

State of Idaho  
Department of Water Resources  
**Water Right License**

WATER RIGHT NO.      96-09004

Priority: September 18, 1998

Maximum Diversion Rate: 0.30 CFS  
Maximum Diversion Volume: 51.0 AF

It is hereby certified that SAGLE VALLEY WATER & SEWER DISTRICT  
PO BOX 901

SAGLE ID 83860-0901 has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated September 16, 1998; and has submitted Proof of Beneficial Use on February 03, 2004. An examination confirms water is diverted from:

**SOURCE**

GROUND WATER

and a water right has been established as follows:

| <b><u>BENEFICIAL USE</u></b> | <b><u>PERIOD OF USE</u></b> | <b><u>DIVERSION RATE</u></b> | <b><u>ANNUAL<br/>DIVERSION VOLUME</u></b> |
|------------------------------|-----------------------------|------------------------------|-------------------------------------------|
| MUNICIPAL                    | 01/01 to 12/31              | 0.30 CFS                     | 51.0 AF                                   |

**LOCATION OF POINT(S) OF DIVERSION:**

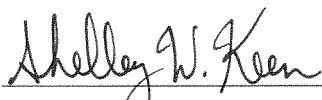
|              |            |                   |               |               |
|--------------|------------|-------------------|---------------|---------------|
| GROUND WATER | SW1/4NE1/4 | Sec. 16, Twp 56N, | Rge 02W, B.M. | BONNER County |
| GROUND WATER | SW1/4NE1/4 | Sec. 16, Twp 56N, | Rge 02W, B.M. | BONNER County |
| GROUND WATER | NW1/4NE1/4 | Sec. 16, Twp 56N, | Rge 02W, B.M. | BONNER County |

**CONDITIONS OF APPROVAL**

1. Place of use is within the service area of Sagle Water & Sewer District as provided for under Idaho law. The place of use is generally located within Sections 9, 10, 15, and 16, Township 56 North, Range 2 West.
2. A map depicting the place of use boundary for this water right at the time of this approval is attached to this document for illustrative purposes.
3. Points of diversion are located within Lot 17, Sagle Pines subdivision.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed this 27<sup>th</sup> day of May, 2015.

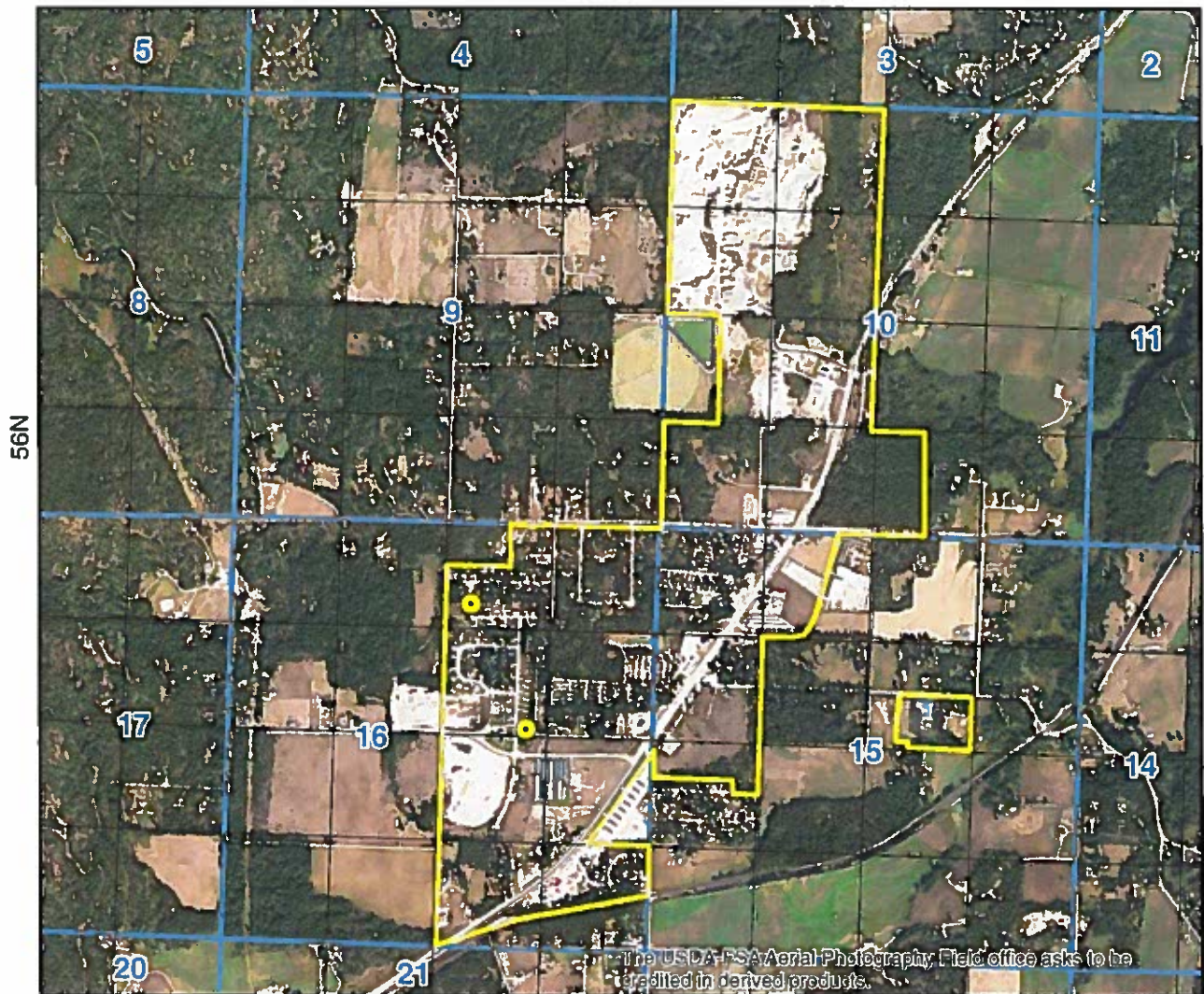
  
for GARY SPACKMAN  
Director

# Attachment To Water Right License

96-9004

This map depicts the MUNICIPAL place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

