

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

TRANSFER OF WATER RIGHT

TRANSFER NO. 5446
WATER RIGHT NO. 11-04121

This is to certify that: **CITY OF GEORGETOWN**
PO BOX 99
GEORGETOWN ID 83239

has requested a change to the above captioned water right(s). This change in water right(s) is authorized pursuant to the provisions of Section 42-222, Idaho Code, provided the conditions listed below are met.

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>
MUNICIPAL	01/01 to 12/31	* 2.76 CFS

SOURCE

GROUNDWATER
SPRING

GEORGETOWN CREEK

Priority: 06/01/1958

LOCATION OF POINT(S) OF DIVERSION:

Groundwater	SWNE , Sec. 4, Township 11S, Range 44E
Groundwater	NESE , Sec. 4, Township 11S, Range 44E
Spring Diversion	SWNWNE , Sec. 10, Township 11S, Range 44E

BEAR LAKE County

PLACE OF USE: See Remarks

CONDITIONS OF APPROVAL AND REMARKS

1. Approval of Transfer 5446 does not confirm Claimed Right 11-04121.
2. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
3. Use of water under this water right will be regulated by the watermaster of State Water District No. 11.
4. The right holder shall maintain a measuring device and lockable controlling works of a type approved by the Department in a manner that will provide the watermaster suitable control of the diversion.

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TRANSFER NO. 5446
WATER RIGHT NO. 11-04121

CONDITIONS OF APPROVAL AND REMARKS

- * 5. The total instantaneous diversion of water from all points of diversion under Transfer 5446 shall not exceed 2.76 cfs.
- 6. The right holder shall accomplish the change authorized by this transfer within one (1) year of the date of this approval.
- 7. Failure of the right holder to comply with the conditions of this transfer is cause for the Director to rescind approval of the transfer.
- 8. Place of use within the service area of the City of Georgetown.

Dated this 6th day of January, 2000.


Chief, Water Allocation Bureau

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FEB 02 2000

SEP 02 2000

PART 1

6. General information:

- a. Description of diversion system: Spring with collection box, pipelines, well, and pump to storage tank to public water system for the City of Georgetown.
- b. Are the lands from which you propose to transfer the water right(s) subject to any liens, deeds of trust, mortgages, or contracts?
N/A Yes N/A No
If yes, provide a notarized statement from the holder of the lien, deed to trust, mortgage, or contract agreeing to the proposed changes.
- c. Describe the affect on the land now irrigated if the place of use is changed pursuant to this transfer: None.
- d. Remarks: Please see attached engineering analysis showing hydrolic link between the original spring source and the proposed well. Applicants feel there is very good evidence that the waters that are normally diverted at the spring will now be intercepted by the well downstream in the watershed.

ACTION OF THE DIRECTOR, IDAHO DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Transfer of Water Rights Number _____

And said application is hereby _____, subject to the following limitations and conditions:

Witness my hand this _____ day of _____, 19____.

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FEB 02 2000

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR TRANSFER OF A WATER RIGHT
PART 2

A. DESCRIPTION OF RIGHT AS RECORDED

1. Right evidenced by:

- a. Decree No.: _____ Decreed to: _____
in the case of: _____ vs. _____
dated: _____ in _____ county of: _____
- b. License No.: _____ issued by the Idaho Department of Water Resources
- c. Claim No.: 11-04121 on file with the Idaho Department of Water Resources
- d. Transfer No.: _____ which produced this right

2. Attach a copy of last year's tax notice for the property to which the water right is appurtenant or other documents which show ownership. Label document as Attachment "A". Check appropriate descriptor below:

_____ Tax Notice _____ Warranty Deed ☒ Other Municipality

3. Source of water: Spring tributary to: Georgetown Creek, Right Hand Fk
4. Date of priority: June 1, 1958

5. Water is used for the following purpose:

amount 2.76 cfs for Municipal purposes from 1-May to 1-Sep
(cfs/ac-ft) _____
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft) _____
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft) _____

6. Total amount of water under this right:
- 2.76
- cfs and or _____ ac-ft per annum

7. Point(s) of diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion
	SW	NW	NE	10	11S	44E	Bear Lake	

8. Land irrigated or place of use:

			NE				NW				SW				SE				Totals
Twp.	Rge.	Sec.	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

Place of use is within city limits of Georgetown, Idaho

Total acres: _____

9. Describe any other water rights used for the same purposes as described above:
- None

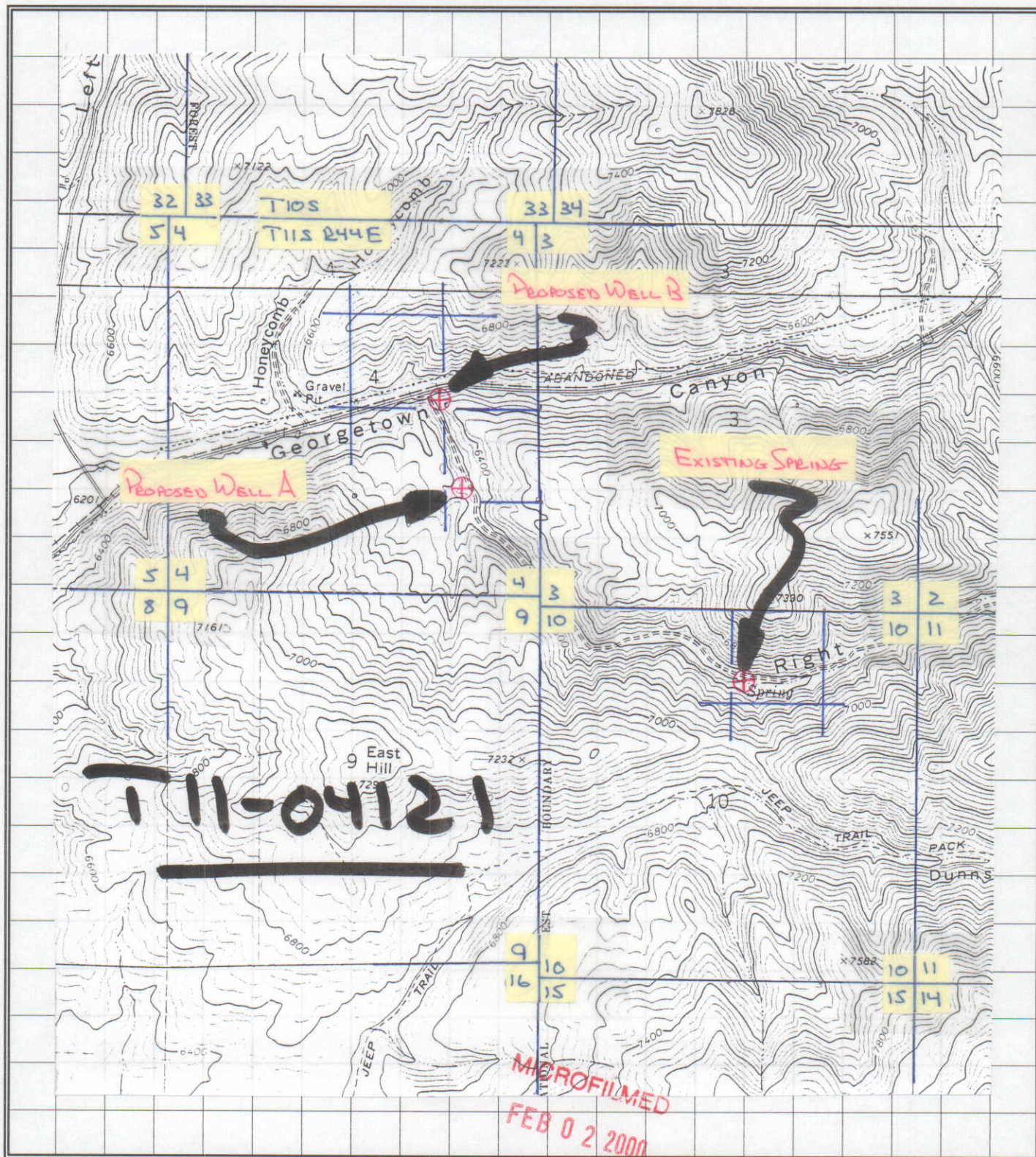
10. To your knowledge, has any portion of this water right undergone a period of five or more consecutive years of non-use?
- No
- If yes, please describe: _____

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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR TRANSFER OF A WATER RIGHT
PART 3

A. Draw a map or attach a USGS map indicating the new point(s) of diversion and/or the new place of use for rights described in Part 1. Clearly depict the land by section, township, and range number.



PART 3

B. CHANGES IN NATURE OF USE

1.	<u>New Nature of Use</u>	<u>Amount</u> (cfs/ac-ft)	<u>Hours/day/yr.</u>	<u>Period of Use</u>
	_____	_____	_____	_____ to _____
	_____	_____	_____	_____ to _____

2. Quantity and quality of return flows and location of discharge:

3. Describe effects on other water uses resulting from the proposed change:

I hereby assert that no one will be injured by such change and that the change does not constitute an enlargement in use of the original right. The information contained in this application is true to the best of my knowledge.

I understand that any willfull misrepresentations made in this application may result in voiding its approval.

Subscribed and sworn to before me this 8th day of April, 19 99.

(Signature of Applicant)

(Notary Public)

My commision expires 7/18/2003

FOR DEPARTMENT USE ONLY

Transfer contains: _____ pages and _____ attachments	Protest filed by: _____
Received by: <u>HWT</u> Date: <u>4-12-99</u>	_____
Prelim. check by: _____ Fee: <u>\$100~~00~~</u>	_____
Receipted by: <u>HWT</u> Date: <u>4-12-99</u>	_____
Receipt Number: <u>#E024894</u>	_____
Published in: <u>News Examiner</u>	Copies of protest forwarded by: _____
Published dates: <u>4/22 & 4/29/99</u>	Hearing held by: _____ Date: _____
Watermaster recommendation requested on: _____	Recommended for: ☒ approval ☐ denial
_____ rec'd: _____	by: <u>BDC</u>
Copy of transfer sent to lien holder on: _____	

MICROFILMED

FEB 02 2000

RECEIVED

Claim No. 11-04121

APR 16 1999

\$50⁰⁰/₁₀₀

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

AMENDED

CLAIM TO A WATER RIGHT

AMENDED

Under the provisions of Section 42-243, *Idaho Code*, any person claiming a water right established by diversion and application of water to beneficial use must file a claim with the Department of Water Resources. **The filing of this claim does not confirm the water right claimed.** Water rights represented by a valid permit, license, decree, or previous claim are exempt from this requirement, as are uses of water for domestic purposes as defined in Section 42-111, *Idaho Code*. A filing fee must be submitted with this claim. See the instruction sheet to determine the appropriate fee.

Notice is hereby given that City of Georgetown
(Name of Claimant)
Post Office Box 99, Georgetown, Idaho Telephone No: (208) 847-2120
(Mailing Address) (Zip Code)

claims a right to the diversion and beneficial use of surface or ground water. The extent and nature of said claim is as follows:

1. Date of Priority: (When the water was first applied to beneficial use) June 1, 1958
A claim is not acceptable for the use of surface water with a priority later than May 20, 1971. A claim is not acceptable for the use of ground water with a priority date later than March 25, 1963, unless the water is used for domestic purposes as defined in Section 42-111, Idaho Code.

2. Describe the source of water: (Name of stream, lake, spring, etc., or ground water)

Spring tributary to Georgetown Creek, Right Hand Fork

3. Describe the purpose for which the water has been used and the time during the year when you have used the right claimed:

(cfs or af)

(Irrigation, Domestic, Stock, Etc.)

(Both dates inclusive)
(MM/DD) (MM/DD)

Quantity <u>2.76 cfs</u>	Use <u>Municipal</u>	Period of Use From <u>1/1</u> to <u>12/31</u>
Quantity _____	Use _____	Period of Use From _____ to _____
Quantity _____	Use _____	Period of Use From _____ to _____
Quantity _____	Use _____	Period of Use From _____ to _____

4. 2.76 cfs TOTAL QUANTITY USED.
(cfs or af)

5. A) Location of point of diversion is SW $\frac{1}{4}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$, Govt. Lot _____
Sec. 10 Township 11S Range 44E B.M., Bear Lake County; additional points of
diversion, if any: _____

B) Describe means of diversion of water: (Pump and pipeline, well, diversion dam, reservoir, length of ditch etc.). Give sizes and capacities. Be specific. Describe any changes in the system and give the date of the change.
Spring box with approx. 1.0 mile pipeline to storage tank to pipeline for water delivery system for City of Georgetown.

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MAY 03 1999

RECEIVED

MAR 04 1999

6. A) Describe the place of use within each 40-acre tract in the appropriate box using the symbols listed below. If the use is for irrigation, describe the location by listing the number of irrigated acres within each 40-acre tract.
D - domestic, S - stockwater, M - municipal, C - Commercial, I - Industrial, X - other

Twp	Rge	Sec	NE¼				NW¼				SW¼				SE¼				TOTAL ACRES
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SE	SW	
*																			

* Place of use is within city limits of Georgetown

TOTAL ACRES _____

- B) If water is used for purposes other than irrigation, fully describe the use. Be specific. _____
Municipal use within city limits of Georgetown, Idaho.

NOTE: Include here the type and number of stock watered: _____

7. Remarks: Contact for city: Paul Miller (208)540-1969
Amended per Georgetown Water Source Study by Sunrise Engineering, Inc. November 1998

8. **Map** -- Attach an 8½"x11" map clearly identifying the point of diversion and the place of use by 40-acre subdivisions, section, township and range of the public land survey system. (A photocopy of a USGS 7½ minute topographic quadrangle map is preferred.) Attach an **aerial photograph** of the place of use if available.

State of Idaho)
 County of Bear Lake) ss.

Be it known that the undersigned, being duly sworn, deposes and says that he, she, they subscribed the forgoing claim to a water right, together with all attached information, and that the matters and facts therein are true to the best of the affiant's knowledge.

Joseph Wade Clark Mayor
 Claimant's Signature (and title if claim is for an organization)

Sworn to before me this 28th day of February 1999.

William S. Lee
 Notary Public

Residing at: Georgetown, Idaho

My commission expires: 7/12/2003

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MAY 03 1999

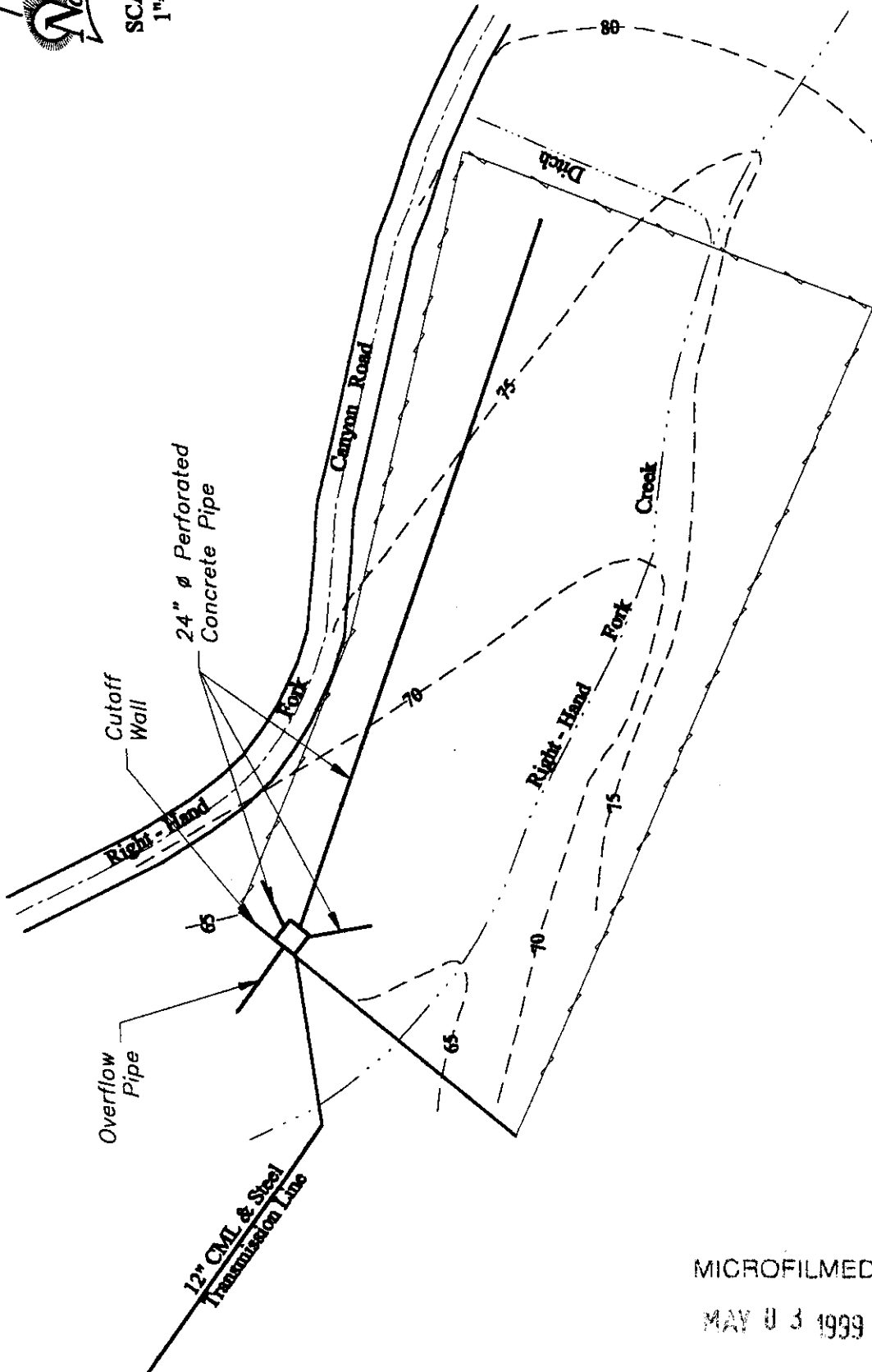
FOR DEPARTMENT USE ONLY

Received by [Signature] Date 3-4-99
 Prelim. check by _____ Date _____
 Fee 50.00 Receipt # EO24810
 Receipt prepared by SC Date 3-9-99

Published in News Examiner
 Publication dates 3-18 & 3-25-99
 Publication checked by EX Date 4/9/99
 Exceptions filed by _____



SCALE:
1"=50'



