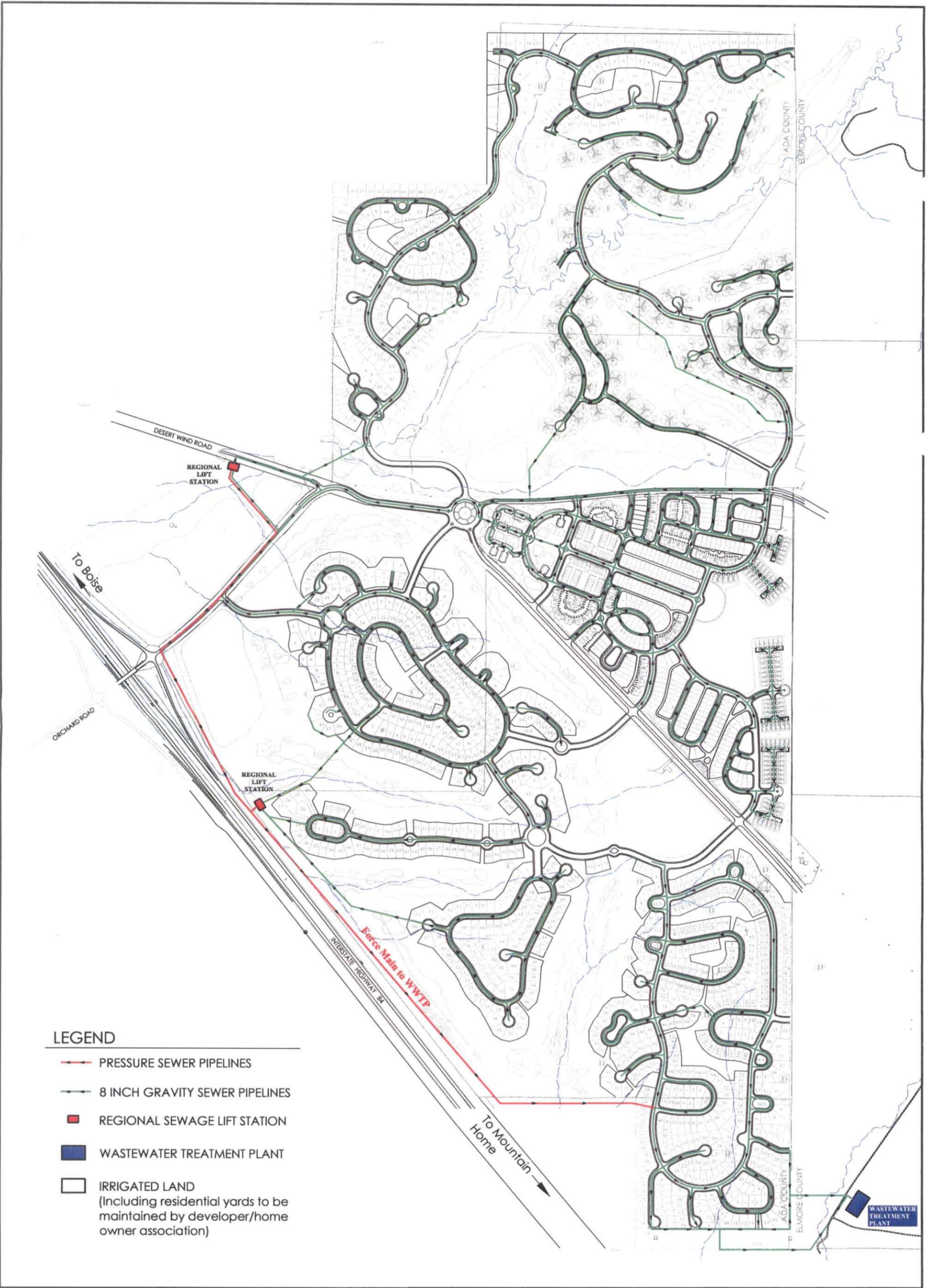
- MBR treatment technology
- Class B effluent
- Possibility of going to Class A effluent

Reclaimed Water Disposal

- Intent to use for irrigation of golf course and common areas
- Possibility of irrigating residential areas
- Also considering land application for agricultural crops
- As flows increase, desire rapid infiltration during winter months to reduce storage needs (aquifer recharge)
- Possible WWTP discharge to Indian Creek or normally dry drainage channels for conveyance to storage facilities or RI basins

Reclaimed Water Storage

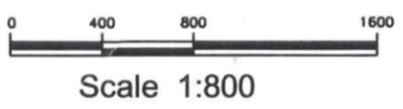
- Lined versus unlined
- Possibility of damming up natural drainage way



LEGEND

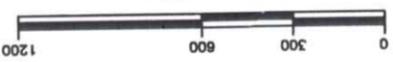
- PRESSURE SEWER PIPELINES
- 8 INCH GRAVITY SEWER PIPELINES
- REGIONAL SEWAGE LIFT STATION
- WASTEWATER TREATMENT PLANT
- IRRIGATED LAND
(Including residential yards to be maintained by developer/home owner association)

WASTEWATER MASTER PLAN



**Mayfield Springs
Planned Community**
May 2006





PROJECT AREA



05037
 This drawing is not to be used for any other project without the written consent of the author. The author assumes no responsibility for any errors or omissions in this drawing. The user of this drawing is advised to verify all information and to consult with the author for any clarification. The author is not responsible for any consequences arising from the use of this drawing. The user of this drawing is advised to consult with the author for any clarification. The author is not responsible for any consequences arising from the use of this drawing.



Land Use Summary

Site Area	875 Ac. +/-
A. View Lots- 70-75' x 120' Ave.	119 Lots
B. Executive Lots- 80-90' x 120' Ave.	112 Lots
C. Golf Oriented- 65-75' x 110' Ave.	387 Lots
D. Greenway Village Lots- 55-65' x 100' Ave. (SE Portion of Site)	375 Lots
E. Courtyard Homes	166 Homes
F. Hillside Cluster Homes	106 Homes
G. Multi-Family 19 Ac. @ 20 DU/Ac.	380 Units
Subtotal	1645 Homes
II. Traditional Neighborhood Development Walkable Village	
a. Alley Loaded Single Family	207
b. Alley Loaded "Mansions" Tri-Plexes	135
c. "Fee Court" SFD "Parkwood Court" Homes	100
d. "Fee Court" Townhomes	72
Subtotal	514 Homes
Total	2159 Homes

For T.N.D. Layout see separate 100' Scale Drawing
Gross Density 2.5 DU/Ac.

Master Plan Mayfield Springs

Ada County, Idaho

Prep.
 Powder River Development Corp.
 Greg Johnson, President
 660 East Franklin Road
 Suite 240
 P.O. Box 344
 Meridian, Idaho 83680

Land Planner:
 David A. Clinger & Assoc. Ltd.
 21759 Cabrini Boulevard
 Golden, Colorado 80401
 303-526-9126

05037
 Scale: 1" = 200'
 January 20, 2006
 February 3, 2006

MEMORANDUM

TO: Shane Bendixsen
FROM: Steve Lester 
DATE: June 2, 2006
RE: Technical Analysis of SPF Water Engineering Report

Western Region is processing Application 63-32225 for a planned community near the truck stop between Boise and Mtn. Home in the Mayfield area. **The following information is enclosed:**

1. copy of the application
2. copy of my 12/16/06 letter requesting additional information
3. copy of an attempted protest (filed too late but department will consider that person's comments and concerns)
4. original SPF 3/20/06 response/report.

Please review this information to determine if the SPF report sufficiently addresses the following concerns:

1. effect on existing water rights in that area¹, sufficiency of water supply for the site, and water-related issues for people within the same watershed (local aquifer?)²
2. effect on Mtn. Home GWMA boundary
3. issues identified by the person who tried to protest the application.

Your analysis of the **technical issues**, without having to worry about financial and other non-technical issues, would be very helpful. Please return the SPF report with your reply and let me know if you need more information or any other help. Thank you for your help.

¹ Assume that impact area includes the area in which ground water declines would occur under the proposed development. Also assume it includes any surface water systems impacted by the proposed ground water pumping.

² Same parameters as footnote #1.



March 20, 2006

RECEIVED

MAR 22 2006

WATER RESOURCES
WESTERN REGION

Steve Lester
IDWR - Western Region
2735 Airport Way
Boise, ID 83705

Subject: Application for Permit No. 63-32225 for Intermountain Sewer and Water Corporation

Dear Steve:

In response to your December 16, 2005 request for additional information regarding the above-referenced application, this letter addresses additional information requirements under Idaho Water Appropriation Rule 40, Rule Subsections 040.05c through 040.05g. Included is information about the following:

1. Effect on existing water rights
2. Sufficiency of water supply
3. Good faith, delay, or speculative purposes
4. Financial resources
5. Local public interest

The following paragraphs provide the requested additional information. Supporting data and analysis are provided in the accompanying report titled "Water Supply Assessment for the Mayfield Springs Planned Community."

Subsection 040.05(c)ii - Plat showing proposed wells relative to existing wells and springs within 1/2 mile radius

not Figure 17

A map showing locations of proposed wells relative to existing wells within a 0.5-mile radius is shown in the accompanying report (Figure 17). We are not aware of any springs in this area.

Subsection 040.05(c)iii - Information concerning any design, construction, or operation techniques to eliminate or reduce the impact on other water rights.

The primary target for proposed withdrawals will be deeper aquifers, with wells extending to depths of 800 feet or more. This will reduce or eliminate impacts to existing water rights diverting from shallow wells and/or surface channels.

To the extent possible, wastewater from domestic uses will be recovered and reused for irrigation purposes. This will reduce the amount of ground water withdrawals required for the proposed community.

golf course

Subsection 040.05(d)i – Water requirements for the proposed project

Water demand estimates for the Mayfield Springs planned community are outlined in Section 1.3 of the attached report. The maximum instantaneous peak water demand for this development is anticipated to be 10.0 cfs. This includes 2.5 cfs for domestic use in 2,000 homes, 6.0 cfs for landscape irrigation of 300 acres (0.15 acres per home), 0.50 cfs for commercial uses, 0.5 cfs for industrial uses, and 0.5 cfs for miscellaneous uses. Fire protection flows will be provided with storage reservoirs.

The period of use will be January 1 through December 31. The annualized average diversion rate is estimated to be approximately 2.5 cfs (1,130 gpm). The average annual diversion volume is estimated to be approximately 1,815 acre feet.

Subsection 040.05(d)ii – Quantity of water available

Aquifers underlying the Mayfield Springs area are present in unconsolidated sediments and volcanic layers. The primary water-bearing zones are found in coarser-grained sedimentary zones (such as sand and gravel layers) or in fractured basalt or cinder zones. Recharge to shallow aquifers occurs through areal infiltration and seepage from surface water bodies (e.g., Indian Creek, tributaries to Indian Creek, and Indian Creek Reservoir). Recharge to deeper aquifers occurs as downward flow from overlying shallow aquifers and underflow at basin margins. Total aquifer recharge in an average year likely ranges from approximately 8,600 to 32,000 acre feet. This amount of estimated recharge is substantially greater than the anticipated amount required for new uses (1,815 acre feet for the proposed planned community) and existing uses (700 acre feet) in the Mayfield Springs area.

where does this come from

pet?

Subsection 040.05(e)i – Information relative to good faith, delay, or speculative purposes of the applicant

The following documents are enclosed.

1. Real Estate Purchase Agreement between Greg Johnson (Buyer) and Helen Agenbroad (Seller)
2. Warranty Deed from North Valley Land, LLC to Greg and Heidi Johnson, Scott Merrill, and Spencer Merrill.

3. Warranty Deed from M R Miller Inc., to Greg and Heidi Johnson
4. Warranty Deed from Keith and Sandra Helmick to Greg and Heidi Johnson
5. Warranty Deed from Petre and Wendi Draghici to Greg and Heidi Johnson
6. Warranty Deed from James and Bonnie Phagan to Greg and Heidi Johnson
(We discovered that the Warranty Deed incorrectly lists this sale to Greg and Marilee Johnson. This error will be corrected.)
7. Warranty Deed from James and Cynthia Thompson to Heidi Johnson
8. Warranty Deed from Robert and Elizabeth Garrard to Greg and Heidi Johnson

These deeds and the purchase agreement cover all of the property within the proposed place of use. Greg Johnson is the registered agent for Intermountain Sewer & Water Corp.

Subsection 040.05(e)ii – Copies of other needed permits, licenses and approvals

Intermountain Sewer & Water will submit plans and specifications for all water and sewer facilities to the Idaho Department of Environmental Quality (IDEQ).

If Intermountain Sewer & Water becomes a for-profit utility, it will make any necessary filings with the Idaho Public Utilities Commission.

A planned community application for Mayfield Springs will be submitted to Ada County Planning and Development Services Department within the next two months.

Subsection 040.05(f)i – Current financial statement

A financial statement or a similar document is contained in the sealed envelope accompanying this letter. Greg Johnson provided this envelope to us for your review.

← \$ info confidential

Subsection 040.05(f)j – Plans, specifications, and construction cost estimate

Detailed plans and specifications have not been prepared for the project. We currently anticipate that the project will include a minimum of three 16-inch diameter wells, each extending to a target depth of approximately 900 feet. The project will also include a storage tank, booster pump station, and distribution piping. Total costs for wells, storage, and booster pump station will be approximately \$3 million. A preliminary estimate of costs for distribution and

transmission piping is \$4.5 million, based on an estimated 100,000 feet of pipe, with an average installed cost of \$45 per foot including appurtenances (hydrants, valves, services, etc.).

Subsection 040.05g – Information relative to public interest

As stated previously, a planned community application for Mayfield Springs will be submitted to Ada County Planning and Development Services Department within the next two months.

Intermountain Sewer and Water will submit to IDEQ detailed Technical, Financial, and Managerial Capacity documents, and plans, specifications, and as-built certifications for all water facilities. IDEQ approval is required for Intermountain Sewer and Water to become a public water supply, as defined by Idaho Code 39-103(12). A corporation that supplies water for municipal purposes through a regulated public water supply meets the definition of a municipal provider.

Other information requested.

IDWR guidelines for internal domestic water use suggest that about 2.08 cfs is required for 2000 homes. However, Idaho Rules for Public Drinking Water Systems (IRDWS) Section 552.01 requires a minimum daily production capacity of 800 gpd per unit for domestic uses (without irrigation). The required peak-day flow rate to serve 800 gpd per unit for 2,000 homes would be approximately 2.5 cfs.

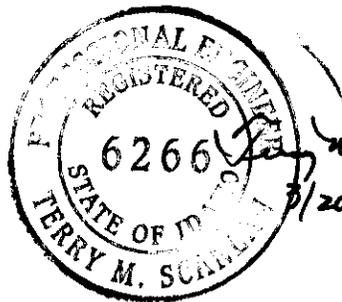
The proposed appropriation (estimated average annual withdrawals of approximately 2.5 cfs) is not anticipated to have a significant impact on water rights and water levels within the Mountain Home Ground Water Management Area. As detailed in the enclosed report, ground water levels in the Mayfield Springs vicinity are stable, and recharge rates appear to be sufficient to support the proposed water use. The Ground Water Management Area boundary is based on the drainage divide between the Indian Creek watershed and Sand Hollow. This boundary is also the boundary between administrative basins 61 and 63. With respect to ground water conditions, the ground water management area boundary is an administrative boundary, and pumping under the proposed permit should not cause the boundary migrate or change.

Sincerely,

Terry M. Scanlan

Terry M. Scanlan, P.E., P.G

cc: Greg Johnson



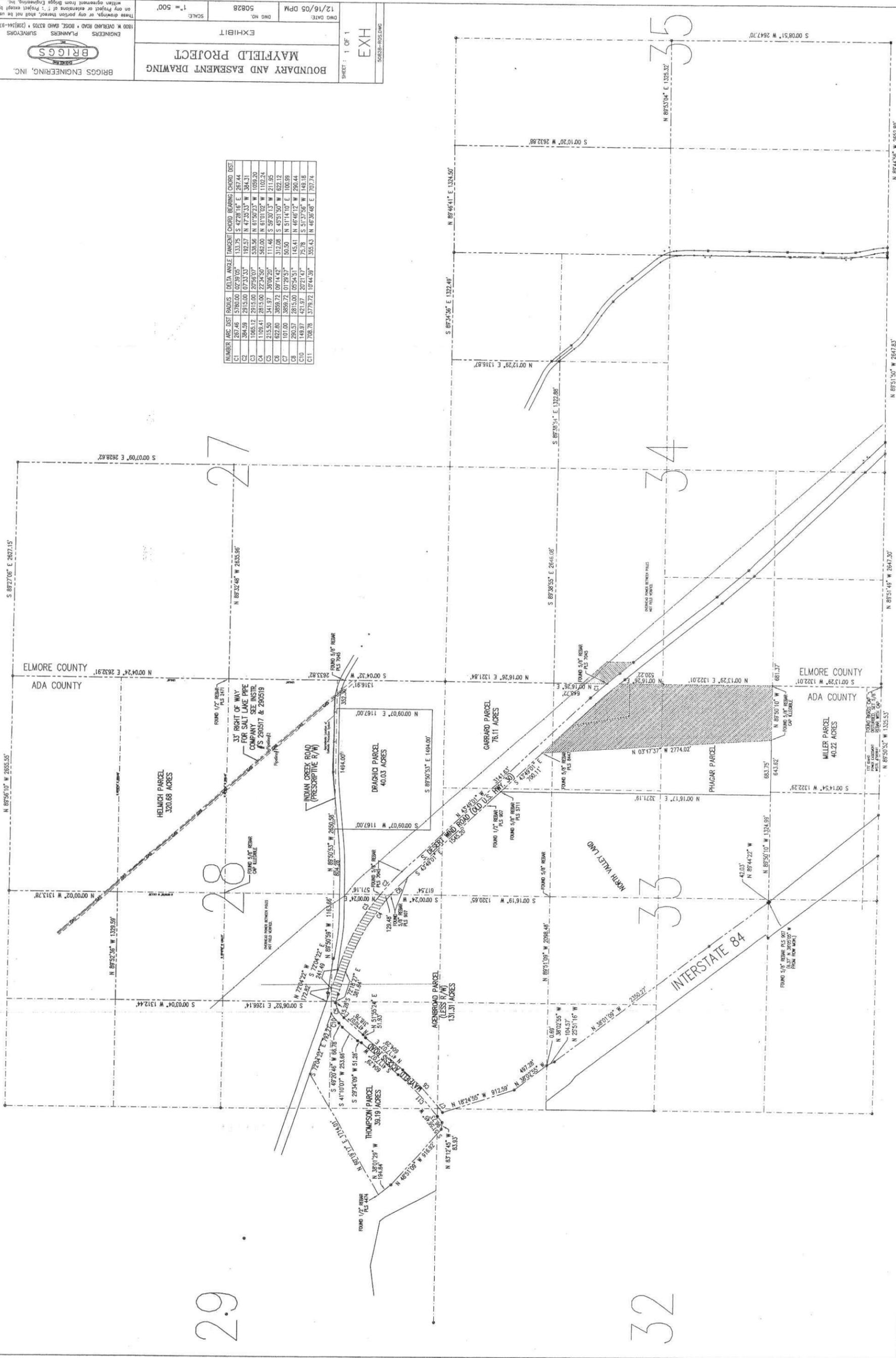
Attachments

1. *"Water Supply Assessment for the Mayfield Springs Planned Community"*
2. Deeds and purchase agreement.
3. Financial information

Document Info:

Filename: S:\Projects\S thru Z Projects\W Projects\West Park Company_329\0050_stagstop_water_study\Response to SL(IDWR)
re PermitQs.doc
SPF file number: 329.0050

NUMBER	ARC DIST	RADIUS	DELTA ANGLE	TANGENT CHORD BEARING	CHORD DIST.
C1	267.46	1760.00	07°30'55"	S 47°28'16" E	267.44
C2	394.59	2015.00	07°33'33"	S 47°35'33" W	384.51
C3	1086.19	2015.00	20°36'57"	S 38°36'57" W	1059.20
C4	1169.41	2015.00	22°34'57"	S 36°00'00" W	1102.29
C5	215.50	341.97	38°30'20"	S 59°30'13" W	211.95
C6	652.80	3869.72	08°44'47"	S 32°08'54" W	622.12
C7	101.00	3869.72	07°49'57"	S 50°30'00" W	100.89
C8	200.57	2015.00	05°54'51"	N 145°41'00" E	200.44
C9	489.97	421.97	20°21'47"	S 75°78'51" W	449.18
C10	708.76	1779.72	10°44'39"	S 355°43'00" E	707.74



29

28

27

32

33

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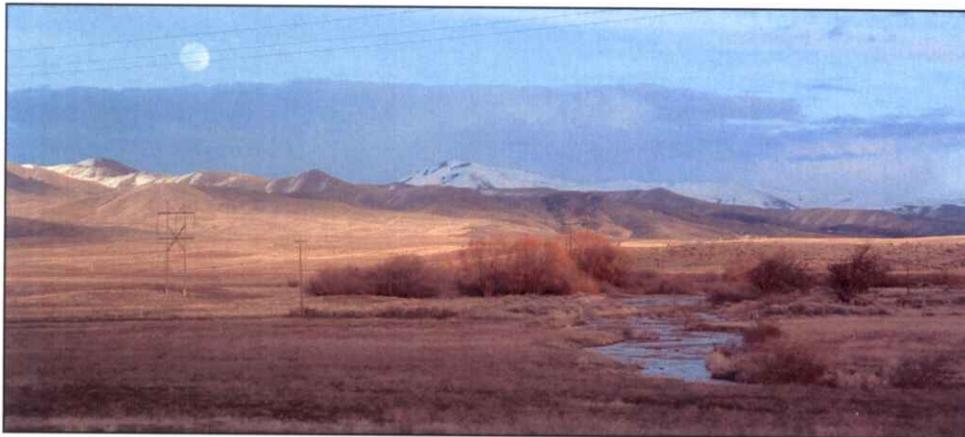
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RECEIVED

MAR 22 2006

WATER RESOURCES
WESTERN REGION

WATER SUPPLY ASSESSMENT FOR THE MAYFIELD SPRINGS PLANNED COMMUNITY



Prepared for

Intermountain Sewer and Water Corporation

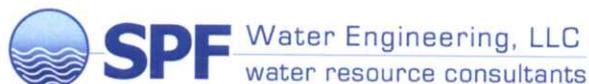
P.O. Box 344
Meridian, ID 83660

Prepared by

SPF Water Engineering, LLC

600 East River Park Lane
Boise, ID 83706

March 20, 2006



63-32225

MEMORANDUM

TO: Water Right File # 63-32225

FROM: Darla Block

DATE: May 25, 2007

RE: Financial Statement

IDWR did receive the financial statement of Greg B Johnson on March 22, 2006 as part of a Water Supply Assessment from SPF Water Engineering. The financial statement received was reviewed, and is no longer needed for the file since a water right permit has been issued. The financial statement is a confidential document, which is being returned to the owner:

INTERMOUNTAIN SEWER & WATER CORP
C/O GREG B JOHNSON
660 E FRANKLIN RD
MERIDIAN ID 83642

EXECUTIVE SUMMARY

The proposed Mayfield Springs Planned Community (Mayfield Springs) is located about 20 miles southeast of Boise in eastern Ada County. Once constructed, the development will require approximately 1,800 acre-feet of water per year, or an average pumping rate of approximately 1,130 gallons per minute (gpm), for domestic, commercial, and industrial purposes. Five wells will likely extend to depths ranging from about 600 feet to over 800 feet, with static water levels ranging from approximately 300 to 600 feet below ground surface.

SPF Water Engineering, LLC (SPF) conducted an assessment of potential ground water availability to meet the needs of the proposed community. The primary conclusions from this assessment are that there is likely sufficient water available for the proposed uses and that substantial impacts to nearby, existing water rights are unlikely. Specific conclusions include the following:

Aquifer Characteristics

1. Aquifers underlying the Mayfield Springs area are present in layers of unconsolidated sediments and volcanic materials.
2. Primary water-bearing zones are found in coarser-grained sedimentary zones (such as sand and gravel layers) or in fractured basalt or cinder zones.
3. Coarse-grained sediments in the Mayfield Springs area originated in nearby highlands and are consistent with alluvial fan deposits.
4. Clay layers or unfractured basalt may form partial aquitards in the Mayfield Springs area. However, it is unlikely that these aquitards are areally extensive because of varying geologic materials and proximity to basin margins.
5. All of the shallower existing wells (e.g., less than 300 feet deep) are within about one mile of Indian Creek or Indian Creek Reservoir. Some of these wells are likely completed in perched aquifer zones.
6. All of the wells further than about one mile from Indian Creek are at least 400 feet in depth (the deepest well extends 811 feet below ground surface).

Aquifer Recharge and Discharge

7. Recharge to shallow zones occurs through areal infiltration and seepage from surface water bodies (e.g., Indian Creek, tributaries to Indian Creek, and Indian Creek Reservoir).

8. Recharge to deeper zones occurs as downward flow from overlying shallow aquifers and infiltration at geologic contact zones.
9. Total aquifer recharge in an average year likely ranges from approximately 7,000 to 28,000 acre feet.

Depth to Water

10. Static water levels in existing wells range from less than 100 feet to over 600 feet.
11. All wells with static water levels less than 200 feet are located within approximately one mile of Indian Creek or Indian Creek Reservoir. These wells are likely completed in perched aquifer zones.

Existing Well Yields

12. Well yields listed on drillers' reports range from zero to 200 gpm. Some of these yields may have been limited by testing method (airlift) and/or well construction.
13. One well (the Ken Agenbroad Well) was tested at a rate of 550 gpm for 6 hours and 795 gpm for 1 hour. The aquifer transmissivity in this area was estimated to be approximately 7,300 gpd/ft (based on an aggregate screened thickness of 130 feet), indicating moderate aquifer productivity. It is likely that overall aquifer transmissivity is greater based on experience with other alluvial-fan aquifers and because the effective aquifer thickness is greater than that penetrated by the Agenbroad well.
14. All of the wells listing an initial yield greater than 50 gpm are located within approximately one mile of Indian Creek or Indian Creek Reservoir.

Water Levels

15. Water levels in the Mayfield Springs area are generally stable.
16. Ground water flow directions (based on contours drawn from available water-level data) are generally from the northeast to southwest.

Water Quality

17. Water quality data for the area are limited, but available data suggest that ground water quality is good. Arsenic and fluoride concentrations were less than current Maximum Contaminant Levels (MCLs).

New Well Construction

18. Wells for the new development will likely extend to depths ranging from 600 to over 800 feet, with static water levels ranging from approximately 300 to 600 feet below ground surface.
19. Wells should be constructed so as to minimize the potential for downward movement of ground water from perched aquifers to lower zones.

Water Availability

20. There is likely a sufficient amount of water available for the proposed uses. The amount of estimated recharge in this area (7,000 to 28,000 acre feet) is substantially greater than the anticipated amount required for new uses (1,815 acre feet for the proposed planned community) and existing uses (700 acre feet) in the Mayfield Springs area.
21. Currently stable (or slightly increasing) water levels indicate that water is available for additional appropriation.

Potential Impacts to Existing Water Rights

22. Impacts on existing water rights are unlikely because estimated recharge in the Mayfield Springs area substantially exceeds the amount of existing and new water demands.

Potential Impacts to Water Levels in the Mountain Home GWMA

23. It is unlikely that new withdrawals for the Mayfield Springs Community will have a significant impact on water levels or water rights within the Mountain Home Ground Water Management Area (GWMA), for several reasons:
 - a. New wells are not being proposed within the Mountain Home GWMA.
 - b. Current ground water levels within the GWMA in the Mayfield Springs area are stable (or rising slightly).
 - c. The primary recharge source in the Mayfield Springs area is seepage from Indian Creek, tributaries to Indian Creek, and Indian Creek Reservoir, which are outside of the GWMA.
 - d. Ground water flow is generally parallel to the northwest boundary of the Mountain Home GWMA – new uses will likely not reduce underflow into the Mountain Home GWMA.
24. The Mountain Home GWMA boundary appears to be based on the drainage divide between the Indian Creek watershed and Sand Hollow, which also is the boundary between administrative basins 61 and 63. Ground water withdrawals in the Mayfield Springs area will not have a hydrologic impact on this administrative GWMA boundary.

Ground Water Monitoring Recommendations

25. Water level monitoring should be conducted in the area prior to and following the construction of new public water system wells. Monitoring should occur on a periodic basis (e.g., quarterly initially, semi-annually thereafter) for an extended period of time (e.g., 5 to 10 years) during and following construction.

Table of Contents

Executive Summary	ii
Aquifer Characteristics	ii
Aquifer Recharge and Discharge	ii
Depth to Water	iii
Existing Well Yields	iii
Water Levels	iii
Water Quality	iii
New Well Construction	iii
Water Availability	iv
Potential Impacts to Existing Water Rights	iv
Potential Impacts to Water Levels in the Mountain Home GWMA	iv
Ground Water Monitoring Recommendations	iv
1. Introduction	1
1.1. Background	1
1.2. Purpose and Objectives	2
1.3. Water Demand	3
2. Hydrologic Conditions in Vicinity of Mayfield Springs	5
2.1. General Geology	5
2.2. Drillers' Report Review	6
2.3. Reported Well Yields	10
2.4. Well Test	10
2.5. Water Levels	10
2.6. Ground Water Flow Direction	12
2.7. Recharge and Discharge	13
2.8. Water Quality	13
2.9. Mountain Home Ground Water Management Area	14
3. Water Rights	16
4. Water Supply Assessment	20
4.1. Water Budget	20
4.1.1. Contributing Basin	20
4.1.2. Precipitation	20
4.1.3. Aquifer Inflows	20
4.1.3.1. Areal Infiltration	20
4.1.3.2. Surface Water Runoff	22
4.1.3.3. Indian Creek Reservoir	23
4.1.3.4. Evapotranspiration	25
4.1.3.5. Stream Seepage	25
4.1.4. Aquifer Outflows	26
4.1.5. Water Budget Summary	26
4.2. Ground Water Availability for Appropriation	27
4.3. Potential Impact on Existing Water Rights	28
4.4. Potential Impacts on Mountain Home GWMA	28
5. References	31

Appendices

- Appendix A: Drillers reports for wells within 3 miles of Mayfield Springs
- Appendix B: Results of pump test of the Neil Helmick Well
- Appendix C: Water levels (hydrographs) for wells near Mayfield Springs
- Appendix D: Drillers' reports for additional wells used in determining ground water flow directions
- Appendix E: General water quality data
- Appendix F: Water rights summary

List of Figures

Figure 1. Proposed Mayfield Springs Planned Community location map.....	1
Figure 2. Proposed Mayfield Springs property with general proposed well sites.....	2
Figure 3: Geology in the vicinity of Mayfield Springs.	5
Figure 4. Wells with drillers' reports within 3 miles of Mayfield Springs.....	7
Figure 5: Static water levels recorded on drillers' reports for wells in the Mayfield Springs area.....	9
Figure 6. Wells with water level measurements near Mayfield Springs.....	11
Figure 7. Ground water flow directions in Mayfield Springs area.	12
Figure 8. Wells with water quality data near Mayfield Springs.	14
Figure 9: Mountain Home Ground Water Management Area boundary (with ground water contours and general ground water flow directions – see also Figure 7).	15
Figure 10: SRBA claims in the Mayfield Springs area.	18
Figure 11: Water rights (based on statutory claims, licenses, and/or decrees) with points of diversion within 0.5 miles of the proposed Mayfield Springs wells.	19
Figure 12. Ground water capture area in the vicinity of Mayfield Springs.	21
Figure 13. Annual precipitation rates in the Mayfield Springs area.	22
Figure 14: Indian Creek Reservoir and vicinity.	23
Figure 15: Approximate Indian Creek flows on March 13, 2006.....	24
Figure 16: Hydrograph for Well 01S04E-10DAD1 (Well 9 in Figure 6).....	29
Figure 17: Hydrograph for Well 01S04E-03ADB1 (Well 10 in Figure 6).....	29
Figure 18: Hydrograph for Well 01S04E-30AAC1 (Well 12 in Figure 6).....	30

List of Tables

Table 1: Estimated water demand for Mayfield Springs Planned Community.....	4
Table 2. Wells with drillers' reports within 3 miles of Mayfield Springs.....	8
Table 3: Water rights within 0.5 miles of proposed pumping wells.....	17
Table 4: Water budget summary.....	27

1. INTRODUCTION

1.1. Background

The Mayfield Springs Planned Community (Mayfield Springs) is proposed for a location about 20 miles southeast of Boise in eastern Ada County (see Figure 1) near the Boise Stage Stop. The proposed community will include approximately 2,000 homes and commercial and industrial facilities. Five general well sites have been proposed for the Mayfield Springs property (Figure 2).

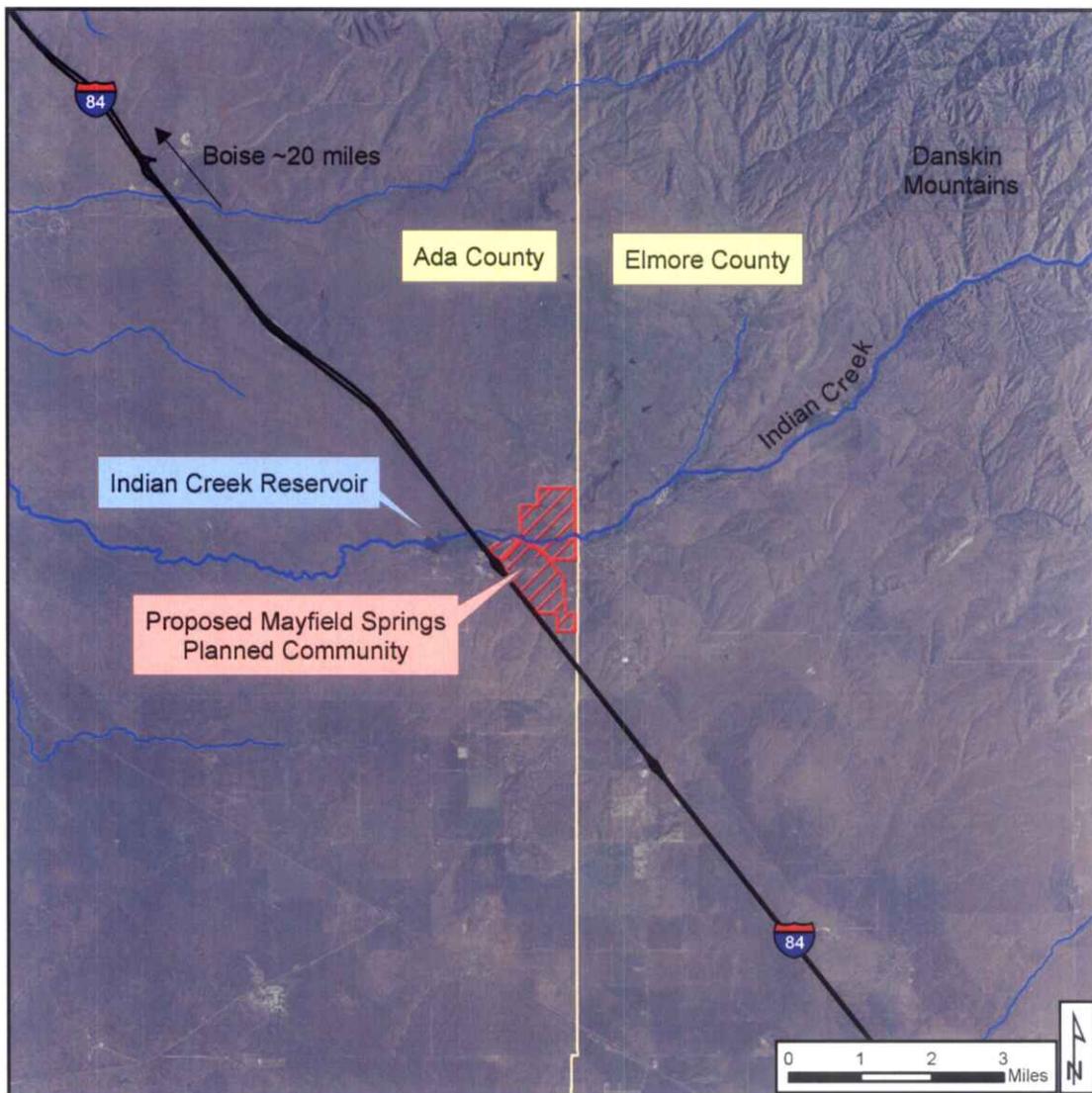


Figure 1. Proposed Mayfield Springs Planned Community location map.

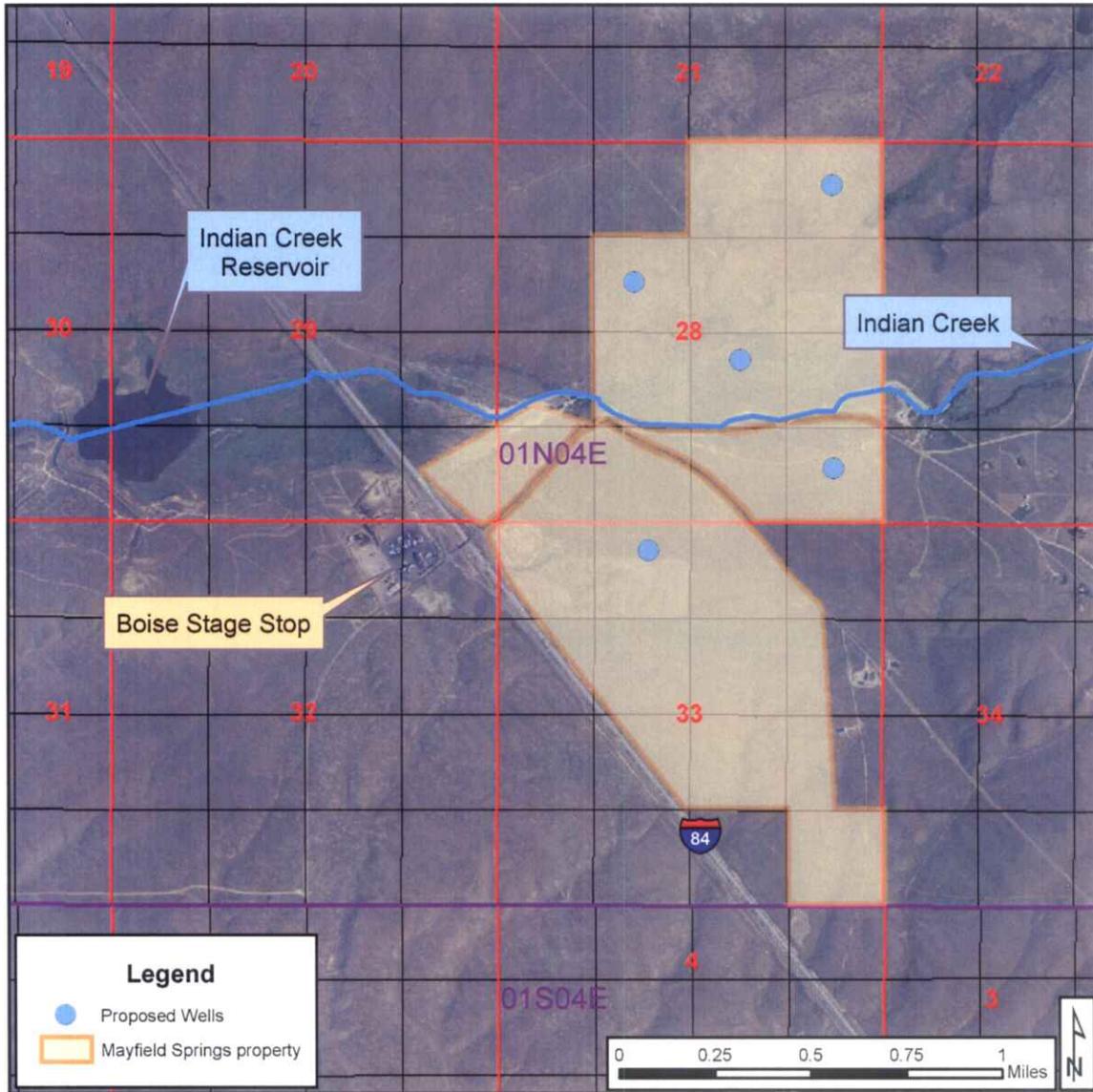


Figure 2. Proposed Mayfield Springs property with general proposed well sites.

The Mayfield Springs area lies in a high desert environment at an elevation of approximately 3,400 feet. Indian Creek, which drains a higher-elevation basin to the northeast of the property, bisects the property upstream of Indian Creek Reservoir. Indian Creek Reservoir is about one mile west of the proposed community.

1.2. Purpose and Objectives

The purpose of this assessment was to evaluate potential water availability in aquifers underlying the Mayfield Springs site. Specific objectives of the assessment included the following:

1. Review local geology based on existing reports and information
2. Obtain and review drillers' reports for local wells
3. Obtain and evaluate available water level data
4. Obtain and review available water quality data
5. Assess water availability based on general aquifer characteristics and estimated aquifer recharge and discharge.
6. Evaluate potential impacts on existing water rights
7. Evaluate potential impacts to water levels in the Mountain Home Ground Water Management Area (GWMA).

1.3. Water Demand

A new ground water-based public water system is proposed for the Mayfield Springs Planned Community. Ground water for the water system will be drawn from up to five wells located within the Mayfield Springs area.

The anticipated peak water demand for this development is 10.0 cfs (Table 1). This amount includes 2.5 cfs for domestic use in 2,000 homes (based on IDEQ requirements of 800 gallons per day per unit), 6.0 cfs for landscape irrigation of 300 acres (0.02 cfs per acre), 0.50 cfs for commercial uses, 0.5 cfs for industrial uses, and 0.5 cfs for miscellaneous uses. Fire protection flows will be provided with storage reservoirs.

The average annual ground water requirement for residential, commercial, industrial, and miscellaneous purposes was estimated to be approximately 1,815 acre feet (Table 1). This estimate includes an average annual demand of approximately 1,460 acre feet for residential domestic and irrigation uses and 350 acre feet for commercial, industrial, and other miscellaneous uses. The residential average-use estimates were based on the following assumptions:

1. Average daily demand of 250 gallons per residential unit for domestic purposes. This estimate is likely high; the Surprise Valley subdivision in southeast Boise uses approximately 225 gallons per residential unit per day for domestic purposes.
2. Approximately 0.15 irrigated acres per home with an application rate of 4.5 feet of water per acre annually.
3. Wastewater is recovered and applied for irrigation. It was assumed that 80 percent of the total domestic consumption will be re-used.

Category	Per residential unit			Total Residential			Commercial, Industrial, and Misc.			Total		
	(cfs)	(gpm)	(afa)	(cfs)	(gpm)	(afa)	(cfs)	(gpm)	(afa)	(cfs)	(gpm)	(afa)
Peak water demand												
Peak rate for residential domestic uses	0.0012	0.56		2.5	1,111					2.5	1111	
Peak demand for residential irrigation	0.0030	1.35		6.0	2,693					6.0	2693	
Peak demand for commercial, industrial, and miscellaneous uses							1.5	673		1.5	673	
Peak water demand				8.5	3,804		1.5	673		10.0	4,477	
				cfs	gpm		cfs	gpm		cfs	gpm	
Average residential water demand												
Daily demand for domestic uses (annual average)	0.0004	0.17	0.28	0.77	347	560				0.77	347	560
Demand for residential irrigation				1.9	837	1350						
Wastewater re-use for residential irrigation (assume 80% of domestic water)				(0.6)	(278)	(448)						
Net annual residential irrigation demand				1.2	559	902				1.2	559	902
Average daily commercial, industrial, and miscellaneous demand							0.5	224	353	0.5	224	353
Total annual average water demand				2.0	906	1,462	0.5	224	353	2.5	1,131	1,815
				cfs	gpm	afa	cfs	gpm	afa	cfs	gpm	afa
Assumptions:												
Number of residential units: 2,000												
Peak daily demand for residential domestic uses: 800 gallons												
Average daily demand for residential domestic uses: 250 gallons												
Average irrigated area per unit: 0.15 acres												
Wastewater re-use rate: 80 percent												
Total irrigated area: 300 acres												
Residential irrigation per season: 4.5 acre-feet/acre												

Table 1: Estimated water demand for Mayfield Springs Planned Community.

2. HYDROLOGIC CONDITIONS IN VICINITY OF MAYFIELD SPRINGS

2.1. General Geology

Surficial geology (Figure 3) in the vicinity of Mayfield Springs area consists of Cretaceous-age granitic rocks (primarily granodiorite) associated with the Idaho batholith (Kii), Middle Pleistocene-age basalt (Qpmb), Pleistocene-age unconsolidated alluvium (Qpg), Pleistocene-age alluvium (Qpa), and Quaternary alluvium (Qa) (Bond and Wood, 1978). Sediments in this area appear to be mostly alluvial fan sediments that are interfingering with basalt flows from the Kuna-Mountain Home basalt field (Wood, 1996).

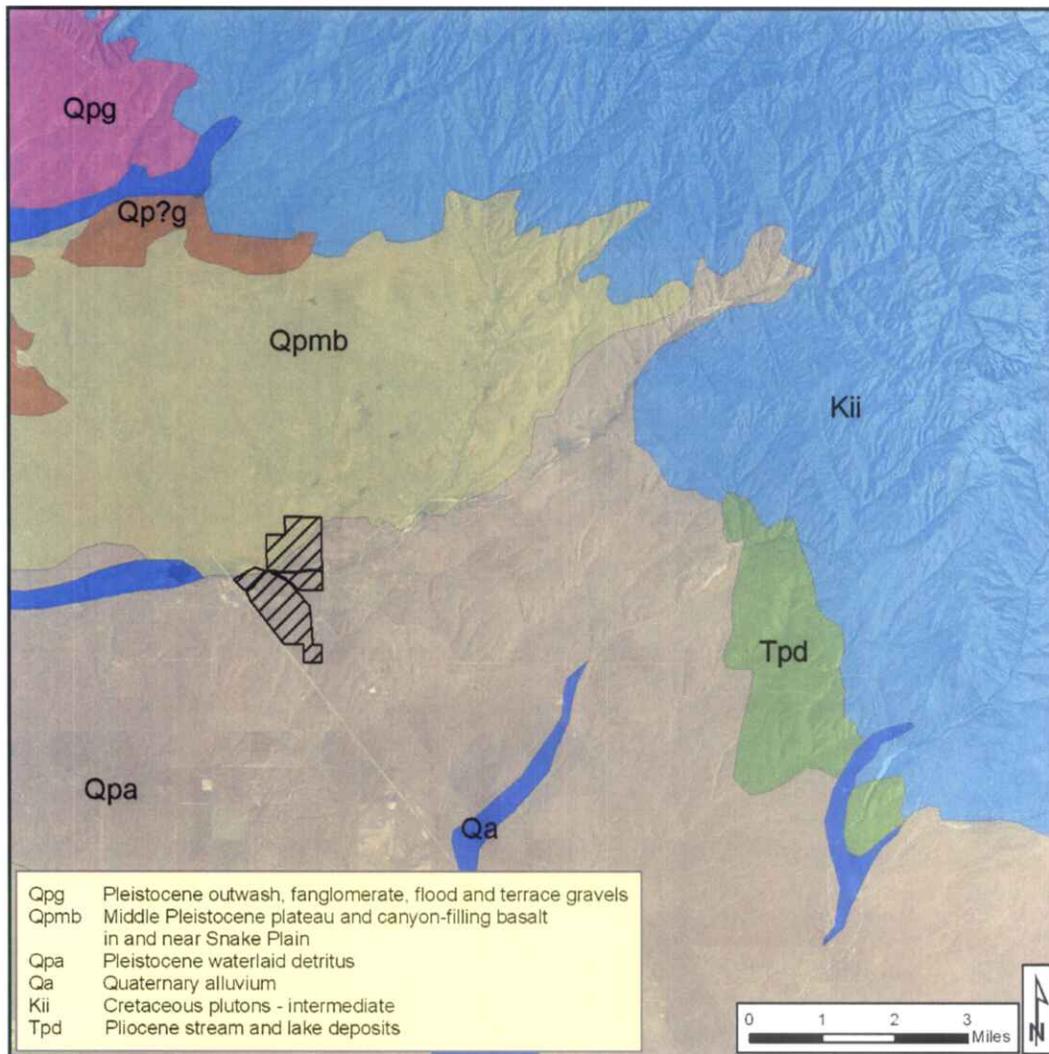


Figure 3: Geology in the vicinity of Mayfield Springs.

Normal faulting has been inferred along the base of the foothills in the Mayfield area (Wood, 1996) based on offsets observed in sedimentary section. Wood notes that the youngest depositional and volcanic units do not appear to be faulted.

2.2. Drillers' Report Review

A search for drillers' reports for the Mayfield Springs area wells was conducted using the Idaho Department of Water Resources' (IDWR) online well construction database. The search area consisted of a 3-mile radius around the Mayfield Springs property.

The IDWR well construction database contained drillers' reports for 37 wells in this area (Figure 4 and Table 2). Copies of drillers' reports for these wells are provided in Appendix A. Of the 37 wells, 27 wells are used for domestic purposes, five are used for irrigation, and two are used for commercial purposes. One driller's report lists an industrial use, one lists a stockwater use, and one well is for cathodic protection.

The depths of these wells range from 66 to 811 feet. Well depths fall into two general categories (Figure 5, page 9): shallow wells with depths ranging from 66 to 260 feet and deeper wells ranging from 390 to 811 feet. Wells located in the vicinity of Indian Creek are generally shallower than those that are located further away.

Wells in the Indian Creek area (wells 2-13 in Figure 4) and wells to the south and southeast of the Mayfield Springs property (wells 22-30 and 32) penetrated brown and blue clay with interbedded sand, silt, and occasional gravel layers. Several drillers' reports note a transition from brown to white and/or blue clay at depths of approximately 460 to 600 feet. Coarse-grained sediments (e.g., sand or gravel), if saturated, were listed as water-producing zones.

