

IDAHO DEPARTMENT OF WATER RESOURCES
PRELIMINARY RECOMMENDATION OF WATER RIGHTS ACQUIRED UNDER STATE LAW

06/17/2004

RIGHT NUMBER: 25-4009

NAME AND ADDRESS: CITY OF RIGBY
158 W FREMONT AVE
RIGBY ID 83442

SOURCE: GROUND WATER

TRIBUTARY:

QUANTITY: 2.800 CFS

The right holder shall record the quantity of water diverted and annually report diversions of water and/or other pertinent hydrologic and system information as required by Section 42-701, Idaho Code.

The right holder shall provide a means of measurement acceptable to the Department from all authorized points of diversion which will allow determination of the total rate of diversion.

PRIORITY DATE: 02/01/1947

POINT OF DIVERSION:

T04N R39E S18 NWSESW Within JEFFERSON County

PURPOSE AND
PERIOD OF USE:

PURPOSE OF USE
MUNICIPAL

PERIOD OF USE
1/01 12/31

QUANTITY
2.800 CFS

PLACE OF USE: Place of use is within the service area of the City of Rigby municipal water supply system as provided for under Idaho Law.

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the Court at a point in time no later than the entry of a final unified decree. Section 42-1412(6), Idaho Code.

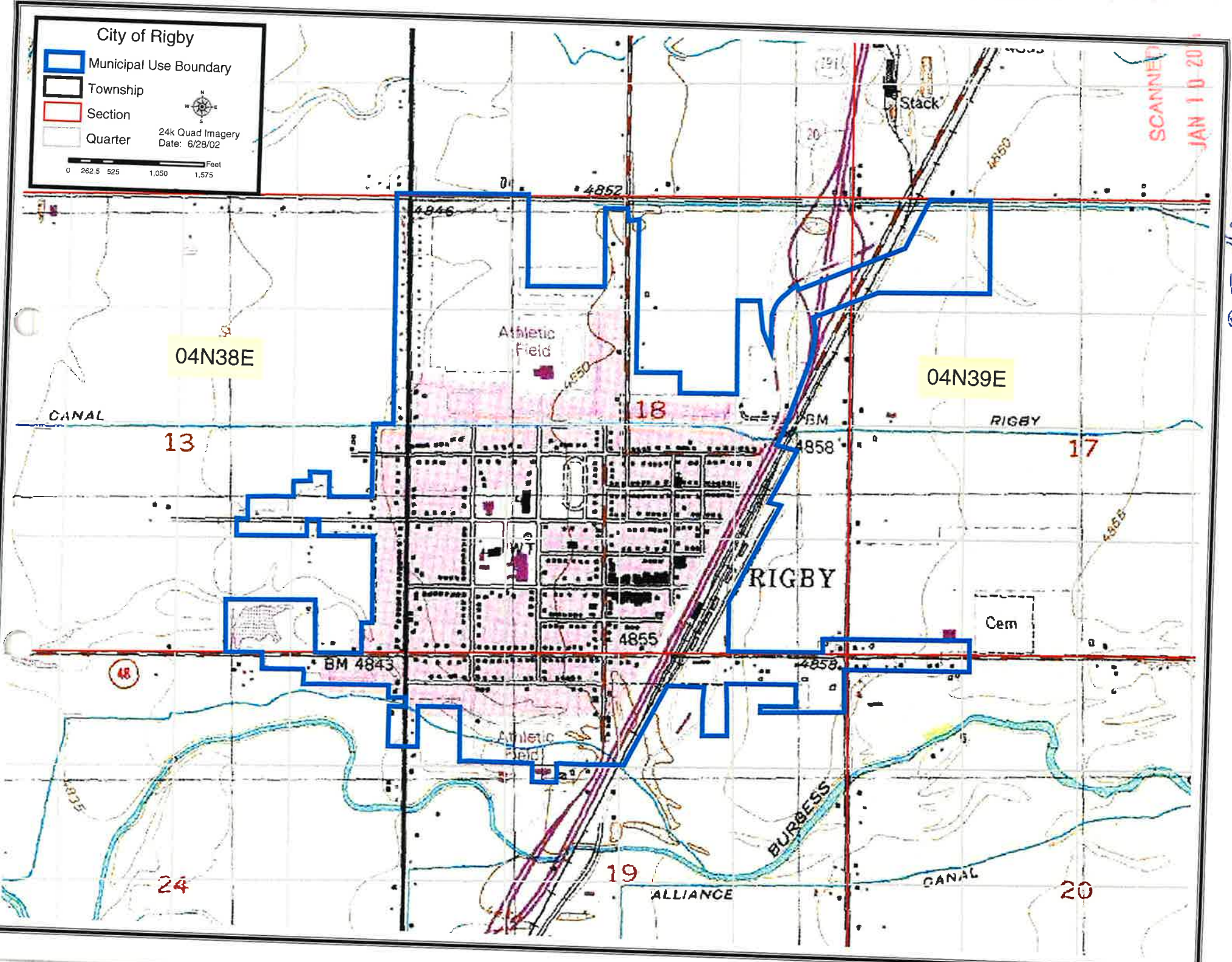
EXPLANATORY MATERIAL: Beneficial Use

City of Rigby

- Municipal Use Boundary
- Township
- Section
- Quarter

24k Quad Imagery
Date: 6/28/02

0 262.5 525 1,050 1,575 Feet



SCANNED
JAN 10 2011

25-4009

City of Rigby AS claim field investigation

4N 39E 18

Well_3

Well_1

Well_2

4N 39E 19

Locations confirmed
by Public Works Director
Doug Nelson 3 March 04

Bac

GPS locations from
WMIS per Terry
Klipfel - see WMIS
copies

Bac 3/2/04

NOV 5 0 2004

PROFILED

RECEIVED

FEB 23 2004

Department of Water Resources
Eastern Region

Michael -

This is copied for you so
you'll know where questions
are coming from, if you get
a call. The city water
employee (not the supervisor -
The supervisor was gone today. I
had left repeated messages & got no
response so I drove up there)
is sure DWR already has
everything you need. He wouldn't
talk to me, told me I had
to work through the city attorney.

SCANNED

NOV 30 2004

Beyce

PROFILED

Water Resources Field Services

1571 N. 1100 E.
Terreton, ID 83450
208-663-4667

February 20, 2004

RECEIVED

FEB 23 2004

Steve Clark
City Attorney, City of Rigby
PO Box 277
Rigby ID 83442

Department of Water Resources
Eastern Region

Re: Water Right Adjudication Claims A25-04009, A25-04010, A25-04011,
A25-07051, A25-07288, A25-10496, A25-10688.

Dear Mr. Clark:

Thank you for talking with me on the phone about the City of Rigby's water rights. As we discussed the Idaho Department of Water Resources (IDWR) has asked me to do a field review of the city's water right claims. This is in preparation for Senior Water Resource Agent Michael Holliday to make recommendations to the court on the city's water rights. You may contact Mr. Holliday at 525-7161 if you have questions.

Jim of the city water department suggested I let you know what is needed before working with the water department personnel. He also believes IDWR has already obtained all the information needed. Before contacting the city, I specifically asked the appropriate IDWR personnel what was already in their files, what was available, and what did they wish me to investigate. Today I contacted IDWR again, and Monday I will follow up with other IDWR personnel. Based on what I have learned, I need the following:

1. I left a copy of IDWR's map of the city service area with Jim. I need a corrected copy with the date and initials of whoever makes the corrections.
2. Documentation of the original motor horsepower, pumping lift, and discharge pressure of well number one and well number two. If possible I need documentation that corresponds to IDWR requirements in the enclosed pamphlet "Evidence of Priority." This is needed because these are "beneficial use" water rights, developed without a permits or licenses. The documentation now in the files documents the existence of the wells, but not their capacities.
3. Documentation of the motor horsepower, pumping lift, and discharge pressure of well number one and well number two after the 1958 increase

SCANNED

NOV 30 2004

PROF

in capacity described in claim A25-10596.

4. Documentation of the height of the water tower and the date of installation. This will help determine the head the pumps push against, which is needed to calculate historical capacity.
5. Documentation of the motor horsepower, pumping lift, and discharge pressure of the two wells currently in use, as authorized by transfer 4791. This is needed because the underlying water rights are still the beneficial use rights.
6. If the city has had any discharge measurements made of well capacity over the years, it will greatly strengthen your water right to have copies of the data in the files.
7. Documentation of evidence of priority (including a history of the size of pumps, and the dates installed) for claim A25-10688. This claim is for the pump in the subwater pond that provides water to the Burgess Canal in exchange for water supplied to the city.
8. It would be useful to have copy of the exchange agreement with the Burgess Canal.
9. I need a thorough description of the use of the exchange water. Where is it used, and for what purposes? How many days per year is it used, and what is the average flow rate while it is being used? If you have records of the volume of water exchanged, please provide copies.
10. It would be helpful for me to get photographs and GPS locations of the wells at the airport and sewage lagoon. It also would be useful to get photographs and GPS locations of where the subwater pump puts water into the Burgess and where the city diverts its exchange water from the Burgess.

I realize some of this information may be very difficult to obtain. Documenting the original motor sizes, and the 1958 upgrades, may be a problem. If you simply can't document these items, I can try to use "chart values" for water use and a study of water use in the Snake River Plain done by the USGS a number of years ago. To do this, I will need a history of the population from the Rigby censuses over the years. The claimed priority of A25-04010 is 1920, so it would be good to have census data back to then at least.

SCANNED

NOV 30 2004

PROFILED

When I showed Jim the map of the service area, he mentioned that there are requests to enlarge the city's service area. I encourage you to talk with Idaho Department of Water Resources about the water right issues of enlarging the service area. Cities are allowed to hold water rights that accommodate future growth, but there still needs to be appropriate authorization for incorporating new geographical areas to the city's service.

Please discuss these needs with the city water manager and ask him to contact me if he has further questions. You or he may reach me at 208 681 9100. He may also contact Mr. Holliday if he has questions about why we need this information.

Sincerely,

SCANNED

NOV 30 2004

Bryce A. Contor

Enclosure

PROFILED

cc: Michael Holliday
IDWR
900 N Skyline Ste A
Idaho Falls ID 83402

PROFILED

NOV 3 0 2004

SCANNED

Rigby's well # 3 in SWNW Sec. 18 is capable of 4.57 cfs
well # 1 in SESE Sec. 18 capable of 4.67

All the above rights (except Hoop already located there) have
been transferred to 2 wells

This gives as an old capacity of 10.6 cfs

25-4009 & 25-10496 well 1 went from 2.8 cfs to 5.35
25-4009 & 25-10496 well 2 went from 1.45 to 2.8
25-4011 North 3rd well 3 for 2.45 cfs

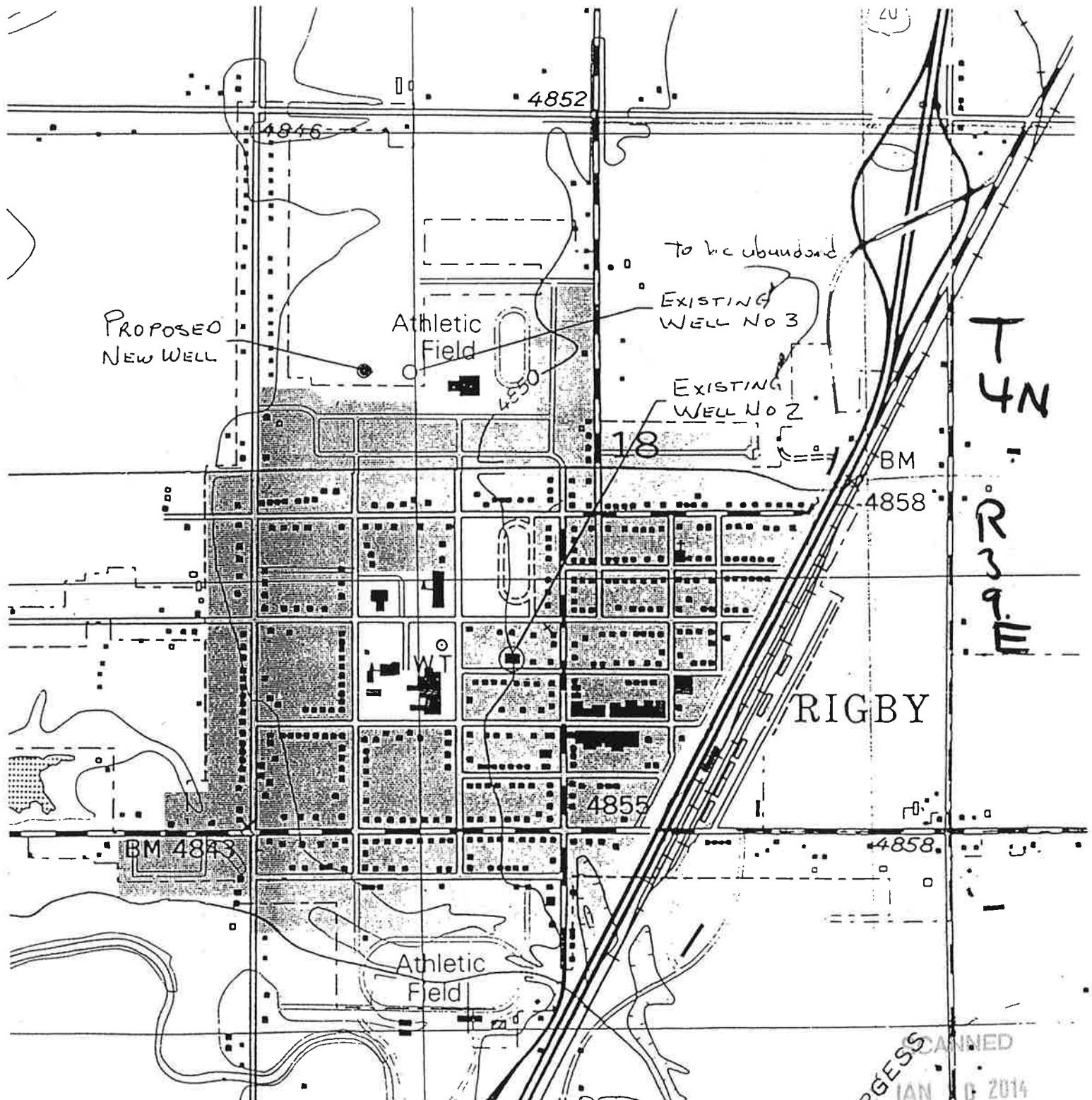
in 1958 (claimed no EOP yet) wells 1 & 2 were enlarged

Before transfer:

the City of Rigby I found the following

After reviewing Bryce Conter's notes and information from

old capacity (including 25-10496)	current capacity
5.35	4.55
2.8	4.67
2.45	
10.6	9.12



**Field Exam Summary - City of Rigby Municipal Wells
Claims A25-04009, A25-04010, A25-04011, A25-10496**

3 March 2004

(Only page 1 is included with paper files A25-04010 through A25-10496; the complete summary is included in paper file A25-04009.)

Bryce Contor
Water Resources Field Services

General Comments

The City of Rigby has four beneficial-use claims for municipal use from wells, and this summary report refers to all four claims. Claims A25-07051, A25-07288 and A25-10688 have separate summary reports in their own files. Except as noted all copies, data, and correspondence are included in paper file A25-04009.

Paper file A25-04009 includes the full site data copied from IDWR Water Measurement Program files, as well as excerpts from a 1995 engineering study by Forsgren Perkins Associates. The engineering study copies were provided by the city.

On 3 March 2004 I met with the Public Works Director Doug Nelson and the City Attorney Steve Clark. I was unsure how the legal principle of water rights for the future needs of "Growing Cities" applies to beneficial use rights, so I have described the history of development of water use and capacity without making specific proposals for water right elements. Currently I have limited data for historical use and capacity but Public Works Director Nelson is looking for more information, which may aid in making a recommendation. Attorney Clark is anticipating that the water-rights review will include consideration of the "growing cities" legal principle.

Ownership

City of Rigby.

PROFILED

SCANNED

NOV 30 2004

POD

The attached engineering report documents four original wells under an "old" naming system. These include a well in the basement of the City Hall, a well just west of the City Hall, a well on the north end of town near the Harwood School, and a well on the south side of town near the armory. The first three of these wells appear to be the wells described in the various affidavits supporting the priority dates. Doug Nelson referred to another well since abandoned. This fifth well may have been connected to the city water system at one time, but not

well may have been connected to the city water system at one time, but not during his tenure. The license for the armory well has a priority date of 1989.

Currently three wells are in use, renumbered "Well #1," "Well #2," and "Well #3." Well #1 is the well west of the City Hall referred to in the affidavits (formerly "Well #1"). Well #2 is the well on the south side of the city near the armory (formerly "Well #4") and is covered under post-AJ license 25-07523. Well #3 is a new well drilled pursuant to transfer 4791, west of the original well near the Harwood School.

The original well near Harwood School has been filled with concrete per IDWR requirements (formerly "Well #3"). The well in the basement of the City Hall still exists but is no longer used (formerly "Well #2"). I believe the fifth well referred to has also been filled, per DEQ requirements.

The current well numbering scheme is reflected on the GIS layout with a handwritten date of 3/2/04. The GPS locations are from the WMIS database and the numbering scheme is from the attached Water Measurement Program files. Doug Nelson confirmed the locations and the numbering scheme. GPS locations ("old" IDTM, based on datum NAD27) are:

- Well #1 287,935 N 668003.3 E
- Well #2 287,428 N 667948.9 E
- Well #3 288,583 N 667,704.7 E

SCANNED

NOV 30 2004

For the rights included on transfer 4791 (A25-04010, A25-04011, A25-10496) I propose recommending the two PODs authorized by the transfer:

Well #1	SW NE SW Section 18, T 4N R 39E
Well #3	SW NW Section 18, T 4N R 39E

Claim A25-04009 is not included on the transfer. Its priority date indicates it refers to Well #1, the second well drilled. I propose recommending the claimed legal description (4N 39E 18 SW NE SW), which is the location of Well #1.

POU

PROFILED

The attached map provided by the city (following the engineer's report in paper file A25-04009) shows the projected "area of impact" of the city through year 2015. This is the service area requested by the city under the "growing cities" doctrine and corresponds to the design capacity of the current system. The dotted lines on the map show the 1995 city limits, which represent current conditions except for a few small annexations. Because I don't know how the

"growing cities" doctrine intersects with "beneficial use" claims I told Mr. Clark that IDWR would probably review this with assistant attorneys general before making a recommendation. I also suggested that the city contact IDWR regarding "place of use" before making further expansions of the city distribution system.

Overlap

The city owns canal shares, which it delivers for lawn and garden irrigation to part of the city. Apparently there are also private canal shareholders within the city. Claim A25-10688 and license 25-07523 also overlap these four rights.

Conflict

None noted.

Priority

Affidavits in the files confirm the historical existence of wells corresponding to claims A25-04009, A25-04010 and A25-04011. Evidence supports:

Original Well #2 (currently unused)	12/31/1920
Original Well #1 (currently well #1)	12/31/1947
Original Well #3 (filled with concrete)	12/31/1961
Enlargement of Capacity, original Well #2 and Well #1 (claim A25-10496)	no evidence

PROFILED

SCANNED
NOV 30 2004

Quantity

a) Diversion Rate

In paper file A25-10496 is a copy of an undated report of a pumping test of 2000 gallons per minute for original Well #3. This confirms *well* capacity but not necessarily *pumping plant* capacity. There is no other evidence of original capacities of the wells, nor is there evidence for the claimed increase in diversion capacity represented by claim A25-10496.

The engineer's report (page 2-3) documents current capacity of:

Well #1	2,100 gallons per minute (4.67 cfs)
Well #2	1,150 gallons per minute (2.56 cfs)
Well #3	2,050 gallons per minute (4.57 cfs)
Total	5,300 gallons per minute (11.81 cfs)

The report (page 2-1) indicates a design discharge pressure of 50-55 psi. IDWR water measurement program data indicate the following:

Well #1	150 hp ¹	dynamic lift 138 feet	discharge to pressurized system
Well #2	100 hp	unknown ²	
Well #3	125 hp	dynamic lift 220 feet	discharge to tank ³

I calculated theoretical capacities using an assumed efficiency of 70%, assumed friction loss of 15 feet, pressure lift = 2.31 x psi, and the formula:

$$\text{GPM} = (\text{water horsepower})(3960)/(\text{Total Dynamic Head}).$$

Results are given in Table 1:

SCANNED

NOV 30 2004

PROFILED

¹ The paper files have a photo pasted over what appears to be the motor data field notes, and the WMIS database is blank. However, WMIS lists 150 hp for a well known as the "fire well," and Well #1 is also listed as the "fire well" on the paper reports from the IDWR Water Measurement program.

² One of the IDWR Water Measurement paper-file reports lists "Deep well 500" for pumping lift, but I believe this actually refers to the depth of the well. I assume the same lift as Well #1 for calculations, which is a more generous assumption than assuming the same lift as Well #3.