MICROFILMED
MAY 03 1999

DESIGNED	CHECKED	DRAWN
SJA	EJS	PGE
DATE	EXHIBIT	
10-31-98	2.2.3	
SCALE	SHEET NO	
1"=50'	1 OF 1	

GEORGETOWN WATER SOURCE STUDY

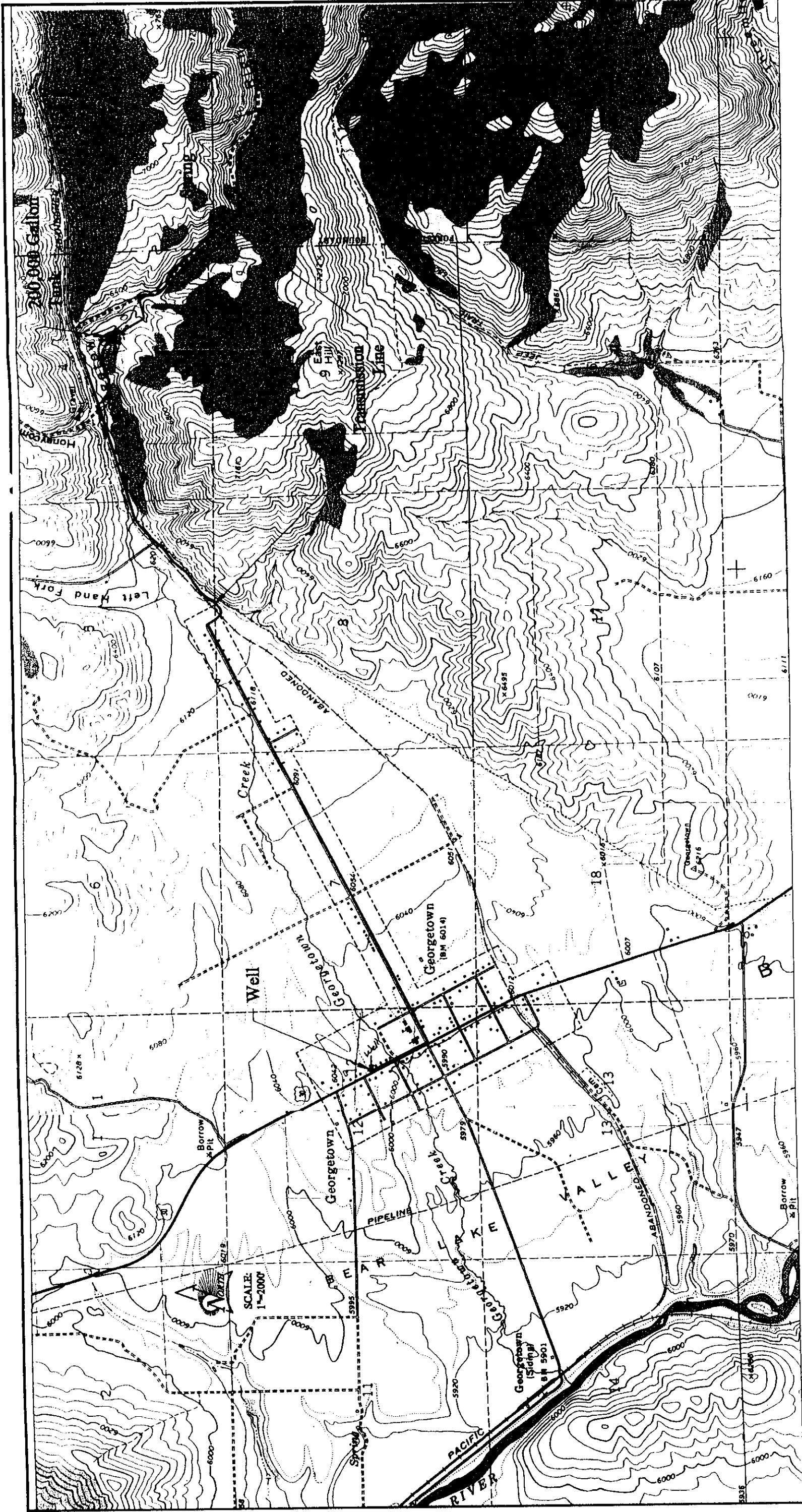
SPRING AREA



SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS & LAND SURVEYORS

47 EAST 4TH AVE., AFTON, WY.



DESIGNED	SLA	CHECKED	EJS	DRAWN	PGE
DATE	10-31-98				EXHIBIT 2.2.1
SCALE	1" = 2000				SHEET NO. 1 OF 1

GEORGETOWN
WATER SOURCE STUDY
WATER SYSTEM



SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
47 EAST 4TH AVE., AFTON, WY 83110

REVISIONS	
NO	DATE
1	
2	
3	

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES



CLAIM TO A WATER RIGHT

Under the provisions of Section 42-243, Idaho Code, any person using or claiming rights to the public waters of Idaho established by diversion and application to a beneficial use must file a claim with the Department of Water Resources on or before June 30, 1983. Exempted from this filing are single family domestic uses as defined in Section 42-230(d), Idaho Code. Also exempted are rights represented by a permit, license, decree, adjudicated right, or a previously filed claim.

The filing of this claim does not confirm the water right claimed but failure to file may result in forfeiture of a water right.

Notice is hereby given that City of Georgetown
(Name of Claimant)
Georgetown, Idaho 83239 Telephone No. 847-2120
(Mailing Address) (Zip Code)

claims a right to the diversion and beneficial use of the surface or ground water. The extent and nature of said claim is as follows:

- (1) Date of priority: (When was the water first applied to a beneficial use) June 1, 1958
A claim is not acceptable on a ground water source with a priority later than March 25, 1963 or on a surface water source with a priority later than May 20, 1971. An exception is that a claim may be filed on single family domestic use from a ground water source.
- (2) Describe the source of water: (Name of stream, lake, spring, etc., or ground water)
Spring tributary to Georgetown Creek
- (3) Describe the purpose for which the water has been used and the time during the year when you have used the right claimed:
- | (cfs, gpd, AFA) | (Domestic, Irrigation, Stock, Etc.) | (Both dates inclusive) | |
|--------------------------|-------------------------------------|-------------------------------|-----------------|
| | | (Mo., Day) | (Mo., Day) |
| Quantity <u>0.62 cfs</u> | Use <u>Municipal</u> | Period of Use From <u>1/1</u> | To <u>12/31</u> |
| Quantity _____ | Use _____ | Period of Use From _____ | To _____ |
| Quantity _____ | Use _____ | Period of Use From _____ | To _____ |
| Quantity _____ | Use _____ | Period of Use From _____ | To _____ |
| Quantity _____ | Use _____ | Period of Use From _____ | To _____ |
- (4) 0.62cfs TOTAL QUANTITY USED.
(cfs, gpd, AFA)
- (5) A) Point of diversion: (Location of point where water is diverted from its source)
NW ¼ NE ¼, Sec. 10 Twp. 11 S. Rge. 44 E. B.M., County of BEAR LAKE
Additional points of diversion: _____

B) Describe means of diversion of water: (Pump and pipeline, well, diversion dam, reservoir, length of ditch and field, etc.). Give sizes and capacities: be as specific as possible. Describe any changes in the system and give the date of the change. 2.0 mile of gravity water line from spring to City of Georgetown

- (6) A) Describe location of use by listing number of irrigated acres within each 40-acre tract in appropriate box. If use is not for irrigation, place an "X" in appropriate box to show location.

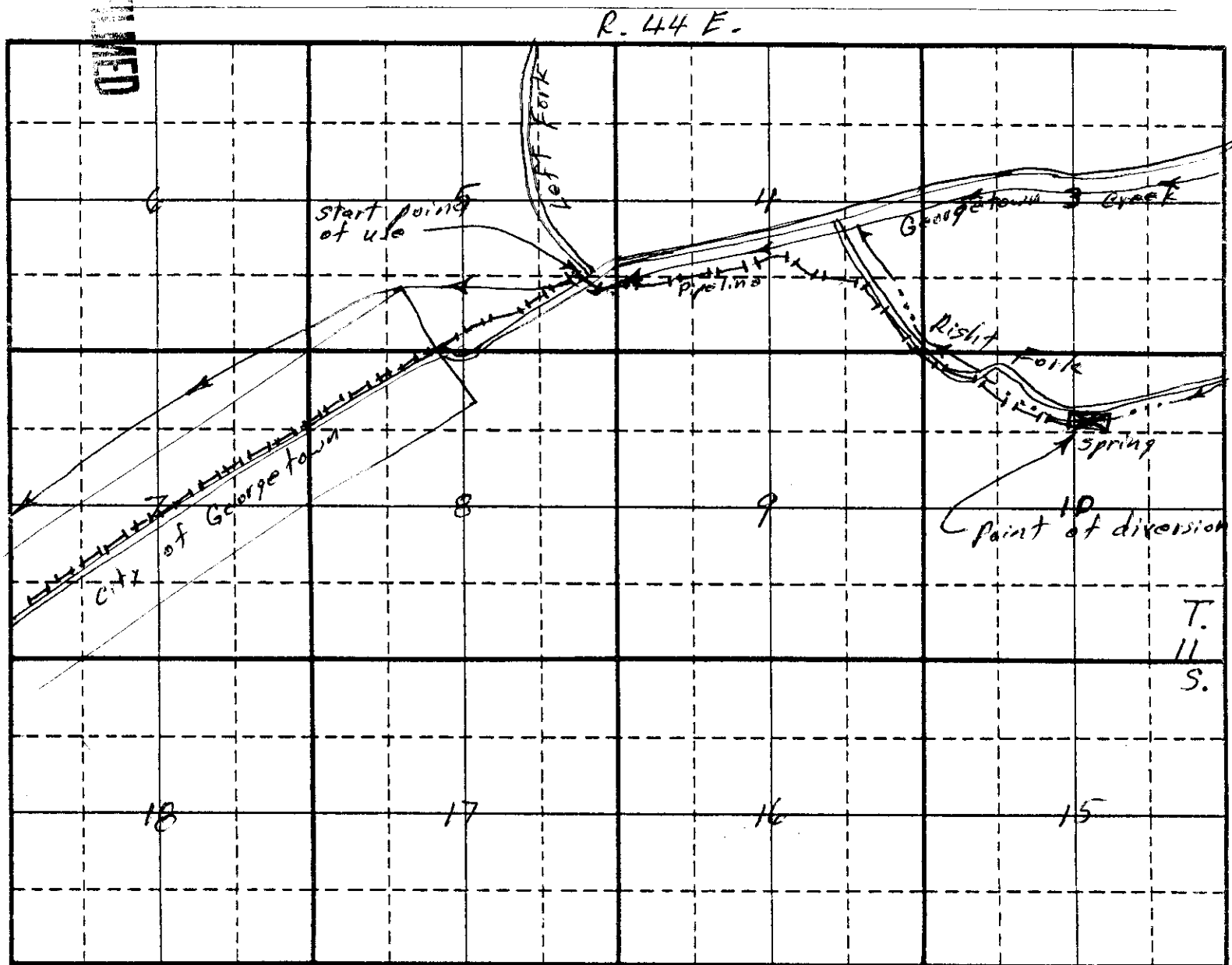
T	R	SEC.	NE¼				NW¼				SW¼				SE¼				TOTAL
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
11 S.	43 E.	12			X	X									X	X	X	X	
11 S.	43 E.	13	X																
11 S.	44 E.	7	X	X	X	X					X	X	X			X			
11 S.	44 E.	8					X	X	X										
11 S.	44 E.	18					CITY OF GEORGETOWN												
11 S.	44 E.	5			X	X								X	X	X	X	X	

No. of acres _____

B) If water is used for other than irrigation, fully describe that use, being as specific as possible:
This is for domestic use for the City of Georgetown, Idaho

NOTE: Include here the type and number of stock watered: _____

- (7) If you are claiming water as a member of an organization, list name of organization: _____



Scale: 2 inches equal 1 mile.

Map should show the location of the point of diversion and the place of use of the water by 40-acre subdivisions, section, township and range of the public land survey system.

State of Idaho)
County of Bear Lake) ss.

Be it known that the undersigned, being duly sworn, deposes and says that he, she, they subscribed the foregoing claim to a water right, together with all attached information, and that the matters and facts therein are true to the best of the affiant's knowledge.

Clarence M. Harper (Mayor)
(Claimant)

Sworn to before me this 4th day of June, 1981.

Allen L. Miller
Notary Public
Residing at Georgetown, Idaho

My commission expires _____

FOR DEPARTMENT USE ONLY

Received by <u>KW EME</u>	Date <u>6/8/81</u>	Exception filed by:	Forwarded to	Date
Prelim. check by <u>HWS</u>	Date		claimant by:	
\$20.00 fee received by <u>KW EME</u>	Date <u>6/8/81</u>	<u>7/6/81 #17775</u>		
Published in <u>News Examiner</u>				
Dates <u>7/16 & 7/23/81</u>				

AFFIDAVIT OF PUBLICATION

STATE OF IDAHO,
County of Bear Lake

ss.

R. J. Spencer

being duly sworn,

deposes and says:

That he is the *Publisher* of THE NEWS-EXAMINER, a weekly newspaper published at Montpelier, in the County of Bear Lake and State of Idaho; and said paper has been and is in general circulation in the county aforesaid, and in the vicinity of Montpelier; that the advertisement, a copy of which is attached hereto, was published in said newspaper once a week for *2* consecutive weeks in the regular and entire issue of said paper during the period and time of publication, and was published in the newspaper proper and not a supplement; that said paper has been established and regularly published for more than seventy-eight consecutive weeks prior to the date of first publication of said advertisement.

Such notice was published in the issue beginning with

7/16, 19*81*, and ending with the issue of *7/23*, 19*81*.

Fees, *2.50*

Subscribed and sworn to before me this *6th* day

of *Oct*, 19*81*

Notary Public, Residing at Montpelier, Idaho

My Commission Expires *lifetime*, 19*81*

LEGAL NO. 1709

NOTICE OF CLAIMS Department
TO WATER RIGHTS Eastern

Notice is hereby given that the following claim(s) to water right(s) have been established by diversion and application to beneficial use:

11-4121

CITY OF GEORGETOWN
P.O. Box 791, GEORGETOWN, ID 83229

Source: SPRING tributary to GEORGETOWN CREEK

Priority Date: 06-01-1958

Amount: 0.62 CFS

Diversion Point: NWNE Sec 10 T 11S R 44E, BEAR LAKE Co.

Use: MUNICIPAL (0.62 CFS)

from 01-01 to 12-31

Place of Use: SWNE SENE NESE
NWSE SWSE SESE Sec 12 T 11S R 43E
NENE Sec 13 T 11S R 43E NENE
NWNE SWNE SENE NESW NWSW
SWSW NWSE Sec 07 T 11S R 44E
NENW NWNW SWNW Sec 08 T 11S R 44E
NENW Sec 12 T 11S R 44E SWNE
SENE SESW NESE NWSE SWSE
SESE Sec 05 T 11S R 44E
Diversion Means: GRAVITY WATER LINE.

Any exception to any claim of water right may be filed with the Director of the Idaho Department of Water Resources, 150 Shoup Ave., Idaho Falls, Idaho 83402.

A. KENNETH DUNN
Director

Published 7-16 & 7-23-81.

7-16, 7-23
40 LINES

LEGAL NO. 1700

**NOTICE OF CLAIMS
TO WATER RIGHTS**

Notice is hereby given that the following claim(s) to water right(s) have been established by diversion and application to beneficial use:

11-4121

CITY OF GEORGETOWN
P.O. Box 791, GEORGETOWN, ID
83239

Source: SPRING tributary to
GEORGETOWN CREEK

Priority Date: 06-01-1958

Amount: 0.62 CFS

Diversion Point: NWNE Sec 10 T 11S
R 44E, BEAR LAKE Co.

Use: MUNICIPAL (0.62 CFS)

Place of Use: SWNE SENE NESE
NWSE SWSE SESE Sec 12 T 11S R 43E
NENE Sec 13 T 11S R 43E NENE
NWNE SWNE SENE NESW NWSW
SWSW NWSE Sec 07 T 11S R 44E
NENW NWNW SWNW Sec 08 T 11S R
44E NENW Sec 18 T 11S R 44E SWNE
SENE SESW NESE NWSE SWSE
SESE Sec 05 T 11S R 44E
Diversion Points: GRAVITY WATER
LINE.

Any exception to any claim of water right may be filed with the Director of the Idaho Department of Water Resources, 150 Shoup Ave., Idaho Falls, Idaho 83402.



A. KENNETH DUNN
Director

Published 7-16 & 7-23-81.

7-16, 7-23
40 LINES



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

January 7, 2000

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

CITY OF GEORGETOWN
PO BOX 99
GEORGETOWN ID 83239

RE: Water Right 11-04121 (Transfer 5446)

Dear Water Right Holder(s):

Enclosed is the copy of your approved Transfer of Water Right for the above referenced water right (Transfer 5446). Please be sure to thoroughly read the Conditions and Remarks listed on the transfer. Also, please be advised that the accompanying transfer approval should be considered and treated as a **preliminary order** of the department issued pursuant to section 67-5243, Idaho Code. Enclosed are instructions for responding to **Preliminary Orders** if you are in disagreement with the approved transfer.

Please note that as of July 1, 1996, water right owners are required to report any change of water right ownership and any change of mailing address of the owner of a water right to the department. Notice of the change must be provided to the department within 120 days of the change. Change reporting forms are available from any office of the department.

Please feel free to contact the department if you have questions.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Jeff Peppersack'.

Jeff Peppersack, Manager
Water Right Permits Section

JP:klt

Enclosures

MICROFILMED

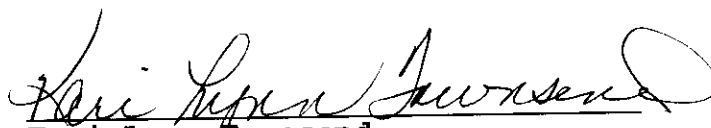
FEB 02 2000

CERTIFICATE OF MAILING

I hereby certify that on the 7th day of **January, 2000** I mailed a true and correct copy, postage prepaid, of the foregoing **TRANSFER APPROVAL** to the person(s) listed below:

RE: WATER RIGHT 11-04121 (Transfer 5446)

**CITY OF GEORGETOWN
PO BOX 99
GEORGETOWN ID 83239**


**Kari Lynn Townsend
Secretary**

MICROFILMED

FEB 02 2006



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

January 7, 2000

PETE PETERSON
WATERMASTER
2483 RIVERDALE RD
PRESTON ID 83263

RE: TRANSFER OF WATER RIGHT 11-04121 (Transfer 5446)

Dear Pete:

Enclosed is a copy of the recently approved Transfer of Water Right for the above referenced water right (Transfer 5446) in the name of City of Georgetown.

Also enclosed is a copy of the reviewers' notes.

If you have any questions, please call me at 208-327-7940.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Jeff Peppersack'.

Jeff Peppersack, Manager
Water Right Permits Section

JP:klt

Enclosures

MICROFILMED

FEB 02 2000

Responding to Preliminary Orders Issued by the Idaho Department of Water Resources

The Idaho Department of Water Resources (Department) issues water right permits, licenses, and transfers as preliminary orders pursuant to section 67-5243, Idaho Code. A preliminary order can and will become a final order without further action of the department unless a party petitions for reconsideration or files an exception and/or brief 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 the order. 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 twenty-one (21) 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 a 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. Otherwise, a preliminary order will become a final order of the Department.

If any party appeals or takes exceptions to a preliminary order, opposing parties shall have twenty-one (21) days to respond to any party's appeal. Written briefs in support of or taking exceptions to the preliminary order shall be filed with the Department. The Department retains the right to review the preliminary order on its own motion.

ORAL ARGUMENT

If the Department grants a petition to review a preliminary order, the Department 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 Department will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Department orders otherwise, all oral arguments will be heard in Boise, Idaho.

MICROFILMED

FEB 07 2000

CERTIFICATE OF SERVICE

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

FINAL ORDER

The Department 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 Department 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.

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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
EASTERN REGION
IDAHO FALLS, ID
ph. (208) 525-7161

FAX NO. (208) 525-7177

TRANSMITTAL COVER SHEET

OMNIFAX

TO: DAN SKAGGS FROM: HEW JONES

DOCUMENT DESCRIPTION: GM Comment Tr. 5446

TOTAL NUMBER OF PAGES (Including this page): 2

*
* BILLING ADDRESS: _____
*
*
*
* NO. OF PAGES _____ COST/PAGE _____ TOTAL CHARGE _____
*

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FEB 02 2000

TOTAL P.01

APPLICATION FOR TRANSFER OF
WATER RIGHT NO. 11-0421/tr.546

WATER DISTRICT: 11

WATERMASTER: Pete Peterson

DATE: 5-2000

HAS THIS WATER RIGHT(S) BEEN DELIVERED WITHIN THE LAST FIVE YEARS?

YES

NO 7 *

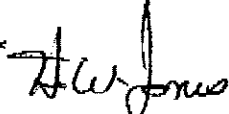
COMMENTS: Don't know

X

I do endorse approval of this change.

I do not endorse approval of this change.

I recommend the following conditions of approval:


Watermaster* The Watermaster does not go up these small tributaries + springs
to deliver water in this Goose Lake area.