02W



-  Point of Diversion
-  Water Service Area Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters

0 0.275 0.55 1.1 Miles

SCANNED  
JUN 05 2015



State of Idaho

**DEPARTMENT OF WATER RESOURCES**

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: [www.idwr.idaho.gov](http://www.idwr.idaho.gov)

C.L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Director

June 2, 2015

SAGLE VALLEY WATER & SEWER DISTRICT  
PO BOX 901  
SAGLE ID 83860-0901

RE: License No. 96-9004

**Issuance of License**

Dear Water Right Holder(s):

The Department of Water Resources has issued the enclosed Water Right License confirming that a water right has been established in accordance with your permit. Please be sure to thoroughly review the conditions of approval and remarks listed on your license. Also enclosed is a copy of the approved application for amendment.

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

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

If you have any questions, please contact me at 208-287-4951.

Sincerely,

Pamela Skaggs

Water Rights Supervisor

Enclosure(s)

cc: JAMES A SEWELL & ASSOC, LLC

## CERTIFICATE OF SERVICE

I hereby certify that on June 4, 2015, I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER (**Approved License**) to the person(s) listed below:

RE: WATER RIGHT NO. 96-9004

JAMES A SEWELL & ASSOC, LLC  
ATTN TIM C BLANKENSHIP  
1319 N DIVISION AVE  
SANDPOINT ID 83864

SAGLE VALLEY WATER & SEWER DISTRICT  
PO BOX 901  
SAGLE ID 83860-0901



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**Darla Block**  
**Technical Records Specialist**

## **EXPLANATORY INFORMATION TO ACCOMPANY A PRELIMINARY ORDER**

(To be used in connection with actions when a hearing was **not** held)

(Required by Rule of Procedure 730.02)

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

### **PETITION FOR RECONSIDERATION**

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

### **EXCEPTIONS AND BRIEFS**

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

### **REQUEST FOR HEARING**

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

### **ORAL ARGUMENT**

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

## **CERTIFICATE OF SERVICE**

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

## **FINAL ORDER**

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

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

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

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

## **APPEAL OF FINAL ORDER TO DISTRICT COURT**

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

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

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

State of Idaho  
Department of Water Resources  
**APPLICATION FOR AMENDMENT**  
(For Licensing Purposes)  
**WATER RIGHT NO. 96-09004**

RECEIVED

MAY 22 2015

DEPARTMENT OF  
WATER RESOURCES**Date of Priority:** September 18, 1998**Maximum Diversion Rate:** 0.30 CFS  
**Maximum Diversion Volume:** 51.0 AF

Comes now SAGLE VALLEY WATER & SEWER DISTRICT  
PO BOX 901

SAGLE ID 83860-0901 and represents to the Director of the Idaho Department  
of Water Resources that he is the owner and holder of Permit to Appropriate the Public Waters of the  
State of Idaho No. 96-09004, and requests that the permit be changed as follows:

**Source:** GROUND WATER

| <b><u>BENEFICIAL USE</u></b> | <b><u>PERIOD OF USE</u></b> | <b><u>RATE OF DIVERSION</u></b> | <b><u>ANNUAL VOLUME</u></b> |
|------------------------------|-----------------------------|---------------------------------|-----------------------------|
| MUNICIPAL                    | 01/01 to 12/31              | 0.30 CFS                        | 51.0 AF                     |

**LOCATION OF POINT(S) OF DIVERSION:**

|              |            |                                 |               |
|--------------|------------|---------------------------------|---------------|
| GROUND WATER | SW1/4NE1/4 | Sec. 16, Twp 56N, Rge 02W, B.M. | BONNER County |
| GROUND WATER | SW1/4NE1/4 | Sec. 16, Twp 56N, Rge 02W, B.M. | BONNER County |
| GROUND WATER | NW1/4NE1/4 | Sec. 16, Twp 56N, Rge 02W, B.M. | BONNER County |

Permit holder asserts that no one will be injured by such change and that such change will be made at  
permit holder's own risk. Signed this 18<sup>th</sup> day of May, 2015.

  
(Signature)

State of Idaho  
Department of Water Resources  
**APPLICATION FOR AMENDMENT**

(For Licensing Purposes)  
**WATER RIGHT NO. 96-09004**

.....  
**FOR DEPARTMENT USE ONLY**

Preliminary check by \_\_\_\_\_ Fee = 100 Received by Gph # C100487 Date 5-22-15

**ACTION OF THE DEPARTMENT OF WATER RESOURCES**

I, GARY SPACKMAN, of the Department of Water Resources hereby approve the  
above Application for Amendment for Permit No. 96-09004 with the following:

**CONDITIONS OF APPROVAL**

1. Place of use is within the service area of Sagle Water & Sewer District as provided for under Idaho law. The place of use is generally located within Sections 9, 10, 15, and 16, Township 56 North, Range 2 West.
2. A map depicting the place of use boundary for this water right at the time of this approval is attached to this document for illustrative purposes.
3. Points of diversion are located within Lot 17, Sagle Pines subdivision.