³ The discharge tank appears to be about 12 feet tall, I assume the average water level the pump is pushing against is 6 feet. I assume it is a non-pressurized tank.

Table 1: Current Capacity
(Theoretical Calculations)

Well	Motor hp	Water hp	Lift	Friction	Press. (psi x 2.31)	TDH	GPM
1	150	105	138	15	116	269	1546
2	100	70	138 ⁴	15	116	269	1030
3	125 ^{note 5}	87.5	220	15	6 ^{note 3}	241	1438

These calculations suggest a current capacity of about 4,014 gallons per minute or 8.94 cfs.

The required diversion rate can be calculated in two different ways:

- The pages of the report that I received do not document the design population, but Mr. Nelson tells me it is 7,500 people and corresponds to the year 2,015. Based on this population and the capacity according to the engineering report, the per-person diversion requirement is (11.81 cfs/7,500 persons = 0.001575 cfs/person).
- The IDWR field examiner's handbook suggests 0.33 cfs for each 50 households served. The US Census Bureau website gives Rigby's year-2000 population as 2998, with 1107 housing units. This gives a relationship of 2.71 persons/household. Applying this relationship to the handbook value gives (0.33 / (50 x 2.71) = 0.002435 cfs/person).

The Census website does not give city populations for other years besides 2000, but it gives total Jefferson County population. In 2000, Rigby's population was (2,998/19,223 = 15.6 %) of the county population. Table 2 lists the required diversion rates calculated from these values:

PROFILED

SCANNED

NOV 30 2004

⁴ Assumed from Well #1.

⁵ There are booster pumps in the Well #3 facility but they pressurize water from the tank and do not affect the available HP or TDH for the well pump itself. The Well #3 facility can deliver more than this rate *to the water mains* but I have calculated the *rate of extraction from the aquifer*.

Table 2:
Calculated Required Diversion Rates
For City of Rigby (cfs)

Year	County Pop.	City Pop. (Calculated)	Rate 1 0.001575	Rate 2 0.002435
1920	9441	1473	2.32	3.59
1930	9171	1431	2.25	3.48
1940	10762	1679	2.64	4.09
1950	10495	1637	2.58	3.99
1960	11672	1821	2.87	4.43
1970	11619	1812	2.85	4.41
1980	15304	2387	3.76	5.81
1990	16543	2581	4.07	6.28
2000	19223	2998	4.72	7.30
2003	19781	3086	4.86	7.51

Absent evidence of motor and pump sizes, this table could be used to assign diversion rates to the various priority dates. Under a liberal interpretation of the "growing cities" doctrine, one could assert that the well developed in 1920 must have had a capacity to serve a 1947 population, because the system was not upgraded until then. Likewise, the 1947 and 1920 wells in combination must have had adequate capacity for about a 1960 population, corresponding to the increase in capacity of the first two wells and the drilling of the well near the Harwood School. That upgrade and new well appear to have served until about 1989 when the Armory Well was drilled, so the 1961 capacity must have been adequate for the 1989 population.

Under that reasoning and using the most generous per-person diversion rates, the results in Table 3 could be suggested. Both the claim and the calculated requirements limit the column "Recommend CFS". It represents the additional cfs proposed for each priority date listed:

SCANNED
NOV 30 2004

PROFILED

PROFILED

SCANNED

NOV 30 2004

Table 3
Diversion Rates Applying "Growing Cities" Doctrine

Right	Priority	Recommend CFS ⁶	Cum. Calc. CFS	Claim CFS ⁷	Cum. Claim CFS
A25-04010	12/31/1920	1.45	3.99	1.45	1.45
A25-04009	12/31/1947	2.80	4.43	2.80	4.25
A25-10496	3/1/1958 ^{note 8}	1.11	5.36 ^{note 9}	3.90	8.15
A25-04011	12/31/1961	0.92	6.28	2.45	10.60

If it is found that beneficial use rights can only be established for the need that existed at the time of establishment, and using the least generous diversion rates, the results in Table 4 could be suggested. As before, column "Recommend CFS" is the quantity that I would propose for each priority date:

Table 4
Diversion Rates Based on
Need at Time of Development

Right	Priority	Recommend CFS	Cum. Calc CFS	Claim CFS	Cum Claim CFS
A25-04009	12/31/1920	1.45	2.32	1.45	1.45
A25-04010	12/31/1947	1.13	2.58	2.80	4.25
A25-10496	3/1/1958 ^{note 8}	0.15	2.73	3.90	8.15
A25-04011	12/31/1961	0.14	2.87	2.45	10.60

Even under the more generous assumptions of Table 3, the total diversion rate available would be 6.28 cfs under the adjudication recommendations plus 2.51 cfs from the license, or 8.79 cfs. This is less than the engineer's report of current capacity and the projected needs for year 2015. It approximately matches my theoretical calculations.

A third alternative would be to recommend a total 9.30 cfs in the adjudication. In combination with the license, that would mean the full current capacity of 11.81 cfs is authorized. This implies an assumption that the pre-March-1963 capacity was 9.30 cfs, or that the "growing cities" doctrine trumps the permit requirement.

⁶ Incremental CFS associated with this priority date.

⁷ Claimed diversion rates are from transfer 4791, as a stated purpose of the transfer was to "clarify claim amount."

⁸ Claimed date; no evidence of priority in file.

⁹ Half the required capacity indicated by 1990 census is added to 1958 upgrade, half to 1961 new well.

b) Diversion Volume

I don't remember if diversion volume is specified for municipal recommendations. If it is, required diversion volume can be calculated in three different ways:

- The USGS RASA report "Water Use on the Snake River Plain, Idaho and Eastern Oregon" (selected pages included in paper file A25-04009) suggests 231 gallons/day/person for municipal use. This translates to 0.259 acre feet per person per year.
- The IDWR Water Measurement Program data suggest current annual diversion volume is about 494 acre feet/year for Well #3, 29 acre feet/year for Well #2, and fire-fighting use only for Well #1. Using the 2000 census of 2998 people, this suggests a volume of 0.17 acre feet per person per year. If the Water Measurement Program data are incomplete, this volume will be misleadingly low.
- Using the 2000 census ratio of 2.71 persons per household for Rigby and the IDWR Field Examiner's Handbook value of 0.6 acre feet per household per year gives a value of 0.22 acre feet per person per year. This does not consider additional municipal uses such as businesses, parks, and schools.

Because of the possibility of omissions in the last two methods, I propose using the USGS estimate of 0.259 acre feet per person per year. Using that volume and the population estimates of Table 2, I calculated required annual diversion volumes. The results are listed in Table 5:

Table 5:
Calculated Required Diversion Volumes
For City of Rigby

Year	County Pop.	City Pop. (Calculated)	Volume (acre feet/year)
1920	9441	1473	382
1930	9171	1431	371
1940	10762	1679	435
1950	10495	1637	424
1960	11672	1821	427
1970	11619	1812	469
1980	15304	2387	618
1990	16543	2581	668
2000	19223	2998	776

PROFILED

NOV 30 2004
SCANNED

Year	County Pop.	City Pop. (Calculated)	Volume (acre feet/year)
2003	19781	3086	799

As with diversion rate, this can be approached under the "growing cities" assumption. In that case, each right should be recommended with the annual volume that should have been adequate up until the time of subsequent system upgrade. It can also be approached under a "need at time of development" assumption. This assumption is that since beneficial use rights were developed without permits, they are valid for the annual volume actually needed at the time of development. Table 6 shows the possible annual volume that could be recommended for each right, under each theory. As with diversion rates, as much volume as possible is assigned to the older rights, and the junior rights reflect only the incremental diversion volume suggested by the data. Columns "Growing Cities Vol. (acre ft/year)" and "Need at Time of Devel. Volume (acre ft/year)" are the columns that would be used for recommendations.

Table 6
Possible Water-right Diversion Volumes

Right	Priority	Growing Cities Vol. (acre ft/year)	Cum. Growing Cities vol.	Need at Time of Devel. Volume (acre feet per year)	Cum. Need at Time of Devel. Volume (acre ft/year)
A25-04010	12/31/1920	424	424	382	382
A25-04009	12/31/1947	3	427	42	424
A25-10496	3/1/1958 ^{note 8}	121	548	2	426
A25-04011	12/31/1961	120	668	1	427

Summary

Depending on the interpretation of the intersection of the "growing cities" doctrine and the nature of "beneficial use" claims, I have calculated possible diversion rates and volumes to be recommended. My calculations and assumptions should be superceded by any data the city is able to provide before the recommendations are prepared.

SCANNED
NOV 30 2004

PROFILE

The diversion rate available to the city after the adjudication will be whatever is decreed for these claims, plus 2.51 cfs from Well #2 under license 25-07523. Even after the adjudication, the total volume available to the city will not be clear because the license does not specify a volume.

Water Use

Municipal

List of Photos

CityofRigby_Municipal1.jpg	Well house, Well #1, looking north.
CityofRigby_Municipal2.jpg	Well house, abandoned well at Harwood Elementary School, looking west.
CityofRigby_Municipal3.jpg	Well house, Well #3, looking north.

Low-quality photocopies of additional photos from the IDWR Water Measurement Program files are included in paper file A25-04009.



Bryce A. Contor

3/10/04
Date

SCANNED
NOV 30 2004

PROFILED

City of Rigby - Forsgren & Assoc.,
1995 Water Improvements
P.W.D. Doug Nelson March 3, 2004

CHAPTER 2.0
GENERAL SYSTEM DESCRIPTION

SCANNED

NOV 30 2004

PROFILED

2.1 INTRODUCTION

In order to provide proper operation and maintenance for the water system it is helpful to have an understanding of the history and previous conditions of the system as well as information regarding new components. The purpose of this chapter is to provide an overall view of the improvements to the water system, individual components of the new system, and how the changes relate to the older facilities.

The purpose of the recent improvements to the water system was to 1) provide for better water supply; 2) increase water pressures; and 3) increase storage capacity for both seasonal demand and fire flows. A general overall view of improvements made during the recent project improvements is shown on the Record Drawings.

The recent improvements made to the distribution system have removed many flow restrictions. New 12-inch, 10-inch, and 8-inch lines were constructed to eliminate several deadend lines, improve pressure and delivery to the northeast and northwest portions of town, and to provide a more efficient network for the remainder of the system.

An important change made to the water system was the abandonment of the elevated 250,000 gallon storage reservoir near City Hall. Prior to the recent improvements, the elevation of the tank provided for a constant 50-55 psi pressure to the City, and pumps were operated as needed to keep the tank reasonably full. The well located under the elevated tank was operated according to the level of water in the tank while the other two wells near the National Guard Armory and near the Harwood School were manually turned on and off according to seasonal fluctuations in demand.

The City's system is now operated by a pump controller that turns on wells and booster pumps as necessary to maintain system pressure in response to varying water demands. Pressure in the system is maintained by two variable frequency drive booster pumps housed in a new pump station at 550 N 2nd W. The well near the National Guard Armory and the well under the old elevated tank are activated by the controller as conditions require. Additionally, a fire booster pump at the new pump station is automatically called for during brief periods of critical demand.

A new well was drilled as a part of this project. This well was designed to pump only from a deep qualifier (700 ft) to guarantee long-term, high quality groundwater free of possible surface contamination. The new well supplies water only to the reservoir and does not pump directly into the system.

The new storage reservoir was constructed directly east of the new pump station. This partially buried concrete structure has a capacity of 1,000,000 gallons. Water from the tank is pumped into the system by the booster pumps since the storage reservoir itself is not pressurized.

2.2 DESIGN CRITERIA

Population	3,835	(Year 2015)
Average Daily Flow (gpm)	2,135	
Peak Hourly Flow (gpm)	4,700	
Peak Daily Flow (gpm)	2,775	
Available Fire Flow (gpm)	2,000	
Normal Pressure (psi)	60-70	
Minimum Fire Pressure (psi)	20+	
Storage Capacity (gallons)	1,000,000	

SCANNED

NOV 30 2004

PROFILED

2.3 DISTRIBUTION SYSTEM

The distribution system is comprised of 4, 6, 8, 10, and 12-inch diameter waterlines with associated valves, hydrants, and fittings. The distribution system is generally constructed on a looped layout wherein water at any given point in the system is available from at least two directions. This greatly improves water delivery and reduces problems from freezing and stagnant water.

For the most part, the system is in good condition and major maintenance problems occur only infrequently. However, it is possible that several small leaks exist that have not yet been identified. The City has been engaged in a program to gradually identify and replace older lines as funding permits.

Recent improvements made to the water system were performed after computer analysis of the existing system was performed by Forsgren Associates. The computer data showed that the existing system was unable to provide adequate pressures in a fire flow situation for outlying areas (i.e. High School).

Another computer modeling analysis of the distribution system was performed after adding the improvements. This showed that a residual pressure of at least 20 psi will be available at all points in the system during a fire flow event.

2.4 WELLS AND PUMPS

2.4.1 Previous Numbering System: Prior to the recent improvements, the City of Rigby's wells were labeled as follows:

abandoned → Well #1: Located in the basement of City Hall. This well was drilled in approximately 1920. This well had not been used since it was **last tested in 1989** and was abandoned as a portion of this improvement project.

Well #2: Located directly west of City Hall under the elevated tank and is approximately 50 years old. This well is 196 feet deep and was served by a 150 horsepower pump that delivered approximately **2200 gpm**. In the past, this well was

the City's main well that ran throughout the year according to the water level in the elevated tank. This well was upgraded during this project.

abandoned →

Well #3: Located near the Harwood Elementary School and was served by a 60 horsepower pump. This well was last measured at 1,243 gpm. This well was 165 feet deep and had experienced continuous problems with pumping sand. As a portion of this improvement project, this well was also abandoned.

Well #4: This well is located near the National Guard Armory and was drilled in 1990 to a depth of 487 feet. This well supplies water to the system by means of a 100 horsepower pump. This pump works on a variable frequency drive and acted as a backup to Well #2. This well has often been operated manually due to problems occurring with the variable frequency drive.

2.4.2 New Well Numbering: The new arrangement of wells that will be used throughout this manual is as follows:

Well #1:	Old Well #2 located under the elevated tank
Well #2:	Old Well #4 located near the National Guard Armory
Well #3:	New well drilled in 1996 at 550 North 2nd West

The pump controller at the new pump station and the alarm system both refer to the City's wells by the numbers listed above.

2.4.3 Well #1: This well is located in an existing block building on Fremont Avenue. The pump level is set at 110 feet. The pump has a 150 horsepower motor and is capable of pumping 2100 gallons per minute at a head of 216 feet. The pump is a Verti-line model 14RM and has been equipped with three stages. Well #1 pumps directly into the City main on Fremont Avenue. This pump is normally controlled by the pump controller at Well #3.

2.4.4 Well #2: This well has a 100 horsepower motor and is located in the existing building west of the Rigby National Guard Armory. Well #2 is capable of pumping approximately 1150 gallons per minute under normal operation. This pump discharges directly into the City mains located on 2nd South.

This pump can be operated in one of three modes; hand mode where the speed of the motor is controlled by the operator, local automatic control where the VFD drive responds to changing pressures at the well and adjusts the speed accordingly to maintain a preset pressure, and remote automatic mode where the pump controller at Well #3 controls the functioning of the well. In the remote automatic mode the pressure set point should be set high enough that the well runs at full speed to deliver maximum flow. The local automatic mode has been provided for a backup in case of a system controller failure.

2.4.5 Well #3: This well is located in the new pump station at 550 North 2nd West. This well is approximately 720 feet deep. The pump level is set at 220 feet. The well column is housed in a 16-inch casing. The pump is a 125 horsepower pump capable of pumping 2050 gallons per minute at a head of 180 feet. The pump is a Verti-line model 12FHM equipped with five stages. This well pumps directly into the new 1,000,000 gallon storage reservoir

and pumps at a constant rate. This pump is controlled by the liquid level of the storage reservoir.

SCANNED

PROFILED

NOV 30 2004

2.5 STORAGE FACILITIES

A new 1.0 million gallon partially buried concrete storage reservoir was constructed as part of this project to provide better water supply for fire protection and peak summer demands. The reservoir is 105 feet in diameter and 16 feet high with an 8-inch thick floor slab, a 12-inch thick wall, and an 8-inch thick roof slab supported on sixteen 18-inch diameter columns. The circular walls of the tank have steel reinforcement on both faces and have been provided with a continuous PVC waterstop at the top and bottom of the wall to prevent leakage and/or contamination. The tank has been mostly buried to protect it from deterioration and to provide some insulation during periods of cold weather.

Access to the new tank is through a hatch opening on the roof located at the north end of the storage reservoir. A ladder extends from the roof to the floor of the reservoir. Venting of the reservoir is accomplished through two galvanized pipe roof vents with insect screens to prevent entrance of contaminants. This vents are located on the east and west sides of the tank. A 12-inch line supplies water to the east end of the reservoir from the booster station. Water leaves the tank at the west end through a 16-inch line that supplies the booster pumps inside the booster station. An overflow for the reservoir is provided to allow gravity drainage to an overflow structure located north of the reservoir.

An acoustic water level sensing device is mounted near the main hatch entrance and provides information to the Miltronics Hydorranger controller that operates Well #3.

2.6 BOOSTER PUMPING FACILITY

A new booster pumping facility was also constructed as a part of the recent upgrades. It is housed in a new cinder block building which is situated directly west of the storage reservoir. The facility consists of three "can" type pumps and one deep well located within the building.

The booster pumps are two 60 horsepower VFD drives and one constant speed 100 horsepower motor. The 60 horsepower drives are operated by a pump controller and vary their speed according to the pressure demands of the system. The remaining fixed speed 100 horsepower fire booster is controlled by the pump controller in response to extreme flow demands.

The two 60 horsepower VFD drives are Verti-line model 12RL pumps with four stages and are each capable of producing 1050 gpm at a head of 180 feet. The operation curves are presented in the manufacturers' information. The 100 horsepower fire booster is a Verti-line pump model 14RL with three stages. This pump is capable of producing 1700 gpm at a head of 180 feet.

Controls for operation of the booster pumping facilities are located inside the pump building and receive information from several monitoring points. This controller will be discussed in Chapter 5.0 of this manual. Additionally, a standby power generator has been installed in the booster pumping facility. The generator can power the deep well and the three boosters simultaneously.

Automatic ventilation louvers have been installed in the walls of the building to provide proper cooling in the summertime and adequate ventilation when the standby power generator is activated.

2.7 FLOW METERING STATION

Two new flow metering stations have been installed. This first is located in the new pump station building on the discharge line from the three booster pumps. This meter is a 12-inch Neptune high performance turbo meter. The meter vault is located directly inside the main doors. Access to the vault is through a standard 24-inch floor hatch. A totalizer for this meter is installed on the door of the pressure transducer unit located on the east wall of the building near the wall exhauster. Instantaneous flow from this meter can be read directly from the pump controller.

An 8-inch Sensus meter was also installed on the discharge line from Well #1. The electronic readout for this meter is located on the west wall of the building at Well #1 and the digital flow signal is transmitted via the radio system to Well #3 where it is used by the pump controller to determine total system flow.

The flow signal from an existing flow meter at Well #2 is also transmitted via the radio system to the pump controller at Well #3. A new digital readout was also installed at this well.

2.8 CHLORINATION FACILITIES

No chlorination facilities existed prior to this improvement project. Presently no chlorination takes place at the new pump station. However, a room has been constructed to house chlorination equipment and a chlorination line has been stubbed out from the Well #3 discharge line to the chlorine room. If in the future it becomes necessary to chlorinate, the necessary equipment can be easily installed at Well #3. No provisions have been made for chlorinating Well #1 or Well #2.

SCANNED

NOV 30 2004

PROFILED

PROFILED

SCANNED
NOV 30 2004

3.0 THEORY OF OPERATION

**Source: City of Rigby Public
Works Dept.
3 March 2004**

**CHAPTER 3.0
THEORY OF OPERATION**

SCANNED
NOV 30 2004

3.1 GENERAL

The basic operational theory behind Rigby's new water supply system is to supply water to the distribution system through the operation of Well #1, Well #2, and the new booster pump station. Through the use of electric power these pumps provide pressure to the system as if an elevated storage facility were in use but on a more economical basis over the life of the facility.

The improvements to the supply system allow for delivery of greater pressure through the distribution system and provide adequate storage to meet peak summer demands and fire flow requirements.

3.2 CONTROLS

3.2.1 Well Pumps: Under normal operation, the D620i pump controller located at the new pump station controls all the various wells and pumps in the City's water supply system. Information produced at several locations is collected by the pump controller to determine which pumps should be operating at any given time.

In general, the cumulative flow from the flow meters is used to determine which pumps should be operating. Pressure control is maintained by adjusting the speed of the two 60 horsepower VFD booster pumps.