Wells 14-17 and 18-21, located west of the Mayfield Springs property, encountered basalt and cinders from as shallow as 45 feet to as deep as about 100 feet. Several of these wells extend through the volcanic materials to clay, sand, or gravel sediments. Water-producing zones were noted in cinder zones within the basalt and/or coarse-grained sediments underlying the volcanics.

Further to the southeast, drillers' reports for wells 31, 33, 34, and 38 encountered basalt and volcanic materials at depths from about 250 to over 675 feet. Water-bearing zones in these wells were noted at various depths in or interbedded with volcanic layers. The driller's report for Well 37 (the southernmost well in Figure 4) recorded only sedimentary materials, with several thin water-bearing zones between 350 and 545 feet.

Two wells located to the southwest of the Mayfield Springs area (wells 35 and 36) encountered basalt and cinders at depths from approximately 75 to 300 feet. No water-producing zones are noted in the 500-foot deep Well 35; several water-producing zones are noted in sand layers between 570 and 695 feet in Well 36.

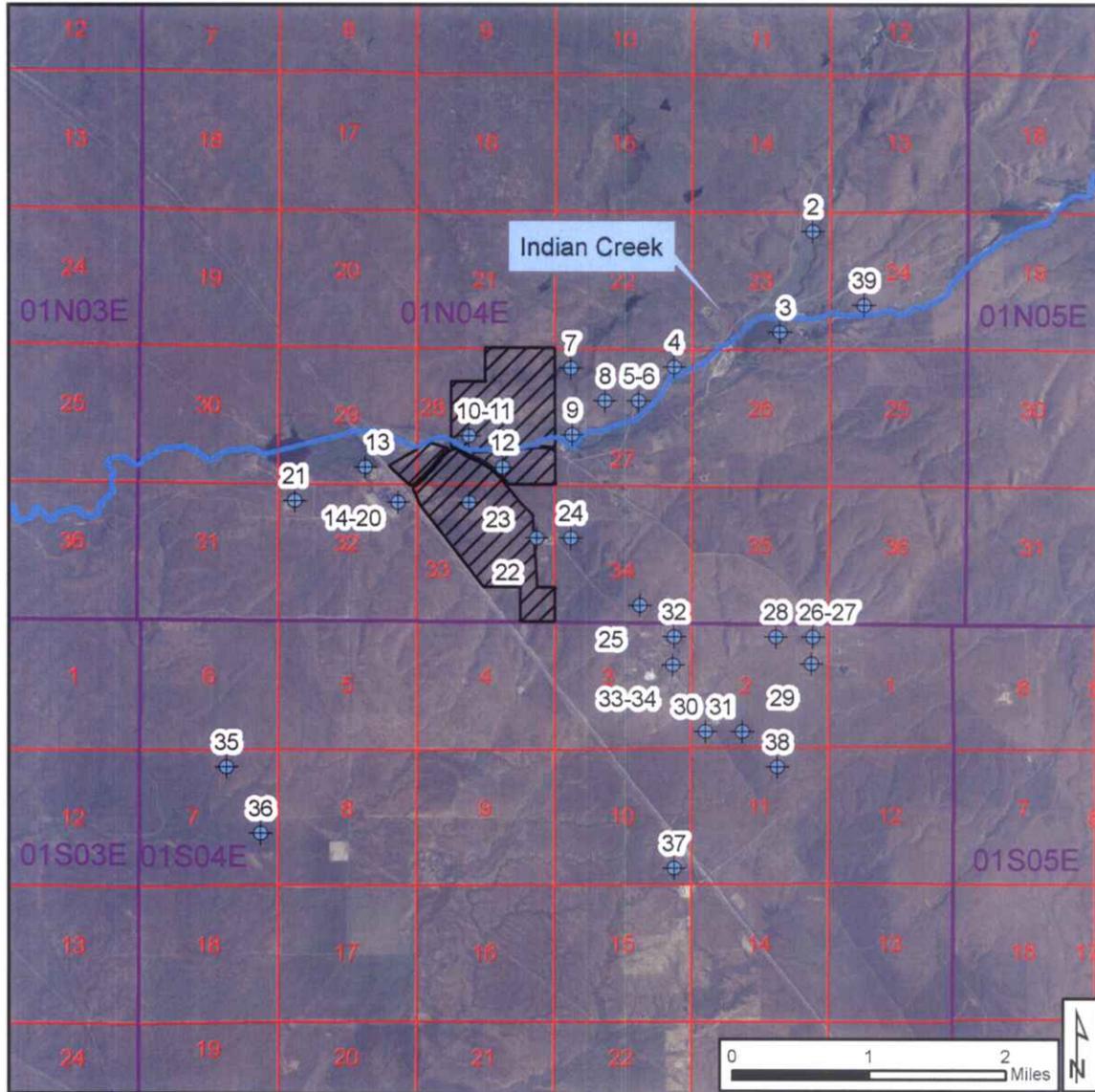


Figure 4. Wells with drillers' reports within 3 miles of Mayfield Springs.

Well 39 (the Owings Well) was drilled to a depth of approximately 1,200 feet in the SW quarter of Section 24. A driller's report is unavailable, but a cuttings log (described by BSU geology student Jim Braendle in 1980) is provided in Appendix A. The inferred normal faulting in this area (Wood, 1996) is based on the depth of sediments observed in the Owings Well, which is within 2 miles of the granite-basin contact. A water temperature of 110°F was noted at the bottom of the Owings well.

Well ID	Contact	Use	TWP	RNG	SEC	Tract	Gallons Per Minute	Static Water Level	Total Depth	Casing Depth	CSG. DIA.	Construction Date	Permit Number	Tag Number	
1	Allen, David	Domestic	Incorrect location on driller's report					342	523				1/10/79	783385	
2	Farnsworth, Larry	Domestic	01N	04E	23	NENE	60	69	147	147	6	5/21/04	815531	D0031310	
3	Ambrose, Ronald D	Domestic	01N	04E	23	SWSE	40	205	256	255	8	3/13/92	725434		
4	Underwood, Darla, Underwood, James	Domestic	01N	04E	27	NWNENE	8.7	343	568	515	5	5/7/91	724581		
5	Danskin Properties Ltd	Domestic	01N	04E	27	SWNE			480	480	12	10/20/93	726607		
6	Underwood, James	Domestic	01N	04E	27	SWNE	55	15	75	68	8	10/13/93	727552		
7	Underwood, James	Domestic	01N	04E	27	NWNW	60	338	485	459	6	5/17/85	722191		
8	Agenbroad, Carl	Irrigation	01N	04E	27	SENW	200	6	200			10/8/74	831274		
9	Helmick, Neil	Domestic	01N	04E	27	NWSW	20	340	510	404	6	8/7/92	721450		
10	Agenbroad, Ken D	Irrigation	01N	04E	28	NESW		390	763			9/4/79	776260		
11	Agenbroad, Ken D	Irrigation	01N	04E	28	NESW			85			4/28/79	820312		
12	Van Beek, Guy		01N	04E	28	SWSE		160	375			5/17/78	776251		
13	Winje, George	Domestic	01N	04E	29	SWSE			202	46	6	6/10/94	728344		
14	Boise Stage Stop	Domestic	01N	04E	32	NENE	3	115	130	57	8	10/1/96	721744		
15	Boise Stage Stop	Domestic	01N	04E	32	NENE		115	180	56	8	10/2/96	721745		
16	Boise Stage Stop	Domestic	01N	04E	32	NENE	15	80	140	120	8	10/8/96	721748		
17	Boise Stage Stop	Domestic	01N	04E	32	NENE	20	40	66	54	8	5/17/99	721925	D0009418	
18	Kings Men	Domestic	01N	04E	32	NENE	20	636	811	810	6	5/7/82	721990		
19	Boise Stage Stop	Industrial	01N	04E	32	NENE	20	58	130	130	6	5/31/02	776954	D0019974	
20	Boise Stage Stop	Domestic	01N	04E	32	NENE	20	34	92			11/14/86	818250		
21	Bravo, Robert	Domestic	01N	04E	32	NWNW	2	24	160	160	6	11/10/01	770361	D0020068	
22	Anderson, Tim	Domestic	01N	04E	33	SENE	20	528	665	660	6	11/9/00	767235	D0015796	
23	Phagan, Jim	Domestic	01N	04E	33	NENW	17	481	569	560	6	11/17/01	772052	D0019379	
24	Stewart, Blackie	Irrigation	01N	04E	34	SWNW	80	89	260			5/10/76	817181		
25	Miller, Ronald L, Pamela K	Domestic	01N	04E	34	SWSE		450	620	596	5	9/23/99	721957	D0012097	
26	Botts, Mary	Domestic	01S	04E	2	NENE	20	310	540	158	8	6/2/99	721929	D0009421	
27	Meeks, Dale	Domestic	01S	04E	2	NENE	30	331	434	428	6	11/1/02	788349	D0025803	
28	Cornell, Rich	Domestic	01S	04E	2	NWNE	20	300	390	383	6	11/28/02	789257	D0025928	
29	Buchanan, Jack	Domestic	01S	04E	2	SENE	50	331	476	469	6	5/5/03	799883	D0029374	
30	Jorgensen, Glen, Jorgensen, Janet	Domestic	01S	04E	2	SWSW	20	388	633	608	6	11/17/00	767572	D0015631	
31	Big View Builders	Domestic	01S	04E	2	SESW	15	365	504	491	6	2/15/04	810178	D0030779	
32	Morton, Jerry	Domestic	01S	04E	3	NENE	25	460	586	584	6	11/11/89	721253		
33	Castle, Rosanna K, Castle, Ronald B	Commercial	01S	04E	3	SENE	30	338	535	490	8	7/28/93	721499		
34	Castle, Ronald B, Castle, Rosanna K	Commercial	01S	04E	3	SENE	40	435	678	550	6	4/25/96	721699		
35	William Pipeline West	Catholic Protection	01S	04E	7	NWNE			500	500	10	1/23/03	789255	D0025927	
36	Weimer, Johnny	Stockwater	01S	04E	7	NESE	25	540	695			6/8/73	792733		
37	Hisel, Jim	Domestic	01S	04E	10	SESE	10	350	545	541	6	9/23/98	721877	D0007514	
38	Dienes, Ed	Domestic	01S	04E	11	NWNE	27	440	543			6/27/79	781273		

Table 2. Wells with drillers' reports within 3 miles of Mayfield Springs.

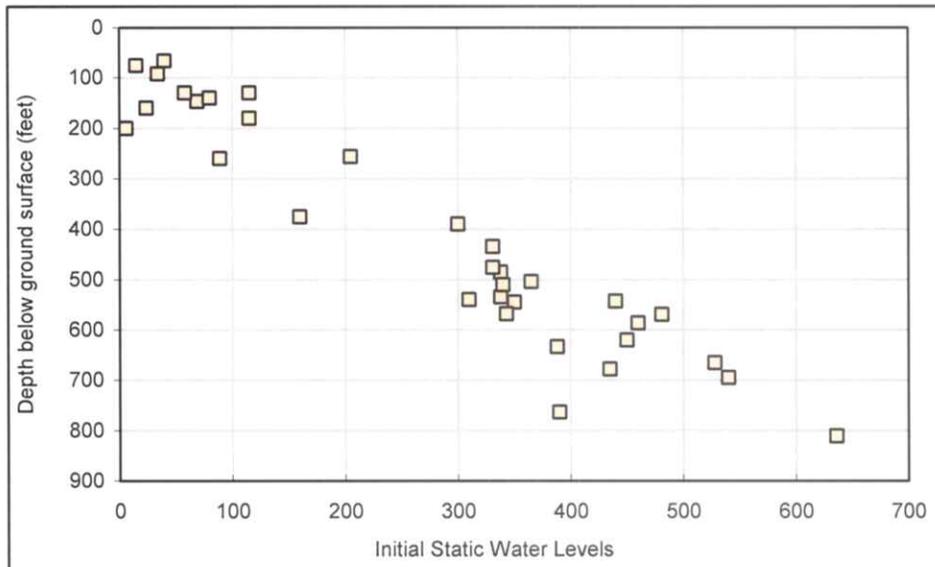


Figure 5: Static water levels recorded on drillers' reports for wells in the Mayfield Springs area.

Most of the shallower existing wells (e.g., less than 300 feet) are within about one mile of Indian Creek or Indian Creek Reservoir. All of the wells further than about one mile from Indian Creek are at least 400 feet in depth (the deepest well extends 811 feet below ground surface).

Initial static water levels recorded on the drillers' reports range from 6 to 636 feet below ground surface. For obvious reasons, static water levels generally correspond with well depth (Figure 5). All wells with static water levels less than 200 feet are located within approximately one mile of Indian Creek or Indian Creek Reservoir.

According to IDWR records, there are currently four wells located on the Mayfield Springs property (wells 10, 11, 12, and 23). These wells have depths ranging from 85 to 763 feet. Static water levels range from 160 to 481 feet below ground surface. Only one of these wells was tested at the time of completion (Well 23, which is 569 feet deep), and this well produced 17 gpm. The 763-foot Helmick Well (well 10 on Figure 4) was subsequently tested at higher rates (see Section 2.4).

Perched water was encountered to the west of Mayfield Springs at shallow depths (30 to 65 feet) in gravel or volcanics (e.g., cinder zones). To the northeast of Mayfield Springs along the Danskin Mountain foothills, water was encountered at depths ranging from 18 to 475 feet in clay and sand or sand and gravel. Indian Creek appears to have a strong influence on the presence of ground water in the vicinity of the creek. Southeast of the proposed development, water-bearing zones were encountered at depths ranging between 118 and 619 feet in sand and gravel, clay and sand, or occasionally cinders.

2.3. Reported Well Yields

Well yields recorded on the drillers' reports, which generally are based on short duration airlift pumping, ranged from 2 to 200 gallons per minute (gpm), although most wells produced less than 50 gpm. Four of the 6 wells rated at more than 50 gpm were less than 260 feet deep; the remaining two wells producing 50 gpm or more were less than 500 feet deep. The production rate in some of the deeper wells may have been limited by the pumping method (airlift). All of the wells listing an initial yield greater than 50 feet are located within approximately one mile of Indian Creek or Indian Creek Reservoir.

2.4. Well Test

A 7-hour well test was conducted in the 763-foot deep Neil Helmick Well on May 20, 1999 (this well is listed as the Ken Agenbroad Well in the driller's report and is shown as well 10 on Figure 4). The results of this well test are included as Appendix B. The well was pumped at 550 gpm for 6 hours, resulting in 73 feet of drawdown. An additional hour of pumping at 795 gpm resulted in a total drawdown of 92 feet. The well test data yielded an aquifer transmissivity estimate of approximately 7,300 gpd/ft, indicating moderate aquifer productivity. The conclusion from this well test was that wells of moderate productivity (400 to 800 gpm) could likely be developed in this area.

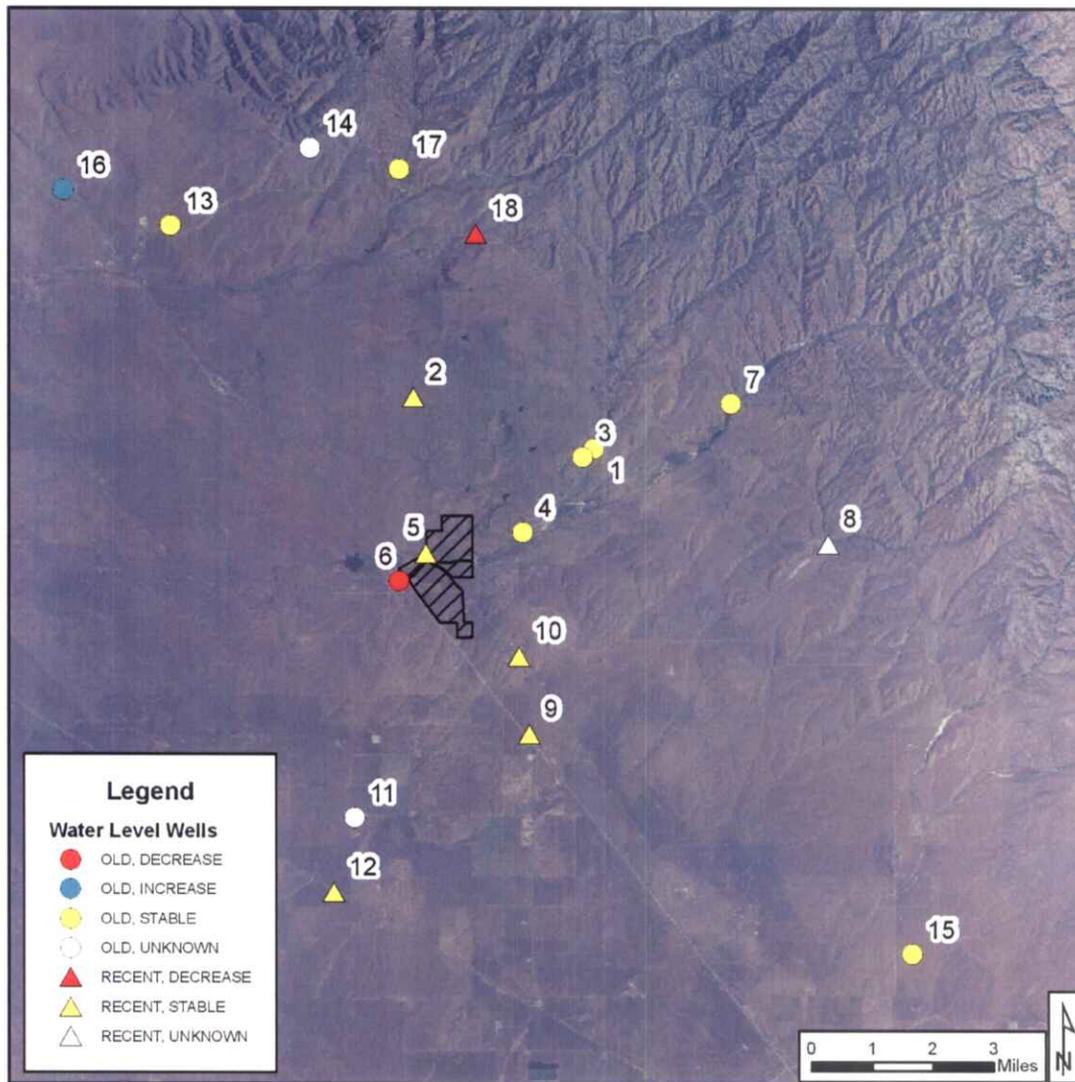
2.5. Water Levels

The IDWR "Well_Log" database has water level data for 18 wells within 10 miles of Mayfield Springs. One of these wells is located on the Mayfield Springs property. Hydrographs for the 18 wells are provided in Appendix C.

Figure 6 provides a summary of local water level trends. Wells that include water level data collected in the last 5 years are labeled as "recent" and are indicated with a "Δ" in Figure 6. Wells for which all water level data are at least 5 years old are labeled as "old" and are indicated with a "O" in Figure 6. Water level trends were characterized (Figure 6) as increasing, decreasing, stable, or "unknown" (in which there were too few data points to describe a water level trend). Water levels were defined as increasing if measurements increased by at least 10 feet during the last 10 years of the sampling record (based on at least three measurements). Water levels are defined as decreasing if at least three measurements resulted in a decrease of at least 10 feet. Water levels were defined as stable if water level changes during the last 10 years of the sampling record were less than 10 feet.

With these criteria, seven wells with older measurement data had stable water levels, one well experienced decreasing water levels, one well had increasing water levels, and one well was classified as unknown (i.e., there were insufficient water level data to determine a water level trend). Of the recently monitored wells, five had stable water levels, one well experienced decreasing water levels, and one well had insufficient data for determining a trend. In total, 12 of the 17 wells had stable water levels, two wells had

decreasing water levels, one well had increasing water levels, and three of the hydrographs could not be classified.



(See text for explanation)

Figure 6. Wells with water level measurements near Mayfield Springs.

Based on these observations, there have been no widespread ground water level declines Mayfield Springs area over the last 30 years. In most of these wells, water levels have remained steady over the data period, with some short-interval variations associated with seasonal ground water usage. At two of the wells with the longest sampling record (wells 9 and 12 on Figure 6), water levels have increased over time, but that increase has been less than 10 feet. There are two wells (wells 6 and 18) where water levels declined by more than 10 feet, but these local declines do not appear to be representative of general ground water conditions in the area.

2.6. Ground Water Flow Direction

Because of the paucity of wells in this area, ground water contours (Figure 7) in the Mayfield Springs area were drawn using water levels from two sources: (1) selected data from recently-measured IDWR monitoring wells and (2) initial static water levels listed on drillers' reports. Measurement points used for contours are highlighted in the Appendix C hydrographs. Wells for which static water levels from drillers' reports were used are indicated in Figure 7; drillers' reports for these wells are provided in Appendix D. Ground surface elevations are taken at the centroid of the quarter-quarter in which the well is located (unless more precise location data were available). Potential errors in these contours may include incorrect well locations, incorrect ground surface elevations, and/or incorrect measurements.

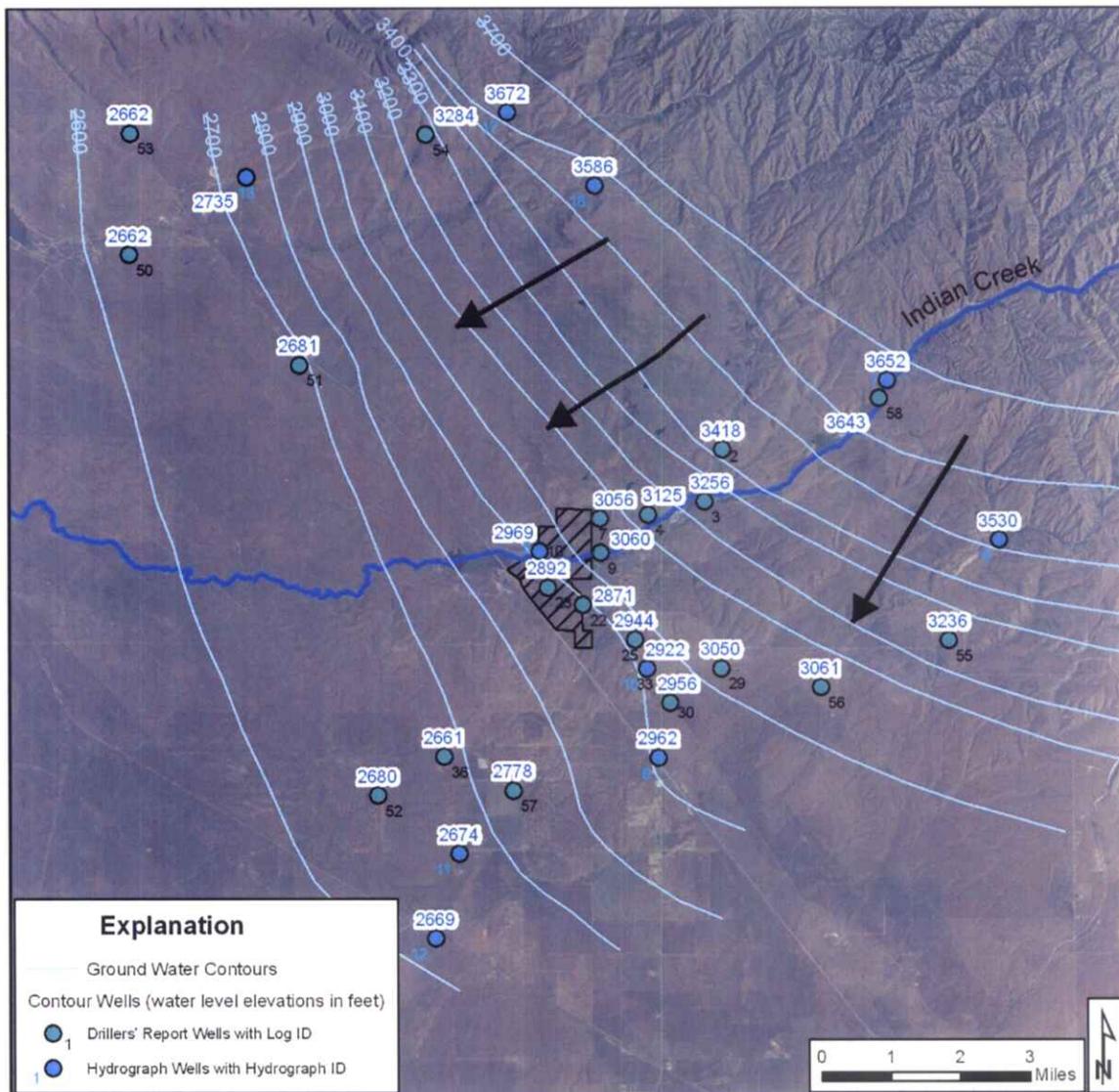


Figure 7. Ground water flow directions in Mayfield Springs area.

In general, ground water flows from high elevation to lower elevation (northeast to southwest). This general ground water flow direction is consistent with conclusions based on USGS measurements in 1980 (Newton, 1991).

2.7. Recharge and Discharge

Recharge to aquifers in the Mayfield Springs area occurs as (1) seepage from surface channels (primarily Indian Creek, tributaries to Indian Creek, and Indian Creek Reservoir), (2) infiltration from precipitation in the immediate Mayfield Springs area, and (3) underflow from the Danskin Mountains northeast of the site. Seepage from surface channels recharges shallow aquifers; shallow aquifers leak to lower, deeper aquifers. Underflow from northeast of the Mayfield Springs area originates as infiltration in highland areas; surface runoff from these highlands is the primary source of water for Indian Creek.

There is very little (if any) natural ground water discharge to Indian Creek in the Mayfield Springs area because regional aquifer water levels (especially in deeper zones) are far below the creek elevation. The ultimate discharge point for aquifers in the Mayfield Springs area is the Snake River. The primary local aquifer discharge is to existing wells in this area.

2.8. Water Quality

There are seven wells within five miles of Mayfield Springs that have been monitored for water quality since 1991 (Figure 8). Sampling results for selected analytes are included in Appendix E. Other than the presence of coliform bacteria in isolated wells (which generally indicates site-specific contamination and is not indicative of regional ground water quality) water quality from these monitoring wells appears to be very good.

The average concentration of arsenic at these monitoring wells was generally around 2 µg/l, below the Maximum Concentration Limit (MCL) of 10 µg/l. One water sample taken from station 01N 04E 23DDC1 in 1991 had an arsenic concentration of 9.0 µg/l, very close to the MCL. The maximum fluoride concentration in these wells was less than 1.0 mg/l (the MCL for fluoride is 4.0 mg/l). The maximum concentration of nitrate at these stations was 4.6 mg/l, below the MCL of 10.0 mg/l. The maximum gross alpha concentration was less than 3.0 pCi/l, well below the MCL of 15.0 pCi/l. The secondary standards for iron, manganese, and total dissolved solids were not exceeded at any of these wells.

Total dissolved solids concentrations (TDS) were available for four wells, with values ranging from 134 to 182 mg/L. In the lower Boise River Basin TDS values less than about 200 mg/L are typically associated with infiltration from drainages in granitic areas (Petrich and Urban, 2004); ground water with low TDS values has generally experienced little chemical interaction with aquifer minerals.

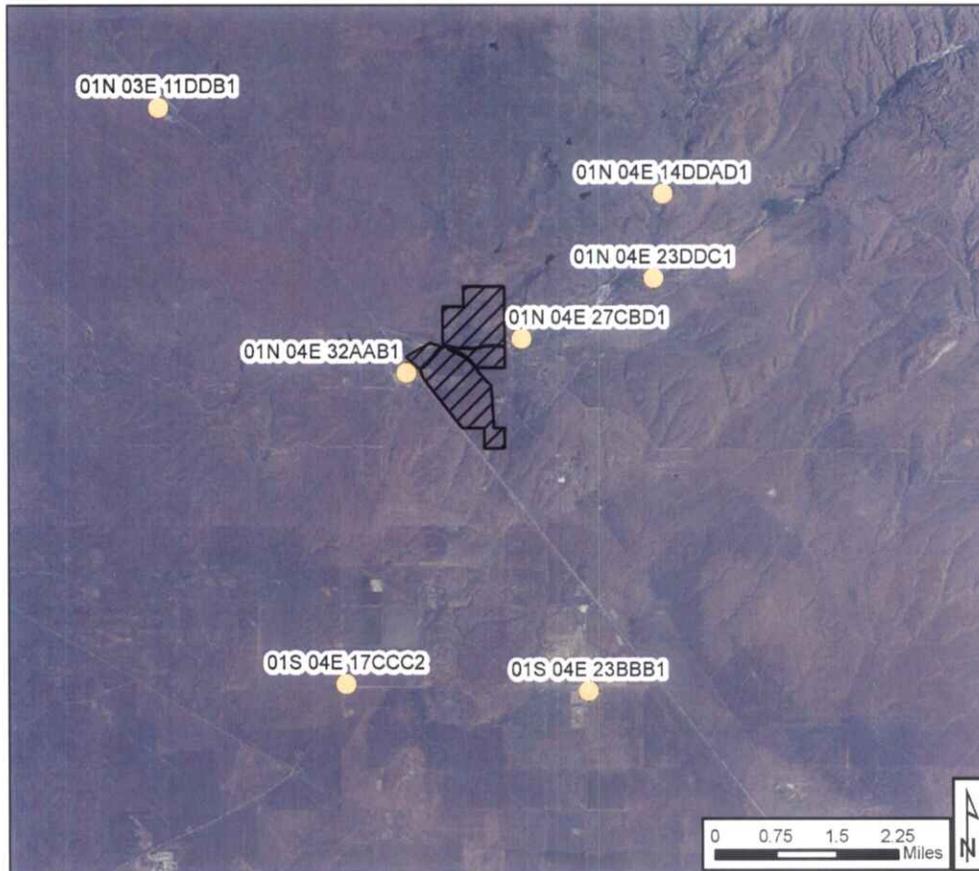


Figure 8. Wells with water quality data near Mayfield Springs.

Water from the Neil Helmick Well (i.e., Ken Agenbroad Well or well 10 on Figure 4) was analyzed in 1999. Results are presented in Appendix B. Water quality in samples from this well was excellent, with no parameters exceeding primary or secondary water quality standards.

2.9. Mountain Home Ground Water Management Area

The Mayfield Springs property is located at the northwestern edge of the Mountain Home GWMA. The Mountain Home GWMA was designated on November 9, 1982 because of declining ground water levels. A GWMA is designated by the IDWR when a ground water basin may be approaching the point of having insufficient ground water supplies for existing users. New ground water applications may be approved by the Director only after it is determined that sufficient ground water supply is available and the new appropriation will not negatively impact other senior water rights.

The Mayfield Springs area is also located about 5 miles northwest of the Cinder Cone Butte Critical Ground Water Area (CGWA). The Cinder Cone Butte CGWA was designated on May 7, 1981 because of declining ground water levels (Harrington and Bendixsen, 1999). A CGWA is designated by the IDWR when evidence suggests

insufficient ground water supplies for users at current or projected rates of withdrawal. The IDWR Director can deny new ground water applications if the proposed point of diversion lies within a CGWA.

Ground water level contours (Section 2.6) indicate a ground water flow direction that is roughly parallel to the Ground Water Management Area Boundary. Four of the 5 wells within the Mountain Home GWMA near the Mayfield Springs property have either stable or rising ground water levels (Appendix C). There are too few data points for a meaningful hydrograph in the fifth well (Well # 11).

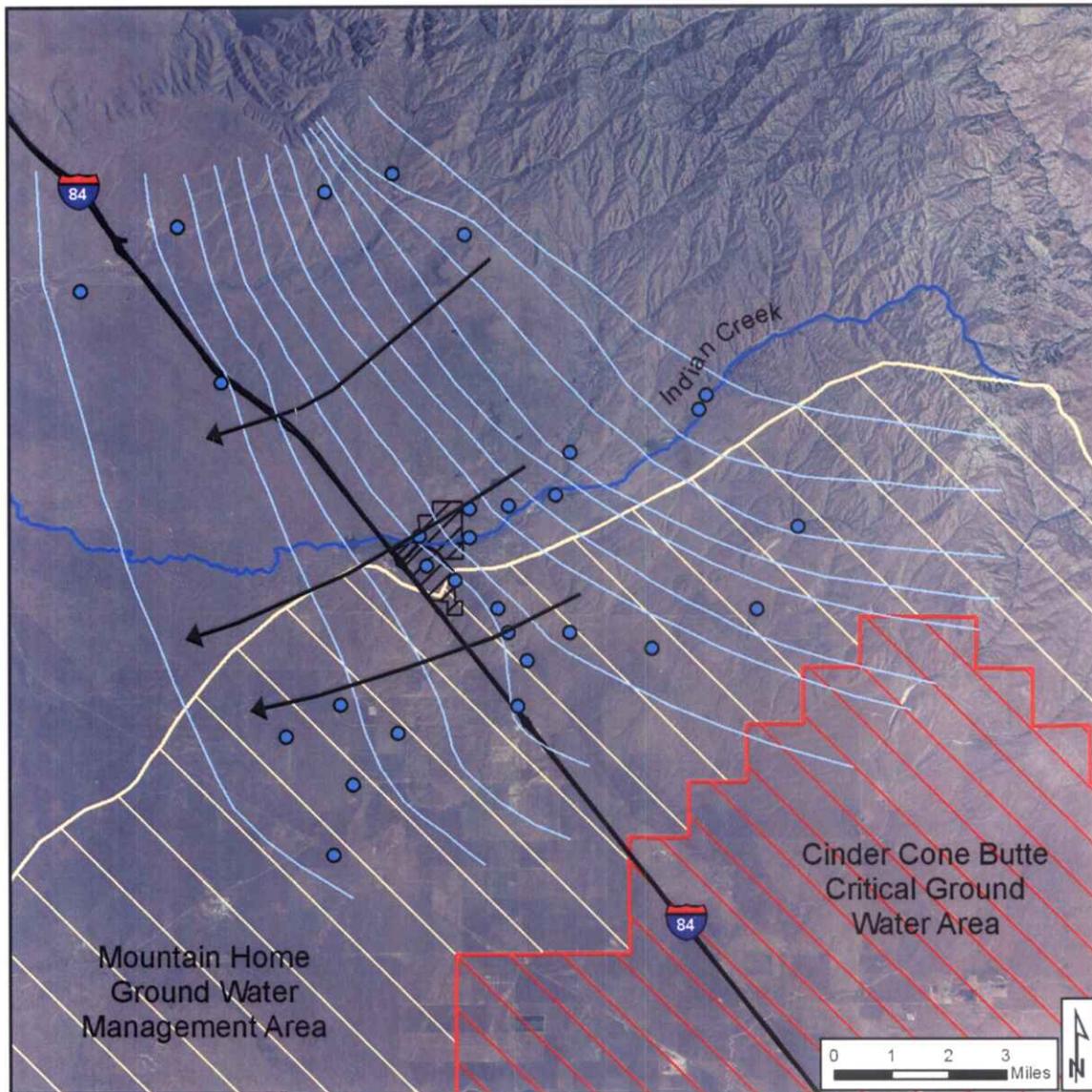


Figure 9: Mountain Home Ground Water Management Area boundary (with ground water contours and general ground water flow directions – see also Figure 7).

3. WATER RIGHTS

A preliminary water rights search was conducted in the vicinity of the Mayfield Springs property. The purpose of the search was to identify ground water rights with points of diversion in the immediate vicinity of proposed Mayfield Springs wells. Water rights were identified based on a (1) map search using IDWR spatial data (current as of February 28, 2006) and (2) text-based search using the IDWR online water rights database.

A summary of water rights with points of diversion within or near 0.5 miles of the proposed Mayfield Springs wells is provided in Table 3. Points of diversion for Snake River Basin Adjudication (SRBA) claims within or near 0.5 miles of proposed new wells are shown in Figure 10 (page 18). Not all existing rights were claimed in the SRBA; water rights based on statutory claims, decrees, and/or licenses having points of diversion within or near 0.5 miles of the proposed Mayfield Springs wells are shown in Figure 11. A list of Snake River Basin Adjudication (SRBA) claims, active permits, SRBA recommendations, and statutory claims, decrees, and/or licenses in the vicinity of the Mayfield Springs development is provided in Appendix F. Of these, water rights 63-8051 and 63-3070 have places of use within the Mayfield Springs community.

One of these rights (61-2328 in Figure 11, page 19) appears to have the incorrect point of diversion location listed in the IDWR database. The Elmore County location and the basin number (61) do not correspond with the point of diversion location (NESE of Section 21 in T1N R4E). This right is likely not within 0.5 miles of proposed Mayfield Springs pumping wells.

Location	No.	Basis	Priority Date	Div. Rate (cfs)	Source List	Water Uses	Owner
Applications							
T1N R4E 28, 29, 32NE, 33	63-32225		9/16/2005	10	GROUND WATER	MUNICIPAL	INTERMOUNTAIN SEWER & WATER CORP (Current)
SRBA Claims							
T1N R4E 28	63-3070	License	12/13/1955	0.02	GROUND WATER	DOMESTIC, IRRIGATION, STOCKWATER	AGENBROAD, CARL S (Current); AGENBROAD, JUDITH A (Current)
T1N R4E 29, 32NE	63-7571	License	3/21/1972	0.09	GROUND WATER	COMMERCIAL	FRENCH, ROBERT L (Current)
T1N R4E 27SW, 28	63-8051	License	10/17/1974	2.44	GROUND WATER	IRRIGATION	GABLE A RANCH (Current)
T1N R4E 27SW	63-21088	Beneficial Use	1/1/1949	0.14	GROUND WATER	DOMESTIC, IRRIGATION, STOCKWATER	AGENBROAD, CARL S (Current); AGENBROAD, JUDITH A (Current)
SRBA Recommendations							
T1N R4E 29, 32NE	63-7571	License	3/21/1972	0.09	GROUND WATER	COMMERCIAL	FRENCH, ROBERT L (Current)
T1N R4E 27SW, 28	63-8051	License	10/17/1974	2.44	GROUND WATER	IRRIGATION	GABLE A RANCH (Current)
Statutory Claims, Decrees, and/or Licenses							
T1N R4E 21SE	61-2328	License	9/22/1958		UNNAMED STREAM	STOCKWATER STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)
T1N R4E 34NW	61-10432	Decreed	5/20/1977	0.04	GROUND WATER	DOMESTIC	ARNOLD, MAMIE L (Current)
T1N R4E 34NW	61-10433	Decreed	10/10/1985	0.04	GROUND WATER	DOMESTIC	WALKER, LELA S (Current)
T1N R4E 34NWNE	61-10525	Decreed	4/29/1980	0.06	GROUND WATER	DOMESTIC, STOCKWATER	BRUBAKER, CARL (Current); BRUBAKER, NANNETTE W (Current)
T1N R4E 28	63-3070	License	12/13/1955	0.02	GROUND WATER	DOMESTIC, IRRIGATION, STOCKWATER	HANSEN, JESS T (Current)
T1N R4E 21SE	63-3662	Decreed	5/5/1953		SHEEP CREEK	STOCKWATER FROM STORAGE, STOCKWATER STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)
T1N R4E 32NE	63-7571	License	3/21/1972	0.09	GROUND WATER	COMMERCIAL	PECON SHOPPE OF BOISE (Current); STUCKEYS (Current)
T1N R4E 27SW, 28	63-8051	License	10/17/1974	2.44	GROUND WATER	IRRIGATION	GABLE A RANCH (Current)
T1N R4E 29, 32NE	63-10372	License	7/28/1986	0.2	GROUND WATER	COMMERCIAL, DOMESTIC, FIRE PROTECTION, IRRIGATION	FRENCH, ROBERT L (Current)
T1N R4E 34NWNE	61-10110	Decreed	4/29/1980	0.06	GROUND WATER	DOMESTIC, STOCKWATER	MILLER, PAMELA K (Current); MILLER, RONALD L (Current)

Table 3: Water rights within 0.5 miles of proposed pumping wells.

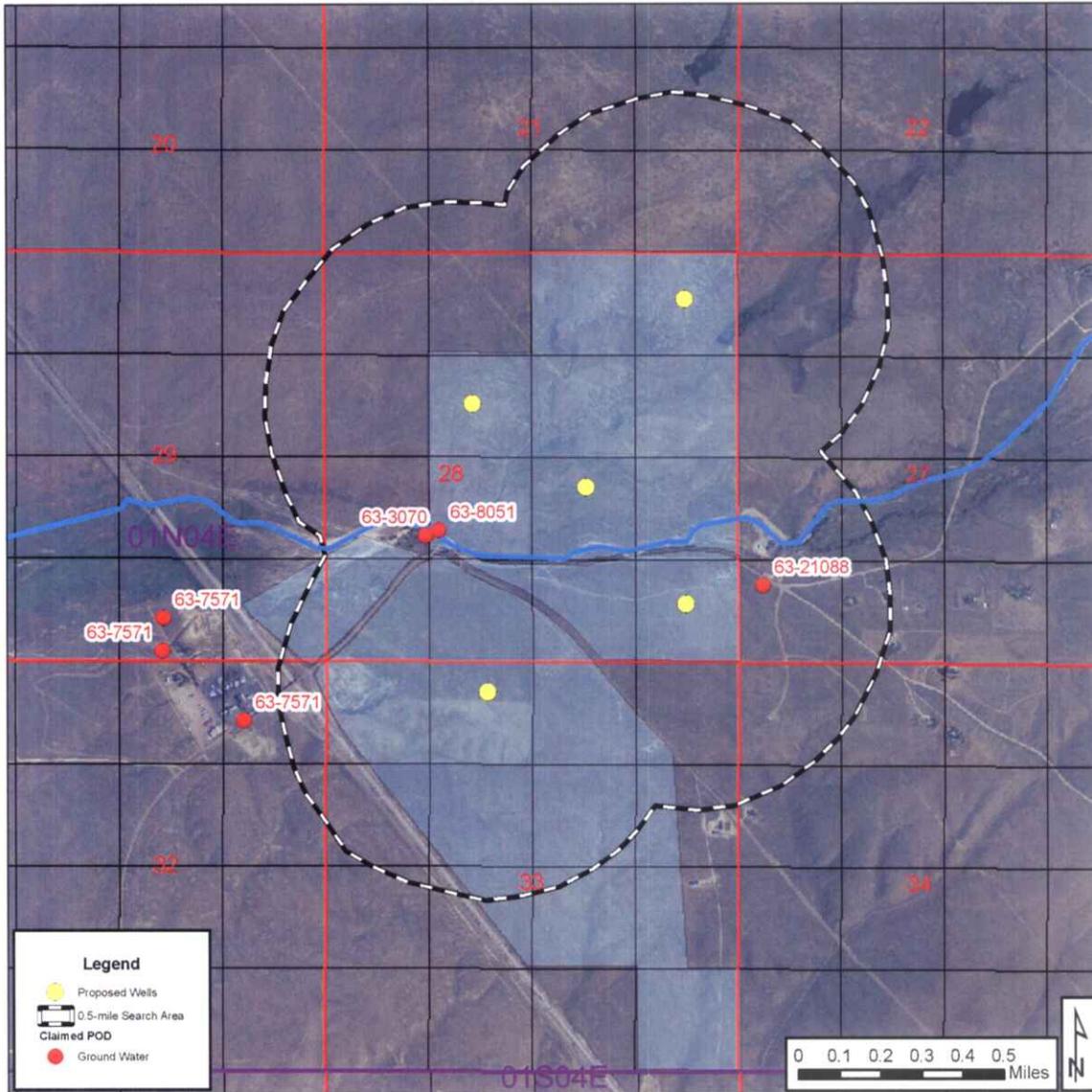


Figure 10: SRBA claims in the Mayfield Springs area.

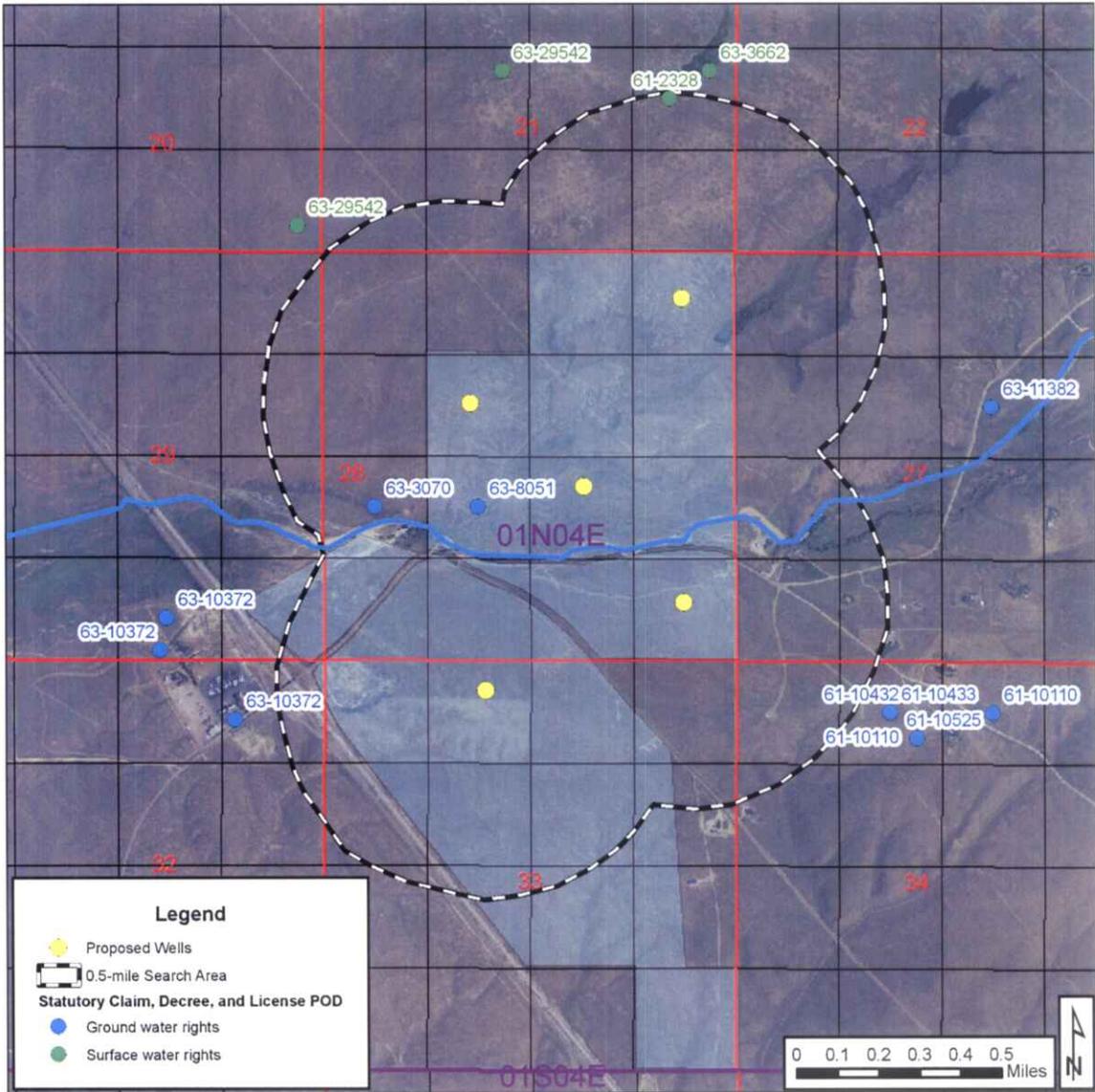


Figure 11: Water rights (based on statutory claims, licenses, and/or decrees) with points of diversion within 0.5 miles of the proposed Mayfield Springs wells.

4. WATER SUPPLY ASSESSMENT

4.1. Water Budget

A general basin water budget was prepared to estimate recharge rates to aquifers in the Mayfield Springs area. Surface water budget components included precipitation and losses to areal infiltration, surface water runoff, evapotranspiration, and seepage from surface channels. Aquifer recharge components included areal infiltration and stream seepage. Aquifer discharge was estimated based on assumed well withdrawals. These water budget components are described in the following sections and summarized in Section 4.1.5.

4.1.1. Contributing Basin

The upper Indian Creek watershed area, which defines surface-water flow in and upgradient of the Mayfield Springs property, is shown in Figure 12. However, this surface water drainage does not necessarily define subsurface flow divides. Aquifers in the Mayfield Springs area extend beyond, and can be influenced by, recharge and discharge from areas beyond the upper Indian Creek watershed area. For this analysis it was assumed that the contributing basin for aquifers in the Mayfield Springs area, and the area of well withdrawals near the Mayfield Springs property, is the (1) area within approximately 3 miles of the Mayfield Springs property and (2) basins upgradient to this 3-mile area (Figure 12). Surface and ground water tributary to this radial area originates primarily from the upper Indian Creek watershed. This assumed water budget area covers approximately 49,000 acres.

4.1.2. Precipitation

Average annual precipitation estimates, based on data obtained from the IDWR, range from approximately 12 to 14 inches per year in lower elevations of the water budget area. The highest elevations receive 24 to 28 inches of precipitation in an average year (see Figure 13, page 22). The average precipitation volume over the water budget area is approximately 72,165 acre feet. This estimate is based on an average of 13 inches per year over 9,709 acres, 15 inches per year over 11,377 acres, 17 inches per year over 7,505 acres, 19 inches per year over 5,459 acres, 22 inches per year over 14,816 acres, and 26 inches per year over 456 acres.

4.1.3. Aquifer Inflows

4.1.3.1. Areal Infiltration

Only a small portion of precipitation infiltrates through the soil; the remainder is lost to evaporation, transpiration by plants, or is collected as surface runoff. Estimates of areal infiltration rates might range from about 2 to 8 percent. An average infiltration rate of 5

percent of precipitation was assumed for this analysis. Factors supporting this assumption include (1) abundant sandy areas and/or fractured basalt in low-lying areas, (2) the presence of decomposed granitic soils, granitic fractures, and alluvial sediments in upland areas, and (3) higher rates of precipitation during months of lowest evapotranspiration (i.e., winter). The estimated average areal infiltration, based on the assumption that 5 percent of precipitation becomes deep infiltration, is about 3,600 acre feet.