Witness my hand this 27<sup>th</sup> day of May, 2015.

Shelley W. Keen  
for GARY SPACKMAN  
Director



State of Idaho

## DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: [www.idwr.idaho.gov](http://www.idwr.idaho.gov)

C.L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Director

May 11, 2015

SAGLE WATER AND SEWER DISTRICT  
PO BOX 901  
SAGLE ID 83860

RE: Water Right Permit No. 96-9004 Sagle Water & Sewer District

Ladies and Gentlemen:

The Department of Water Resources is reviewing the permit referenced above prior to issuing a water right license. By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit. The certified examiner who verified your water use reported that certain elements of the permit have been developed differently than described on your permit. Changes that do not increase the authorized use of water under the permit can be requested and approved in accordance with Section 42-211, Idaho Code. Before a license can be issued, your permit must be amended to depict your water use as it was actually developed.

Based on the examiner's report and conversations with your representative, Tim Blankenship, it was determined that this permit should have the water use described as municipal instead of domestic, irrigation, and fire protection. It was also determined that place of use for this permit should be the service area of Sagle Water & Sewer District, and include the SV Estates well located in the NWNE quarter of Section 16, Township 56 North, Range 2 West in Bonner County.

The enclosed Application for Amendment form depicts the elements of the water rights as they will appear on the license when it is issued. Please review the amendment form carefully. If you concur with the information presented, please sign the form and return it with the \$100.00 filing fee within 14 days.

If you have any questions, please contact me.

Sincerely,

Daniel A. Nelson  
Staff Hydrologist  
Planning Bureau  
Idaho Department of Water Resources  
Telephone # (208) 287-4856  
Email – [dan.nelson@idwr.idaho.gov](mailto:dan.nelson@idwr.idaho.gov)

Enclosure(s)

## Nelson, Dan

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**From:** Nelson, Dan  
**Sent:** Monday, May 11, 2015 4:34 PM  
**To:** 'Tim Blankenship'  
**Subject:** Amendment of Permit for Sagle Water & Sewer District Permit 96-9004  
**Attachments:** 96-9004 amendment.pdf

Tim,

Here is the assignment of permit for water right 96-9004 (former Goding Permit) and the cover letter. This amendment changes the use from domestic and irrigation to municipal use. This will allow it to dovetail in with the rest of the Sagle Water and Sewer District water rights. This amendment will need to be signed by one of the officers of the Sagle Water & Sewer District. There will also be a \$100.00 fee. I have mailed the original, but you can print out this email attachment, get it signed, and mail the \$100.00 fee and signed amendment back to me.

Thank you.

Daniel Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone (208) 287-4856  
Fax (208) 287-6700 (attn: Dan Nelson)

## MEMORANDUM

TO: File 96-9004

FROM: Daniel Nelson – Staff Hydrologist

DATE: May 8, 2015

SUBJECT: License Review Water Right Permit 96-9004

### History:

Permit 96-9004 was filed by Beverly Goding in 1998 to supply water to a 55 home subdivision known as Cedar Groves Estates Blocks 1-3 and Sagle Pines Estates Unit III. This permit diverted water from 2 wells. A field exam was performed on this permit in 2004 that found a diversion rate of 0.48 cfs or 215 gpm. This permit stated that the two wells had two 5 Hp pumps. In review of this field exam, it is unlikely that the 215 gpm was diverted from these wells under normal operating conditions. I will discuss the recommendations for licensing of this permit later on in this memo.

In February of 2009, a second permit, 96-9429, was filed by Sagle Valley Water & Sewer District. This permit is a municipal use for a large area that includes the Cedar Groves Estates subdivision, and diverts from the same two wells. The diversion rate for the second permit is for 0.45 cfs or 202 gpm, which the engineer for Sagle Valley Water & Sewer District states the system now produces with two 7.5 Hp pumps in the wells. No field exam has been done on the second permit.

Sandy Hemenway attempted to license this permit in 2011, but ran into several issues that were never resolved. The first thing that needed to be accomplished was for the permit to be assigned from Beverly Goding to Sagle Valley Water & Sewer District. Sagle Valley Water & Sewer District apparently took over the water system in 2007. Ms. Hemenway never did receive the assignment from Beverly Goding. Ms. Hemenway was able to procure information on the system, but there was some discrepancy on the information that was sent for this permit. Most of the information that was received from the Sagle Valley Water & Sewer System was for the entire system, and not for the system that was developed by Beverly Goding for Cedar Groves Estates. On April 27, 2015, we received the assignment of permit to change this water right in the name of Sagle Valley Water and Sewer District.

This brief history is necessary to avoid confusion when looking at these two water rights. Permit 96-9004 is only for a small portion of the service area for Sagle Valley Water & Sewer District described in permit 96-9429, so the two shouldn't be confused. It also appears as though the wells have been improved since Sagle Valley Water & Sewer District took over the water system, and those improvements cannot be licensed under permit 96-9004.

## **Licensing Review of Water Right 96-9004:**

### **Place of Use:**

The place of use for this permit is described as the Cedar Grove Estates and Sagle Pines Estates. The permit was originally 55 homes, but it has been determined that only 51 lots were developed. The lots developed under this permit are lots 1-16, Blk 1; Lots 1-13, Blk 2; and Lots 1-5, Block 3 of Cedar Grove Estates and Lots 1-16 Unit III and Well Lot Unit III in the Sagle Pines Estates. The well lot was included because the lot is irrigated and has minimal in building use. These lots are located in the SWNE quarter of Section 16, Township 56 North, Range 2 West. The place of use was determined by the subdivision map supplied with water right permit 96-9129. The point of diversion is located in Well Lot Unit III of Sagle Pines Estates. An amendment was prepared to include the entire Sagle Valley Water and Sewer District boundaries, but the diversion rates and volumes can only be for what was originally developed in the original permit.