3.2.2 Booster Pumping Facilities: At low flows only one booster pump is required. The speed of this pump adjusts automatically to compensate for changes in system demand. One booster pump is capable of maintaining 70 psi at flows up to approximately 1150 gpm. When the pump controller detects that flows have exceeded 1100 gpm it brings an additional booster pump on-line. The speed of both pumps is then adjusted by the pump controller to maintain the system at the preset pressure set point. With both booster pumps operating the system is able to maintain 70 psi up to approximately 2300 gpm. When flows exceed 2200 gpm, the system calls for the 100 horsepower booster pump at Well #2 to come on-line. As this well speeds up and starts to produce water, the two VFD booster pumps at the new booster station automatically decrease their speed to maintain the pressure set point.

When flows increase to 3300 gpm the controller sends a signal to Well #1 to turn on and to Well #2 to turn off. The larger pumping capacity of Well #1 together with the two VFD booster pumps have a combined capacity of approximately 4300 gpm. If flow demands exceed this value then the system will call for Well #2 to reactivate. With Well #1, Well #2, and both booster pumps the system has a total capacity of approximately 5400 gpm. Again, the booster pumps adjust their speed automatically to maintain the pressure set point.

In the unlikely event that more than 5500 gpm is needed, flows will increase until the two VFD booster pumps are operating at maximum speed. If the demand for water continues to increase, the system pressure will gradually fall as the pumps are no longer able to maintain the preset value. When the pressure at the new pump station falls below 50 psi, the pump controller will activate the 100 horsepower fire booster. With all three booster pumps, Well #1, and Well #2 in operation the maximum system capacity at 70 psi is over 7000 gpm. This is approximately 2500 gpm more than the anticipated peak hourly demand at the design year of 2015.

With the fire booster in operation, Well #3 at the new pump station will not be able to keep up with the three booster pumps and the level in the tank will gradually drop. With all three boosters operating at full design capacity there will be a minimum reserve of 5-6 hours in the new storage reservoir.

When demands begin to fall, the pump controller will detect the decreasing flow rates and will turn off pumps accordingly so that the two VFD pumps in the new pumps station can maintain the preset pressure set point. For clarification, Table 3-1 illustrates which pumps are in operation at various flow rates.

TABLE 3-1 BOOSTER PUMP OPERATION MATRIX						
Total Flow (gpm)	1st 60 Hp VFD Booster	2nd 60 Hp VFD Booster	Well #1	Well #2	Fire Booster	Corresponding Stage
0-900	on	off	off	off	off	0
900-1100	on	on or off	off	off	off	transition
1100-1850	on	on	off	off	off	1
1850-2200	on	on	off	on or off	off	transition
2200-2800	on	on	off	on	off	2
2800-3300	on	on	on or off	on or off	off	transition
3300-4000	on	on	on	off	off	3
4000-4300	on	on	on	on or off	off	transition
4300-5500	on	on	on	on	off	4
5500+	on	on	on	on	on	5

PROFILED

SCANNED

NOV 30 2004

There are two backup devices built into the pump controller that need to be understood by the system operator. Both backup modes address the problem of maintaining system pressure and fire flow protection when one or more pumps are off-line for service or repair. A potential problem arises when one or more of the pumps that normally operate in the lower stages is not functioning.

To illustrate this point, consider the following scenario. If one of the 60 horsepower boosters is down for repairs it would be impossible for the remaining VFD drive to develop the total flow of 2200 gpm required to call Well #2 on. To remedy this problem, the pump

controller will automatically detect the failure of a VFD booster pump to start when called for, and if necessary will replace the failed booster with Well #2. Once repairs to the pump are complete the system controller will need to be reset by the operator to notify it that the pump is ready to operate again. This is done by scrolling through the displays on the D620i controller by pressing the up or down arrow until the booster reset screen is found. Then move the cursor over the failed pump with the right or left arrow, as required. When the failed pump is highlighted press [enter]. The pump will now be put back into service.

Another backup procedure built into the pump controller concerns the functioning of Stage 5. Stages 0-4 operate in sequential order. If the system is operating in Stage 1 and flow demands suddenly increase, the controller will normally step through Stage 2 and then Stage 3, etc. until the demands are satisfied. As each stage can take up to one minute to activate, this may result in inadequate fire flows for several seconds and a low pressure condition. To remedy this situation, Stage 5 will become active anytime the system pressure falls below 50 psi for more than 45 seconds. When this happens the fire booster will supplement flows until the other wells in the system become active.

The system operator should be aware that if Well #1 or Well #2 is inoperable and if summer daytime water use is high the system pressure may decrease enough to call the fire booster at the new pump station on-line. When this occurs the well at the booster station will be unable to keep up with the three booster pumps; thus causing the water level in the reservoir to fall. A low level tank alarm will be sent over the radio system when the water level falls to 5 feet. If the level continues to fall to 1 foot, the pump controller will automatically shut off all three booster pumps to prevent them from pumping dry and damaging the pumps. The pumps will remain off until the water level rises above 2 feet. **CAUTION: If the booster pumps shutoff due to a low tank level, it is likely that the City will be left with no water at all for several minutes.**

The flow rates shown in Table 3-1 have been programmed in the controller and represent the rates at which switching of the pumps should occur to keep pressure changes to a minimum and maximize the efficiency of the booster pumps. However, these flow rates are user definable values and can be quickly changed at anytime using the programmable controller input routines.

Electrical controls for the individual pumps and wells include meters to record the hours of operation, a hand-off-auto switch which allows for manual or automatic operation of the pump, and pump running and pump failure lights to monitor the operating conditions. The pump control circuits are also protected by a device sensing phase loss, phase reversal, low voltage, high voltage, and high amperage as well as having lightning arresters for surge protection.

Incorporated in the main control panel are digital readouts for the total system flow rate, flow rate from each flow meter, total system flows, totalizing flows for each flow meter, system pressure, pressure set point, and any active alarm conditions. Alarm conditions are monitored for each pump in the system and broadcast over the City radio frequency in case of operational failures.

3.2.3 Reservoir Levels: Control of the water level in the storage reservoir is accomplished by a Miltronics Hydorranger acoustic level sensing device. This Hydorranger monitors the water level in the tank and turns Well #3 on when the level falls below 12.0 feet and turns it off when the level reaches 14.3 feet. If the level of the tank exceeds 14.5 feet, a high tank alarm is sent over the radio system. Additionally, if the water level falls below 5 feet a low level alarm is sent over the radio system, and if it falls below 1 foot the well controller automatically cuts out the three booster pumps as previously discussed.

This operation of the system helps to provide water to the storage reservoir and keep it as full as possible for maximum storage in case of emergency, yet still not allowing for excessive pump operation. It is important to remember that Well #3 is not directly controlled by the D620i pump controller.

3.2.4 Manual Operation of Pumps: Each well and pump in the system can be operated automatically as designed or can be operated in "hand" mode. The two VFD booster pumps at the new pump station can be operated manually with manual speed control or can be operated to bypass the speed control equipment and immediately run at full speed in the "bypass" mode.

Well #1 at City Hall can be operated in automatic mode or can be operated by hand. This well does not have a variable frequency drive and will always operate at 1780 rpm. Well #2 can be operated in one of three modes; hand mode with manual speed control, remote automatic control, and local automatic control. The normal setting will be the remote automatic control wherein the pump is controlled by the pump controller at Well #3 and runs only when called for. In this mode the motor always runs at full speed. This is done by setting the pump's setpoint to 80 psi. In local automatic mode the pump runs continuously and changes speed in response to locally sensed pressures. This method of operation would typically be used as a backup in case of a controller failure at the new pump station. When operating as backup, the pressure set point for this pump should be set at 70 psi.

SCANNED

NOV 30 2004

PROFILED

3.3 STANDBY GENERATOR SYSTEM

The new pump station has been equipped with a 400 kW Onan standby generator system. This generator is capable of supplying electrical power to all four pumps located in the new pump station. An automatic transfer switch located in the pump station detects a loss of electrical power and brings the generator on-line within a few seconds. When electrical power is restored and remains constant for one minute, the transfer switch retransfers the load back to normal utility power.

The automatic transfer switch is equipped with an exercise clock that runs the generator for half an hour every Monday at noon. Regular exercising keeps engine parts lubricated, prevents oxidation of electrical contacts, and helps provide reliable engine starting. The generator can be tested with a load by manually turning the keyed switch on the transfer switch panel to the "test" position. Power can be transferred back to the electrical service by turning this switch to "retransfer" and then returning it to the "normal" position. Proper functioning of the generator and

the transfer switch can also be tested by opening the main circuit breaker to the booster station building.

Under the routine exercise cycle, the transfer switch can be configured to simply run the generator or start the generator and transfer the electrical load to the generator. There are advantages to each method of operation. If the generator is operated without transferring the electrical load there is no interruption of electrical power to the pump controller or the booster pumps. However, exercising the generator with a load allows the generator to come to full operating temperature as recommended by the manufacturer. In this mode, there is a momentary loss of power to the pump controller and booster pumps while the power transfer is taking place. This temporary loss of power can result in a low pressure situation and will likely trigger several alarms. In any case the generating set should be operated under full load at least four times per year to verify that it is in proper working condition. At present the generator is set up to exercise without a load.

Fuel for the generator is supplied by a 1000 gallon tank located directly south of the pump station. The level of fuel in the tank should be checked periodically and should be filled with No. 2 diesel fuel when it is below half full. A low generator fuel alarm will sound if the tank is not filled.

A separate 25 gallon day tank is provided in the generator room and supplies fuel directly to the generator. This day tank is fitted with a small transfer pump that periodically transfers fuel from the 1000 gallon tank to the day tank as needed. This day tank is equipped with an alarm system to detect fuel leakage, low fuel, or a fuel overfill condition. The 1000 gallon tank is also equipped with an automatic leak detection system.

SCANNED

NOV 30 2004

3.4 ALARM MONITORING SYSTEM

In addition to the pump and reservoir controls as mentioned in previous sections, each monitoring device also reports its condition to the pump controller at Well #3 or to the central alarm system. Alarm conditions reported over the City's radio frequency are:

TABLE 3-2 SYSTEM ALARMS	
Alarm #	Alarm Message
1	"This is the well #1 failure alarm"
2	"This is a control failure from well #3"
3	"There is a low pressure alarm from well #3"
4	"There is a high pressure alarm from well #3"
5	"There is a power failure at the generator"
6	"There is a high tank level alarm from well #3"
7	"There is a low tank level alarm from well #3"
8	"There is a generator failure alarm from well #3"
9	"There is a generator low diesel fuel alarm for well #3"
10	"There is a diesel fuel leak from well #3"
11	"There is well #3 failure alarm"

PROFILED

12	"There is a booster pump failure alarm from well #3"
13	"There is chlorine alarm from well #3"
14	"There is well #2 failure alarm"
15	"There is an AC power failure alarm at the Zeetron for well #2"
16	"There is the Zeetron communication failure alarm for well #1"

The presence of an alarm signal also activates an alarm light on the corresponding control panel. The above voice message describing the alarm condition is broadcast over the City's radio frequency and is repeated three times every 30 minutes until the alarm condition has been rectified. The cause of each type of alarm and the corrective actions to be taken by the operator are described in detail in Chapter 5.0.

SCANNED

NOV 30 2004

PROFILED

City of Rigby 3/3/04 9 AM

Questions to Cover

- ① Documentation of Historical Capacity
+ Water use, including service area
- ② Discuss location of P.O.'s re: transfer
- ③ Wk claim from gravel pit pump.
- ④ location of airport + sewer plant wells.

Notes for Meeting:

SCANNED

NOV 30 2004

Meeting w/ Doug city wr mgr, Steve Clark
City Mgr. attorney

- 1) Well #1 - bore up only
- 2) Well #3 - 700 feet
- 3) Well #2 88/89 100 hp - use
- 4) Old well east # - abandoned, filled w/ concrete
Harwood school parking lot
- 5) GIS layout is correct is numbering
and location.

PROFILED

City of Rigby

3/3/03 p2

- 6) Buy mail post xfer papers. to add #2 as POD.
- 7) Map of impact area - projected through 2015
- 5) Report of Forensic Analysis
- 9) Burgess - LDS church park / Ball diamonds.

City holds canal shares in trust for citizen - Rigby Canal

SCANNED

NOV 30 2004

PROFILED

No WMS
GPS - WMS
288583.20 N
667704.70 E

**STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES**

THIS IS YOUR 1999 WATER MEASUREMENT ANNUAL REPORT

**For the Water Measurement Program -
MEASURING DEVICE METHOD FOR TOTALIZING FLOW METERS
NON-IRRIGATION WELLS**

ATTENTION: Year end data must be submitted to Idaho Department of Water Resources,
1301 N. Orchard St. Boise ID 83706, on or before:

January 15, 2000.

NOTE: A separate reporting form must be submitted for each diversion.

This report form may be used for the following diversion:

Name:	CITY OF RIGBY			—
Water Right Nos:	A25-04011	X25-10496		—
Legal Description:	04N 39E 18 NESWNW 3			—
	E0007614	POD# 101640	1/4	
Site Tag No:	WELL #3		8	
Diversion Name:				

add to name block

Primary Well

SECTION I Water Right Holder/Operator information

Name and Address of Water Right Holder

Please check for address correction. ☐

Current Owner

Name City of Rigby

Phone 208-745-8111

Address 158 W. Fremont

Fax 208-745-7111

City RIGBY

State & Zip Id. 83442

Original Owner (if sold within last year)

Name _____

Phone _____

Address _____

Fax _____

City _____

State & Zip _____

Operator or Contact Person

Name Nelson Douglas E

Phone 208-745-8111

Address 158 W. Fremont

Fax 208-745-7111

City RIGBY

State & Zip Id. 83442

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

SCANNED

NOV 30 2004

PROFILED

SECTION II Well Information

Depth to water. Record the date, if the pump was on or off, or if other nearby pumps were on.

Static Water Level (pump off, water level stable): _____ ft Date _____
 Dynamic Water Level (pump on): 720 ft Date 2
Deep Well 720 feet

*Water Level
Not input
in 50.
sub
3/9/04*

SECTION III Rate of flow and volume diverted

Meter information:

Make Consolidated Model No. _____ Serial No. _____

Does the meter totalizer measure in acre-feet or gallons? What is the multiplier? 10,000

Does the meter rate of flow indicator show gpm or cfs? What is the multiplier? 1
 (circle one) (circle one)

For meters without rate of flow indicators, check here ☐ and see page 4 for rate measurement methods.

(meter information on page 4)

Note: Reading of the meter totalizer, flow rate and discharge pressure should be taken and recorded once each month on or near the same day.

Date (date of reading)	Totalizer Reading	Flow Rate circle: cfs or <u>gpm</u>	Discharge Pressure
1998 End of Year	<u>9727</u>	<u>00000</u>	70
January (<u>29</u>)	<u>10026</u>	<u>298</u>	70
February (<u>25</u>)	<u>10317</u>	<u>291</u>	70
March (<u>31</u>)	<u>10662</u>	<u>346</u>	70
April (<u>29</u>)	<u>10995</u>	<u>333</u>	70
May (<u>30</u>)	<u>11483</u>	<u>488</u>	70
June (<u>30</u>)	<u>12047</u>	<u>664</u>	70
July (<u>30</u>)	<u>12768</u>	<u>721</u>	70
August (<u>31</u>)	<u>13453</u>	<u>685</u>	70
September (<u>30</u>)	<u>14093</u>	<u>640</u>	70
October (<u>29</u>)	<u>14604</u>	<u>511</u>	70
November (<u>30</u>)	<u>14966</u>	<u>362</u>	70
December (<u>30</u>)	<u>15290</u>	<u>324</u>	70
End of Year (Dec 31)	<u>15305</u>	<u>1500000</u>	70

Does totalizer reading above include meter multiplier? Yes ☒ No

Total Acre-feet 171.2 *gh* OR Total Gallons 5578
 (there are 325,850 gallons per acre feet)

SCANNED

NOV 30 2004

PROFILED

Source: IDWR Water Meter
Pray Well #3
 Date: March 04

MR

SECTION III Modifications made in 1999

Please describe in the space below any major modifications made to the diversion works or piping system which would affect system capacity or accuracy of the flow measurements during 1999. Attach drawings, sketches, photographs, notes or design information if needed.

Comments: (If the flowmeter was installed, calibrated, or replaced during 1999, please note the date.)

SCANNED
NOV 30 2004

PROFILED

SECTION IV Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

[Signature]
Signature

P.W.D
Title

2-14-2000
Date

Note: Each reporting form shall be accompanied by a report processing fee in the amount of **twenty-five dollars (\$25) per diversion** made payable to the Idaho Department of Water Resources (Section 42-701(6), Idaho Code). Report fee is not required if no water was diverted during 1999.

For Office Use Only

Received by DWB

Date 3/2/00

Time

Fee amount submitted \$25

Correct? yes ☒ no ☐

Receipted by A. Koach

Receipt No. C048274

Reviewed by cyh

Date 3/9/00

Source: IDWR Eastern Region,
Water Meas. Program Files, Well

Data entry by DWB

Date 3/9/00

3
March 2004

SECTION II Well Information

Depth to water. Record the date, if the pump was on or off, or if other nearby pumps were on.

Static Water Level (pump off, water level stable): _____ ft Date _____

Dynamic Water Level (pump on): _____ ft Date _____

Deep Well 720 feet

SCANNED

NOV 30 2004

Water Level
Not input
in 50.
bub
3/9/00

SECTION III Rate of flow and volume diverted

Meter information:

Make Consolidated Model No. _____ Serial No. _____

PROFILED

Does the meter totalizer measure in acre-feet or gallons?

(circle one)

What is the multiplier? 10,000

Does the meter rate of flow indicator show gpm or cfs?

(circle one)

What is the multiplier? 1

For meters without rate of flow indicators, check here ☐ and see page 4 for rate measurement methods.

(meter information on page 4)

Note: Reading of the meter totalizer, flow rate and discharge pressure should be taken and recorded once each month on or near the same day.

Date (date of reading)	Totalizer Reading	Flow Rate circle: cfs or gpm	Discharge Pressure
1998 End of Year	9727 ~~00000~~	~~00000~~	70
January (29)	10026	298	70
February (25)	10317	291	70
March (31)	10662	346	70
April (29)	10995	333	70
May (30)	11483	488	70
June (30)	12047	664	70
July (30)	12768	721	70
August (31)	13453	685	70
September (30)	14093	640	70
October (29)	14604	511	70
November (30)	14966	362	70
December (30)	15290 ~~00000~~	324	70
End of Year (Dec 31)	15305 ~~00000~~	~~1500000~~	70

Does totalizer reading above include meter multiplier? Yes ☒ No

Total Acre-feet 171.2 ^{gh} ✓ OR Total Gallons 5578 00000
(there are 325,850 gallons per acre foot)

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

MR

SECTION III Modifications made in 1999

Please describe in the space below any major modifications made to the diversion works or piping system which would affect system capacity or accuracy of the flow measurements during 1999. Attach drawings, sketches, photographs, notes or design information if needed.

Comments: (If the flowmeter was installed, calibrated, or replaced during 1999, please note the date.)

SCANNED

NOV 30 2004

PROFILED

SECTION IV Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

[Signature]
Signature

P.W.D
Title

2-14-2000
Date

Note: Each reporting form shall be accompanied by a report processing fee in the amount of **twenty-five dollars (\$25) per diversion** made payable to the Idaho Department of Water Resources (Section 42-701(6), Idaho Code). Report fee is not required if no water was diverted during 1999.

For Office Use Only

Received by DWB

Date 3/2/00

Time

Fee amount submitted \$25

Correct? yes ☒ no ☐

Receipted by H. Koach

Receipt No. CX48274

Reviewed by cyh

Date 3/9/00

Data entry by DWB

Date 3/9/00

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

RECEIVED

MAR 01 1999

Department of Water Resources

THIS IS YOUR 1998 WATER MEASUREMENT ANNUAL REPORT

3-10-99

**For the Water Measurement Program -
MEASURING DEVICE METHOD FOR TOTALIZING FLOW METERS
NON-IRRIGATION WELLS****ATTENTION: Year end data must be submitted to Idaho Department of Water Resources,
1301 N. Orchard St. Boise ID 83706, on or before:****January 15, 1999.****NOTE: A separate reporting form must be submitted for each diversion.****This report form may be used for the following diversion:**

Name:	—	CITY OF RIGBY	—
Water Right No:	—	A25-04011 X25-10496	—
Legal Description:	T_	04N 39E 1B NESWNW 3	—
Site Tag No:	—	E0007614	—
Diversion Name:	—	WELL #3	—

SECTION I Water Right Holder/Operator information

Name and Address of Water Right Holder

Current OwnerName City of Rigby
Last, First, MIAddress 158 W. FremontCity Rigby**Original Owner (if sold within last year)**Name _____
Last, First, MI

Address _____

City _____

Operator or Contact PersonName _____
Last, First, MI

Address _____

City _____

Please check for address correction. ☐Phone 208-745-8111Fax 208-745-7111State & Zip ID 83442Phone SCANNEDFax NOV 30 2004

State & Zip _____

Phone PROFILED

Fax _____

State & Zip _____

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

SECTION II Well Information

Depth to water. Record the date, if the pump was on or off, or if other nearby pumps were on.