MEMORANDUM

TO: Right 11-04121

FROM: Pam Skaggs/State Office

SUBJECT: Transfer 5446

DATE: January 6, 2000

Transfer 5446 adds groundwater points of diversion to the existing spring source under Right 11-04121. Review of the proposal by the Hydrology Section found that the source of the spring and groundwater are from the same drainage basin and the effects of the transfer should be minimal on the regional aquifer.

The city is seeking the groundwater points of diversion for use while repairs and construction to the original spring source are completed. Two proposed wells have been identified; however construction of the second well will depend on the results and production of the first well. All three points of diversion, two groundwater and the spring diversion, are included on the transfer approval to allow for flexibility.

Region staff failed to request the watermaster comment during region review. The comment has been requested and transfer will be withheld from processing until the watermaster's recommendation has been received and considered.

Recommended approval conditions include drilling permit conditions, watermaster control, measuring & lockable devices, multiple points of diversion limits, non-confirmation of claim and standard transfer conditions.

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TRANSFER REVIEW SHEET

(10-99)

Transfer # 5446

Date Reviewed 01-05-2000 23

Right(s) 11-0 4/21 _____

☒ WRQ/Split Summary NA ^{Outside SRBA} SRBA Status NA ^{Municipal} Run POU Comparison Report

B:Change P/D C:Add P/D D:Change P/U E:Change Nature of Use
 F:Change Period of Use G:Other H:Change P/D & Add P/D
 I:Change P/D & P/U J:Add P/D & Change P/U

Proof of Ownership City - Municipal use.

Transfer ☒ All of Right _____ Portion of Right
 Resulting Split(s) NONE

Check Transfer Against Recorded Right:

Standard Season 01-01 to 12-31 Standard Volume NA
/

- (1) ☒ Priority (2) ☒ Use (3) ☒ Season/W61 (4) ☒ Rate (5) NA Volume
 (6) _____ Source (7) _____ P/D (8) ☒ P/U (9) ☒ Proof/Owner (10) ☒ Map
 (11) 11 Water District (12) NO Pertinent Conditions (13) NO Expansion
WM Comment Rev'd 1-4-2000 w/limits
(6) Add 2 wells for groundwater diversion - new source
(7) 2 P/Ds added

No surface to GW condition per LGS in this case.
Hydrology Section review finds Spring + GW from same drainage basin +
transfer should have minimal affect on regional aquifer. (See 12-14-99 Memo)

Transfer Remarks P/U w/in City (W58) (W34)
Conditions 0416, R04, R43, T07, T08, replaced by R43

Database/Processing Notes _____ Standard ☒ Non-Standard _____
T file

"T" Files Update Complete ☒ Approval Form ☒ Transfer Memo ☒
 Database Updated Following Approval ☒ Memo/Form Files Deleted ☒

28 01-06-2000

WR0631NP

IDAHO DEPARTMENT OF WATER RESOURCES
PREFIX/SPLIT QUERY

DATE: 01/05/00
TIME: 13:26:59
PAGE: 1

WATER RIGHT NO.	NAME	OWNER	PRIORITY DATE	STG/STS	SOURCE	USE DESC	SYSTEM
11-04121	CITY OF GEORGETOWN	C	06/01/1958	S/	SPRING	MUNI	WR
T11-04121	CITY OF GEORGETOWN	C	06/01/1958	S/	SPRING	MUNI	WR
					GROUNDWATER		

MEMORANDUM

December 16, 1999

To: Pam Skaggs\Water Rights Permits Section
From: Shane Bendixsen\Hydrology
Subject: Transfer 5446: City of Georgetown

It is my understanding that transfer 5446 proposes to transfer (temporarily ?) 2.76 cfs which was historically diverted from a spring water to ground water. The transfer will be from T11S-R44E, sec 10 to T11S-R44E, sec 4 (approximately one mile to the northwest). The purpose for the transfer is to provide the City of Georgetown with an alternate supply of water while they redevelop the spring. After redevelopment, the well may be used for a backup water supply.

The question is "is the spring source the same as the proposed well source"? The following is a brief review of the Sunrise Engineering Inc., March 1999 report. Figure 1 and Figure 2 (not attached) as referred to in this memo are from the aforementioned report.

Currently the spring can produce 1200 gpm. A well that can produce 425 gpm would be capable of supplying the town until the spring is redeveloped. Site selection was based on locating the well next to preexisting facilities (i.e. water tank and power lines) for economic purposes (see Figure 1). Two sites were selected incase the primary proved unproductive.

Both the spring and proposed well locations (see Figure 2) are located in consolidated rock (hard rock). These include three limestone and one sandstone unit. Flow from the spring would naturally pass through the sandstone and one of the limestone units. The area is also extensively faulted.

Consolidated rocks are much more variable than alluvium in terms of producing high yielding water wells. Yields can range from extremely high to practically nothing. Aerial extent is usually limited in these types of aquifers, which in turn limits storage and development.

Ground water development in the area is extremely limited and therefore data are not available to determine if the spring and the aquifer underlying the proposed well sites are connected. It can be assumed that since the natural spring flow and the proposed well sites are in the same drainage basin, that it would be the same aquifer. In an alluvial aquifer this would probably be the case. In this case the natural flow passes over a fault

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and a geologic contact between a limestone and the sandstone. Therefore an aquifer boundary could very well exist.

While the spring is in redevelopment, spring flow will follow the natural surface drainage and probably recharge the aquifer underlying the proposed well sites. Pumpage from the well is also proposed to be less (1/3) than the existing spring production. Therefore whether the existing spring or the aquifer underlying the proposed well sites are connected is not a factor. No regional decline should occur.

Future development though may force increased production. If the well is used for this and not a backup, ground water declines are always possible.

Another point of consideration may be that possibly neither of the proposed wells will provide significant production. Three previous wells drilled close to the site had very minimal production. Two miles southwest of the proposed well site, wells can be drilled into an alluvial aquifer and probably achieve more than sufficient production. Therefore the City of Georgetown may be applying for another transfer. The rationale for approving the transfer will be the same as the one presented above.

In closing, I concur with Sunrise Engineering Inc. that the transfer will not affect ground water storage in the regional aquifer.

Cc Hal Anderson & Paul Castelin

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FEB 02 2000

MEMORANDUM

COPY

TO: Shane Bendixson

FROM: Pam Skaggs/Water Rights Permits Section

SUBJECT: Transfer 5446

DATE: December 7, 1999

Transfer 5446 proposes to add groundwater as a source under Right 11-04121 which is historically diverted from a spring that is tributary to Georgetown Creek, Right Hand Fork. The applicant, City of Georgetown, has provided a report on the hydrologic relationship between the springs and the wells as proposed on the application.

Please review the proposed change under Transfer 5446 and the hydrologic information provided by Sunrise Engineering, Inc. (see attached) and advise me of your evaluation of this proposal. I will withhold the application from further processing until I have received your response.

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FEB 02 2000

AFFIDAVIT OF PUBLICATION

RECEIVED

MAY 07 1999

STATE OF IDAHO,
County of Bear Lake

ss.

Department of Water Resources
Eastern Region

Rosa S. Moosman

being duly sworn,

deposes and says:

That he is the Editor of THE NEWS-EXAMINER, a weekly newspaper published at Montpelier, in the County of Bear Lake and State of Idaho; and said paper has been and is in general circulation in the county aforesaid, and in the vicinity of Montpelier; that the advertisement, a copy of which is attached hereto, was published in said newspaper once a week for 2 consecutive weeks in the regular and entire issue of said paper during the period and time of publication, and was published in the newspaper proper and not a supplement; that said paper has been established and regularly published for more than seventy-eight consecutive weeks prior to the date of first publication of said advertisement.

Such notice was published in the issue beginning with

April 21, 1999, and ending

with the issue of April 28, 1999

Rosa S. Moosman

Fees, \$73.64

Subscribed and sworn to before me this 27th day

of April, 1999

Sherry Brown
Notary Public, Residing at Montpelier, Idaho

My Commission Expires August 28, 2003

PROPOSED CHANGE OF A WATER RIGHT NO. T5446

Notice is hereby given that City of Georgetown, PO Box 99, Georgetown, ID 83239, has applied to the Department of Water Resources to add a point of diversion and to add a source of water to the existing surface water source. The right sought to be changed is evidenced by a claim and recorded as follows:

Claim No.: 11-04121

Source: Spring/Georgetown Creek

Amount: 2.76 cfs

Priority: 6/1/1958

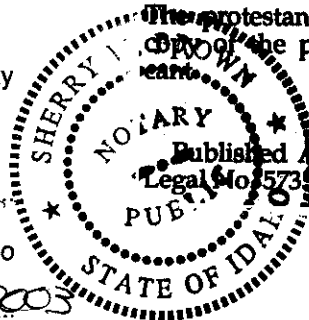
Point of Diversion(s): SWN-WNE SEC 10 T11S R44E, Bear Lake County

The water is used for municipal within the city limits of Georgetown ID.

TO BE CHANGED AS FOLLOWS:

The applicant contends that drilling a well or wells in the NESE and SWNE SEC 4 T11S R44E will intercept the same spring water now used for Municipal purposes. These wells will serve as the source of City water while the original spring diversion is rebuilt.

Any protests against approval of the proposed changes must be filed with the Idaho Department of Water Resources, 900 N Skyline Dr. Ste A, Idaho Falls, ID 32402, together with a protest fee of \$25.00 on or before May 10, 1999. The protestant must also send a copy of the protest to the applicant.



KARL J. DREHER
Director

Published April 21, 28, 1999 —
Legal No. 5735

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FEB 02 1999



State of Idaho

DEPARTMENT OF WATER RESOURCES

900 N. Skyline Dr., Suite A, Idaho Falls, Idaho 83402-1718 - (208) 525-7161- Fax (208) 525-7177

EASTERN REGION

April 15, 1999

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

**CITY OF GEORGETOWN
PO BOX 99
GEORGETOWN ID 83239**

RE: Application for Transfer #5446

Dear Applicant:

This office is currently in the process of advertising the application in the News Examiner on April 22 and 29, 1999. The advertisement will be published once a week for two consecutive weeks, and a period of ten days following the second publication will be allowed for the submittal of protests.

If the application is protested, you will be sent a copy of the protest. The protest must be resolved before the application is approved or denied. If the protest is not resolved voluntarily, this Department will conduct a conference and/or hearing on the matter.

Please feel free to contact this office if you have any questions regarding this procedure.

Sincerely,

**Harold W. Jones
Water Right Supervisor**

HWJ::sc

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FEB 02 2000



State of Idaho

DEPARTMENT OF WATER RESOURCES

900 N. Skyline Dr., Suite A, Idaho Falls, Idaho 83402-1718 - (208) 525-7161- Fax (208) 525-7177

EASTERN REGION

April 15, 1999

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

**DEPARTMENT OF ENVIRONMENTAL QUALITY
224 S ARTHUR
POCATELLO ID 83204**

RE: Applications for Transfer #5446

Dear Sirs:

We are enclosing a copy of the application (s) that may be of interest to your department. Please review the application (s) and submit any comments you may have to our Department as soon as possible. The last date of protest is May 10, 1999, and we are required to take final action shortly thereafter.

If we may be of further assistance, please feel free to contact us.

Respectfully submitted,

**Harold W. Jones
Water Right Supervisor**

HWJ: sc

Enc.

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FEB 02 2000



State of Idaho

DEPARTMENT OF WATER RESOURCES

900 N. Skyline Dr., Suite A, Idaho Falls, Idaho 83402-1718 - (208) 525-7161- Fax (208) 525-7177

EASTERN REGION

April 15, 1999

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

**JODY L WILLIAMS, ESQ.
KRUSE LANDA & MAYCOCK LLC
50 W BROADWAY 8TH FLOOR
SALT LAKE CITY UT 84101**

RE: Applications for Transfer #5446

Dear Sirs:

We are enclosing a copy of the application (s) that may be of interest to your department. Please review the application (s) and submit any comments you may have to our Department as soon as possible. The last date of protest is May 10, 1999, and we are required to take final action shortly thereafter.

If we may be of further assistance, please feel free to contact us.

Respectfully submitted,

**Harold W. Jones
Water Right Supervisor**

HWJ: sc

Enc.

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State of Idaho

DEPARTMENT OF WATER RESOURCES

900 N. Skyline Dr., Suite A, Idaho Falls, Idaho 83402-1718 - (208) 525-7161- Fax (208) 525-7177

EASTERN REGION

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

April 15, 1999

**NEWS EXAMINER
PO BOX 278
MONTPELIER ID 83254**

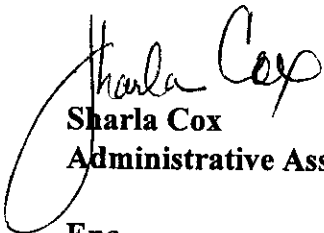
Dear Publisher:

Enclosed you will find a legal notice which we wish to have published on the dates indicated in your newspaper. 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. Your cooperation is appreciated.

Please send the affidavit of publication and publication billing to this office before May 10, 1999.

Respectfully submitted,


Sharla Cox
Administrative Assistant

Enc.

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SEP 02 2000

NOTICE OF PROPOSED CHANGE OF A WATER RIGHT
NO. T5446

Notice is hereby given that City of Georgetown, PO Box 99, Georgetown, ID 83239, has applied to the Department of Water Resources to add a point of diversion and to add a source of water to the existing surface water source. The right sought to be changed is evidenced by a claim and recorded as follows:

Claim No.: 11-04121 Source: Spring / Georgetown Creek
Amount: 2.76 cfs Priority: 6/1/1958
Point of Diversion(s): SWNWNE SEC 10 T11S R44E, Bear Lake County
The water is used for municipal within the city limits of Georgetown ID.

TO BE CHANGED AS FOLLOWS:

The applicant contends that drilling a well or wells in the NESE and SWNE SEC 4 T11S R44E will intercept the same spring water now used for Municipal purposes. These wells will serve as the source of City water while the original spring diversion is rebuilt.

Any protests against approval of the proposed changes must be filed with the Idaho Department of Water Resources, 900 N Skyline Dr. Ste A, Idaho Falls, ID 83402, together with a protest fee of \$25.00 on or before May 10, 1999. The protestant must also send a copy of the protest to the applicant.

KARL J. DREHER
Director

Published in the News Examiner on April 22 & 29, 1999.

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FEB 02 2000



GEORGETOWN WELL SITING

Prepared for:

The Town of Georgetown
P.O. Box 99
Georgetown, ID 83239

Sunrise Project No. E8070.06
March 31, 1999

Prepared by:

Sunrise Engineering, Inc.
12227 S. Business Park Drive, Suite 220
Draper, UT 84020
Phone: 801-523-0100
Fax: 801-523-0990



MICROFILMED *Entire Book*
FEB 02 2000
SCANNED *Entire Book*
SEP 01 2004

March 24, 1999

RECEIVED

APR 12 1999

Department of Water Resources
Eastern Region

RE: Well Siting Study - Georgetown
Sunrise Project No. E8070.06

Dear Mr. Archibald;

Provided herewith is the final report concerning potential well site locations for future groundwater development in the vicinity of Georgetown. Thank you for your comments on the draft report.

If you have any questions, please feel free to contact us at (801) 523-0100.

Sincerely,
Sunrise Engineering, Inc.

Prepared by:



Z. (Joe) Zhao, P.E., Ph.D
Project Engineer

Reviewed by:

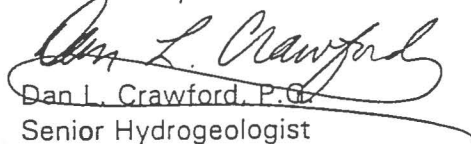

Dan L. Crawford, P.G.
Senior Hydrogeologist

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FIGURES

FIGURE 1. AREA MAP

FIGURE 2. GEOLOGICAL MAP

APPENDIX – DRILLER’S WELL LOGS

GEORGETOWN WELL SITING

1.0 INTRODUCTION

1.1 *Background*

The Georgetown water supply system is currently supplied by a spring located approximately four miles northeast of the town in the Right Hand Fork Canyon. The topographic location of the spring is: 1000 feet (ft.) South 2500 ft. West from the Northeast Corner of Section 10, Township 11 South, Range 44 East, Boise Base & Meridian as shown in **Figure 1**. **Figure 1** is modified from a portion of the U.S. Geological Survey (USGS) 7.5 series Quadrangle Map for Georgetown, Idaho (USGS, 1970). Production of the spring is approximately 1200 gallon per minute (gpm). Water from the spring is transmitted through an 8-inch transmission line to a 200,000 gallon water storage tank located about 1000 ft. southwest of the confluence of Georgetown Canyon and the Right Hand Fork and at an elevation of about 6400 ft. Georgetown plans to redevelop the spring to prevent surface water influence, if any, and increase its production. A well capable of producing 425 gpm is desired to supply water to the town during redevelopment of the spring. In the future, the well will be used as a backup water resource for the spring. The town would like to locate a well close to the water tank and power lines in order to use the existing water collection and distribution facilities.

1.2 *Objective*

The objective of this study was to determine if favorable well sites exist in the vicinity of the existing water storage tank. In order to determine favorable groundwater zones in the area, we completed the following tasks:

- Obtained and reviewed published and readily available unpublished geologic and hydrogeologic data of the area.
- Reviewed geologic, construction and aquifer yields of existing wells in the area.
- Identified potential well locations and depths.
- Evaluated well locations for potential yield and water quality.

No fieldwork beyond a site visit was completed as part of our evaluation of potential well sites.

2.0 GEOLOGIC DATA

This section includes a summary description of the surface and subsurface geology in the Georgetown area. The purpose of this section is to identify, characterize, and map the extent of: (1). Geologic units (aquifers) which provide acceptable, sufficient and economic quantities of groundwater. (2). Geologic units which may set vertical and horizontal limits on groundwater flow (aquitards or confining beds). (3). Faults which may be barriers or influence groundwater flow. (4). Fractures and/or karst features which may provide local and regional controls on groundwater production.

The geology of the Georgetown area is characterized by the "Bannock Overthrust Zone" (**Figure 2**). The Bannock Overthrust is interpreted as a westward-dipping imbricate overthrust zone possibly several tens of miles wide extending at least from southwestern Montana to north-central Utah (F.C. Armstrong and E.R. Cressman, 1963). The upper plates of the thrust moved to the northeast in response to an unknown force. Steep eastward-trending tear faults formed during thrusting probably in response to differential movement among the eastward-moving thrust plates.

Georgetown is located at the southeast boundary of the "Bear River Valley" from Georgetown to Threemile Knoll, which is the almost uninterrupted northward continuation of "Bear Lake Valley" (**Figure 2**). An important feature of the Bannock Overthrust is the folding of this originally near horizontal and rather regular thrust surface (Richards and Mansfield, 1912). Renewed compressional forces, acting in the same direction as the original thrusting, folded the fault surface into anticlinal and synclinal folds, some of which were locally overturned to the northeast. In the southern part of the area four folds, two anticlines and two synclines were recognized. The western anticline arches over Bear River Valley, the syncline next east passes beneath the Aspen Range and the town of Georgetown and Montpelier. The crest of the eastern anticline is exposed in Georgetown Canyon, on the Left Fork of Twin Creek, and in the Slug Creek window; the eastern syncline passes beneath Snowdrift Mountain.

Consolidated rocks exposed in the vicinity of the water storage tank include: Mississippian Age Madison limestone (Mm) and Brazer limestone (Mb), Jurassic Age Nugget sandstone (Jn) and Twin Creek limestone (Jt), and Tertiary Age Salt Lake formation (Tsl). Quaternary alluvium hill wash, talus and terrace gravel are not shown on the geologic map of the Georgetown area (**Figure 2**). Two southwest-dipping normal faults run through the water tank area and their dip angles are unknown. Georgetown Canyon and the Right Fork Creek cut through this area.