### **Point of Diversion:**

The original permit only had 2 wells. Therefore, we can only consider those two wells when determining the flow rates and volumes of this permit. However, these two wells have been incorporated into the entire Sagle Water & Sewer District system, which has a third well located in the NWNE of Section 16, Township 56 North, Range 2 West. The amendment will include this well even though it can't be used to determine the diversion rate or volume for this permit.

### **Diversion Rate:**

The 2004 field exam provided a diversion rate of 108 gpm from Well #1 and 107 gpm from Well #2 for a total of 215 gpm or 0.48 cfs. The field exam also describes that the system used two 5 Hp well pumps. The engineer for Sagle Valley Water & Sewer District confirmed that there were two 5 Hp pumps in these wells in 2004. The information received from Sagle Valley Water & Sewer District describes two 7.5 Hp wells pumps. The two 7.5 Hp well pumps were tested at 100 gpm for each well during a 24 hour test. Taking this data and using our standard theoretical calculation, I determined that the two 5 Hp pumps could produce 67 gpm each using the same conditions for a total of the two wells of 133 gpm or 0.30 cfs. Administrative memo 22 states that the maximum allowable for the in-house needs of a 50 home subdivision would need 0.33 cfs. This permit has in-house and yard irrigation use, but the system also has a 300,000 gallon storage tank according to an email from the engineer on August 9, 2011. When the 300,000 gallon storage tank is included into the analysis, a diversion rate of 0.30 cfs seems reasonable.

It appears from the field exam, that flow meters on the system were used, but I am assuming that they were not tested at operational conditions. From the data available it appears as though the 5 Hp pumps were tested when the system was at open discharge or 20 psi conditions. This would be the conditions that would be present if they open discharged the system by opening up a fire hydrant while testing the pumps.

I am recommending that the diversion rate for this permit be reduced to 0.30 cfs or 133 gpm when

the permit is licensed.

#### Volume:

The engineer for this system states in an email dated August 9, 2011, that the system delivers 900 gallons per day average for each unit for a total of 361,800 gallons per day at full build out of 402 units. The Cedar Gove Estates subdivision was for 51 units, so the maximum that can be allowed for this permit is 459,000 gallons per day or 16,753,500 gallons per year or 51 acre feet ( $900 \text{ gal/unit} \times 51 \text{ units} = 459,000 \text{ gallons per day} \times 365 \text{ days} = 16,753,500 \text{ gallons per year} / 325,850 = 51 \text{ acre feet}$ ). The maximum standard volume for a domestic home per administrative memo 22 is 1.2 acre-feet per home or 61 acre-feet for the 51 homes ( $1.2 \text{ af/home} \times 51 \text{ homes} = 61 \text{ acre feet}$ ). The system at 0.30 cfs can provide more than enough volume of water to supply the 51 homes ( $0.30 \text{ cfs} \times 1.9835 \times 365 \text{ days} = 217 \text{ af}$ ). Since we have information that shows a lower annual volume per home, we will limit this license to the 51 acre feet described in the August 9, 2010 memo. The volume provided by the engineer seems reasonable, and is very close to our maximum standard.

#### Ownership:

There has been an attempt to change the ownership of this permit into the name of the Sagle Valley Water & Sewer District through an assignment of permit. According to the August 9, 2011 email from the engineer for Sagle Valley Water & Sewer District, they took over this system in 2007. However, the Department did not receive an assignment for this permit. I have contacted the engineer for Sagle Valley Water & Sewer District again to have Beverly Goding assign it into their name. The Sagle Valley Water & Sewer District will not be able to perform any of the amendments needed for this permit if the assignment hasn't been received. Therefore, I have sent them assignment of permit form and am allowing them the opportunity to put this permit into their name. The assignment of permit was received on April 27, 2015 in our northern region office. I made the changes to the permit on May 8, 2015. Sagle Valley & Sewer District are now the owner's of this permit.

#### Possible Amendment of Permit:

In order to make this permit match and work with water right permit 96-9429 owned by Sagle Valley Water & Sewer District, the field examiner suggested that this permit needs to be amended to change the use to a municipal use. This would make the overlapping water use for these two water rights much cleaner, and easier to work with for Sagle Valley Water & Sewer District.

However, we could not change the use to municipal as long as Ms. Goding was the owner of the permit, since she does not qualify as a municipal provider according Idaho Code 42-202B. We did receive the assignment on May 8, 2015, so we can move forward with seeking an amendment of permit. The will be for municipal use, but will be limited by the amount of municipal use that was developed under the permit for the 51 homes.

If the amendment is received the Department will we make the changes and pursue licensing of the permit as a municipal water right. If the amendment is not received, then we will need to proceed with licensing this permit as originally filed. The well for 96-7916 was added to this permit through the amendment, but was not included in the consideration for the license. Well 96-7916 is part of the Sagle Water & Sewer District system.

#### Overlap:

Whereas Sagle Water & Sewer District has taken over this permit, we must look at all of the water rights owned by Sagle Water & Sewer District has connected to their system. Other than this permit, there is a licensed right (96-7916) and a permit (96-9429) in the name of Sagle Water & Sewer District.