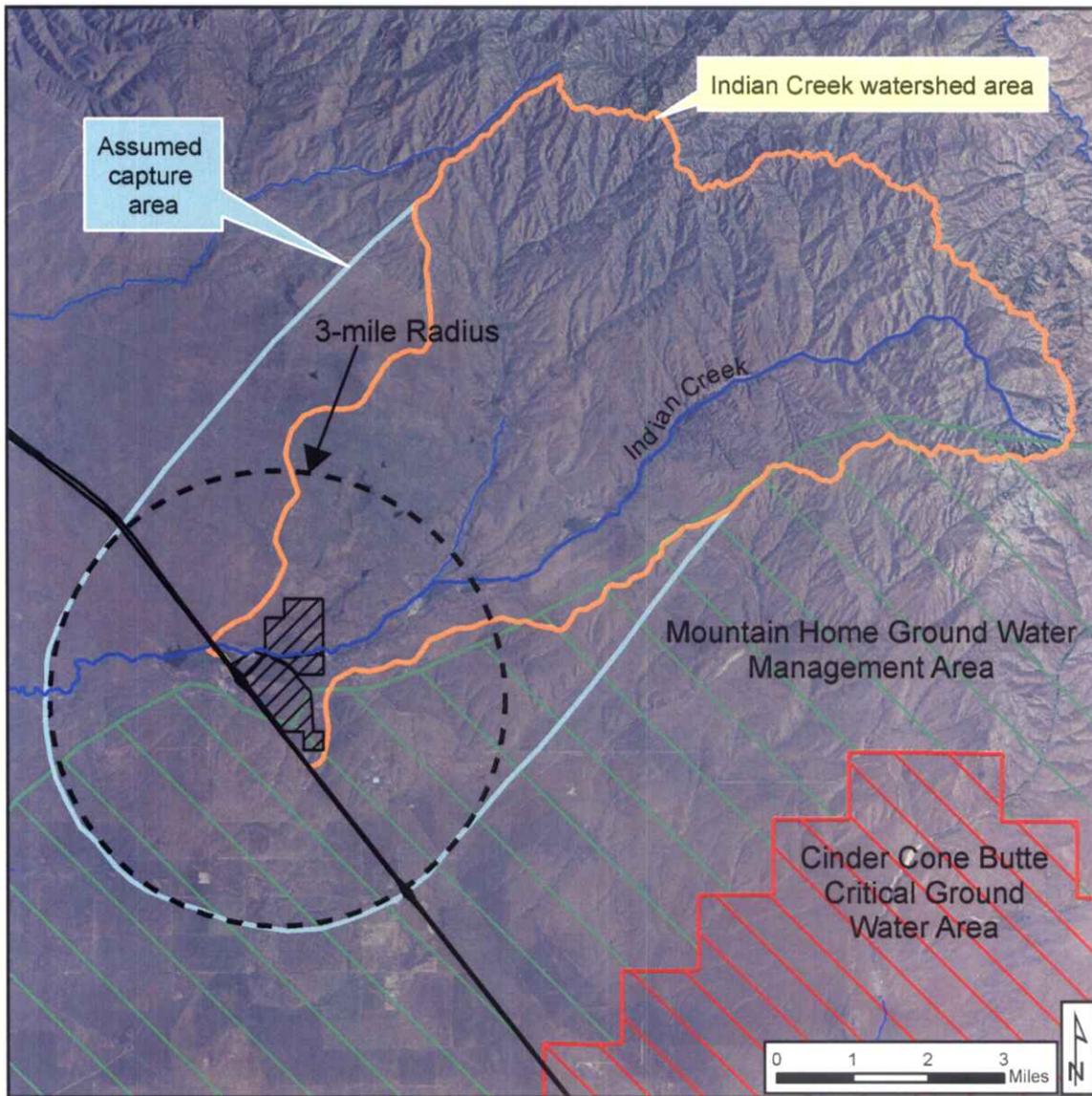


Figure 12. Ground water capture area in the vicinity of Mayfield Springs.

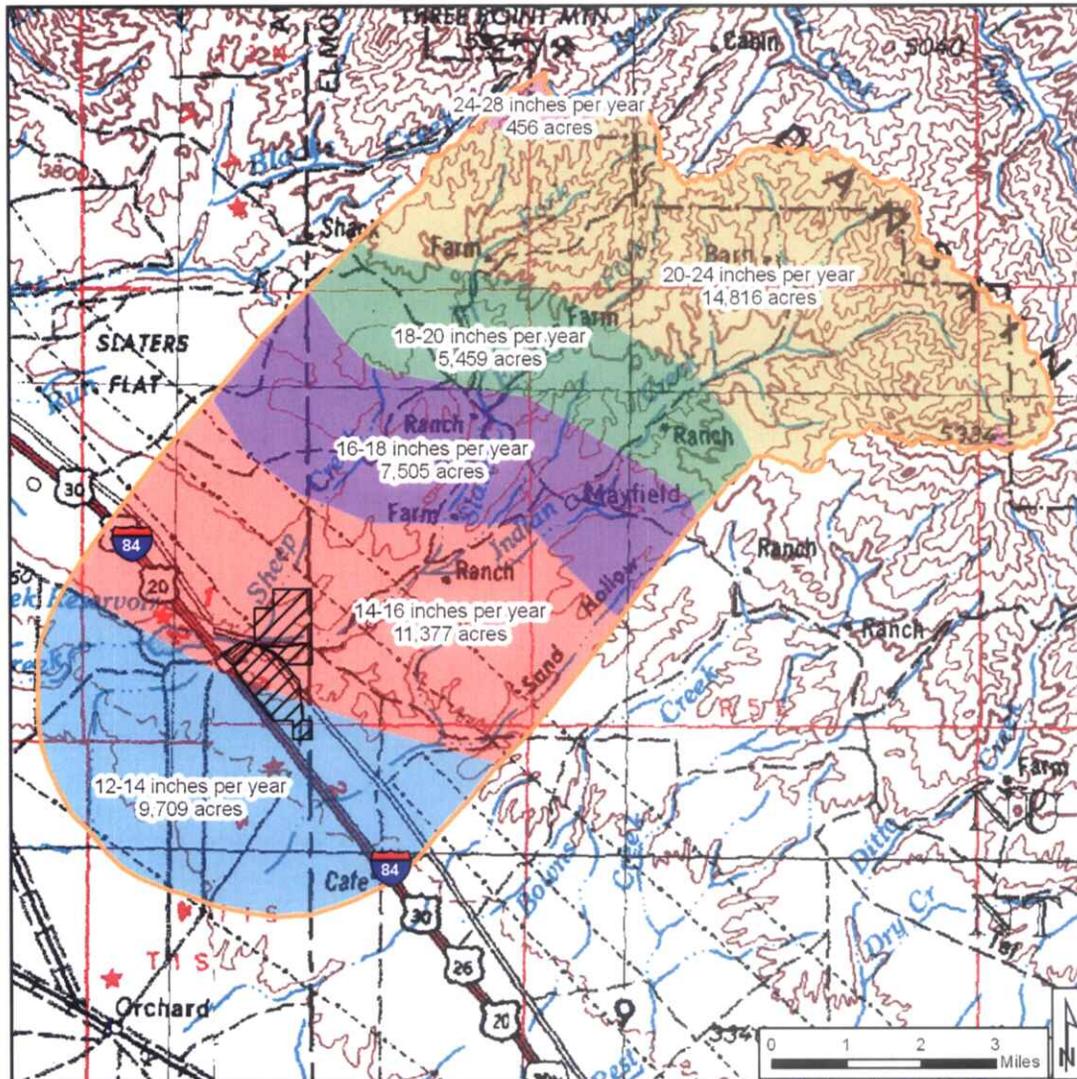


Figure 13. Annual precipitation rates in the Mayfield Springs area.

4.1.3.2. Surface Water Runoff

The primary surface water drainage in the area is Indian Creek, which channels water into Indian Creek Reservoir. Two flow measurements were made by the USGS in Indian Creek approximately 2,000 feet northeast of Mayfield (Section 17, T1N, R5E – Site 13211100). Flow rates of 0.6 cfs 1.66 cfs were measured on February 2, 1954 and June 26, 1954, respectively. The actual flow in Indian Creek is variable. Channel morphology suggests possible flood flows 100 cfs or greater.

Approximately 8-10 cfs was observed flowing in Indian Creek at the Mayfield Bridge (Figure 15, page 24) during a reconnaissance visit on March 13, 2006. The Indian Creek channel downstream of the Mayfield Springs property was dry. All of the water entering the Indian Creek Valley at Mayfield had seeped into the subsurface before reaching the Indian Creek Reservoir.

Anecdotal information suggests that this is a common pattern. Neil Helmick (a local resident) suggests that flow from Indian Creek into the Indian Creek Reservoir is rare. The Indian Creek channel has generally not carried water through the Mayfield Springs property in the last 10 years. Mr. Helmick indicates that a large portion Indian Creek Reservoir water comes from Sheep and Caldwell Creeks.

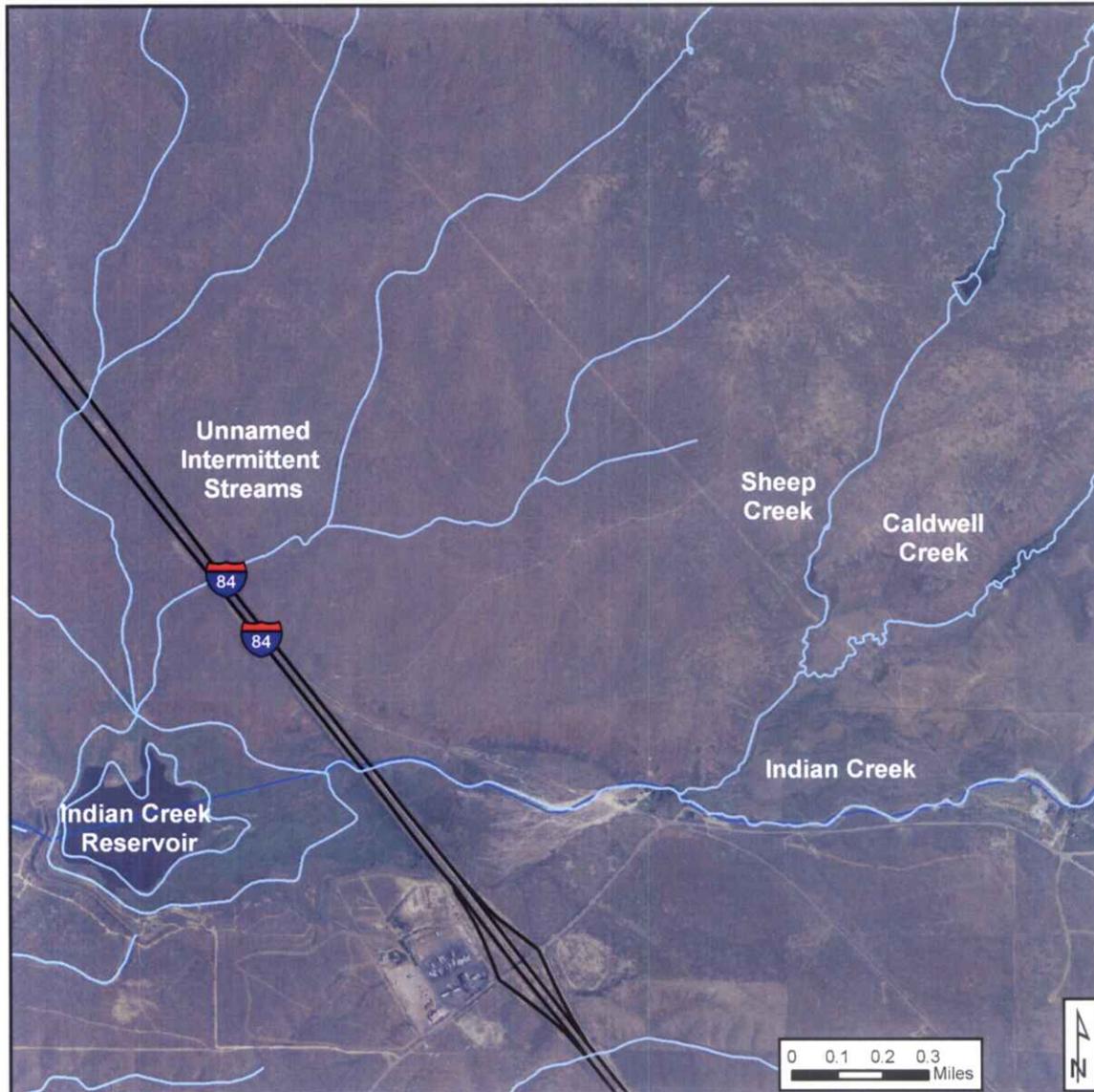


Figure 14: Indian Creek Reservoir and vicinity.

4.1.3.3. Indian Creek Reservoir

Indian Creek flows (primarily during high-water events) into Indian Creek Reservoir. Other sources of flow into the Indian Creek Reservoir include Sheep and Caldwell

Creeks and several unnamed streams (Figure 14). Discharge from Indian Creek Reservoir is to the lower Boise River.

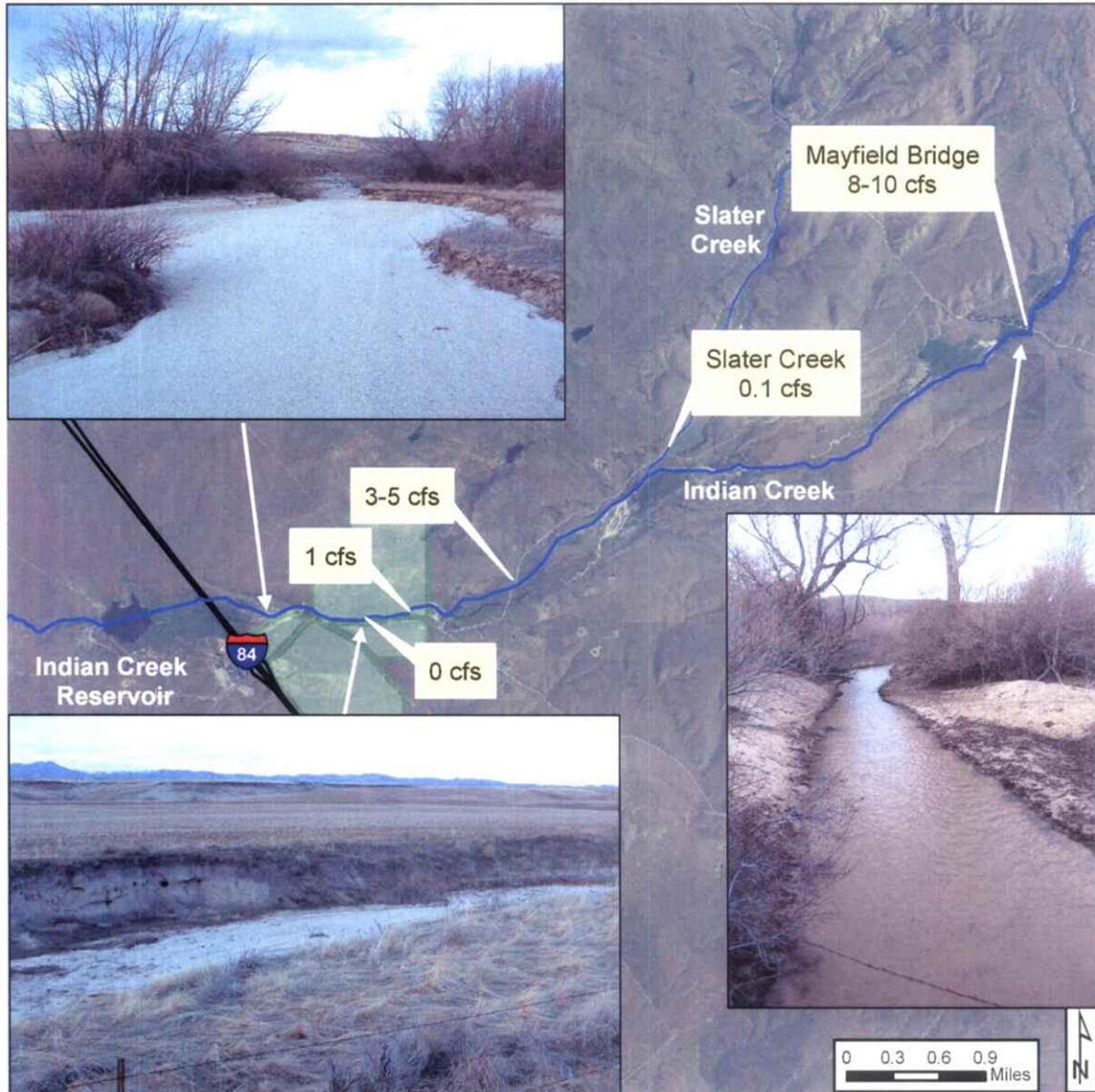


Figure 15: Approximate Indian Creek flows on March 13, 2006.

The Idaho Department of Fish and Game has water right claims (63-4679 and 63-4338) pending for the use of water in Indian Creek for wildlife storage, recreation storage, and fish propagation. The claims lists a diversion rate of 100 cfs and volume limit of 3,000 acre-feet. The IDWR dam safety database lists the storage volume of Indian Creek Reservoir as 2,035 acre feet. However, there is insufficient water to fill the reservoir in many years.

Based on general observations and anecdotal information, it was assumed that there was zero discharge from Indian Creek Reservoir during normal years. Thus, it was assumed that any water entering Indian Creek Reservoir is lost to evaporation or infiltrates into the subsurface. The reservoir, based on the image in Figure 14, is approximately 41 acres in size. This size varies according to season. Assuming an annual evaporation loss of 3.5 feet per acre and an average 80-acre reservoir/riparian area size, the total evaporative losses in an average year from the reservoir area might be approximately 280 acre feet.

4.1.3.4. Evapotranspiration

A preliminary 2002 SEBAL¹ estimate for seasonal rangeland evapotranspiration in the lower Boise River basin was 9.5 inches (Morse et al., 2003). Assuming that this rough approximation applies to the Indian Creek watershed, the annual volume of evapotranspiration could be approximately 39,000 acre feet.

4.1.3.5. Stream Seepage

The areal infiltration, evapotranspiration, and Indian Creek Reservoir evaporation estimates (approximately 3,600 acre feet, 39,000, and 280 acre feet, respectively) account for only a portion of the estimated average precipitation (72,000 acre feet). This leaves a difference of approximately 29,000 acre feet. A substantial portion of this water seeps into the subsurface from the Indian Creek channel, tributary channels, and from Indian Creek Reservoir. Evidence for substantial seepage includes observed channel losses, the presence of shallow coarse-grained alluvial sediments (which enable seepage to the subsurface), substantial wetland and riparian areas in the Mayfield area, shallow (likely perched) aquifers in the vicinity of Indian Creek, and low TDS values reflecting infiltration of surface runoff from a granitic area.

All of the water in upper Indian Creek on March 13, 2006 was lost to the subsurface by the time the channel exited the Mayfield Springs property. The observed flow on this day (8-10 cfs) was likely less than typical for March because of cool basin temperatures. A typical spring flow in Indian Creek at Mayfield could be higher than 10 cfs, especially in good water years. An average flow of 20 cfs (combined Indian Creek flow and shallow subsurface flow into the Mayfield area) over a 3-month period would result in an aquifer gain of approximately 3,600 acre feet (assuming that all of this water is lost to channel seepage). In addition, temporary higher flows would also contribute to seepage losses from either the channel or Indian Creek Reservoir. A temporary, 3-day flow of 100 cfs (resulting from a possible rain-on-snow event during the winter) could result in a seepage loss of about 600 acre feet.

These combined seepage losses (4,200 acre feet) are substantially less than the 29,000 acre feet difference between precipitation and other estimated surface water losses. Reasons for the discrepancy could include (1) lower than estimated precipitation, (2)

¹ "Surface Energy Balance Algorithm for Land"

higher than estimated evapotranspiration, (3) higher than estimated areal infiltration rates, (4) higher than estimated stream seepage rates, or (5) surface irrigation.

A text-based search of the IDWR water rights database for water rights in sections 18, 19, 23, 24, 27, and 28 revealed one decreed surface-water irrigation right (63-2143) listing diversions from Big Draw Creek, Dry Hollow Creek, Indian Creek, Slater Creek for the irrigation of 53 acres. All other irrigation water rights list ground water sources. Diversions under water right 63-2143 would not cause the discrepancy in water budget estimates listed above.

In summary, seepage from Indian Creek and Indian Creek Reservoir are likely higher than the 4,200 acre feet listed above but less than the 29,000 acre-foot difference between precipitation and other estimated losses.

4.1.4. Aquifer Outflows

Most of the subsurface flow from aquifers in this area is (1) withdrawals by wells and (2) underflow to toward the Snake River. There are 73 wells listed in the IDWR well construction database as located within the basin boundary (as defined in Figure 12). Of these 73 wells, 57 are for domestic uses, four are for irrigation, two are for industrial (Boise Stage Stop), two are for cathodic protection, four are for commercial purposes, one is for stockwater, one is a test well, and two have unknown uses. The amount of land irrigated by ground water in this basin appears to be small, likely less than 150 acres. Assuming 150 acres of irrigation (at 4.5 acre feet per year per acre for delivery and consumptive purposes), domestic use for 57 homes (at 0.3 acre feet per year per household), commercial/industrial from six wells (at 1.0 acre feet per year per well), and stockwater use for 100 cattle (1.4 acre feet per year), the annual average consumption of ground water might be approximately 700 acre feet per year. This is likely a high estimate of total withdrawals because an irrigation application rate of 4.5 feet per acre implies some inefficiency which would result in returns (recharge) to the shallow subsurface.

4.1.5. Water Budget Summary

A summary of estimated basin and aquifer inflows and outflows is provided in Table 4. Based on the estimates described above, there is likely a total recharge rate ranging from about 8,600 to 32,600 acre feet available from aquifers in the Mayfield Springs area in an average year.

A 3-mile area had been assumed for estimating areal recharge. This radius is likely greater than the actual zone influenced by proposed pumping. However, the areal assumption used for estimating water budget components is likely of small consequence because most recharge to local aquifers appears to occur not from areal infiltration in the 3-mile radial area but from seepage from Indian Creek, tributaries to Indian Creek, and Indian Creek Reservoir.

Component	Inflow to Basin (afa)	Surface Outflow from Surface Basin (afa)	Estimated Aquifer Recharge (afa)	Current ground water diversions (afa)	Available for Appropriation (afa)
Precipitation	72,000				
Estimated areal infiltration		-3,600	3600		
Evapotranpiration		-39,000			
Reservoir evaporation (based on water rights 63-4338 and 63-4679)		-280			
Surface discharge from Indian Creek Reservoir		0			
Maximum surface channel seepage		-29,120			
Likely infiltration from surface channels and Indian Creek Reservoir			5,000 to 29,000		
Discharge to wells				-700	
Total	72000	-72,000	8,600 to 32,600	-700	7,900 to 31,900

Table 4: Water budget summary.

4.2. Ground Water Availability for Appropriation

The amount of water required for domestic and commercial/industrial uses at Mayfield Springs was estimated to be approximately 1,815 acre feet per year (see Section 1.3). The total amount of water available for appropriation from aquifers in the Mayfield Springs area likely ranges from approximately 7,900 acre feet to 31,900 acre feet per year (Table 4). This quantity exceeds the combined existing and proposed withdrawals.

A second indication of ground water availability is that of local ground water levels. Most water levels in this area are steady or rising slightly (see Section 2.5 and Appendix C). Stable water levels suggest that water is available for appropriation.

4.3. Potential Impact on Existing Water Rights

Little or no impact on existing water rights and water users are anticipated as a result of proposed new diversions for the Mayfield Springs Planned Community. The preceding water budget analysis suggests that there is an ample water supply for existing and proposed uses.

4.4. Potential Impacts on Mountain Home GWMA

The Mountain Home GWMA boundary crosses a portion of the Mayfield Springs property in Section 33 of T1N R4E. The boundary appears to be based on a local surface water divide in this area. Based on hydrographs for three wells, ground water levels within the Mountain Home GWMA near the Mayfield Springs property have been stable or rising since the 1960s (see Section 2.5, Figure 6, Figure 16 through Figure 18, and Appendix C). Ground water level declines seen in other parts of the GWMA or in the Cinder Cone Butte Critical Groundwater Area are not apparent in these wells. Stable (or rising) ground water levels in the Mayfield Springs area suggest the availability of water for appropriation.

New ground water pumping in the Mayfield Springs area may cause a local depression in ground water levels. Some depression is required for water to move toward new pumping wells. This pumping will not affect the GWMA boundary because the boundary is based on surface topography.

However, it is unlikely that new pumping in the Mayfield Springs will substantially impact ground water conditions in the Mountain Home GWMA. The water budget for the Mayfield Springs area suggests that there is ample water available for the new proposed uses (Section 4.1.5). It is unlikely that withdrawals in the Mayfield Springs will draw a significant amount water from the Mountain Home GWMA.

The predominant ground water flow direction in the Mayfield Springs area is to the southwest (Figure 7). General ground water flow in the Mayfield Springs area is parallel to the northwestern Mountain Home GWMA boundary – new uses will not reduce underflow into the Mountain Home GWMA.

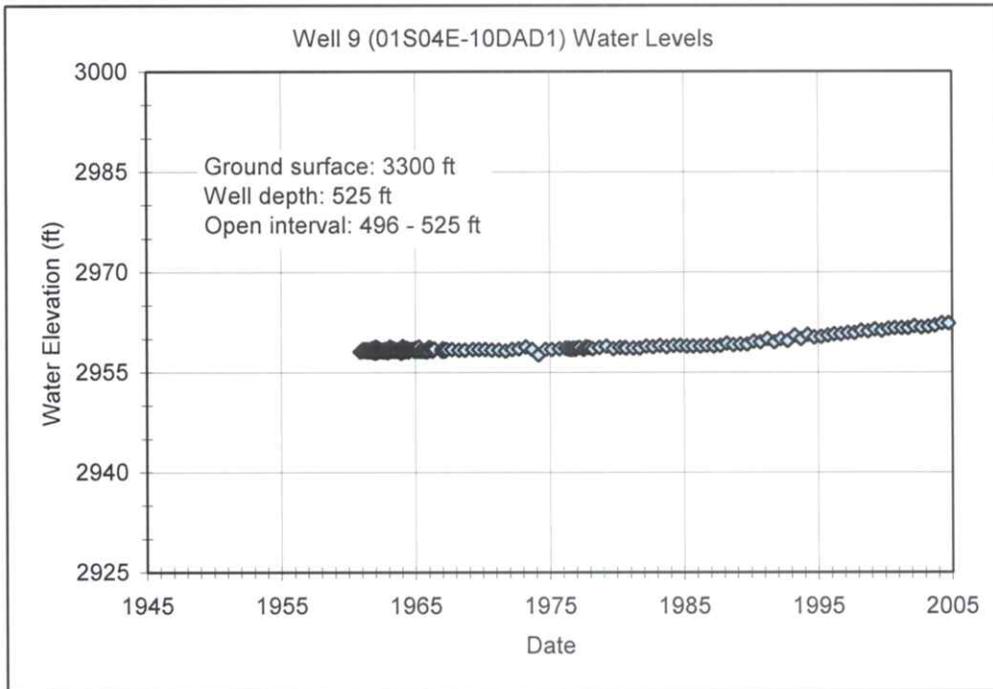


Figure 16: Hydrograph for Well 01S04E-10DAD1 (Well 9 in Figure 6).

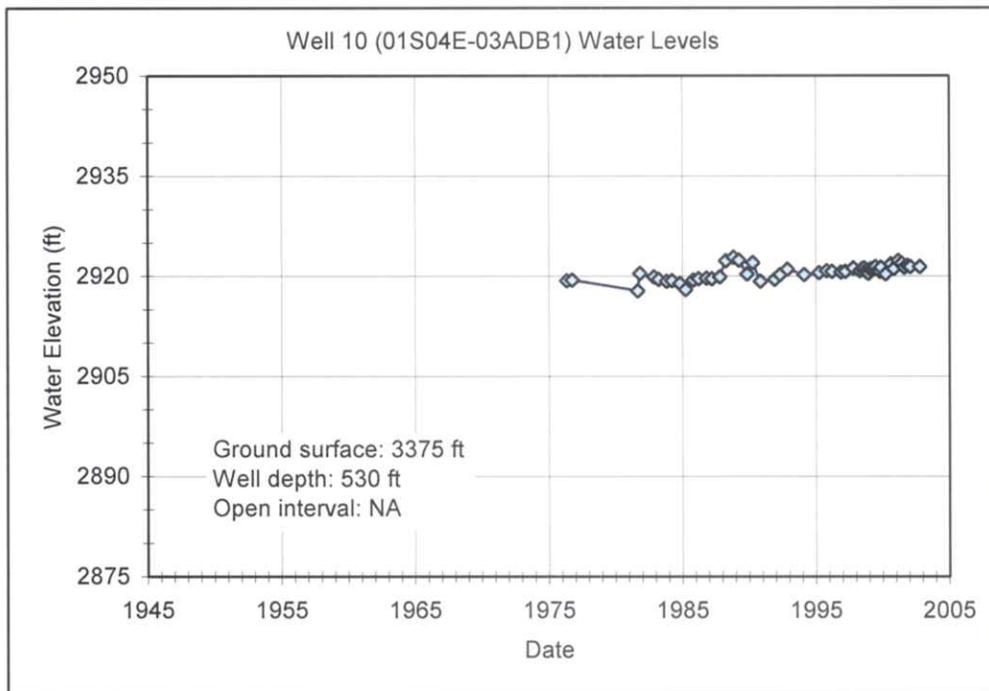


Figure 17: Hydrograph for Well 01S04E-03ADB1 (Well 10 in Figure 6).

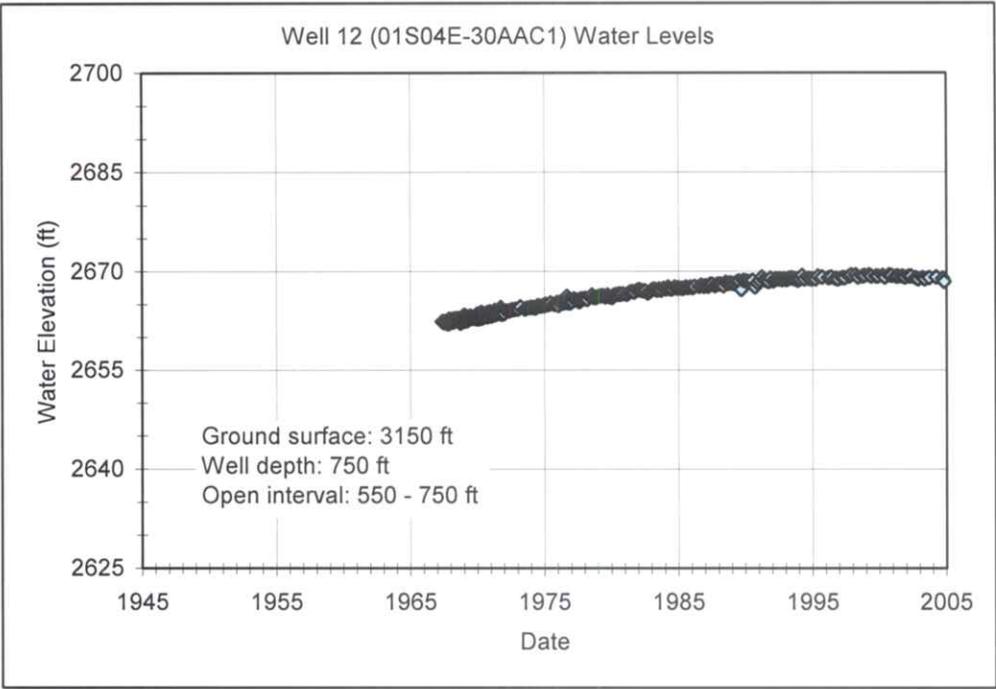


Figure 18: Hydrograph for Well 01S04E-30AAC1 (Well 12 in Figure 6).

5. REFERENCES

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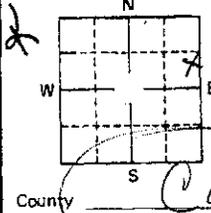
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Last edited: 3/20/2006
Pages: 39

Appendix A: Drillers' Reports

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

TYPE 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.

<p>1. WELL OWNER</p> <p>Name <u>Alaine Allen</u></p> <p>Address <u>Rte 4 Nampa</u></p> <p>Owner's Permit No. _____</p>	<p>7. WATER LEVEL</p> <p>Static water level <u>240</u> feet below land surface.</p> <p>Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____</p> <p>Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p> <p>Temperature _____ °F. Quality _____</p>																																																																																								
<p>2. NATURE OF WORK</p> <p><input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement</p> <p><input type="checkbox"/> Abandoned (describe method of abandoning) _____</p>	<p>8. WELL TEST DATA</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																					
Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																							
<p>3. PROPOSED USE</p> <p><input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Test <input type="checkbox"/> Municipal</p> <p><input type="checkbox"/> Industrial <input type="checkbox"/> Stock <input type="checkbox"/> Waste Disposal or Injection</p> <p><input type="checkbox"/> Other _____ (specify type)</p>	<p>9. LITHOLOGIC LOG</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Hole Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td></td> <td>0</td> <td>3</td> <td>Top soil + driveway fill</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>3</td> <td>9</td> <td>Sand + Gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>9</td> <td>118</td> <td>Sandy Clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>118</td> <td>135</td> <td>Finer Sand</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>135</td> <td>180</td> <td>Sandy clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>180</td> <td>340</td> <td>Yellow clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>240</td> <td>300</td> <td>Yellow shale + sand</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>300</td> <td>360</td> <td>Yellow clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>360</td> <td>400</td> <td>Blue clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>400</td> <td>420</td> <td>Blue shale</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>420</td> <td>425</td> <td>Blue sand shale</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>425</td> <td>516</td> <td>Blue shale</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>516</td> <td>523</td> <td>Blue sand + shale</td> <td>X</td> <td></td> </tr> </tbody> </table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No		0	3	Top soil + driveway fill		X		3	9	Sand + Gravel		X		9	118	Sandy Clay		X		118	135	Finer Sand		X		135	180	Sandy clay		X		180	340	Yellow clay		X		240	300	Yellow shale + sand		X		300	360	Yellow clay		X		360	400	Blue clay		X		400	420	Blue shale	X			420	425	Blue sand shale	X			425	516	Blue shale		X		516	523	Blue sand + shale	X	
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RECEIVED

JUN 19 1979

Department of Water Resources
Western Regional Office

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

U¹ PEWITTER OR
ALPOINT 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.

R-2

<p>1. WELL OWNER</p> <p>Name <u>Ron Ambrose</u></p> <p>Address <u>2295 E. 3100 South, Wendell, ID 83355</u></p> <p>Drilling Permit No. <u>63-92-W-119</u></p> <p>Water Right Permit No. _____</p>	<p>7. WATER LEVEL</p> <p>Static water level <u>205</u> feet below land surface.</p> <p>Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____</p> <p>Artesian closed-in pressure _____ p.s.i.</p> <p>Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p> <p>Temperature _____ °F. Quality _____</p> <p><i>Describe artesian or temperature zones below.</i></p>																																																																												
<p>2. NATURE OF WORK</p> <p><input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement</p> <p><input type="checkbox"/> Well diameter increase</p> <p><input type="checkbox"/> Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)</p>	<p>8. WELL TEST DATA</p> <p><input type="checkbox"/> Pump <input type="checkbox"/> Bailor <input checked="" type="checkbox"/> Air <input type="checkbox"/> Other _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">40</td> <td></td> <td style="text-align: center;">3</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	40		3																																																																						
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3

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter
or
Ball Point Pen

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NOV 03 1993

1. DRILLING PERMIT NO. 63 93 - 8 - 869 - 8

Other IDWR No. 63-11382

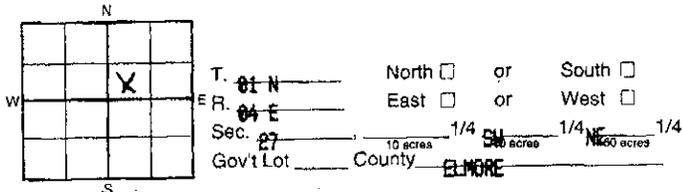
2. OWNER:
Name DANSKIN PROPERTIES LTD

Address INDIAN CR. RD. HC 34 MAYFIELD STAGE

City BOISE State ID Zip 83786

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.



Address of Well Site INDIAN CR RD HC34 MAYFIELD STAGE

(Give at least Direction + Distance to Road or Landmark)

Lot No. 19 Block No. 1 Subdivision DANSKIN PROPERTIES

4. PROPOSED USE: DOMESTIC

- Domestic Municipal Monitor Irrigation
 Thermal Injection Other

5. TYPE OF WORK NEW WELL

- New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD REVERSE CIRCULATION

- Mud Rotary Air Rotary Cable Other

7. SEALING PROCEDURES

Material	SEAL/FILTER PACK		AMOUNT Sacks or Pounds	METHOD
	From	To		
BENTONITE	8	126	22,500#	POURED
BENTONITE	368	388	2500#	POURED

Was drive shoe seal tested? YES NO How?

8. CASING/LINER:

Diameter	From	To	Gauge	Casing	Liner	Steel	Plastic	Welded	Threaded
12"	43	428	.250			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10"	468	488	.250			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Final location of shoes _____

Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS

- Perforations Method _____
 Screens Type HOUSTON Material STAINLESS STEEL

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casing	Liner
428	468	.20		18"		<input type="checkbox"/>	<input type="checkbox"/>

10. WELL TESTS: N/A

- Pump Bailor Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time
NA	NA	NA	NA

Temperature of water 65. Was a water analysis done? Yes No

By whom? _____

Water Quality (odor, etc.) GOOD

Bottom Hole Temperature 65

11. STATIC WATER LEVEL:

NA ft. below surface Depth artesian flow found _____

Artesian pressure _____ lb. Describe access port WELL CAP

Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL
26"	10	10	TOPSOIL		N
	10	35	COURSE SAND		Y
	35	55	CLAY & CRSE SAND MIX		Y
	55	65	CRS & FINE SAND SOME CLAY MIX		Y
	65	75	CRS SAND W/BRN CLAY MIX		N
	75	105	CRS SAND W/BRN CLAY & GRAVEL MIX		Y
	105	115	BRN CLAY W/CRS SAND SMALL ROCK MIX		N
	115	120	BRN CLAY		N
	120	125	FINE TO COURSE SAND, WITH CLAY		N
			AND SMALL GRAVEL & LARGE ROCKS MIXED		
	125	140	CRS SAND, CLAY, SMALL & LARGE GRAVEL MIXED		N
	140	160	FINE TO CRS SAND		N
	160	165	BROWN CLAY		N
	165	195	FINE TO CRS SAND W/CLAY & GRAVEL MIX		N
	195	218	FINE TO CRS SAND & GRAVEL		N
	218	223	FINE TO CRS SAND & CLAY MIX		N
	223	235	FINE TO CRS SAND & GRAVEL		N
	235	245	FINE TO CRS SAND & SMALL GRAVEL		N
	245	255	FINE TO CRS SAND W/ CLAY MIX		N
	255	268	FINE TO CRS SAND		N
	268	265	FINE SAND & CLAY MIX		N
	265	271	FINE TO CRS SAND W/CLAY&GRAVEL MIX		N
	271	275	FINE SAND		Y
	275	285	FINE SAND WITH CLAY MIX		N
	285	295	FINE TO CRS SAND		N
	295	305	CLAY & FINE SAND MIX		N

Date: Started 10-15-93 Completed 10-20-93

13. DRILLER'S CERTIFICATION

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

Firm Name PETE COPE DRILLING Firm No. 213

Firm Official [Signature] Date 10/29/93

Supervisor or Operator _____ Date 10/29/93

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

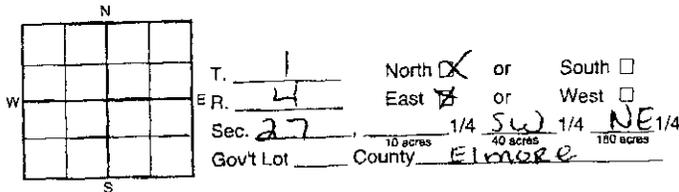
Use Typewriter
or
Ball Point Pen

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108846

1. DRILLING PERMIT NO. 63 93 C - 869 - 0
Other IDWR No. _____

2. OWNER:
Name DANSKIN PROPERTIES LTD
Address _____
City _____ State _____ Zip _____

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



Address of Well Site Indian Creek RD
(Give at least Direction + Distance to Road or Landmark)

Lot No. _____ Block No. _____ Subd. Name _____

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

5. TYPE OF WORK
 New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD
 Mud Rotary Air Rotary Cable Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		

Was drive shoe seal tested? YES NO How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Casting	Liner	Steel	Plastic	Welded	Threaded
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Final location of shoes _____

Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tele/Pipe	Casting	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

FEB 28 1994

10. WELL TESTS:

Pump Bailer Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water _____ Was a water analysis done? Yes No

By whom? _____

Water Quality (odor, etc.) _____

Bottom Hole Temperature _____

11. STATIC WATER LEVEL:

_____ ft. below surface Depth artesian flow found _____

Artesian pressure _____ lb. Describe access port _____

Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL
	285	315	FINE SAND AND CLAY MIX		N
	315	325	CLAY & FINE SAND MIX		N
	325	335	LIGHT BRN CLAY		N
	335	339	LIGHT BRN CLAY		N
	339	341	FINE TO CRS SAND		N
	341	351	SANDY LIGHT BRN CLAY		N
	351	355	FINE TO CRS SAND & GRAVEL		N
	355	365	FINE SAND W/SMALL AMOUNT CLAY MIX		N
	365	370	FINE SAND		N
	370	372	FINE TO CRS SAND & BOULDERS		N
	372	374	FINE TO CRS SAND W/BOULDERS & BROKEN ROCK		N
	374	376	SAND & CLAY MIXED		N
	376	382	SANDY CLAY LIGHT BROWN COLOR		N
	382	387	SANDY CLAY & SHALE MIXED		N
	387	400	CRS SAND & CLAY MIXED		N
	400	407	FINE TO MED SAND		N
	407	413	SAND & CLAY MIXED		Y
	413	423	FINE TO MED SAND & CLAY MIXED		Y
			SOME MED GRAVEL MIXED		Y
	423	429	FINE TO MED SAND & MED GRAVEL		Y
	429	433	FINE SAND, & SMALL AMOUNT CLAY MIXED		Y
	433	440	FINE MED SAND		Y
	440	443	FINE TO CRS SAND W/GRAVEL & CLAY MIXED		Y
	443	449	FINE TO COURSE SAND		Y
	449	450	BRN CLAY		N
	450	453	SAND, GRAVEL & CLAY MIXED		Y

Date: Started _____ Completed _____

13. DRILLER'S CERTIFICATION

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

Firm Name _____ Firm No. _____

Firm Official _____ Date _____

and
Supervisor or Operator _____ Date _____

(Sign once if Firm Official & Operator)

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

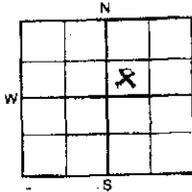
Use Typewriter
or
Ball Point Pen

108844

1. DRILLING PERMIT NO. 83 93 W 1045 000
Other IDWR No. _____

2. OWNER:
Name JIM UNDERWOOD
Address HC 34 MAYFIELD STAGE
City BOISE State ID Zip 83706

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



T. 1N North or South 15 L. E
E. R. 4E East or West
Sec. 27 SW 1/4 NE 1/4 160 acres
Gov't Lot _____ County ELMORE

Address of Well Site HC 34 INDIAN CREEK RD HC 34
Mayfield Stage Stop
(Give at least Direction + Distance to Road or Landmark)

Lot No. _____ Block No. _____ Subd. Name _____

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

5. TYPE OF WORK **NEW WELL**
 New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD **AIR ROTARY**
 Mud Rotary Air Rotary Cable Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
*BENTONITE	0	20	750#	POURED

Was drive shoe seal tested? Y N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Casting	Liner	Steel	Plastic	Welded	Threaded
*8"	+1	68	.254			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoes *68
Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS
 Perforations Method FACTORY
 Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Telr/Pipe Size	Casting	Liner
*28	68	1/8"		8"	PIPE	<input checked="" type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

10. WELL TESTS: **PUMP**

Yield gal./min.	Drawdown	Pumping Depth	Time
55	40	63	80

Temperature of water 65 Was a water analysis done? Yes No
By whom? _____
Water Quality (odor, etc.) GOOD
Bottom Hole Temperature 65

11. STATIC WATER LEVEL:
L.F. _____ ft. below surface Depth artesian flow found _____
Artesian pressure _____ lb. Describe access port WELL CAP
Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL
	0	9	TOPSOIL		N
	10	20	SAND		Y
	20	23	GRAVEL		Y
	23	27	SAND		Y
	27	29	CLAY		N
	29	48	SAND		Y
	48	49	BROWN CLAY		N
	49	58	SAND		Y
	58	75	BROWN CLAY		N
	75		SAND		Y

RECEIVED
OCT 20 1993
WATER RESOURCES
WESTERN REGION
MONROVIA
FEB 28 1994
Date: Started 10/12/93 Completed 10/13/93

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Firm Name PETE COPE DRILLING Firm No. 213
Firm Official Joseph Cope Date 10/19/93
and Supervisor or Operator Jerry Foster Date 10/19/93
(Sign once if Firm Official & Operator)

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

USE WRITER OR
B POINT 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.

<p>1. WELL OWNER</p> <p>Name <u>Jim Underwood</u></p> <p>Address <u>Mayfield, Idaho</u></p> <p>Owner's Permit No. <u>63-85-C-0001-000</u></p>	<p>7. WATER LEVEL</p> <p>Static water level <u>338'</u> feet below land surface.</p> <p>Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____</p> <p>Artesian closed-in pressure _____ p.s.i.</p> <p>Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p> <p>Temperature _____ °F. Quality _____</p> <p><i>Describe artesian or temperature zones below.</i></p>																																																																												
<p>2. NATURE OF WORK</p> <p><input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement</p> <p><input type="checkbox"/> Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)</p>	<p>8. WELL TEST DATA</p> <p><input type="checkbox"/> Pump <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Air <input type="checkbox"/> Other _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr> <td style="text-align: center;">60</td> <td></td> <td style="text-align: center;">2</td> </tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	60		2																																																																						
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<p>5. WELL CONSTRUCTION</p> <p>Casing schedule: <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>.250 inches</td> <td>6 inches</td> <td>+ 3' feet</td> <td>459' feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> <p>Was casing drive shoe used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Was a packer or seal used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Perforated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>How perforated? <input type="checkbox"/> Factory <input type="checkbox"/> Knife <input type="checkbox"/> Torch</p> <p>Size of perforation _____ inches by _____ inches</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> <p>Well screen installed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Manufacturer's name _____</p> <p>Type _____ Model No. _____</p> <p>Diameter _____ Slot size _____ Set from _____ feet to _____ feet</p> <p>Diameter _____ Slot size _____ Set from _____ feet to _____ feet</p> <p>Gravel packed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Size of gravel _____</p> <p>Placed from _____ feet to _____ feet</p> <p>Surface seal depth <u>20'</u> Material used in seal: <input type="checkbox"/> Cement grout <input type="checkbox"/> Bentonite <input checked="" type="checkbox"/> Pudding clay <input type="checkbox"/> _____</p> <p>Sealing procedure used: <input type="checkbox"/> Slurry pit <input type="checkbox"/> Temp. surface casing <input checked="" type="checkbox"/> Overbore to seal depth</p> <p>Method of joining casing: <input type="checkbox"/> Threaded <input checked="" type="checkbox"/> Welded <input type="checkbox"/> Solvent Weld <input type="checkbox"/> Cemented between strata</p> <p>Describe access port _____</p>	Thickness	Diameter	From	To	.250 inches	6 inches	+ 3' feet	459' feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	<div style="text-align: center; font-size: 2em; font-weight: bold; opacity: 0.5;">RECEIVED</div> <p style="text-align: center;">JUL 8 1985</p> <p style="text-align: center; font-size: 0.8em;">Department of Water Resources</p>																																												
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<p>6. LOCATION OF WELL</p> <p>Sketch map location <u>must</u> agree with written location.</p> <div style="display: flex; align-items: center;"> <div style="text-align: center;"> </div> <div style="margin-left: 20px;"> <p>Subdivision Name _____</p> <p>Lot No. _____ Block No. _____</p> </div> </div> <p>County <u>ELMORE</u></p>	<p>10. Work started <u>5-09-85</u> finished <u>5-17-85</u></p>																																																																												
<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>Firm Name <u>BILL DOTY WELL DRILLING</u> Firm No. <u>42</u></p> <p>Address <u>RT. 7 BOX 311 CALDWELL, IDAHO 83605</u> Date <u>6-01-85</u></p> <p>Signed by (Firm Official) <u>Bill Doty</u></p> <p style="text-align: center;">and</p> <p>(Operator) <u>Bob Doty</u></p>	<div style="text-align: center; font-size: 2em; font-weight: bold; opacity: 0.5;">RECEIVED</div> <p style="text-align: center;">JUL 8 1985</p> <p style="text-align: center; font-size: 1.5em; font-weight: bold; opacity: 0.5;">MICROFILMED</p> <p style="text-align: center; font-size: 0.8em;">Department of Water Resources</p>																																																																												

7

USE TYPEWRITER OR BALL POINT PEN

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

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

Handwritten notes:
10-30-74
D
me

1. WELL OWNER

Name Carl Agenbroad

Address 6 20 13th Ave. So., Nampa, Idaho 83651

Owner's Permit No. _____

7. WATER LEVEL

Static water level 6 feet below land surface

Flowing? Yes No G.P.M. flow _____

Temperature _____ ° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by Valve Cap Plug

2. NATURE OF WORK

New well Deepened Replacement

Abandoned (describe method of abandoning)

8. WELL TEST DATA

Pump Bailer Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>500</u>	<u>Clear down</u>	

3. PROPOSED USE

Domestic Irrigation Test Other (specify type)

Municipal Industrial Stock Waste Disposal or Injection

9. LITHOLOGIC LOG 46767

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
	0	10	Top Soil		
	10	47	coarse white & gray sand		
	47	52	brown clay		
	52	64	coarse gray & white sand		
	64	105	brown clay & sand		
	105	118	brown clay		
	118	128	brown, gray sand		
	125	128	gray clay & white sand		
	128	133	blue clay		
	133	146	brown sand/streaks of clay		
	146	147	brown clay		
	147	150	brown sand		
	150	160	brown sand/clay streaks		
	160	165	brown clay/sand		
	165	180	brown sand/clay streaks		
	180	200	coarse brown sand/pea gravel		

4. METHOD DRILLED

Reverse

Cable Rotary Dug Other

5. WELL CONSTRUCTION

Diameter of hole 27 inches Total depth 200 feet

Casing schedule: Steel Concrete

Thickness	Diameter	From	To
<u>2.50</u> inches	<u>16</u> inches	<u>2</u> feet	<u>18</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? Yes No

Perforated? Yes No

How perforated? Factory Knife Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	<u>18</u> feet	<u>200</u> feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? Yes No

Manufacturer's name _____

Type Beaumont Model No. Laver

Diameter 14 Slot size 3/16 Set from 18 feet to 200 feet

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

Gravel packed? Yes No Size of gravel 3/8 minus

Placed from 18 feet to 200 feet

Surface seal depth 18 Material used in seal Cement grout

Pudding clay Well cuttings

Sealing procedure used Sherry pit Temporary surface casing

Overbore to seal depth

6. LOCATION OF WELL

Sketch location must agree with written location.