Static Water Level (pump off, water level stable): _____ ft Date _____

Dynamic Water Level (pump on): _____ ft Date _____

SECTION III Rate of flow and volume diverted

Meter information:

Make _____ Model No. _____ Serial No. _____

Does the meter totalizer measure in acre-feet or gallons? What is the multiplier? 1

Does the meter rate of flow indicator show gpm or cfs? What is the multiplier? 1

For meters without rate of flow indicators, check here ☐ and see page 4 for rate measurement methods.

(meter information on page 4)

Note: Reading of the meter totalizer, flow rate and discharge pressure should be taken and recorded once each month on or near the same day.

Date (enter date of reading)	Totalizer reading	Flow rate cfs or <u>gpm</u>	Discharge pressure
January ()	Not Available	SCANNED	70 psc
February ()			
March ()		NOV 9 0 2004	
April ()		PROFILED	
May ()			
June ()			
July ()			
August (22)	786,000.000		
September (1)	816,000.000	231	
October (1)	870,400.000	176	
November (1)	913,300.000	86	
December (1)	942,500.000	66	70 psc

Does totalizer reading above include meter multiplier? ☒ Yes ☐ No

Total Acre-feet 494.0 OR Total Gallons 15,952,000 (partial)
(there are 325,850 gallons per acre feet)

OK

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

Comment:

Did not begin readings until August 98

SECTION III Modifications made in 1998

Please describe in the space below any major modifications made to the diversion works or piping system which would affect system capacity or accuracy of the flow measurements during 1998. Attach drawings, sketches, photographs, notes or design information if needed.

None

Comments: (If the flowmeter was installed, calibrated, or replaced during 1998, please note the date.)

N/A

SCANNED

NOV 30 2004

PROFILED

SECTION IV Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

Pyle Thompson EngR.
Signature Title

2-26-99
Date

Note: Each reporting form shall be accompanied by a report processing fee in the amount of **twenty-five dollars (\$25) per diversion** made payable to the Idaho Department of Water Resources (Section 42-701(6), Idaho Code). Report fee is not required if no water was diverted during 1998.

For Office Use Only

Received by _____

Date _____

Time _____

Fee amount submitted 25.00

Correct? yes _____ no _____

Receipted by B. Jiffes

Receipt No. CO44740

Data entry by DWR 11/4/99

Date 3-3-99

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

Reviewed 4-5-99 gl

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
 Water Measurement Program

RECEIVED

MAR 01 1999

Department of Water Resources

1997 WATER MEASURING DEVICE CERTIFICATION

Date of Testing _____

INV 6-17-98 ghl

Person performing test _____

Name:	City of Rigby
Water Right No:	A25-04011, X25-10496
Legal Description:	T4N R39E Sec 18 NE 1/4 SW 1/4 NW 1/4 L3
Site Tag No:	E0007614
Diversion Name:	Well #3

PRIMARY
WELL

Current Owner

Name

City of Rigby

Phone

208-745-8111

Address

158 West Hemlock City Rigby

State

ID

Zip

83402

Operator (if leased or operated by someone else)

Name

Phone

Last

First

MI

SCANNED

NOV 30 2004

PROFILED

SECTION I WELL SITE IDENTIFICATION

Global Positioning System Data:

Data Collection Filename

F0617178

Offset

25' W

IDWR Site Tag Identification No.

E0007614

Site Tag location description:

current on main discharge

PLS/USGS Locator _____

For Department/District Use Only

Received by _____

Date _____

Reviewed by _____

Date _____

Data Entry by _____

Date _____

Source: IDWR Eastern Region,
Water Meas. Program Files, Well

#

3

March 2004

SECTION II INSTALLED METER INFORMATION

METER AND MOUNTING PIPE INFORMATION			
Date of meter Installation	6-97	Multiplier - Flow rate	
Manufacturer	Consolidated Elec	Multiplier - Totalizer	
Meter Type	Diff. Pressure	Location (good/fair/poor)	
Model	4PL RJ1201 HPL	Pipe information	
Serial Number	95SKT44328	Pipe material	Ductile Iron
Size (nominal)	12"	Outside Diameter	13"
Measure Flow Rate?	(circle one) Yes No	Wall Thickness	1/2" +
Measurement Units	(circle one) CFS GPM Other(specify)	Inside Diameter	12"
Measure Cumulative Volume?	(circle one) Yes No	Dist. of straight pipe upstream from meter	11'
Volume Units	Acre-Feet Yes No Other(specify) gal	Dist. of Straight pipe downstream from meter	8'

SECTION III CERTIFICATION FOR CALIBRATION OF A WATER MEASUREMENT METER

See back page for instructions.

Measurement No. 1 (M_1) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M_2) is the measured rate of flow from the measuring device being used to check the flow for the calibration. This method or device must be accurate to within $\pm 5\%$ error. Describe below the method and equipment used to perform this measurement.

N/A

$$\text{Percent Difference} = (M_1 - M_2) \div M_2 \times 100 = \pm \% \quad (\text{Acceptable is within } \pm 10\%) \quad (\text{equation 1})$$

$$\text{Calibration Multiplier} = M_2 \div M_1 \quad (\text{equation 2})$$

Is flowmeter installed according to manufacturer's specifications? Yes / No / Unsure
Describe any apparent problems with installation or operation _____

Flowmeter accuracy prior to any adjustments: _____ Totalizer reading _____

Flowmeter accuracy after final adjustment: _____ Totalizer reading _____

Flowmeter calibration multiplier: _____ Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

Opt B
01-15-97
Bjcht

Water Level DataDoes the well have access to measure water levels? Yes / No Not AvailableStatic Water Level _____ ft Pumping Water Level _____ ft (at condition # _____)
Date _____ Date _____**FLOWMETER ACCURACY CALIBRATION TABLE**

Owners meter (totalizer reading)	Time	Total Gallons	Ave. Flow Rate - GPM (M ₁)	Standard total gallons	Average flow rate (M ₂)	Percent diff. (±)	Comments and adjustments

Notes, Comments or Calculations: Flow Meters installed/expended
within 4 years.

Sketch and or photograph of installation:

Attached**PROFILED**

SCANNED

NOV 30 2004

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

I certify that the above information is true and correct to the best of my knowledge and ability and the measurements taken and recorded are in accordance with the standards and specifications of the equipment used.

Signature

[Signature]
(person performing measurements)

Date

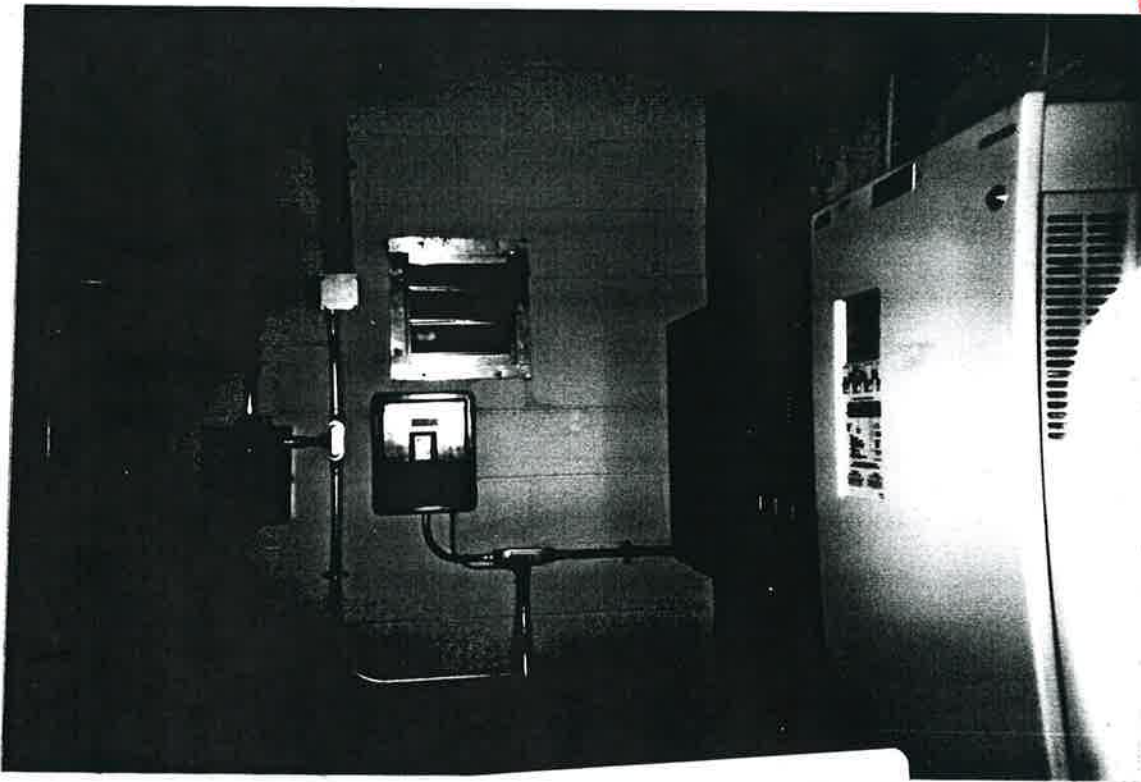
2-24-99

Thompson Engineering, Inc.

City of Riga
Well # 3



SCANNED
NOV 30 2004



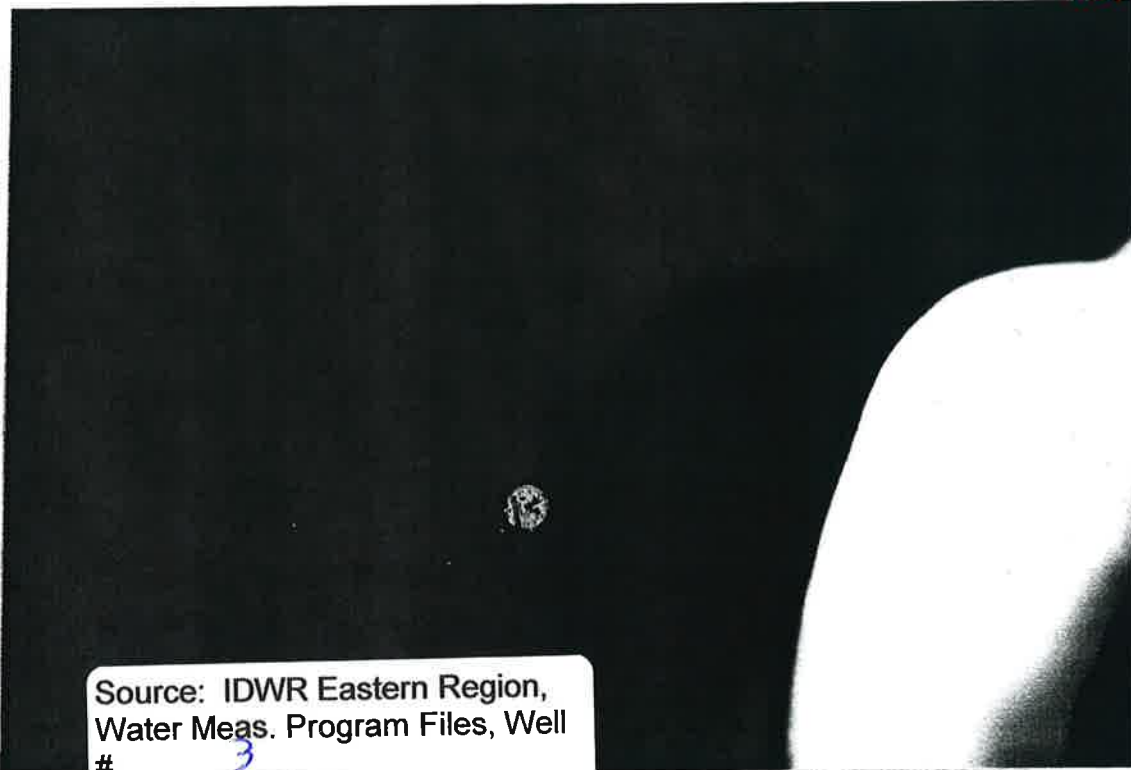
PROFILED

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

CITY of Rights
WELL # 3



SCANNED
NOV 30 2004



PROFILED

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Water Measurement Program

1997 WATER MEASURING DEVICE CERTIFICATION

Date of Testing _____

Inv 6-17-98 gth

Person performing test _____

Name:	City of Rigby
Water Right No:	A25-04011, X25-10496
Legal Description:	T4N R39E Sec 18 NE 1/4 SW 1/4 NW 1/4 L3
Site Tag No:	E0007614
Diversion Name:	Well # 3

PRIMARY
WELL**Current Owner**

Name _____ Phone _____

Last, First, MI

Address _____ City _____ State _____ Zip _____

Operator (if leased or operated by someone else)

Name _____ Phone _____

Last, First, MI

SECTION I WELL SITE IDENTIFICATION

Global Positioning System Data:

Data Collection Filename F0617178 Offset 25' WIDWR Site Tag Identification No. E0007614Site Tag location description: air vent on main discharge

PLS/USGS Locator _____

For Department/District Use Only

Received by _____ Date _____

Reviewed by _____ Date _____

Data Entry by _____ Date _____

Source: IDWR Eastern Region,
Water Meas. Program Files, Well# 3

March 2004

SECTION II INSTALLED METER INFORMATION

METER AND MOUNTING PIPE INFORMATION			
Date of meter Installation	6-97	Multiplier - Flow rate	
Manufacturer	Consolidated Elec	Multiplier - Totalizer	
Meter Type	Diff. Pressure	Location (good, fair, poor)	
Model		Pipe information	
Serial Number		Pipe material	
Size (nominal)		Outside Diameter	
Measure Flow Rate?	(circle one) Yes No	Wall Thickness	
Measurement Units	(circle one) CFS GPM Other(specify)	Inside Diameter	
Measure Cumulative Volume?	(circle one) Yes No	Dist. of straight pipe upstream from meter	
Volume Units	Acre-Feet Yes No Other(specify) gal	Dist. of Straight pipe downstream from meter	

SECTION III CERTIFICATION FOR CALIBRATION OF A WATER MEASUREMENT METER

See back page for instructions.

Measurement No. 1 (M_1) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M_2) is the measured rate of flow from the measuring device being used to check the flow for the calibration. This method or device must be accurate to within $\pm 5\%$ error. Describe below the method and equipment used to perform this measurement.

$$\text{Percent Difference} = (M_1 - M_2) \div M_2 \times 100 = \pm \% \quad (\text{Acceptable is within } \pm 10\%) \quad (\text{equation 1})$$

$$\text{Calibration Multiplier} = M_2 \div M_1 \quad (\text{equation 2})$$

Is flowmeter installed according to manufacturer's specifications? Yes / No / Unsure

Describe any apparent problems with installation or operation _____

Flowmeter accuracy prior to any adjustments: _____ Totalizer reading _____

Flowmeter accuracy after final adjustment: _____ Totalizer reading _____

Flowmeter calibration multiplier: _____ Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	CITY OF RIGBY 158 W FREMONT RIGBY ID 83442 (208) 745-8111	06/01/1961	MUNICIPAL	01-01 12-31	2.45 CFS	
TOTAL DIVERSION:					2.45 CFS	

Water Source: GROUNDWATER

Tributary to:

Stage: STATUTORY CLAIM

Point(s) of Diversion: T04N R39E S18 Lot03(NESWNW) #3

JEFFERSON County

POU County:

Non-Irrigation Uses: M/700 HOMES 75 BUSINESSES. CITY LIMITS OF RIGBY.

Other Rights: 25-04009, 04010, 10496

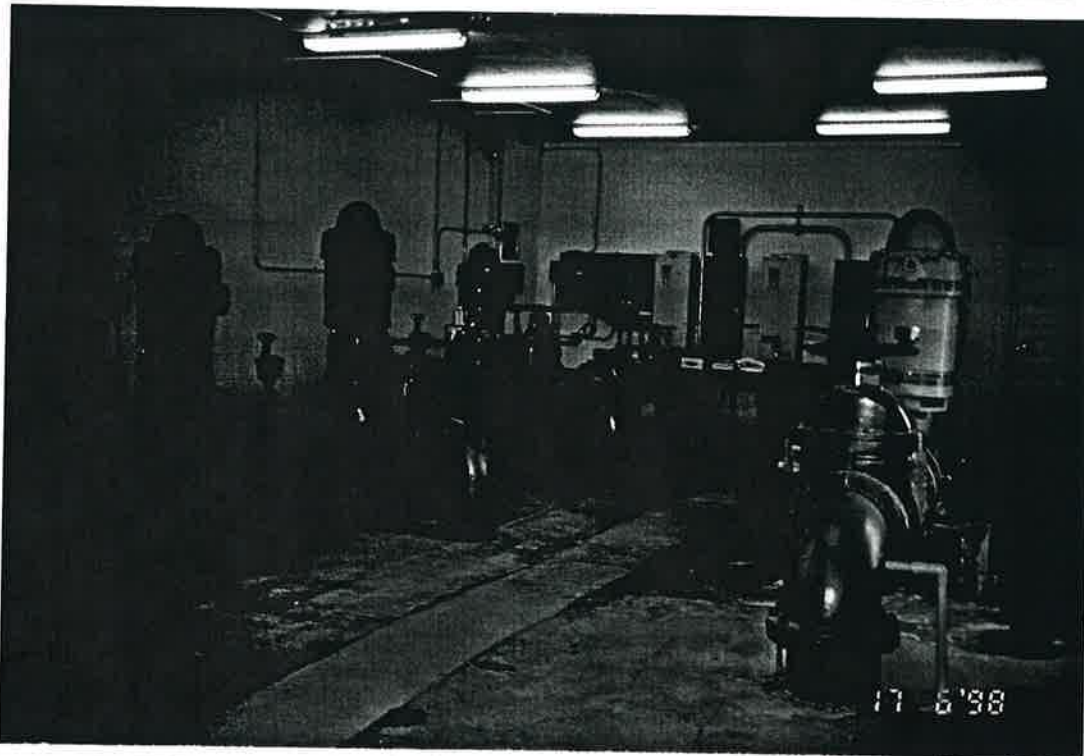
PROFILED
SCANNED
NOV 30 2004

Remarks: GEN P/U WITHIN CITY LIMITS OF RIGBY WELL #3.

Dates: Exam Made Date: Verified Date: 05/20/1985 Objection Filed Date:

Misc: Water District Number: Field Inspection Flag:
Presumption Flag:

Audi



ters
ig
booster
arger
p

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

head vari
in tank =
water level
PWL = 12
TDH = 12
Inst.
6-97
FOB 17/1
2
11:5

AJ5809NP
No. A25-04011

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT

DATE: 06/08/98
PAGE: 2

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	CITY OF RIGBY 158 W FREMONT RIGBY ID 83442 (208) 745-8111	06/01/1961	MUNICIPAL	01-01 12-31	2.45 CFS	
TOTAL DIVERSION:					2.45 CFS	

Water Source: GROUNDWATER

Tributary to:

Stage: STATUTORY CLAIM

Point(s) of Diversion: T04N R39E S18 Lot03(NESWNW) #3

JEFFERSON County

POU County:

Non-Irrigation Uses: M/700 HOMES 75 BUSINESSES. CITY LIMITS OF RIGBY.

Other Rights: 25-04009, 04010, 10496

Remarks: GEN P/U WITHIN CITY LIMITS OF RIGBY WELL #3.

Dates: Exam Made Date: Verified Date: 05/20/1985 Objection Filed Date:

Misc: Water District Number: Field Inspection Flag:
Presumption Flag:

lit: 10/12/88 VERNER 03/29/95 POST-STD

125HP turbine to 1 mil gal tank, 3 boosters
SCADA system monitors all wells including
totals for #2 & #1

meter for #3 is pressure transducer in booster
discharge manifold

Consolidated electric transducer, Schlumberger
recorder

— E0007614 air vent on wellhead pump

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
3
March 2004

AJ5809NP
No. A25-04009

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT

DATE: 06/08/98
PAGE: 1

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	CITY OF RIGBY 158 W FREMONT RIGBY ID 83442 (208) 745-8111	02/01/1947	MUNICIPAL	01-01 12-31	2.80 CFS	
TOTAL DIVERSION:					2.80 CFS	

Water Source: GROUNDWATER

Tributary to:

Stage: STATUTORY CLAIM

Point(s) of Diversion:

T04N R39E S18

SWNESE

#1

JEFFERSON County

POU County:

Non-Irrigation Uses: M/700 HOMES & 75 BUSINESSES. MUNICIPLE USE IN CITY OF RIGBY.

Other Rights: 25-04010, 04011, & A25-10496.

Remarks: GEN P/U WITHIN CITY LIMITS OF RIGBY WELL #1.
PRIORITY DATE ALSO 3-1-1958 FOR 2.55 CFS., CLAIMED UNDER
A25-10496 ALONG W/ EXPANDED USE OF WELL # 2 (25-04010).