3.0 EXISTING DATA AND EVALUATION

Based on review of water rights records in the Georgetown area, four wells (Well #6, #7, #8 and #9 in **Figure 1**) were drilled northeast of the town in Section 7, T11S, R44E, Boise Base and Meridian. Their depths ranged from 65 to 400 ft. with yields varying from 5 to 500 gpm. Well #7, owned by A.M. Thompson, was 231 ft. deep and had the largest yield among the four wells. The yield/drawdown ratio (specific capacity) of this well was 500gpm/30ft. The well appeared to have tapped the unconsolidated sandy gravel aquifer according to its well log. The other three wells were not as deep as the Thompson's well and their yields were low ranging from 10 to 35 gpm. In the vicinity of the water storage tank, three wells were drilled (Section 4, Township 11 South, Range 44 East, Boise Base & Meridian as shown in **Figure 1**). Their depth ranged from 60 to 220 ft. Their specific capacities ratios were less than one (gpm/ft.). The driller reported that Well #1 (220 ft. deep) penetrated into "hard or broken limestone". The static water level at the completion of the well was 33 ft. below grade. An air test indicated a yield of 5 gpm with an unknown drawdown. The well log also indicated that water quality from this well was good. Well #2 was 100 ft. deep and the static water level was 31 ft. below grade. Its specific capacity was (15-20)gpm/29ft.. Well #3, the closest well to the water storage tank, was only 60 ft. deep and the static water level was 13 ft. below grade. Its specific capacity was 25 gpm/27 ft..

4.0 WELL LOCATIONS

The Thompson's well (Well #7), drilled in the unconsolidated sandy gravel aquifer, was pumped at 500 gpm with only 30 ft. drawdown. The other three wells close to the Thompson's well do not yield as much probably due to their shallow depths. Based on the production of the Thompson's well, potential future well development appears to be good in this area. However, a production well located in this area is not economically feasible because the town wants to use the existing water storage tank, which is about three miles to the northeast. A more economical option is to locate a production well of adequate quantity and quality of water close to the water storage tank.

The yields of the three existing wells (Well #1, 2 and 3 in **Figure 1**) are not promising. Local geological data indicated that these three wells were drilled in the Tertiary Age Salt Lake Formation (Tsl), which consists of conglomerate, tuff, and sandstone unit (Kariya *et. al.*, 1994) though the driller's well log showed that the

bedrock encountered was "hard or broken limestone". It is shown in **Figure 2** that the Salt Lake Formation or the so-called "limestone" is on the down-thrown plate of a normal fault. It is impossible to judge the porosity and fracturing conditions of the "limestone" with the existing data. We believe that the "limestone" is not quite fractured to conduct water to the wells.

Based on the geological and hydrogeological data available and our evaluation presented in the above section, two alternative well sites were outlined (Well A and Well B in **Figure 1**). Well A is about 800 ft. southeast of the water storage tank in the Right Hand Fork and Well B is about 700 ft. northeast of the water storage tank at the intersection of Georgetown Canyon and the Right Hand Fork. Both well sites are to be located in the potential Mississippian Madison aquifer. The topographic map shows that the Madison limestone aquifer may receive recharge from the mountain areas to the northeast, east and southeast through the Right Hand Fork and Georgetown Canyon. Three faults run through the potential well site area: two southwest dipping normal faults and a west-dipping overthrust fault (**Figure 2**). The Madison limestone in the shear zone is probably more fractured than the Salt Lake formation in which the three existing wells did not yield much water. Furthermore, if the Madison limestone is indeed quite fractured, the recharge from the mountain areas to the limestone aquifer will probably be enhanced by the faults described above. We expect greater potential of water development in the Madison limestone in the fault zone than in the Salt Lake formation. Though both well sites are selected in the potential Madison limestone aquifer, Well A appears to be a better choice than Well B. A mine dump is located about four miles northeast of Well B and at the edge of Georgetown Canyon. There is a potential for the mine dump to serve as a potential contamination source through surface water infiltration. No hydrogeological study of the Georgetown area is available when this report is prepared. We do not know the exact groundwater flow direction in our study area. Based on the topographic data, we expect that groundwater flows in the direction from topographical higher Well A to topographical lower Well B. Therefore, the probability of water contamination at Well A by the mine dump is lower than at Well B.

5.0 WELL DEPTHS, POTENTIAL YIELDS AND WATER QUALITY

5.1 *Well Specific Capacity Estimate*

The success of water development in our study area depends largely on the fracturing conditions in the Madison limestone. As presented, no well drilling records in the Madison limestone of this area have been found. Without any well

log or pumping test data, potential yields can only be estimated based on the local geological/hydrogeological conditions. Hydraulic conductivity K of karst limestone ranges widely from 0.3 to 3000 ft/day (Freeze and Cherry, 1979). It was assumed that hydraulic conductivity of the Madison limestone aquifer of the study area is approximately 3 ft/day. Based on the geologic information described in Section 2.0, the thickness of the Madison limestone aquifer B is assumed to be 200 ft. Because no constant rate pumping test data were available, we used the following empirical formula developed by Farri (1997) to estimate the specific capacity (SC) of the well.

$$T = 0.85 SC^{1.07} \quad (1)$$

Where, T is the transmissivity (m^2/day), and SC is the specific capacity (m^2/day) of the well. Based on the above hydraulic conductivity and aquifer thickness of the Madison limestone, the transmissivity T ($= KB$) of the aquifer is $56 m^2/day$ (or $600 ft^2/day$). The calculated specific capacity of the well by using equation (1) is about $15.5 m^3/day/ft$ (or $2.8 gpm/ft$). The required drawdown to produce 425 gpm will be approximately 150 ft.

5.2 Proposed Well Depth

Based on the static water levels of the existing wells #1, #2 and #3 in Georgetown Canyon, it is expected that the static water levels at the two alternate well sites are approximately 30 ft. below grade. Therefore, we expect both Well A and Well B to have the potential to produce 425 gpm of water if they are drilled to a depth of about 300 ft. in the Madison limestone. The top 100 ft. should be sealed/grouted to prevent surface water influence on the aquifer. The bottom 200 ft. will be perforated to yield groundwater to the wells. Therefore, when the well is pumped at 425 gpm, the drawdown in the well will be around 150 ft., or the water level will be 180 feet below grade. The distance from the top of the aquifer to the water level during pumping is approximately 80 ft, close to one-third of the aquifer thickness.

5.3 Water Quality

There is no report of water quality concerns in the Georgetown area. The spring supplying water to the Georgetown water system appears to be of good quality. However, no records of wells drilled in the Madison limestone of this area have

been found when this report is prepared. Water quality data are not available to evaluate the potential water quality issues.

6.0 RELATIONSHIP OF THE PROPOSED WELL AND THE EXISTING SPRING

As stated in Section 1.0, the Georgetown water supply system is currently supplied by a spring located approximately four miles northeast of the town in the Right Hand Fork Canyon (**Figure 1**). Production of the spring is approximately 1200 gpm. Georgetown plans to redevelop the spring to prevent surface water influence, if any, and increase its production. The proposed well is a supplementary well and will be used to supply water to the town during the redevelopment of the spring. In the future, the well will be used as a backup water resource for the spring. The well will be used only when the spring is not in use. Therefore, after the well is completed, no additional groundwater will be tapped from the regional groundwater system. We believe that Georgetown does not need additional water rights for construction of the proposed well because:

- a. The spring is located approximately one mile up-gradient of the proposed well site. During the redevelopment of the spring, water from the spring (1200 gpm) will not be tapped and be discharged to the Right Hand Fork. Therefore, the aquifer located down-gradient of the spring and up-gradient of the proposed well site will be recharged by the spring water and the Right Hand Fork.
- b. Only a portion of the water discharged from the spring, when it is not in use, will be withdrawn from the proposed well (the proposed maximum pumping rate will be 425 gpm), the majority of the water will be discharged to the regional groundwater system down-gradient of the proposed well site. Therefore, the well will not reduce the groundwater storage of the regional aquifer down-gradient of the well.
- c. Groundwater in the close vicinity of the proposed well will be affected locally and it is expected to be small because the projected maximum production is approximately one-third of the spring production.
- d. In general, when the proposed well is in use while the spring is not in operation, the groundwater storage of the regional aquifer down-gradient of the proposed well site will increase by approximately 800 gpm.

7.0 TEST WELL VERSUS PRODUCTION

A test well program is proposed to reduce the large risk and costs associated with installing a large diameter production well. While this phased approach will

ultimately cost more if the project progresses to installing a large capacity production well capable of producing 425 gpm, there are opportunities to save costs by abandoning sites which have low apparent production potential based on the geologic data collected during the small diameter borehole exploratory drilling program. We recommend the installation of two 6-inch test wells at the depths previously noted (**Figure 1**) and conducting aquifer pump tests to verify the aquifer transmissivity and yield.

8.0 LIMITATIONS

The services provided on this project, as described in this report, include professional opinions and judgments based on the data collected and analyzed. We performed these services according to currently accepted water resources engineering principles and practices conducted in this area at this time.

No test wells have been drilled nor have aquifer pump tests been performed. The following information was used to derive our calculations and arrive at our conclusions:

1. Data from previous investigations.
2. Data from available published literature.
3. Our knowledge of and experience in the local area.

The report does not provide a warranty as to variable subsurface conditions that may actually exist. This report does not apply to the areas outside of the study zone. In addition, evaluation of geologic and hydrogeologic conditions is a difficult task. Engineers and hydrogeologists must occasionally make general judgments leading to conclusions with incomplete knowledge of the geologic history, subsurface conditions and hydraulic characteristics present. More extensive studies including subsurface exploration may be necessary to reduce the inherent risk associated with evaluating water resources.

9.0 REFERENCES

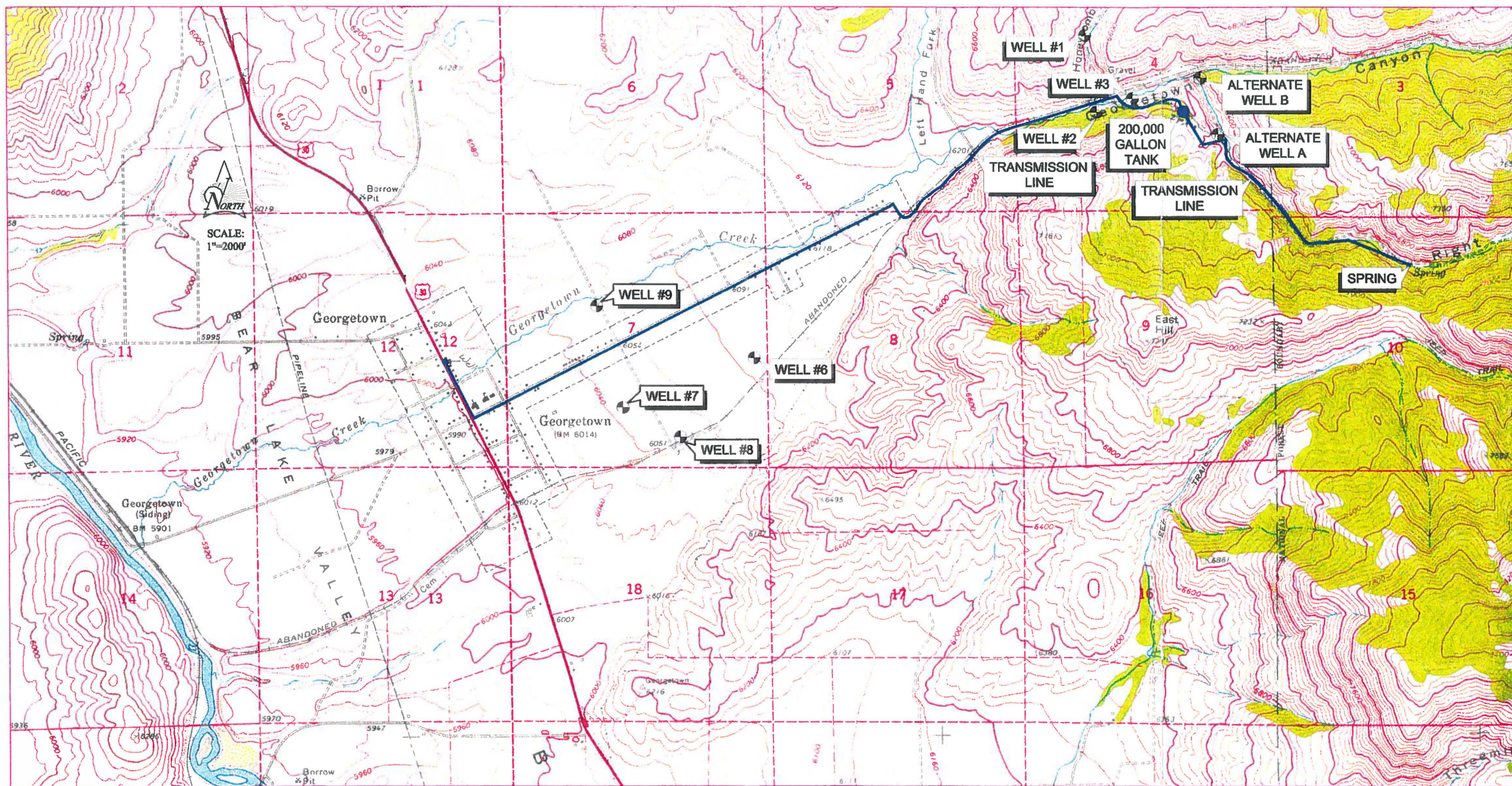
- Armstrong F.C. and E.R. Cressman 1963. The Bannock thrust Zone, Southeastern Idaho. Geological Survey Professional Paper 374-J.
- Kariya K.A. *et. al.* 1994. Hydrology of Cache Valley, Cache county, Utah, and Adjacent Part of Idaho, with Emphasis on Simulation of Ground-Water Flow. U.S. Geological Survey.

Georgetown
Hydrogeologic Assessment/Well Siting Study
Sunrise Project No. E8070.06

Freeze R.A. and J.A. Cherry 1979. Groundwater. Prentice-Hall, Inc.

Farri, Paolo, 1997. Transmissivity in the Geothermal Euganean Basin: A Geostatistical Analysis. Journal of Ground Water, September-October, Vol. 35.

FIGURES



REVISIONS

NO. DATE

1

2

3

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS & LAND SURVEYORS

12227 So. Business Park Dr., Suite 220 Draper, Ut. 84020



**GEORGETOWN
WATER SOURCE STUDY**

FIGURE 1. AREA MAP

DESIGNED
SLA

CHECKED
EJS

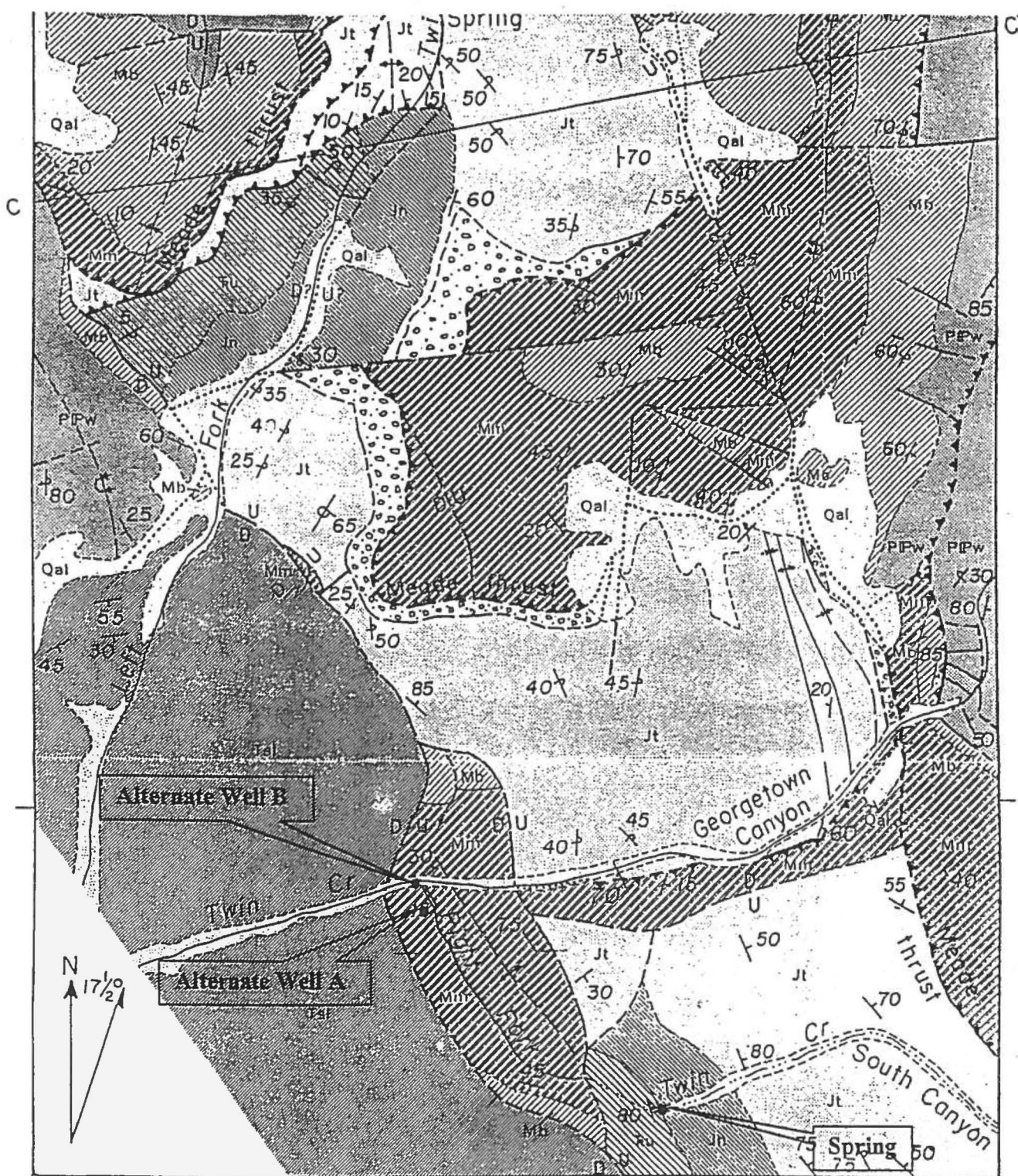
DATE
10-31-98

SCALE
1" = 2000'

FIG.