Handwritten: dk, 603

Subdivision Name _____

Lot No. _____ Block No. _____

County Ada

SE 1/4 NW 1/4 Sec. 27, T. 1 N, R. 4 E

10. Work started Oct 3 finished Oct 8-74

11. DRILLERS CERTIFICATION

USGS

Firm Name Pete Cope Drilling Co., Inc Firm No. 213

Address Box 56, Mosheim Date 10-12-74

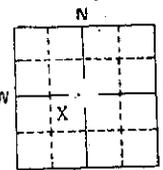
Signed by (Firm Official) Pete Cope, President

and (Operator) Jack Jones

Handwritten circled number: 8

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>Ken Agenbroad</u></p> <p>Address <u>Mayfield Stage, Boise, Idaho 83706</u></p> <p>Owner's Permit No. _____</p>	<p>7. WATER LEVEL</p> <p>Static water level <u>390</u> feet below land surface.</p> <p>Flowing? <input type="checkbox"/> Yes <input type="checkbox"/> No G.P.M. flow _____</p> <p>Artesian closed-in pressure _____ p.s.i.</p> <p>Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p> <p>Temperature _____ OF. Quality _____</p>																																																																																																																																																																																																																												
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<p>5. WELL CONSTRUCTION</p> <p>Casing schedule: <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>.250 inches</td> <td>16 inches</td> <td>2 feet</td> <td>500 feet</td> </tr> <tr> <td>.250 inches</td> <td>16 inches</td> <td>510 feet</td> <td>608 feet</td> </tr> <tr> <td>.250 inches</td> <td>16 inches</td> <td>688 feet</td> <td>712 feet</td> </tr> <tr> <td>.250 inches</td> <td>16 inches</td> <td>752 feet</td> <td>763 feet</td> </tr> <tr> <td>.281 inches</td> <td>26 inches</td> <td>0 feet</td> <td>72 feet</td> </tr> </tbody> </table> <p>Was casing drive shoe used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Was a packer or seal used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Perforated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>How perforated? <input type="checkbox"/> Factory <input type="checkbox"/> Knife <input type="checkbox"/> Torch</p> <p>Size of perforation _____ inches by _____ inches</p> <p>Number _____ From _____ To _____</p> <p>_____ perforations _____ feet _____ feet</p> <p>_____ perforations _____ feet _____ feet</p> <p>_____ perforations _____ feet _____ feet</p> <p>Well screen installed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Manufacturer's name <u>Roscoe Moss</u></p> <p>Type _____ Model No. _____</p> <p>Diameter <u>16</u> Slot size <u>80</u> Set from <u>500</u> feet to <u>510</u> feet</p> <p>Diameter <u>16</u> Slot size <u>80</u> Set from <u>712</u> feet to <u>763</u> feet</p> <p>Gravel packed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Size of gravel <u>3/8 minus</u></p> <p>Placed from <u>6</u> feet to <u>763</u> feet</p> <p>Surface seal depth <u>72</u> Material used in seal: <input checked="" type="checkbox"/> Cement grout</p> <p><input type="checkbox"/> Puddling clay <input type="checkbox"/> Well cuttings</p> <p>Sealing procedure used: <input type="checkbox"/> Slurry pit <input type="checkbox"/> Temp. surface casing</p> <p><input checked="" type="checkbox"/> Overbore to seal depth</p> <p>Method of joining casing: <input type="checkbox"/> Threaded <input checked="" type="checkbox"/> Welded <input type="checkbox"/> Solvent Weld</p> <p><input type="checkbox"/> Cemented between strata</p> <p>Describe access port <u>To be determined</u></p>	Thickness	Diameter	From	To	.250 inches	16 inches	2 feet	500 feet	.250 inches	16 inches	510 feet	608 feet	.250 inches	16 inches	688 feet	712 feet	.250 inches	16 inches	752 feet	763 feet	.281 inches	26 inches	0 feet	72 feet	<p>RECEIVED</p> <p>Work started _____ finished <u>9-4-79</u></p>																																																																																																																																																																																																				
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<p>6. LOCATION OF WELL</p> <p>Sketch map location must agree with written location.</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>Subdivision Name _____</p> <p>Department of Water Resources Firm Name <u>Pete Cope Drilling Co. Inc.</u> Firm No. <u>215</u></p> <p>Western Regional Office Address <u>P.O. Box 561</u> Date <u>9-11-79</u></p> <p>Lot No. _____ Block No. _____</p> <p>Signed by (Firm Official) <u>Pete Cope</u></p> <p>and <u>Julie Engstrom</u></p> <p>(Operator)</p> </div> </div> <p>County <u>Ada</u></p> <p>NE 1/4 SW 1/4 Sec. <u>28</u>, T. <u>1N</u> N/S, R. <u>4E</u> E/W.</p>	<p>RECEIVED</p> <p>SEP 28 1979</p> <p>Department of Water Resources</p>																																																																																																																																																																																																																												

IDA DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter
or
Ball Point Pen

1. DRILLING PERMIT NO. 63-94-W-0489 - 000

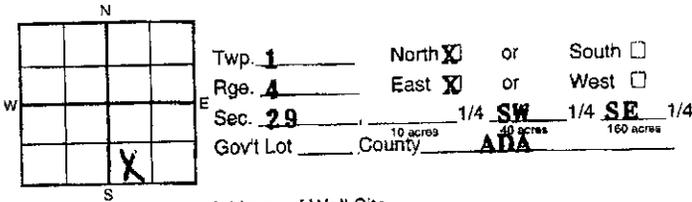
Other IDWR No. _____

2. OWNER:

Name GEORGE WINJE
Address HC34/MAYFIELD STG. 52
City BOISE State ID Zip 83706

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.



Twp. 1 North or South
Rge. 4 East or West
Sec. 29 1/4 SW 1/4 SE 1/4
Gov't Lot _____ County ADA

Address of Well Site _____

ORCHARD/MAYBER EXIT City _____
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. PROPOSED USE:

Domestic Municipal Monitor Irrigation
 Thermal Injection Other _____

5. TYPE OF WORK

New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD

Mud Rotary Air Rotary Cable Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
<u>BENT</u>	<u>0</u>	<u>18</u>	<u>2S</u>	<u>OVERBORE</u>

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6"</u>	<u>+1</u>	<u>46</u>	<u>250</u>	<u>STEEL</u>	<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 MIDDORF

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
					<u>FEB 08 1995</u>	<input type="checkbox"/>	<input type="checkbox"/>

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

NO ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

Pump Bailer Air Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
<u>NO</u>		<u>NO</u>	<u>NO</u>

Water Temp. _____ Bottom hole temp. 091183
Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
9"	0	1	TOPSOIL	NO	
9"	1	7	BLACK HARD LAVA	NO	
9"	7	12	YELLOW SOAP STONE	NO	
9"	12	18	BEIGE COARSE SANDSTONE	NO	
6"	18	25	BEIGE COARSE SANDSTONE	NO	
6"	25	30	BRN CLAY	NO	
6"	30	41	GRAY PEA GRAVEL	YES	
6"	41	46	BRN SOFT CLAY	NO	
6"	46	68	BLACK LAVA	NO	
6"	68	72	GRAY PACKED FINE SAND	NO	
6"	72	80	RUSTY BRN CLAY	NO	
6"	80	87	PACKED GRAY SAND COARSE	NO	
6"	87	95	BRN CLAY	NO	
6"	95	110	PACKED BRN COARSE SAND	NO	
6"	110	120	BRN CLAY	NO	
6"	120	130	BRN SANDY CLAY	NO	
6"	130	140	BRN CLAY	NO	
6"	140	150	PACKED BRN SAND	NO	
6"	150	160	BRN SAND	NO	
6"	160	162	BRN CLAY	NO	
6"	162	180	BRN COARSE SAND	NO	
6"	180	185	BRN CLAY	NO	
6"	185	202	BRN COARS SAND	NO	

RECEIVED
SEP 15 1994
Department of Water Resources

RECEIVED
JUN 21 1994
WATER RESOURCES
WESTERN REGION

Completed Depth 203' FROM TOP OF CASING (Measurable)
Date: Started 6/8/94 Completed 6/10/94

13. DRILLER'S CERTIFICATION

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

Firm Name S.O.S. WELLDRIILLING Firm No. 212

Firm Official Franz Skumia Date 6-14-94

and Supervisor or Operator Tony Jacobeth Date 6-14-94

(Sign once if Firm Official & Operator)



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.

9

<p>1. WELL OWNER</p> <p>Name <u>Boise Stage Stop</u></p> <p>Address _____</p> <p>Owner's Permit No. _____</p>	<p>7. WATER LEVEL</p> <p>Static water level <u>34</u> feet below land surface.</p> <p>Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____</p> <p>Artesian closed-in pressure _____ p.s.i.</p> <p>Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p> <p>Temperature _____ OF. Quality _____</p> <p><small>Describe artesian or temperature zones below.</small></p>																																																																																														
<p>2. NATURE OF WORK</p> <p><input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement</p> <p><input type="checkbox"/> Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)</p>	<p>8. WELL TEST DATA</p> <p><input type="checkbox"/> Pump <input type="checkbox"/> Bailor <input checked="" type="checkbox"/> Air <input type="checkbox"/> Other _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr> <td style="text-align: center;">20</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	20		2																																																																																								
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<p>3. PROPOSED USE</p> <p><input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Test <input type="checkbox"/> Municipal</p> <p><input type="checkbox"/> Industrial <input type="checkbox"/> Stock <input type="checkbox"/> Waste Disposal or Injection</p> <p><input type="checkbox"/> Other _____ (specify type)</p>	<p>9. LITHOLOGIC LOG 87169</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Bore Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>0</td> <td>8</td> <td>Soil + Hard Pan</td> <td></td> <td></td> </tr> <tr> <td></td> <td>8</td> <td>35</td> <td>SAND + GRAVEL</td> <td></td> <td></td> </tr> <tr> <td></td> <td>35</td> <td>45</td> <td>SAND + CLAY</td> <td></td> <td></td> </tr> <tr> <td></td> <td>45</td> <td>52</td> <td>CLAY</td> <td></td> <td></td> </tr> <tr> <td>10-8</td> <td>52</td> <td>65</td> <td>GRAY LAVA</td> <td></td> <td></td> </tr> <tr> <td></td> <td>65</td> <td>69</td> <td>GRAY + BROWN CINDER</td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td></td> <td>69</td> <td>72</td> <td>GRAY LAVA</td> <td></td> <td></td> </tr> <tr> <td></td> <td>72</td> <td>74</td> <td>GRAY LAVA CLAY + CINDER</td> <td></td> <td></td> </tr> <tr> <td></td> <td>74</td> <td>82</td> <td>GRAY LAVA</td> <td></td> <td></td> </tr> <tr> <td></td> <td>82</td> <td>83</td> <td>BROWN CINDER</td> <td></td> <td></td> </tr> <tr> <td></td> <td>83</td> <td>84</td> <td>GRAY LAVA</td> <td></td> <td></td> </tr> <tr> <td></td> <td>84</td> <td>88</td> <td>Brown cinder + clay</td> <td></td> <td></td> </tr> <tr> <td></td> <td>88</td> <td>89</td> <td>Red clay</td> <td></td> <td></td> </tr> <tr> <td></td> <td>89</td> <td>92</td> <td>SAND</td> <td></td> <td></td> </tr> </tbody> </table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	10	0	8	Soil + Hard Pan				8	35	SAND + GRAVEL				35	45	SAND + CLAY				45	52	CLAY			10-8	52	65	GRAY LAVA				65	69	GRAY + BROWN CINDER		X		69	72	GRAY LAVA				72	74	GRAY LAVA CLAY + CINDER				74	82	GRAY LAVA				82	83	BROWN CINDER				83	84	GRAY LAVA				84	88	Brown cinder + clay				88	89	Red clay				89	92	SAND		
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<p>4. METHOD DRILLED</p> <p><input checked="" type="checkbox"/> Rotary <input checked="" type="checkbox"/> Air <input type="checkbox"/> Hydraulic <input type="checkbox"/> Reverse rotary</p> <p><input type="checkbox"/> Cable <input type="checkbox"/> Dug <input type="checkbox"/> Other _____</p>	<div style="border: 2px solid black; padding: 10px; width: fit-content; margin: auto;"> <p>RECEIVED</p> <p>DEC 8 1986</p> <p>Department of Water Resources</p> </div> <div style="border: 2px solid black; padding: 10px; width: fit-content; margin: auto; margin-top: 20px;"> <p>RECEIVED</p> <p>MAR 11 1987</p> <p>Department of Water Resources Western Regional Office</p> </div>																																																																																														
<p>5. WELL CONSTRUCTION</p> <p>Casing schedule: <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____</p> <p>Thickness _____ inches Diameter _____ inches From _____ feet To _____ feet</p> <p>_____ inches _____ inches _____ feet _____ feet</p> <p>_____ inches _____ inches _____ feet _____ feet</p> <p>_____ inches _____ inches _____ feet _____ feet</p> <p>Was casing drive shoe used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Was a packer or seal used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Perforated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>How perforated? <input type="checkbox"/> Factory <input type="checkbox"/> Knife <input type="checkbox"/> Torch</p> <p>Size of perforation _____ inches by _____ inches</p> <p>Number _____ From _____ To _____</p> <p>_____ perforations _____ feet _____ feet</p> <p>_____ perforations _____ feet _____ feet</p> <p>_____ perforations _____ feet _____ feet</p> <p>Well screen installed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Manufacturer's name _____</p> <p>Type _____ Model No. _____</p> <p>Diameter _____ Slot size _____ Set from _____ feet to _____ feet</p> <p>Diameter _____ Slot size _____ Set from _____ feet to _____ feet</p> <p>Gravel packed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Size of gravel _____</p> <p>Placed from _____ feet to _____ feet</p> <p>Surface seal depth <u>53</u> Material used in seal: <input type="checkbox"/> Cement grout</p> <p><input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Pudding clay <input type="checkbox"/> _____</p> <p>Sealing procedure used: <input type="checkbox"/> Slurry pit <input type="checkbox"/> Temp. surface casing</p> <p><input checked="" type="checkbox"/> Overbore to seal depth</p> <p>Method of joining casing: <input type="checkbox"/> Threaded <input checked="" type="checkbox"/> Welded <input type="checkbox"/> Solvent</p> <p>Weld Department of Water Resources</p> <p><input type="checkbox"/> Cemented between strata</p> <p>Describe access port _____</p>																																																																																															
<p>6. LOCATION OF WELL</p> <p>Sketch map location must agree with written location.</p> <div style="text-align: center;"> </div> <p>Subdivision Name _____</p> <p>Lot No. _____ Block No. _____</p> <p>County <u>Ada</u></p> <p><u>NE 1/4 NE 1/4 Sec. 32, T. 1 N, R. 4 E.</u></p>																																																																																															
<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>Firm Name <u>Middleton Drilling</u> Firm No. <u>35</u></p> <p>Address <u>MT Home</u> Date <u>11-24-86</u></p> <p>Signed by (Firm Official) <u>[Signature]</u></p> <p>and (Operator) <u>[Signature]</u></p>	<p>10.</p> <p>Work started <u>11-7-86</u> finished <u>11-14-86</u></p>																																																																																														

20

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0020068
DRILLING PERMIT NO. _____
Other IDWR No. _____

2. OWNER:
Name Robert Beaso
Address 0000 South Orchard Street
City Boise State ID Zip 83716

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

N		E		S		W	
1		4		32		1/4	
North		East		NW		NE	
Twp		Rge		Sec		1/4	
1		4		32		1/4	
County		County		County		County	
Boise		Boise		Boise		Boise	

Address of Well Site 1/4 mile behind Stage Stop City Boise

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

SEALER/PACK	AMOUNT	METHOD		
From	To	Sacks or		
Material	Feet	Headings		
Bentonite	0	20	15	overbore

Was shoe used? Yes No Shoe Depth(s) 20
 Was drive shoe seal tested? Yes No How? Air Test

8. CASING/LINER:

Diameter	From	To	Length	Material	Casing	Linear	Welded	Threaded
6"	+1	20	250	steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 1/4"	19	160		PVC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

From	To	Sh. Size	Number	Diameter	Material	Casing	Linear
19	160	40	44	PVC	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Perforations Method _____
 Screens Screen Type _____

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

11. WELL TESTS:

Pump Bailor Air Flowing Artesian

Yield gal./min. _____ Drawdown _____ Pumping Level _____ Time _____

2 _____ 160 _____ 3 hrs.

Water Temp. _____ 65 _____ Bottom hole temp. _____ 65 _____

Water Quality test or comments: Good Depth first Water Encounter 56

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

Size	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
10"	0	3	overburden	X	X
10"	3	7	hard pan	X	X
10"	7	16	gravel	X	X
10"	16	26	clay	X	X
6"	26	56	lava	X	X
6"	56	68	clinders	X	X
6"	68	100	decomposed granite	X	X
6"	100	110	red clinders	X	X
6"	110	123	decomposed granite	X	X
6"	123	140	clay	X	X
6"	140	160	granite	X	X

RECEIVED
 AUG 15 2001
 Departmental Water Resources

Completed Depth 160 (Measurable)
 Date: Started 11/06/2000 Completed 11/10/2000

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

Company Name BE L. Holder Drilling Firm No. 578
 Firm Official [Signature] Date 11/10/2000
 and Driller or Operator _____ Date _____
 (Sign once if Firm Official & Operator)

21

USE TYPEWRITER OR BALL POINT PEN

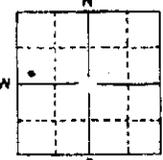
State of Idaho
Department of Water Resources

RECEIVED

WELL DRILLER'S REPORT

JUL 20 1976

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. Department of Water Resources

<p>1. WELL OWNER Name <u>BLACKIE STEWART</u> Address <u>BOISE, IDAHO</u> Owner's Permit No. _____</p>	<p>7. WATER LEVEL Static water level <u>89</u> feet below land surface Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p>																																																																
<p>2. NATURE OF WORK <input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement <input type="checkbox"/> Abandoned (describe method of abandoning)</p>	<p>8. WELL TEST DATA <input type="checkbox"/> Pump <input type="checkbox"/> Bailor <input checked="" type="checkbox"/> Other Discharge G.P.M. <u>80</u> Draw Down _____ Hours Pumped <u>2</u></p>																																																																
<p>3. PROPOSED USE <input type="checkbox"/> Domestic <input checked="" type="checkbox"/> Irrigation <input type="checkbox"/> Test <input type="checkbox"/> Other (specify type) <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> Stock <input type="checkbox"/> Waste Disposal or Injection</p>	<p>9. LITHOLOGIC LOG <u>042808</u></p> <table border="1"> <thead> <tr> <th rowspan="2">Hole Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>0</td> <td>8</td> <td>Soil</td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>8</td> <td>16</td> <td>DECOMPOSED GRANITE + CLAY</td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>16</td> <td>42</td> <td>DECOMPOSED GRANITE + CLAY + BOLDER</td> <td></td> <td>✓</td> </tr> <tr> <td>8</td> <td>42</td> <td>48</td> <td>GRANITE BOLDER</td> <td></td> <td>✓</td> </tr> <tr> <td>8</td> <td>48</td> <td>72</td> <td>DECOMPOSED GRANITE + BOLDER</td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>72</td> <td>91</td> <td>GRANITE</td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>91</td> <td>97</td> <td>DECOMPOSED GRANITE + CLAY</td> <td></td> <td></td> </tr> <tr> <td>8</td> <td>97</td> <td>168</td> <td>GRANITE + DECOMPOSED GRANITE</td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>168</td> <td>260</td> <td>GRANITE + DECOMPOSED GRANITE</td> <td></td> <td>✓</td> </tr> </tbody> </table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No	8	0	8	Soil			8	8	16	DECOMPOSED GRANITE + CLAY			8	16	42	DECOMPOSED GRANITE + CLAY + BOLDER		✓	8	42	48	GRANITE BOLDER		✓	8	48	72	DECOMPOSED GRANITE + BOLDER			8	72	91	GRANITE			8	91	97	DECOMPOSED GRANITE + CLAY			8	97	168	GRANITE + DECOMPOSED GRANITE			6	168	260	GRANITE + DECOMPOSED GRANITE		✓
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6	168	260	GRANITE + DECOMPOSED GRANITE		✓																																																												
<p>4. METHOD DRILLED <input type="checkbox"/> Cable <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Dug <input type="checkbox"/> Other</p>																																																																	
<p>5. WELL CONSTRUCTION Diameter of hole <u>6</u> inches Total depth <u>260</u> feet Casing schedule: <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Concrete Thickness Diameter From To <u>150</u> inches <u>8 5/8</u> inches + <u>1</u> feet <u>16</u> feet <u>250</u> inches <u>6 3/8</u> inches <u>2</u> feet <u>168</u> feet ____ inches _____ inches _____ feet _____ feet ____ inches _____ inches _____ feet _____ feet ____ inches _____ inches _____ feet _____ feet Was casing drive shoe used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Was a packer or seal used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perforated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No How perforated? <input type="checkbox"/> Factory <input checked="" type="checkbox"/> Knife <input type="checkbox"/> Torch Size of perforation <u>1/4</u> inches by <u>3</u> inches <u>15</u> perforations <u>135</u> feet <u>145</u> feet ____ perforations _____ feet _____ feet ____ perforations _____ feet _____ feet Well screen installed? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>72</u> Material used in seal <input type="checkbox"/> Cement grout <input checked="" type="checkbox"/> Puddling clay <input type="checkbox"/> Well cuttings Sealing procedure used <input type="checkbox"/> Slurry pit <input type="checkbox"/> Temporary surface casing <input checked="" type="checkbox"/> Overbore to seal depth</p>																																																																	
<p>6. LOCATION OF WELL Sketch map location must agree with written location. <u>(3)</u>  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>ELMORE</u> <u>SW 1/4 NW 1/4 Sec. 34 T. 1 N. R. 4 E. 4</u></p>	<p>10. Work started <u>4/29/76</u> finished <u>5/10/76</u> 11. DRILLERS CERTIFICATION USGS Firm Name <u>Hullston Drilling</u> Firm No. <u>35</u> Address <u>MT HOME, IDAHO</u> Date <u>5/12/76</u> Signed by (Firm Official) <u>Ross</u> and (Operator) <u>Ken Koh</u></p>																																																																

24

25

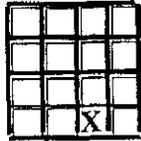
Inspected by _____
 Twp _____ Rgc _____ Sec _____
 _____ 1/4 _____ 1/4
 Lat: _____ Long: _____

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. DRILLING PERMIT NO. 61-99-W-0059-000
 Other IDWR No. D0012097

2. OWNER:
 Name Ronald & Pamela Miller
 Address HC 34 Mayfield Stage
 City Boise State ID Zip 83716

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



Twp. 1 North or South
 Rge. 4 East or West
 Sec. 34 1/4 SW 1/4 SE 1/4
10 acres 40 acres 160 acres

Gov't lot _____ County Elmore

Lat: _____ Long: _____

Address of Well Site Mayfield Road

City Mayfield

(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 X Mud Rotary Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	18	900 lbs	Overbore

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

Was drive shoe seal tested? Y N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
5.438	+2	596	288	Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.563	606	616	288	Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input 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
596	606	020		5.563	SS	<input checked="" type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

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

11. WELL TESTS: **59137**
 Pump Bailer Air Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encountered _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temp.	Y	N
12	0	3	Top Soil		<input checked="" type="checkbox"/>
12	3	15	Hard Pan		<input checked="" type="checkbox"/>
12	15	18	Sand & Clay Seams		<input checked="" type="checkbox"/>
8	18	22	Tan Clay		<input checked="" type="checkbox"/>
8	22	257	Tan Sand & Clay Seams		<input checked="" type="checkbox"/>
8	257	260	Tan Clay		<input checked="" type="checkbox"/>
8	260	320	Brown Silt & Sand		<input checked="" type="checkbox"/>
8	320	400	Tan Clay & Some Sand		<input checked="" type="checkbox"/>
8	457	469	White Clay & Large Stone		<input checked="" type="checkbox"/>
8	469	471	Sand - 013		<input checked="" type="checkbox"/>
8	471	500	Tan Clay & Some Sand		<input checked="" type="checkbox"/>
8	500	520	White Clay & Some Sand		<input checked="" type="checkbox"/>
8	520	594	Tan Clay & Some Sand		<input checked="" type="checkbox"/>
8	594	610	White Clay & Some Sand		<input checked="" type="checkbox"/>
8	610	615	Medium Sand & White Clay		<input checked="" type="checkbox"/>
8	615	620	White Clay & Some Stone		<input checked="" type="checkbox"/>

25

RECEIVED
 MICROFILMED
 NOV 30 1999
 OCT 13 1999
 WATER RESOURCES
 WESTERN REGION

Completed Depth: 616 (Measurable)
 Date: Started 9-18-99 Completed 9-23-99

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

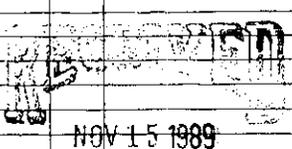
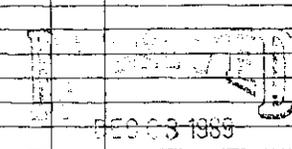
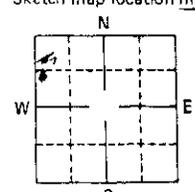
Firm Name Hiddleston & Son, Inc Firm No. 35

Firm Official [Signature] Date 10/11/99

Supervisor or Operator [Signature] Date _____
 (Sign once if Firm Official & Operator)

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>Jerry Merton</u></p> <p>Address <u>Box 48 Mayfield Stage</u></p> <p>Owner's Permit No. <u>61-89-2-026 83707</u></p>	<p>7. WATER LEVEL</p> <p>Static water level <u>460</u> feet below land surface.</p> <p>Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____</p> <p>Artesian closed-in pressure _____ p.s.i.</p> <p>Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p> <p>Temperature _____ of. Quality _____</p> <p><i>Describe artesian or temperature zones below.</i></p>																																														
<p>2. NATURE OF WORK</p> <p><input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement</p> <p><input type="checkbox"/> Well diameter increase</p> <p><input type="checkbox"/> Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)</p>	<p>8. WELL TEST DATA</p> <p><input type="checkbox"/> Pump <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Air <input type="checkbox"/> Other _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr> <td style="text-align: center;">25</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	25		2																																								
Discharge G.P.M.	Pumping Level	Hours Pumped																																													
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<p>3. PROPOSED USE</p> <p><input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Test <input type="checkbox"/> Municipal</p> <p><input type="checkbox"/> Industrial <input type="checkbox"/> Stock <input type="checkbox"/> Waste Disposal or Injection</p> <p><input type="checkbox"/> Other _____ (specify type)</p>	<p>9. LITHOLOGIC LOG</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Bore Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>8"</td> <td>0</td> <td>10</td> <td>sand</td> <td></td> <td></td> </tr> <tr> <td>8"</td> <td>10</td> <td>28</td> <td>Clay w/ some sand</td> <td></td> <td></td> </tr> <tr> <td>8-6"</td> <td>28</td> <td>260</td> <td>Clay w/ sand</td> <td></td> <td></td> </tr> <tr> <td>6"</td> <td>260</td> <td>510</td> <td>Cemented sand & Gravel etc</td> <td></td> <td></td> </tr> <tr> <td>6"</td> <td>510</td> <td>583</td> <td>fine sand (gray) w/ very little gravel</td> <td></td> <td></td> </tr> <tr> <td>6"</td> <td>583</td> <td>586</td> <td>sand & gravel</td> <td></td> <td></td> </tr> </tbody> </table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	8"	0	10	sand			8"	10	28	Clay w/ some sand			8-6"	28	260	Clay w/ sand			6"	260	510	Cemented sand & Gravel etc			6"	510	583	fine sand (gray) w/ very little gravel			6"	583	586	sand & gravel		
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<p>4. METHOD DRILLED</p> <p><input checked="" type="checkbox"/> Rotary <input checked="" type="checkbox"/> Air <input type="checkbox"/> Hydraulic <input type="checkbox"/> Reverse rotary</p> <p><input type="checkbox"/> Cable <input type="checkbox"/> Dug <input type="checkbox"/> Other _____</p>	<div style="text-align: center;">  <p>NOV 15 1989</p> <p>Department of Water Resources</p>  <p>DEC 03 1989</p> <p>Department of Water Resources Western Regional Office</p>  <p>JUN 08 1990</p> </div>																																														
<p>5. WELL CONSTRUCTION</p> <p>Casing schedule: <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>250 inches</td> <td>6 5/8 inches</td> <td>2 feet</td> <td>584 feet</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>Was casing drive shoe used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Was a packer or seal used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Perforated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>How perforated? <input type="checkbox"/> Factory <input type="checkbox"/> Knife <input type="checkbox"/> Torch <input type="checkbox"/> Gun</p> <p>Size of perforation _____ inches by _____ inches</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>Well screen installed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Manufacturer's name _____</p> <p>Type _____ Model No. _____</p> <p>Diameter _____ Slot size _____ Set from _____ feet to _____ feet</p> <p>Diameter _____ Slot size _____ Set from _____ feet to _____ feet</p> <p>Gravel packed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Size of gravel _____</p> <p>Placed from _____ feet to _____ feet</p> <p>Surface seal depth <u>50</u> Material used in seal: <input type="checkbox"/> Cement grout</p> <p><input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Pudding clay <input type="checkbox"/> _____</p> <p>Sealing procedure used: <input type="checkbox"/> Slurry pit <input type="checkbox"/> Temp. surface casing</p> <p><input checked="" type="checkbox"/> Overbore to seal depth</p> <p>Method of joining casing: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded <input type="checkbox"/> Solvent Weld</p> <p><input type="checkbox"/> Cemented between strata</p> <p>Describe access port _____</p>	Thickness	Diameter	From	To	250 inches	6 5/8 inches	2 feet	584 feet													Number	From	To										<p>10.</p> <p>Work started <u>10-24-89</u> finished <u>11-11-89</u></p>														
Thickness	Diameter	From	To																																												
250 inches	6 5/8 inches	2 feet	584 feet																																												
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<p>6. LOCATION OF WELL</p> <p>Sketch map location <u>must</u> agree with written location.</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>Subdivision Name _____</p> <p>Lot No. _____ Block No. _____</p> </div> </div> <p>County <u>Elmore</u></p> <p>SW 1/4 NW 1/4 Sec. <u>34</u>, T. <u>1</u> N <input checked="" type="checkbox"/> S <input type="checkbox"/> R. <u>4</u> E <input checked="" type="checkbox"/> W <input type="checkbox"/></p>	<p>11. DRILLERS CERTIFICATION</p> <p style="text-align: right;">OL</p> <p>I/We certify that all minimum well construction standards were complied with at the time the rig was removed.</p> <p>Firm Name <u>Huddleston & Son, Inc.</u> Firm No. <u>25</u></p> <p>Address <u>Mt. Home, Id</u> Date <u>11-12-89</u></p> <p>Signed by (Firm Official) <u>Mark S. Huddleston</u></p> <p>and</p> <p>(Operator) <u>Mark S. Huddleston</u></p>																																														

32

POOR QUALITY

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

RECEIVED

U.S. TYPEWRITER OR
BALLPOINT PEN

AUG 03 1993

WELL DRILLER'S REPORT

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

1. WELL OWNER
 Name RONALD & ROSEANNA CASTLE
 Address HC 85, BX 237 GRANDVIEW, ID 83824
53-93-C-0031-000
 Drilling Permit No. _____
 Water Right Permit No. 61-07683 (upon approval)

7. WATER LEVEL
 Static water level 338 feet below land surface.
 Flowing? Yes No G.P.M. flow _____
 Artesian closed-in pressure _____ p.s.i.
 Controlled by: Valve Cap Plug
 Temperature 65 °F. Quality Good
Describe artesian or temperature zones below.

2. NATURE OF WORK NEW WELL
 New well Deepened Replacement
 Well diameter increase Modification
 Abandoned (describe abandonment or modification procedures such as liners, screen, materials, plug depths, etc. in lithologic log, section 9.)

8. WELL TEST DATA Air
 Pump Bailer Air Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
<u>30</u>	<u>337</u>	<u>1</u>

3. PROPOSED USE NON-DOMESTIC
 Domestic Irrigation Monitor
 Industrial Stock Waste Disposal or Injection
 Other _____ (specify type)

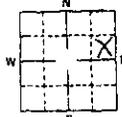
9. LITHOLOGIC LOG 081538

4. METHOD DRILLED AIR&MUD ROTARY
 Rotary Air Auger Reverse rotary
 Cable Mud Other _____
(backhoe, hydraulic, etc.)

Bore Diam.	Depth		Material	Water	
	From	To		Yes	No
	4	5	GLEACHEY		X
	5	50	CLAY & DECOMPOSED GRANIT AND SAND mix		X
	50	85	SAND		X
	85	90	CLAY AND SAND MIXED		X
	90	170	BOULDERS & SAND		X
	170	225	CLAY, & SAND MIXED		X
	225	240	HARD GRANIT		X
	240	270	DECOMPOSED GRANIT		X
	270	275	BROWN CLAY		X
	275	300	DECOMPOSED GRANIT		X
	300	485	SAND		X
	485	487	CLAY		X
	487	510	LAVA ROCK	X	
	510	535	BROCKEN LAVA ROCK, & SOME ROUND LAVA	X	

5. WELL CONSTRUCTION
 Casing schedule: Steel Concrete Other _____
 Thickness _____ Diameter _____ From _____ To _____
2.25 inches 6 inches + 1 feet 490 feet
 _____ inches _____ inches _____ feet _____ feet
 _____ inches _____ inches _____ feet _____ feet
 Was casing drive shoe used? Yes No
 Was a packer or seal used? Yes No
 Perforated? Yes No
 How perforated? Factory Knife Torch Gun
 Size of perforation? _____ inches by _____ inches
 Number _____ From _____ To _____
 _____ perforations _____ feet _____ feet
 _____ perforations _____ feet _____ feet
 _____ perforations _____ feet _____ feet
 Well screen installed? Yes No
 Manufacturer _____ Type _____
 Top Packer or Headpipe _____
 Bottom of Tailpipe _____
 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 270 Material used in seal: Cement grout
 Bentonite Puddling clay _____
 Sealing procedure used: Slurry pit
 Temp. surface casing Overbore to seal depth
 Method of joining casing: Threaded Welded
 Solvent Weld Cemented between strata

10. Work started 7/8/93 finished 7/28/93

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

 Subdivision Name _____
 Lot No. _____ Block No. _____
 County ELMORE
 Address of Well Site HC 84 MAYFIELD STAGE BOX 100
(give at least name of road)
 T. 21S N or S
 R. 10E E or W
 SE 1/4 NE 1/4 Sec. 5

11. DRILLER'S CERTIFICATION
 I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
 Firm Name ETE CORP DRILL Firm No. 313
 Address 5005 W. CHINDEN Date 7/28/93
 Signed by Drilling Supervisor [Signature]
 and _____
 (Operator) _____
(If different than the Drilling Supervisor)

33

RECEIVED
AUG 02 1993
Department of Water Resources
Western Regional Office

WELL DRILLER'S REPORT 093344

Use Typewriter or Ballpoint Pen

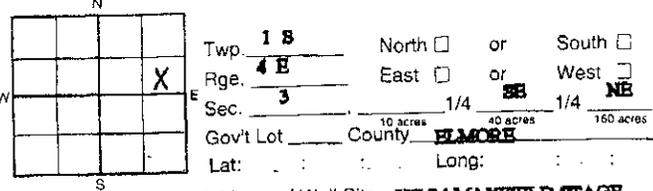
Office Use Only
 Inspected by _____
 Twp. _____ Rge. _____ Sec. _____
 1/4 _____ 1/4 _____ 1/4 _____
 Lat: _____ Long: _____

1. DRILLING PERMIT NO. 61 96 W 10 100

Other IDWR No. 61-07683
Previous permit 61-93-C-0031-000

OWNER: RONALD B & ROSANNA K CASTLE
 Name _____
 Address HC 34 BOX 34-106
 City BOISE State ID Zip 83706

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



Gov't Lot _____ County ELMORE
 Lat: _____ Long: _____
 Address of Well Site HC 34 MAYFIELD STAGE
 City MAYFIELD
BOX 100
 (Give at least name of road + Distance to Road or Landmark)

4. USE: NON-DOMESTIC MULTIPLY HOME DOMESTIC
 Domestic Municipal Monitor Irrigation
 Thermal Injection Other _____

5. TYPE OF WORK check all that apply DEEPEN (Replacement etc.)
 New Well Modify Abandonment Other DEEPEN

6. DRILL METHOD AIR ROTARY
 Air Rotary Cable Mud Rotary Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
<u>REFER TO FIRST WELL LOG</u>				

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>REFER TO FIRST WELL LOG 0 TO 333</u>								
6"	42	330	230	STEEL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.5"	498	678	40	PVC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Length of Headpipe _____ Length of Tailpipe _____

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

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
578	678	1/8"	3 per ft	4.5"	PVC	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

11. WELL TESTS:
 Pump Bailor Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
40 GPM	N/A	616 FT	2 HRS

Water Temp. COLD Bottom hole temp. COLD
 Water Quality test or comments: GOOD, CLEAR, NO SMELL
 Depth first Water Encountered 629

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

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
		0	<u>TO 335 REFER TO FIRST WELL LOG</u>		<input checked="" type="checkbox"/>
6"	335	350	<u>CAVING LAVA ROCK</u>		<input checked="" type="checkbox"/>
	350	365	<u>LAVA & GRANITE</u>		<input checked="" type="checkbox"/>
	365	370	<u>BROWN CINDERS</u>		<input checked="" type="checkbox"/>
	370	384	<u>LAVA</u>		<input checked="" type="checkbox"/>
	384	388	<u>BROWN CINDERS</u>		<input checked="" type="checkbox"/>
	388	397	<u>LAVA ROCK</u>		<input checked="" type="checkbox"/>
	397	609	<u>GREEN GRANITE</u>		<input checked="" type="checkbox"/>
	609	618	<u>WHITE & GREEN GRANITE W/LAVA</u>		<input checked="" type="checkbox"/>
	618	619	<u>GRAY GRANITE</u>		<input checked="" type="checkbox"/>
	619	629	<u>WHITE GRANITE W/ LAVA</u>	<input checked="" type="checkbox"/>	
	629	638	<u>BROWN CINDERS</u>	<input checked="" type="checkbox"/>	
	638	670	<u>BRN CINDERS FINE & CRS SAND</u>	<input checked="" type="checkbox"/>	
	670	678	<u>LAVA ROCK & SAND</u>		

RECEIVED
MAY 30 1996

Department of Water Resources
 RECEIVED
MAY 22 1996

WATER RESOURCES
 WESTERN REGION
 AUG 21 1996

Completed Depth 678 FEET (Measurable)
 Date Started 4/10/96 Completed 4-25-96

13. DRILLER'S CERTIFICATION
 I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
 Firm Name PETE COPE DRILLING CO., INC. Firm No. 213
 Firm Official [Signature] Date 5/6/96
 and
 Supervisor or Operator _____ Date _____
 (Sign once if Firm Official & Operator)

WELL DRILLER'S REPORT

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

Received 27 APR 1960

1. WELL OWNER
 Name JOHN WEIMER
 Address _____
 Owner's Permit No. _____

7. WATER LEVEL
 Static water level 540 feet below land surface
 Flowing? Yes No G.P.M. flow _____
 Temperature _____ ° F. Quality _____
 Artesian closed-in pressure _____ p.s.i.
 Controlled by Valve Cap Plug

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

8. WELL TEST DATA
 Pump Bailer Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>25</u>	<u>12'</u>	<u>15 BAILED</u>

3. PROPOSED USE
 Domestic Irrigation Test
 Municipal Industrial Stock

9. LITHOLOGIC LOG 028862

4. METHOD DRILLED
 Cable Rotary Dug Other

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
10"	0	3	TOP SOIL		X
10"	3	51	SANDY CLAY		X
10"	51	80	COURSE SAND GRAVEL		X
10"	80	84	SOFT LAVA		X
10"	84	102	VERY HARD BLK. LAVA		X
10"	102	136	LAVA GRAY NOT SO HARD		X
10"	136	138	RED CLAY		X
10"	138	163	GRAY LAVA HARD		X
10"	163	173	RED AND BLK. CINDERS		X
10"	173	180	HARD GRAY LAVA		X
10"	180	226	RED LAVA		X
10"	226	235	BLK LAVA HARD		X
10"	235	254	RED LAVA		X
10"	254	322	GRAVEL AND BRN. CLY.		X
8"	322	345	SANDY GRAVEL		X
8"	345	400	SANDY CLAY		X
8"	400	502	DRY SAND		X
8"	502	520	SANDY CLAY GRAVEL		X
8"	520	640	SANDY CLAY		X
8"	640	665	BLUE CLAY		X
8"	665	673	FINE SAND		X
6"	673	695	COURSE SAND GRAVEL		X

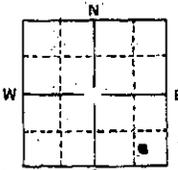
5. WELL CONSTRUCTION
 Diameter of hole 8 inches Total depth 695 feet
 Casing schedule: Steel Concrete

Thickness	Diameter	From	To
<u>1/4"</u>	<u>10"</u>	<u>0</u>	<u>990</u>
<u>1/4"</u>	<u>8"</u>	<u>0</u>	<u>673</u>
<u>1/4"</u>	<u>6"</u>	<u>665</u>	<u>695</u>

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	<u>673</u> feet	<u>695</u> 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? Yes No To what depth 890 feet
 Material used in seal Cement grout Puddling clay

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

 County Ada
NE 1/4 SE 1/4 Sec. 7 T. 15 N/S, R. 4E E/W

10. Work started 27 APR 1 finished JUNE 8th

11. DRILLER'S CERTIFICATION **USGS**
 This well was drilled under my supervision and this report is true to the best of my knowledge.
Russell Cowe
 Driller's or Firm's Name _____ Number _____
Bruse
 Address _____
 Signed By _____ Date _____

36

Form 238-7
3/95-C96

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

61-98-W-0059-000

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

1. DRILLING PERMIT NO. _____
Other IDWR No. D0007514

2. OWNER:
Name Jim Hisel
Address Mayfield Stage, HC-34
City Boise State ID _____ Zip 83706

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

W		Twp. <u>1</u> North <input type="checkbox"/> or South <input checked="" type="checkbox"/>
		Rge. <u>4</u> East <input checked="" type="checkbox"/> or West <input type="checkbox"/>
		Sec. <u>10</u> <u>1/4</u> <u>SE 1/4</u> <u>SE 1/4</u>
		<small>10 acres 40 acres 160 acres</small>
		Gov't lot _____ County <u>Elmore</u>

Lat: _____ Long: _____
Address of Well Site Mayfield Stage, HC-34
City Boise
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

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

5. TYPE OF WORK check all that apply (Replacement etc.)
 New Well Modify Abandonment Other _____

6. DRILL METHOD
 Air Rotary Cable Mud Rotary Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
Bentonite	2'	40'	16	Overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1'	541'	250'	Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.5"	532'	542'		PVC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Length of Headpipe _____ Length of Tailpipe _____

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

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
539'	542'		80	4.5"	PVC	<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:
350ft. 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
10		400'	1hr
40		520'	1hr
50		540'	1hr

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encountered 358'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temp.	Y	N
10"	0'	1'	brown top soil		
10"	1'	2'	lt brown hardpan		
10"	2'	8'	coarse brown sand		
10"	8'	18'	brown sandy clay		
10"	18'	20'	coarse brown sand		
8"	20'	205'	brown clay/coarse sand strips		
8"	205'	225'	brown brown & black granite		
8"	225'	307'	brown & white granite		
8"	307'	328'	cemented quartz sand		
8"	328'	358'	white & clear granite		
8"	358'	396'	brown clay w/sand strips		
6"	396'	410'	coarse white & brown sand		
6"	410'	422'	brown clay		
6"	422'	432'	coarse white sand		
6"	432'	453'	lt brown clay w/small cracks		
6"	453'	464'	hard brown clay		
6"	464'	467'	coarse brown sand		
6"	467'	484'	lt brown sand w/sm. cracks		
6"	484'	501'	dirty brown sand w/clay strips		
6"	501'	532'	brown clay w/small cracks		
6"	532'	538'	grey clay w/grey sand		
6"	538'	542'	grey clay		
6"	542'	545'	blue/grey & white sand		

RECEIVED RECEIVED
MAR 26 1999 MAR 30 1999
WATER RESOURCES WESTERN REGION Department of Water Resources

Completed Depth: 542 (Measurable)
Date: Started 09-16-98 Completed 09-23-98

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Firm Name SOS Welldrilling & Pump Co Firm No. 212
Firm Official _____ Date 3-24/99
Supervisor or Operator [Signature] Date 3/24/99
(Sign once if Firm Official & Operator)

Date: 03/24/99 Time: 12:30 PM
MICROFILMED
JUN 08 1999

KENNY OWINGS WELL, MAYFIELD, ELMORE CO.

Samples washed and described by Jim Braendle, Geology student, BSU
April, 1980

- 300' Coarse quartz and feldspar sands, <5% dark rock chips
- 330' Fine to medium ($\frac{1}{2}$ mm), quartz, feldspar
3-5% dark rock chips
- 360' Medium sand, quartz, feldspar, some pale brown clay-sized material
- 390' Very coarse sand w/rock chips ranging to ~7 mm (siltstone)
- 403' Fine quartz/feldspar sands w/approx. 15% clumps of dark yellowish brown clay
- 434' Poorly sorted quartz/feldspar sand mostly medium sand but w/some (chips?) ranging to 7 mm. Traces iron stain on some grains
- 465' Medium sand qtz and feldspar, traces iron oxide
- 496' Coarse grained sand, mostly quartz, some feldspar. No dark chips, but some (<5%) stained w/iron oxides. Plastic and organic matter abundant
- 525' Medium to coarse qtz/feldspar sands, ~5% grains show stain from iron oxides. 10% clumps of dk. yellowish brown clay
- 557' Medium grained qtz & feldspar sand, shows considerable (10%) iron staining. Large amount of organic matter found in sample.
- 586' Coarse grained sand (qtz/feldspars), occasional larger stone ($\frac{1}{2}$ ")
Also contains some balls of dusky brown mud ~10%
- 618' Very small sample mostly organic matter and fine mud. Some medium sand and some rock chips...dark grey (~5%)
- 648' Medium sand (qtz, feldspar, muscovite), large amount of organic matter.
- 678' Fine to medium sand primarily qtz. Some feldspar, muscovite, dark chips (1%)
- 708' Fine to medium qtz and feldspar sand w/occasional chips up to 3/8"
- 801' Coarse to very coarse sand, qtz & feldspar, small amount (<5%) dusky brown clay in chunks. (Snailshell found in sample) (Some plastic wrap found in sample)
- 832' Fine qtz/feldspar sand w/occasional grey rock chips
- 863' Very coarse to coarse sand, primarily quartz, feldspar ~10% of grains stained dark ~5% pieces dusky brown mud

39
Pg 1

894' Medium qtz. sand, sample contained mostly organic matter
Plastic wrap, etc., also large amount light grey clay & mud

960' Medium to fine sand qtz, feldspar, also muscovite. Also very
fine light grey mud. Very small sample.

990'

1021'

1052'

Cuttings available but not washed
Samples not yet logged S.H. Wood 9/80

39
Pg 2

The above descriptions were made by Jim Braendle - not checked, but
they look reasonable. S. H. Wood

Cuttings are available at BSU for examination.

Appendix B: Neil Helmick Well Pumping Test Results

September 17, 2005

Greg Johnson
Westpark Company
P.O. Box 344
Meridian, ID 83660

Subject: United Water Data - Neil Helmick Well

Dear Greg:

The data received from United Water Idaho for the Neil Helmick Well (i.e., Ken Agenbroad Well) are enclosed for your files. The data are summarized below.

1. Water quality from the well is excellent, with no parameters exceeding primary or secondary water quality standards. The water has a temperature of 73.5 degrees F, total dissolved solids of 193 mg/L, hardness of 60.4 mg/L (soft), and Langlier index of 0.12 (non-corrosive).
2. The Helmick Well is 763 feet, and is completed with 130 feet of 16-inch diameter steel shutter screens staggered between 500 and 752 feet. The well is gravel packed from 6 feet to 763 feet. A cement grout surface seal extends to 72 feet on the outside of a 20-inch surface.
3. Static water level on May 20, 1999 was 389 feet below ground surface.
4. The well was test pumped at 550 gpm for 6 hours on May 20, 1999 with 73 feet of drawdown, and an additional one hour at 795 gpm with 92 feet of drawdown. Based on projection of the pumping water level trend, the well can probably be operated continuously at a rate of 450 to 500 gpm without dewatering the uppermost well screens. If the uppermost well screen section (from 500 to 510 feet) were dewatered (likely resulting in cascading water), the well could potentially produce a higher yield. By dewatering the uppermost screen, an additional 100 feet of drawdown is possible.
5. The well produced sand during test pumping, but the sand content diminished to a non-detectable level after 150 minutes of continuous pumping.
6. Analysis of the test pumping water-level trend indicates an aquifer transmissivity of approximately 7,300 gpd/ft. This transmissivity value suggests that the aquifer

productivity or permeability is low to moderate. Aquifer transmissivity measured tests of wells in the Boise area is typically in the range of 10,000 to 30,000 gpd/ft.