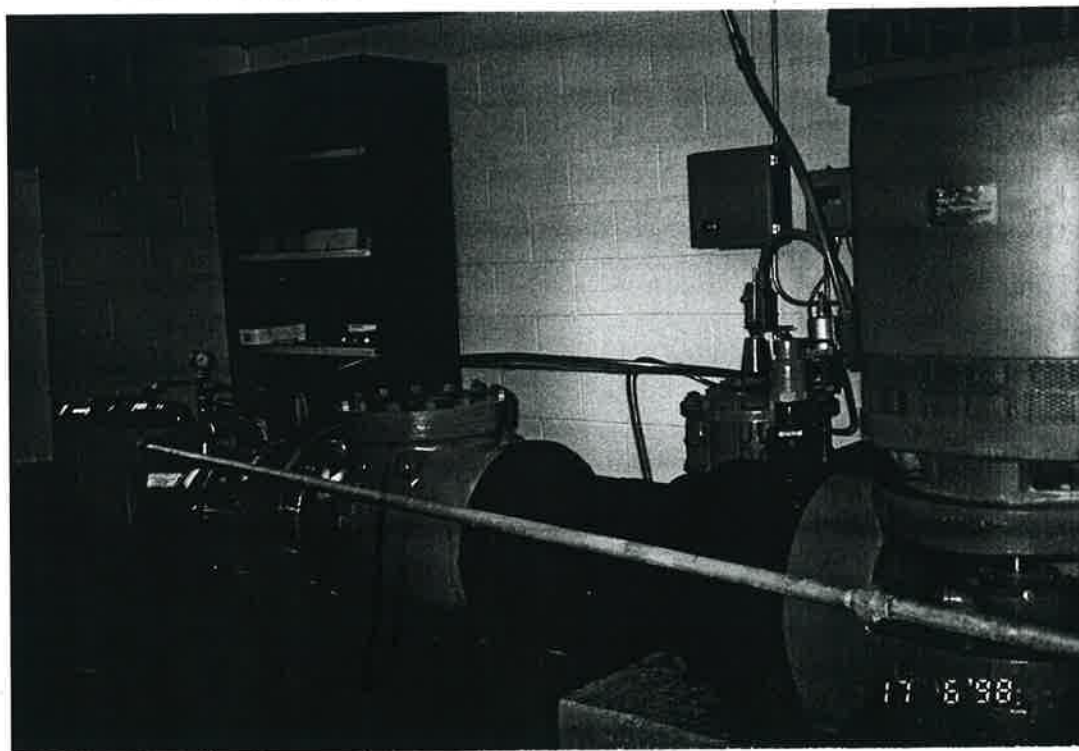
WMS
287935.00 N
668803.32 E
SCANNED
NOV 30 2004

Dates: Exam Made Date: Verified Date: 05/20/1985 Objection Filed Date:

Misc: Water District Number: Field Inspection Flag:
Presumption Flag:

Audit: 10/12/88 VERNER 03/29/95 POST-STD

PROFILED



2E
5-53768E
/
display
er at
3

Source: IDWR Water Meter Program well #1
Date: March 2004
Inst. 6
photo
11:11

SECTION II INSTALLED METER INFORMATION

METER AND MOUNTING PIPE INFORMATION			
Date of meter Installation	6-97	Multiplier - Flow rate	1
Manufacturer	Sensus	Multiplier - Totalizer	1
Meter Type	Pressure Diff.	Location (good, fair, poor)	
Model	W3500 DRE	Pipe information	SCANNED
Serial Number	1100DN553768E	Pipe material	NOV 30 2004
Size (nominal)		Outside Diameter	
Measure Flow Rate?	(circle one) Yes No	Wall Thickness	
Measurement Units	(circle one) CFS GPM Other(specify)	Inside Diameter	PROFILED
Measure Cumulative Volume?	(circle one) Yes No	Dist. of straight pipe upstream from meter	
Volume Units	Acre-Feet Yes No Other(specify) gal	Dist. of Straight pipe downstream from meter	

Recorded at Site 3. No display this site

SECTION III CERTIFICATION FOR CALIBRATION OF A WATER MEASUREMENT METER

See back page for instructions.

Measurement No. 1 (M_1) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M_2) is the measured rate of flow from the measuring device being used to check the flow for the calibration. This method or device must be accurate to within $\pm 5\%$ error. Describe below the method and equipment used to perform this measurement.

$$\text{Percent Difference} = (M_1 - M_2) \div M_2 \times 100 = \pm \% \quad (\text{Acceptable is within } \pm 10\%) \quad (\text{equation 1})$$

$$\text{Calibration Multiplier} = M_2 \div M_1 \quad (\text{equation 2})$$

flowmeter installed according to manufacturer's specifications? Yes / No / Unsure

Describe any apparent problems with installation or operation _____

owmeter accuracy prior to any adjustments: _____ Totalizer reading _____

Flowmeter accuracy after final adjustment: _____ Totalizer reading _____

Flowmeter calibration multiplier: _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
 Water Measurement Program

1997 WATER MEASURING DEVICE CERTIFICATION

Date of Testing

11/16-17-98 *gjh*

Person performing test

Name:	<u>City of Rigby</u>
Water Right No:	<u>A25 4009, 14010, X25-10496</u>
Legal Description:	<u>T 4N R 39E Sec 18 SW 1/4 NE 1/4 SW 1/4</u>
Site Tag No:	<u>E0007477</u>
Diversion Name:	<u>Well # 1</u>

(FIRE WELL)

Current Owner

Name _____ Phone _____

Last, First, MI

Address _____ City _____ State _____ Zip _____

Operator (if leased or operated by someone else)

Name _____ Phone _____

Last, First, MI

SCANNED

NOV 30 2004

SECTION I WELL SITE IDENTIFICATION

Global Positioning System Data:

PROFILED

Data Collection Filename F061714A Offset 30'SIDWR Site Tag Identification No. E0007477Site Tag location description: Sample Port

S/USGS Locator _____

For Department/District Use Only

Received by _____ Date _____

Reviewed by _____ Date _____

Data Entry by _____ Date _____

Source: IDWR Eastern Region,
 Water Meas. Program Files, Well
 # _____
 March 2004

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
1
March 2004



SCANNED
NOV 3 0 2004
PROFILED



Well # 1
Rigby

Source: IDWR Eastern Region,
Water Meas. Program Files, Well

March 2004

SCANNED
NOV 30 2004

PROTECTED



Well # 1
off of Rigby

Water Level Data

Does the well have access to measure water levels? Yes / No

Not Available

Static Water Level _____ ft
Date _____

Pumping Water Level _____ ft (at condition # _____)
Date _____

FLOWMETER ACCURACY CALIBRATION TABLE

Owners meter (totalizer reading)	Time	Total Gallons	Ave. Flow Rate - GPM (M ₁)	Standard total gallons	Average flow rate (M ₂)	Percent diff. (±)	Comments and adjustments

Notes, Comments or Calculations: Flow Meter installed/upgraded
within 4 YEARS

Sketch and or photograph of installation:

Attached

SCANNED

NOV 30 2004

PROFILED

I certify that the above information is true and correct to the best of my knowledge and ability
the measurements taken and recorded are in accordance with the standards and
cifications of the equipment used.

Signature [Signature]
(person performing measurements)

Date 2-24-99

Thompson Engineering Inc.

SECTION II INSTALLED METER INFORMATION

METER AND MOUNTING PIPE INFORMATION			
Date of meter Installation	6-97	Multiplier - Flow rate	1
Manufacturer	Sensus	Multiplier - Totalizer	1
Meter Type	Pressure Diff.	Location (good, fair, poor)	
Model	W3500 DRE	Pipe information	
Serial Number	1100 DNSS53708E	Pipe material	Ductile Iron
Size (nominal)	8"	Outside Diameter	9"
Measure Flow Rate?	(circle one) Yes No	Wall Thickness	1/2"
Measurement Units	(circle one) CFS GPM Other (specify)	Inside Diameter	8"
Measure Cumulative Volume?	(circle one) Yes No	Dist. of straight pipe upstream from meter	10'
Volume Units	Acre-Feet Yes No Other (specify) gal	Dist. of Straight pipe downstream from meter	30'

Recorded at Site 3. No display this site

SECTION III CERTIFICATION FOR CALIBRATION OF A WATER MEASUREMENT METER

See back page for instructions.

Measurement No. 1 (M_1) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M_2) is the measured rate of flow from the measuring device being used to check the flow for the calibration. This method or device must be accurate to within $\pm 5\%$ error. Describe below the method and equipment used to perform this measurement.

N/A

Percent Difference = $(M_1 - M_2) \div M_2 \times 100 = \pm \%$ (Acceptable is within $\pm 10\%$) (equation 1)

Calibration Multiplier = $M_2 \div M_1$ (equation 2)

flowmeter installed according to manufacturer's specifications? Yes / No / Unsure
Describe any apparent problems with installation or operation _____

Flowmeter accuracy prior to any adjustments: _____. Totalizer reading _____

Flowmeter accuracy after final adjustment: _____. Totalizer reading _____

Flowmeter calibration multiplier: _____

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
March 2004

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
 Water Measurement Program

RECEIVED
MAR 01 1999
 Department of Water Resources

1997 WATER MEASURING DEVICE CERTIFICATION

Date of Testing _____

INV 6-17-98 ghr

Person performing test _____

Name:	City of Rigby
Water Right No:	A25 4009, 4010, X25-10496
Legal Description:	T 4N R 39E Sec. 18 SW 1/4 NE 1/4 SW 1/4
Site Tag No:	E0007477
Diversion Name:	Well # 1

(FIRE WELL)

Current Owner

Name City of Rigby Phone 208-745-8111

Address 158 West Fremont City Rigby State ID Zip 83442

Operator (if leased or operated by someone else)

Name _____ Phone _____

SCANNED

NOV 30 2004

PROFILE

SECTION I WELL SITE IDENTIFICATION

Global Positioning System Data:

Data Collection Filename FOG1716A Offset 30'S

IDWR Site Tag Identification No. E0007477

Site Tag location description: Sample Port

SGS Locator _____

For Department/District Use Only

Received by _____ Date _____

Reviewed by _____ Date _____

Data Entry by _____ Date _____

Source: IDWR Eastern Region,
 Water Meas. Program Files, Well
 # _____ March 2004

SECTION III Modifications made in 1998

Please describe in the space below any major modifications made to the diversion works or piping system which would affect system capacity or accuracy of the flow measurements during 1998. Attach drawings, sketches, photographs, notes or design information if needed.

NONE

Comments: (If the flowmeter was installed, calibrated, or replaced during 1998, please note the date.)

N/A

SCANNED

NOV 30 2004

PROFILED

SECTION IV Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

E. Thompson Engineer 2-26-99
Signature Title Date
E. Thompson Engineer

Note: Each reporting form shall be accompanied by a report processing fee in the amount of twenty-five dollars (\$25) per diversion made payable to the Idaho Department of Water Resources Section 42-701(6), Idaho Code). Report fee is not required if no water was diverted during 1998.

For Office Use Only

Received by _____ Date _____ Time _____
Amount submitted 25.00 Correct? yes _____ no _____
Receipted by B. Giffis Receipt No. 6044740
Data entry by D. M. 11/4/99 Date 3-3-99

Reviewed 4-5-99 jh

SECTION II Well Information

Depth to water. Record the date, if the pump was on or off, or if other nearby pumps were on.

Static Water Level (pump off, water level stable): _____ ft Date _____

Dynamic Water Level (pump on): _____ ft Date _____

SECTION III Rate of flow and volume diverted

Meter information:

Make _____ Model No. _____ Serial No. _____

Does the meter totalizer measure in acre-feet or gallons? _____ What is the multiplier? 1

Does the meter rate of flow indicator show gpm or cfs? _____ What is the multiplier? 1

For meters without rate of flow indicators, check here ☐ and see page 4 for rate measurement methods.

(meter information on page 4)

Note: Reading of the meter totalizer, flow rate and discharge pressure should be taken and recorded once each month on or near the same day.

Date (enter date of reading)	Totalizer reading	Flow rate cfs or gpm	Discharge pressure
January ()	~~0~~		
February ()			
March ()			
April ()	Fire - Backup only.		
May ()			
June ()		SCANNED	
July ()		NOV 30 2004	
August ()		PROFILED	
September ()			
October ()			
November ()			
December ()			

es totalizer reading above include meter multiplier? Yes No

Total Acre-feet OR Total Gallons
(there are 325,850 gallons per acre feet)

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

RECEIVED

MAR 01 1999

Department of Water Resources

THIS IS YOUR **1998** WATER MEASUREMENT ANNUAL REPORT

For the Water Measurement Program -
MEASURING DEVICE METHOD FOR TOTALIZING FLOW METERS
NON-IRRIGATION WELLS

ATTENTION: Year end data must be submitted to Idaho Department of Water Resources,
1301 N. Orchard St. Boise ID 83706, on or before:

January 15, 1999.

NOTE: A separate reporting form must be submitted for each diversion.

This report form may be used for the following diversion:

Name:	CITY OF RIGBY		
Water Right Nos:	A25-04009	A25-04010,	X25-10496
Legal Description:	T	04N 39E 18 SWNESW	
Site Tag No:	E0007477	B	
Diversion Name:	WELL #1		

SECTION I Water Right Holder/Operator information

Name and Address of Water Right Holder

Please check for address correction. ☐

Current Owner

Name City of Rigby

Phone 208-745-8111

Address 158 W. Fremont

Fax 208-745-7111

City Rigby

State & Zip IDaho 83442

Original Owner (if sold within last year)

ie Last, First, MI Phone _____

ress NOV 30 2004 Fax _____

State & Zip _____

erator or Contact Person

ne Last, First, MI Phone _____

dress Fax _____

ty State & Zip _____

Source: IDWR Eastern Region,
Water Meas. Program Files, Well

March 2004

SCANNED

NOV 30 2004

PROFILED

SECTION III Modifications made in 1999

Please describe in the space below any major modifications made to the diversion works or piping system which would affect system capacity or accuracy of the flow measurements during 1999. Attach drawings, sketches, photographs, notes or design information if needed.

NONE

Comments: (If the flowmeter was installed, calibrated, or replaced during 1999, please note the date.)

SCANNED

NOV 30 2004

PROFILED

SECTION IV Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

Signature Doug Nelson Title P.W.D Date 2-14-2000

Note: Each reporting form shall be accompanied by a report processing fee in the amount of **twenty-five dollars (\$25) per diversion** made payable to the Idaho Department of Water Resources section 42-701(6), Idaho Code). Report fee is not required if no water was diverted during 1999.

For Office Use Only

Received by A. Rouch Date 3-2-00 Time 1:00

Fee amount submitted ~~50.00~~ 0 Correct? yes ☒ no ☐

Accepted by AK Receipt No. —

Reviewed by cyh Date 3/9/00

Data entry by Sub Date 3/9/00

(Z)

NO
USE

SECTION II Well Information

Depth to water. Record the date, if the pump was on or off, or if other nearby pumps were on.

Static Water Level (pump off, water level stable): _____ ft Date _____

Dynamic Water Level (pump on): 110 ft Date _____

138 feet

SECTION III Rate of flow and volume diverted

Meter information:

Make Sensus Model No. W3500DR Serial No. 1100DN5537683

Does the meter totalizer measure in acre-feet or gallons? What is the multiplier? 1

Does the meter rate of flow indicator show gpm or cfs? What is the multiplier? 1

(circle one)

(circle one)

For meters without rate of flow indicators, check here ☐ and see page 4 for rate measurement methods.

(meter information on page 4)

Note: Reading of the meter totalizer, flow rate and discharge pressure should be taken and recorded once each month on or near the same day.

Date (date of reading)	Totalizer Reading	Flow Rate circle: cfs or gpm	Discharge Pressure
1998 End of Year			
January ()			
February ()			
March ()			
April ()			
May ()			
June ()			
July ()			
August ()			
September ()			
October ()			
November ()			
December ()			
End of Year (Dec 31)			

Does totalizer reading above include meter multiplier? _____ Yes _____ No

Total Acre-feet _____ OR Total Gallons _____
(there are 325,850 gallons per acre feet)

SECTION III Modifications made in 1999

Please describe in the space below any major modifications made to the diversion works or piping system which would affect system capacity or accuracy of the flow measurements during 1999. Attach drawings, sketches, photographs, notes or design information if needed.

NONE

Comments: (If the flowmeter was installed, calibrated, or replaced during 1999, please note the date.)

SCANNED

NOV 30 2004

PROFILED

SECTION IV Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

Doug Nelson
Signature

P.W.D
Title

2-14-2000
Date

Note: Each reporting form shall be accompanied by a report processing fee in the amount of twenty-five dollars (\$25) per diversion made payable to the Idaho Department of Water Resources Section 42-701(6), Idaho Code). Report fee is not required if no water was diverted during 1999.

For Office Use Only

Received by A. Ranch

Date 3-2-00

Time 1:00

Fee amount submitted ~~50.00~~ 0

Correct? yes ✓ no _____

Received by AK

Receipt No. —

Reviewed by cyh

Date 3/9/00

Data entry by Sub

Date 3/9/00

(Z)

NO
USE

Source: IDWR Eastern Region,
Water Meas. Program Files, Well
March 2004

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

THIS IS YOUR 1999 WATER MEASUREMENT ANNUAL REPORT

**For the Water Measurement Program -
MEASURING DEVICE METHOD FOR TOTALIZING FLOW METERS
NON-IRRIGATION WELLS**

ATTENTION: Year end data must be submitted to Idaho Department of Water Resources,
1301 N. Orchard St. Boise ID 83706, on or before:

January 15, 2000.

NOV 30 2004

NOTE: A separate reporting form must be submitted for each diversion.

This report form may be used for the following diversion:

Name:	CITY OF RIGBY		
Water Right Nos:	A25-04009	A25-04010, X25-10496	—
Legal Description:	04N 39E 18 SWNESW	POD# 101639	—
Site Tag No:	WELL #1	B	1/4
Diversion Name:	—		

PROFILED

(Fire Well) ✓

SECTION I Water Right Holder/Operator information

Name and Address of Water Right Holder

Please check for address correction. ☐

Current Owner

Name City of Rigby
Last, First, MI

Phone 208-745-8111

Address 158 W. Fremont

Fax 208-745-7111

City Rigby

State & Zip Idaho, 83442

Original Owner (if sold within last year)

Name _____
Last, First, MI

Phone _____

Address _____

Fax _____

City _____

State & Zip _____

Operator or Contact Person

Name Nelson Douglas E
Last, First, MI

Phone 208-745-8111

Address 158 W. Fremont

Fax 208-745-7111

City Rigby

State & Zip Id, 83442

Water Right Number - 25-07523

Prefix Translation: WATER RIGHT

Old (D) Number -

+ - - - - Last Name - - - - + + - First Name - - + + - - - - - Address - - - - -

SCANNED

*** C - CURRENT OWNER ***
CITY OF RIGBY

1 - 158 W FREMONT AVE
2 -
3 -
City- RIGBY
Phone - 208-745-8111

NOV 30 2004

State- ID Zip- 83442

+ - - Priority Date - - + + - - - Region - - - + + - - Stage - - - + + - - Status - - - +
06/09/1989 15 EASTERN L - LICENSE

+ - - - - Source - - - - + + - - - Tributary - - - - -
GROUNDWATER

WELL #12

+ - - - - Point of Diversion - - - - -
Twn Rng Sec Tract Lot RFlg County Diversion Name Diversion Rate Diversion No.

04N 39E 19 NW NE NW (51) JEFFERSON

+ - - - - Water Use - - - - -
Code Description Period From Period To Diversion Rate Diversion Volume
40 - MUNICIPAL 01/01 12/31 2.510

+ - Total Div. Rate - + + - Total Div. Volume - + + - Total Div. Capacity - + + - Total Consumptive Use - + + - KW Usage - +
2.510 2.510 0.0

+ - - - - Place of Use - - - - -
g Sec Tract Lot Acres Code Description County

ns -

n Use -

for Same Use -

+ - - - - Remarks - - - - -

GEN Place of use is located within the city limits of Rigby.

+ - - - - Old Water Right Numbers - - - - -
No Old Water Right Numbers found.

+ - - - - Conditions of Approval - - - - -

- R55 - This right is for the use of trust water and is subject to review
 - 20 years after the issuance of the permit to determine
 - availability of water and to re-evaluate the public interest.
- R56 - Diversion and use of water under this right is subject to an
 - annual use fee if rules are subsequently promulgated which
 - provide for the submittal of the fee.
- R57 - The Director retains jurisdiction of the right and may change,
 - add, or remove any requirement as determined to be appropriate.