SHEET

1 OF 1



Source: Geological Survey Professional Paper 374-J, 1963

FIGURE 2(A). GEOLOGY IN THE VICINITY OF THE POTENTIAL WELL SITES

Georgetown Well Siting
Georgetown, Idaho

Sunrise Project No.
E8070.06

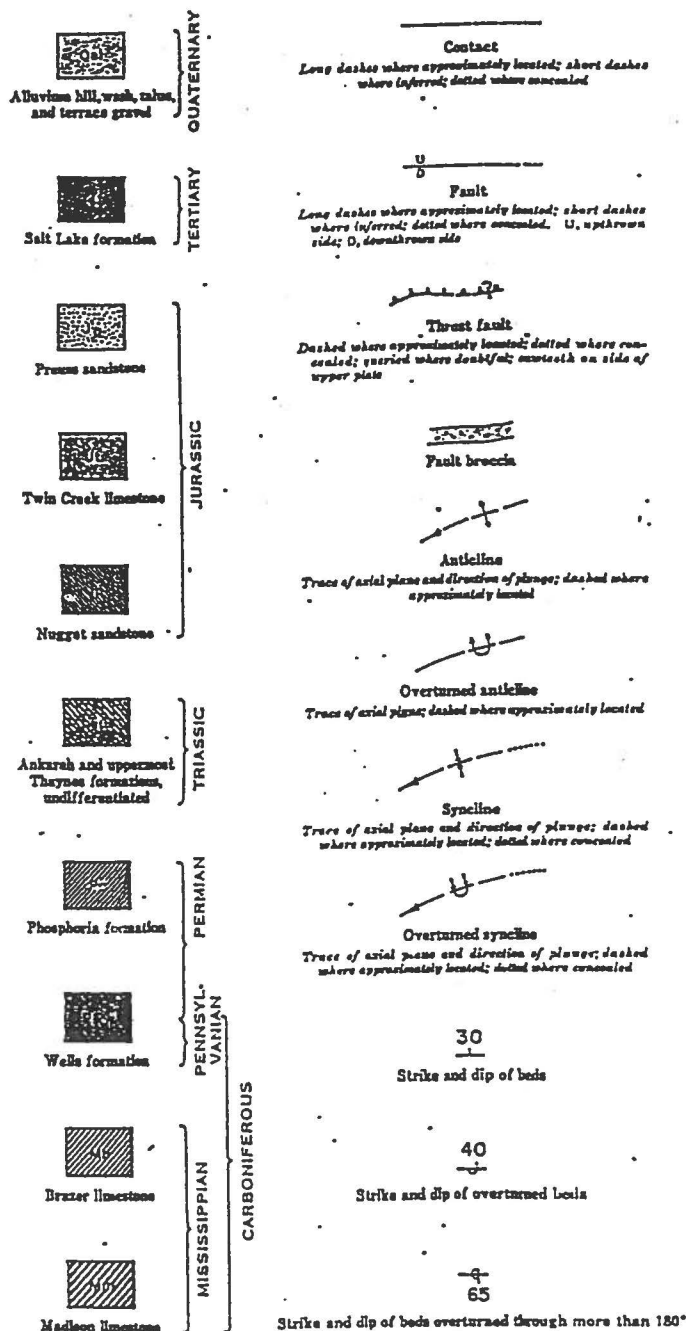
Date: March 24, 1999

Draw by: ZZ

Scale: 1 inch = 0.5 miles



EXPLANATION



Source: Geological Survey Professional Paper 374-J, 1963

FIGURE 2(B). GEOLOGY IN THE VICINITY OF THE POTENTIAL WELL SITES
Georgetown Well Siting
Georgetown, Idaho

Sunrise Project No.
E8070.06

Date: March 24, 1999

Draw by: ZZ

Scale: 1 inch = 0.5 miles



APPENDIX - DRILLER'S WELL LOGS

2-23-1999 9:26AM

FROM SUNRISE ENGINEERING 307 885 8501

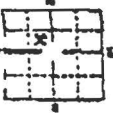
P.2

99-02-23 08:17 WILTON/FEED INC.

P.3

Well #1

Form 228-7
402STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE TYPEWRITER OR
BALLPOINT PENState law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>C. Fred Keller</u> Address <u>1730 W. Quinlan #152</u> Drilling Permit No. <u>11-938-013</u> Water Right Permit No. _____		7. WATER LEVEL Static water level <u>33</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>50</u> °F Quality <u>Good</u> Describe strata or temperature zones logs.																																													
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Well diameter increase ☐ Modification ☐ Abandoned (describe abandonment or modification procedure such as liners, screen, materials, plug depths, etc. in lithologic log, section 3.)		8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Air ☐ Other _____ <table border="1"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Flow Duration</th> </tr> </thead> <tbody> <tr> <td><u>5</u></td> <td></td> <td></td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		Discharge G.P.M.	Pumping Level	Flow Duration	<u>5</u>																																								
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4. METHOD DRILLED ☒ Rotary ☒ Air ☐ Auger ☐ Reverse rotary ☐ Cable ☐ Mud ☐ Other _____ (Backhoe, hydraulic, etc.)		10. WELL CONSTRUCTION Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____ Thickness _____ Diameter _____ From _____ To _____ <u>2.50</u> inches <u>8</u> inches <u>1</u> feet <u>15</u> feet <u>2.50</u> inches <u>6</u> inches <u>1</u> feet <u>250</u> 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? <u>7/16</u> inches by <u>12</u> inches Number _____ From _____ To _____ <u>20</u> perforations <u>100</u> feet <u>120</u> feet <u>10</u> perforations <u>150</u> feet <u>200</u> 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 <u>10</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Pudding clay ☐ _____ Sealing procedure used: ☐ Shurry pit ☐ _____ ☒ Surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded Describe access port <u>Plug in cap</u>																																													
11. LOCATION OF WELL Section map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County _____ Address of Well Site <u>Maine Cong. Rd. B. 2000</u> (give at least name of road) <u>SE 1/4 NW 1/4 Sec 4</u> T. <u>11</u> N ☐ or S <u>7</u> R. <u>44</u> E ☐ or W ☐		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 <u>Nelson</u> Firm No. <u>215</u> Address <u>Sub Springs St.</u> Date <u>8-5-93</u> Signed by Drilling Supervisor <u>Kay Nelson</u> and <u>Albert</u> (Operator) <u>Albert</u> (If different than the Drilling Supervisor)																																													

'99-02-23 08:19 WALTON, JT, INC.

Form 738-7
3/95IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

P. 3
Office Use Only
Inspected by _____
Twp. _____ Rge. _____ Sec. _____
1/4 1/4 1/4
Lat. _____ Long. _____
☐ Air ☐ Flowing Artesian

Well #

1. DRILLING PERMIT NO. 11-96-E-0023
Other IDWR No. _____2. OWNER:
Name John Jaskowski
Address Box 351
City Greentown State Idaho Zip 832393. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

Twp. <u>11</u>	North ☐ or South <u>2</u>
Rge. <u>44</u>	East <u>18</u> or West ☐
Sec. <u>4</u>	1/4 <u>NE</u> 1/4 <u>SW</u> 1/4
Gov't Lot _____	County <u>Boise</u>
Lat. _____	Long. _____

Address of Well Site 1100 Greentown
Canyon Rd. City Greentown
(Draw a sketch of well location on this map or attach a separate map)

LT. _____ Bk. _____ 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	Seals or Feet	
<u> Bentonite chips </u>	<u> 0 </u>	<u> 10 </u>	<u> 350 lbs </u>	<u> overburden </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	Weight	Casing	Line	Weight	Threaded
<u> 8 </u>	<u> +1 </u>	<u> 19 </u>	<u> 2.8 </u>	<u> 52.0 </u>	<u> 8 </u>	☐	☐	☐
<u> 6 </u>	<u> +1 </u>	<u> 40 </u>	<u> 1 </u>	<u> 11 </u>	<u> 12 </u>	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☐ Perforations Method _____
☐ Screens Screen Type _____

From	To	Slot Size	Number	Discs	Material	Casing	Line
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

 23 ft. below ground Artesian pressure _____ ft.

Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump ☐ Bailor

Yard or Feet	Drawdown	Pumping Level	Time
<u> 25 </u>		<u> 40 </u>	<u> 2 hr. </u>

Water Temp. 51° Bottom hole temp. 51°

Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Soil	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u> 12 1/2 </u>	<u> 0 </u>	<u> 2 </u>	<u> overburden </u>		☒
<u> 1 </u>	<u> 2 </u>	<u> 6 </u>	<u> Boulder </u>		☒
<u> 1 </u>	<u> 6 </u>	<u> 19 </u>	<u> Gravel + Boulder </u>		☒
<u> 1 </u>	<u> 19 </u>	<u> 19 </u>	<u> Clay </u>		☒
<u> 7 1/2 </u>	<u> 19 </u>	<u> 26 </u>	<u> " </u>		☒
<u> 1 </u>	<u> 26 </u>	<u> 40 </u>	<u> Gravel </u>		☒
<u> 6 </u>	<u> 40 </u>	<u> 40 </u>	<u> " </u>		☒

Set bottom of pump at 35 ft.

Completed Depth _____ (Measureable)

Date Started 8-12-96 Completed 8-12-96

13. DRILLER'S CERTIFICATION

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

Firm Name Nelson Drilling Inc Firm No. 215 Firm Official Ray Nelson Date 8-19-96 and Supervisor or Operator [Signature] Date 8-19-96

(Sign only if Firm Official & Operator)

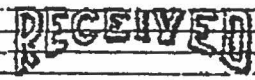
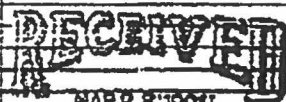
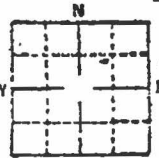
FORWARD WHITE COPY TO WATER RESOURCES

SEP-01-98 TUE 08:07 AM

P. 02

Well #

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

1. WELL OWNER Name <u>Tom of Bennington</u> 26 S. 2nd N. Address <u>Bennington, Montpelier, Idaho 83254</u> <u>61-69-S-022</u> Owner's Permit No. <u>1-07577</u>	7. WATER LEVEL Static water level <u>dry</u> <u>10</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ OF. Quality _____ Describe artesian or temperature zones below.																																								
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Boiler ☐ Air ☐ Other _____ <table border="1"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped																																					
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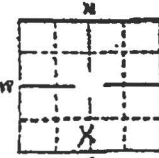
USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT

SEP-01-98 TUE 08:08 AM

P.03

Well #

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

1. WELL OWNER Name <u>Bert Westlake</u> Address <u>RT. # 2 223 E. Center Pennington</u> <u>Montpelier, Ida. 83254</u> Owner's Permit No. <u>11-89-E010</u>	7. WATER LEVEL Static water level <u>70</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>69</u> , Quality <u>good</u> Describe corrosion or temperature control device below																																																																								
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Boiler ☒ Air ☐ Other _____ <table border="1"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr> <td>60</td> <td>120'</td> <td>3</td> </tr> </tbody> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	60	120'	3																																																																		
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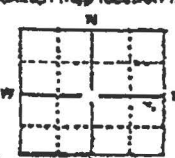
USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT

SEP-01-98 TUE 08:10 AM

P. 06

Well #

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

1. WELL OWNER Name: <u>C.A. SIMS</u> Address: <u>Gorge town</u> Owner's permit No. _____	7. WATER LEVEL Static water level <u>50</u> feet below land surface Flowing? ☐ Yes ☒ No S.P.N. 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 <u>A.I.R. test</u> Type: ☒ Pump ☐ Sailer ☐ Other _____ <table border="1"> <thead> <tr> <th>Overhead G.P.M.</th> <th>Over-Down</th> <th>Head in Pounds</th> </tr> </thead> <tbody> <tr> <td><u>5-15</u></td> <td></td> <td><u>1</u></td> </tr> </tbody> </table>	Overhead G.P.M.	Over-Down	Head in Pounds	<u>5-15</u>		<u>1</u>																														
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6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>BRAZOS</u> <u>Lake</u> <u>R.P. 4 SE 1/4 Sec. 7 T. 11 N. R. 4 E. 1/4</u>	10. Work started <u>10-1-74</u> finished <u>10-1-74</u> 11. DRILLERS CERTIFICATION Firm Name <u>Sunrise Engineering</u> Well Number <u>117</u> Address <u>44150 11th</u> Date <u>10-1-74</u> Signed by (Print Name) <u>Donald L. Lunsford</u> and _____ Company _____																																				

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

SEP-01-98 TUE 08:10 AM

P.07

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

Well #

WELL OWNER:

Name A. M. ThompsonAddress GEORGETOWN 12445Owner's Permit No. 6-1-3-57NATURE OF WORK (check): Replacement well ☐New well ☒ Deepened ☐ Abandoned ☐Water is to be used for: IRRIGATION FARMMETHOD OF CONSTRUCTION: Rotary ☐ Cable ☒Dug ☐ Other ☐

(explain)

CASING SCHEDULE: Threaded ☐ Welded ☐10 "Diam. from 0 ft. to 231 ft." "Diam. from ft. to ft." "Diam. from ft. to ft." "Diam. from ft. to ft.Thickness of casing: .250 Material:Steel ☒ concrete ☐ wood ☐ other ☐

(explain)

PERFORATED? Yes ☒ No ☐ Type of perforator used: TEACHSize of perforations: 6 " by 3/4 "424 perforations from 63 ft. to 231 ft. perforations from ft. to ft. perforations from ft. to ft. perforations from ft. to ft.WAS SCREEN INSTALLED? Yes ☐ No ☒

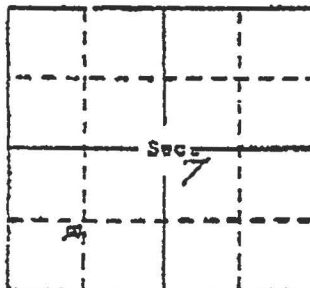
Manufacturer's name

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 Gravelplaced from ft. to ft. Surface sealprovided? Yes ☐ No ☐ To what depth? ft. Material used in seal:Did any strata contain unusable water? Yes ☐No ☒ Type of water:Depth of strata ft. Method of sealing

strata off:

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

Locate well in section



LOCATION OF WELL: County

SW X SW X Sec. 7 T. 11 N. R. 14 E. S. 20

Use other side for additional remarks

Size of drilled hole: 10 " Total depth of well: 231 Standing water level below ground: 20 Temp 70.5 Fahr. Test delivery: 500 gpm or cfs Pump? ☒ Bail ☐

Size of pump and motor used to make test:

18 TURBINE 90 SETTING 200 HP MOTORLength of time of test: 6 Hrs. 15 Min.Drawdown: 30 ft. Artesian pressure: ft.above land surface Give flow cfsor gpm. Shutoff pressure:Controlled by: Valve ☐ Cap ☐ Plug ☐No control ☐ Does well leak around casing?Yes ☐ No ☐

DEPTH FROM TO FEET FEET	MATERIAL	WATER YES OR NO
0 4	TOP 3.4L BLACK	
4 18	GRAVEL Boulders CLAY	
18 29	"	
29 34	"	
34 36	"	
36 40	"	
40 52	GRAVEL CLAY Boulders	
52 55	"	YES
55 61	"	
61 69	"	YES
69 91	"	
91 99	"	
99 111	Sand GRAVEL	
111 113	"	YES
113 119	"	
119 122	"	
122 126	"	YES
126 130	"	
130 133	"	YES
133 143	"	
143 145	"	
145 151	"	
151 163	"	
163 169	"	
169 180	"	
180 185	"	
185 187	"	YES
187 197	"	
197 229	GRAVEL + Boulders	YES
229 231	CLAY	

Work started: APR 9 1965Work finished: MAY 10 1965

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

Name: BERT WESTLANDAddress: BENNINGTON 12445Signed by: Bert WestlandLicense No. Date: OCT 17 1987

SEP-01-98 TUE 08:11 AM

P. 08

Well #1

Form 238-7

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

Office Use Only

Inspected by _____
Twp. _____ Rge. _____ Sec. _____
1/4 1/4 1/4
Lat. : : Long. : :
Flowing Artesian1. DRILLING PERMIT NO. 11-96-E-008-000
Other IDWR No. _____2. OWNER: John McDonald
Name _____
Address PO Box 103
City GEORGETOWN State Id Zip 832393. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N		Twp. <u>11</u>		North ☐ or South ☒	
E		Rge. <u>44</u>		East ☐ or West ☐	
S		Sec. <u>7</u>		1/4 SW 1/4 SE 1/4	
W		Govt Lot _____		County _____	
X		Lat. : : Long. : :		Address of Well Site <u>1/2 mile Lane</u>	
		City <u>GEORGETOWN</u>			

Lt. _____ Bld. _____ 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/PLUG/BACK			AMOUNT Bags or Pails	METHOD
Material	From	To		
Bentonite chips	0	19	350 lbs	over-bore

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

8. CASING/LINER:

Depth	From	To	Casing	Material	Casing	Size	Welded	Threaded
1	0	19	12"	STP61	2"			
2	19	29	6"	"	2"			

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method PERFORATOR Down Hole
☐ Screens Screen Type _____

From	To	Slot Size	Number	Outside	Inside	Casing	Line
80	160	2x3	30				

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

11. WELL TESTS:

☐ Pump ☐ Sealer

Tested at	Duration	Pressure Level	Time
35		90'	3 hrs

Water Temp. 50° Bottom hole temp. 50°

Water Quality test or comments: _____

Depth first Water Encountered 82'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Row	From	To	Remarks: Lithology, Water Quality & Temperature	ft.	m.
1	0	2	overburden		X
2	2	13	Gravel + clay		
3	13	19	clay		
4	19	82	clay + gravel		
5	82	100	Gravel		X

RECEIVED

AUG 28 1998

Department of Water Resources

RECEIVED

AUG 13 1998

Department of Water Resources
Eastern RegionCompleted Depth 100 (Measurable)
Date Started 8-6-96 Completed 8-7-96

13. DRILLER'S CERTIFICATION

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

Firm Name Nelson Drilling Inc. Firm No. 215Firm Official Ray Nelson Date 8-10-96and Supervisor or Operator J. Redick Date 8-10-96
(Sign must be Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES



State of Idaho

DEPARTMENT OF WATER RESOURCES

900 N. Skyline Dr., Suite A, Idaho Falls, Idaho 83402-1718 - (208) 525-7161- Fax (208) 525-7177

EASTERN REGION

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

APRIL 7, 1999

CITY OF GEORGETOWN
C/O PAUL MILLER
PO BOX 99
GEORGETOWN, ID 83239

Re: Claim No. 11-04360

Dear Claimants(s):

The Department of Water Resources has completed the advertising of your claim to a water right, and no further action is authorized under Section 42-243 and 42-244, Idaho Code. Your claim will be retained in our files and will be available at any time for use by you or the court.

The filing and advertising of the claim does not confirm the water right claimed, but will serve to record and preserve the information and the evidence which you included in your claim.

If, at a later date, you find that you have additional information or supporting evidence that you would like to have included with the claim, you may have the information or evidence added at any time. Please refer to the claim identification number when corresponding with the office.

We are enclosing a copy of your claim for your records. If you have questions, or if this office may be of further assistance, please feel free to contact us.

Sincerely,

RONALD D CARLSON
Eastern Region Manager

Enclosure

MC-FOF/MED

MAY 13 1999

No 5716

AFFIDAVIT OF PUBLICATION

STATE OF IDAHO,

ss.

County of Bear Lake

Rosa S. Moosman

being duly sworn,

deposes and says:

That he is the Editor of THE NEWS-EXAMINER, a weekly newspaper published at Montpelier, in the County of Bear Lake and State of Idaho; and said paper has been and is in general circulation in the county aforesaid, and in the vicinity of Montpelier; that the advertisement, a copy of which is attached hereto, was published in said newspaper once a week for 2 consecutive weeks in the regular and entire issue of said paper during the period and time of publication, and was published in the newspaper proper and not a supplement; that said paper has been established and regularly published for more than seventy-eight consecutive weeks prior to the date of first publication of said advertisement.

Such notice was published in the issue beginning with

March 17, 1999, and ending
with the issue of March 24, 1999.

Rosa S. Moosman
Fees, \$59.34

Subscribed and sworn to before me this 31st
day of March, 1999.

Sherry Brown
Notary Public, Residing at Montpelier, Idaho

My Commission Expires August 28, 192003

NOTICE OF CLAIMS TO WATER RIGHTS

The Following claim(s) have been filed on water rights created by diversion and beneficial use:

CITY OF GEORGETOWN
C/O PAUL MILLER
PO BOX 99
GEORGETOWN, ID 83239

Source: SPRING
Tributary: GEORGETOWN CREEK
Diversion Pt: SWNWNE Sec 10 T
11S R 44E in BEAR LAKE County.
Use: MUNICIPAL (2.760 CFS)
Total Diversion: (2.760 CFS)
Claimed Priority: 6/1/1958
T R S00

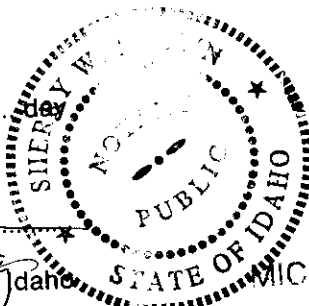
CITY OF GEORGETOWN
C/O PAUL MILLER
PO BOX 99
GEORGETOWN, ID 83239

Source: GROUNDWATER
Diversion Pt: NWNESE Sec 12 T
11S R 43E in BEAR LAKE County.
Use: MUNICIPAL (0.450 CFS)
Total Diversion: (0.450 CFS)
Claimed Priority: 4/1/1939
T R S00

Exceptions to a claim may be filed with the Department of Water Resources, Eastern Region, 900 N. Skyline Ste A, Idaho Falls, Idaho 83402.