7. A video survey of the well was conducted on May 10, 1999. My review of the video found that the screen slots appear to be open in most places, and the well casing looks to be in good condition. The video technician's notes suggest that the screens are plugged, but I believe his interpretation was based on the side-view appearance of the shutter screen, rather than the more appropriate downward view.

Review of the data suggests that wells of moderate productivity (400 gpm to 800 gpm) can likely be developed for the Mayfield Springs planned community. Pumping water levels will be 500 feet or more. The water quality is expected to be adequate for public water system use.

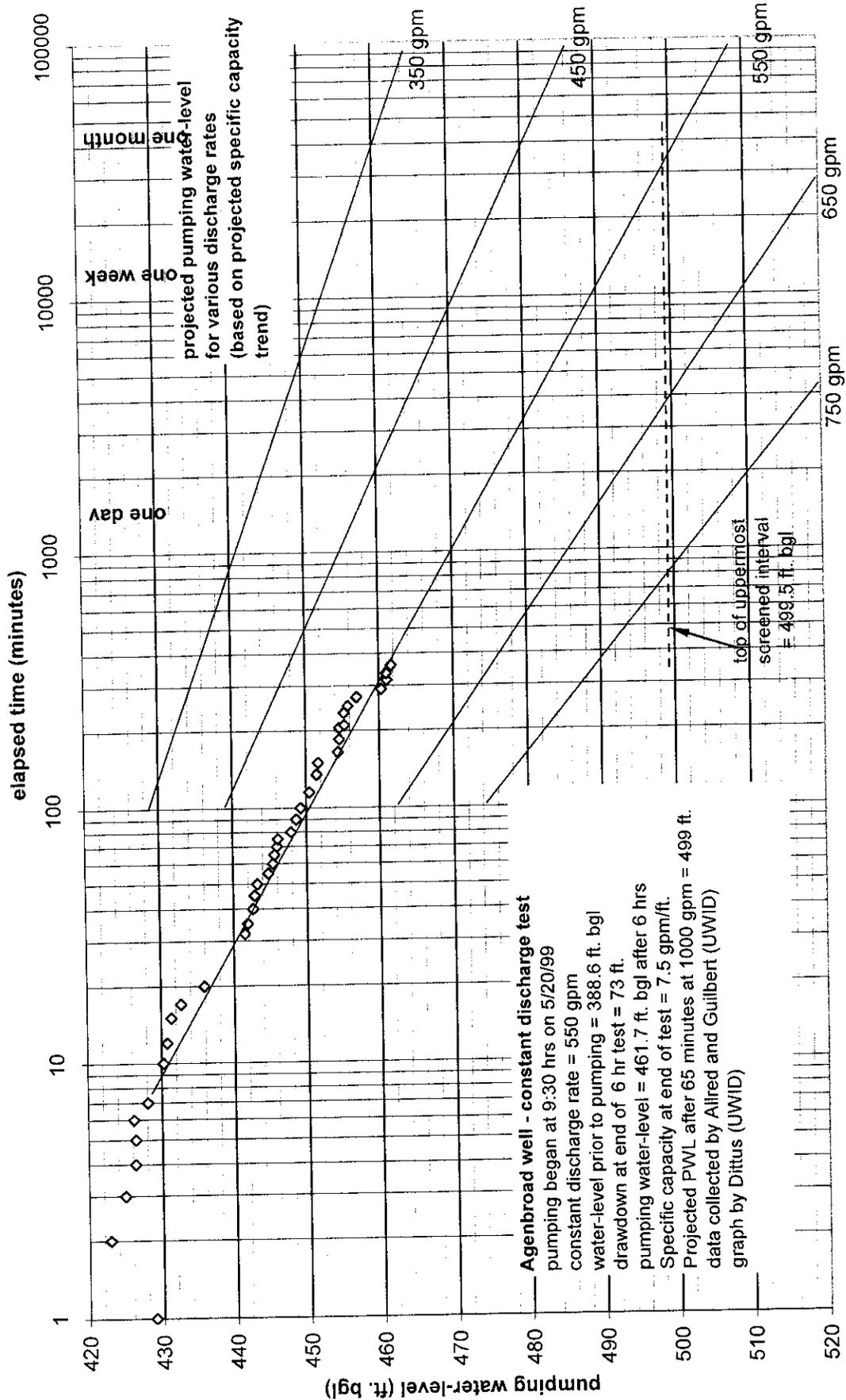
Please contact me with any questions.

Sincerely,

Terry M. Scanlan, P.E., P.G.

File: 329.0050

Agenbroad well - constant discharge test



Agenbroad well - constant discharge test
 pumping began at 9:30 hrs on 5/20/99
 constant discharge rate = 550 gpm
 water-level prior to pumping = 388.6 ft. bgl
 drawdown at end of 6 hr test = 73 ft.
 pumping water-level = 461.7 ft. bgl after 6 hrs
 Specific capacity at end of test = 7.5 gpm/ft.
 Projected PWL after 65 minutes at 1000 gpm = 499 ft.
 data collected by Allred and Guilbert (UWID)
 graph by Dittus (UWID)

Appendix D: Neil Helmick Well Water Quality



Alchem Laboratories, Inc.

104 West 31st Street
Boise, Idaho 83714

Phone (208) 336-1172
FAX (208) 336-7124

UNIFIED WATER
Water, Waste Water
and Soil Analysis

JUN 11 1999

LABORATORY REPORT

UNITED WATER
P.O. BOX 7488
BOISE, IDAHO

83707-1488

DATE COLLECTED - - - 05/20/1999
TIME COLLECTED - - - 15:30
DATE RECEIVED - - - 05/20/1999
DATE REPORTED - - - 06/10/1999
SUBMITTED :

ATTENTION: ED SQUIRES
SOURCE -: AGENBROAD

LAB SAMPLE NUMBER - 64919

Results reported unless noted: (Chemistry Analysis as ug/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
ANTIMONY by FURNACE	<0.002	06/02/1999	PM
ARSENIC	0.007	06/01/1999	PM
BARIUM	<0.10	06/01/1999	PM
BERYLLIUM	<0.0002	06/01/1999	PM
CADMIUM	<0.0005	06/01/1999	PM
CHROMIUM	<0.002	06/01/1999	PM
CYANIDE, TOTAL	<0.005	06/03/1999	SD
FLUORIDE	0.51	05/26/1999	CE
MERCURY	<0.0002	06/09/1999	MN
NICKEL	<0.003	06/01/1999	PM
NITRATE as N	<0.10	05/21/1999	HG
NITRITE as N	<0.01	05/20/1999	NH
SELENIUM by GRAPHITE	<0.005	06/09/1999	PM
SODIUM	24.3	06/01/1999	PM
SULFATE	0.26	05/21/1999	HG
THALLIUM GRAPHITE	<0.0006	06/07/1999	PM
CHLORIDE	2.63	05/21/1999	HG
COLOR	<1.0	05/20/1999	HG
IRON	0.19	06/01/1999	PM
IRON (DISS.)	0.14	06/01/1999	PM
SULFIDE	<0.05	05/21/1999	CE
MANGANESE	0.02	06/01/1999	PM
MANGANESE (DISS.)	0.02	06/01/1999	PM
ODOR	1.0	05/20/1999	HG
SURFACTANT	<0.025	05/21/1999	PM
TOTAL DISS. SOLIDS	193.0	05/25/1999	NH
ZINC	0.016	06/01/1999	PM

Continued on next page



Alchem Laboratories, Inc.

104 West 31st Street
Boise, Idaho 83714

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FAX (208) 336-7124

Water, Waste Water
and Soil Analysis

LABORATORY REPORT

continued

UNITED WATER
P.O. BOX 7488
BOISE, IDAHO

83707-1488

DATE COLLECTED - - - 05/20/1999
TIME COLLECTED - - - 15:30
DATE RECEIVED - - - 05/20/1999
DATE REPORTED - - - 06/10/1999
SUBMITTED :

ATTENTION: ED SQUIRES
SOURCE -: AGENBROAD

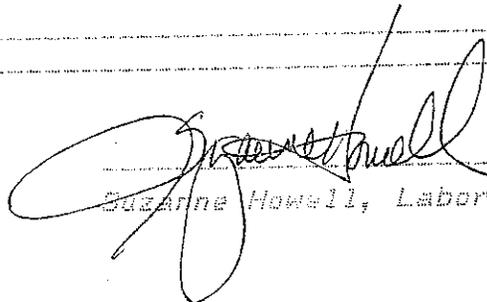
LAB SAMPLE NUMBER - 64919

Results reported unless noted: (Chemistry Analysis as ug/l) (Bacteria as organisms/100 ml)

ANALYSIS	RESULTS	DATE ANALYZED	ANALYST
SILVER	<0.02	06/01/1999	PM
ALUMINUM	2.02	06/01/1999	PM
ALKALINITY	142.0	05/28/1999	CE
AMMONIA as N	0.06	06/04/1999	SD
CALCIUM as CaCO3	56.6	06/01/1999	PM
HARDNESS	60.4	06/01/1999	PM
MAGNESIUM	0.91	06/01/1999	PM
POTASSIUM	1.20	05/28/1999	MM
SILICA	17.7	05/25/1999	MM
LEAD GRAPHITE	<0.002	05/25/1999	PM
COPPER	0.18	06/01/1999	PM
CORROSIVITY	0.12	06/02/1999	JD
CONDUCTIVITY (umhos/cm)	225.0	05/20/1999	NH
SUSPENDED SOLIDS	<1.0	05/25/1999	NH
pH (SU)	8.10	05/20/1999	TK

COMMENTS: FIELD pH = 8.23, FIELD COND = 201 uS/cm, FIELD TEMP = 73.5 F
CORROSIVITY: THE WATER IS NON-AGGRESSIVE ACCORDING TO THE
LANGLIER INDEX.
HARDNESS = 60.4 = 3.6 GRAINS PER GALLON = SOFT

This report for the exclusive use of the client(s) to whom it is addressed. Its disclosure to others for use in advertising is not authorized. These results refer only to the specific sample tested and no interpretation is intended or implied.


Suzanne Howell, Laboratory Manager



Alchem Laboratories, Inc.

104 West 31st Street
Boise, Idaho 83714

Phone (208) 336-1172
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Water, Waste Water
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JUL 20 1999

DRINKING WATER RADIOLOGICAL ANALYSIS REPORT

UNITED WATER

#POS	CONTAMINANT	RESULT mg/L	RESULT pCi/L	90 % Confidence Interval (+ 1.65σ)	MCL	MDL	METHOD
4002	GROSS ALPHA		0.2		15.0		900.0
4100	GROSS BETA		1.8		50.0		900.0
4XXX	URANIUM (measure if gross alpha exceeds 15 pCi/L: activity in pCi/L = 0.68 x concentration in ug/L.)						908.1
4000	ADJUSTED GROSS ALPHA (subtract uranium activity level from gross alpha)				3.0		903.1
4020	RADIUM 226 [measure if gross alpha plus 90% confidence interval (1.65σ) is greater than 5 pCi/L]						904.0
4030	RADIUM 228 (measure if radium 226 exceeds 3 pCi/L)						
4010	TOTAL MEASURED RADIUM (sum of Radium 226 & Radium 228)				5.0		
4100	BETA / PHOTON ACTIVITY (measure major constituents if activity exceeds 50 pCi/L.)				4mREM		

NAME OF WATER SYSTEM : AGENBROAD WELL

COMPOSITE SAMPLE DATES:	
1st quarterly sample:	
2nd quarterly sample:	
3rd quarterly sample:	
4th quarterly sample:	
COMMENTS:	
Analyzed by Idaho Bureau of Labs, Boise, Idaho	
Lab Supervisor Signature	Date

PWS #	
LAB SAMPLE #	64917
DATE COLLECTED	05/20/99
SAMPLE TYPE	PLANT TAP
DATE RECEIVED	05/20/99
TIME COLLECTED	15:30 HRS
LOCATION TAG #	
COLLECTION LOCATION	INDIAN CREEK
DATE REPORTED	07/09/99
JURISDICTION	
PWS CONTACT PHONE #	362-7332

REPORT RESULTS TO:

UNITED WATER
ATTN: ED SQUIRES
P.O. BOX 7488
BOISE, IDAHO 83707



Alchem Laboratories, Inc.

104 West 31st Street
Boise, Idaho 83714

Phone (208) 336-1172
FAX (208) 336-7124

Water, Waste Water
and Soil Analysis
WATER

PUBLIC DRINKING WATER LABORATORY ANALYSIS REPORT
VOLATILE ORGANIC CONTAMINANTS - METHOD 502.2

FRDS	COMPOUND (MCL) (ug/L)	MDL (ug/L)	RESULT (ug/L)	FRDS	COMPOUND (MCL) (ug/L)	MDL (ug/L)	RESULT (ug/L)
REGULATED COMPOUNDS							
2990	Benzene (5.0)	0.5	ND	2987	Tetrachloroethylene (5.0)	0.5	ND
2982	Carbon Tetrachloride (5.0)	0.5	ND	2378	1,2,4-Trichlorobenzene (70.0)	0.5	ND
2977	1,1 - Dichloroethylene (7.0)	0.5	ND	2981	1,1,1 - Trichloroethane (200.0)	0.5	ND
2380	cis - 1,2 Dichloroethene (70.0)	0.5	ND	2985	1,1,2 - Trichloroethane (5.0)	0.5	ND
2979	trans-1,2 Dichloroethene (100.0)	0.5	ND	2984	Trichloroethylene (5.0)	0.5	ND
2980	1,2 - Dichloroethane (5.0)	0.5	ND	2991	Toluene (1000.0)	0.5	ND
2983	1,2 - Dichloropropane (5.0)	0.5	ND	2976	Vinyl Chloride (2.0)	0.2	ND
2968	o - Dichlorobenzene (600.0)	0.5	ND	2955	Xylenes - Total (10,000.0)	0.5	ND
2969	p - Dichlorobenzene (75.0)	0.5	ND	2950	Trihalomethanes - Total (100.0)	1.0	ND
2964	Dichloromethane (5.0)	0.5	ND	2943	Bromodichloromethane	0.2	ND
2992	Ethylbenzene (700.0)	0.5	ND	2942	Bromoform	1.0	ND
2989	Monochlorobenzene (100.0)	0.5	ND	2941	Chloroform	0.2	ND
2996	Styrene (100.0)	0.5	ND	2944	Dibromochloromethane	0.5	ND
UNREGULATED COMPOUNDS							
2993	Bromobenzene	0.5	ND	2416	2,2 - Dichloropropane	0.5	ND
2430	Bromochloromethane	0.5	ND	2410	1,1 - Dichloropropene	0.5	ND
2214	Bromomethane	2.0	ND	2413	cis - 1,3 - Dichloropropene	0.5	ND
2422	n - Butylbenzene	0.5	ND	2413	trans - 1,3 - Dichloropropene	0.5	ND
2428	sec - Butylbenzene	0.5	ND	2246	Hexachlorobutadiene	0.5	ND
2426	tert - Butylbenzene	0.5	ND	2994	Isopropylbenzene	0.5	ND
2216	Chloroethane	1.0	ND	2030	p - Isopropyltoluene	0.5	ND
2210	Chloromethane	0.5	ND	2248	Naphthalene	0.5	ND
2965	o - Chlorotoluene	0.5	ND	2998	n - Propylbenzene	0.5	ND
2966	p - Chlorotoluene	0.5	ND	2986	1,1,1,2 - Tetrachloroethane	0.5	ND
2408	Dibromomethane	4.0	ND	2988	1,1,2,2 - Tetrachloroethane	0.5	ND
2967	1,3 - Dichlorobenzene	0.5	ND	2420	1,2,3 - Trichlorobenzene	0.5	ND
2212	Dichlorodifluoromethane	0.5	ND	2218	Trichlorofluoromethane	0.5	ND
2978	1,1 - Dichloroethane	0.5	ND	2414	1,2,3 - Trichloropropane	0.5	ND
2412	1,3 - Dichloropropane	0.5	ND	2424	1,3,5 - Trimethylbenzene	0.5	ND
2931	1,2 - Dibromo-3-chloropropane	5.0	ND	2418	1,2,4 - Trimethylbenzene	0.5	ND
2946	1,2 - Dibromoethane	1.5	ND				

WATER SYSTEM: AGENBROAD WELL

PWS #	
Lab Sample #	64918
Date Collected	05/20/99
Sample Type	PLANT TAP
Date Received	05/20/99
Time Collected	15:30
Sample Location	INDIAN CREEK
Location Tag #	
Analyst & Analysis Date	G. HAGEN - 05/25/99
Date Reported by Lab	05/26/99
Jurisdiction	
PWS Contact Phone	208-362-7332

LAB RESULT REPORTING CODES:

ND = Not detected within sensitivity of instrument
-- = No analysis performed for this contaminant
Numerical entry = Detection at level indicated

COMMENTS:

Lab Supervisor Signature _____ Date _____

5/26/99

REPORT RESULTS TO:

UNITED WATER
ATTN: ED SQUIRES
P.O. BOX 7488
BOISE, IDAHO 83707



Aichem Laboratories, Inc.

104 West 31st Street
Boise, Idaho 83714

Phone (208) 336-1172
FAX (208) 336-7124

Water, Waste Water
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UNited WATER

SYNTHETIC ORGANIC CHEMICAL ANALYSIS REPORT

REGULATED COMPOUNDS

FRDS#	COMPOUND (MCL) (ug/L)	MDL (ug/L)	RESULT (ug/L)	METHOD	FRDS#	COMPOUND (MCL) (ug/L)	MDL (ug/L)	RESULT (ug/L)	METHOD
2946	EDB (0.05)	0.01	ND	504.1	2031	Dalapon (200.0)	2.0	ND	552.1
2931	DBCP (0.2)	0.002	ND	504.1	2041	Dinoseb (7.0)	0.2	ND	515.2
2051	Alachlor (2.0)	0.2	ND	525.2	2326	PCP (1.0)	0.05	ND	515.2
2050	Atrazine (3.0)	0.1	ND	525.2	2040	Picloram (500.0)	0.1	ND	515.2
2037	Simazine (4.0)	0.1	ND	525.2	2105	2,4-D (70.0)	0.1	ND	515.2
2959	Chlordane (2.0)	0.20	ND	508	2110	2,4,5-TP (50.0)	0.2	ND	515.2
2005	Endrin (2.0)	0.02	ND	508	2306	Benzo(a)pyrene (0.2)	0.04	ND	525.2
2065	Heptachlor (0.4)	0.04	ND	508	2035	Di(2-ethylhexyl)adipate (400.0)	0.6	ND	525.2
2067	Heptachlor Epoxide (0.2)	0.04	ND	508	2298	Di(2-ethylhexyl)phthalate (6.0)	0.6	ND	525.2
2274	Hexachlorobenzene (1.0)	0.1	ND	525.2	2046	Carbofuran (40.0)	1.0	ND	531.1
2042	Hexachlorocyclopentadiene (50.0)	0.1	ND	525.2	2036	Oxamyl (200.0)	2.0	ND	531.1
2010	Lindane (0.2)	0.04	ND	508	2034	Glyphosate (700.0)	6.0	ND	547
2015	Methoxychlor (40.0)	0.10	ND	508	2033	Endothall (100.0)	9.0	ND	548.1
2020	Toxaphene (3.0)	1.00	ND	508	2032	Diquat (20.0)	0.4	ND	549.1
2383	PCB's (0.5)	0.10	ND	508					

UNREGULATED COMPOUNDS

2076	Butachlor	0.1	ND	525.2	2047	Aldicarb	1.0	ND	531.1
2045	Metolachlor	0.1	ND	525.2	2044	Aldicarb Sulfone	0.5	ND	531.1
2595	Metribuzin	0.1	ND	525.2	2043	Aldicarb Sulfoxide	1.0	ND	531.1
2356	Aldrin	0.05	ND	508	2021	Carbaryl	1.0	ND	531.1
2070	Dieldrin	0.05	ND	508	2066	3-Hydroxycarbofuran	1.0	ND	531.1
2077	Propachlor	0.2	ND	525.2	2022	Methomyl	1.0	ND	531.1
2440	Dicamba	0.1	ND	515.2					

ANALYST	DATE	METHOD	ANALYST	DATE	METHOD
S. TANNER	05/22/99	504.1	S. TANNER	05/27/99	508
S. TANNER	06/04/99	515.2	B. BROKER	06/03/99	525.2
D. MYERS	06/15/99	531.1	D. MYERS	06/02/99	547
S. TANNER	05/26/99	548.1	D. MYERS	05/28/99	549.1
S. TANNER	06/09/99	552.1			

SAMPLE INFORMATION

PWS# :	SYSTEM : AGENBROAD WELL
LAB SAMPLE # :	64918
DATE COLLECTED :	05/20/99 TIME : 15:30 HRS
SAMPLE TYPE :	PLANT TAP
DATE RECEIVED BY LAB :	05/20/99
COLLECTED BY :	
SAMPLE LOCATION :	INDIAN CREEK
LOCATION TAG # :	
DATE REPORTED :	06/17/99
JURISDICTION :	
PWS CONTACT PHONE (208) :	362-7332

Lab result reporting codes:

- ND = Not detected within sensitivity of instrument
- = No analysis performed for this contaminant
- TR = Trace amount detected but so small it was not quantifiable
- Numerical entry = Detection of contaminant at level indicated

Comments:

Lab Supervisor Signature

Date

[Signature] 6/17/99

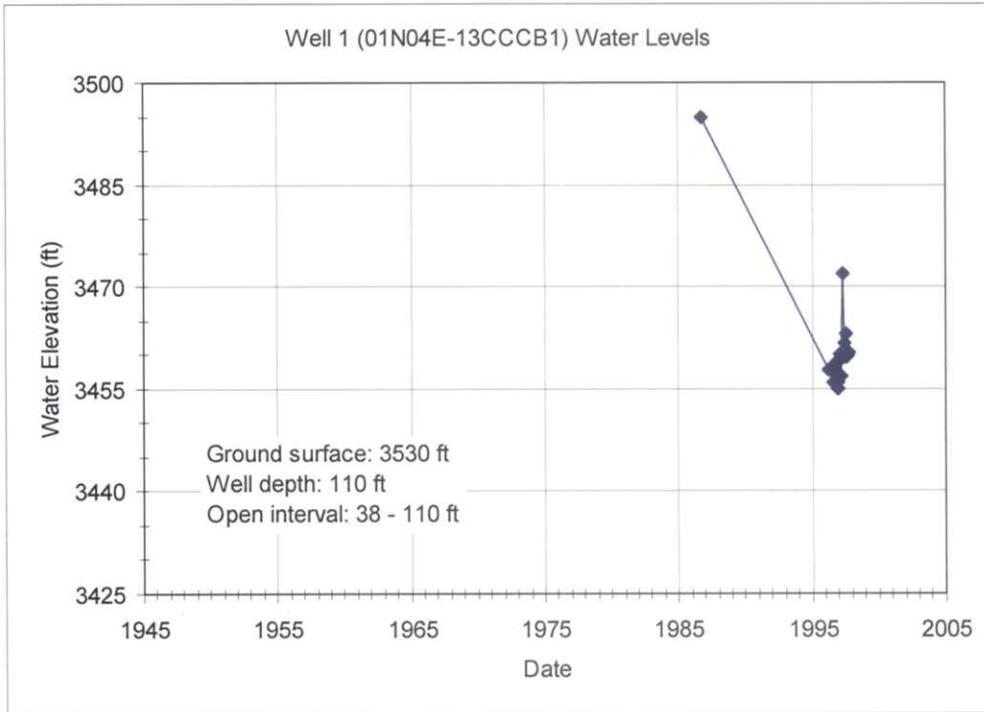
REPORT RESULTS TO:

UNITED WATER
ATTN: ED SQUIRES
P.O. BOX 7488
BOISE, IDAHO 83707

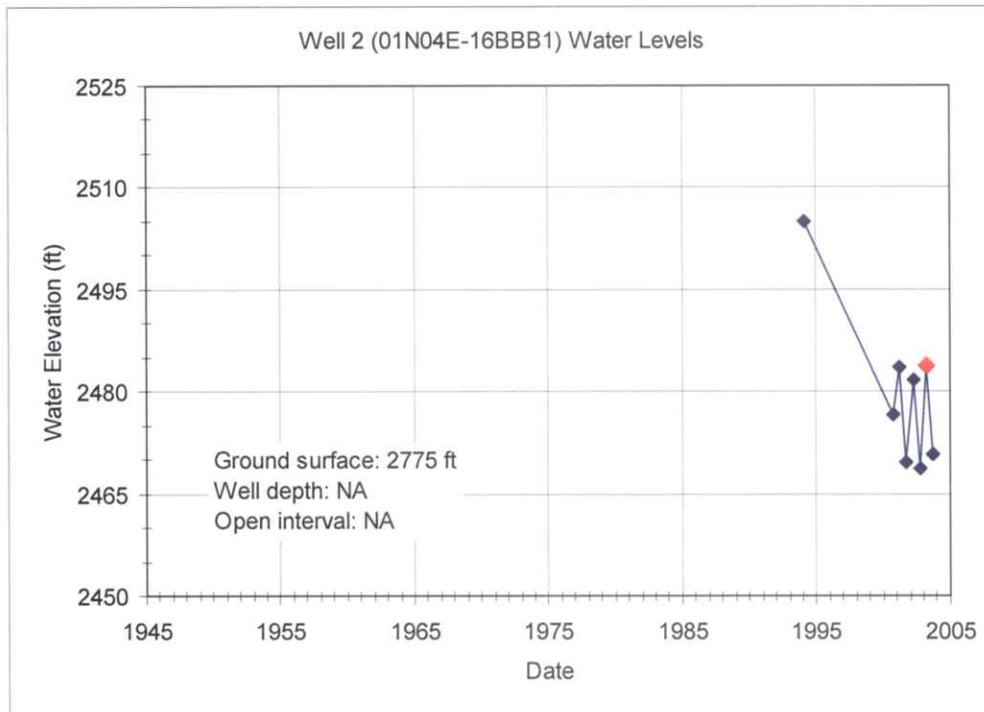
Appendix C: Water Levels (Hydrographs) for wells near Mayfield Springs

The following hydrographs are based on data maintained in the Idaho Department of Water Resources' Well_Log database.

Appendix B: Neil Helmick Well Pumping Test Results

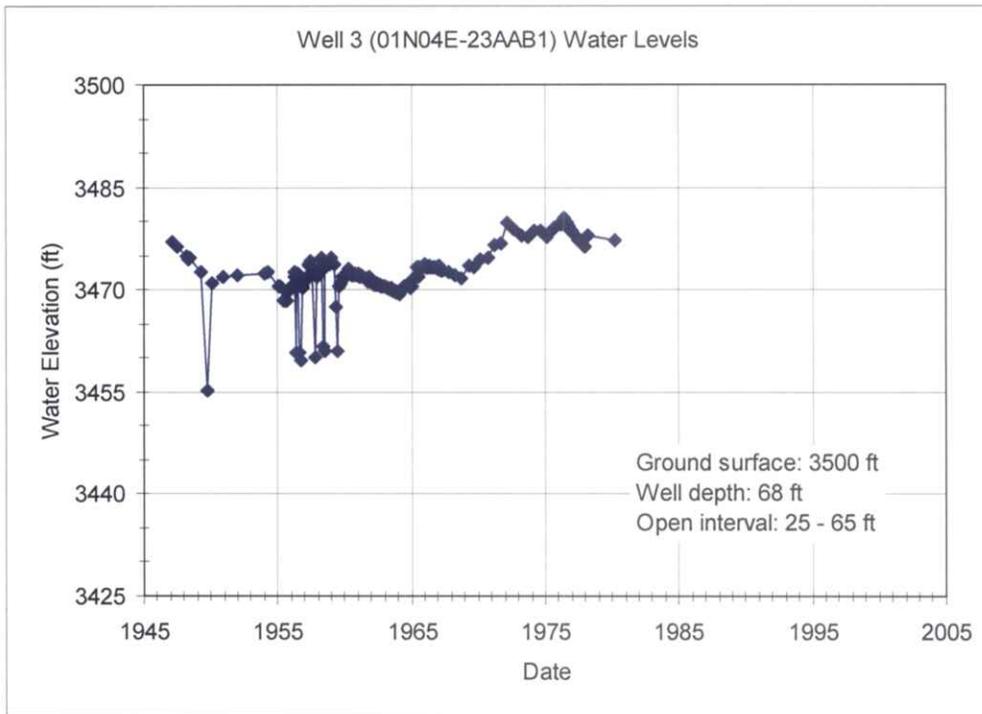


Well 1 (older measurements, stable water levels).

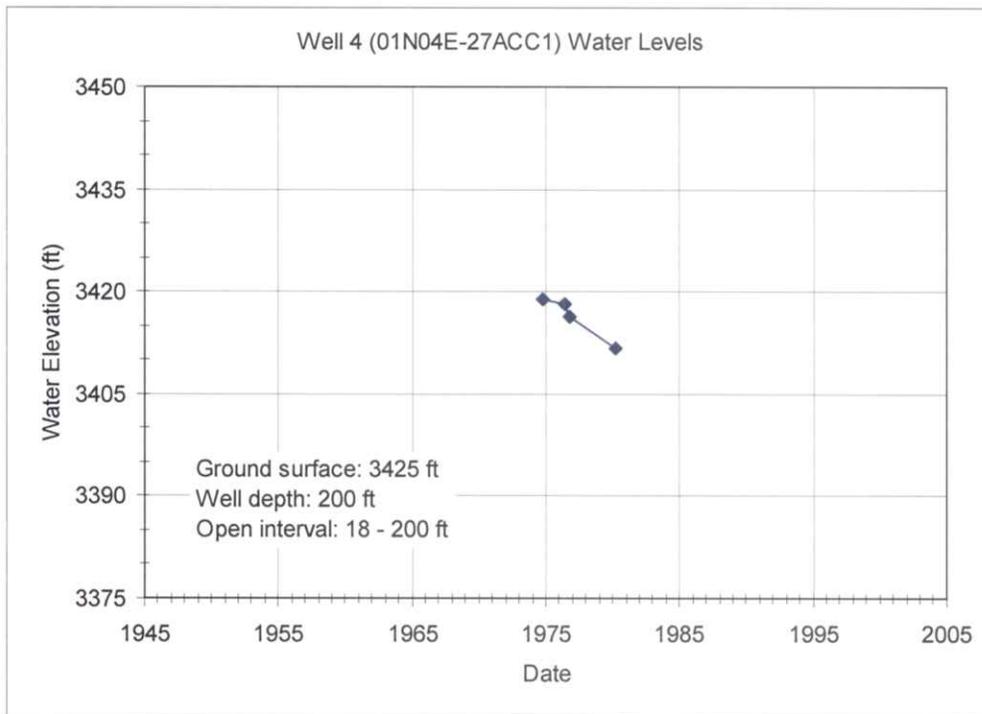


(Ground surface elevation may be incorrectly listed in IDWR database; accurate depth- to-water measurements are assumed).

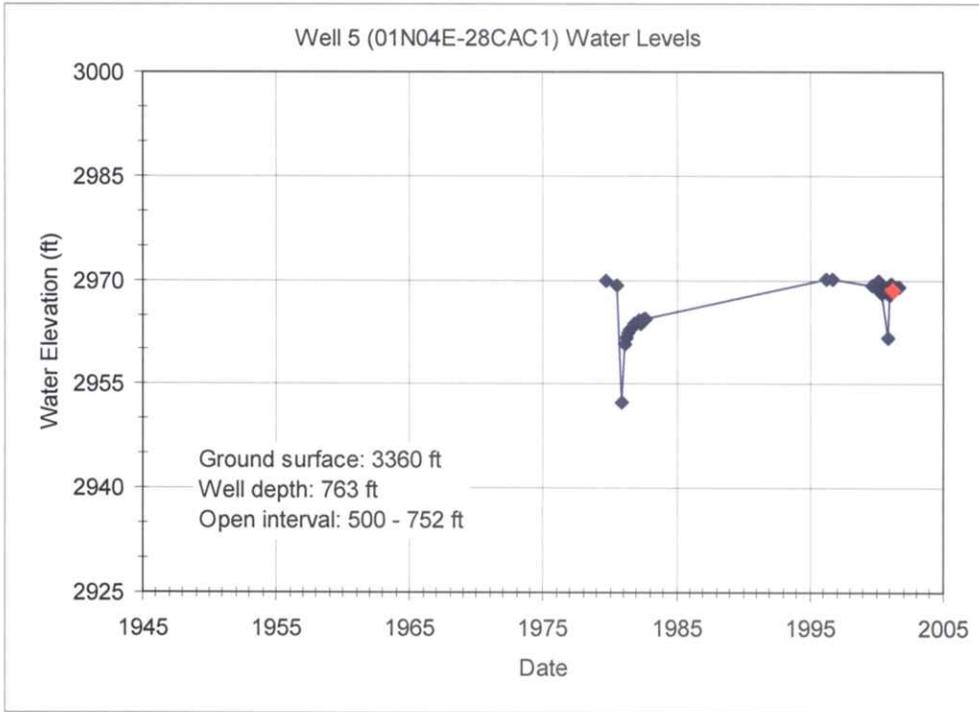
Well 2 (recent measurements, stable water levels).



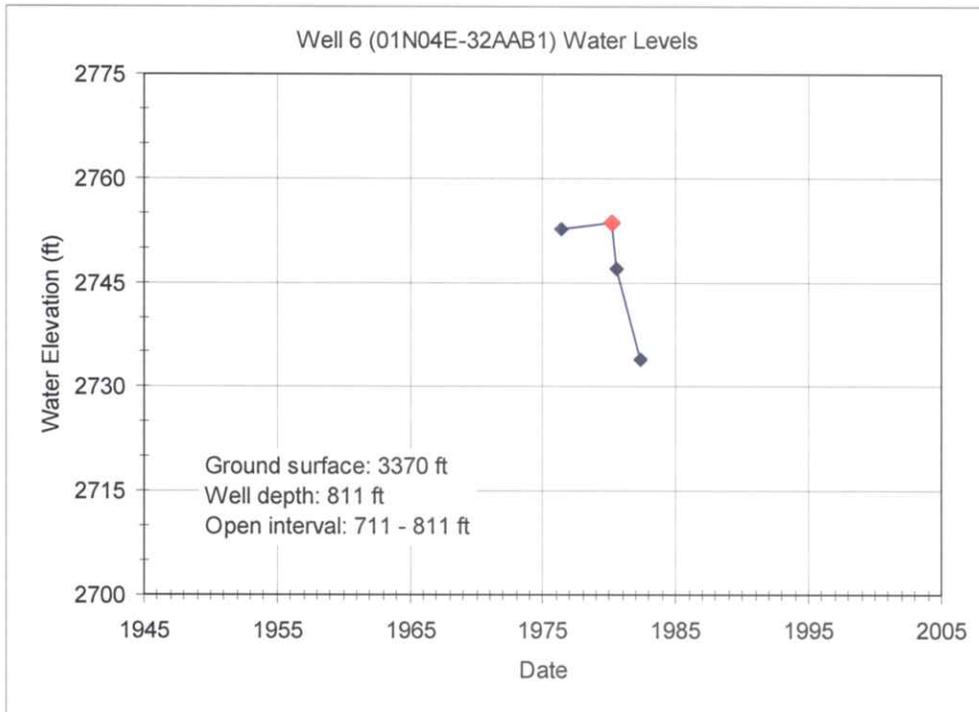
Well 3 (older measurements, stable water levels).



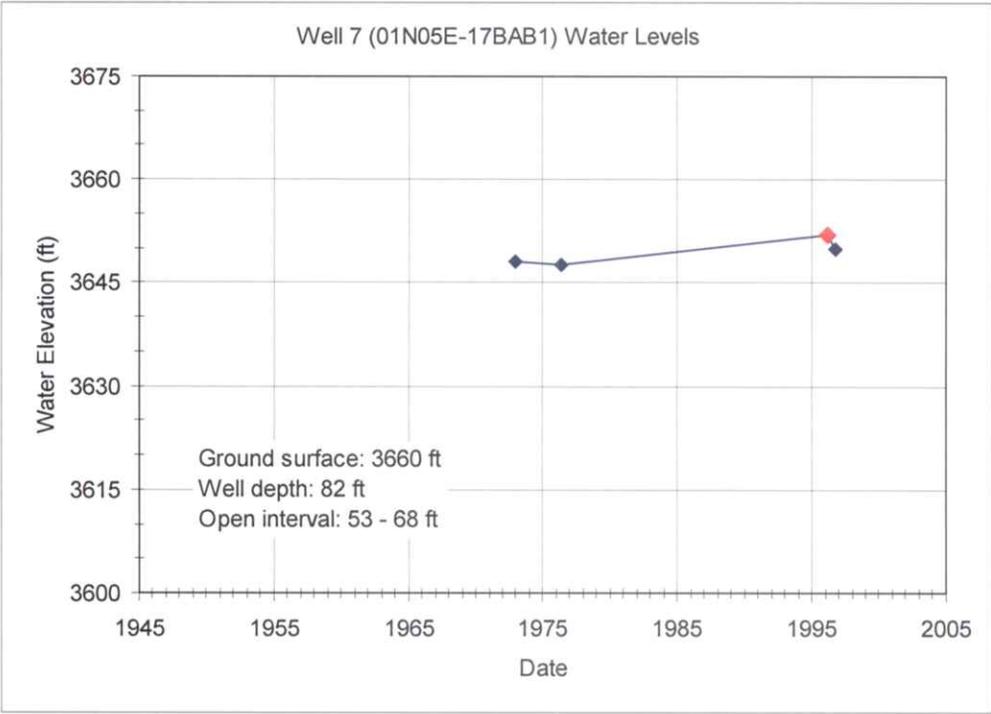
Well 4 (older measurements, stable water levels).



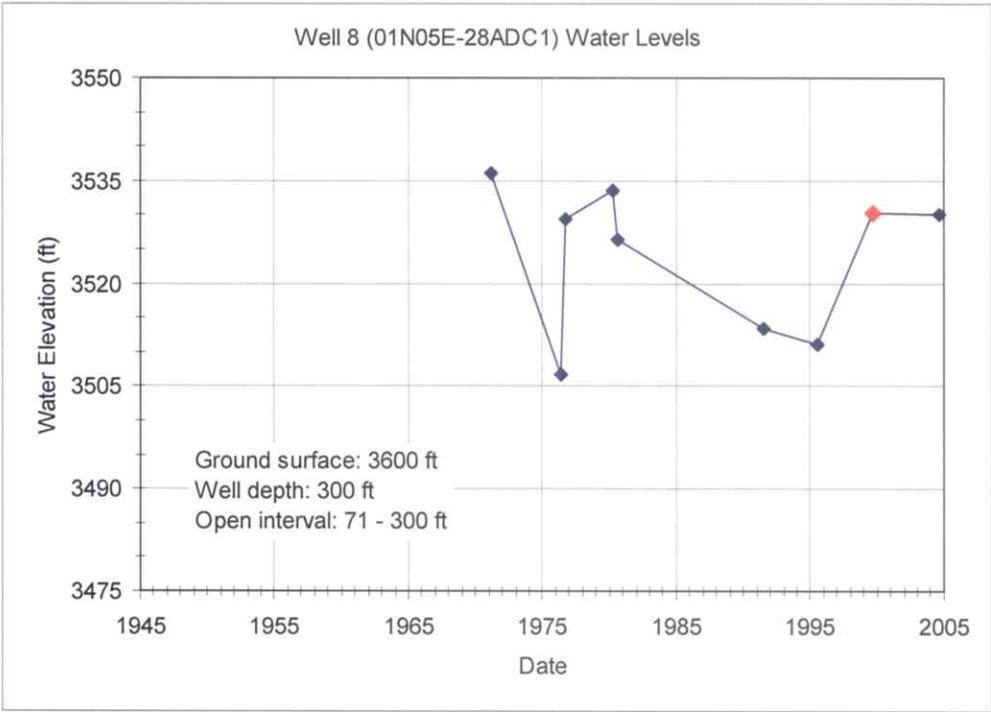
Well 5 (recent measurements, stable water levels).



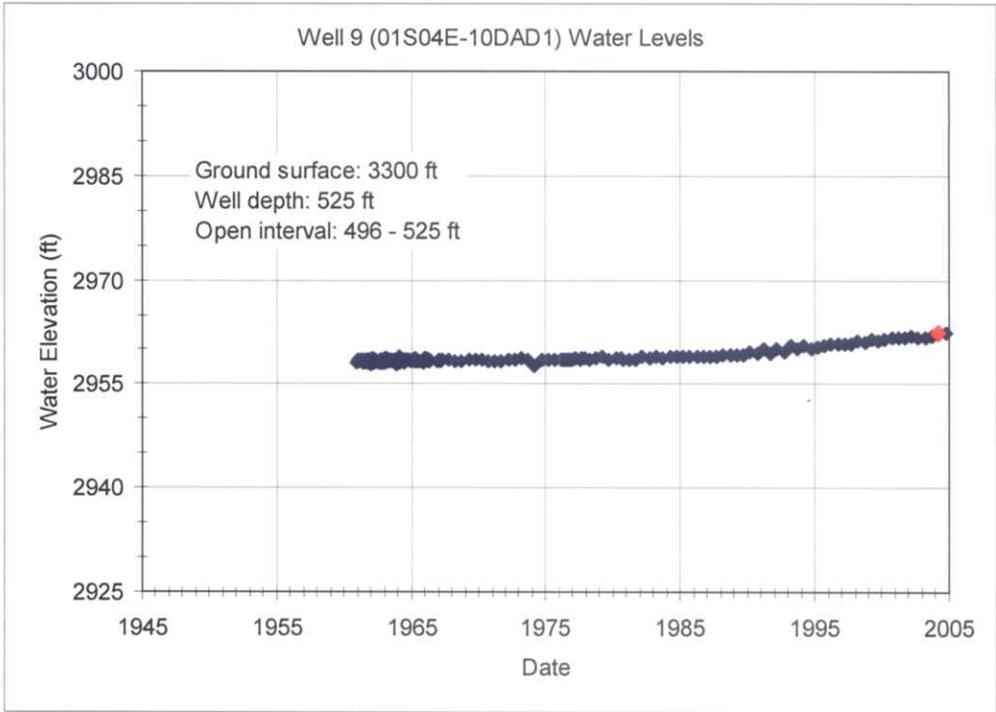
Well 6 (older measurements, decreasing water levels).



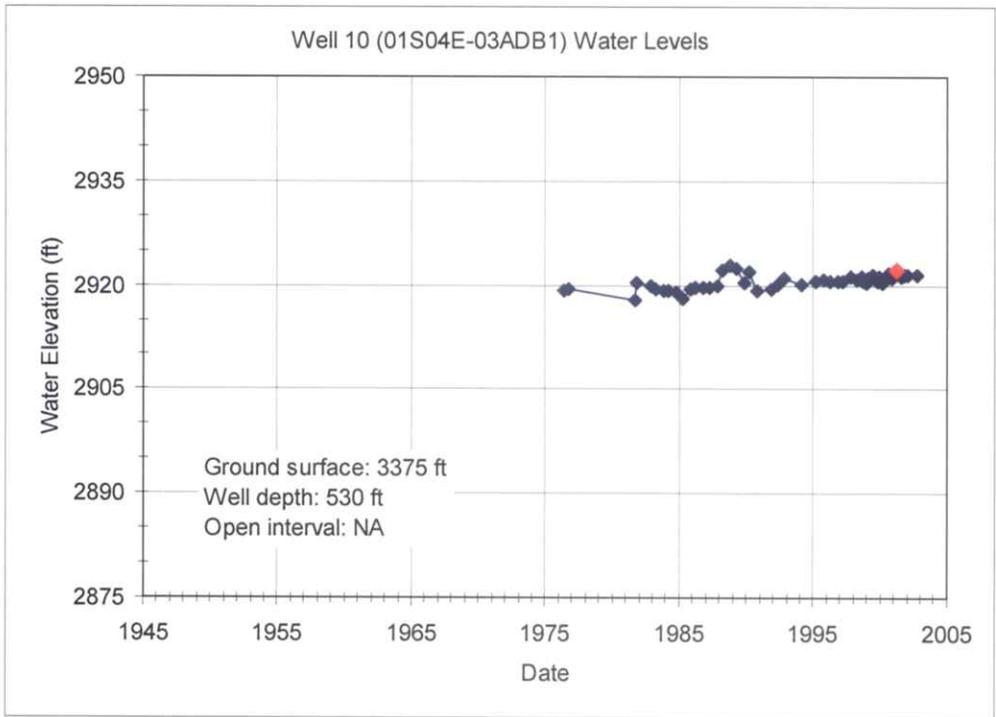
Well 7 (older measurements, stable water levels).



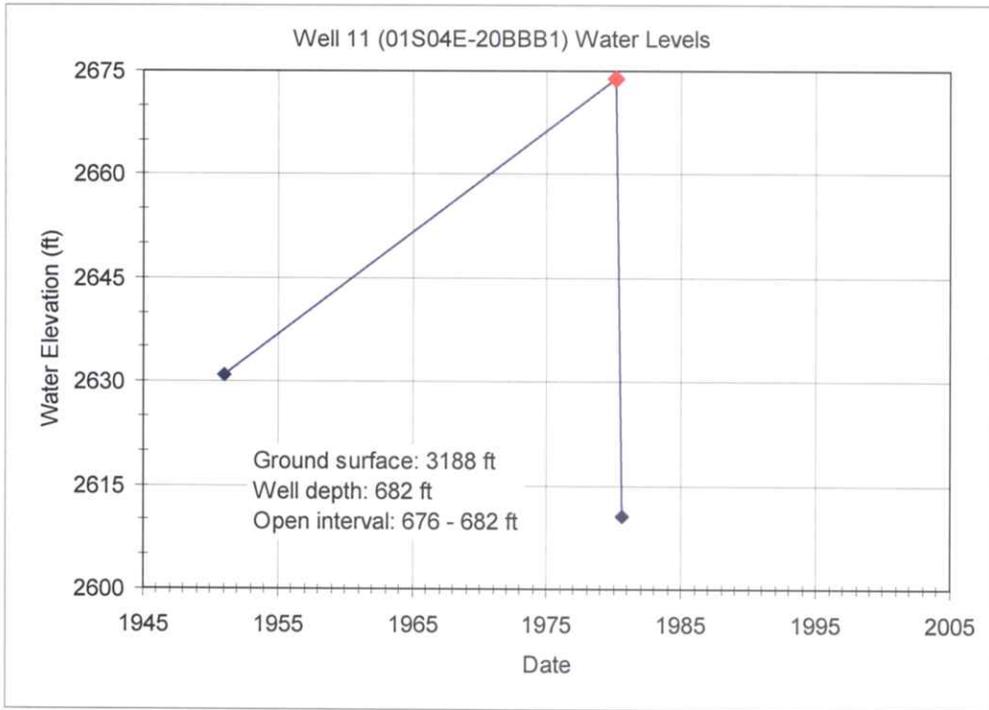
Well 8 (older measurements, unclear water level trend).



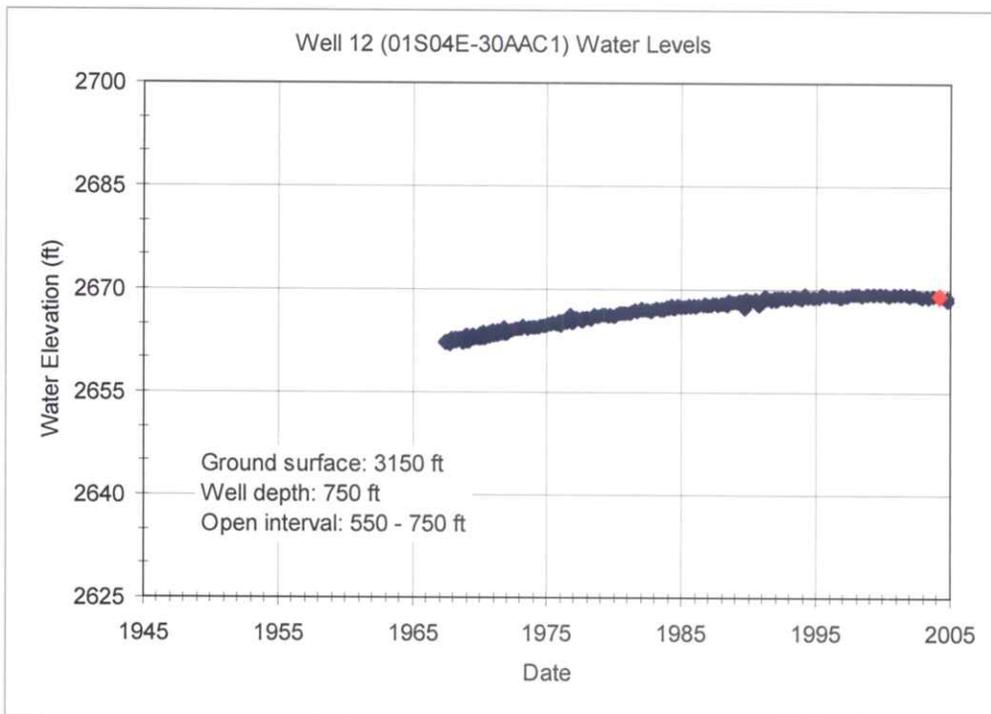
Well 9 (recent measurements, stable water levels).