PROFILED

Source: IDWR Measurement Program Well 2
Date: Mar 2004

287428N
667948.90E

Photo 23

Feb 16/17 25'S
11:30

E0007479
on sample port

100HP turbine - 1st backup well
Data Industrial Model 2100
gpm/gal totalizer
(323217 on
totalizer
6-17-98)
relay to site 3

Water Right Number - 25-07523

Prefix Translation: WATER RIGHT

Old (D) Number -

+ - - - - Last Name - - - - + + - First Name - - + + - - - - - Address - - - - -

*** C - CURRENT OWNER ***
CITY OF RIGBY

1 - 158 W FREMONT AVE
2 -
3 -
City- RIGBY
Phone - 208-745-8111

SCANNED

NOV 30 2004
State- ID Zip- 83442

+ - - Priority Date - - + + - - - Region - - - + + - - - Stage - - - + + - - - Status - - - +
06/09/1989 15 EASTERN L - LICENSE

+ - - - - Source - - - - + + - - - Tributary - - - - -
GROUNDWATER

+ - - - - Point of Diversion - - - - -
TwN Rng Sec Tract Lot RFlg County Diversion Name Diversion Rate Diversion No.

04N 39E 19 NW NE NW (51) JEFFERSON

+ - - - - Water Use - - - - -
Code Description Period From Period To Diversion Rate Diversion Volume
40 - MUNICIPAL 01/01 12/31 2.510

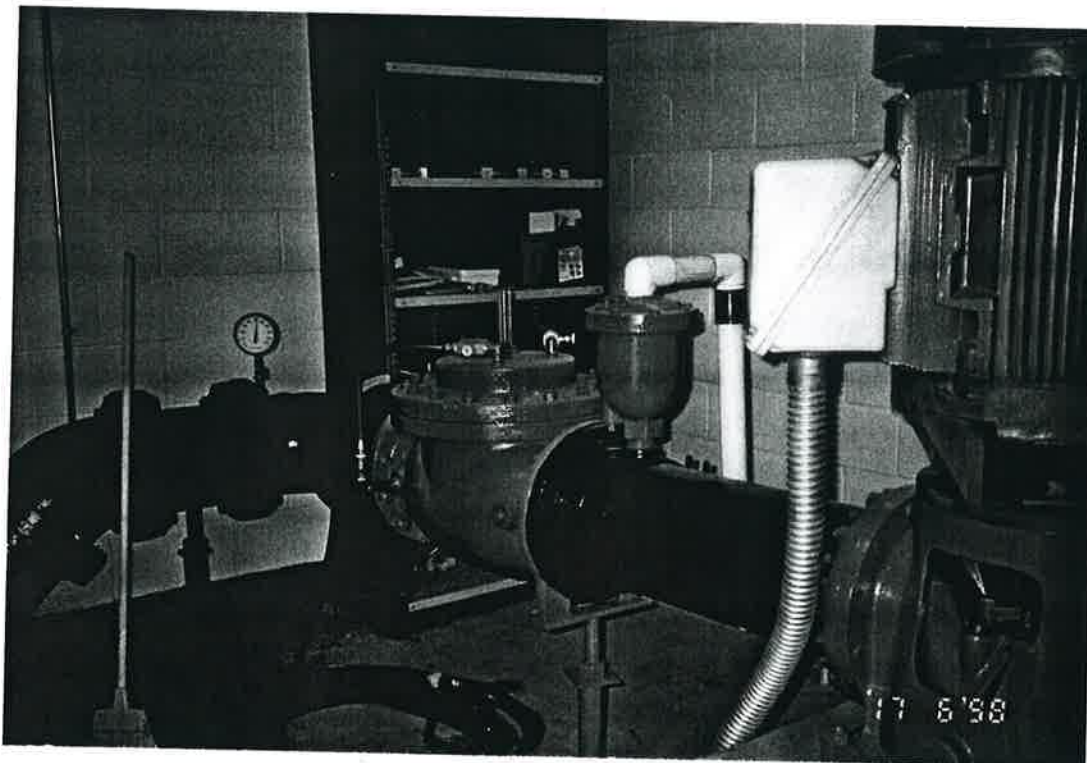
+ - Total Div. Rate - + + - Total Div. Volume - + + - Total Div. Capacity - + + - Total Consumptive Use - + + - KW Usage - +
2.510 2.510 0.0

+ - - - - TwN Rng

+ - - Diversion Means

+ - - Non-Irrigation

+ - - Other Rights f



Source: I and R Westerners Program Well 2
Date: Mar 04

100HP turbine - 1st backup well
Data Industrial Model 2900
again/gal totalizer

R57 - The Director retains jurisdiction of the right and may change,
- add, or remove any requirement as determined to be appropriate.

PROFILED

17 on
1224
17-98)
ite 3

SECTION II INSTALLED METER INFORMATION

METER AND MOUNTING PIPE INFORMATION			
Date of meter Installation	6-97	Multiplier - Flow rate	1
Manufacturer	Data Industrial	Multiplier - Totalizer	1
Meter Type	propeller	Location (good, fair, poor)	
Model	2100	Pipe information	
Serial Number		Pipe material	
Size (nominal)		Outside Diameter	
Measure Flow Rate?	(circle one) Yes No	Wall Thickness	
Measurement Units	(circle one) CFS GPM Other(specify)	Inside Diameter	
Measure Cumulative Volume?	(circle one) Yes No	Dist. of straight pipe upstream from meter	
Volume Units	Acre-Feet Yes No Other(specify)	Dist. of Straight pipe downstream from meter	

PROFILED

SCANNED
NOV 30 2004

SECTION III CERTIFICATION FOR CALIBRATION OF A WATER MEASUREMENT METER

See back page for instructions.

Measurement No. 1 (M_1) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M_2) is the measured rate of flow from the measuring device being used to check the flow for the calibration. This method or device must be accurate to within $\pm 5\%$ error. Describe below the method and equipment used to perform this measurement.

$$\text{Percent Difference} = (M_1 - M_2) \div M_2 \times 100 = \pm \% \quad (\text{Acceptable is within } \pm 10\%) \quad (\text{equation 1})$$

$$\text{Calibration Multiplier} = M_2 \div M_1 \quad (\text{equation 2})$$

Is flowmeter installed according to manufacturer's specifications? Yes / No / Unsure

Describe any apparent problems with installation or operation _____

Flowmeter accuracy prior to any adjustments: _____ Totalizer reading _____

Flowmeter accuracy after final adjustment: _____ Totalizer reading _____

Flowmeter calibration multiplier: _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
 Water Measurement Program

1997 WATER MEASURING DEVICE CERTIFICATION

Date of Testing _____

Inv 6-17-98 jgl

Person performing test _____

Name:	City of Rigby
Water Right No:	25-07523
Legal Description:	T 4N R 39E Sec. 19 NW 1/4 NE 1/4 NW 1/4
Site Tag No:	E0007479
Diversion Name:	Well #2

FIRST
BACKUP

Current Owner

Name _____ Phone _____

Last, First, MI

Address _____ City _____ State _____ Zip _____

Operator (if leased or operated by someone else)

Name _____ Phone _____

Last, First, MI

SECTION I WELL SITE IDENTIFICATION

PROFILED

SCANNED
NOV 30 2004

Global Positioning System Data:

Data Collection Filename F061717A Offset 25'S

IDWR Site Tag Identification No. E0007479

Site Tag location description: Sample port

PLS/USGS Locator _____

For Department/District Use Only

Received by _____ Date _____

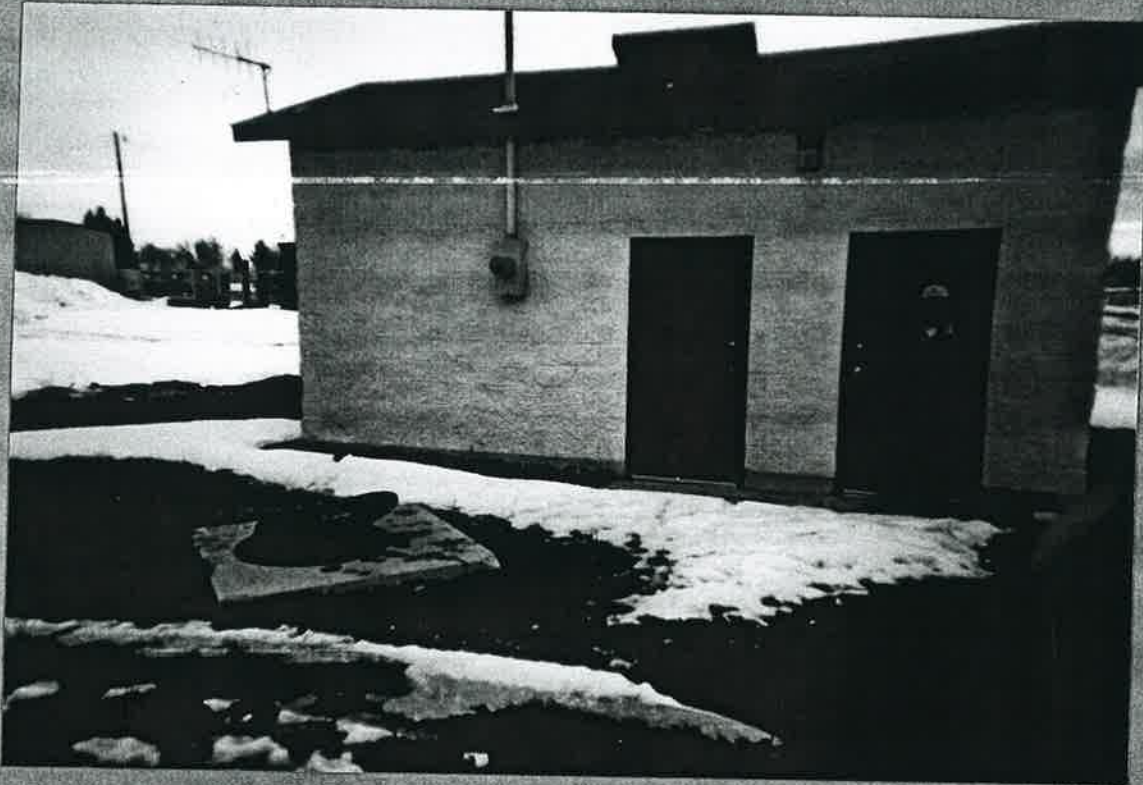
Reviewed by _____ Date _____

Data Entry by _____ Date _____

Source: IDWR Meas. Program Well #2

Date: Mar 04

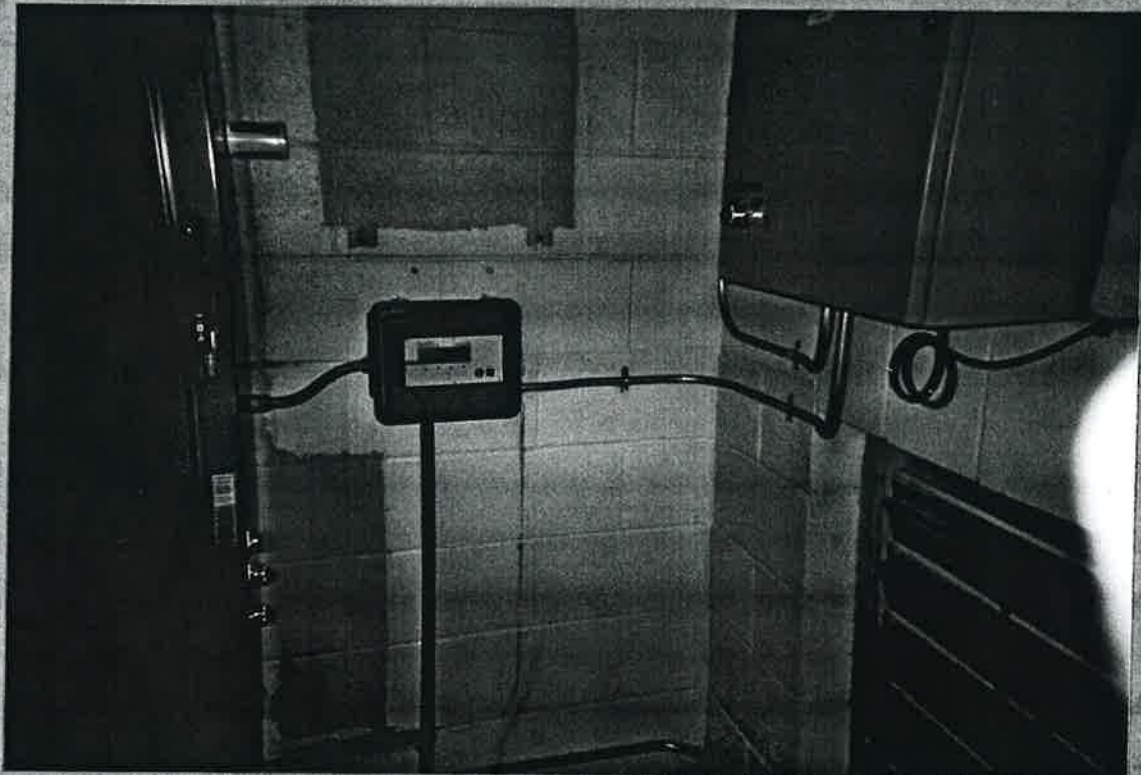
CITY OF RIGBY
WELL # 2



SCANNED
NOV 30 2004

PROFILED

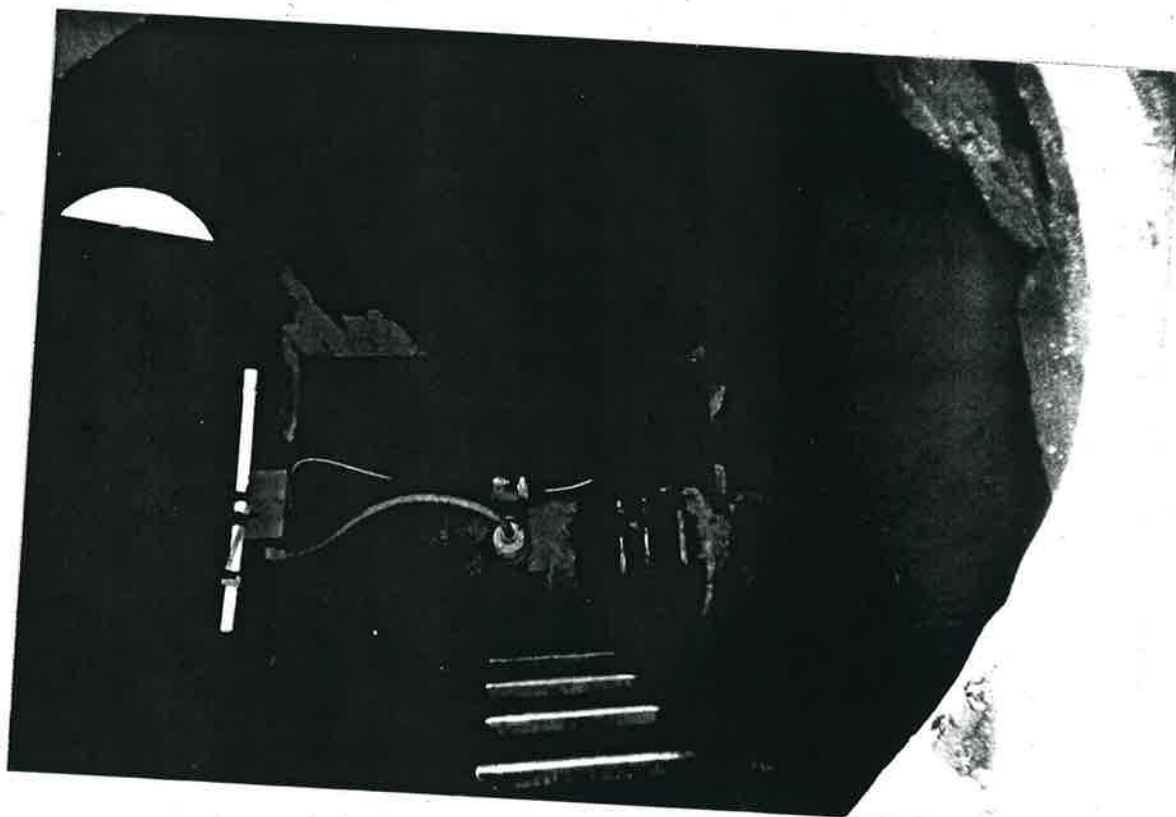
Source: IPWR Neas. Program Well #2
Date: Mar 04



City of Rigny
Well # 2

Source: EDWR Water Meter Program Well #2

Date: Mar 04



SCANNED
NOV 30 2004

PROFILE

Water Level Data

Does the well have access to measure water levels? Yes / No Not Available

Static Water Level _____ ft Pumping Water Level _____ ft (at condition # _____)
Date _____ Date _____

FLOWMETER ACCURACY CALIBRATION TABLE

Owners meter (totalizer reading)	Time	Total Gallons	Ave. Flow Rate - GPM (M ₁)	Standard total gallons	Average flow rate (M ₂)	Percent diff. (±)	Comments and adjustments

Notes, Comments or Calculations:

Flow Meter installed/replaced
with 4 YEARS

Sketch and or photograph of installation:

A Hatchel

SCANNED

NOV 30 2004

PROFILED

I certify that the above information is true and correct to the best of my knowledge and ability and the measurements taken and recorded are in accordance with the standards and specifications of the equipment used.

Signature

[Signature]
(person performing measurements)

Date

2-24-99

Source: PWWR Water Meter Program Well #2

Date: Mar 04

SECTION II INSTALLED METER INFORMATION

METER AND MOUNTING PIPE INFORMATION			
Date of meter Installation	6-97	Multiplier - Flow rate	1
Manufacturer	Dats Industrial	Multiplier - Totalizer	1
Meter Type	Propeller	Location (good, fair, poor)	
Model	2100	Pipe information	
Serial Number	2100-600829	Pipe material	Ductile Iron
Size (nominal)	10"	Outside Diameter	10"
Measure Flow Rate?	(circle one) Yes No	Wall Thickness	1/2" +
Measurement Units	(circle one) CFS GPM Other (specify)	Inside Diameter	10"
Measure Cumulative Volume?	(circle one) Yes No	Dist. of straight pipe upstream from meter	15'
Volume Units	Acre-Feet Yes No Other (specify)	Dist. of Straight pipe downstream from meter	60'

SECTION III CERTIFICATION FOR CALIBRATION OF A WATER MEASUREMENT METER

See back page for instructions.

Measurement No. 1 (M_1) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M_2) is the measured rate of flow from the measuring device being used to check the flow for the calibration. This method or device must be accurate to within $\pm 5\%$ error. Describe below the method and equipment used to perform this measurement.

$$\text{Percent Difference} = (M_1 - M_2) \div M_2 \times 100 = \pm \% \quad (\text{Acceptable is within } \pm 10\%) \quad (\text{equation 1})$$

$$\text{Calibration Multiplier} = M_2 \div M_1 \quad (\text{equation 2})$$

Is flowmeter installed according to manufacturer's specifications? Yes / No / Unsure

Describe any apparent problems with installation or operation

Flowmeter accuracy prior to any adjustments: Totalizer reading

Flowmeter accuracy after final adjustment: Totalizer reading

Flowmeter calibration multiplier:

Source: DWR Water Mass Program Well #2
Date: Mar 04

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
 Water Measurement Program

RECEIVED

MAR 01 1999

Department of Water Resources

1997 WATER MEASURING DEVICE CERTIFICATION

Date of Testing _____

Inv 6-17-98 ghl

Person performing test _____

Name:	City of Rigby		
Water Right No:	25-07523		
Legal Description:	T 4N	R 39E	Sec 19 NW ¼ NE ¼ NW ¼
Site Tag No:	E0007479		
Diversion Name:	Well #2		

FIRST
BACKUP**Current Owner**Name City of Rigby Phone 208-745-8111Address 158 West Fremont City Rigby State ID Zip 83442**Operator (if leased or operated by someone else)**

Name _____ Phone _____

Last, First, MI

SECTION I WELL SITE IDENTIFICATION

Global Positioning System Data:

Data Collection Filename F061717A Offset 25'SIDWR Site Tag Identification No. E0007479Site Tag location description: Sample port

PLS/USGS Locator _____

For Department/District Use Only

Received by _____ Date _____

Reviewed by _____ Date _____

Data Entry by _____ Date _____

Source: IDWR Water Meas Program Well #2

Date: Mar 04

SECTION III Modifications made in 1998

Please describe in the space below any major modifications made to the diversion works or piping system which would affect system capacity or accuracy of the flow measurements during 1998. Attach drawings, sketches, photographs, notes or design information if needed.

None

Comments: (If the flowmeter was installed, calibrated, or replaced during 1998, please note the date.)

None

SCANNED
NOV 30 2004

PROFILED

SECTION IV Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

Signature [Signature] Title Engineer Date 2-26-99
Thompson Eng. Inc.

Note: Each reporting form shall be accompanied by a report processing fee in the amount of twenty-five dollars (\$25) per diversion made payable to the Idaho Department of Water Resources (Section 42-701(6), Idaho Code). Report fee is not required if no water was diverted during 1998.

For Office Use Only

Received by _____ Date _____ Time _____
Fee amount submitted 25.00 Correct? yes _____ no _____
Receipted by B. Gelfo Receipt No. 0044740
Data entry by Dub 1/4/99 Date 3-3-99

reviewed 4-5-99 cjh

Source: IdWR Water Meas Program Well #2

Date: Mar 04

SECTION II Well Information

Depth to water. Record the date, if the pump was on or off, or if other nearby pumps were on.