License 96-7916 describes it uses as domestic and irrigation use for a 28 home subdivision in the NWNE of Section 16, Township 56 North, Range 2 West. The tax lot information shows the 28 home subdivision is Sagle Valley Estates. The place of use for 96-7916 is located within the service area for Sagle Valley Estates. Although the original system for license 96-7916 may now be tied into the water delivery system for Sagle Water & Sewer District, it has a diversion rate, volume, and place of use that prevents the water from this system to be used on the lands developed under this permit.

Permit 96-9429 describes its use as Municipal and provides a large service area. This permit uses the same wells described in this permit. Whereas permit 96-9429 has not been licensed yet, we shouldn't include combination conditions on this permit until 96-9429 is licensed. We should include a condition that states that permit 96-9429 is diverted from the same wells. The diversion rate also cannot be limited by this permit, since the pumps in the wells have been upgraded after this permit was field examined from 2- 5 Hp pumps to 2 – 10 Hp pumps.

#### Conditions:

Whereas we are changing the use of this permit from domestic and irrigation to municipal all of the conditions on the original permit were changed to municipal type conditions. Conditions 126, 180, and X50 were added to the permit for licensing.

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 96-9004  
 Reviewer: Dan Nelson  
 Date of Review: 3/16/2015

P/D No.:

PUMP HORSEPOWER  
 BOOSTER HORSEPOWER

PUMPING LEVEL

DISCHARGE PRESSURE

RATE OF FLOW (cfs)

| Well #1 |
|---------|
|         |
| 5       |
| 0       |
|         |
| 92      |
|         |
| 50      |
|         |
| 0.15    |
| 67      |

| Well #2 |
|---------|
|         |
| 5       |
| 0       |
|         |
| 92      |
|         |
| 50      |
|         |
| 0.15    |
| 67      |

| Flow at 20<br>psi<br>pressure |
|-------------------------------|
|                               |
| 5                             |
| 0                             |
|                               |
| 92                            |
|                               |
| 20                            |
|                               |
| 0.22                          |
| 100                           |

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.  
 No Friction

Examiners Notes:

The pumps for this system are 2 - 5 Hp pumps. The system currently has 2 - 7.5 Hp pumps. The current system pumps 100 gpm for each pump. The calculations below show that a lift of 92 feet would provide the 100 gpm for the two 7.5 Hp pumps. Using the same lift for the two 5 Hp pumps, the maximum flow rate would be 67 gpm per pump or 133 gpm total (0.30 cfs). Therefore, the measurements done on the field exam must have been done at 20 psi pressure, and a domestic/municipal system cannot operate at that low of pressure.

P/D No.:

PUMP HORSEPOWER  
 BOOSTER HORSEPOWER

PUMPING LEVEL

DISCHARGE PRESSURE

RATE OF FLOW (cfs)

| Well #1 |
|---------|
|         |
| 7.5     |
| 0       |
|         |
| 92      |
|         |
| 50      |
|         |
| 0.22    |
| 100     |

| Well #2 |
|---------|
|         |
| 7.5     |
| 0       |
|         |
| 92      |
|         |
| 50      |
|         |
| 0.22    |
| 100     |

|        |
|--------|
| 0.45   |
| 199.85 |



WELL DRILLER'S REPORT 78186

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

1. WELL TAG NO. D5672

Drilling Permit No: 96-98-N-280

Other IDWR No. \_\_\_\_\_

2. OWNER

Name GODING, RALPH

Well Number: 829

Address PO BOX 397

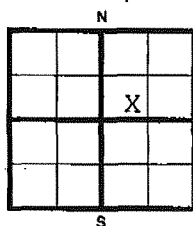
City SAGLE

State ID

Zip 83860

3. LOCATION OF WELL by legal description

sketch map location must agree with written location



Twp. 56



North or



South

Rge. 02



East or



West

Sec. 16



1/4 SW 1/4 NE 1/4

Gov't Lot \_\_\_\_\_

County BONNER

Lat: \_\_\_\_\_

: \_\_\_\_\_

Long: \_\_\_\_\_

: \_\_\_\_\_

: \_\_\_\_\_

Address of Well Site SCHELL RD/BEVERL

City SAGLE

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

Lt. \_\_\_\_\_ Blk. \_\_\_\_\_ Sub. Name \_\_\_\_\_

4. USE:

- ☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation  
☐ Thermal ☐ Injection ☐ Other \_\_\_\_\_

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

- ☒ New Well ☐ Modify ☐ Abandonment ☐ Other \_\_\_\_\_

6. DRILL METHOD

- ☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other \_\_\_\_\_

7. SEALING PROCEDURES

| SEAL/FILTER PACK |      |    | AMOUNT          | METHOD          |
|------------------|------|----|-----------------|-----------------|
| Material         | From | To | Sacks or Pounds |                 |
| BENTONITE        | 0    | 40 | 15              | Slurry/Granular |
|                  |      |    |                 |                 |
|                  |      |    |                 |                 |

Was drive shoe used? ☐ Y ☐ N Shoe Depth(s) 0

Was drive shoe seal tested? ☐ Y ☐ N How? \_\_\_\_\_

8. CASING/LINER:

| Diameter | From | To   | Gauge | Material | Casing                              | Liner                    | Welded                              | Threaded                 |
|----------|------|------|-------|----------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| 8        | +2   | .175 | .250  | STEEL    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7        | -168 | -173 | .250  | STEEL    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Length of Headpipe 5' Length of Tailpipe \_\_\_\_\_

9. PERFORATIONS/SCREENS

- ☐ Perforations Method \_\_\_\_\_  
☒ Screens Screen Type Stainless Steel Johnson

| From | To  | Slot Size | Number | Diameter | Material  | Casing                   | Liner                    |
|------|-----|-----------|--------|----------|-----------|--------------------------|--------------------------|
| 173  | 183 |           | 10     | 8        | Stainless | <input type="checkbox"/> | <input type="checkbox"/> |
|      |     |           |        |          |           |                          |                          |
|      |     |           |        |          |           |                          |                          |

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

60 ft. below ground Artesian pressure \_\_\_\_\_ lb.