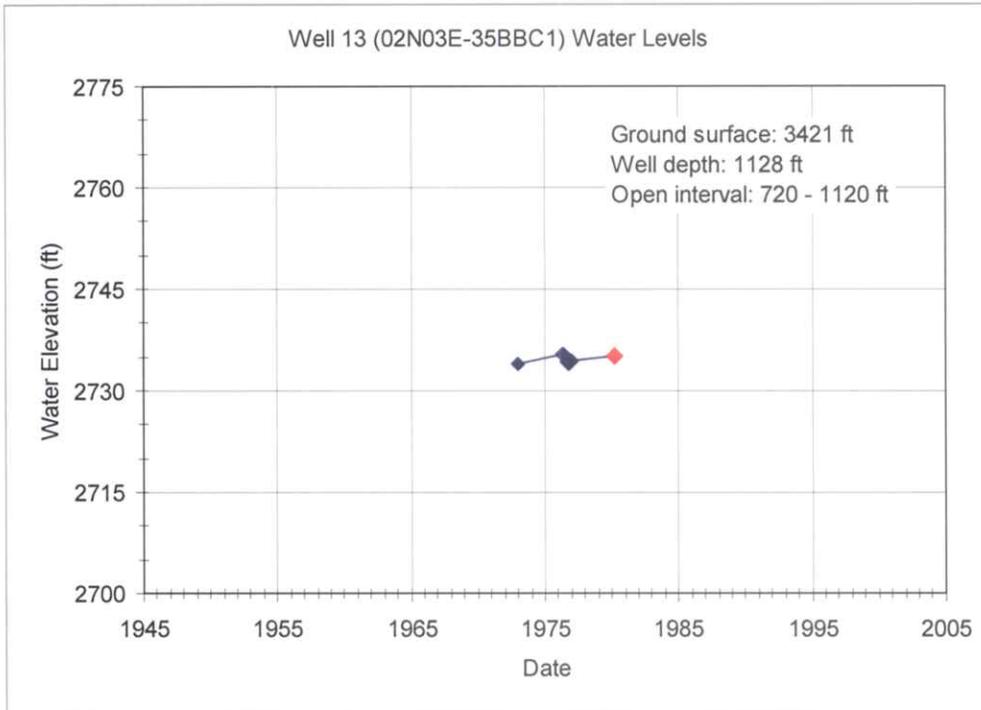
Well 10 (recent measurements, stable water levels).



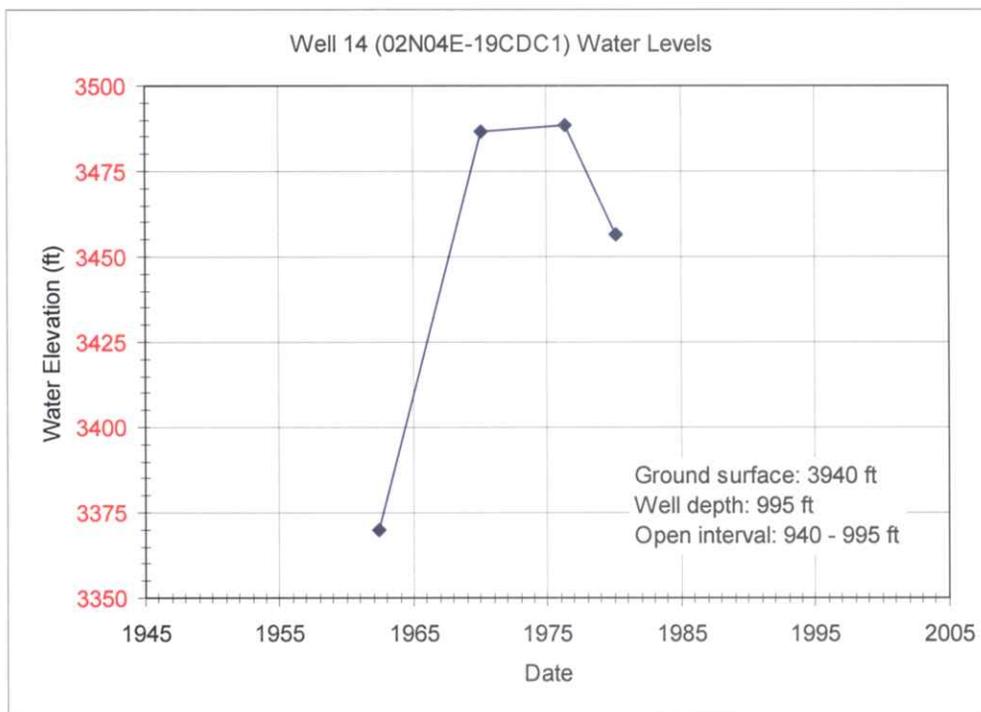
Well 11 (older measurements, unknown water level trend).



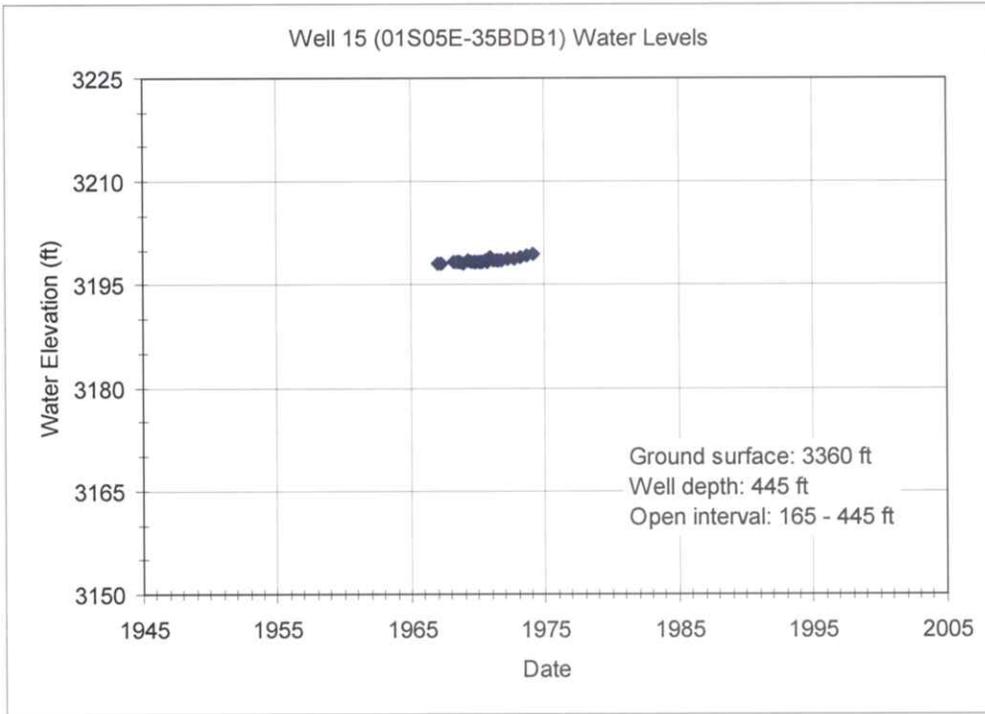
Well 12 (recent measurements, stable water levels).



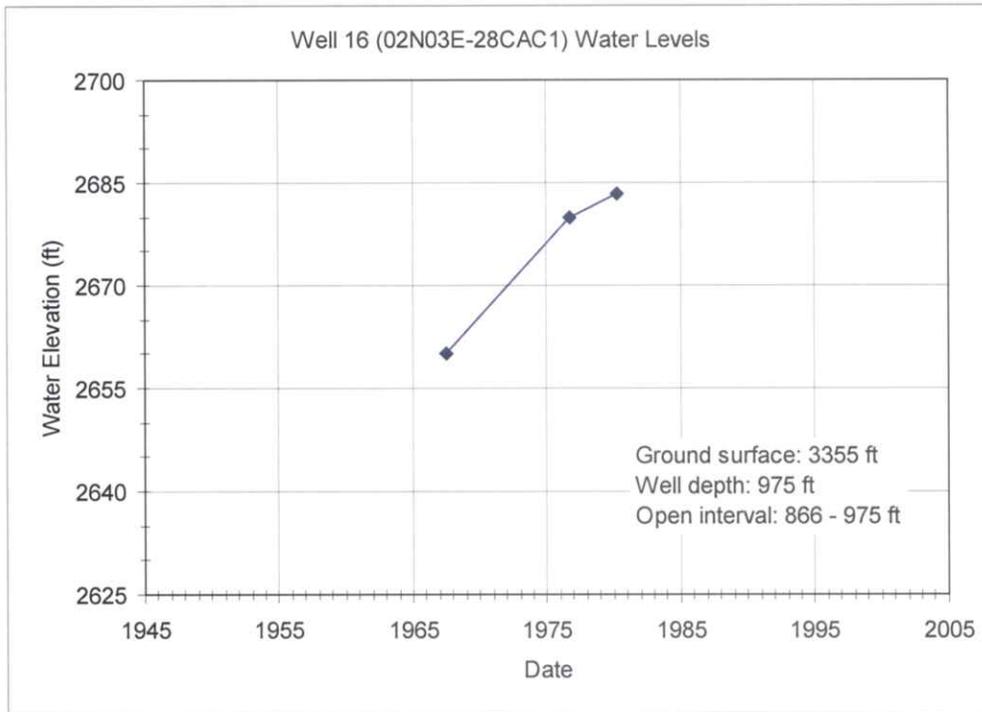
Well 13 (older measurements, stable water levels).



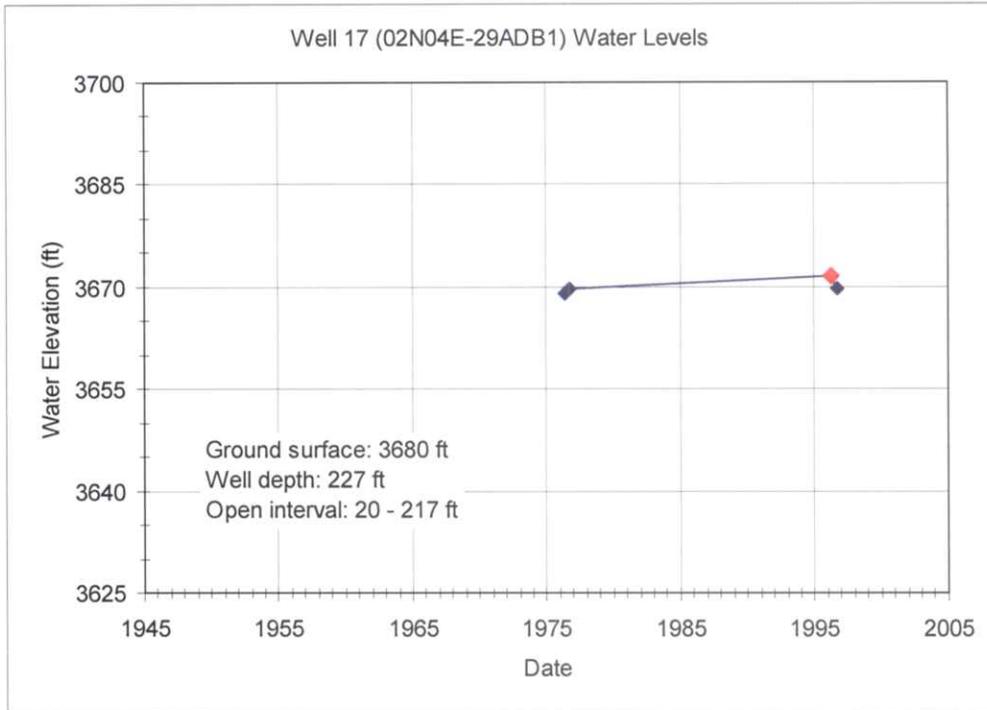
Well 14 (older measurements, unknown water level trend).



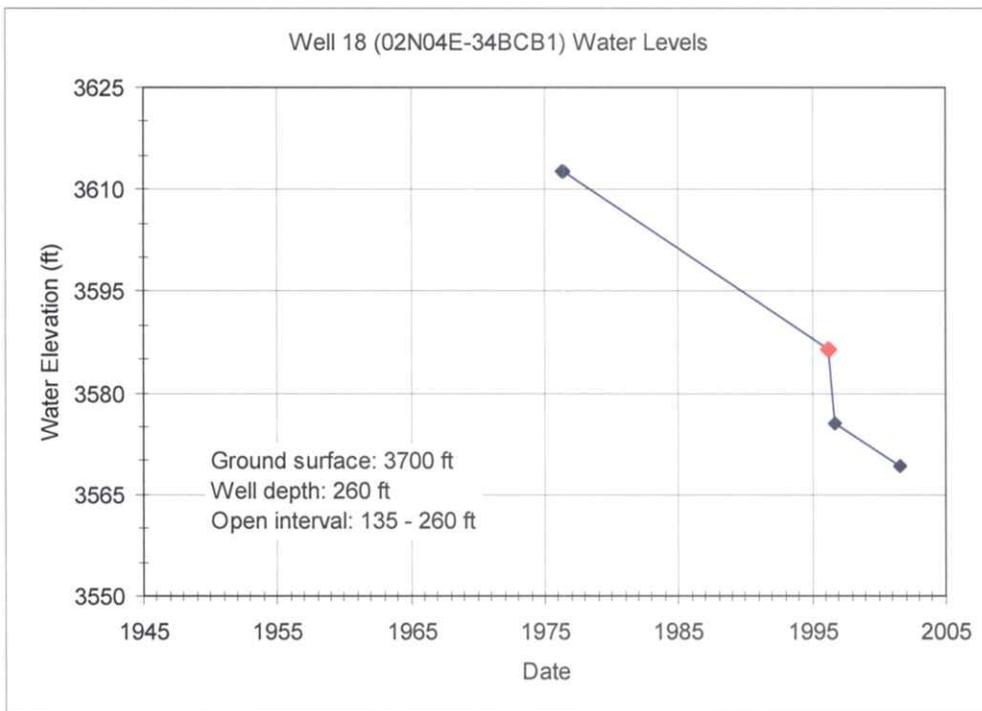
Well 15 (older measurements, stable water levels).



Well 16 (older measurements, increasing water levels).



Well 17 (older measurements, stable water levels).



Well 18 (recent measurements, decreasing water levels).

**Appendix D: Drillers' Reports for Additional Wells used in
Determining Ground Water Flow Directions**

56232

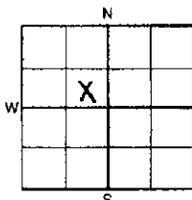
Page 1 of 2

1. DRILLING PERMIT NO. 63 94 W - 371 - 0
Other IDWR No. Abandoned see 63-94-W-0371-300

2. OWNER:
Name BOB & JOAN PRIGGE
Address 10521 LAKE HAZEL RD
City BOISE State ID Zip 83709

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.



T. 1/4 North or South
E. 1/4 East or West
Sec. 4 SE 1/4 NW 1/4 SW 1/4
Gov't Lot _____ County ADA

Address of Well Site BLACKS CREEK ROAD

(Give at least Direction + Distance to Road or Landmark)

Lot No. _____ Block No. _____ Subd. Name _____

4. PROPOSED USE: DOMESTIC

- Domestic Municipal Monitor Irrigation
 Thermal Injection Other _____

5. TYPE OF WORK NEW WELL

- New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD MUD ROTARY

- Mud Rotary Air Rotary Cable Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
BENTONITE	0	50	2500#		POURED

Was drive shoe seal tested? YES NO NONE USED

8. CASING/LINER:

Diameter	From	To	Gauge	Casting	Liner	Steel	Plastic	Welded	Threaded
6"	+1	627	.250			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6"	647	653	.250			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6"	663	675	.250			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6"	730	735	.250			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Final location of shoes NONE USED

Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS SCREENS

- Perforations Method _____
 Screens Type WIRE Material STAINLESS STEEL

From	To	Slot Size	Number	Diameter	Tel/Pipe Size	Casting	Liner
627	647	.20	304 STA	6"	PIPE	<input type="checkbox"/>	<input type="checkbox"/>
653	663	.20	304 STA	6"	PIPE	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

10. WELL TESTS: NOT AVAILABLE

- Pump Bailor Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water NA Was a water analysis done? Yes No

By whom? _____

Water Quality (odor, etc.) GOOD

Bottom Hole Temperature NA

11. STATIC WATER LEVEL:

605 ft. below surface Depth artesian flow found _____

Artesian pressure _____ lb. Describe access port WELL CAP

Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL
11"	0	2	TOPSOIL		
	2	3	CLAY		
	3	25	BOULDERS, GRAVEL, SAND MIX		
	25	27	SAND		
	27	32	BOULDERS		
	32	33	SAND, GRAVEL MIX		
	33	50	BOULDERS		
	50	54	SAND		
	54	68	BOULDERS		
	68	71	SAND, GRAVEL MIX		
	71	73	SAND		
	73	78	SAND & GRAVEL MIX		
	78	92	SAND		
	92	97	BOULDERS		
	97	99	SAND		
	99	125	SAND & GRAVEL MIX		
	125	132	SAND		
	132	135	GRAVEL		
	135	137	SAND		
	137	150	GRAVEL		
	150	197	VERY HARD SAND		
	197	201	GRAVEL		
	201	219	BOULDERS		
	219	245	SAND, SOME GRAVEL, VERY HARD		
	245	269	GRAVEL, SAND MIX		
	269	272	CLAY		
	272	281	SAND		

RECEIVED
SEP 20 1994
JUL 01 1994
WATER RESOURCES
WESTERN REGION
MAY 08 1995

Date: Started 6/1/94 Completed 6/23/94

13. DRILLER'S CERTIFICATION

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

Firm Name PETE COPE DRILLING Firm No. 213

Firm Official Joseph J... Date 6/23/94

Supervisor or Operator Jerry J... Date 6/23/94

(Sign once if Firm Official & Operator)

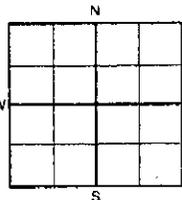
FORWARD WHITE COPY TO WATER RESOURCES

1. DRILLING PERMIT NO. 63 94 W - 371 - 2
Other IDWR No. _____

2. OWNER:
Name BOB & JOAN PRIGGE
Address 10521 LAKE HAZEL RD
City BOISE State ID Zip 83709

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.



T. _____ North or South
E. R. _____ East or West
Sec. _____ 1/4 _____ 1/4 _____ 1/4
Gov't Lot _____ County _____

Address of Well Site _____

(Give at least Direction + Distance to Road or Landmark)

Lot No. _____ Block No. _____ Subd. Name _____

4. PROPOSED USE:

- Domestic Municipal Monitor Irrigation
 Thermal Injection Other _____

5. TYPE OF WORK

- New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD

- Mud Rotary Air Rotary Cable Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		

Was drive shoe seal tested? YES NO How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Casting	Liner	Steel	Plastic	Welded	Threaded
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoes _____

Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS PERFORATIONS

- Perforations Method TORCH PERFORATED
 Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Telg/Pipe Size	Casting	Liner
675	680	1/8"	5 PER FT.	6"	PIPE	<input type="checkbox"/>	<input type="checkbox"/>
680	730	1/8"	5 PER FT.	6"	PIPE	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

10. WELL TESTS:

- Pump Bailer Air Flowing Artesian

Yield gal/min.	Drawdown	Pumping Depth	Time

Temperature of water _____ Was a water analysis done? Yes No

By whom? _____

Water Quality (odor, etc.) _____

Bottom Hole Temperature _____

11. STATIC WATER LEVEL:

_____ ft. below surface Depth artesian flow found _____

Artesian pressure _____ lb. Describe access port _____

Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL
	281	283	CLAY		
	283	285	CEMENTED SAND		
	285	287	CLAY		
	287	326	CEMENTED SAND		
	326	327	CLAY		
	327	335	SAND		
	335	341	CLAY		
	341	342	SAND		
	342	346	GRAVEL		
	346	351	SAND		
	351	355	CLAY		
	355	359	CEMENTED SAND		
	359	370	VERY HARD PEA GRAVEL		
	370	371	CEMENTED SAND		
	371	449	CLAY		
	449	455	LARGE GRAVEL, SOME SAND MIX		
	455	500	SAND, GRAVEL, CLAY MIX		
	500	512	SAND, SOME CLAY MIX		
	512	627	BRN SAND, CLAY MIX		
	627	651	CEMENTED SANDSTONE, SOME CLAY MIX		
	651	657	SAND & CLAY MIX		
	657	686	CEMENTED SANDSTONE & STREAKS OF CLAY		
	686	689	SAND		
	689	719	SAND & BRN CLAY MIX		
	719	721	SAND		
	721	730	SAND & CLAY MIX		
	730	735	CLAY		
	735		CLAY		

Date Started _____ Completed _____

13. DRILLER'S CERTIFICATION

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

Firm Name PETE COPE DRILLING Firm No. 213

Firm Official _____ Date _____

and _____

Supervisor or Operator _____ Date _____

(Sign once if Firm Official & Operator)

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

USE TYPEWRITER OR
PEN

RECEIVED
JUL 26 1988

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>State of Idaho-Transportation Dept</u></p> <p>Address <u>Statehouse Mail Box 8028</u></p> <p>Owner's Permit No. <u>63-87-2 077</u></p>	<p>7. WATER LEVEL</p> <p>Static water level <u>687</u> feet below land surface. Department of Water Resources</p> <p>Flowing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No G.P.M. flow _____</p> <p>Artesian closed-in pressure _____ p.s.i.</p> <p>Controlled by: <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p> <p>Temperature <u>78</u> °F. Quality _____</p> <p><i>Describe artesian or temperature zones below.</i></p>																																																																																																																																																																																																										
<p>2. NATURE OF WORK</p> <p><input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement</p> <p><input type="checkbox"/> Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)</p>	<p>8. WELL TEST DATA</p> <p><input checked="" type="checkbox"/> Pump <input type="checkbox"/> Bailor <input type="checkbox"/> Air <input type="checkbox"/> Other</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Water Resources</th> </tr> </thead> <tbody> <tr> <td>38</td> <td>738</td> <td>2</td> </tr> <tr> <td>45</td> <td>748</td> <td>2</td> </tr> <tr> <td>55</td> <td>755</td> <td>4</td> </tr> </tbody> </table>	Discharge G.P.M.	Pumping Level	Water Resources	38	738	2	45	748	2	55	755	4																																																																																																																																																																																														
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<p>3. PROPOSED USE</p> <p><input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Test <input type="checkbox"/> Municipal</p> <p><input type="checkbox"/> Industrial <input type="checkbox"/> Stock <input type="checkbox"/> Waste Disposal or Injection</p> <p><input type="checkbox"/> Other _____ (specify type)</p>	<p>9. LITHOLOGIC LOG</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Bore Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>0</td> <td>2</td> <td>clay topsoil</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>2</td> <td>4</td> <td>hardpan & lava boulders</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>4</td> <td>55</td> <td>brown sand, clay & lava bou.</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>55</td> <td>60</td> <td>cemented brown sand & gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>60</td> <td>63</td> <td>loose brown sand & gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>63</td> <td>116</td> <td>cemented sand & gravel & clay streaks</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>116</td> <td>126</td> <td>sand & gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>126</td> <td>130</td> <td>sandy clay & gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>130</td> <td>145</td> <td>cemented sand & sandy clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>145</td> <td>148</td> <td>brown clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>148</td> <td>175</td> <td>cemented gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>175</td> <td>204</td> <td>cemented sand</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>204</td> <td>225</td> <td>sandy clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>225</td> <td>245</td> <td>cemented sand & streaks clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>245</td> <td>410</td> <td>sandy clay & gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>410</td> <td>455</td> <td>sand & fine gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>455</td> <td>460</td> <td>sandy clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>460</td> <td>500</td> <td>cemented sand</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>500</td> <td>558</td> <td>sandy clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>558</td> <td>600</td> <td>sand & fine gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>600</td> <td>628</td> <td>sandy clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>628</td> <td>661</td> <td>sand</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>661</td> <td>665</td> <td>sand & gravel</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>665</td> <td>720</td> <td>sandy brown clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>720</td> <td>750</td> <td>dirty sand, clay streaks</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>750</td> <td>775</td> <td>sandy clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>775</td> <td>802</td> <td>brown clay</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>802</td> <td>820</td> <td>sand & clay streaks</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>820</td> <td>870</td> <td>clay with sand streaks</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>870</td> <td>879</td> <td>cemented sand</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>879</td> <td>893</td> <td>sand & clay streaks</td> <td></td> <td>X</td> </tr> <tr> <td></td> <td>893</td> <td>1000</td> <td>clay</td> <td></td> <td>X</td> </tr> </tbody> </table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	12	0	2	clay topsoil		X		2	4	hardpan & lava boulders		X		4	55	brown sand, clay & lava bou.		X		55	60	cemented brown sand & gravel		X		60	63	loose brown sand & gravel		X		63	116	cemented sand & gravel & clay streaks		X		116	126	sand & gravel		X		126	130	sandy clay & gravel		X		130	145	cemented sand & sandy clay		X		145	148	brown clay		X		148	175	cemented gravel		X		175	204	cemented sand		X		204	225	sandy clay		X		225	245	cemented sand & streaks clay		X		245	410	sandy clay & gravel		X		410	455	sand & fine gravel		X		455	460	sandy clay		X		460	500	cemented sand		X		500	558	sandy clay		X		558	600	sand & fine gravel		X		600	628	sandy clay		X		628	661	sand		X		661	665	sand & gravel		X		665	720	sandy brown clay		X		720	750	dirty sand, clay streaks	X			750	775	sandy clay		X		775	802	brown clay		X		802	820	sand & clay streaks	X			820	870	clay with sand streaks		X		870	879	cemented sand		X		879	893	sand & clay streaks		X		893	1000	clay		X
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	802	820	sand & clay streaks	X																																																																																																																																																																																																							
	820	870	clay with sand streaks		X																																																																																																																																																																																																						
	870	879	cemented sand		X																																																																																																																																																																																																						
	879	893	sand & clay streaks		X																																																																																																																																																																																																						
	893	1000	clay		X																																																																																																																																																																																																						
<p>4. METHOD DRILLED</p> <p><input type="checkbox"/> Rotary <input type="checkbox"/> Air <input type="checkbox"/> Hydraulic <input type="checkbox"/> Reverse rotary</p> <p><input checked="" type="checkbox"/> Cable <input type="checkbox"/> Dug <input type="checkbox"/> Other _____</p>	<p>10.</p> <p>Work started <u>4/12/88</u> finished <u>6/23/88</u></p>																																																																																																																																																																																																										
<p>5. WELL CONSTRUCTION</p> <p>Casing schedule: <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>250 inches</td> <td>8 inches</td> <td>2 feet</td> <td>865 feet</td> </tr> <tr> <td>250 inches</td> <td>6 inches</td> <td>843'6" feet</td> <td>863'6" feet</td> </tr> <tr> <td>250 inches</td> <td>6 inches</td> <td>894'0" feet</td> <td>904'0" feet</td> </tr> </tbody> </table> <p>Was casing drive shoe used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Was a packer or seal used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6" pipe 21'</p> <p>Perforated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 822'6"-843'6"</p> <p>How perforated? <input type="checkbox"/> Factory <input type="checkbox"/> Knife <input type="checkbox"/> Torch</p> <p>Size of perforation _____ inches by _____ inches</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>perforations</td> <td>feet</td> <td>feet</td> </tr> <tr> <td>perforations</td> <td>feet</td> <td>feet</td> </tr> <tr> <td>perforations</td> <td>feet</td> <td>feet</td> </tr> </tbody> </table> <p>Well screen installed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Manufacturer's name <u>Johnson</u></p> <p>Type <u>stainless steel</u> Model No. <u>304</u></p> <p>Diameter <u>6</u> Slot size <u>30</u> Set from <u>863'6"</u> to <u>894'0"</u> feet</p> <p>Diameter _____ Slot size _____ Set from _____ feet to _____ feet</p> <p>Gravel packed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Size of gravel <u>8-12 sand</u></p> <p>Placed from <u>843'6"</u> feet to <u>863'6"</u> feet</p> <p>Surface seal depth <u>89</u> Material used in seal: <input type="checkbox"/> Cement grout</p> <p><input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Puddling clay <input type="checkbox"/> _____</p> <p>Sealing procedure used: <input checked="" type="checkbox"/> Slurry pit <input checked="" type="checkbox"/> Temp. surface casing</p> <p><input checked="" type="checkbox"/> Overbore to seal depth</p> <p>Method of joining casing: <input type="checkbox"/> Threaded <input checked="" type="checkbox"/> Welded <input type="checkbox"/> Solvent</p> <p><input type="checkbox"/> Cemented between strata</p> <p>Describe access port _____</p>	Thickness	Diameter	From	To	250 inches	8 inches	2 feet	865 feet	250 inches	6 inches	843'6" feet	863'6" feet	250 inches	6 inches	894'0" feet	904'0" feet	Number	From	To	perforations	feet	feet	perforations	feet	feet	perforations	feet	feet	<p>11. DRILLERS CERTIFICATION</p> <p>I certify that all minimum well construction standards were complied with at the time the rig was removed.</p> <p>Firm Name <u>W.E. Stevens & Sons</u> No. <u>153</u></p> <p>Address <u>3709 Hawthorne Dr</u> Date <u>6/26/88</u></p> <p>Signed by (Firm Official) _____</p> <p>and _____</p> <p>(Operator) _____</p>																																																																																																																																																																														
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<p>6. LOCATION OF WELL</p> <p>Sketch map location must agree with written location.</p> <p>Department of Water Resources</p> <p>East Boise POE (along I84)</p> <p>Subdivision Name _____</p> <p><u>IR-84-2(33) 66</u></p> <p>Lot No. _____ Block No. _____</p> <p>County <u>Ada</u></p> <p>S/E 1/4 S/E 1/4 Sec. <u>11</u>, T. <u>1</u> N. S. R. <u>3</u> E. W.</p>	<p>11. DRILLERS CERTIFICATION</p> <p>I certify that all minimum well construction standards were complied with at the time the rig was removed.</p> <p>Firm Name <u>W.E. Stevens & Sons</u> No. <u>153</u></p> <p>Address <u>3709 Hawthorne Dr</u> Date <u>6/26/88</u></p> <p>Signed by (Firm Official) _____</p> <p>and _____</p> <p>(Operator) _____</p>																																																																																																																																																																																																										

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DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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WATER RESOURCES
WESTERN REGION

PAGE 1 OF 3 PAGES 95106

1. DRILLING PERMIT NO. 61-98-W-0075-000
Other IDWR No. D000 7483

10. WELL TESTS:

Pump Bailor Air Flowing Artesian

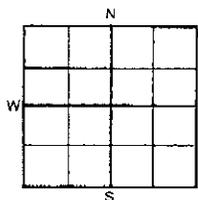
Yield gal./min.	Drawdown	Pumping Depth	Time
9.7	< 1 FT	500.8	12 HRS

2. OWNER:

Name FRANK BONESSA
Address 1979 BORCHERS DRIVE
City SAN JOSE State CA Zip 95124

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.



T. 1S North or South
R. 3E East or West
Sec. 13 SE 1/4 NE 1/4 NE 1/4
Gov't Lot _____ County ADA

Address of Well Site 1 MILE WEST OF ORCHARD ACCESS RD ON ORCHARD RANCH LAWS, THEN 1 MILE NORTH
(Give at least Direction + Distance to Road or Landmark)

Lot No. _____ Block No. _____ Subd. Name _____

4. PROPOSED USE:

Domestic Municipal Monitor Irrigation
 Thermal Injection Other _____

5. TYPE OF WORK

New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD

Mud Rotary Air Rotary Cable Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
NEAT CEMENT	124.6A	178	178	DISPLACED THROUGH 8"
GROUT	178	115.4	115.4	PA#3 BAGS CASING
BENTONITE	115.4	4	16 BAGS	SLURRY PIT
NEAT CEMENT GROUT	0-4'			1 BAG POURED

Was drive shoe seal tested? Yes No How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Casing	Liner	Steel	Plastic	Welded	Threaded
8 5/8	+1.83	124.6A	1/4	✓	✓	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6 5/8	1	557	0.28	✓		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 7/8	5K	629.7	0.182		✓	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 1/2	560.2	581.0	0.237		✓	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Final location of shoes 8" SHOE AT 124.6A'
Top Packer or Headpipe 5K Bottom Tailpipe 629.7E

9. PERFORATIONS/SCREENS

Perforations Method SAWED IN PVC, TORCH
 Screens Type JOHNSON Material CONTINUOUS SLOT WIRE WOOD

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casting	Liner
410	550	3/32	1064	6 5/8	PIPE	<input checked="" type="checkbox"/>	<input type="checkbox"/>
560.2	570.45	0.20	11A	5 7/8	(LITTLE SCREENING)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
580.2	581.0	3/32	78	4 1/2	PIPE	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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11. STATIC WATER LEVEL:

500 ft. below surface Depth artesian flow found _____
Artesian pressure _____ lb. Describe access port 8" CASING
BY REMOVING WELL CAP

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	WATER
				YES NO
8	0	551'		
6	557	63A		
	0	2	SOIL	
	2	6	SOIL, SUBSOIL, CLAYEY HARDPAN	
	6	8	SANDY CLAY	
	8	16	CLAY	
	16	18	SAND	
	18	31.5	SANDY CLAY	
	31.5	35	ROCK	
	35	63	CLAYEY SAND	
	63	64	GRAVEL	
	64	69	CLAYEY SAND	
	69	70	GRAVEL	
	70	96	CLAYEY SAND	
	96	107	GRAVEL	
	107	116	CLAY	
	116	122	GRAVEL	
	122	194	BASALT	
	194	197	RUBBLE & CINDERS	
	197	216	BASALT	
	216	217	BASALT, GREYED, RED IN SEAMS	
	217	257	BASALT	
	255	257	BOULDERS, HARD, RED MATRIX	
	257	272	BASALT, RED IN SEAMS	
	272	273	RUBBLE & CINDERS	
	273	311	BASALT	
	311	312	RUBBLE & CINDERS	

Date: Started Nov 30, 1998 Completed SEE PAGE 3

13. DRILLER'S CERTIFICATION

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

Firm Name ARTESIAN CO Firm No. 318

Firm Official HUGH HARDEN Date 7 June 1999

Supervisor or Operator Hugh Harden Date 7 June 1999

(Sign once if Firm Official & Operator)

JUN 08 1999

WELL DRILLER'S REPORT

JUN 14 1999

Bali Point Pen

PAGE 2 OF 3 PAGES

95107

WATER RESOURCES

61-98-W-0075-000

Department of Water Resources

1. DRILLING PERMIT REGION
Other IDWR No. D 000 7483

2. OWNER:
Name FRANK BONESSA
Address _____
City _____ State _____ Zip _____

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

OFFICE USE ONLY			
Section	T. _____	North <input type="checkbox"/>	or South <input type="checkbox"/>
Range	R. _____	East <input type="checkbox"/>	or West <input type="checkbox"/>
Section	<u>21S Rge 63E Sec 13</u>	1/4	1/4 1/4 1/4
Gov't Lot	County	40 acres	160 acres
<u>SE 1/4 NE 1/4 NE 1/4</u>			

Address of Well Site _____

(Give at least Direction + Distance to Road or Landmark)

Lot No. _____ Block No. _____ Subd. Name _____

4. PROPOSED USE:

- Domestic Municipal Monitor Irrigation
 Thermal Injection Other _____

5. TYPE OF WORK

- New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD

- Mud Rotary Air Rotary Cable Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT Sacks or Pounds	METHOD
Material	From	To		

Was drive shoe seal tested? YES NO How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Casting	Liner	Steel	Plastic	Welded	Threaded
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoes 6" PVC COUPLING @ 551 FT

Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS

- Perforations Method _____
 Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casting	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

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10. WELL TESTS:

- Pump Bailor Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water _____ Was a water analysis done? Yes No

By whom? _____

Water Quality (odor, etc.) _____

Bottom Hole Temperature _____

11. STATIC WATER LEVEL:

_____ ft. below surface Depth artesian flow found _____

Artesian pressure _____ lb. Describe access port _____

Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water	Temp
	312	317	BASALT SOFTER, BROWN	✓	
	317	320	BASALT HARD, GREY	✓	
	320	321	BASALT SOFTER, BROWN	✓	
	321	321.5	BASALT MED, HARD, GREY	✓	
	321.5	324	RUBBLE & CINDERS, BROWN	✓	
	324	326	CLAY, BROWN	✓	
	326	342	BASALT, HARD, BROWN	✓	
	342	379	SANDSTONE, TAN	✓	
	379	383	CLAY, TAN	✓	
	383	401	SAND, TAN	✓	
	401	403	CLAY, TAN	✓	
	403	424	CLAYEY SAND, TAN	✓	
	424	435	CLAY, TAN	✓	
	435	438	SANDY CLAY, TAN	✓	
	438	445	CONGLOMERATE, TAN	✓	
	445	471	CLAYEY SAND, TAN	✓	
	471	472	CONGLOMERATE TAN	✓	
	472	479	CLAYEY SAND, TAN	✓	
	479	482	CLAY, TAN	✓	
	482	484	SAND, TAN	✓	
	484	487	CLAYEY SAND, TAN	✓	
	487	487.2	SAND TAN	✓	
	487.2	500	CLAYEY SAND TAN	✓	
	500	500.2	SAND TAN	✓	
	500.2	517	CLAYEY SAND & CLAY	✓	
	517	517.2	SAND TAN	✓	
	517.2	517	CLAYEY SAND TAN	✓	

Date: Started PAGE 1 Completed PAGE 3

13. DRILLER'S CERTIFICATION

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

Firm Name ARTESIAN CO Firm No. 318

Firm Official [Signature] Date 7 June 1999

and Supervisor or Operator _____ Date _____

(Sign once if Firm Official & Operator)

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DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

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PAGE 3 of 3 PAGES

95108

WATER RESOURCES
WESTERN REGION 61-98-W-0075-000

1. DRILLING PERMIT NO.

Other IDWR No. D 0000 TAB3

2. OWNER:

Name FRANK [REDACTED] BONESSA
Address 1979 BORCHERS DRIVE
City SAN JOSE State CA Zip 95124

3. LOCATION OF WELL by legal description:

Stretch map location must agree with written location.

OFFICE USE ONLY

Map No. 03E 800/3

Section SE 1/4 NE 1/4

10 acres 1/4 40 acres 1/4 160 acres 1/4

County _____

Address of Well Site _____

(Give at least Direction + Distance to Road or Landmark)

Lot No. _____ Block No. _____ Subd. Name _____

4. PROPOSED USE:

- Domestic Municipal Monitor Irrigation
- Thermal Injection Other _____

5. TYPE OF WORK

- New Well Modify or Repair Replacement Abandonment

6. DRILL METHOD

- Mud Rotary Air Rotary Cable Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT Sacks of Pounds	METHOD
Material	From	To		

Was drive shoe seal tested? Y N How? _____

8. 4 1/2 OD LINER: HANGER 5" COUPLING CUT OFF, BEVELED TO INSIDE

Diameter	From	To	Gauge	Casting	Liner	Steel	Plastic	Welded	Threaded
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HARD FACED
GROUND
SMOOTH

Final location of shoes - 4" LINER - NO SHOE

Top Packer or Headpipe _____ Bottom Tailpipe _____

9. PERFORATIONS/SCREENS Pipe Axis, Chamfered

- Perforations Method INTERNALLY & GROUND
- Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tel/Pipe Size	Casting	Liner
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

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10. WELL TESTS:

- Pump Bailor Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water _____ Was a water analysis done? Yes No

By whom? _____

Water Quality (odor, etc.) _____

Bottom Hole Temperature _____

11. STATIC WATER LEVEL:

_____ ft. below surface Depth artesian flow found _____

Artesian pressure _____ lb. Describe access port _____

Describe Controlling Devices: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Core Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
	517	518	SAND TAN	✓	
	518	522	CLAYEY SAND, TAN		✓
	522	523	SAND, TAN	✓	
	523	524	CLAYEY SAND, TAN		✓
	524	526	SAND, TAN	✓	
	526	529	ROCK BASALT? BAIRS DRY		✓
	529	532	SAND, TAN		✓
	532	537	SANDY CLAY, TAN		✓
	537	538	SAND, TAN	✓	
	538	572	ROCK CONGLOMERATE? TAN		✓
	572	573	CLAY, TAN		✓
	573	575	CONGLOMERATE? TAN		✓
	575	578	CLAYEY GRAVEL	✓	
	578	581	CLAYEY SAND TAN		✓
	581	602	ALTERNATING LAYERS SAND & CLAY		✓
	602	603	CLAYEY GRAVEL, TAN		✓
	603	604	CLAY, TAN		✓
	604	605	SAND, TAN		✓
	605	633	ALTERNATING LAYERS SAND & CLAY		✓

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JUN 14 1999

Department of Water Resources

Date: Started SEE PAGE 1 Completed JUNE 1, 1999

13. DRILLER'S CERTIFICATION

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

Firm Name ARTESIAN CO Firm No. 318

Firm Official Hugh Harden Date JUNE 7, 1999

and _____

Supervisor or Operator _____ Date _____

(Sign once if Firm Official & Operator)

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811001-53

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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 State Highway Dept. (Black Creek Rest Area)
Address Boise, Idaho

Owner's Permit No. 6-22956
NATURE OF WORK (check): Replacement well
New well Deepened Abandoned

Water is to be used for: Drinking & Rest Area
METHOD OF CONSTRUCTION: Rotary Cable
Dug Other

CASING SCHEDULE: Threaded Welded
8" Diam. from 0 ft. to 904 ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
"Diam. from _____ ft. to _____ ft.
Thickness of casing: $\frac{1}{2}$ " wall Material:
Steel concrete wood other

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

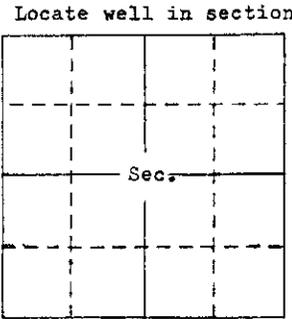
Size of perforations: $\frac{1}{8}$ " by 3"
perforations from 866 ft. to 890 ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

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 $\frac{1}{2}$ " minus Gravel placed from 818 ft. to 975 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 _____
N $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 28 T. 2 N. R. 3 E. $\frac{1}{4}$

Size of drilled hole: 8" Total
Depth of well: 975 ft. Standing water
Level below ground: 695 ft. Temp.
Fahr. 71 ° Test delivery: 55-75 gpm
or _____ cfs Pump? Bail
Size of pump and motor used to make test:
20 h.p. Sub. pump
Length of time of test: 48 Hrs. Min.
Drawdown: No 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 104073 WATER
FROM TO YES OR NO
FEET FEET

DEPTH FEET	FROM	TO	MATERIAL	YES OR NO
0	2		Top Soil	
2	8		White hardpan	
8	105		Cemented gravel	
105	120		Gravel & sand-small amount yellow clay	
120	130		Small gravel & reddish clay	
130	165		Light brown clay & small gravel	
165	245		Yellowish sand & clay	
245	280		Yellowish sand & clay (floaters of decomposed granite)	
280	353		Sand & clay	
353	392		Sticky brown clay	
392	415		Brown sand & clay	
415	500		Brown sand & clay (some gravel)	
500	555		Layers of sand & clay	
555	680		Sand, gravel & clay	
680	690		Light brown clay	
690	730		Sand, gravel & clay	
730	845		Clay--small amount of sand	
845	904		Sand & gravel--small layers of clay	
			Casing perforated 866-890 ft.	
904	975		layers of clay, sand & gravel	
			4" liner installed from 818' to 975' and gravel packed	

Work started: November 23, 1966
Work finished: June 14, 1967
Well Driller's Statement: This well was drilled under my supervision and this report is true to the best of my knowledge.
Name: Wayne E. Stevens
Address: 3709 Hawthorne Drive, Boise, Idaho
Signed by: Wayne E. Stevens
License No. 324 Date: June 25, 1967
no helper used

Use other side for additional remarks

USGS

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

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#9003

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

1. DRILLING PERMIT NO. 61-98-W-0078-000
Other IDWR No. _____

2. OWNER:
Name Jim Hutchings
Address 13690 S Cloverdale
City Kuna State ID Zip 83634

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

N W E S	Twp. <u>1</u> North <input checked="" type="checkbox"/> or South <input type="checkbox"/>
	Rge. <u>5</u> East <input checked="" type="checkbox"/> or West <input type="checkbox"/>
	Sec. <u>33</u> 1/4 <u>Sec</u> 1/4 <u>Sec</u> 1/4
	Gov't Lot _____ County <u>Elmore</u>
	Lat: _____ Long: _____

Address of Well Site Base Line Rd.
City Mountain Home

(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

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

5. TYPE OF WORK check all that apply (Replacement etc.)
 New Well Modify Abandonment Other _____

6. DRILL METHOD
 Air Rotary Cable Mud Rotary Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK	AMOUNT		METHOD
	From	To	
<u>Benite</u>	<u>0</u>	<u>500</u>	<u>200</u>

Was drive shoe used? Y N Shoe Depth(s) 510
Was drive shoe seal tested? Y N How? Air

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6</u>	<u>12</u>	<u>518</u>	<u>250</u>	<u>Steel</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
30 ft. below ground Artesian pressure _____ lb.
Depth flow encountered 525 ft. Describe access port or control devices: CAP

11. WELL TESTS:
 Pump Bailer Air Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>50</u>	<u>500</u>	<u>500</u>	<u>4 hr</u>

Water Temp. 56 Bottom hole temp. 56
Water Quality test or comments: _____
Depth first Water Encountered 260

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

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>8 1/2</u>	<u>0</u>	<u>2</u>	<u>TOP SOIL</u>		
	<u>2</u>	<u>4</u>	<u>Hard Pan</u>		
	<u>4</u>	<u>18</u>	<u>Red CLAY</u>		
	<u>18</u>	<u>170</u>	<u>Red sand CLAY</u>		
	<u>190</u>	<u>220</u>	<u>200</u>		
	<u>220</u>	<u>360</u>	<u>Red sand CLAY</u>		
	<u>360</u>	<u>440</u>	<u>CLAY + Sand layers</u>		
	<u>440</u>	<u>470</u>	<u>Gravel</u>		
	<u>470</u>	<u>525</u>	<u>CLAY + Shaly Sand layers</u>		
	<u>525</u>	<u>540</u>	<u>Sand & Gravel</u>		

RECEIVED

DEC 21 1998

Department of Water Resources

RECEIVED

MICROFILMED

DEC 16 1998

MAR 08 1999

WATER RESOURCES
WESTERN REGION

Completed Depth 525 (Measurable)
Date: Started 12-10-98 Completed 12-11-98

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Firm Name Wesley Carter Drilling Firm No. 560
Firm Official [Signature] Date 12-12-98
and
Supervisor or Operator _____ Date _____
(Sign once if Firm Official & Operator)

721802-56

Form 238-7
3/95-296

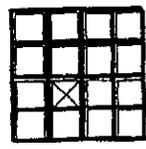
IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

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

1. DRILLING PERMIT NO. 61-97-W-0033-000
 Other IDWR No. _____

2. OWNER:
 Name Rick Millington
 Address 8011 Ustick Rd.
 City Boise State ID Zip 83704

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



Twp. 1 North or South
 Rge. 5 East or West
 Sec. 6 1/4 NE 1/4 SW 1/4
 10 acres 30 acres 160 acres
 Gov't lot _____ County Elmore

Lat: _____ Long: _____
 Address of Well Site Baseline Rd
 City Mayfield
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:
 Domestic Municipal Monitor Irrigation
 Thermal Injection Other

5. TYPE OF WORK check all that apply (Replacement etc.)
 New Well Modify Abandonment Other

6. DRILL METHOD
 Air Rotary Cable Mud Rotary Other

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
bentonite	2	18	6	overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	575	.250	steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8"	0	80	.250	steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

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

11. WELL TESTS:
 Pump Bailer Air Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
30		560	2 hrs.

Water Temp. _____ Bottom hole temp. _____
 Water Quality test or comments: _____
 Depth first Water Encountered 455

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Water				Remarks: Lithology, Water Quality & Temp.	Y	N
Bore Dia.	From	To				
10"	0	1		brown top soil		
10"	1	3		brown clay		
10"	3	5		brown hardpan clay		
10"	5	20		brown sand		
8"	20	24		brown clay		
8"	24	60		brown clay & strips brown sand		
8"	60	114		white & brown soft granite		
8"	114	117		black granite		
8"	117	160		white & brown granite		
8"	160	175		brown granite chips		
8"	175	225		white & brown granite		
8"	225	338		brown clay		
8"	338	365		clear & white grnt. w/strips brn clay		
8"	365	402		brown fine sand		
8"	402	440		brn sand w/strips of clay		
6"	440	455		brown sandy clay		
6"	455	473		brown sand w/small gravel		
6"	473	495		brown clay		
6"	495	528		brown sand & small gravel		
6"	528	533		brown sandy clay		
6"	533	561		brown & white sand		
6"	561	566		light brown clay		
6"	566			gray sand		

RECEIVED RECEIVED

SEP 11 1997 SEP - 4 1997

Department of Water Resources WATER RESOURCES WESTERN REGION

Completed Depth: 387 (Measurable)
 Date: Started 07-11-97 Completed 07-18-97

13. DRILLER'S CERTIFICATION

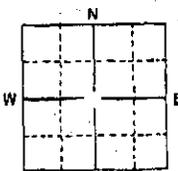
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name SOS Welldrilling & Pump Co Firm No. 212
 Firm Official Fred Spurrin Date 9-2-97
 Supervisor or Operator Sam Spurrin Date 9-2-97
(Sign once if Firm Official & Operator)

Date: 08/22/97 Time: 4:11 PM MICROFILMED
 JAN 8 5 1998

State of Idaho Department of Water Administration
WELL DRILLER'S REPORT 1150

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

<p>1. WELL OWNER Name <u>El Paso Natural Gas</u> Address _____ Owner's Permit No. _____</p>	<p>7. WATER LEVEL Static water level <u>450</u> feet below land surface Flowing? <input type="checkbox"/> Yes <input type="checkbox"/> No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by <input type="checkbox"/> Valve <input type="checkbox"/> Cap <input type="checkbox"/> Plug</p>																																																																																																																																																				
<p>2. NATURE OF WORK <u>Armed Bed</u> <input checked="" type="checkbox"/> New well <input type="checkbox"/> Deepened <input type="checkbox"/> Replacement <input type="checkbox"/> Abandoned (describe method of abandoning) <u>Not a Water Well</u></p>	<p>8. WELL TEST DATA <input type="checkbox"/> Pump <input type="checkbox"/> Bailer <input type="checkbox"/> Other Discharge G.P.M. _____ Draw Down _____ Hours Pumped _____ <u>None</u> <u>Was not tested</u></p>																																																																																																																																																				
<p>3. PROPOSED USE <input type="checkbox"/> Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Test <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> Stock <u>Not a Water Well</u></p>	<p>9. LITHOLOGIC LOG 028863</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Hole Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>12 0</td> <td>0</td> <td>8</td> <td>Surface</td> <td></td> <td></td> </tr> <tr> <td>12 8</td> <td>8</td> <td>114</td> <td>Clay Fine gravel sand</td> <td></td> <td></td> </tr> <tr> <td>12 114</td> <td>114</td> <td>148</td> <td>Gravel</td> <td></td> <td></td> </tr> <tr> <td>12 148</td> <td>148</td> <td>177</td> <td>Black Basalt</td> <td></td> <td></td> </tr> <tr> <td>12 177</td> <td>177</td> <td>187</td> <td>Red Basalt</td> <td></td> <td></td> </tr> <tr> <td>12 187</td> <td>187</td> <td>197</td> <td>Gravel</td> <td></td> <td></td> </tr> <tr> <td>12 197</td> <td>197</td> <td>223</td> <td>Red Basalt</td> <td></td> <td></td> </tr> <tr> <td>12 223</td> <td>223</td> <td>237</td> <td>Black Basalt</td> <td></td> <td></td> </tr> <tr> <td>12 237</td> <td>237</td> <td>277</td> <td>Red Basalt</td> <td></td> <td></td> </tr> <tr> <td>12 277</td> <td>277</td> <td>284</td> <td>Fine gravel sand</td> <td></td> <td></td> </tr> <tr> <td>12 284</td> <td>284</td> <td>288</td> <td>Clay through to drill</td> <td></td> <td></td> </tr> <tr> <td>10 288</td> <td>288</td> <td>360</td> <td>gravel & sand</td> <td></td> <td></td> </tr> <tr> <td>10 360</td> <td>360</td> <td>450</td> <td>Layer Clay & white sand</td> <td></td> <td></td> </tr> <tr> <td>10 450</td> <td>450</td> <td>550</td> <td>hard & packed</td> <td></td> <td></td> </tr> <tr> <td>10 550</td> <td>550</td> <td>571</td> <td>Water flowing</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Clay with sand</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>hard could be</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Water at 350?</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Casing 550-558</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Clay</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Clay was sticky</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>sand white, quartz</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>blending formation</td> <td></td> <td></td> </tr> </tbody> </table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No	12 0	0	8	Surface			12 8	8	114	Clay Fine gravel sand			12 114	114	148	Gravel			12 148	148	177	Black Basalt			12 177	177	187	Red Basalt			12 187	187	197	Gravel			12 197	197	223	Red Basalt			12 223	223	237	Black Basalt			12 237	237	277	Red Basalt			12 277	277	284	Fine gravel sand			12 284	284	288	Clay through to drill			10 288	288	360	gravel & sand			10 360	360	450	Layer Clay & white sand			10 450	450	550	hard & packed			10 550	550	571	Water flowing						Clay with sand						hard could be						Water at 350?						Casing 550-558						Clay						Clay was sticky						sand white, quartz						blending formation		
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<p>4. METHOD DRILLED <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rotary <input type="checkbox"/> Dug <input type="checkbox"/> Other</p>	<p>10. Work started <u>14 Feb 73</u> finished <u>30 April 1973</u></p>																																																																																																																																																				
<p>5. WELL CONSTRUCTION Diameter of hole <u>12</u> inches Total depth <u>570</u> feet Casing schedule: <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Concrete Thickness <u>1/4</u> inches Diameter <u>10 3/4</u> inches From <u>1</u> feet To <u>508</u> feet _____ inches _____ inches _____ feet _____ feet Was a packer or seal used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Perforated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No How perforated? <input type="checkbox"/> Factory <input type="checkbox"/> Knife <input type="checkbox"/> Torch Size of perforation _____ inches by _____ inches Number _____ From _____ To _____ _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Size of gravel _____ Placed from _____ feet to _____ feet Surface seal? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No To what depth <u>18</u> feet Material used in seal <input type="checkbox"/> Cement grout <input checked="" type="checkbox"/> Puddling clay</p>	<p>11. DRILLER'S CERTIFICATION This well was drilled under my supervision and this report is true to the best of my knowledge. USGS <u>Faye New Walker</u> Driller's or Firm's Name _____ Number _____ <u>624 Prince St Twin Falls</u> Address _____ <u>Eugene Walker</u> 14 Feb 1973 Signed By _____ Date _____</p>																																																																																																																																																				
<p>6. LOCATION OF WELL Sketch map location must agree with written location.  County <u>Ada</u> <u>NE 1/4 NE 1/4 Sec. 17, T. 1 N, R. 4 E</u></p>	<p>11. DRILLER'S CERTIFICATION (continued) This well was drilled under my supervision and this report is true to the best of my knowledge. USGS <u>Faye New Walker</u> Driller's or Firm's Name _____ Number _____ <u>624 Prince St Twin Falls</u> Address _____ <u>Eugene Walker</u> 14 Feb 1973 Signed By _____ Date _____</p>																																																																																																																																																				

USE TYPEWRITER OR BALL POINT PEN

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

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

*Received
1-15-72
DWA*

1. WELL OWNER
Name Western Land & Cattle Co.
Address Mayfield, Idaho
Owner's Permit No. _____

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

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

8. WELL TEST DATA
 Pump Bailor Other
Discharge G.P.M. 25 Draw Down 25 ft. Hours Pumped 4

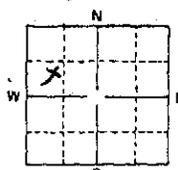
3. PROPOSED USE
 Domestic Irrigation Test
 Municipal Industrial Stock

9. LITHOLOGIC LOG
108033

4. METHOD DRILLED
 Cable Rotary Dug Other

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
8	0	25	topsoil	X	X
	25	40	pea gravel	X	
	40	65	red sand	X	
	65	69	hard gravel	X	
	69	82	white clay		X

5. WELL CONSTRUCTION
Diameter of hole 8 inches Total depth 82 feet
Casing schedule: Steel Concrete
Thickness 3/22 inches Diameter 8 inches From 7 feet To 51 feet
257 inches 5 inches 51 feet 53 feet
257 inches 5 inches 68 feet 82 feet
_____ inches _____ inches _____ feet _____ feet
_____ inches _____ inches _____ feet _____ feet
Was a packer or seal used? Yes No
Perforated? Yes No
How perforated? Factory Knife Torch
Size of perforation _____ inches by _____ inches
Number _____ From _____ To _____
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
Well screen installed? Yes No
Manufacturer's name Johnson
Type Stainless Model No. _____
Diameter 6 Slot size 30 Set from 53 feet to 58 feet
Diameter 6 Slot size 35 Set from 58 feet to 68 feet
Gravel packed? Yes No Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal? Yes No To what depth 20 feet
Material used in seal Cement grout Budding clay
Ben Lante

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

County Elmore
SW 1/4 NW 1/4 Sec. 17, T. 1 N., R. 5 E.