Static Water Level (pump off, water level stable): _____ ft Date _____

Dynamic Water Level (pump on): _____ ft Date _____

SECTION III Rate of flow and volume diverted

Meter information:

Make _____ Model No. _____ Serial No. _____

Does the meter totalizer measure in acre-feet or gallons? What is the multiplier? _____

Does the meter rate of flow indicator show gpm or cfs? What is the multiplier? _____

For meters without rate of flow indicators, check here ☐ and see page 4 for rate measurement methods.

(meter information on page 4)

Note: Reading of the meter totalizer, flow rate and discharge pressure should be taken and recorded once each month on or near the same day.

Date (enter date of reading)	Totalizer reading	Flow rate cfs or gpm	Discharge pressure
January ()			
February ()			
March ()	will start readings spring/summer '99		
April ()			
May ()	Pump runs during summer peak flow.		
June (12)	323217		
July ()			
August ()			
September ()			
October ()			
November ()			
December ()			

Does totalizer reading above include meter multiplier? ☒ Yes ☐ No

Total Acre-feet _____ OR Total Gallons _____
(there are 325,850 gallons per acre feet)

Comment:

~~No device~~ - device not read - no readings available
Single reading in June by IDWR

Source: IDWR Water Meter Program (ND)
Date: Mar 04

SCANNED
NOV 30 2004
PROFILED

SECTION II Well Information

Depth to water. Record the date, if the pump was on or off, or if other nearby pumps were on.

Static Water Level (pump off, water level stable): _____ ft Date _____

Dynamic Water Level (pump on): _____ ft Date _____

SECTION III Rate of flow and volume diverted

Meter information:

Make _____ Model No. _____ Serial No. _____

Does the meter totalizer measure in acre-feet or gallons? _____ What is the multiplier? _____

Does the meter rate of flow indicator show gpm or cfs? _____ What is the multiplier? _____

For meters without rate of flow indicators, check here ☐ and see page 4 for rate measurement methods.

(meter information on page 4)

Note: Reading of the meter totalizer, flow rate and discharge pressure should be taken and recorded once each month on or near the same day.

Date (enter date of reading)	Totalizer reading	Flow rate cfs or gpm	Discharge pressure
January ()			
February ()			
March ()	will start readings spring/summer '99		
April ()			
May ()	pump runs during summer peak flow.		
June (17)	323217		
July ()			
August ()			
September ()			
October ()			
November ()			
December ()			

SCANNED

NOV 30 2004

PROFILED

Does totalizer reading above include meter multiplier? ☒ Yes ☐ No

Total Acre-feet _____ OR Total Gallons _____

(there are 325,850 gallons per acre foot)

Comment:

~~No device~~ - device not read - No readings available
Single reading in June by IDWR

Program Well #2

ND

Source: IDWR Water Meter

Date: Mar 04

**STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES**

RECEIVED

MAR 01 1999

Department of Water Resources

THIS IS YOUR 1998 WATER MEASUREMENT ANNUAL REPORT

**For the Water Measurement Program -
MEASURING DEVICE METHOD FOR TOTALIZING FLOW METERS
NON-IRRIGATION WELLS**

**ATTENTION: Year end data must be submitted to Idaho Department of Water Resources,
1301 N. Orchard St. Boise ID 83706, on or before:**

January 15, 1999.

NOTE: A separate reporting form must be submitted for each diversion.

This report form may be used for the following diversion:

Name:	—	CITY OF RIGBY	—
Water Right Nos:	—	25-07523	—
Legal Description:	T	04N 39E 19 NWNENW	—
Site Tag No:	—	E0007479	8
Diversion Name:	—	WELL #2	—

SECTION I Water Right Holder/Operator information

Name and Address of Water Right Holder

Current Owner

Name City of Rigby

Address 158 West Fremont

City Rigby

Original Owner (if sold within last year)

Name _____

Address _____

City _____

Operator or Contact Person

Name _____

Address _____

City _____

Please check for address correction. ☐

Phone 208-745-8111

Fax 208-745-7111

State & Zip IDAHO, 83442

Phone _____

Fax _____

State & Zip _____

Phone _____

Fax _____

State & Zip _____

SCANNED

NOV 30 2004

PROFILED

Source: Idaho Water Measurement Program Well #2Date: Mar 04

SECTION III Modifications made in 1999

Please describe in the space below any major modifications made to the diversion works or piping system which would affect system capacity or accuracy of the flow measurements during 1999. Attach drawings, sketches, photographs, notes or design information if needed.

Comments: (If the flowmeter was installed, calibrated, or replaced during 1999, please note the date.)

SCANNED
NOV 30 2004

SECTION IV Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

Doug Nelson
Signature

P.W.D.
Title

2-14-2000
Date

Note: Each reporting form shall be accompanied by a report processing fee in the amount of twenty-five dollars (\$25) per diversion made payable to the Idaho Department of Water Resources (Section 42-701(6), Idaho Code). Report fee is not required if no water was diverted during 1999.

For Office Use Only

Received by DWB

Date 3/2/00

Time -

Fee amount submitted \$25

Correct? yes ☒ no ☐

Receipted by April Kooch

Receipt No. C 48274

Reviewed by cyh

Date 3/9/00

Data entry by DWB

Date 3/9/00

PROFILED

Source: DWR Water Meas Program Well #2

Date: Mar 04

SECTION II Well Information

Depth to water. Record the date, if the pump was on or off, or if other nearby pumps were on.

Static Water Level (pump off, water level stable): _____ ft Date _____

Dynamic Water Level (pump on): _____ ft Date _____

Deep Well 500 feet

SCANNED

SECTION III Rate of flow and volume diverted

NOV 30 2004

Meter information:

Make DATA INDUSTRIAL Model No. 2100 Serial No. _____

Does the meter totalizer measure in acre-feet or gallons?
(circle one)

What is the multiplier? 1

Does the meter rate of flow indicator show gpm or cfs?
(circle one)

What is the multiplier? 1

For meters without rate of flow indicators, check here ☐ and see page 4 for rate measurement methods.

(meter information on page 4)

Note: Reading of the meter totalizer, flow rate and discharge pressure should be taken and recorded once each month on or near the same day.

Date (date of reading)	Totalizer Reading	Flow Rate circle: cfs or gpm	Discharge Pressure
1998 End of Year			
January ()			
February ()			
March ()			
April ()			
May ()			
June ()			
July ()			
August ()			
September ()			
October ()			
November ()			
December ()			
End of Year (Dec 31)			

2nd Well Back-up

Does totalizer reading above include meter multiplier? Yes No 2-28-2009
 Total Acre-feet 29.0 OR Total Gallons 18787174
 (there are 325,850 gallons per acre feet) will start about May

Total Use = 56.7 a/c June 98 - Feb 2000 (2 seasons). Est. 29 af
 Total meter reading 57.7 af since June 97 for 1999

Source: FDWR Water Measurement Program Well #2
 Date: Mar 04

FE

PROTECTED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

PROFILED

THIS IS YOUR 1999 WATER MEASUREMENT ANNUAL REPORT

For the Water Measurement Program -
MEASURING DEVICE METHOD FOR TOTALIZING FLOW METERS
NON-IRRIGATION WELLS

SCANNED
NOV 30 2004

ATTENTION: Year end data must be submitted to Idaho Department of Water Resources,
1301 N. Orchard St. Boise ID 83706, on or before:
January 15, 2000.

NOTE: A separate reporting form must be submitted for each diversion.

This report form may be used for the following diversion:

Name:	CITY OF RIGBY			—
	25-07523			—
Water Right Nos:	04N 39E 19 NWNEW			—
Legal Description:	E0007479	POD#	101638	1/4
Site Tag No:	WELL #2		B	—
Diversion Name:				

Back-up
Well

SECTION I Water Right Holder/Operator Information

Name and Address of Water Right Holder

Please check for address correction. ☐

Current Owner

Name City of Rigby

Phone 208 745-8111

Address 158 W. Fremont

Fax 208-745-7111

City Rigby,

State & Zip Id. 83442

Original Owner (if sold within last year)

Name _____

Phone _____

Address _____

Fax _____

City _____

State & Zip _____

Operator or Contact Person

Name Nelson Douglas E

Phone 208-745-8111

Address 158 W. Fremont

Fax 208-745-7111

City Rigby,

State & Zip Id. 83442

3130692

Source: FAWR Water Meas. Program Well #2

Date: May 04

**OFFICE OF THE CITY ATTORNEY
STEPHEN J. CLARK, ESQ.
P.O. BOX 277
RIGBY, IDAHO 83442-0277
TEL. (208) 745-9202
FAX. (208) 745-8160**

February 25, 2004

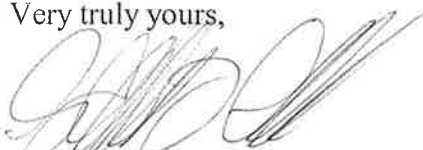
Bryce A. Contor
Water Resources Field Services
1571 North 1100 East
Terreton, ID 83450

Re: Water Right Adjudication Claims A25-04009, A25-04010, A25-04011, A25-07051, A25-07288, A25-10496, A25-10688

Dear Mr. Contor:

I am in receipt of your February 20, 2004 letter. I spoke with the Mayor and would like to invite you to our department head meeting, Tuesday, March 2nd at 9:30 a.m., at City Hall. If this is not an appropriate time, please let me know.

Very truly yours,



Stephen J. Clark
City Attorney

c: City of Rigby

PROFILED

SCANNED

NOV 30 2004

Idaho Water Resources Research Institute
UNIVERSITY OF IDAHO
1776 Science Center Dr.
Idaho Falls, Idaho 83402

WATER USE ON THE SNAKE RIVER PLAIN IDAHO AND EASTERN OREGON

SCANNED
NOV 30 2004

PROFILED

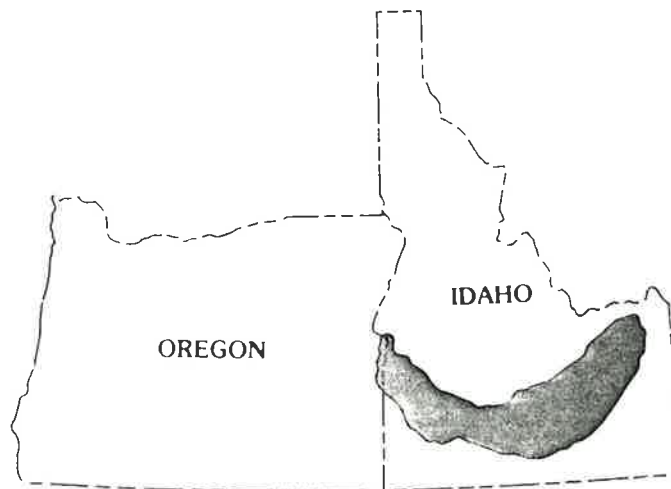


TABLE 11.—Aquaculture water use by county, 1980

County	Number of fish farms	Withdrawal (acre-feet per year)
Ada.....	1	2,000
Bannock.....	2	56,000
Bingham.....	2	183,000
Gooding.....	16	1,370,000
Jerome.....	2	152,000
Power.....	1	12,000
Twin Falls.....	9	131,000
Total.....	33	1,906,000

annual evaporation from open water is 36 in./yr, total consumptive use by fish farms would equal 990 acre-ft/yr. Few, if any, fish farms have 10 acres of open water and most have much less, so consumptive use by aquaculture on the Snake River Plain probably amounts to less than 1,000 acre-ft/yr.

NONINDUSTRIAL PUBLIC SUPPLY

Nonindustrial public supply refers to water withdrawn by public and private water suppliers and delivered for domestic, public, and commercial uses. Domestic uses include drinking, food preparation, washing, and lawn and garden watering. Public uses include schools, fire departments, and municipal parks. Most commercial establishments also use public supplies.

Nonindustrial public-supply withdrawals in Idaho were estimated using the equation:

$$Q = [(P) (231 \text{ gal/d}) (0.00112015)] - I \quad (4)$$

where

Q is volume withdrawn for nonindustrial public supply, in acre-feet;

P is population served by public supplies; and

I is public-supply withdrawals for industrial use, in acre-feet.

Data on population served by public supplies and public-supply withdrawals for industrial use were provided by IDWR. The value for per-capita public-supply withdrawals (231 gal/d) is the average reported value for Idaho in 1980 (Solley and others, 1983, p. 10). The constant (0.00112015) converts gallons per day to acre-feet per year. Volumes withdrawn for public supply in Malheur County, Oregon, were reported by D.D. Nebert (U.S. Geological Survey, oral commun., 1983).

In 1980, about 102,000 acre-ft of water was withdrawn on the Snake River Plain for nonindustrial public-supply

uses. Table 12 shows estimated withdrawals, population served, and source of water by county, and figure 28 shows the locations of public-supply withdrawals. More than 95 percent of public supply is ground water (Association of Idaho Cities, 1980). Solley and others (1983, p. 10) reported that consumptive use of nonindustrial public supply in Idaho was about 22 percent. On the basis of this rate, consumptive use of nonindustrial public supply in 1980 on the Snake River Plain was estimated to be about 22,000 acre-ft.

RURAL

Rural water use includes water for domestic and livestock needs supplied by private systems. Domestic withdrawals were estimated using 98 gal/d per person, which is the average per-capita rural domestic use for the 17 Western States (Solley and others, 1983, p. 33). To determine the population supplied by private systems in each county, the population supplied by public systems was subtracted from the total 1980 population. However, parts of counties lie outside the study area. In those counties, rural populations were assumed to be distributed uniformly over the county and thus were multiplied by the percentage of the county in the study area. All rural domestic water is assumed to be ground water.

Amount and source of withdrawals for livestock were derived from estimates prepared for a national water-use summary. Withdrawals for livestock were assumed to be distributed uniformly within each county and were adjusted as above for those counties partially outside the study area.

Withdrawals for livestock in Malheur County, Oregon, were estimated from reported livestock populations (U.S. Bureau of the Census, 1981; Oregon Crop and Livestock Reporting Service, 1982). Total populations of horses, cattle, sheep, pigs, chickens, and goats were multiplied by their daily per-capita use as reported by Murray (1968, p. 4) and by the percentage of Malheur County included in the study area. Withdrawals were assumed to be equally from surface and ground water.

Amounts of rural domestic and livestock withdrawals are presented by county in table 13 and locations are shown in figure 28. In 1980, an estimated 23,000 acre-ft was withdrawn from surface and ground water for rural uses. About 13,000 acre-ft was used for domestic purposes and 10,000 acre-ft for livestock. In previous water-use estimates, the U.S. Geological Survey (Solley and others, 1983, p. 14) reported that consumptive use was about 24 percent of domestic withdrawals and 86 percent of livestock withdrawals. On the basis of these rates, consumptive use of rural domestic and livestock withdrawals was estimated to be about 11,800 acre-ft.

PROFILED

TABLE 12.—Nonindustrial public-supply water use and population served by county, 1980

[<, less than]

County	Population served by public supplies	Withdrawal for public supply (acre-feet per year)	Source of water (G, ground water; S, surface water)
Ada.....	141,940	36,100	G
Bannock.....	16,430	4,200	G
Bingham.....	18,790	4,700	G
Blaine.....	160	<100	G
Bonneville.....	50,120	10,500	G
Butte.....	1,320	300	G
Canyon.....	58,810	15,200	G
Cassia.....	10,860	2,800	G
Clark.....	540	100	G
Elmore.....	17,250	4,400	G
Fremont.....	4,870	1,300	G
Gem.....	5,290	1,400	G
Gooding.....	5,880	1,400	G
Jefferson.....	5,280	1,400	G
Jerome.....	8,630	2,200	G
Lincoln.....	1,620	300	G
Madison.....	12,290	3,000	G
Malheur, Oreg...	12,100	1,600	G,S
Minidoka.....	12,070	2,500	G
Owyhee.....	3,270	800	G,S
Payette.....	10,310	2,200	G
Power.....	3,880	1,000	G
Twin Falls.....	33,340	3,800	G
Washington.....	4,860	1,200	G,S
Total.....	439,910	102,400	

PROFILED

SCANNED

NOV 30 2004

and Jefferson Counties. Consumptive use was 53 percent, or 3,900 acre-ft. The rest was returned to the aquifer via injection and drain wells and leaching ponds.

INSTREAM WATER USES

Instream water uses do not involve either withdrawals or significant consumptive use of water. However, when perfected as senior water rights, they limit the availability of water for other uses by requiring continuous minimum flows at specific locations. Instream water uses include hydroelectric power generation, minimum flows for fish habitat preservation, and recreation.

HYDROELECTRIC POWER GENERATION

Since the early 1900's, availability of inexpensive hydroelectric power has been important to Idaho's economic development. With an abundance of free-flowing water, Idaho has relied almost exclusively on hydroelectric power. About half of the State's hydroelectric power facilities are within the study area on the Snake River and its tributaries (fig. 29).

An estimated 52 million acre-ft of water was used in 1980 to generate 2.6 million MWh of electricity on the Snake River Plain. This is about 30 percent of the total hydropower generation in Idaho. About 39.4 million acre-ft of water was used on the eastern plain and 12.3 million on the western plain.

Water use for hydropower generation was estimated by IDWR from power generation data provided by the Federal Energy Regulatory Commission. Data on water use and power produced in 1980 are shown by county in table 14. Virtually none of this water was consumptively used; after passing through a power generation plant, the water was available for downstream use. The small amount of water evaporated from reservoirs associated with hydropower generation is accounted for as evaporation from open water.

Continued instream flows are necessary to generate electricity at current levels. During early development of Idaho's water resources, abundant supplies precluded competition between power generation and other water uses. As development proceeded, competition for water use increased. When flows are low, consumptive water use upstream from a power generating facility reduces the amount of water available for power generation.

Jeff County from [B] Census Bureau

Website
 2002 19781
 2000 19223
 1990 16543
 1980 15304
 1970 11619
 1960 11672
 1950 10495
 1940 10762
 1930 9171
 1920 9441

Census 2000
 1996 - (1996)
 2998 persons 1107 units

PROFILED

SCANNED
 NOV 3 0 2004

WMIS data e-mailed by Tim Luke 2/23/2004 (IDWR Distribution Section, Boise)

r_organization	year	fm_date	fm_calib	fm_acrft	fm_adjacrft	fm_afqual	fm_comments
CITY OF RIGBY	1995	01-Jan-95					
CITY OF RIGBY	1996	01-Jan-95					
CITY OF RIGBY	1997	01-Jan-95					
CITY OF RIGBY	1998	01-Jan-95	1		ND		Device not read/no readings available
CITY OF RIGBY	1999	01-Jan-95	1	29	29		Total use = 56.7 acft June 98 - Feb 2000 (2 seasons.) Est. 29 af for 1999. Total meter reading 57.7 af since June 97.
CITY OF RIGBY	1995	01-Jan-95					
CITY OF RIGBY	1996	01-Jan-95					
CITY OF RIGBY	1997	01-Jan-95					
CITY OF RIGBY	1998	01-Jan-95	1		Z		backup well for fires
CITY OF RIGBY	1999	01-Jan-95	1		Z		
CITY OF RIGBY	1995	01-Jan-95					
CITY OF RIGBY	1996	01-Jan-95					
CITY OF RIGBY	1997	01-Jan-95					
CITY OF RIGBY	1998	24-Feb-99	1	494	494 PM		began readings Aug '98
CITY OF RIGBY	1999	24-Feb-99	1	171.18	171.18 MR		

PROFILED

SCANNED

NOV 30 2004



bcontor@hotmail.com

Printed: Monday, February 23, 2004 12:09 PM

From : Luke, Tim <TLUKE@idwr.state.id.us>
Sent : Monday, February 23, 2004 9:22 AM
To : 'Bryce Contor' <bcontor@hotmail.com>
CC : "Yenter, Cindy (Hodges)" <cyenter@idwr.state.id.us>, "Rounds, Lewis" <LRounds@idwr.state.id.us>, "Holliday, Michael" <mhholiday@idwr.state.id.us>
Subject : RE: [SPAM ?? (SP)]::City of Rigby file

📎 Attachment : RigbyMeters.xls (10 KB)

Bryce,

I believe any water measurement file for Rigby should be at Eastern Region as Cindy suggested. Attached is a spreadsheet query I pulled from WMIS for Rigby. As per WMIS, there are three wells, a primary, a back-up and fire use well. It appears we are lacking some data for these wells and I'm not sure why. I am hoping there is more information in the file. If the City has not been submitting annual reports as required, then the Department may need to intervene and get the necessary data.

Are you contracting with IDWR to investigate or recommend adjudication claims now or is this an IWRRRI project. I'm curious why the City is put out by your inquiries? If you are working at the regional office, you should be able to have someone pull up WMIS so you can see what is there.