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

11. WELL TESTS:

- ☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

| Yield gal./min. | Drawdown | Pumping Level | Time |
|-----------------|----------|---------------|------|
| 50+             |          |               |      |
|                 |          |               |      |
|                 |          |               |      |

Water Temp. \_\_\_\_\_ Bottom Hole Temp \_\_\_\_\_

Water Quality test or comments: \_\_\_\_\_

Depth first Water encountered 80'

12. LITHOLOGIC LOG:(Describe repairs or abandonment)

|           |      |     |                                                | Water                               |                                     |
|-----------|------|-----|------------------------------------------------|-------------------------------------|-------------------------------------|
| Bore Diam | From | To  | Remarks: Lithology, Water Quality, Temperature | Y                                   | N                                   |
| 14        | 0    | 15  | Sand Brown                                     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 14        | 15   | 22  | Gravels & Sand                                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 14        | 22   | 40  | Gravels & Sand                                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10        | 40   | 125 | Gravels & Sand Cemented                        | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10        | 125  | 185 | Gravels Sand Cemented                          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
|           | 0    | 0   | Two 5"x8" Stainless Steel Screens              | <input type="checkbox"/>            | <input type="checkbox"/>            |

Completed Depth 183' (Measurable)

Date: Started 12/29/98 Completed 12/30/98

13. DRILLER'S CERTIFICATION

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

Firm Name H2O Well Service Inc. Firm No. 448

Firm Official \_\_\_\_\_ Date 12/30/98

and \_\_\_\_\_

Supervisor or Operator \_\_\_\_\_ Date 12/30/98

(Sign Once if Firm Official and Operator)

(Jim McLeslie)

56 N 2 W 16

## Nelson, Dan

---

**From:** Nelson, Dan  
**Sent:** Friday, May 08, 2015 11:08 AM  
**To:** 'Tim Blankenship'  
**Subject:** RE: Amendment of Permit for Permit 96-9004

Thank you Tim. I will see if we can include this well on the amendment as another point of diversion. We won't be able to use this well to determine flow rate or volume of the original permit, because it wasn't part of the system at the time the permit was being developed, but we may be able to include on the amendment to avoid a water right transfer later on. I have a meeting scheduled to go over this water right with my boss early next week, so if everything goes right, I should have it ready to by the Wednesday board meeting.

Thank you.

Dan

---

**From:** Tim Blankenship [<mailto:tblankenship@jasewell.com>]  
**Sent:** Friday, May 08, 2015 9:18 AM  
**To:** Nelson, Dan  
**Subject:** RE: Amendment of Permit for Permit 96-9004

All 3 (1 at SV Estates, and 2 at Cedar Grove) wells supply water to the same water system network and reservoir.

 **Tim C. Blankenship, P.E.**  
**James A. Sewell & Associates, LLC**  
ENGINEERING • SURVEYING • LAND USE PLANNING  
1319 North Division Avenue  
Sandpoint, Idaho 83864  
Phone: (208) 263-4160  
Fax: (208) 263-5229  
[www.jasewell.com](http://www.jasewell.com)

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**From:** Nelson, Dan [<mailto:Dan.Nelson@idwr.idaho.gov>]  
**Sent:** Friday, May 08, 2015 8:16 AM  
**To:** Tim Blankenship  
**Subject:** RE: Amendment of Permit for Permit 96-9004

Tim,

Thank you. I will try to send you an email copy of the assignment as soon as I have it prepared.

I do have a question for you. Sagle Valley Water & Sewer District has a licensed right, 96-7916, that appears to be for Sagle Valley Estates subdivision. Did you folks tie this well into the system with the Goding wells, or is that a completely separate system.

Thank you Again,

Daniel Nelson  
Staff Hydrologist

Idaho Department of Water Resources  
Telephone (208) 287-4856  
Fax (208) 287-6700 (attn: Dan Nelson)

---

**From:** Tim Blankenship [<mailto:tblankenship@jasewell.com>]  
**Sent:** Friday, May 08, 2015 8:47 AM  
**To:** Nelson, Dan; Eric Eldenburg  
**Subject:** RE: Amendment of Permit for Permit 96-9004

Thanks Dan,

Please include me as the SVWSD representative on further transmittals using the contact information below. The next board meeting is this coming Wednesday evening. If you can get the amendment to me before then I will get it signed at the meeting.

Again, thanks for all your help.

 **Tim C. Blankenship, P.E.**  
**James A. Sewell & Associates, LLC**  
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Sandpoint, Idaho 83864  
Phone: (208) 263-4160  
Fax: (208) 263-5229  
[www.jasewell.com](http://www.jasewell.com)

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**From:** Nelson, Dan [<mailto:Dan.Nelson@idwr.idaho.gov>]  
**Sent:** Friday, May 08, 2015 7:01 AM  
**To:** Tim Blankenship; Eric Eldenburg  
**Subject:** Amendment of Permit for Permit 96-9004

Hello Tim and Eric,

We received the amendment in our office, and I have changed the ownership of the permit into the name of Sagle Valley Water and Sewer District (SVWASD). I will start working on the amendment we discussed to change the water use from domestic, irrigation, and fire protection to municipal use to match the existing water rights for SVWASD. We will send all correspondence from this point forward to PO BOX 901, Sagle, ID 83860. If you want a copy of all correspondence to go to you, we can include you as SVWASD's representative. We will need a written request (email will work) with your name, address, and telephone number. As a representative, you will get a copy of all mailings the Department sends to SVWASD.