10. Work started Nov 9-72 finished Dec 1-72

11. DRILLER'S CERTIFICATION
This well was drilled under my supervision and this report is true to the best of my knowledge.
Engleman Well Drill 47
Driller or Firm's Name Number
1309 Grand-Boise, Idaho
Address
Carl Engleman 12-1-72
Signed By Date

Appendix E: General water quality data

Station	Analyte	Units	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2002	2003	2004	Maximum
01S 04E 23BBB1	Arsenic	ug/L	3				3				2				2.7	3
	Fecal Coliform	col/100 ml	<1				45				<1				<1	45
	Fluoride	mg/L	0.4				0.4				0.44				0.5	0.5
	Nitrate	mg/L	0.79				0.79				0.765				0.79	0.79
	Alpha, G	pCi/l	0.4				0.6									0.6
	Iron	ug/L	<3				<3					<10			<6	
	Manganese	ug/L	<1				<1					<2.2			<0.8	
	Solids	mg/L	134				163					161			147	163
01S 04E 17CCC2	Arsenic	ug/L	3				2				2				2	3
	Fecal Coliform	col/100 ml	22				<1				<1				<1	22
	Fluoride	mg/L	0.2				0.2				0.23				0.2	0.23
	Nitrate	mg/L	0.64				0.61				0.633				0.6	0.64
	Alpha, G	pCi/l	3				0.7									3
	Iron	ug/L	16				7				5.3				176	176
	Manganese	ug/L	2				<1				<3.0				9.8	9.8
	Solids	mg/L	182				178				181				176	182
01N 04E 32AAB1	Arsenic	ug/L	3				2				2				2.3	3
	Fecal Coliform	col/100 ml	<1				<1				<1				<1	
	Fluoride	mg/L	0.5				0.5				0.41				0.4	0.5
	Nitrate	mg/L	0.11				0.11				0.086				0.09	0.11
	Alpha, G	pCi/l	0.2				2.6									2.6
	Iron	ug/L	6				6				<10				6	6
	Manganese	ug/L	<1				<1				<3.0				<0.8	0
	Solids	mg/L	150				153				151				147	153
01N 04E 27CBD1	Arsenic	ug/L			2				3				3			3
	Fecal Coliform	col/100 ml			<1				<1				<1			
	Fluoride	mg/L			0.3				0.3				0.3			0.3
	Nitrate	mg/L			4.6				2.92				0.45			4.6
	Alpha, G	pCi/l			1.1											1.1
	Iron	ug/L			10				10				42			42
	Manganese	ug/L			2				1.2				1.2			2
	Solids	mg/L			185				185				162			185
01N 04E 23DDC1	Arsenic	ug/L	9													9
	Fecal Coliform	col/100 ml	2													2
	Fluoride	mg/L	0.3													0.3
	Nitrate	mg/L	0.29													0.29
	Alpha, G	pCi/l	0.1													0.1
	Iron	ug/L	6													6
	Manganese	ug/L	<1													
	Solids	mg/L	134													134
01N 04E 14DDAD1	Arsenic	ug/L				2				3				2.12		3
	Fecal Coliform	col/100 ml				<1				<1				<1		
	Fluoride	mg/L				0.3				0.31				0.3		0.31
	Nitrate	mg/L				2.5				3.05				2.7		3.05
	Alpha, G	pCi/l				1.7										1.7
	Iron	ug/L				<3				11				15.5		15.5
	Manganese	ug/L				<1				<4.0				1.2		1.2
	Solids	mg/L				153				160				0.21 (t/af)		160
01N 03E 11DDB1	Arsenic	ug/L		4				4				4.2				4.2
	Fecal Coliform	col/100 ml		<1				<1				<1				
	Fluoride	mg/L		0.3				0.3				0.3				0.3
	Nitrate	mg/L		0.49				0.56				0.459				0.56
	Alpha, G	pCi/l		1.7				1.1								1.7
	Iron	ug/L		<3				<3				<10				
	Manganese	ug/L		1				<1				<2				1
	Solids	mg/L		177				171				176				177

Table 1. Selected water quality results from wells near Mayfield Springs.

Appendix F: Water Rights Summary

Location	Type	Basin	Sequence	Suffix	Version	Basis	Status	Priority Date	Div. Rate (cfs)	Source List	Water Uses	Owner List
Applications												
T1N R4E 28, 29, 32NE, 33	Application	63	32225				Active	9/16/2005	10	GROUND WATER	MUNICIPAL	INTERMOUNTAIN SEWER & WATER CORP (Current)
SRBA Claims												
T1N R4E 28	Claim	63	3070			License	Active	12/13/1955	0.02	GROUND WATER	DOMESTIC, IRRIGATION, STOCKWATER	AGENBROAD, CARL S (Current); AGENBROAD, JUDITH A (Current)
T1N R4E 28, 29	Claim	63	4338			Statutory Claim	Active	1895-06-01		INDIAN CREEK	RECREATION STORAGE, WILDLIFE STORAGE	STATE OF IDAHO (Current)
T1N R4E 28, 29	Claim	63	4679			Statutory Claim	Active	1895-01-01		INDIAN CREEK	FISH PROPAGATION	STATE OF IDAHO (Current)
T1N R4E 29, 32NE	Claim	63	7571			License	Active	3/21/1972	0.09	GROUND WATER	COMMERCIAL	FRENCH, ROBERT L (Current)
T1N R4E 27SW, 28	Claim	63	8051			License	Active	10/17/1974	2.44	GROUND WATER	IRRIGATION	GABLE A RANCH (Current)
T1N R4E 27SW	Claim	63	21088			Beneficial Use	Active	1/1/1949	0.14	GROUND WATER	DOMESTIC, IRRIGATION, STOCKWATER	AGENBROAD, CARL S (Current); AGENBROAD, JUDITH A (Current)
Permits												
T1N R4E 27SW, 34NW	Permit	63	12494				Active	7/8/2004	0.16	GROUND WATER	DOMESTIC	DANSKIN PROPERTIES LTD (Current)
SRBA Recommendations												
T1N R4E 29, 32NE	Recommendation	63	7571		1	License	Active	3/21/1972	0.09	GROUND WATER	COMMERCIAL	FRENCH, ROBERT L (Current)
T1N R4E 27SW, 28	Recommendation	63	8051		1	License	Active	10/17/1974	2.44	GROUND WATER	IRRIGATION	GABLE A RANCH (Current)

Location	Type	Basin	Sequence	Suffix	Version	Basis	Status	Priority Date	Div. Rate (cfs)	Source List	Water Uses	Owner List
Statutory Claims, Decrees, and/or Licences												
T1N R4E 21SE	Statutory Claim, Decree and License	61	2328			License	Active	9/22/1958		UNNAMED STREAM	STOCKWATER STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)
T1N R4E 34NWNE	Statutory Claim, Decree and License	61	10110			Decreed	Active	4/29/1980	0.06	GROUND WATER	DOMESTIC, STOCKWATER	MILLER, PAMELA K (Current); MILLER, RONALD L (Current)
T1N R4E 34NW	Statutory Claim, Decree and License	61	10432			Decreed	Active	5/20/1977	0.04	GROUND WATER	DOMESTIC	ARNOLD, MAMIE L (Current)
T1N R4E 34NW	Statutory Claim, Decree and License	61	10433			Decreed	Active	10/10/1985	0.04	GROUND WATER	DOMESTIC	WALKER, LELA S (Current)
T1N R4E 34NWNE	Statutory Claim, Decree and License	61	10525			Decreed	Active	4/29/1980	0.06	GROUND WATER	DOMESTIC, STOCKWATER	BRUBAKER, CARL (Current); BRUBAKER, NANNETTE W (Current)
T1S R4E 4NW	Statutory Claim, Decree and License	61	11109			Decreed	Active	6/28/1934		UNNAMED STREAM	STOCKWATER FROM STORAGE, STOCKWATER STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)
T1N R4E 33	Statutory Claim, Decree and License	61	11110			Decreed	Active	6/28/1934		UNNAMED STREAM	STOCKWATER FROM STORAGE, STOCKWATER STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)
T1N R4E 28	Statutory Claim, Decree and License	63	3070			License	Active	12/13/1955	0.02	GROUND WATER	DOMESTIC, IRRIGATION, STOCKWATER	HANSEN, JESS T (Current)
T1N R4E 21SE	Statutory Claim, Decree and License	63	3662			Decreed	Active	5/5/1953		SHEEP CREEK	STOCKWATER FROM STORAGE, STOCKWATER STORAGE	UNITED STATES OF AMERICA ACTING THROUGH (Current)
T1N R4E 28, 29	Statutory Claim, Decree and License	63	4338			Statutory Claim	Active	1895-06-01	100	INDIAN CREEK	DIVERSION TO STORAGE, RECREATION STORAGE, WILDLIFE STORAGE	STATE OF IDAHO (Current)
T1N R4E 28, 29	Statutory Claim, Decree and License	63	4679			Statutory Claim	Active	1895-01-01		INDIAN CREEK	RECREATION STORAGE, WILDLIFE STORAGE	STATE OF IDAHO (Current)

Location	Type	Basin	Sequence	Suffix	Version	Basis	Status	Priority Date	Div. Rate (cfs)	Source List	Water Uses	Owner List
T1N R4E 32NE	Statutory Claim, Decree and License	63	7571			License	Active Transferred	3/21/1972	0.09	GROUND WATER	COMMERCIAL	PECON SHOPPE OF BOISE (Current); STUCKEYS (Current)
T1N R4E 27SW, 28	Statutory Claim, Decree and License	63	8051			License	Active	10/17/1974	2.44	GROUND WATER	IRRIGATION	GABLE A RANCH (Current)
T1N R4E 29, 32NE	Statutory Claim, Decree and License	63	10372			License	Active	7/28/1986	0.2	GROUND WATER	COMMERCIAL, DOMESTIC, FIRE PROTECTION, IRRIGATION	FRENCH, ROBERT L (Current)
T1N R4E 27SW	Statutory Claim, Decree and License	63	11382			License	Active	5/15/1990	0.22	GROUND WATER	DOMESTIC, IRRIGATION	DANSKIN PROPERTIES ASSN INC (Current)
T1N R4E 29	Statutory Claim, Decree and License	63	29541			Decreed	Active	6/28/1934	0.02	INDIAN CREEK	STOCKWATER	UNITED STATES OF AMERICA ACTING THROUGH (Current)
T1N R4E 20SE, 21SW, 29	Statutory Claim, Decree and License	63	29542			Decreed	Active	6/28/1934	0.02	UNNAMED STREAM	STOCKWATER	UNITED STATES OF AMERICA ACTING THROUGH (Current)
T1N R4E 29	Statutory Claim, Decree and License	63	29543			Decreed	Active	6/28/1934	0.02	UNNAMED STREAMS	STOCKWATER	UNITED STATES OF AMERICA ACTING THROUGH (Current)



RE-24 VACANT LAND REAL ESTATE PURCHASE AND SALE AGREEMENT AND RECEIPT FOR EARNEST MONEY



THIS IS A LEGALLY BINDING CONTRACT. READ THE ENTIRE DOCUMENT INCLUDING ANY ATTACHMENTS. IF YOU HAVE ANY QUESTIONS, CONSULT YOUR ATTORNEY AND/OR ACCOUNTANT BEFORE SIGNING.

1 ID# 57119454

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3 LISTING AGENCY Windermere-Nampa DATE 09/07/2005

4 Listing Agent Anthony H. Miller E-Mail captainru@bigskytel.com Office Phone # (208) 468-7848 Fax # (208) 362-7654

5 SELLING AGENCY Windermere-Nampa Phone # _____

6 Selling Agent Anthony H. Miller E-Mail captainru@bigskytel.com Office Phone # (208) 468-7848 Fax # (208) 362-7654

7 Phone # 208-880-0560

8 1. BUYER: Greg Johnson and/or Aasjans

9 agrees to purchase, and the undersigned SELLER agrees to sell the following described real estate hereinafter referred to as "PREMISES"

10 COMMONLY KNOWN AS _____ (Hereinafter called "BUYER")

11 City Boise County Ada ID, Zip 83716

12 Legally described as: Parcel #1833212400 of NW4 Sec 23 E of the SW4 Sec 28 T1N R1E to be more particularly

13 described by survey, See attached addendum "A"

14 OR Legal Description Attached as addendum # _____

15 2. _____ PURCHASE PRICE: _____ (Addendum must accompany original offer.)

16 payable upon the following TERMS AND CONDITIONS (not including closing costs): _____ DOLLARS,

17 3. FINANCIAL TERMS: Note: A+C+D+E must add up to total purchase price.

18

19 A. EARNEST MONEY: BUYER hereby deposits _____ DOLLARS

20 as Earnest Money evidenced by: Cash Personal check Cashier's check Note (due date): _____

21 Other _____ and a receipt is hereby acknowledged. Earnest Money to be deposited in trust account upon

22 receipt, Upon acceptance by all parties and shall be held by: Listing Broker Selling Broker Other David Dykstra

23 for the benefit of the parties hereto. The responsible Broker shall be _____

24 B. ALL CASH OFFER: NO YES If this is an all cash offer do not complete lines Subsection C, fill blanks with

25 "0" (zero). IF CASH OFFER BUYER'S OBLIGATION TO CLOSE SHALL NOT BE SUBJECT TO ANY FINANCIAL

26 CONTINGENCY. BUYER agrees to provide SELLER within _____ business days from the date of this agreement, evidence of sufficient funds

27 and/or proceeds necessary to close transaction. Acceptable documentation includes, but is not limited to a copy of a recent bank or financial

28 statement or contract(s) for the sale of BUYER'S current residence or other property to be sold.

29 C. NEW LOAN PROCEEDS:

30 FIRST LOAN of \$ _____ not including mortgage insurance. This Agreement is contingent upon BUYER

31 obtaining the following type(s) of financing: FHA VA CONVENTIONAL OTHER RURAL DEVELOPMENT

32 OTHER _____ with interest not to exceed _____ % for a period of _____ year(s) at _____ Fixed Rate

33 than _____ point(s). Any reduction in points shall first accrue to the benefit of the BUYER SELLER Divided Equally VA.

34 SECOND LOAN of \$ _____ for a period of _____ year(s) at: Fixed Rate Other _____ BUYER shall

35 pay no more than _____ point(s) plus origination fee if any. SELLER shall pay no more than _____ point(s). Any reduction in points shall

36 first accrue to the benefit of the BUYER SELLER Divided Equally VA.

37 LOAN APPLICATION: BUYER has applied shall apply for such loan(s) within _____ business day(s) of SELLER'S acceptance,

38 showing lender approval of credit report, income verification, debt ratios in a manner acceptable to the SELLER with a written confirmation

39 to satisfactory appraisal and final lender underwriting. If such written confirmation is not received by SELLER(S) and subject only

40 noticed, SELLER(S) may at their option cancel this agreement by notifying BUYER(S) in writing of such cancellation within _____

41 business day(s) after written confirmation was required. If SELLER does not cancel within the strict time period specified as set forth herein,

42 SELLER shall be deemed to have accepted such written confirmation of lender approval and shall be deemed to have elected to proceed with

43 the transaction. SELLER'S approval shall not be unreasonably withheld. If an appraisal is required by lender, the property must appraise at

44 not less than purchase price or BUYER'S Earnest Money may be returned at BUYER'S request. BUYER may also apply for a loan with

45 different conditions and costs and close transaction provided all other terms and conditions of this Agreement are fulfilled, and the new loan

46 does not increase the costs or requirements to the SELLER.

47 FHA/VA: If applicable, it is expressly agreed that notwithstanding any other provisions of this contract, BUYER shall not be obligated to

48 complete the purchase of the property described herein or to incur any penalty or forfeiture of Earnest Money deposits or otherwise unless

49 BUYER has been given in accordance with HUD/FHA or VA requirements a written statement by the Federal Housing Commissioner, Veterans

50 Administration or a Direct Endorsement lender setting forth the appraisal value of the property of no less than the sales price as stated in the

51 contract. SELLER agrees to pay fees required by FHA or VA.

52 BUYER'S Initials: [Signature] Date: 9/14/05 SELLER'S Initials: [Signature] Date: 9/14/05

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RE-24 Purchase and Sale Agreement for Vacant Land Page 2 of 8 JULY 2005 EDITION

PROPERTY ADDRESS: TBD Mayfield Rd. Boise ID#: 57119454

D. ADDITIONAL FINANCIAL TERMS:
Additional financial terms are specified under the heading "OTHER TERMS AND/OR CONDITIONS" (Section 4).
Additional financial terms are contained in a FINANCING ADDENDUM of same date, attached hereto, signed by both parties.

E. APPROXIMATE FUNDS DUE AT CLOSING: \$1,030,000
Cash at closing, not including closing costs, to be paid by BUYER at closing. In GOOD FUNDS, which includes: cash, electronic transfer funds, certified check or cashier's check. Any net difference between the approximate balances of the loan(s) shown above, which are to be assumed or taken subject to, and the actual balances of said loan(s) at closing of escrow shall be adjusted in ECash OR Other.

4. OTHER TERMS AND/OR CONDITIONS: See Attached Addendum "A"

5. "NOT APPLICABLE DEFINED": The letters "n/a," "N/A," "n.u.," and "N.A." as used herein are abbreviations of the term "not applicable." Where this agreement uses the term "not applicable" or an abbreviation thereof, it shall be evidence that the parties have contemplated certain facts or conditions and have determined that such facts or conditions do not apply to the agreement or transaction herein.

6. INSPECTION: BUYER IS STRONGLY ADVISED TO INVESTIGATE THE CONDITION AND SUITABILITY OF ALL ASPECTS OF THE PROPERTY AND ALL MATTERS AFFECTING THE VALUE OR DESIRABILITY OF THE PROPERTY INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

- A. SIZE: Square footage and lot size. (Any numerical statements regarding these items are APPROXIMATION ONLY, and have not been and will not be verified and should not be relied upon by BUYER.
B. LINES AND BOUNDARIES: Property lines and boundaries, septic, and leach lines (Fences, walls, hedges, and other natural or constructed barriers or markers do not necessarily identify true property boundaries. Property lines may be verified by surveys.)
C. ZONING AND LAND USE: Inquiries, investigations, studies or any other means concerning past, present or proposed laws, ordinances, referendums, initiatives, votes, applications and permits affecting the current use of the property, BUYER's intended use of the property, future development, zoning, building, size, governmental permits and inspections. Both parties are advised that Broker does not guarantee the status of permits, zoning or code compliance. This parties are to satisfy themselves concerning these issues.
D. UTILITIES AND SERVICE: Availability, costs, and restrictions of utilities and services, including but not limited to, sewage, sanitation, water, electricity, gas, telephone, cable TV and drainage.
E. UTILITIES, IMPROVEMENTS & OTHER RIGHTS: SELLER represents that the property does have the following utilities, improvements, services and other rights available (describe availability): none
F. HAZARDOUS MATERIALS: The real estate broker(s) or their agents in this transaction have no expertise with respect to toxic waste, hazardous materials or undesirable substances. BUYERS who are concerned about the presence of such materials should have the property inspected by qualified experts. BUYER acknowledges that he/she has not relied upon any representations by either the Broker or the SELLER with respect to the condition of the property that are not contained in this Agreement or in any disclosure statements.
G. TAX LIABILITY: The BUYER and SELLER acknowledge that they have not received or relied upon any statements or representations by the Broker with respect to the effect of this transaction upon BUYER's or SELLER's tax liability.

BUYER chooses to have inspection; not to have inspection. If BUYER chooses not to have inspection skip the remainder of section 6. BUYER shall have the right to conduct inspections, investigations, tests, surveys and other studies at BUYER'S expense. BUYER shall, within business day(s) of acceptance, complete these inspections and give to SELLER written notice of items disapproved of. BUYER is strongly advised to exercise these rights and to make BUYER'S own selection of professionals with appropriate qualifications to conduct inspections of the entire property. BUYER'S acceptance of the condition of the property is a contingency of this Agreement.

SATISFACTION/REMOVAL OF INSPECTION CONTINGENCIES:

- 1. If BUYER does not within the strict time period specified give to SELLER written notice of items disapproved of, BUYER shall conclusively be deemed to have: (a) completed all inspections, investigations, review of applicable documents and disclosures; (b) elected to proceed with the transaction and (c) assumed all liability, responsibility and expense for repairs or corrections other than for items which SELLER has otherwise agreed in writing to repair or correct.
2. If BUYER does within the strict time period specified give to SELLER written notice of items disapproved of, BUYER shall provide to SELLER pertinent section(s) of written inspection reports. SELLER shall have business day(s) in which to respond in writing. The SELLER, at their option, may correct the items as specified by the BUYERS in their letter or may elect not to do so. If the SELLER agrees to correct the items asked for in the BUYERS letter, then both parties agree that they will continue with the transaction and proceed to closing. This will remove the BUYERS inspection contingency.

BUYER'S Initials [Signature] Date 9/14/05 SELLER'S Initials [Signature] Date 9/14/05

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RE-24 Purchase and Sale Agreement for Vacant Land Page 4 of 8 JULY 2005 EDITION

PROPERTY ADDRESS: TBD Mayfield Rd. Boise ID#: 57119454

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13. FARM/CROPS/TIMBER RIGHTS: SELLER, or any tenant of SELLER, shall be allowed to harvest, sell or assign any annual crops which have been planted on the Property prior to the date of this Contract, even though said harvest time may occur subsequent to the date of the settlement of this contract, unless otherwise agreed by attached addendum. If the crop consists of timber, then neither SELLER nor any tenant of SELLER shall have any right to harvest the timber unless the right to remove same shall be established by attached addendum. Notwithstanding the provisions hereof, any tenant who shall be leasing the Property shall be allowed to complete the harvest of any annual crops that have been planted prior to the date of Contract Acceptance as previously agreed between SELLER and Tenant. ANY AND ALL SUCH TENANT AGREEMENTS ARE TO BE ATTACHED.

14. NOXIOUS WEEDS: BUYER of the property in the State of Idaho should be aware that some properties contain noxious weeds. The laws of the State of Idaho require owners of property within this state to control, and to the extent possible, eradicate noxious weeds. For more information concerning noxious weeds and your obligations as an owner of property, contact your local county extension office.

15. MINERAL RIGHTS: Any and all mineral rights which are already included with the property will be included in the sale of this property unless otherwise stipulated.

16. WATER RIGHTS: Description of water rights, water systems, wells, springs, water, ditches, ditch rights, etc., if any, that are appurtenant thereto that are now on or used in connection with the premises and shall be included in the sale unless otherwise provided herein:

17. RISK OF LOSS: Prior to closing of this sale, all risk of loss shall remain with SELLER. In addition, should the premises be materially damaged by fire or other destructive causes prior to closing, this Agreement shall be voidable at the option of BUYER.

18. BUSINESS DAYS & HOURS: A business day is herein defined as Monday through Friday, 8:00 A.M. to 5:00 P.M. in the local time zone where the subject real property is physically located. A business day shall not include any Saturday or Sunday, nor shall a business day include any legal holiday recognized by the State of Idaho as found in Idaho Code § 73-109. The time in which any act required under this agreement is to be performed shall be computed by excluding the date of execution and including the last day. The first day shall be the day after the date of execution. If the last day is a legal holiday, then the time for performance shall be the next subsequent business day.

19. SEVERABILITY: In the case that any one or more of the provisions contained in this Agreement or any application thereof, shall be invalid, illegal or unenforceable in any respect, the validity, legality or unenforceability of the remaining provisions shall not in any way be affected or impaired thereby.

20. FACSIMILE TRANSMISSION: Facsimile or electronic transmission of any signed original document, and retransmission of any signed facsimile or electronic transmission shall be the same as delivery of an original. At the request of either party or the Closing Agency, the parties will confirm facsimile and electronic transmitted signatures by signing an original document.

21. ADDITIONAL CONTINGENCIES AND COSTS: The closing of this transaction is contingent upon written satisfaction or waiver of the following contingencies. Costs in addition to those listed below may be incurred by BUYER and SELLER unless otherwise agreed herein, or provided by law or required by lender, or otherwise stated herein. The below costs will be paid as indicated and by no later than time of closing. Some costs are subject to loan program requirements. In addition, the parties shall satisfy all contingencies set forth in this section by (Date): _____ unless otherwise agreed to by the parties.

COSTS	BUYER	SELLER	Contingency		CONTINGENCIES	BUYER	SELLER	Status	
			Applied Equity	Not Applicable				Applied Equity	Not Applicable
Appraisal Fee				X					
Long Term Escrow Fee				X	Environmental Inspection (Phase 1)				X
Closing Escrow Fee			X		Environmental Inspection (Phase 2)				X
Survey	X				Environmental Inspection (Phase 3)				X
Flood Certification/Tracking Fee				X	PERC Test				X
TBD Ins. Standard Coverage Dealer's Policy		X			Zoning Variance				X
Title Ins. Extended Coverage Lender's Policy - Mortgage Policy				X	Settle Title				X
Additional Title Coverage				X	Hazardous Waste Report(s)				X
Water Rights Transfer Fee				X					
Attorney Contract Preparation Fee				X					

BUYER'S Initials [Signature] Date 9/7/05 SELLER'S Initials [Signature] Date 9/14/05

RE-04 Purchase and Sale Agreement for Vacant Land Page 6 of 8 JULY 2003 EDITION

PROPERTY ADDRESS: TBD Mayfield Rd.

Boise

ID#: 57119454

22. COUNTERPARTS: This Agreement may be executed in counterparts. Executing an agreement in counterparts shall mean the signature of two identical copies of the same agreement. Each identical copy of an agreement signed in counterparts is deemed to be an original, and all identical copies shall together constitute one and the same instrument.

23. ENTIRE AGREEMENT: This Agreement contains the entire Agreement of the parties respecting the matters herein set forth and supersedes all prior Agreements between the parties respecting such matters. No warranties, including, without limitation, any warranty of habitability, agreements or representations not expressly set forth herein shall be binding upon either party.

24. DEFAULT: If BUYER defaults in the performance of this Agreement, SELLER has the option of: (1) accepting the Earnest Money as liquidated damages or (2) pursuing any other lawful right or remedy to which SELLER may be entitled. If SELLER elects to proceed under (1), SELLER shall make demand upon the holder of the Earnest Money, upon which demand said holder shall pay from the Earnest Money the costs incurred by SELLER's Broker on behalf of SELLER and BUYER related to the transaction, including, without limitation, the costs of title insurance, escrow fees, credit report fees, inspection fees and attorney's fees; and said holder shall pay any balance of the Earnest Money, one-half to SELLER and one-half to SELLER's Broker, provided that the amount to be paid to SELLER's Broker shall not exceed the Broker's agreed-to commission. SELLER and BUYER specifically acknowledge and agree that if SELLER elects to accept the Earnest Money as liquidated damages, such shall be SELLER's sole and exclusive remedy, and such shall not be considered a penalty or forfeiture. If SELLER elects to proceed under (2), the holder of the Earnest Money shall be entitled to pay the costs incurred by SELLER's Broker on behalf of SELLER and BUYER related to the transaction, including, without limitation, the costs of brokerage fee, title insurance, escrow fees, credit report fees, inspection fees and attorney's fees, with any balance of the Earnest Money to be held pending resolution of the matter.

If SELLER defaults, having approved said sale and fails to consummate the same as herein agreed, BUYER's Earnest Money deposit shall be returned to him/her and SELLER shall pay for the costs of title insurance, escrow fees, credit report fees, inspection fees, brokerage fees and attorney's fees, if any. This shall not be considered as a waiver by BUYER of any other lawful right or remedy to which BUYER may be entitled.

25. SALES PRICE INFORMATION: SELLER and BUYER hereby grant permission to the brokers and either party to this Agreement to disclose sale data from this transaction, including selling price and property address to the local Association / Board of REALTORS®, multiple listing service, its members, its members' prospects, appraisers and other professional users of real estate sales data. The parties to this Agreement acknowledge that sales price information compiled as a result of this Agreement may be provided to the County Assessor's Office by either party or by either party's Broker.

26. TIME IS OF THE ESSENCE IN THIS AGREEMENT.

27. CLOSING: On or before the closing date, BUYER and SELLER shall deposit with the closing agency all funds and instruments necessary to complete this transaction. Closing means the date on which all documents are either recorded or accepted by an escrow agent and the sale proceeds are available to SELLER. The closing shall be no later than (Date) September 14th, 2005. The parties agree that the CLOSING AGENCY for this transaction shall be Emerald-Boise located at Lawyer's Title. escrow holder shall be IVA If a long-term escrow / collection is involved, then the long-term

28. POSSESSION: BUYER shall be entitled to possession upon closing or (Date) at Daily Property taxes and water assessments (using the last available assessment as a basis), rents, interest and reserves, liens, encumbrances or obligations assumed and utilities shall be pro-rated as of closing

29. SPECIAL CONSIDERATIONS AND CONTINGENCIES: This Agreement is made subject to the following special considerations and/or contingencies which must be satisfied prior to closing:

30. REPRESENTATION CONFIRMATION: Check one (1) box in Section 1 and one (1) box in Section 2 below to confirm that in this transaction, the brokerage(s) involved had the following relationship(s) with the BUYER(S) and SELLER(S).

- Section 1: U.A. The brokerage working with the BUYER(S) is acting as an AGENT for the BUYER(S).
- M.B. The brokerage working with the BUYER(S) is acting as a LIMITED DUAL AGENT for the BUYER(S), without an ASSIGNED AGENT.
- L.C. The brokerage working with the BUYER(S) is acting as a LIMITED DUAL AGENT for the BUYER(S) and has an ASSIGNED AGENT acting solely on behalf of the BUYER(S).
- U.D. The brokerage working with the BUYER(S) is acting as a NONAGENT for the BUYER(S).

- Section 2: U.A. The brokerage working with the SELLER(S) is acting as an AGENT for the SELLER(S).
- M.B. The brokerage working with the SELLER(S) is acting as a LIMITED DUAL AGENT for the SELLER(S), without an ASSIGNED AGENT.
- L.C. The brokerage working with the SELLER(S) is acting as a LIMITED DUAL AGENT for the SELLER(S) and has an ASSIGNED AGENT acting solely on behalf of the SELLER(S).
- U.D. The brokerage working with the SELLER(S) is acting as a NONAGENT for the SELLER(S).

Each party signing this document confirms that he has received, read and understood the Agency Disclosure Brochure copied or approved by the Idaho real estate commission and has consented to the relationship confirmed above. In addition, each party confirms that the brokerage's agency office policy was made available for inspection and review. EACH PARTY UNDERSTANDS THAT HE IS A CUSTOMER AND IS NOT REPRESENTED BY A BROKERAGE UNLESS THERE IS A SIGNED WRITTEN AGREEMENT FOR AGENCY REPRESENTATION.

BUYER'S Initials [Signature] Date 9/14/05 SELLER'S Initials [Signature] Date 9/14/05

RE-24 Purchase and Sale Agreement for Vacant Land Page 6 of 6 JULY 2005 EDITION

PROPERTY ADDRESS: TBD Mayfield Rd.

Boise

ID#: 57110454

31. ACCEPTANCE: BUYER'S offer is made subject to the acceptance of SELLER on or before (Date) 9/15/06 at (Time) 8:00 A.M. P.M. If SELLER does not accept this Agreement within the time specified, the entire Earnest Money shall be refunded to BUYER on demand.

32. BUYER'S SIGNATURES:

SEE ATTACHED BUYER'S ADDENDUM(S): A (Specify number of BUYER addendum(s) attached.)

BUYER Signature: [Signature]
Date: 9/12/05 Time: 3:00 A.M. P.M.

BUYER (Print Name) _____
Phone # _____ Cell # _____
City _____ State _____ Zip _____
Fax # _____

Address _____
E-Mail Address _____

BUYER Signature _____
Date _____ Time _____ A.M. P.M.

BUYER (Print Name) _____
Phone # _____ Cell # _____
City _____ State _____ Zip _____
Fax # _____

Address _____
E-Mail Address _____

33. SELLER'S SIGNATURES:

On this date, I/We hereby approve and accept the transaction set forth in the above Agreement and agree to carry out all the terms thereof on the part of the SELLER.

SIGNATURE(S) SUBJECT TO ATTACHED COUNTER OFFER

SIGNATURE(S) SUBJECT TO ATTACHED ADDENDUM(S) # _____

SELLER Signature: [Signature]
Date: 9.14.2005 Time: _____ A.M. P.M.
Address: 5519 E. Grovers Ave.
E-Mail Address: hlazzpint@webtv.net

SELLER (Print Name) _____
Phone # _____ Cell # _____
City _____ State _____ Zip _____
Fax # _____

SELLER Signature _____
Date _____ Time _____ A.M. P.M.

SELLER (Print Name) _____
Phone # _____ Cell # _____
City _____ State _____ Zip _____
Fax # _____

Address _____
E-Mail Address _____

RE-11 ADDENDUM JULY 2005 EDITION PAGE 1 OF 1



RE-11 ADDENDUM # A (1,2,3, etc.)

Date: 9/7/05



THIS IS A LEGALLY BINDING CONTRACT. READ THE ENTIRE DOCUMENT INCLUDING ANY ATTACHMENTS. IF YOU HAVE ANY QUESTIONS, CONSULT YOUR ATTORNEY AND/OR ACCOUNTANT BEFORE SIGNING.

1 This is an ADDENDUM to the Purchase and Sale Agreement and Receipt for Earnest Money.
2 (Addendum means that the information below is added material for the agreement (such as lists or descriptions) and/or means the form is being used
3 to change, correct or revise the agreement (such as modification, addition or deletion of a term)).
4

5 PURCHASE AND SALE AGREEMENT DATED: 9/7/05

6 ADDRESS: TBD Mayfield Rd. D# 57118454

7 BUYER(S): Greg Johnson and/or Assigns

8 SELLER(S): Helen Agenbroad

9 The undersigned parties hereby agree as follows:

- 10 1. The purchase price for the property in this agreement is based on 135 acres priced at _____ per acre. The
- 11 final purchase price will be determined, based on the total number of acres (as determined by survey), multiplied
- 12 by _____ per acre.
- 13 2. Earnest money to be released to Seller within 10 business days of mutual acceptance of this agreement.
- 14 earnest money to be non-refundable except in the event of a default by Seller. Should Buyer fail to close
- 15 according to the terms of this agreement, Seller will accept the earnest money as liquidated damages and as
- 16 Seller's sole and exclusive remedy with no further recourse by either party.
- 17 3. Buyer agrees to cooperate in Seller's 1031 exchange.
- 18 4. All parties to this agreement agree not to disclose price, terms, Buyer's identity or Buyer's intended purpose
- 19 to any outside party other than those necessary to complete this transaction.
- 20
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- 31

To the extent the terms of this ADDENDUM modify or conflict with any provisions of the Purchase and Sale Agreement including all prior Addendums or Counter Offers, these terms shall control. All other terms of the Purchase and Sale Agreement including all prior Addendums or Counter Offers not modified by this ADDENDUM shall remain the same. Upon its execution by both parties, this agreement is made an integral part of the aforementioned Agreement.

BUYER: [Signature]

BUYER: _____

SELLER: [Signature]

SELLER: _____

Date: 9/7/05

Date: _____

Date: _____

Date: 9-14-2005

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AGENBROAD

RE-13 COUNTER OFFER, JULY 2003 EDITION Page 1 of 1



RE-13 COUNTER OFFER #

1

(1, 2, 3, etc.)



THIS COUNTER OFFER SUPERCEDES ALL PRIOR COUNTER OFFERS

THIS IS A LEGALLY BINDING CONTRACT. READ THE ENTIRE DOCUMENT INCLUDING ANY ATTACHMENTS. IF YOU HAVE ANY QUESTIONS, CONSULT YOUR ATTORNEY AND/OR ACCOUNTANT BEFORE SIGNING.

1 This is a COUNTER OFFER to the Purchase and Sale Agreement Dated: 9/7/05

2 ADDRESS: TBD Mayfield Rd. ID# 57119454

3 BUYER: Greg Johnson and/or Assigns

4 SELLER: Helen L. Agenbroad

5 The parties accept all of the terms and conditions in the above-designated Purchase and Sale Agreement with the following changes:

6 This is a SELLER counter offer. The SELLER reserves the right to withdraw this offer or accept any other offers prior to the receipt of a true copy of signed acceptance of this Counter Offer within the time frame specified herein.

7 This is a BUYER counter offer. The undersigned BUYER reserves the right to withdraw this offer at any time prior to the receipt of a true copy of signed acceptance of this Counter Offer within the time frame specified herein.

1. Earnest money to be \$100,000.00.
2. That parcel of land lying in the N 1/2 of the NE 1/4 of Section 32 T1N R4E east of Interstate 84 in parcel #81033212400 (to be more particularly described by survey) is included in this sale.
3. Paragraph # 31 "Acceptance" is extended to 9/15/05 at 8:00 P.M.
4. In the event of Buyer's default, no commission will be paid.
5. In the event of Seller's default, no commission will be paid.

27 To the extent the terms of this Counter Offer modify or conflict with any provisions of the Purchase and Sale Agreement including all prior Addendums, the terms in this Counter Offer shall control. All other terms of the Purchase and Sale Agreement including all prior Addendums not modified by this Counter Offer shall remain the same. Buyer and Seller acknowledge the down payment and/or loan amount on Page 1 of Purchase and Sale Agreement may change if purchase price is changed as part of this Counter Offer. Upon its execution by both parties, this agreement is made an integral part of the aforementioned Agreement.

33 If a signed acceptance is not delivered on or before (date): 9/15/05 at 8:00 AM PM, this Counter Offer shall be deemed to have expired.

36 DELIVERY: Delivery shall be to the agent/broker working with the maker of the Counter Offer in person, by mail, facsimile or electronic transmission of any signed original document, and retransmission of any signed original document. Retransmission of any signed facsimile or electronic transmission shall be deemed to be the same as delivery of an original.

40 SELLER Helen Agenbroad Date 9/14/05 Time AM PM

41 SELLER _____ Date _____ Time _____ AM PM

42 BUYER Gregory B. Johnson Date 9/15/05 Time 11:40 AM PM

43 BUYER _____ Date _____ Time _____ AM PM

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256610
Srm/bc



A Pioneer Company
PIONEER TITLE COMPANY
OF ADA COUNTY
8151 W. Rifleman Ave. / Boise, Idaho 83704
(208) 377-2700

ADA COUNTY RECORDER J. DAVID NAVARRO AMOUNT 6.00 2
BOISE IDAHO 08/15/05 04:02 PM
DEPUTY Bonnie Oberbillig
RECORDED - REQUEST OF
Pioneer
105114437

READ AND APPROVED BY _____

WARRANTY DEED

For Value Received North Valley Land, LLC an Idaho Limited Liability Company

hereinafter referred to as Grantor, does hereby grant, bargain, sell, warrant and convey unto

Gregory B Johnson and Heidi Johnson, Husband and Wife as to an undivided 65% interest, Scott B. Merrill, a married man as to an undivided 17.5% interest, and Spencer B. Merrill, a married man as to an undivided 17.5% interest

hereinafter referred to as Grantee, whose current address is 660 Franklin Road, Suite 240, Meridian, ID 83642

the following described premises, to-wit:

SEE EXHIBIT A ATTACHED HERETO AND MADE A PART HEREOF.

To HAVE AND TO HOLD the said premises, with their appurtenances unto the said Grantee, his heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that Grantor is the owner in fee simple of said premises; that said premises are free from all encumbrances except current years taxes, levies, and assessments, and except U.S. Patent reservations, restrictions, easements of record, and easements visible upon the premises, and that Grantor will warrant and defend the same from all claims whatsoever.

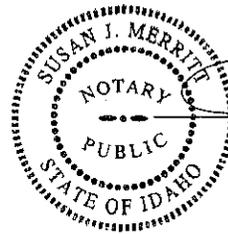
Dated: August 11, 2005

North Valley Land, LLC

By 
Colin Connell, Manager

STATE OF IDAHO, County of Ada, ss

On this 15th day of August, in the year of 2005, before me Susan J. Merritt, a notary public, personally appeared Colin Connell, known or identified to be one of the member(s)/manager(s) in a limited liability company, of * and the member(s)/manager(s) who subscribed said limited liability company name to the foregoing instrument, and acknowledged to me that he/she/they executed the same in said limited liability company name.



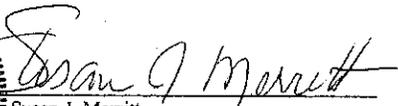

Susan J. Merritt
Notary Public of Idaho
Residing at Caldwell, ID
Commission expires: May 5, 2011

EXHIBIT A

 PARCEL I:

That portion of the Southwest quarter of the Southeast quarter of Section 28, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho, lying Southwesterly of Old State Highway 20, 26 & 30, said highway described in Deed recorded December 4, 1929 in Book 192 of Deeds at page 138, Instrument No. 137754, records of Ada County, Idaho.

PARCEL II:

The South half of the Northwest quarter lying Northeasterly of Interstate 84 North as described in Deed recorded May 14, 1959 in Book 455 of Deeds at page 347, Instrument No. 454300, records of Ada County, Idaho.

And the North half of the Southwest quarter lying Northeasterly of Interstate 84 North as described in Deed recorded May 14, 1959 in Book 455 of Deeds at page 347, Instrument No. 454300, records of Ada County, Idaho.

And The North half of the Southeast quarter lying Southwesterly of old U.S. Highway 20, 26 and 30, as described in Deed recorded December 4, 1929 in Book 192 of Deeds at page 138, Instrument No. 137754, records of Ada County, Idaho.

And the Northeast quarter lying Southwesterly of Old U.S. Highway 20, 26 & 30, as described in Deed recorded December 4, 1929 in Book 192 of Deeds at page 138, Instrument No. 137754, records of Ada County, Idaho, all being a portion of Section 33, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho.

EXCEPT that portion located in the East half of Section 33, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho, more particularly described as follows:

Beginning at the brass cap marking the East quarter corner of said Section 33, Township 1 North, Range 4 East, the **REAL POINT OF BEGINNING**.

Thence along the East section line of said Section 33, South 00 degrees 13'58" West, 1322.04 feet;
Thence North 89 degrees 50'07" West, 1364.94 feet;
Thence North 00 degrees 16'17" East, 3271.02 feet to a point on the Southwesterly right of way of a 100 feet wide State Highway Corridor;
Thence along said right of way line, South 43 degrees 49'04" East, 1596.31 feet to a concrete monument marking the beginning of a curve to the right;
Thence along said 5000.00 foot radius curve, through a central angle of a 4 degrees 23'36", a distance of 379.56 feet to a point on the East section line of said Section 33;
Thence along said East section line South 00 degrees 16'20" West, 517.42 feet to the **REAL POINT OF BEGINNING**.

258032
sem/ta



A Pioneer Company
PIONEER TITLE COMPANY
OF ADA COUNTY
8151 W. Rifleman Ave. / Boise, Idaho 83704
(208) 377-2700

ADA COUNTY RECORDER J. DAVID NAVARRO
BOISE IDAHO 07/27/05 02:34 PM
DEPUTY Bonnie Oshroff
RECORDED - REQUEST OF
PIONEER

AMOUNT 3.00 1
185162783

WARRANTY DEED

For Value Received M R Miller Inc, an Idaho corporation
hereinafter referred to as Grantor, does hereby grant, bargain, sell, warrant and convey unto
Gregory B Johnson and Heidi M Johnson, Husband and Wife
hereinafter referred to as Grantee, whose current address is P.O. Box 344, Meridian, Id 83680
the following described premises, to-wit:

The Southeast quarter of the Southeast quarter of Section 33, Township 1 North, Range 4 East,
Boise Meridian, Ada County, Idaho.