KARL J. DREHER
Director

Legal No. 5716 — Publish Mar. 17, 24, 1999.



RECEIVED

MICROFILMED APR 07 1999

Department of Water Resources
Eastern Region



State of Idaho

DEPARTMENT OF WATER RESOURCES

900 N. Skyline Dr., Suite A, Idaho Falls, Idaho 83402-1718 - (208) 525-7161- Fax (208) 525-7177

EASTERN REGION

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

MARCH 9, 1999

Legal Notices Department
THE NEWS-EXAMINER
P.O. BOX 278
MONTPELIER, ID 83254

Dear Legal Dept.:

Enclosed you will find legal notices which we wish to have published on the dates indicated (once a week for two consecutive weekly issues) in your newspaper. 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. Your cooperation is appreciated.

Please send the affidavit of publication and publication billing to this office before APRIL 5, 1999.

Yours truly,

Sharla Cox
Senior Secretary

Encl.



MICROFILMED

MAY 8 3 1999

NOTICE OF CLAIMS TO WATER RIGHT

The Following claim(s) have been filed on water rights created
by diversion and beneficial use:

11-04121

CITY OF GEORGETOWN
C/O PAUL MILLER
PO BOX 99
GEORGETOWN, ID 83239

Source: SPRING

Tributary: GEORGETOWN CREEK

Diversion Pt: SWNWNE Sec 10 T 11S R 44E in BEAR LAKE County.

Use: MUNICIPAL	(	2.760 CFS)
Total Diversion:	(	2.760 CFS)

Claimed Priority: 6/ 1/1958

T R S00

Exceptions to a claim may be filed with the Department of Water
Resources, Eastern Region, 900 N Skyline Ste A, Idaho Falls, Idaho 83402.

KARL J. DREHER, Director

Published: 3/18/1999 & 3/25/1999

MICROFILMED

MAY 03 1999

State of Idaho
Department of Water Resources

CLAIM ANALYSIS SHEET

INITIAL REVIEW BY: HCW

Right Number 11 4121 Applicant Carl S. Gonsky

NOTE: IF ANY OF THE ITEMS BELOW ARE MISSING, THE CLAIM IS INCOMPLETE AND MUST BE RETURNED IMMEDIATELY TO THE CLAIMANT ALONG WITH THE APPROPRIATE COVER LETTER.

CHECK:

- ☒ Name and address.
- ☒ Date of priority. (Check for a date past the mandatory filing dates.) (One date only.)
- ☒ Source.
- ☒ Quantity, use, period.
- ☒ Point(s) of diversion.
- ☒ Location of use.
- ☒ Signature/notarization/fee.

8/3

FINAL REGIONAL PROCESSING REVIEW:

- ☒ Affidavit of publication received.
- ☒ Claim published correctly.
- ☐ Exceptions processed.

By Ernest Carlson Date Oct 7, 1981

STATE OFFICE PROCESSING:

- ☒ Claim review complete.

By Jim Date 10/2/81

RECEIVED
OCT 03 1981

Department of Water Resources

WATER RESOURCES
DIVISION

Carl S. Gonsky
10-2-81
JWG

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Eastern Region

150 Shoup Ave.
Idaho Falls, Idaho 83402
(208) 525-7161

AUGUST 4, 1981

CITY OF GEORGETOWN
P.O. BOX 791
GEORGETOWN ID 83239

RE: Claim No. 11-4121

Dear Claimant:

The Department of Water Resources has completed the advertising of your claim to a water right, and no further action is authorized under Section 42-243 and 42-244, IDAHO CODE. Your claim will be retained in our files and will be available at any time for use by you or the court.

The filing and advertising of the claim does not confirm the water right claimed, but will serve to record and preserve the information and the evidence which you included in your claim.

If, at a later date, you find that you have additional information or supporting evidence that you would like to have included with the claim, you may have that information or evidence added at any time. Please refer to the claim identification number when corresponding with this office.

We are enclosing a copy of your claim for your records. If you have questions, or if this office may be of further assistance, please feel free to contact us.

Yours truly,

RONALD D. CARLSON
Eastern Region Supervisor

Enclosure



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
EASTERN REGION

John V. Evans
Governor

A. Kenneth Dunn
Director

150 Shoup
Idaho Falls, Idaho 83401
(208) 525-7161

August 24, 1981

News Examiner
P.O. Box 278
Montpelier, Idaho 83254

RE: Attached Listing of Required Affidavits

Gentlemen:

I am in the process of getting the newspaper files in order and in so doing I find there are eleven outstanding affidavits from your company. It is important in our processing procedure that these affidavits be sent immediately after the notices have been advertised. I would appreciate it if you would see that these affidavits are sent to this office as soon as possible.

Thank you for your cooperation in this matter.

Sincerely,

BOBBIE R. STEPHENS
Principal Clerk

BRS

attachement:

RECEIVED
AUG 27 1981
WATER RESOURCES
DIVISION

WATER RIGHT NUMBERDATE PUBLISHED

11-4117	7/2 & 7/9/81
11-4118	7/2 & 7/9/81
11-4119	7/9 & 7/16/81
11-4120	7/9 & 7/16/81
11-4121	7/16 & 7/23/81
11-7222	3/26 & 4/2/81
11-7254	5/28 & 6/4/81
11-7255	5/28/ & 6/4/81
11-7257	5/28/ & 6/4/81
11-7263	7/2/ & 7/9/81
24-4041	7/2/ & 7/9/81

It is important that we verify that these notices have indeed been published. If you find that is not the case, please let me know immediately.

11-4117
11-4118
11-4119
11-4120
11-4121
11-7222
11-7254
11-7255
11-7257
11-7263
24-4041

<u>Water Right Number</u>	<u>Date Published</u>
11-4105	5/28 & 6/04/81
11-4106	5/28 & 6/04/81
11-4107	5/28 & 6/04/81
11-4108	5/28 & 6/04/81
11-4109	5/28 & 6/04/81
11-4110	5/28 & 6/04/81
11-4111	5/28 & 6/04/81
11-4112	5/28 & 6/04/81
11-4113	5/28 & 6/04/81
11-4114	5/28 & 6/04/81
11-4115	5/28 & 6/04/81
11-4116	6/04 & 6/11/81
11-4117	7/02 & 7/09/81
11-4118	7/02 & 7/09/81
11-4119	7/09 & 7/16/81
11-4120	7/09 & 7/16/81
11-4121	7/16 & 7/23/81
11-7194 Amendment	4/30 & 5/07/81
11-7222	3/26 & 4/02/81
11-7254	5/28 & 6/04/81
11-7255	5/28 & 6/04/81
11-7257	5/28 & 6/04/81
11-7258	5/28 & 6/04/81
11-7259	5/28 & 6/04/81
11-7260	6/04 & 6/11/81
11-7261	6/11 & 6/18/81
11-7262	6/18 & 6/25/81
11-7263	7/02 & 7/09/81
24-4041	7/02 & 7/09/81

RECEIVED
JUL 1 1981

STATE OF IDAHO

JULY 9, 1981

Gentlemen:

An affidavit of publication must be submitted to the Department along with the publication bill. Your cooperation is appreciated.

Yours truly,

Encl.

NOTICE OF CLAIMS TO WATER RIGHTS

Notice is hereby given that the following claim(s) to water right(s) have been established by diversion and application to beneficial use:

Any exception to any claim of water right may be filed with the Director of the Idaho Department of Water Resources, 150 Shoup Ave., Idaho Falls, Idaho 83402.

A. KENNETH DUNN

Director

Published 7/16 & 7/23/81.

11-4121-

CITY OF GEORGETOWN

P.O. BOX 791, GEORGETOWN, ID 83239

Source: SPRING tributary to GEORGETOWN CREEK

Priority Date: 06/01/1958

Amount: 0.62 CFS

Diversion Point: NWNE Sec 10 T 11S R 44E, BEAR LAKE Co.

Use: MUNICIPAL (0.62 CFS) from 01/01 to 12/31

Place of Use: SWNE SENE NESE NWSE SWSE SESE Sec 12 T 11S R 43E NENE
Sec 13 T 11S R 43E NENE NWNE SWNE SENE NESW NWSW SWSW NWSE
Sec 07 T 11S R 44E NENW NWNW SWNW Sec 08 T 11S R 44E NENW
Sec 18 T 11S R 44E SWNE SENE SESW NESE NWSE SWSE SESE
Sec 05 T 11S R 44E

Diversion Means: GRAVITY WATER LINE.

03-11-58



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
EASTERN REGION

John V. Evans
Governor

C. Stephen Allred
Director

1515 Lincoln Road
Idaho Falls, Idaho 83401
(208) 523-7186

June 17, 1981

Mr. Leland M. Hayes
c/o City of Georgetown
P.O. Box 791
Georgetown, Idaho 83239

Dear Sir:

Enclosed is the claim for the city of Georgetown, check No. 92-286 for \$30.00, and a blank claim form.

The claim is being returned because Items 5 and 6a are not complete. Item 5 needs the county and Item 6a needs an "x" in each appropriate box to show the location of use for the City of Georgetown. The address of the city should also include a box number and zip code.

Please feel free to contact this office for any further assistance that may be needed.

Sincerely,

KEITH C. WILSON
Sr. Resource Agent

KCW:cw

Attachment: Ck. No. 92-286

Enclosure: Claim

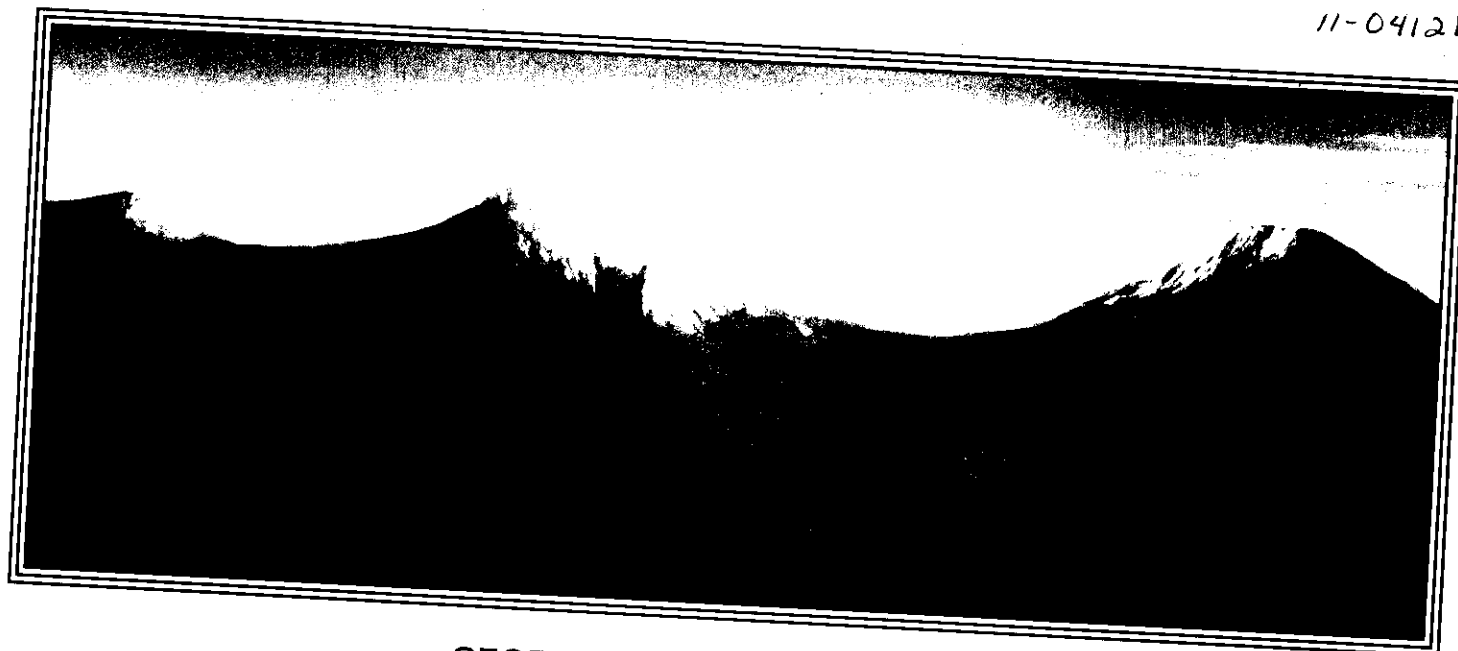
RECEIVED

JUL 6 1981

Department of Water Resources
Eastern District Office

RECEIVED

11-04121



GEORGETOWN WELL SITING

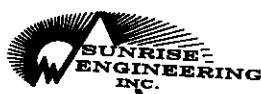
Prepared for:

The Town of Georgetown
P.O. Box 99
Georgetown, ID 83239

Sunrise Project No. E8070.06
March 31, 1999

Prepared by:

Sunrise Engineering, Inc.
12227 S. Business Park Drive, Suite 220
Draper, UT 84020
Phone: 801-523-0100
Fax: 801-523-0990



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FEB 02 2000
Picture Book

March 24, 1999

RECEIVED

APR 12 1999

Department of Water Resources
Eastern Region

RE: Well Siting Study - Georgetown
Sunrise Project No. E8070.06

Dear Mr. Archibald;

Provided herewith is the final report concerning potential well site locations for future groundwater development in the vicinity of Georgetown. Thank you for your comments on the draft report.

If you have any questions, please feel free to contact us at (801) 523-0100.

Sincerely,
Sunrise Engineering, Inc.

Prepared by:


Z. (Joe) Zhao, P.E., Ph.D
Project Engineer

Reviewed by:


Dan L. Crawford, P.G.
Senior Hydrogeologist

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FIGURES

FIGURE 1. AREA MAP

FIGURE 2. GEOLOGICAL MAP

APPENDIX – DRILLER’S WELL LOGS

GEORGETOWN WELL SITING

1.0 INTRODUCTION

1.1 *Background*

The Georgetown water supply system is currently supplied by a spring located approximately four miles northeast of the town in the Right Hand Fork Canyon. The topographic location of the spring is: 1000 feet (ft.) South 2500 ft. West from the Northeast Corner of Section 10, Township 11 South, Range 44 East, Boise Base & Meridian as shown in **Figure 1**. **Figure 1** is modified from a portion of the U.S. Geological Survey (USGS) 7.5 series Quadrangle Map for Georgetown, Idaho (USGS, 1970). Production of the spring is approximately 1200 gallon per minute (gpm). Water from the spring is transmitted through an 8-inch transmission line to a 200,000 gallon water storage tank located about 1000 ft. southwest of the confluence of Georgetown Canyon and the Right Hand Fork and at an elevation of about 6400 ft. Georgetown plans to redevelop the spring to prevent surface water influence, if any, and increase its production. A well capable of producing 425 gpm is desired to supply water to the town during redevelopment of the spring. In the future, the well will be used as a backup water resource for the spring. The town would like to locate a well close to the water tank and power lines in order to use the existing water collection and distribution facilities.

1.2 *Objective*

The objective of this study was to determine if favorable well sites exist in the vicinity of the existing water storage tank. In order to determine favorable groundwater zones in the area, we completed the following tasks:

- Obtained and reviewed published and readily available unpublished geologic and hydrogeologic data of the area.
- Reviewed geologic, construction and aquifer yields of existing wells in the area.
- Identified potential well locations and depths.
- Evaluated well locations for potential yield and water quality.

No fieldwork beyond a site visit was completed as part of our evaluation of potential well sites.

2.0 GEOLOGIC DATA

This section includes a summary description of the surface and subsurface geology in the Georgetown area. The purpose of this section is to identify, characterize, and map the extent of: (1). Geologic units (aquifers) which provide acceptable, sufficient and economic quantities of groundwater. (2). Geologic units which may set vertical and horizontal limits on groundwater flow (aquitards or confining beds). (3). Faults which may be barriers or influence groundwater flow. (4). Fractures and/or karst features which may provide local and regional controls on groundwater production.

The geology of the Georgetown area is characterized by the "Bannock Overthrust Zone" (Figure 2). The Bannock Overthrust is interpreted as a westward-dipping imbricate overthrust zone possibly several tens of miles wide extending at least from southwestern Montana to north-central Utah (F.C. Armstrong and E.R. Cressman, 1963). The upper plates of the thrust moved to the northeast in response to an unknown force. Steep eastward-trending tear faults formed during thrusting probably in response to differential movement among the eastward-moving thrust plates.

Georgetown is located at the southeast boundary of the "Bear River Valley" from Georgetown to Threemile Knoll, which is the almost uninterrupted northward continuation of "Bear Lake Valley" (Figure 2). An important feature of the Bannock Overthrust is the folding of this originally near horizontal and rather regular thrust surface (Richards and Mansfield, 1912). Renewed compressional forces, acting in the same direction as the original thrusting, folded the fault surface into anticlinal and synclinal folds, some of which were locally overturned to the northeast. In the southern part of the area four folds, two anticlines and two synclines were recognized. The western anticline arches over Bear River Valley, the syncline next east passes beneath the Aspen Range and the town of Georgetown and Montpelier. The crest of the eastern anticline is exposed in Georgetown Canyon, on the Left Fork of Twin Creek, and in the Slug Creek window; the eastern syncline passes beneath Snowdrift Mountain.

Consolidated rocks exposed in the vicinity of the water storage tank include: Mississippian Age Madison limestone (Mm) and Brazer limestone (Mb), Jurassic Age Nugget sandstone (Jn) and Twin Creek limestone (Jt), and Tertiary Age Salt Lake formation (Tsl). Quaternary alluvium hill wash, talus and terrace gravel are not shown on the geologic map of the Georgetown area (Figure 2). Two southwest-dipping normal faults run through the water tank area and their dip angles are unknown. Georgetown Canyon and the Right Fork Creek cut through this area.

3.0 EXISTING DATA AND EVALUATION

Based on review of water rights records in the Georgetown area, four wells (Well #6, #7, #8 and #9 in **Figure 1**) were drilled northeast of the town in Section 7, T11S, R44E, Boise Base and Meridian. Their depths ranged from 65 to 400 ft. with yields varying from 5 to 500 gpm. Well #7, owned by A.M. Thompson, was 231 ft. deep and had the largest yield among the four wells. The yield/drawdown ratio (specific capacity) of this well was 500gpm/30ft. The well appeared to have tapped the unconsolidated sandy gravel aquifer according to its well log. The other three wells were not as deep as the Thompson's well and their yields were low ranging from 10 to 35 gpm. In the vicinity of the water storage tank, three wells were drilled (Section 4, Township 11 South, Range 44 East, Boise Base & Meridian as shown in **Figure 1**). Their depth ranged from 60 to 220 ft. Their specific capacities ratios were less than one (gpm/ft.). The driller reported that Well #1 (220 ft. deep) penetrated into "hard or broken limestone". The static water level at the completion of the well was 33 ft. below grade. An air test indicated a yield of 5 gpm with an unknown drawdown. The well log also indicated that water quality from this well was good. Well #2 was 100 ft. deep and the static water level was 31 ft. below grade. Its specific capacity was (15-20)gpm/29ft.. Well #3, the closest well to the water storage tank, was only 60 ft. deep and the static water level was 13 ft. below grade. Its specific capacity was 25 gpm/27 ft..

4.0 WELL LOCATIONS

The Thompson's well (Well #7), drilled in the unconsolidated sandy gravel aquifer, was pumped at 500 gpm with only 30 ft. drawdown. The other three wells close to the Thompson's well do not yield as much probably due to their shallow depths. Based on the production of the Thompson's well, potential future well development appears to be good in this area. However, a production well located in this area is not economically feasible because the town wants to use the existing water storage tank, which is about three miles to the northeast. A more economical option is to locate a production well of adequate quantity and quality of water close to the water storage tank.