It will take me a few days before I can complete the work on the amendment. I will send you a copy of the amendment to get it signed. It will need to be signed by officer of SVWASD.

Thank you, and I hope you had a good vacation Tim.

Daniel Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone (208) 287-4856

Fax (208) 287-6700 (attn: Dan Nelson)

**Nelson, Dan**

---

**From:** Nelson, Dan  
**Sent:** Monday, April 20, 2015 3:20 PM  
**To:** 'Eric Eldenburg'  
**Subject:** RE: Sagle Valley Water & Sewer District, Assignment of Permit

Eric,

The assignment looks good. **We do not have the \$25.00 fee, and we will need the original signed document to change the name to Sagle Valley Water and Sewer District.** The assignment is due next Monday April 27, 2015, but where you have sent me an emailed copy of this, I can hold this file as bit longer to ensure the mail gets here. Once I receive the original assignment and the \$25 fee, I will be able to move forward with the licensing process as discussed in earlier emails to Tim Blankenship. Several extensions of time to allow your organization to acquire have already been granted, so you will want to mail it to me as soon as possible to avoid future issues. I think I can hold off on it a few days to ensure we get the mailing.

Where this isn't coming from Tim Blankenship of your office, I need to ask if you are taking over for Mr. Blankenship or if you are just filling in for him for some reason? If you are taking over from Mr. Blankenship, I would be happy to give you a brief run down on all of the issues that have been discussed over the past few years.

Thank you.

Daniel Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone (208) 287-4856  
Fax (208) 287-6700 (attn: Dan Nelson)

---

**From:** Eric Eldenburg [<mailto:eeldenburg@jasewell.com>]  
**Sent:** Monday, April 20, 2015 1:46 PM  
**To:** Nelson, Dan  
**Cc:** Tim Blankenship; [markc@smartplugs.com](mailto:markc@smartplugs.com)  
**Subject:** Sagle Valley Water & Sewer District, Assignment of Permit

Hi Dan,

I met with Bev and Ralph Goding this morning and obtained Bev's signature on the Assignment of Permit to the Sagle Valley Water & Sewer District. I have attached a scan of the original signed document.

Let me know if you need anything else, such as the original document mailed to you. I assume that you already have the \$25 permit fee.

Thanks.

Eric J. Eldenburg, P.E.  
 **James A. Sewell & Associates, LLC**  
ENGINEERING • SURVEYING • LAND USE PLANNING

600-4th Street West  
Newport, Washington 99156  
Phone: (509) 447-3626 (208) 437-2641  
Fax: (509) 447-2112  
[www.jasewell.com](http://www.jasewell.com)

## MEMORANDUM

TO: File 96-9004

FROM: Daniel Nelson – Staff Hydrologist

DATE: April 6, 2015

SUBJECT: Request for additional time to file amendment

Tim Blankenship representing Sagle Valley Water & Sewer District spoke with me on the telephone today. Mr. Blankenship called to request additional time to provide the assignment of permit from Beverly Goding to Sagle Valley Water & Sewer District. We agreed to hold the permit until April 24, 2015 before moving forward with licensing. I informed Mr. Blankenship that we have held this permit since 2011 to get this issue resolved, and simply cannot hold it any longer.

Mr. Blankenship assured me that he would either resolve the issue by April 24, 2015, or he would contact me with a request for additional time. I informed Mr. Blankenship that if he didn't contact us by April 24, 2015 I would need to move forward with licensing without any further contact with his organization. Sagle Valley Water & Sewer District is not the current owner of the permit, but currently own and operate the system. Therefore, we must deal solely with Ms. Goding if no assignment of permit can be produced.

**Nelson, Dan**

---

**From:** Nelson, Dan  
**Sent:** Thursday, April 02, 2015 3:13 PM  
**To:** Nelson, Dan; 'tblankenship@jasewell.com'  
**Subject:** RE: Attn Tim C. Blankenship Sandpoint office

Dear Mr. Blankenship,

Our office has not received the assignment of permit to change water right 96-9004 into the name of Sagle Valley Water & Sewer District. Therefore, I am going to proceed with licensing the permit in the name of Beverly Goding with fire protection, domestic, and irrigation uses. Unfortunately, Ms. Goding does not qualify as a municipal provider, so we cannot accept an amendment from Ms. Goding to change this permit to a municipal use. If the license is approved, you may be able to make that change through a water right transfer instead of the amendment of permit suggested in our earlier correspondence. This permit will be taken into consideration when staff performs the licensing exam for water right permit 96-9249 for the same wells and overlaps the same subdivision.

If I receive the assignment before the license is approved, we will be able to make the needed corrections. I am hoping that I can have the license ready for signature in the next day or two.

If you have any further questions, please contact me.

Thank you for your time and patience.

Respectfully,

Daniel Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone (208) 287-4856  
Fax (208) 287-6700 (attn: Dan Nelson)

---

**From:** Nelson, Dan  
**Sent:** Monday, March 16, 2015 5:04 PM  
**To:** 'tblankenship@jasewell.com'  
**Subject:** RE: Attn Tim C. Blankenship Sandpoint office

Tim,

Per our telephone call today, I am sending you an assignment of permit form for Ms. Beverly Goding to assign water right 96-9004 to the current owners. There is a \$50.00 fee with the assignment of permit.