To HAVE AND TO HOLD the said premises, with their appurtenances unto the said Grantee, his heirs
and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that Grantor
is the owner in fee simple of said premises; that said premises are free from all encumbrances except current
years taxes, levies, and assessments, and except U.S. Patent reservations, restrictions, easements of record,
and easements visible upon the premises, and that Grantor will warrant and defend the same from all claims
whatsoever.

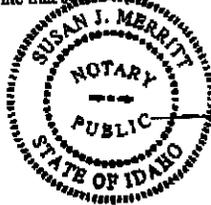
Dated: July 15, 2005

M R Miller Inc

By: Michael R Miller
Michael R. Miller, President

STATE OF Idaho, County of Ada, ss.

On this 26 day of July, in the year of 2005, before me the undersigned, a notary public,
personally appeared Michael R. Miller known or identified to me to be the President of the corporation
that executed the instrument or the person/persons who executed the instrument on behalf of said
corporation, and acknowledged to me that such corporation executed the same.



Susan J Merritt
Susan J. Merritt
Notary Public of Idaho
Residing at Caldwell
Commission expires: May 3, 2011

Lester, Steve

From: Terry Scanlan [TScanlan@spfwater.com]
Sent: Tuesday, April 11, 2006 12:24 PM
To: Lester, Steve
Subject: App 63-32225 for Intermountain Sewer and Water Corporation

Steve –

The deed for the Helmick property that I sent to you with the additional information for application 63-32225 was incorrect. The deed submitted was for a site outside of the proposed place of use. The correct deed is attached. Sorry for any confusion.

Terry

4/11/2006

ADA COUNTY RECORDER J. DAVID NAVARRO
BOISE IDAHO 11/22/06 02:36 PM
DEPUTY Pat Thompson
RECORDED - REQUEST OF
Pioneer

AMOUNT 6.00



295642
sum/06



Pioneer TITLE CO.

GOING BEYOND

8151 W. Rifleman Ave. / Boise, Idaho 83704 / (208) 377-2700

WARRANTY DEED

For Value Received Keith O. Helmick, also known as Neil Helmick and Sandra R.

Helmick, also known as Sandy Helmick, Husband and Wife

hereinafter referred to as Grantor, does hereby grant, bargain, sell, warrant and convey unto

Gregory B. Johnson and Heidi M. Johnson, Husband and Wife

hereinafter referred to as Grantee, whose current address is P.O.Box 344, Meridian, Idaho 83680

the following described premises, to-wit:

SEE EXHIBIT A ATTACHED HERETO AND MADE A PART HEREOF.

To HAVE AND TO HOLD the said premises, with their appurtenances unto the said Grantee, his heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that Grantor is the owner in fee simple of said premises; that said premises are free from all encumbrances except current years taxes, levies, and assessments, and except U.S. Patent reservations, restrictions, easements of record, and easements visible upon the premises, and that Grantor will warrant and defend the same from all claims whatsoever.

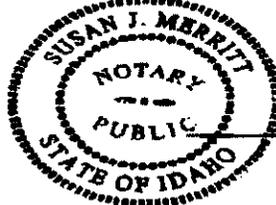
Dated: November 21, 2005

Keith O. Helmick
Keith O. Helmick

Sandra R. Helmick
Sandra R. Helmick

STATE OF Idaho. County of Ada, ss.

On this 21st day of November, in the year of 2005, before me the undersigned, notary public personally appeared Keith O. Helmick and Sandra R. Helmick known or identified to me to be the person/persons whose name is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same.



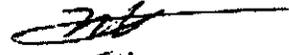
Susan J. Merritt
Susan M. Merritt
Notary Public of Idaho
Residing at Caldwell
Commission expires: May 5, 2011

EXHIBIT A

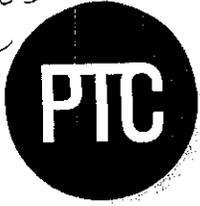
The Northeast quarter, the North half of the Southeast quarter, the Southeast quarter of the Northwest quarter and Northeast quarter of the Southwest quarter of Section 28, Township 1 North, Range 4 East, Boise Meridian, in Ada County, Idaho.

EXCEPTING from said Northeast quarter Southwest quarter that property deed to the State of Idaho by Warranty Deed recorded May 4, 1959 in Book 454 of Deeds at page 534 as Instrument No. 453382 for the Mayfield Access Road.

ALSO EXCEPTING, from said Northeast $\frac{1}{4}$ Southwest $\frac{1}{4}$ lying within the right-of-way for Old Highway 30 as described in Deed to the State of Idaho, recorded in Book 194 of Deeds at Page 46, records of Ada County, Idaho.


SH

2/20/03
Stem/ol



Pioneer .

GOING BEYOND

8151 W. Rifleman Ave. / Boise, Idaho 83704 / (208) 377-2700

WARRANTY DEED

For Value Received Keith O. Helmick, also known as Neil Helmick, also shown of record as Keith O'Neil Helmick and Sandra R. Helmick, also known as Sandy R. Helmick, Husband and Wife hereinafter referred to as Grantor, does hereby grant, bargain, sell, warrant and convey unto Gregory B. Johnson and Heidi M. Johnson, Husband and Wife hereinafter referred to as Grantee, whose current address is P.O. Box 344, Meridian, Idaho 83680 the following described premises, to-wit:

SEE EXHIBIT A ATTACHED HERETO AND MADE A PART HEREOF.

To HAVE AND TO HOLD the said premises, with their appurtenances unto the said Grantee, his heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that Grantor is the owner in fee simple of said premises; that said premises are free from all encumbrances except current years taxes, levies, and assessments, and except U.S. Patent reservations, restrictions, easements of record, and easements visible upon the premises, and that Grantor will warrant and defend the same from all claims whatsoever.

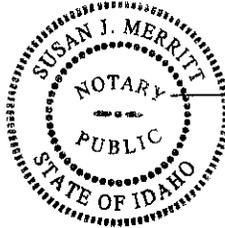
Dated: November 21, 2005

Keith O. Helmick
Keith O. Helmick

Sandra R. Helmick
Sandra R. Helmick

STATE OF Idaho. County of Ad, ss.

On this 21st day of November, in the year of 2005, before me the undersigned, notary public personally appeared Keith O. Helmick and Sandra R. Helmick known or identified to me to be the person/persons whose name is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same.



Susan J. Merritt
Susan J. Merritt
Notary Public of Idaho
Residing at Caldwell
Commission expires: May 5, 2011

EXHIBIT A

PARCEL I

The North 30 feet of the Northeast quarter of Section 17, Township 1 South, Range 4 East, Boise Meridian, Ada County, Idaho.

EXCEPTING THEREFROM that property Deeded to the State of Idaho in Deed recorded November 23, 1959 in Book 463 of Deeds at page 110, Instrument No. 467761 for the Orchard Access Road.

PARCEL II

The Northeast quarter of Section 17, Township 1 South, Range 4 East, Boise Meridian, Ada County, Idaho.

EXCEPTING THEREFROM the North 30 feet.

ALSO EXCEPTING THEREFROM that property Deeded to the State of Idaho in Deed recorded November 23, 1959 in Book 463 of Deeds at page 110, Instrument No. 467761 for the Orchard Access Road.

PARCEL III

The Northwest quarter (NW ¼) Section 16, Township 1 South, Range 4 East, Boise Meridian, EXCEPT for a tract located in the Northwest quarter Northwest quarter of said Section 16 referred to as Tract 102, Condemnation Case No. 3551 dated December 10, 1962 and more particularly described as follows:

Beginning at a point lying on the North line of said Section 16, which point lies Easterly, a distance of 418.49 feet from the Northwest corner thereof; thence South 47 degrees 53'01" East, a distance of 296.58 feet; thence North 89 degrees 14'32" East, a distance of 310.03 feet; thence North 30 degrees 32'26" East, a distance of 236.15 feet to a point lying on the North line of said Section 16, thence Westerly along said North line, a distance of 650.0 feet to the POINT OF BEGINNING, records of Ada County, Idaho.

AND

The Northeast quarter (NE ¼) Section 16, Township One (1) South, Range Four (4) East, Boise Meridian, records of Ada County, Idaho.

AND

The Southwest quarter (SW ¼) Section 16, Township One (1) South, Range Four (4) East, Boise Meridian, records of Ada County, Idaho.

AND

The Southeast quarter (SE ¼), Section 16, Township One (1) South, Range Four (4) East, Boise Meridian, records of Ada County, Idaho.

JH
SH

EXHIBIT A

Parcel "A" according to Record of Survey No. 4393 being a parcel of land located in a portion of the South half Southeast quarter of Section 28, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho and being more particularly described as follows:

Commencing at a found half inch iron pin marking the East quarter corner of said Section 28, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho, said pin bears South 89 degrees 46'03" East 2652.26 feet from a set 5/8" iron pin marking the C1/4 corner of said Section 28; thence
South 0 degree 07'30" West 1316.99 feet along the East boundary of the said Southeast quarter of Section 28 to a set 5/8" iron pin marking the South 1/16 corner common to said Section 28 and 27, said pin bears
North 0 degree 07'30" East 1317.00 feet from a found brass cap marking the Southeast corner of said Section 28; thence
North 89 degrees 47'36" West 352.30 feet to a set half inch iron pin marking the REAL POINT OF BEGINNING; thence
South 0 degree 12'24" West 1167.00 feet to a set half inch iron pin; thence
North 89 degrees 47'36" West 1494.00 feet to a set half inch iron pin; thence
North 0 degree 12'24" East 1167.00 feet to a set half inch iron pin; thence
South 89 degrees 47'36" East 1494.00 feet to the POINT OF BEGINNING.



ADA COUNTY RECORDER J. DAVID NAVARRO
BOISE IDAHO 09/01/05 04:31 PM
DEPUTY Patti Thompson
RECORDED - REQUEST OF
Transnation Title

AMOUNT 6.00 2



Escrow No. 0500031686 *530*

WARRANTY DEED

FOR VALUE RECEIVED

JAMES C. PHAGAN AND BONNIE L. PHAGAN, husband and wife

GRANTOR(s), does(do) hereby GRANT, BARGAIN, SELL AND CONVEY unto: Greg Johnson and Marilee Johnson, husband and wife

GRANTEES(s), whose current address is: _____, ID
the following described real property in Ada County, State of Idaho,
more particularly described as follows, to wit:

Lot 1 in Block 1 of REGINA HEIGHTS SUBDIVISION, according to the official plat thereof, filed in Book 83 of Plats at Pages 9176 and 9177, records of Ada County, Idaho.

TO HAVE AND TO HOLD the said premises, with their appurtenances unto the said heirs and assigns forever. And the said Grantor(s) does(do) hereby covenant to and with the said Grantee(s), that Grantor(s) is/are the owner(s) in fee simple of said premises; that said premises are free from all encumbrances EXCEPT those to which this conveyance is expressly made subject and those made, suffered or done by the Grantee(s); and subject to reservations, restrictions, dedications, easements, rights of way and agreements, (if any) of record, and general taxes and assessments, (including irrigation and utility assessments, if any) for the current year, which are not yet due and payable, and that Grantor(s) will warrant and defend the same from all lawful claims whatsoever.

Date: August 30, 2005

Bonnie L. Phagan

Bonnie L. Phagan

James C. Phagan

James C. Phagan

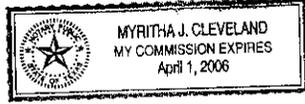
Notary Acknowledgment - see page 2

WARRANTY DEED - NOTARY ACKNOWLEDGMENT(S):

State of Texas, County of Galveston, ss.

On this 30 day of August in the year of 2005, before me, the undersigned, a Notary Public in and for said State, personally appeared Bonnie L. Phagan known or identified to me to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same.

Myritha J. Cleveland
Residing at: 3300 Texas Ave, Texas City, TX
My commission expires: April 1, 2006

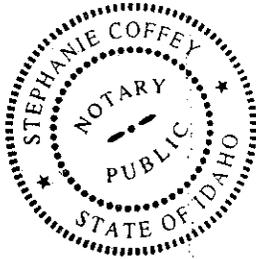


State of Idaho, County of Ada, ss.

On this 15th day of ~~August~~ ^{Sept} in the year of 2005, before me, the undersigned, a Notary Public in and for said State, personally appeared James C. Phagan known or identified to me to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same.

[Signature]
Residing at:
My commission expires:

Residing in Meridian, Idaho
My Commission expires: 03-20-2010



The Grantees herein have read and approved the following:

WARRANTY DEED

Title File No.: LT05-11614

FOR VALUE RECEIVED

ROBERT L. GARRARD AND ELIZABETH GARRARD, husband and wife

GRANTOR(s), does(do) hereby GRANT, BARGAIN, SELL and CONVEY unto: Greg Johnson and Heidi Johnson, husband and wife

GRANTEES(s), whose current address is: P.O. Box 344, Meridian, ID 83680
the following described real property in Ada County, State of Idaho,
more particularly described as follows, to wit:

See Exhibit "A" Attached hereto and made a part hereof.

TO HAVE AND TO HOLD the said premises, with their appurtenances unto the said Grantee(s), and Grantee(s) heirs and assigns forever. And the said Grantor(s) does(do) hereby covenant to and with the said Grantee(s), that Grantor(s) is/are the owner(s) in fee simple of said premises; that said premises are free from all encumbrances, EXCEPT those to which this conveyance is expressly made subject and those made, suffered or done by the Grantee(s); and subject to reservations, restrictions, dedications, easements, rights of way and agreements, (if any) of record, and general taxes and assessments, (including irrigation and utility assessments, if any) for the current year, which are not yet due and payable, and that Grantor(s) will warrant and defend the same from all lawful claims whatsoever.

Dated: January 17, 2006

Robert L. Garrard
Robert L. Garrard

Elizabeth Garrard
Elizabeth Garrard

STATE OF Idaho, County of Ada, ss.

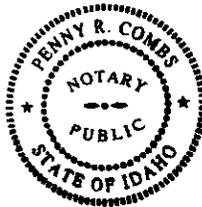
On this 17th day of January in the year of 2006, before me, the undersigned, a Notary Public in and for said State, personally appeared Robert L. Garrard and Elizabeth Garrard

known or identified to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

Signature: Penny R. Combs

Name: Penny R. Combs.

Residing at: MERIDIAN, ID
My commission expires: COMMISSION EXPIRES 06-04-2006



Lawyers Title Insurance Corporation

EXHIBIT "A"

The South half of the Southeast quarter of Section 28, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho, lying Northeasterly of the old U.S. Highway 20, 26 and 30, and the Northeast quarter of Section 33, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho, lying Northeasterly of the old U.S. Highway 20, 26 and 30.

EXCEPTING THEREFROM a parcel of land located in a portion of the South half of the Southeast quarter of Section 28, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho and being more particularly described as follows:

Commencing at a found 1/2 inch iron pin marking the East quarter corner of said Section 28, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho, said pin bears
South 89°46'03" East 2652.26 feet from a set 5/8 inch iron pin marking the C-1/4 corner of said Section 28; thence
South 0°07'30" West 1316.99 feet along the East boundary of the said Southeast quarter of Section 28 to a set 5/8 inch iron pin marking the South 1/16 corner common to said Section 28 and 27, said pin bears
North 0°07'30" East 1317.00 feet from a found brass cap marking the Southeast corner of said Section 28; thence
North 89°47'36" West 352.30 feet to a set 1/2 inch iron pin marking the REAL POINT OF BEGINNING; thence
South 0°12'24" West 1167.00 feet to a set 1/2 inch iron pin; thence
North 89°47'36" West 1494.00 feet to a set 1/2 inch iron pin; thence
North 0°12'24" East 1167.00 feet to a set 1/2 inch iron pin; thence
South 89°47'36" East 1494.00 feet to the POINT OF BEGINNING.

2
ADA COUNTY RECORDER J. DAVID NAVARRO
BOISE IDAHO 01/17/06 04:37 PM
DEPUTY Patti Thompson
RECORDED-REQUEST OF
Lawyers Title

AMOUNT 9.00 3



3

This sheet has been added to the document
to accommodate recording information

LTOS-11614 PRC



A Pioneer Company
PIONEER TITLE COMPANY
 OF ADA COUNTY
 8151 W. Rifleman Ave. / Boise, Idaho 83704
 (208) 377-2700

READ AND APPROVED BY CMJ

WARRANTY DEED

For Value Received James C Thompson III and Cynthia L. Thompson, Husband and Wife
 hereinafter referred to as Grantor, does hereby grant, bargain, sell, warrant and convey unto

Heidi M. Johnson, a married woman as her sole and separate property
 hereinafter referred to as Grantee, whose current address is P.O. Box 344, Meridian, Id 83680
 the following described premises, to-wit:

SEE EXHIBIT A ATTACHED HERETO AND MADE A PART HEREOF.

To HAVE AND TO HOLD the said premises, with their appurtenances unto the said Grantee, his heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that Grantor is the owner in fee simple of said premises; that said premises are free from all encumbrances except current years taxes, levies, and assessments, and except U.S. Patent reservations, restrictions, easements of record, and easements visible upon the premises, and that Grantor will warrant and defend the same from all claims whatsoever.

Dated: July 18, 2005

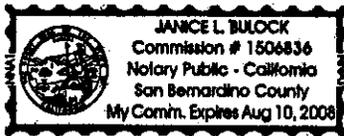
[Signature]
 James C. Thompson III

[Signature]
 Cynthia L. Thompson

STATE OF California County of San Bernardino, ss.

On this 20 day of July, in the year of 2005, before me the undersigned, notary public personally appeared James C. Thompson III and Cynthia L. Thompson known or identified to me to be the person/persons whose name is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same.

[Signature]



Notary Public of Calif.
espera, Calif. at
 Residing
 Commission 8-10-08 expires:

EXHIBIT A

A parcel of land being a portion of the NE ¼ of the NE ¼ of Section 32, a portion of the SW ¼ of Section 28 and a portion of the SE ¼ of Section 29, all in Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho, said parcel being more particularly described as follows:

Commencing at the brass cap marking the quarter corner common to Sections 29 and 32, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho;
Thence North 89°59'42" East a distance of 2649.90 feet to a pipe marking the corner common to Sections 33, 32, 29 and 28;
Thence South 89°38'07" West a distance of 98.39 feet to a brass cap right-of-way monument on the Northeasterly side of I-84, said point being the REAL POINT OF BEGINNING;
Thence along said right-of-way of I-84 the following courses and distances:
South 51°43'54" West a distance of 96.73 feet to a brass cap right-of-way monument;
Thence North 83°25'36" West a distance of 83.93 feet to a brass cap right-of-way monument;
Thence North 49°04'00" West a distance of 916.92 feet to a brass cap right-of-way monument;
Thence North 38°14'20" West a distance of 194.84 feet to an iron pin;
Thence leaving said right-of-way, North 60°06'26" East a distance of 1781.81 feet to the physical centerline of pavement of Old Highway 30;
Thence along said centerline South 72°17'03" East a distance of 804.29 feet to a point of beginning of curve on the Westerly right-of-way of Mayfield Road;
Thence along said right-of-way the following courses and distances:
Along a curve to the left 226.47 feet, said curve having a delta of 30°45'03", a radius of 421.97 feet, tangents of 116.04 feet and a long chord of 223.76 feet which bears South 56°36'41" West to a brass cap right-of-way monument marking a point of ending of curve;
Thence South 49°18'53" West a distance of 66.90 feet to a brass cap right-of-way monument;
Thence South 41°01'11" West a distance of 253.55 feet to a brass cap right-of-way monument;
Thence South 28°47'54" West a distance of 51.42 feet to a brass cap right-of-way monument;
Thence South 41°04'16" West a distance of 604.29 feet to a brass cap right-of-way monument marking a point of beginning of curve;
Thence along a curve to the right 708.77 feet, said curve having a delta of 10°44'39", a radius of 3779.72 feet, tangents of 355.43 feet and a long chord of 707.74 feet which bears South 46°23'57" West to the REAL POINT OF BEGINNING,

EXCEPT any portion thereof lying within the right-of-way for Old Highway 30.



A Pioneer Company

PIONEER TITLE COMPANY
OF ADA COUNTY

8151 W. Rifleman Ave. / Boise, Idaho 83704 / (208) 377-2700

ESCROW INSTRUCTIONS

SELLER: James C Thompson III and Cynthia L. Thompson
BUYER: Pioneer 1031 Company / Heidi M. Johnson, exchangor
LENDER:
PROPERTY: 40+- acres - E. Mayfield Road
Boise, Idaho 83716
ESCROW NO.: 258028 DATE: July 18, 2005

To: PIONEER TITLE COMPANY OF ADA COUNTY

Upon receipt of collected funds sufficient to close this transaction, PIONEER TITLE COMPANY OF ADA COUNTY is authorized to close the above escrow and record the documents delivered to it, as well as to disburse those funds as set forth in the closing statement executed and hereby approved by the Buyer and Seller, on the following conditions.

1. **TITLE INSURANCE:** Buyer and Seller instructs Pioneer Title Company to close this transaction upon notification that a(n) Standard Owner's Policy in the amount of \$165,000.00 insuring Buyer can be issued subject to customary title exceptions, restrictive covenants, easements, and title exceptions 1 thru 13, 15, 16 as set forth in Title Commitment No. 258028, which Buyer and Seller have read and hereby approve.

2. **PRORATIONS:** All prorations between Buyer and Seller shall be as of the date set forth in the closing statement. All prorations shall be based upon a 365-day year, unless the parties otherwise notify Pioneer Title Company of a different applicable amortization period. Calculated prorations shall be based upon the most recently available property tax, rental and insurance information received from Seller or the Deed of Trust beneficiary or mortgagee. All water, utility, and other prorations not specifically set forth in the closing statement shall be prorated directly between Buyer and Seller outside of this closing. Additional recording fees and additional interest due on any required loan payoffs different from that set forth in the closing statement may be deducted from the appropriate party's funds, notwithstanding the amounts set forth in that closing.

3. **FIRE INSURANCE:** Pioneer Title Company shall have no obligation to cancel, transfer, or purchase fire or other insurance for the Buyer and Seller. All insurance needs of the parties shall be handled directly by the parties, outside of escrow.

4. **DISPUTES WITH PIONEER TITLE:** Pioneer Title Company and every other party executing this Agreement agree that all disputes, claims, and controversies involving Pioneer Title Company in any way, whether individual, joint, or class in nature, arising out of this agreement or otherwise, including without limitation contract and tort disputes, in which the amount in controversy is \$50,000.00 or less shall be arbitrated pursuant to the Uniform Arbitration Act, upon written request of Pioneer Title Company. The parties shall mutually agree upon the arbitrator who shall be a licensed attorney or retired judge. Each of the parties to the dispute shall pay a pro-rata share of the arbitrator's fee. If the parties to the dispute cannot agree upon the arbitrator, then the arbitrator shall be selected by the court of general jurisdiction in the judicial district in which the principal office of Pioneer Title Company is situated upon motion or petition of Pioneer Title Company. The award rendered by the arbitrator shall be final and non-appealable, except that judgment may be entered in any court having jurisdiction thereof enforcing the terms of the arbitrator's award. Under no circumstances shall an arbitrator award punitive or exemplary damages to any of the parties to the arbitration.

5. **DISPUTES WITH OTHERS:** If a dispute arises between the Buyer and Seller or with any third party, Pioneer Title Company shall have the option to await settlement of such controversy between the parties and submission of joint written instructions by them, or to institute an inter pleader action or otherwise await the entry of a court order judgment determining the parties' rights in such dispute. In the event that you should become a party to any such legal proceedings, we jointly and severally agree to pay and to hold you as escrow holder harmless from and against any and all costs, charges, damages, attorney's fees or other expense which you in good faith may incur.

6. **DISBURSEMENTS:** Buyer and Seller agree to pay and reimburse Pioneer Title Company, upon demand, any sums paid or otherwise disbursed by it in reliance upon any check, draft, or other items if they are returned or otherwise fail to result in the immediate, unconditional deposit or credit of cash funds at closing. If Buyer or Seller fails to present for payment any check or instrument issued by Pioneer Title Company within ninety (90) days from the date such check was issued, then Buyer and Seller authorizes Pioneer Title Company to deduct the sum of three dollars (\$3.00) per month from such funds until the check is presented for payment. If Pioneer Title



A Pioneer Company
PIONEER TITLE COMPANY
 OF ADA COUNTY
 8151 W. Rifleman Ave. / Boise, Idaho 83704
 (208) 377-2700

253028 SRM/AK

ADA COUNTY RECORDER J. DAVID NAVARRO AMOUNT 6.00
 RECORDED - REQUEST OF Pioneer
 DATE IDAHO 07/22/05 04:31 PM
 105100441



QUITCLAIM DEED

For Value Received

Jeffrey Agenbroad as Trustee of the Carl S. and Judith A. Agenbroad Revocable Trust under Agreement dated August 6, 1993 and Gable A. Properties, LLC, an Idaho limited liability company do hereby convey, release, remise and forever quit claim unto

James C. Thompson III and Cynthia L. Thompson, Husband and Wife
 whose address is 25362 Village Road, Dana Point CA 92629 ,

the following described premises, to-wit:

SEE EXHIBIT A ATTACHED HERETO AND MADE A PART HEREOF.

together with their appurtenances.

Dated: July 21, 2005

Jeffrey Agenbroad as Trustee of the Carl S. and Judith A. Agenbroad
 Revocable Trust under Agreement dated August 6, 1993

Jeffrey C. Agenbroad
 Jeffrey Agenbroad, Trustee

Gable A. Properties, LLC

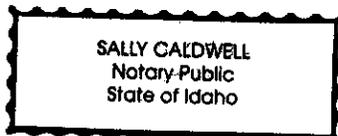
Jeffrey C. Agenbroad
 Jeffrey Agenbroad, Manager

STATE OF Idaho, County of Ada, ss.

On this *21st* day of July, in the year of 2006, before me the undersigned, a notary public personally appeared Jeffrey Agenbroad, known or identified to me to be the person whose name is subscribed to the within instrument as Trustee of the Carl S. and Judith A. Agenbroad Revocable Trust and acknowledged to me that he/she/they executed the same as such Trustee.

STATE OF Idaho, County of Ada, ss

On this *21st* day of July, in the year of 2005, before me the undersigned, a notary public, personally appeared Jeffrey Agenbroad, known or identified to be one of the member(s)/manager(s) in a limited liability company, of Gable A. Properties LLC and the member(s)/manager(s) who subscribed said limited liability company name to the foregoing instrument, and acknowledged to me that he/she/they executed the same in said limited liability company name.



Sally Caldwell
 Notary Public of *Idaho*
 Residing at *xxxxxx*
 Commission expires: *11-13-08*

EXHIBIT A

A parcel of land being a portion of the NE ¼ of the NE ¼ of Section 32, a portion of the SW ¼ of Section 28 and a portion of the SE ¼ of Section 29, all in Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho, said parcel being more particularly described as follows:

Commencing at the brass cap marking the quarter corner common to Sections 29 and 32, Township 1 North, Range 4 East, Boise Meridian, Ada County, Idaho;
Thence North 89°59'42" East a distance of 2649.90 feet to a pipe marking the corner common to Sections 33, 32, 29 and 28;
Thence South 89°38'07" West a distance of 98.39 feet to a brass cap right-of-way monument on the Northeasterly side of I-84, said point being the REAL POINT OF BEGINNING;
Thence along said right-of-way of I-84 the following courses and distances:
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Thence North 83°25'36" West a distance of 83.93 feet to a brass cap right-of-way monument;
Thence North 49°04'00" West a distance of 916.92 feet to a brass cap right-of-way monument;
Thence North 38°14'20" West a distance of 194.84 feet to an iron pin;
Thence leaving said right-of-way, North 60°06'26" East a distance of 1781.81 feet to the physical centerline of pavement of Old Highway 30;
Thence along said centerline South 72°17'03" East a distance of 804.29 feet to a point of beginning of curve on the Westerly right-of-way of Mayfield Road;
Thence along said right-of-way the following courses and distances:
Along a curve to the left 226.47 feet, said curve having a delta of 30°45'03", a radius of 421.97 feet, tangents of 116.04 feet and a long chord of 223.76 feet which bears South 56°36'41" West to a brass cap right-of-way monument marking a point of ending of curve;
Thence South 49°18'53" West a distance of 66.90 feet to a brass cap right-of-way monument;
Thence South 41°01'11" West a distance of 253.55 feet to a brass cap right-of-way monument;
Thence South 28°47'54" West a distance of 51.42 feet to a brass cap right-of-way monument;
Thence South 41°04'16" West a distance of 604.29 feet to a brass cap right-of-way monument marking a point of beginning of curve;
Thence along a curve to the right 708.77 feet, said curve having a delta of 10°44'39", a radius of 3779.72 feet, tangents of 355.43 feet and a long chord of 707.74 feet which bears South 46°23'57" West to the REAL POINT OF BEGINNING,

EXCEPT any portion thereof lying within the right-of-way for Old Highway 30, as described in Deed to the State of Idaho, recorded in Book 194 of Deeds, at Page 46, records of Ada County, Idaho.

Lester, Steve 

From: Lester, Steve
Sent: Wednesday, March 01, 2006 12:14 PM
To: 'Terry Scanlan'
Subject: RE: Application for Permit 63-32225 for Intermountain Sewer and Water Corp.

Terry:

Thank you for following up on this. An extension to submit additional information for Application 63-32225 is approved through April 30, 2006. Please let me know if you have additional questions/concerns. As previously noted, it's best if formal steps like this one are handled by you to remain consistent with the original application submittal. That does not prevent Christian from making direct contacts with IDWR as he works through the details.

Steve

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

From: Terry Scanlan [mailto:TScanlan@spfwater.com]
Sent: Wednesday, March 01, 2006 8:39 AM
To: Lester, Steve
Cc: Christian Petrich
Subject: RE: Application for Permit 63-32225 for Intermountain Sewer and Water Corp.

Steve -

As discussed with Christian, we would like to get an extension on the larger diversion information for 63-32225. Christian has been working on a report regarding water conditions that will form the basis of our response, and we have fallen a bit behind. If we could get an extension until the end of March it would be appreciated. Thanks.

Terry

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

From: Christian Petrich
Sent: Tuesday, February 28, 2006 8:52 AM
To: Terry Scanlan
Subject: FW: Application for Permit 63-32225 for Intermountain Sewer and Water Corp.

I emailed Steve Lester requesting an extension on the Intermountain Water and Sewer response. Steve prefers that you request the extension.

CP

From: Lester, Steve [mailto:Steve.Lester@idwr.idaho.gov]
Sent: Tuesday, February 28, 2006 7:44 AM
To: Christian Petrich
Subject: RE: Application for Permit 63-32225 for Intermountain Sewer and Water Corp.

Christian:

An applicant can make a written request seeking more time beyond a deadline defined by IDWR under its rules. This application was submitted with a cover letter signed by Terry as the

3/1/2006

ADD'TL info due 4/30/06

consultant. Therefore, Terry must make the written request. We strive to avoid the "too many cooks" syndrome in which more than one person speaks for the applicant -- usually leads to problems.

Please have the consultant of record make a written request in this case. Using email is fine instead of a traditional letter. Thanks for helping us keep the cooking staff to a minimum!

Steve

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

From: Christian Petrich [mailto:CPetrich@spfwater.com]

Sent: Saturday, February 25, 2006 7:05 PM

To: Lester, Steve

Subject: Application for Permit 63-32225 for Intermountain Sewer and Water Corp.

Steve,

You have sent a letter to Terry requesting additional information regarding the above-referenced permit application. I would like to request an extension for providing the additional information - we intend to have a response complete within the next week or two.

I apologize for the delay.

Regards,
Christian

Christian R. Petrich, Ph.D., P.E., P.G.
SPF Water Engineering, LLC
600 East River Park Lane, Suite 105
Boise, ID 83706
Tel: 208-383-4140 ext. 202
Fax: 208-383-4156
Email: cpetrich@spfwater.com

SPF Project:

Lester, Steve 

From: Lester, Steve
Sent: Thursday, February 09, 2006 12:42 PM
To: 'Terry Scanlan'
Subject: RE: Use of Treated Wastewater for Irrigation Purposes

Terry:

It is my understanding that a valid municipal water permit or water right includes any associated uses in the service area (not beyond that) provided the wastewater still remains under the provider's control. In other words, the wastewater has not yet been released to something beyond the provider's system, such as injection into the aquifer or discharge to a river. If approved, 63-32225 should cover the scenario you mentioned under the above assumptions. Another separate approval should not be needed.

Steve

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

From: Terry Scanlan [mailto:TScanlan@spfwater.com]
Sent: Tuesday, February 07, 2006 11:24 AM
To: Lester, Steve
Subject: Use of Treated Wastewater for Irrigation Purposes

Steve -

Is a water right required for reuse of treated domestic wastewater? Specifically, can Mayfield Springs Planned Community reuse treated municipal wastewater for pressurized irrigation purposes? The water would be diverted from wells under proposed permit 63-32225 by Intermountain Sewer & Water Corporation, used for domestic or other purposes, discharged to a sewer system, treated to Class A quality at a sewage treatment facility, stored in a wastewater pond, and then pumped into a pressurized irrigation system for irrigation of common areas, residential lots, or commercial properties.

Terry



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190

FAX (208) 334-2348

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

January 27, 2006

DANSKIN PROPERTIES ASSN INC
315 E DANSKIN DR
MAYFIELD ID 83716

Re: Application for Permit No. 63-32225 in the Name of Intermountain Sewer & Water,
Corp.

Dear Sir or Madam:

We received your letter dated January 25, 2006 in which you expressed concerns about the approval of the above-referenced application for a water right. Please be advised, however, that the protest period ended January 23, 2006 and your letter was not received until January 25, 2006. Our office must receive the protest on or before the protest period is ended. Also, the protest fee of \$25.00 was not received. Pursuant to Idaho Code, we cannot recognize your letter as a protest. Your concerns, however, will be taken into consideration.

The department will now continue to process the application, subject to certain conditions of approval, if the application is ultimately approved.

Please feel free to contact this office if you have questions.

Sincerely,

Steve Lester
Water Rights Supervisor

SL:sk

OFFICE LOCATION: 3131 State Street, Boise Idaho
MAILING ADDRESS: PO BOX 7129, BOISE ID 83707-1129
PHONE: (208) 334-8522
FAX: (208)334-8601
E-MAIL: barbara.waite@id.idaho.gov



Fax

This Notice of Protest was received after the 1/23/06 deadline.

RECEIVED

JAN 25 2006

WATER RESOURCES
WESTERN REGION

To:

KIMBERLY

From: Barbara Waite

Sr. RIGHT-OF-WAY AGENT

Acquisition/Condemnation Section

Page	334-2348	Page	2
Phone	334-2190	Date	1/25/06
Re:	APPLICATION FOR PERMIT No. 63-2-63-32225		

For Your Request For Review Please Comment For Your Use Please Telephone

11/99

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

RECEIVED

JAN 25 2006

NOTICE OF PROTEST

WATER RESOURCES
WESTERN REGION

This form may be used to file a protest with the department under sections 42-108B, 42-203A, 42-203C, 42-211, 42-222 and 42-224, Idaho Code. The department will also accept a timely protest not completed on this form if it contains the same information.

1. Matter being protested Application for Permit No. 63-32225

2. Name of protestant Danskin Properties Association, Inc. (an association of 25 home owners)

3. Protestant's Representative for service (If different than protestant)
Barbara Waite

4. Service mailing address 315 E. Danskin Drive Mayfield, ID 83716

5. Service telephone no. (208)334-8522 Business. (208)342-4702 Home

6. Basis of protest (including statement of facts and law upon which the protest is based)
The proposed use is in an area of very limited groundwater resources, approval would reduce the water for existing water rights, the water supply is insufficient for the proposed purpose, it will conflict with the local public interest, as defined in the Idaho Code and it is contrary to the conservation of water resources within the State of Idaho. Although the diversion is in Ada county, the majority of the existing Mayfield community lies within Elmore County.

(additional pages may be attached to describe nature of the protest)

7. What would resolve your protest? Additional information about the planned uses and the proposed development, information regarding the proposed landscaping, proposed land uses and conservation measures and adequate ground water hydrological information to show that existing water rights in the area will not be adversely affected.

I hereby, acknowledge that if I, or my designated representative, fails to appear at any regularly scheduled conference or hearing in the matter of which I have been notified at the address above, the department may issue a notice of proposed default against me in this matter for failure to appear. I also verify that I have served a copy of this protest upon the applicant.

Signed this 25 day of JAN., 2006.

DANSKIN PROPERTIES ASSOC., INC.
Protestant

Barbara Waite
Protestant's Representative

Kreger (Taylor), Sue

To: Charles.Ariss@deq.idaho.gov

**IDAHO DEPARTMENT OF WATER RESOURCES
WESTERN REGION
2735 AIRPORT WAY
BOISE ID 83705**

January 4, 2006

ID DEPT ENV QUALITY
CHARLES ARISS
1445 N ORCHARD
BOISE ID 83706-2239

Re: Applications for Permit

Dear Mr. Ariss:

Attached is a copy(s) of one or more applications that may be of interest to you and/or to a local District Health office should you choose to delegate review of the application(s) to that organization. Please contact the applicant if your agency and/or District Health have concerns about the application(s). It is not necessary to provide agency comments to the Idaho Department of Water Resources (IDWR), although your comments are welcome if you think IDWR would benefit from them.

If your agency and/or a local District Health office desires to file a formal protest against approval of any of these applications, a written protest along with the \$25.00 protest fee for each application protested must be received in this office by January 23, 2006. A copy of the protest must also be sent to the applicant.

If you have any questions regarding these applications, please contact this office at 334-2190.

Sincerely,



63-7194.pdf



63-32225.pdf

**IDAHO DEPARTMENT OF WATER RESOURCES
WESTERN REGION
2735 AIRPORT WAY
BOISE ID 83705**

December 29, 2005

Legal Notice Department

IDAHO STATESMAN
PO BOX 40
BOISE ID 83707

RE: Application for Permit No. 63-32225
Application for Transfer of Permit No. 63-7194 in the Name of Peregrine and
Application for Transfer of Permit No. 63-7194 in the Name of Choutchourrou

Dear LEGAL NOTICE DEPARTMENT:

Enclosed you will find a legal notice which we wish to have published in your newspaper on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before 01/23/2006. Your cooperation is appreciated.

Sincerely

Sue Kreger
Administrative Assistant

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

63-32225

INTERMOUNTAIN SEWER & WATER CORP
660 E FRANKLIN RD
MERIDIAN ID 83642

Point(s) of Diversion	NENE	S28	T01N R04E	ADA County	Source GROUND WATER
Point(s) of Diversion	SENW	S28	T01N R04E	ADA County	Source GROUND WATER
Point(s) of Diversion	NWSE	S28	T01N R04E	ADA County	Source GROUND WATER
Point(s) of Diversion	SESE	S28	T01N R04E	ADA County	Source GROUND WATER
Point(s) of Diversion	NENW	S33	T01N R04E	ADA County	Source GROUND WATER

Use: MUNICIPAL 01/01 To 12/31 10 CFS

Total Diversion: 10 CFS

Date Filed: 09/16/2005

Place Of Use: MUNICIPAL

T01N R04E S28 NENE NWNE SWNE SENE SENW NESW NWSW SWSW SESW NESE NWSE
SWSE SESE

T01N R04E S29 SESE

T01N R04E S32 NENE

T01N R04E S33 NENE NWNE SWNE SENE NENW NWNW SWNW SENW NESW NESE NWSE
SESE

Remark: Municipal use is for Mayfield Springs Planned Community of 2000 homes and associated uses east of Indian Creek Reservoir between I84 and the Ada-Elmore County line. Water bearing zone to be appropriated from up to 5 proposed wells is from 300 to 1000 feet. Applicant agrees to mitigate consumptive use in the future as needed.

Permits will be subject to all prior water rights. Protests may be submitted based on the criteria of Sec 42-203A, Idaho Code.

Any protest against the approval of this application must be filed with the Director, Dept. of Water Resource, Western Region, 2735 Airport Way, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before 01/23/2006. The protestant must also send a copy of the protest to the applicant.

KARL J DREHER, Director

Published in the Idaho Statesman on January 5 and 12, 2006.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190

FAX (208) 334-2348

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

December 16, 2005

TERRY SCANLAN P E
SPF WATER ENGINEERING LLC
600 E RIVER PARK LN STE 105
BOISE ID 83706

Re: Application for Permit No. 63-32225 for Intermountain Sewer & Water Corp.

Dear Terry:

The above referenced application for permit regarding ground water for municipal use can be processed once the minor place of use clarification is made as noted in the telephone message I left you today. To assist this office in completing the initial processing steps, please submit additional information required by I. C. § 42-203A(5)(a-e) for "large diversion projects." This requirement includes the following items discussed in the enclosed copy of Water Appropriation Rule 40, Rule Subsections 040.05c through 040.05g:

- ✓ 1. effect on existing water rights
- ✓ 2. sufficiency of water supply
- ✓ 3. good faith, delay or speculative purposes
- ✓ 4. financial resources
- ✓ 5. local public interest.

All of the highlighted items in the attached information apply to this application. For **local public interest**, please provide information as follows:

- ✓ • Describe the work the applicant has completed or will complete to satisfy Ada County approval requirements.
- ✓ • Describe the work the applicant has completed or will complete to establish itself as a municipal provider pursuant to I. C. § 42-202B(5).

Other additional information is needed as follows:

- ✓ • Idaho Department of Water Resources (IDWR) standards for internal domestic use for 2000 homes suggest that about 2.08 cfs would be expected. Please justify why 2.50 cfs is proposed for this component.

Application for Permit No. 63-32225
December 16, 2005
Page 2

- ✓ • The proposed wells are close to the Mountain Home Ground Water Management Area boundary, particularly the Section 33 location. Describe what impacts, if any, could be expected on this boundary by pumping up to 10.0 cfs over time. Would aquifer dynamics cause the boundary to migrate and/or change in other ways?

Please submit the requested information to allow final evaluation of your application to be completed. You may seek additional time to provide the information by making a written request to delay or interrupt processing. Your written response including the requested information, or a request for more time to seek the information, must be received within sixty (60) days of the date of this letter. The application will be voided without a timely reply.

Please let me know if you have any questions or need more information. Thank you for your attention to these matters.

Sincerely,



Steve Lester
Water Rights Supervisor

Enclosure

LARGE DIVERSION INFORMATION

RULE 40 ... 040.05. c through g @ most cases
c " h @ trust water

criterion (e) of Section 42-203A(5), Idaho Code, as to any factor affecting local public interest of which he is knowledgeable or reasonably can be expected to be knowledgeable. The protestant shall bear the initial burden of coming forward with evidence for those factors relevant to criterion (e) of Section 42-203A(5), Idaho Code, of which the protestant can reasonably be expected to be more cognizant than the applicant. (7-1-93)

iii. The protestant shall bear the initial burden of coming forward with evidence for the evaluation of the public interest criteria of Section 42-203C(2), Idaho Code, and of demonstrating a significant reduction, except that the applicant shall provide details of the proposed design, construction, and operation of the project and directly associated operations to allow the impact of the project to be evaluated. (7-1-93)

c. The applicant has the ultimate burden of persuasion for the criteria of Section 42-203A, Idaho Code, and the protestant has the ultimate burden of persuasion for the criteria of Section 42-203C, Idaho Code. (7-1-93)

d. For unprotested applications or permits to be reprocessed, the director will evaluate the application, information submitted pursuant to Rule Subsection 040.05.c. and information in the files and records of the department, and the results of any studies the department may conduct to determine compliance with the appropriate criteria. (7-1-93)

e. In protested matters the director will take official notice of information as described in the department's adopted Rules of Procedure, and will, prior to considering, circulate to the parties information from department studies and field examinations concerning the protested application or permit being reprocessed, if such information has not otherwise been made a part of the hearing record. (7-1-93)

05. Additional Information Requirements. (7-1-93)

a. For unprotested applications and permits being reprocessed, the additional information required by Rule Subsection 040.05.c. shall be submitted within thirty (30) days after the director notifies the applicant that the application or permit is being reviewed for decision. The director may extend the time within which to submit the information upon request by the applicant and upon a showing of good cause. Failure to submit the required information within the time period allowed will be cause for the director to void an application or to advance the priority of a permit being reprocessed by the number of days that the information submittal is late. The director will provide opportunity for hearing as provided in Section 42-1701A, Idaho Code. (7-1-93)

b. For protested applications or protested permits being reprocessed, the information required by Rule Subsection 040.05.c. may be requested by the director to be submitted within thirty (30) days after notification by the director, may be made a part of the record of the hearing held to consider the protest, or may be made available in accordance with any pre-hearing discovery procedures. Failure to submit the required information within the time period allowed will be cause for the director to void an application or to advance the priority of a permit being reprocessed by the number of days that the information submittal is late. (7-1-93)

* c. The following information shall be submitted for applications to appropriate unappropriated water or trust water and for permits being reprocessed for trust water. The additional information submittal requirements of this rule are waived for filings which seek to appropriate five (5) cfs or less or storage of five hundred acre-feet (500 AF) or less and for filings seeking reallocation of trust water which the director determines will reduce the flow of the Snake River measured at Murphy Gauge by not more than two (2) acre-feet per day. For filings proposing irrigation as a purpose of use, the additional information is required if more than two hundred (200) acres will be irrigated. However, the director may specifically request submittal of any of the following information for any filing, as he determines necessary. Information relative to the effect on existing water rights, Section 42-203A(5)(a), Idaho Code, shall be submitted as follows: (7-1-93)

N/A — i. For applications appropriating springs or surface streams with five (5) or fewer existing users, either the identification number, or the name and address of the user, and the location of the point of diversion and nature of use for each existing water right shall be submitted. (7-1-93)

ii. For applications appropriating groundwater, a plat shall be submitted locating the proposed well relative to all existing wells and springs and permitted wells within a one-half mile radius of the proposed well.

* IF > 5 cfs > 200 ACRES irrigation
> 500 AF STORAGE > 2 AF/day reduction AT
Murphy gauge

(7-1-93)

iii. Information shall be submitted concerning any design, construction, or operation techniques which will be employed to eliminate or reduce the impact on other water rights. (7-1-93)

d. Information relative to sufficiency of water supply, Section 42-203A(5)(b), Idaho Code, shall be submitted as follows: (7-1-93)

i. Information shall be submitted on the water requirements of the proposed project, including, but not limited to, the required diversion rate during the peak use period and the average use period, the volume to be diverted per year, the period of year that water is required, and the volume of water that will be consumptively used per year. (7-1-93)

ii. Information shall be submitted on the quantity of water available from the source applied for, including, but not limited to, information concerning flow rates for surface water sources available during periods of peak and average project water demand, information concerning the properties of the aquifers that water is to be taken from for groundwater sources, and information on other sources of supply that may be used to supplement the applied for water source. (7-1-93)

e. Information relative to good faith, delay, or speculative purposes of the applicant, Section 42-203A(5)(c), Idaho Code, shall be submitted as follows: (7-1-93)

i. The applicant shall submit copies of deeds, leases, easements or applications for rights-of-way from federal or state agencies documenting a possessory interest in the lands necessary for all project facilities and the place of use or if such interest can be obtained by eminent domain proceedings the applicant must show that appropriate actions are being taken to obtain the interest. Applicants for hydropower uses shall also submit information required to demonstrate compliance with Sections 42-205 and 42-206, Idaho Code. (7-1-93)

ii. The applicant shall submit copies of applications for other needed permits, licenses and approvals, and must keep the department apprised of the status of the applications and any subsequent approvals or denials. (7-1-93)

f. Information Relative to Financial Resources, Section 42-203A(5)(d), Idaho Code, shall be submitted as follows: (7-1-93)

i. The applicant shall submit a current financial statement certified to show the accuracy of the information contained therein, or a financial commitment letter along with the financial statement of the lender or other evidence to show that it is reasonably probable that financing will be available to appropriate the water and apply it to the beneficial use proposed. (7-1-93)

ii. The applicant shall submit plans and specifications along with estimated construction costs for the project works. The plans shall be definite enough to allow for determination of project impacts and implications. (7-1-93)

g. Information Relative to Conflict with the Local Public Interest, Section 42-203A(5)(e), Idaho Code, shall be submitted as follows: The applicant shall seek comment and shall submit all letters of comment on the effects of the construction and operation of the proposed project from the governing body of the city and/or county and tribal reservation within which the point of diversion and place of use are located, the Idaho Department of Fish and Game, the Idaho Department of Environmental Quality, and any irrigation district or canal company within which the proposed project is located and from other entities as determined by the director. (7-1-93)

h. The following information Relative to the Public Interest Criteria of Section 42-203C(2), Idaho Code, shall be submitted by an applicant seeking reallocation of trust water for a project which the director determines will reduce the flow of the Snake River by more than two (2) acre-feet per day. For filings proposing irrigation as a purpose of use, the additional information is required if more than two hundred (200) acres will be irrigated. The director may request any or all of the following information for any filing seeking the reallocation of trust water. (7-1-93)

SEE
COVER
LETTER,
DON'T SEND
LETTERS
N/A



RECEIVED

SEP 16 2005

WATER RESOURCES
WESTERN REGION

September 14, 2005

Steve Lester
Western Region Office
Idaho Department of Water Resources
2735 Airport Way
Boise, ID 83705

Subject: Application for Permit – Intermountain Sewer & Water, Corp.

Dear Steve:

Enclosed on behalf of Intermountain Sewer & Water, Corp., is an application for permit proposing appropriation of 10 cfs for municipal purposes at Mayfield Springs Planned Community in eastern Ada County. The project would include approximately 2000 homes plus commercial and industrial facilities.

A check for the \$610 filing fee is enclosed. Please contact me with any questions.

Sincerely,

Terry M. Scanlan, P.E.

Cc: Greg Johnson – Intermountain Sewer & Water, Corp.