The yields of the three existing wells (Well #1, 2 and 3 in **Figure 1**) are not promising. Local geological data indicated that these three wells were drilled in the Tertiary Age Salt Lake Formation (Tsl), which consists of conglomerate, tuff, and sandstone unit (Kariya *et. al.*, 1994) though the driller's well log showed that the

bedrock encountered was "hard or broken limestone". It is shown in **Figure 2** that the Salt Lake Formation or the so-called "limestone" is on the down-thrown plate of a normal fault. It is impossible to judge the porosity and fracturing conditions of the "limestone" with the existing data. We believe that the "limestone" is not quite fractured to conduct water to the wells.

Based on the geological and hydrogeological data available and our evaluation presented in the above section, two alternative well sites were outlined (Well A and Well B in **Figure 1**). Well A is about 800 ft. southeast of the water storage tank in the Right Hand Fork and Well B is about 700 ft. northeast of the water storage tank at the intersection of Georgetown Canyon and the Right Hand Fork. Both well sites are to be located in the potential Mississippian Madison aquifer. The topographic map shows that the Madison limestone aquifer may receive recharge from the mountain areas to the northeast, east and southeast through the Right Hand Fork and Georgetown Canyon. Three faults run through the potential well site area: two southwest dipping normal faults and a west-dipping overthrust fault (**Figure 2**). The Madison limestone in the shear zone is probably more fractured than the Salt Lake formation in which the three existing wells did not yield much water. Furthermore, if the Madison limestone is indeed quite fractured, the recharge from the mountain areas to the limestone aquifer will probably be enhanced by the faults described above. We expect greater potential of water development in the Madison limestone in the fault zone than in the Salt Lake formation. Though both well sites are selected in the potential Madison limestone aquifer, Well A appears to be a better choice than Well B. A mine dump is located about four miles northeast of Well B and at the edge of Georgetown Canyon. There is a potential for the mine dump to serve as a potential contamination source through surface water infiltration. No hydrogeological study of the Georgetown area is available when this report is prepared. We do not know the exact groundwater flow direction in our study area. Based on the topographic data, we expect that groundwater flows in the direction from topographical higher Well A to topographical lower Well B. Therefore, the probability of water contamination at Well A by the mine dump is lower than at Well B.

5.0 WELL DEPTHS, POTENTIAL YIELDS AND WATER QUALITY

5.1 *Well Specific Capacity Estimate*

The success of water development in our study area depends largely on the fracturing conditions in the Madison limestone. As presented, no well drilling records in the Madison limestone of this area have been found. Without any well

log or pumping test data, potential yields can only be estimated based on the local geological/hydrogeological conditions. Hydraulic conductivity K of karst limestone ranges widely from 0.3 to 3000 ft/day (Freeze and Cherry, 1979). It was assumed that hydraulic conductivity of the Madison limestone aquifer of the study area is approximately 3 ft/day. Based on the geologic information described in Section 2.0, the thickness of the Madison limestone aquifer B is assumed to be 200 ft. Because no constant rate pumping test data were available, we used the following empirical formula developed by Farri (1997) to estimate the specific capacity (SC) of the well.

$$T = 0.85 SC^{1.07} \quad (1)$$

Where, T is the transmissivity (m^2/day), and SC is the specific capacity (m^2/day) of the well. Based on the above hydraulic conductivity and aquifer thickness of the Madison limestone, the transmissivity $T (= KB)$ of the aquifer is $56 m^2/day$ (or $600 ft^2/day$). The calculated specific capacity of the well by using equation (1) is about $15.5 m^3/day/ft$ (or $2.8 gpm/ft$). The required drawdown to produce 425 gpm will be approximately 150 ft.

5.2 Proposed Well Depth

Based on the static water levels of the existing wells #1, #2 and #3 in Georgetown Canyon, it is expected that the static water levels at the two alternate well sites are approximately 30 ft. below grade. Therefore, we expect both Well A and Well B to have the potential to produce 425 gpm of water if they are drilled to a depth of about 300 ft. in the Madison limestone. The top 100 ft. should be sealed/grouted to prevent surface water influence on the aquifer. The bottom 200 ft. will be perforated to yield groundwater to the wells. Therefore, when the well is pumped at 425 gpm, the drawdown in the well will be around 150 ft., or the water level will be 180 feet below grade. The distance from the top of the aquifer to the water level during pumping is approximately 80 ft, close to one-third of the aquifer thickness.

5.3 Water Quality

There is no report of water quality concerns in the Georgetown area. The spring supplying water to the Georgetown water system appears to be of good quality. However, no records of wells drilled in the Madison limestone of this area have

been found when this report is prepared. Water quality data are not available to evaluate the potential water quality issues.

6.0 RELATIONSHIP OF THE PROPOSED WELL AND THE EXISTING SPRING

As stated in Section 1.0, the Georgetown water supply system is currently supplied by a spring located approximately four miles northeast of the town in the Right Hand Fork Canyon (**Figure 1**). Production of the spring is approximately 1200 gpm. Georgetown plans to redevelop the spring to prevent surface water influence, if any, and increase its production. The proposed well is a supplementary well and will be used to supply water to the town during the redevelopment of the spring. In the future, the well will be used as a backup water resource for the spring. The well will be used only when the spring is not in use. Therefore, after the well is completed, no additional groundwater will be tapped from the regional groundwater system. We believe that Georgetown does not need additional water rights for construction of the proposed well because:

- a. The spring is located approximately one mile up-gradient of the proposed well site. During the redevelopment of the spring, water from the spring (1200 gpm) will not be tapped and be discharged to the Right Hand Fork. Therefore, the aquifer located down-gradient of the spring and up-gradient of the proposed well site will be recharged by the spring water and the Right Hand Fork.
- b. Only a portion of the water discharged from the spring, when it is not in use, will be withdrawn from the proposed well (the proposed maximum pumping rate will be 425 gpm), the majority of the water will be discharged to the regional groundwater system down-gradient of the proposed well site. Therefore, the well will not reduce the groundwater storage of the regional aquifer down-gradient of the well.
- c. Groundwater in the close vicinity of the proposed well will be affected locally and it is expected to be small because the projected maximum production is approximately one-third of the spring production.
- d. In general, when the proposed well is in use while the spring is not in operation, the groundwater storage of the regional aquifer down-gradient of the proposed well site will increase by approximately 800 gpm.

7.0 TEST WELL VERSUS PRODUCTION

A test well program is proposed to reduce the large risk and costs associated with installing a large diameter production well. While this phased approach will

ultimately cost more if the project progresses to installing a large capacity production well capable of producing 425 gpm, there are opportunities to save costs by abandoning sites which have low apparent production potential based on the geologic data collected during the small diameter borehole exploratory drilling program. We recommend the installation of two 6-inch test wells at the depths previously noted (**Figure 1**) and conducting aquifer pump tests to verify the aquifer transmissivity and yield.

8.0 LIMITATIONS

The services provided on this project, as described in this report, include professional opinions and judgments based on the data collected and analyzed. We performed these services according to currently accepted water resources engineering principles and practices conducted in this area at this time.

No test wells have been drilled nor have aquifer pump tests been performed. The following information was used to derive our calculations and arrive at our conclusions:

1. Data from previous investigations.
2. Data from available published literature.
3. Our knowledge of and experience in the local area.

The report does not provide a warranty as to variable subsurface conditions that may actually exist. This report does not apply to the areas outside of the study zone. In addition, evaluation of geologic and hydrogeologic conditions is a difficult task. Engineers and hydrogeologists must occasionally make general judgments leading to conclusions with incomplete knowledge of the geologic history, subsurface conditions and hydraulic characteristics present. More extensive studies including subsurface exploration may be necessary to reduce the inherent risk associated with evaluating water resources.

9.0 REFERENCES

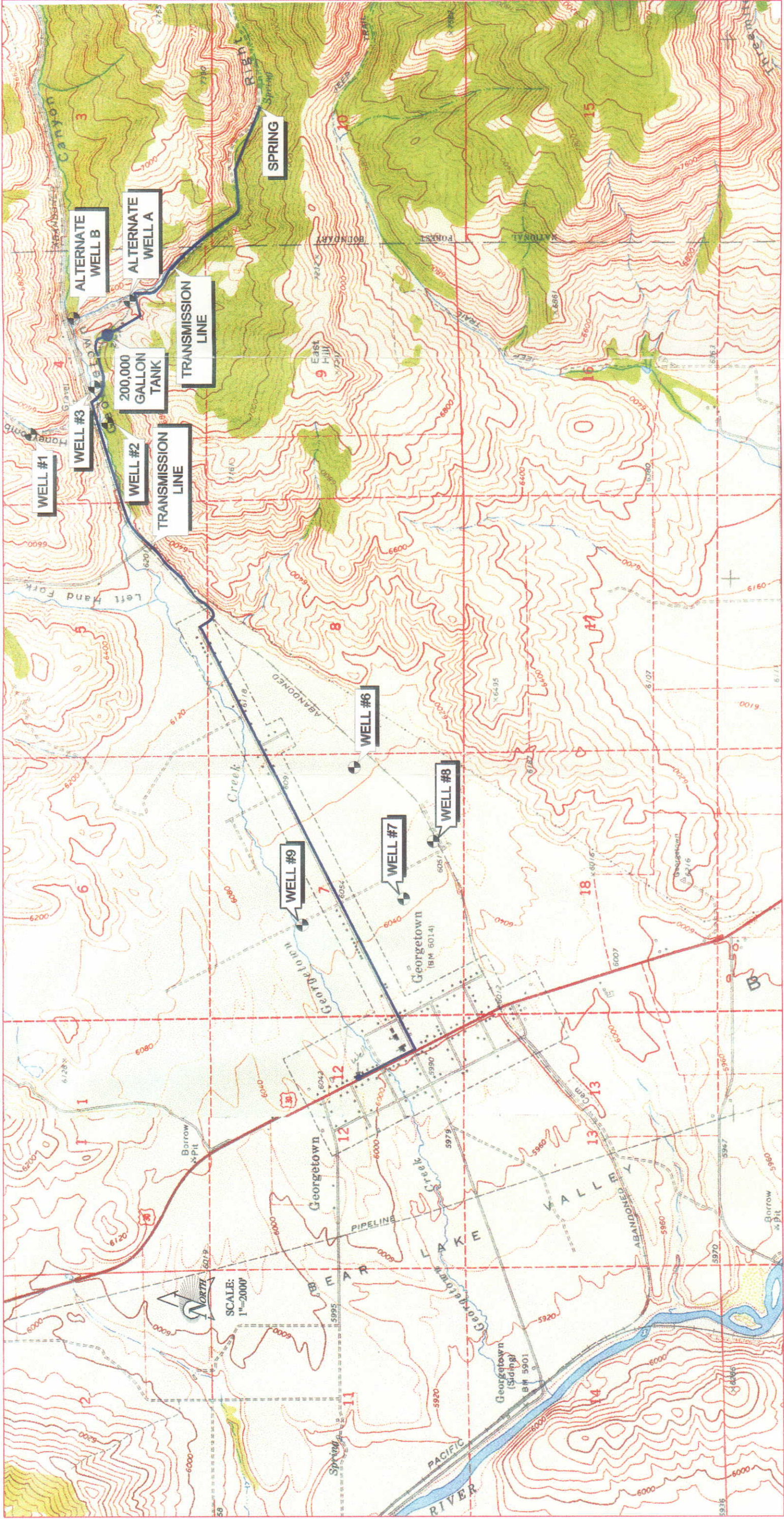
- Armstrong F.C. and E.R. Cressman 1963. The Bannock thrust Zone, Southeastern Idaho. Geological Survey Professional Paper 374-J.
- Kariya K.A. *et. al.* 1994. Hydrology of Cache Valley, Cache county, Utah, and Adjacent Part of Idaho, with Emphasis on Simulation of Ground-Water Flow. U.S. Geological Survey.

Georgetown
Hydrogeologic Assessment/Well Siting Study
Sunrise Project No. E8070.06

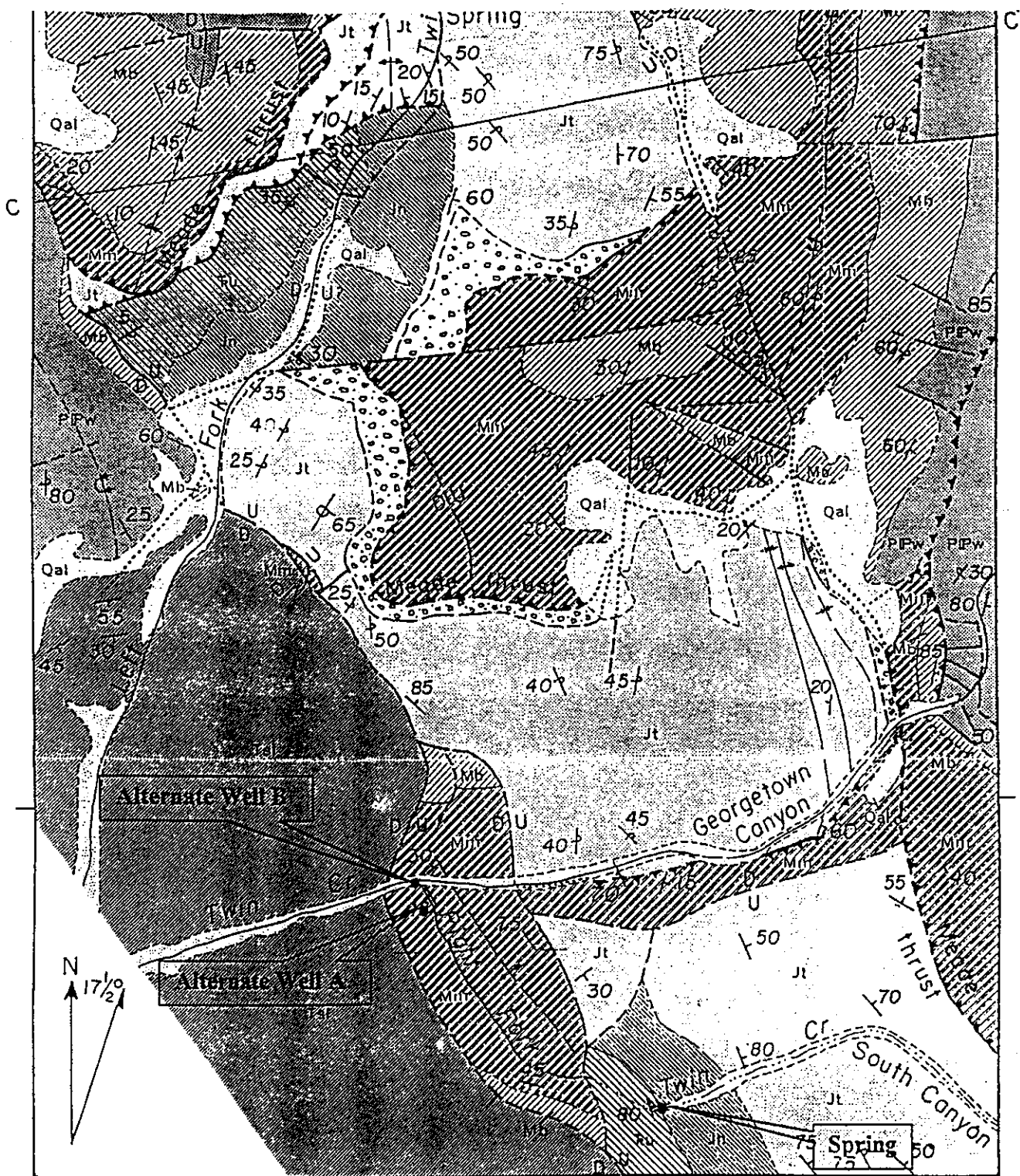
Freeze R.A. and J.A. Cherry 1979. Groundwater. Prentice-Hall, Inc.

Farri, Paolo, 1997. Transmissivity in the Geothermal Euganean Basin: A Geostatistical Analysis. Journal of Ground Water, September-October, Vol. 35.

FIGURES



REVISIONS	SUNRISE ENGINEERING, INC.				GEORGETOWN WATER SOURCE STUDY			
	CONSULTING ENGINEERS & LAND SURVEYORS				FIGURE 1. AREA MAP			
	NO.	DATE	DESIGNED	CHECKED	SLA	EJS	DRAWN	PCE
1	1		10-31-98					2.2.1
2	2							
3	3							
12227 So. Business Park Dr., Suite 220 Draper, Ut. 84020				1" = 2000'				1 OF 1



Source: Geological Survey Professional Paper 374-J, 1963

FIGURE 2(A). GEOLOGY IN THE VICINITY OF THE POTENTIAL WELL SITES

Georgetown Well Siting
Georgetown, Idaho

Sunrise Project No.
E8070.06

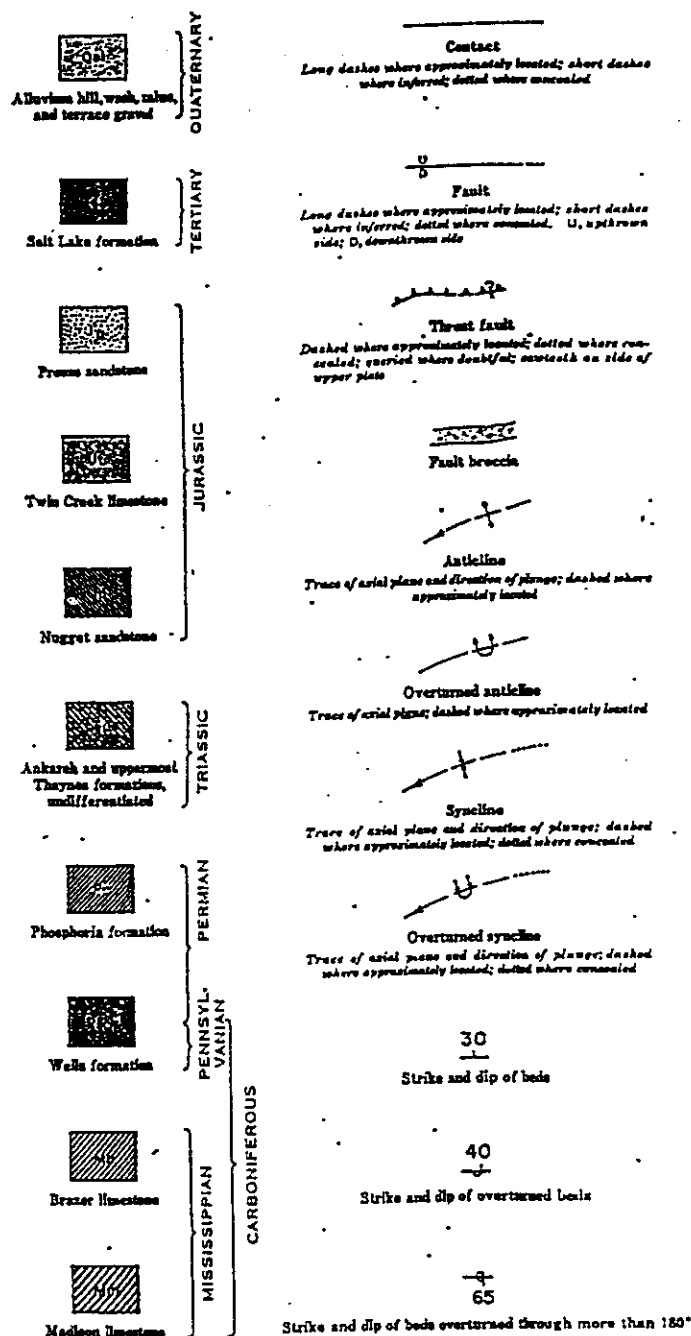
Date: March 24, 1999

Draw by: ZZ

Scale: 1 inch = 0.5 miles



EXPLANATION



Source: Geological Survey Professional Paper 374-J, 1963

FIGURE 2(B). GEOLOGY IN THE VICINITY OF THE POTENTIAL WELL SITES

Georgetown Well Siting
Georgetown, Idaho

Sunrise Project No.
E8070.06

Date: March 24, 1999

Draw by: ZZ

Scale: 1 inch = 0.5 miles



APPENDIX - DRILLER'S WELL LOGS

P.S.