Tim

SCANNED

NOV 30 2004

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

From: Bryce Contor [mailto:bcontor@hotmail.com]
Sent: Monday, February 23, 2004 7:33 AM
To: tkiprei@idwr.state.id.us; lrounds@idwr.state.id.us; cyenter@idwr.state.id.us; CHODGES@idwr.state.id.us; mhholiday@idwr.state.id.us; tluke@idwr.state.id.us
Subject: [SPAM ?? (SP)]::City of Rigby file

I'll everyone. Michael has asked me to look at the City of Rigby adjudication claims. The city folks are a little put out that I've contacted them again, so I committed to make another run at finding the results of the water measurement program field work.

Friday I talked with Cindy on the phone, she believes the file was delivered to Eastern. Terry wasn't in Friday, but I found a box by her desk that had Ririe's file, and Pocatello's, and some other cities, but not Rigby. In the Eastern Water Measurement District files I found Rexburg, but not Rigby.

Can any of you help me? These are beneficial use claims, so I need as much as I can get. Especially flow measurements, motor and pump capacities, and pumping lift.

Thanks, Bryce

208 681 9100

PROFILED

Take off on a romantic weekend or a family adventure to these great U.S. locations.



bcontor@hotmail.com

Printed: Monday, February 23, 2004 12:11 PM

From : Rounds, Lewis <LRounds@idwr.state.id.us>
Sent : Monday, February 23, 2004 9:24 AM
To : 'Bryce Contor' <bcontor@hotmail.com>
CC : "Klipfel, Terry" <tklipfel@idwr.state.id.us>
Subject : City of Rigby file

Bryce,

The city of Rigby has not reported since 1999. I have talked with the Mayor who will be in the office today to get new forms. He is supposed to have them filled out and returned to me by Friday or risk losing his measurement exemption from the EWMD. I did have the file because I was trying to get this matter resolved. The file is now at Terry's desk however, like I said, we only have information for 1998 and 1999.

Lewis Rounds
 Dam Safety Section / WD 120 Watermaster
 Idaho Department of Water Resources
 900 N. Skyline Dr. Suite A
 Idaho Falls, Idaho 83402
 (208) 525-7161

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

From: Bryce Contor [mailto:bcontor@hotmail.com]
Sent: Monday, February 23, 2004 9:16 AM
To: tklipfel@idwr.state.id.us
Cc: lrounds@idwr.state.id.us
Subject: [SPAM ?? (SP)]:RE: [SPAM ?? (SP)]:City of Rigby file

Thanks Terry. I meant to include Lewis on this mailing, thanks for letting him.

>From: "Klipfel, Terry"
 >To: 'Bryce Contor'
 >CC: "Rounds, Lewis"
 >Subject: RE: [SPAM ?? (SP)]:City of Rigby file
 >Date: Mon, 23 Feb 2004 07:48:10 -0700
 >
 >Bryce,
 >
 >you may want to check with Lewis. maybe he has the file. Rigby has not
 >been sending in their reporting for a couple of years. I know that phone
 >calls were made, and I believe someone may have even talked with the mayor
 >(don't quote me on that one) because reports hadn't been sent in.
 >
 >I hope that helps. Files generally are in the box by my desk so my best
 >guess is that Lewis has the file??
 >

>Terry

>

>

>-----Original Message-----

>From: Bryce Contor [mailto:bcontor@hotmail.com]
 >Sent: Monday, February 23, 2004 7:33 AM
 >To: tklipfel@idwr.state.id.us; lrounds@idwr.state.id.us;
 >cyenter@idwr.state.id.us; CHODGES@idwr.state.id.us;
 >mholliaday@idwr.state.id.us; duke@idwr.state.id.us
 >Subject: [SPAM ?? (SP)]:City of Rigby file

SCANNED

NOV 30 2004

PROFILED

>
>
>Hi everyone. Michael has asked me to look at the City of Rigby adjudication
>claims. The city folks are a little put out that I've contacted them again,
>so I committed to make another run at finding the results of the water
>measurement program field work.
>
>Friday I talked with Cindy on the phone, she believes the file was delivered
>to Eastern. Terry wasn't in Friday, but I found a box by her desk that had
>Ririe's file, and Pocatello's, and some other cities, but not Rigby. In the
>Eastern Water Measurement District files I found Rexburg, but not Rigby.
>
>Kin any of you hep me? These are beneficial use claims, so I need as much
>as I can get. Especially flow measurements, motor and pump capacities, and
>pumping lift.
>
>Thanks, Bryce
>
>208 681 9100
>
> _____
>
>Take off on a romantic weekend or a
>family adventure to these great U.S. locations.
>

[Watch high-quality video with fast playback at MSN Video. Free!](#)

SCANNED

NOV 30 2004

PROFILED

Water Resources Field Services

1571 N. 1100 E.
Terreton, ID 83450
208-663-4667

February 20, 2004

Steve Clark
City Attorney, City of Rigby
PO Box 277
Rigby ID 83442

SCANNED

NOV 30 2004

PROFILED

Re: Water Right Adjudication Claims A25-04009, A25-04010, A25-04011,
A25-07051, A25-07288, A25-10496, A25-10688.

Dear Mr. Clark:

Thank you for talking with me on the phone about the City of Rigby's water rights. As we discussed the Idaho Department of Water Resources (IDWR) has asked me to do a field review of the city's water right claims. This is in preparation for Senior Water Resource Agent Michael Holliday to make recommendations to the court on the city's water rights. You may contact Mr. Holliday at 525-7161 if you have questions.

Jim of the city water department suggested I let you know what is needed before working with the water department personnel. He also believes IDWR has already obtained all the information needed. Before contacting the city, I specifically asked the appropriate IDWR personnel what was already in their files, what was available, and what did they wish me to investigate. Today I contacted IDWR again, and Monday I will follow up with other IDWR personnel. Based on what I have learned, I need the following:

1. I left a copy of IDWR's map of the city service area with Jim. I need a corrected copy with the date and initials of whoever makes the corrections.
2. Documentation of the original motor horsepower, pumping lift, and discharge pressure of well number one and well number two. If possible I need documentation that corresponds to IDWR requirements in the enclosed pamphlet "Evidence of Priority." This is needed because these are "beneficial use" water rights, developed without a permits or licenses. The documentation now in the files documents the existence of the wells, but not their capacities.
3. Documentation of the motor horsepower, pumping lift, and discharge pressure of well number one and well number two after the 1958 increase

PROFILED

SCANNED
NOV 30 2004

in capacity described in claim A25-10596.

4. Documentation of the height of the water tower and the date of installation. This will help determine the head the pumps push against, which is needed to calculate historical capacity.
5. Documentation of the motor horsepower, pumping lift, and discharge pressure of the two wells currently in use, as authorized by transfer 4791. This is needed because the underlying water rights are still the beneficial use rights.
6. If the city has had any discharge measurements made of well capacity over the years, it will greatly strengthen your water right to have copies of the data in the files.
7. Documentation of evidence of priority (including a history of the size of pumps, and the dates installed) for claim A25-10688. This claim is for the pump in the subwater pond that provides water to the Burgess Canal in exchange for water supplied to the city.
8. It would be useful to have copy of the exchange agreement with the Burgess Canal.
9. I need a thorough description of the use of the exchange water. Where is it used, and for what purposes? How many days per year is it used, and what is the average flow rate while it is being used? If you have records of the volume of water exchanged, please provide copies.
10. It would be helpful for me to get photographs and GPS locations of the wells at the airport and sewage lagoon. It also would be useful to get photographs and GPS locations of where the subwater pump puts water into the Burgess and where the city diverts its exchange water from the Burgess.

I realize some of this information may be very difficult to obtain. Documenting the original motor sizes, and the 1958 upgrades, may be a problem. If you simply can't document these items, I can try to use "chart values" for water use and a study of water use in the Snake River Plain done by the USGS a number of years ago. To do this, I will need a history of the population from the Rigby censuses over the years. The claimed priority of A25-04010 is 1920, so it would be good to have census data back to then at least.

When I showed Jim the map of the service area, he mentioned that there are requests to enlarge the city's service area. I encourage you to talk with Idaho Department of Water Resources about the water right issues of enlarging the service area. Cities are allowed to hold water rights that accommodate future growth, but there still needs to be appropriate authorization for incorporating new geographical areas to the city's service.

Please discuss these needs with the city water manager and ask him to contact me if he has further questions. You or he may reach me at 208 681 9100. He may also contact Mr. Holliday if he has questions about why we need this information.

Sincerely,

Bryce A. Contor

Enclosure

cc: Michael Holliday
IDWR
900 N Skyline Ste A
Idaho Falls ID 83402

SCANNED

NOV 30 2004

PROFILED

Rigby City Attorney Steve Clark

745-9202

2/20/04

11:45

PO Box 277 Rigby 83442

- I will mail letter to him w/ requested
info - what, why -

3/10/04 745-9202 3:45 pm

msg w/ Secretary re: found WR for well #2

SCANNED

NOV 30 2004

PROFILED

Michael 1/22/04 City of Rigby

3 weds per WMIS

Well #1 ?

Well #2 100 hp

Fire Well 150 hp

PROFILED

2/17/04 745-8111 xt 13 msg on machine

2/18/04 " " " "

checked w/ Clerk, this is the right extension

2/23/04 745-8111 xt 13 msg on machine

"Please talk to Jim & city Attorney, then
call me!"

2/27/04 745-9202 8:15 AM City Attorney no answer

9:40 AM msg w/ Secretary

~ 1:30 PM Mr. Clark suggested Wed.

~ 3:00 PM msg w/ Secretary -
Wed OK, please call w/ time.

3/3/04 Met w/ Mr. Nelson & Mr. Clark, see notes
Mailed transfer app. to Mr. Clark.

SCANNED

NOV 30 2004

August 18, 2003

City of Rigby
158 W Fremont
Rigby, ID 83442

Re: Water Right Adjudication Claim(s) A25-04009, A25-04010, A25-04011,
A25-07051, A25-10105, A25-11456, A25-10496, A25-10688

Dear Water User:

Idaho Department of Water Resources (IDWR) is reviewing claims to water rights in the Snake River Basin Adjudication in your area. Water Resources Field Services has been retained to do field inspections to aid the Department in making correct recommendations to the court. In the next weeks and months, I will be contacting you to make an appointment to look at your diversion works and uses of water.

One of the purposes of the visit will be to identify the service area of the municipal system. I will also want to locate and photograph the "beneficial use claim" wells, verify system capacity, and review evidence of priority.

I look forward to helping make sure your water right recommendation is correct. Please contact me if there is a particular time that would be convenient for you. You may call in the evenings, or leave a message on the answering machine.

Sincerely,

Bryce A. Contor

SCANNED

NOV 30 2004

PROFILED

April 29, 1991

City of Rigby
158 West Fremont
Rigby, ID 83442

RE: Evidence of Priority

Dear Sirs:

The Notice of Claim(s) identified with the number(s) shown at the end of this letter has been filed in the Snake River Basin Adjudication (SRBA). The Notice(s) indicates the water usage are based on "Beneficial Use" or a "Statutory Claim". Water rights of this type are established by the historical use of water, dating back to when water was first used for the purpose claimed, at or on the place of use identified on the Notice. The date the water was first put to use, known as the priority date, has not been confirmed by a License, Decree, or Permit. For this reason, proof must be provided supporting the priority date.

For your reference I have provided a printout of your Notice(s) and the pamphlet entitled "Evidence of Priority". The pamphlet describes the types of evidence required and suggests which documents will fulfill this requirement. While I encourage you to read all of the pamphlet, I direct your attention to the two sections entitled "What Kind of Evidence is Required" and "Some Examples of Documents Which May Be Evidence of the Priority Date".

It is our goal to recommend this historical water rights within the Snake River Basin as accurately as possible. Field exams to verify other items of the Notice(s) have been or soon will be conducted by Department personnel. But, the Department will not recommend the Notice(s) be decreed by the court if no evidence of a priority date is submitted.

SCANNED
NOV 30 2004

MICROFILMED
NOV 10 1992
PROFILED

City of Rigby

Page 2

Please submit the required evidence supporting the priority date(s) by **May 29, 1991**, referencing all documents with the corresponding Notice number(s). If you have any questions not covered by this letter or the enclosed pamphlet, please contact this office.

All Notices required to submit this evidence are currently being reviewed for recommendation to the court. Hence, the need for expediency on your part or your agency. every effort should be made to submit this information within 30 days of the date of this letter.

Respectfully submitted,

Ernest Carlsen
Water right Supervisor, Adjudication

EC:sc

Enclosure: Brochure on "Evidence of Priority"
Proof Report

A25-10688
CITY OF RIGBY
158 W. FREMONT

RIGBY ID 83442

A25-04011
CITY OF RIGBY
158 W. FREMONT

RIGBY ID 83442

A25-10496
CITY OF RIGBY
158 WEST FREMONT

RIGBY ID 83442

A25-04010
CITY OF RIGBY
158 W. FREMONT

RIGBY ID 83442

A25-04009
CITY OF RIGBY
158 W. FREMONT

RIGBY ID 83442

SCANNED
NOV 30 2004

MICROFILMED
NOV 10 1992

PROFILED



State of Idaho
DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720 -(208) 327-7900

CECIL D. ANDRUS

GOVERNOR

R. KEITH HIGGINSON

DIRECTOR

RECEIVED

MAR 1 - 1990

Department of Water Resources
Eastern District Office

February 22, 1990

Rigby Water Dept.
158 West Fremont
Rigby, ID 83442

Gentlemen:

Our records show you have filed your adjudication claim(s) in the Snake River Basin Adjudication. Our records do not, however, include a clear map of your service area. Would it be possible for us to get a map of your customer service area for your municipal water system, both to supplement the record of your claim(s) and for use as described below?

In our review and investigation phase of the Snake River Basin Adjudication, the map would be helpful for us to have this information in verifying individual claims to water rights for domestic purposes. We will be happy to discuss with you the most convenient way for you to provide this information to us. I can be reached at 327-7931 or you may contact my assistant, Anita Warntjes at 327-7986.

Your assistance in this matter is greatly appreciated.

Sincerely,

DAVID B. SHAW
Adjudication Bureau Chief

PROFILED

DBS:alw

A25-C401
0721
04009
04010
10496
10608

SCANNED
NOV 30 2004

MICROFILMED
NOV 10 1992

City of Rigby

158 WEST FREMONT

RIGBY, IDAHO 83442

OFFICE OF THE CITY CLERK
PH. 745-7111

Well No. 1	196 feet deep	16 in. casing	drilled 1947
Well No. 2	175 feet deep	14 in. casing	drilled 1920
Well No. 3	165 feet deep	16 in. casing	drilled 1961

SCANNED

NOV 30 2004

PROFILED

MICROFILMED

NOV 10 1992

IN THE MATTER OF:

City of Rigby

AFFIDAVIT

State of Idaho

County of Jefferson

I ARTHUR RUFEL CHANDLER

being first duly sworn,

deposes and says: I have lived in Rigby Idaho since June

15, 1901 and have watched the place grow from a real small community to its present size.

In the year of 1921 I was hired by Ira Mangum to help pour the foundation for our present City building. Since the well which is in the present city building is in the basement it would have to have been built before that time.

The well that was drilled approximately 50ft West of the Rigby City Hall was drilled in the year of 1947.

The well that was drilled on the Delbert Call addition on the North side of the City of Rigby just North of 3rd North was drilled in the year of 1961.

SCANNED

NOV 30 2004

PROFILED

A. R. Chandler
(signature)

Subscribed and sworn to before me this 21st day of April 1972.

James A. Pirie
(notary public)

Residing at Rigby, Idaho

My commission expires 10-24-72

IN THE MATTER OF:

AFFIDAVIT

CITY OF RIGBY
State of Idaho
County of JEFFERSON

FRED HUTCHENS being first duly sworn,
deposes and says: After having searched the records of the City of
Rigby, I have found the city Hall was built in 1921. No 2 well is
in the basement of City Hall, so had to drill before erection of
the building. Through this evidence I put down Jan. 1920 as drilling
date.

No. 1 well was drilled in 1947 by Jim Schoonover of Burley, Idaho.
I was a city employee at this time.

No. 3 well was drilled by Paul Vollmer & Sons of Aberdeen, Idaho
in 1961. I am enclosing a copy of the Log on this well.

I, Fred Hutchens, was the water Supt. at the time this well was
drilled and I still hold the same title at this time.

FRED HUTCHENS

CITY SUPT.

CITY OF RIGBY

SCANNED

NOV 30 2004

PROCESSED

Fred Hutchens
(signature)

Subscribed and sworn to before me this 21st day of April 1972.

James A. Davis
(notary public)

Residing at Rigby, Idaho
My commission expires 10-24-72

IN THE MATTER OF:

City Of Rigby
State of Idaho
County of Jefferson

AFFIDAVIT

Sheridan S. Evans being first duly sworn,
deposes and says: I Sheridan S. Evans Being 73 years old and a resident
of the city of Rigby since 1917. I have knowledge that the present
City Hall was built in 1921 and well known as no. 2 was drilled prior to
to that time.

The well west of City Hall known as well no 1 was drilled in 1947.
The well in the north part of the city was drilled in 1961.

As I was the owner and operator of a plumbing business in the city
of Rigby, my association of the water supply of the city was of great
importance to me.

PROFILED

SCANNED

NOV 30 2004

Sheridan S. Evans
(signature)

Subscribed and sworn to before me this 21st day of April 19 72.

James A. Pirie
(notary public)

Residing at Rigby, Idaho
My commission expires 10-24-72

IN THE MATTER OF:

City of Rigby

State of Idaho

County of Jefferson

AFFIDAVIT

I J. L. Brown

being first duly sworn,

deposes and says: To whom it may concern Re: Wells at Rigby.

I J. L. Brown came to Rigby in April 1903 with my parents. Have resided here since that time, except the time spent in the Army during W.W.I.

I testify that well #1 was drilled about 50 ft. west of the city hall ^{Feb 1947} Also

in 1920, Well #2 was drilled in the basement just prior to the building of the present City Hall. Not long afterward, I had the privilege of serving on the City Council for two years.

well #3 was drilled in February 1961 on Delbert Call addition.

PROFILED

SCANNED

NOV 30 2004

(signature)

Subscribed and sworn to before me this 21st day of April 19 72.

(notary public)

Residing at Rigby, Idaho

My commission expires 10-24-72

SCANNED

JUL 25 2001

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

Ident. Number: A25-04009

Date Received: 10/12/1988

Receipt No: 6003379

Received By: EA

NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name: CITY OF RIGBY
Address: 158 W. FREMONT
RIGBY, ID

208-745-8111

83442

2. Date of Priority: FEB 01, 1947

3. Source: GROUNDWATER

Trib. to:

4. Point of Diversion:

Township	Range	Section	1/4 of	1/4 of	1/4 of	Lot	County
04N	39E	18	SW	NE	SW		JEFFERSON

5. Description of diverting works:

196' X 16" WELL W/ PUMP CAPACITY OF 2400 GPM. CITY DISTRIBUTION.

6. Water is used for the following purposes:

Purpose	From	To	C.F.S.	(or)	A.F.A.
MUNICIPAL	01/01	12/31	2.800		

7. Total Quantity Appropriated is:
2.800 C.F.S. (and/or)

A.F.A.

8. Total consumptive use is

Acre Feet Per Annum.

9. Non-irrigation uses:

M/700 HOMES & 75 BUSINESSES. MUNICIPAL USE IN CITY OF RIGBY.

10. Place of Use:

Township	Range	Section	1/4 of	1/4 of	Lot	Use	Acres
----------	-------	---------	--------	--------	-----	-----	-------

11. Place of use in counties:

12. Do you own the property listed above as place of use? YES

A25-04009

Page

1

Date: 10/12/88

MICROFILMED

NOV 10 1992

A2504009



13. Other Water Rights Used:
25-04010, 04011, & A25-10496.

14. Remarks:
P/U WITHIN CITY LIMITS OF RIGBY WELL #1.
PRIORITY DATE ALSO 3-1-1958 FOR 2.55 CFS., CLAIMED UNDER
A25-10496 ALONG W/ EXPANDED USE OF WELL # 2 (25-04010).

15. Basis of Claim: STATUTORY CLAIM

16. Signature(s)

(a.) By signing below, I/We acknowledge that I/We have received, read and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do _____ do not _____ wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments: 6

For Organizations:

I do solemnly swear or affirm that I am City Clerk of
City of Rigby, that I have signed the foregoing
document in the space below as City Clerk of
City of Rigby and that the statements contained in the
foregoing document are true and correct.

David C. Smith
Signature of Authorized Agent

City Clerk - City of Rigby
Title and Organization

October 20, 1988
Date

State of Idaho)
County of Bonneville) SS.

Subscribed and sworn (or affirmed) before me this 19 day
of October 19 88

Seal

[Signature]
Notary Public

Residing at Idaho Falls, ID

My Commission Expires 22 Aug 1994

A25-04009
4831-04010
12-04011
-10496

R 38€

4840
T
4
N

MICROFILMED
NOV 10 1992

WELL NO. 1
WELL NO. 2
WELL NO. 3

PLACE OF USE