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

**USE TYPEWRITER OR
BALLPOINT PEN**

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

within 30 days after the completion or abandonment of this well.

1. WELL OWNER

Name C. Fred Kallen
Address 1730 W. Quinlan #152 St. Louis
Drilling Permit No. 11-93E-013
Water Right Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase ☐ Modification
☐ Abandoned (describe abandonment or modification procedures such as liners, screens, materials, plug depths, etc. in lithologic log, section 3.)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Monitor
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (Specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Auger ☐ Reverse rotary
☐ Cable ☐ Mud ☐ Other _____
(Gaslift, hydraulic, etc.)

5. WELL CONSTRUCTION

Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____
Thickness _____ Diameter _____ From _____ To _____
1.50 inches 8 inches 1 foot 1.5 feet
2.50 inches 4 inches 1 foot 2.0 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? 7/16 inches by 12 inches
Number _____ From _____ To _____
20 perforations 100 feet 120 feet
20 perforations 100 feet 100 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 10 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Padding clay ☐ _____
Sealing procedure used: ☐ Slurry pit
☒ Plug surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded
Describe access port FLUG IN CAS

6. LOCATION OF WELL

Select map location must agree with written location.
Subdivision Name _____
Lot No. _____ Block No. _____
County _____
Address of Well Site Maiden Cmg. Rd. Beasonton
(Give at least name of road)
S.E. 1/4 N.W. 1/4 Sec. 4 T. 11 N. or S. XX
R. 44 E. or W. II

7. WATER LEVEL

Static water level 33 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 50 °F Quality Good
(Describe character or composition of water sample)

8. WELL TEST DATA

Discharge G.P.M.	Pumping Level	Recovery Footage
5		

9. LITHOLOGIC LOG

Depth	Material	Notes
0 - 19	Consolidated Gravel	X
19 - 25	" "	X
25 - 40	Loose broken sand	X
40 - 43	Consolidated Gravel	X
43 - 45	Sand	X
45 - 170	Hard limestone	X
170 - 200	" "	
200 - 212	" "	
212 - 216	Sand	
216 - 220	Head	

10. DRILLER'S CERTIFICATION

We certify that all minimum well construction standards were complied with at the time the rig was removed.
Firm Name Nelson Firm No. 3-15
Address Sub. Savings Bldg. Date 8-5-73
Signed by Drilling Supervisor Kay Nelson
and [Signature]
(Operator) [Signature]
(If different than the Drilling Supervisor)

'99-02-23 08:18 WALTON L. INC.

P.2

Form 238-7
3/95IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

Office Use Only

Inspected by _____

Twp _____ Rge _____ Sec _____

1/4 1/4 1/4

Lat _____ Long _____

Flowing Artesian

1. DRILLING PERMIT NO.

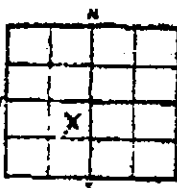
Other IDWR No. 749 4141

2. OWNER:

Name Crockett, David R.Address PO Box 58City GeorgetownState Id Zip 83239

3. LOCATION OF WELL by legal description:

Sketch map location (Must agree with written location).


 Twp. 11 North ☐ or South 28
 Rge. 44 East ☐ or West 11
 Sec. 4 1/4 NE 1/4 SW 1/4
 GOVT LOT _____ County Bear Lake
 Lat. _____ Long. _____

 Address of Well Site Georgetown
Canyon Rd. City Georgetown

Lt. _____ Bk. _____ 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	Feet	Feet	
Bentonite chips	0	20	450lb	over bore	

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

8. CASING/LINER:

Depth	From	To	Size	Material	Casing	Liner	Weight	Threads
8"	+1	20	1.315	STEEL	☒	☐	☐	☐
6"	+1	80	"	"	☒	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method Down Hole
☐ Screens Screen Type _____

From	To	Size	Number	Depth	Material	Casing	Liner
60	80	30	30			☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

31 ft. below ground Artesian pressure _____ ft.

Depth flow encountered _____ ft. Describe access port or

control devices: Plug in cap

11. WELL TESTS:

☐ Pump ☐ Bailer

Well	Flow	Flowing	Flowing
15620			
72			

Water Temp. 52°Bottom hole temp. 52°

Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Depth	Feet	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	1	overburden		X
"	1	10	Broken ls.		
72	10	29	" "		
29	37		Hard "		
37	45		Broken "		
45	72		Hard "		
72	80		Broken " 4 GPM	Y	
80	95		Hard "		Y
95	100		Broken " 12 GPM	X	

Completed Depth 100 (Measurable)Date Started 11-6-97 Completed 11-6-97

13. DRILLER'S CERTIFICATION

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

Firm Name Nelson Drilling Inc. Firm No. 315Firm Official Ray Nelson Date 11-11-97and Supervisor or Operator Shelby Cook Date 11-11-97

(Sign once a Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Use Typewriter or Ballpoint Pen

Pr.

Office Use Only

Inspected by _____
Twp _____ Rgs _____ Sec _____
_____ 1/4 _____ 1/4 _____ 3/4
Lat : : Long : :

Well #

Sign away 2 Free Oatmeal & Cornmeal

FORWARD WHITE COPY TO WATER RESOURCES

P. 02

Well #

1. WELL OWNER Name <u>Town of Bennington</u> <u>26 E. 2nd N.</u> Address <u>Bennington, Montpelier, Idaho 83254</u> <u>AI-89-5-022</u> Owner's Permit No. <u>AI-97577</u>	7. WATER LEVEL Static water level <u>dry hole</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ OF. Quality _____ (Describe artesian or non-artesian source below)																															
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as material plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Boiler ☐ Air ☐ Other _____ <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> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped																												
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3. PROPOSED USE ☐ Domestic ☐ Irrigation ☐ Test ☒ Municipal ☐ Industry ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Bore Diam.</th> <th>Depth From To</th> <th>Material</th> <th>Water Yield</th> </tr> </thead> <tbody> <tr> <td>1A 2</td> <td>2</td> <td>Soil</td> <td>1</td> </tr> <tr> <td>1B 2</td> <td>15</td> <td>Gravel & sand</td> <td>2</td> </tr> <tr> <td>20 24</td> <td>58</td> <td>Gravel, sand & some clay</td> <td>2</td> </tr> <tr> <td>30 56</td> <td>350</td> <td>CLAY SANDY</td> <td>2</td> </tr> <tr> <td>30 350</td> <td>400</td> <td>Clay brown sandy</td> <td>2</td> </tr> </tbody> </table>	Bore Diam.	Depth From To	Material	Water Yield	1A 2	2	Soil	1	1B 2	15	Gravel & sand	2	20 24	58	Gravel, sand & some clay	2	30 56	350	CLAY SANDY	2	30 350	400	Clay brown sandy	2							
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30 56	350	CLAY SANDY	2																													
30 350	400	Clay brown sandy	2																													
4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____																																
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>.250 inches</td> <td>10 inches</td> <td>1 foot</td> <td>275 feet</td> </tr> <tr> <td>inches</td> <td>inches</td> <td>feet</td> <td>feet</td> </tr> <tr> <td>inches</td> <td>inches</td> <td>feet</td> <td>feet</td> </tr> <tr> <td>inches</td> <td>inches</td> <td>feet</td> <td>feet</td> </tr> </tbody> </table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>perforations</td> <td>feet</td> <td>feet</td> </tr> <tr> <td>perforations</td> <td>feet</td> <td>feet</td> </tr> <tr> <td>perforations</td> <td>feet</td> <td>feet</td> </tr> </tbody> </table> Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ 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 _____ feet Placed from _____ feet to _____ feet Surface seal depth <u>20+</u> 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 struts Describe access port... <u>Well Cap</u>		Thickness	Diameter	From	To	.250 inches	10 inches	1 foot	275 feet	inches	inches	feet	feet	inches	inches	feet	feet	inches	inches	feet	feet	Number	From	To	perforations	feet	feet	perforations	feet	feet	perforations	feet
Thickness	Diameter	From	To																													
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inches	inches	feet	feet																													
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Number	From	To																														
perforations	feet	feet																														
perforations	feet	feet																														
perforations	feet	feet																														
6. LOCATION OF WELL Skip map location must agree with written location. N W E S Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Beau Lake</u>	10. Work started <u>10/9/89</u> Finished <u>10/21/89</u>																															
11. LOCATOR OF WELL Sketch map location must agree with written location. N W E S Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Beau Lake</u>	12. DRILLERS CERTIFICATION I/we certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>Andrew Well Drilling Firm No. 5</u> Address <u>1268 E. 17th Street</u> Date <u>10/24/89</u> <u>Idaho Falls, Idaho 83404</u> Signed by (Firm Official) <u>[Signature]</u> and <u>[Signature]</u> (Operator)																															

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

3E of

3-01-1999 8:29AM

FROM SUNRISE ENGINEERING 307 885 8501

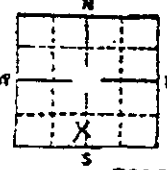
P. 3

SEP-01-88 TUE 08:08 AM

P. 03

Well #5

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

1. WELL OWNER Name: <u>Bert Nestlake</u> Address: <u>Rt. # 2 223 E. Center Pennington</u> <u>Montpelier, Ida. 83254</u> Owner's Permit No. <u>11-89-E010</u>		7. WATER LEVEL Static water level <u>70</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>67</u> Quality <u>good</u> Describe condition or treatment of water below																																					
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)		8. WELL TEST DATA ☐ Pump ☐ Boiler ☒ Air ☐ Other _____ <table border="1"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr> <td>60</td> <td>120'</td> <td>3</td> </tr> </tbody> </table>		Discharge G.P.M.	Pumping Level	Hours Pumped	60	120'	3																														
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113' to 114'	clay																																						
114' to 120'	cobbles & gravel	X																																					
120' to 134'	clay																																						
4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____		10. Work started <u>6/06/89</u> finished <u>6/07/89</u>																																					
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>1/2" inches</td> <td>610</td> <td>inches + 1 1/4</td> <td>feet 118</td> </tr> <tr> <td>inches</td> <td></td> <td>inches</td> <td>feet</td> </tr> <tr> <td>inches</td> <td></td> <td>inches</td> <td>feet</td> </tr> <tr> <td>inches</td> <td></td> <td>inches</td> <td>feet</td> </tr> </tbody> </table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☒ Yes ☐ No How perforated? ☒ Factory ☐ Knife ☐ Torch Size of perforation <u>1/8</u> inches by <u>3</u> inches <table border="1"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>120</td> <td>perforations</td> <td>105 feet 115 feet</td> </tr> <tr> <td></td> <td>perforations</td> <td>feet feet</td> </tr> <tr> <td></td> <td>perforations</td> <td>feet feet</td> </tr> </tbody> </table> Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>50</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☒ Puddling clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth ☐ Solvent Method of joining casing: ☐ Threaded ☒ Welded ☐ Weld ☐ Cemented between struts Describe access port <u>well cap</u>		Thickness	Diameter	From	To	1/2" inches	610	inches + 1 1/4	feet 118	inches		inches	feet	inches		inches	feet	inches		inches	feet	Number	From	To	120	perforations	105 feet 115 feet		perforations	feet feet		perforations	feet feet	11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>Nestlake Drilling</u> Firm No. <u>114</u> Address <u>184 N. 7 St.</u> <u>Montpelier, Ida.</u> Date <u>7/08/89</u> Signed by (Firm Official) <u>E. Ray Nestlake</u> and (Operator) <u>E. Ray Nestlake</u>					
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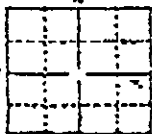
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JUL 11 1989

 Department of Water Resources
 Eastern District Office

P. 08

Well #6

1. WELL OWNER Name: <u>C.A.SIMS</u> Address: <u>Gorge town</u> Owner's permit No. _____	7. WATER LEVEL Static water level <u>50</u> feet below land surface Flooding? ☐ Yes ☒ No (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 <u>Air test</u> Pump ☐ Sailer ☐ Other ☒ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Draw Down</th> <th>Motor Pumping</th> </tr> </thead> <tbody> <tr> <td><u>2-10</u></td> <td></td> <td><u>1</u></td> </tr> </tbody> </table>	Discharge G.P.M.	Draw Down	Motor Pumping	<u>2-10</u>		<u>1</u>																														
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3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type) _____ ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection	9. LITHOLOGIC LOG <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Depth Feet</th> <th colspan="2">From To</th> <th rowspan="2">Material</th> <th rowspan="2">Water Yes No</th> </tr> <tr> <th>Start</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>5</td> <td>CLAY BROWN</td> <td></td> </tr> <tr> <td>5</td> <td>5</td> <td>20</td> <td>SAND GRANUL</td> <td></td> </tr> <tr> <td>20</td> <td>20</td> <td>35</td> <td>" "</td> <td></td> </tr> <tr> <td>35</td> <td>35</td> <td>50</td> <td>CLAY BROWN</td> <td></td> </tr> <tr> <td>50</td> <td>50</td> <td>65</td> <td>GRANUL</td> <td></td> </tr> </tbody> </table>	Depth Feet	From To		Material	Water Yes No	Start	To	0	0	5	CLAY BROWN		5	5	20	SAND GRANUL		20	20	35	" "		35	35	50	CLAY BROWN		50	50	65	GRANUL					
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6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>BRAZILIA</u> <u>N 2 1/2 SE 1/4 Sec 7 T. 11 N. R. 4 E. DN</u>	10. Work started <u>10-1-74</u> finished <u>10-1-74</u> 11. DRILLER'S CERTIFICATION I am a duly licensed driller under No. <u>212</u> Address <u>HALLS 4156</u> Date <u>10-1-74</u> Signed by (Name Official) <u>Ronald J. Anderson</u> and _____ Drillman _____																																				

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

SEP-01-98 TUE 08:10 AM

P.07

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

WELL OWNER:

Name A. M. ThompsonAddress GEORGETOWN 10445Owner's Permit No. 15-16-347NATURE OF WORK (check): Replacement well ☐New well ☒ Deepened ☐ Abandoned ☐Water is to be used for: IRRIGATION DRYERMETHOD OF CONSTRUCTION: Rotary ☐ Cable ☒Dug ☐ Other ☐

(explain)

CASING SCHEDULE: Threaded ☐ Welded ☐10 "Diam. from 0 ft. to 231 ft."Diam. from 0 ft. to 0 ft."Diam. from 0 ft. to 0 ft."Diam. from 0 ft. to 0 ft.Thickness of casing: 250 Material:Steel ☒ concrete ☐ wood ☐ other ☐

(explain)

PERFORATED? Yes ☒ No ☐ Type of perforator used: TEACHSize of perforations: 6 " by 3/4 "424 perforations from 63 ft. to 231 ft.perforations from 0 ft. to 0 ft.perforations from 0 ft. to 0 ft.perforations from 0 ft. to 0 ft.WAS SCREEN INSTALLED? Yes ☐ No ☒

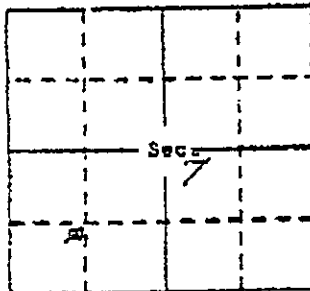
Manufacturer's name

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 Gravelplaced from ft. to ft. Surface sealprovided? Yes ☐ No ☐ To what depth?ft. Material used in seal:Did any strata contain unusable water? Yes ☐No, ☒ Type of water:Depth of strata ft. Method of sealing

strata off:

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

Locate well in section



LOCATION OF WELL: County

SW & SW Sec. 7 T. 11 N. R. 4 E. S. 20

Use other side for additional remarks

Size of drilled hole: 10 " Total depth of well: 231 Standing water level below ground: 80 Temp. 70-75 Fahr. Test delivery: 500 gpm or 1/2 cfs Pump? ☒ Ball ☐

Size of pump and motor used to make test: 10 " 75 200 1/2 " 1/2 " 1/2 "

Length of time of test: 6 Hrs. 15 Min.Drawdown: 30 ft. Artesian pressure: ft.above land surface Give flow cfsor gpm. Shutoff pressure:Controlled by: Valve ☐ Cap ☐ Plug ☐No control ☐ Does well leak around casing?Yes ☐ No ☐

DEPTH MATERIAL WATER YES OR NO

FROM TO FEET FEET

0 7 TOP 5.4 BLACK CLAY7 18 GRAVEL CLAY CLAY18 29 " " "29 36 " " "36 40 " " "40 52 GRAVEL CLAY CLAY52 57 " " "57 61 " " "61 69 " " "69 91 " " "91 99 " " "99 111 SAND GRAVEL " "111 113 " " "113 119 " " "119 122 " " "122 126 " " "126 130 " " "130 133 " " "133 143 " " "143 145 " " "145 151 " " "151 163 " " "163 169 " " "169 180 " " "180 185 " " "185 187 " " "187 197 " " "197 228 GRAVEL & DEWDIPS " "228 231 CLAY " "Work started: APR 9 1985Work finished: APR 10 1985

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

Name: BOAT WEST LAKEAddress: BENNINGTON 10445Signed by: BOAT WEST LAKELicense No. 10445 Date: OCT 17 1987

SEP-01-98 TUE 08:11 AM

P. 08

Well #8

Form 218-7
1995IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

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

1. DRILLING PERMIT NO. 11-96-E-108-000
Other IDWR No.

2. OWNER:

Name John Mc Donald
Address PO Box 103
City George Town State Idaho Zip 83439

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

Top	11	North	or	South	☒
Rge	44	East	or	West	☐
Sec	7	1/4	SW	1/4	SE
Govt Lot		County			
Lat		Long			
Address of Well Site <u>1/2 mile land</u>					
<u>GEORGETOWN</u> City					

L1. Bld. 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

Material	From	To	Amount	Method
Bentonite chips	0	19	350 lb	over-bore

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

8. CASING/LINER:

Depth	From	To	Casing	Material	Casing	Used	Welded	Threaded
5	+1	19	48	STP61	2"	☒	☐	☐
6	+1	99	6	"	"	☒	☐	☐

Length of Headpipe Length of Tailpipe

9. PERFORATIONS/SCREENS

☒ Perforations Method PERFORATOR Round Hole
☐ Screens Screen Type

From	To	Shot Size	Number	Diameter	Material	Casing	Used
80	100	20	30			☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

6.5 ft. below ground Artesian pressure lb.
Depth first encountered ft. Describe access port or control devices:

11. WELL TESTS:

Test	Pump	Sealer	Year	Flowing Artesian
35				
90				
36.2				

Water Temp. 50 Bottom hole temp. 50
Water Quality test or comments: 12. LITHOLOGIC LOG: (Describe repairs or abandonment) 82

Depth	From	To	Remarks: Lithology, Water Quality & Temperature	Water
119	0	2	over-bore	X
12	13	19	Gravel + clay	
13	19	19	clay	
78	19	92	clay + gravel	
11	82	100	Gravel	X

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AUG 28 1998

Department of Water Resources

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AUG 13 1998

Department of Water Resources
Eastern RegionCompleted Depth 100 (Measurable)
Date: Started 8-6-96 Completed 8-7-96

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 Nelson Drilling Inc. Firm No. 215Firm Official Ray Nelson Date 8-10-96and Supervisor or Operator John Nelson Date 8-10-96
(Sign only if Firm Owner & Operator)

FORWARD WHITE COPY TO WATER RESOURCES