From what you have told me and from what I can ascertain for the existing file, once the assignment has been returned, we will need to do an amendment of permit to change the use of this water right from domestic, irrigation, and fire protection to municipal use. I will be calculating the flow rates from the wells based on the two original 5 Hp wells found during the field examination completed in May of 2004.

I will have to do some follow up work to get this permit to licensing, so please don't hesitate contacting me if you have any questions.



Tim, I sent a copy of this to your main office because I was having trouble with your email address.

Thank you

Daniel Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone (208) 287-4856  
Fax (208) 287-6700 (attn: Dan Nelson)

**Nelson, Dan**

---

**From:** Nelson, Dan  
**Sent:** Monday, March 16, 2015 12:31 PM  
**To:** 'tblankenship@jaasewell.com'  
**Subject:** Assignment of permit for 96-9004  
**Attachments:** Assignment of Permit.pdf

Tim,

Per our telephone call today, I am sending you an assignment of permit form for Ms. Beverly Goding to assign water right 96-9004 to the current owners. There is a \$50.00 fee with the assignment of permit.

From what you have told me and from what I can ascertain for the existing file, once the assignment has been returned, we will need to do an amendment of permit to change the use of this water right from domestic, irrigation, and fire protection to municipal use. I will be calculating the flow rates from the wells based on the two original 5 Hp wells found during the field examination completed in May of 2004.

I will have to do some follow up work to get this permit to licensing, so please don't hesitate contacting me if you have any questions.

Thank you

Daniel Nelson  
Staff Hydrologist  
Idaho Department of Water Resources  
Telephone (208) 287-4856  
Fax (208) 287-6700 (attn: Dan Nelson)

## Hemenway, Sandy

---

**From:** Tim Blankenship [tblankenship@jasewell.com]  
**Sent:** Friday, September 16, 2011 10:51 AM  
**To:** Hemenway, Sandy  
**Subject:** Sagle Valley Water 96-9429/96-9004  
**Attachments:** H-SERIES GOULDS\_SAGLE VALLEY.pdf

See answers below. Call or email with questions.

Tim C. Blankenship, PE  
**James A. Sewell & Associates, LLC**  
1205 Highway 2 West, Suite 101  
Sandpoint, Idaho 83864  
PH: (208) 263-4160  
FAX (208) 263-5229

---

**From:** Hemenway, Sandy [<mailto:Sandy.Hemenway@idwr.idaho.gov>]  
**Sent:** Tuesday, August 09, 2011 2:01 PM  
**To:** Tim Blankenship  
**Cc:** Hemenway, Sandy  
**Subject:** RE: Sagle Valley Water 96-9429/96-9004

Hi Tim,

Do you have the following information:

- (1) Do you have the Make/model, serial #, Hp for the new pumps, size discharge, and psi they run at?  
Goulds Model #100H074  
7.5 hp  
3" NPT Discharge  
PSI depends on whether the system is running with tank online or offline. Online: (55 psi) Offline: (55-65 psi)
- (2) Can you send me a copy of the pump curves?  
Attached
- (3) What size is the main, and type of pipe?  
4,200' of 12" PVC, 11,000' of 10", 6,500' of 8", 5,500' of 6"
- (4) Do you have Peak Demand measurements from each well, or the 2 combined wells measurement (if only one flow meter)?  
Each of the two Cedar Grove pumps is rated at 100 gpm based on pump testing.
- (5) Measurement for the maximum capacity of the combined wells.  
Each well was tested at 100 gpm for a 24 hour period.
- (6) Annual Volume for the 2 wells.  
Future "build out" allows for 402 ERU's at 900 per day per ERU = 361,800 gallons per day or 132,057,000 gallons per year
- (7) Do you have the date when Sagle Valley Water and Sewer assumed the 2 wells from Ralph Goding?  
August 2007
- (8) Is there any storage, and if so, describe?  
Water from the system is stored in a 300,000 gallon storage tank at the north end of the district

(9) Are the 2 wells described in water right 96-9429, the same wells that are described in water right 96-9004 (located in Sagle Pines Unit III Lot #17)?

They do not appear to be the same wells. Needs further investigation.

(10)I show another water right # 96-7916 (ground water source for 0.20 cfs) as part of the municipal system for Sagle Valley Water and Sewer. Is the distribution system all tied in together (a looped distribution system)?

Yes, all of the pumps are pumping into the same looped system.

(11)Do you have any idea what the current number of lots/homes that are served by Sagle Valley Water and Sewer within their service area boundary?

154 residential connections

36 commercial connections

The information above will enable me to write up both 96-9429 and 96-9004 for Licensing.

Thanks so much for all your help, and the attachment you sent earlier today.

Sandy Hemenway

Sr. Water Resource Agent

IDWR/State Office, Boise

322 E Front St/PO Box 83720, Boise, ID 83720-0098

(208) 287-4920

[Sandy.hemenway@idwr.idaho.gov](mailto:Sandy.hemenway@idwr.idaho.gov)

---

**From:** Tim Blankenship [<mailto:tblankenship@jasewell.com>]

**Sent:** Tuesday, August 09, 2011 12:39 PM

**To:** Hemenway, Sandy

**Subject:** Sagle Valley Water 96-9429

See attached. Call if I can help.

Tim C. Blankenship, PE

**James A. Sewell & Associates, LLC**

1205 Highway 2 West, Suite 101

Sandpoint, Idaho 83864

PH: (208) 263-4160

FAX (208) 263-5229



# ITT

B100-275H

Residential Water Systems

## Goulds Pumps

100H, 150H, 225H, 275H

60 Hz High Capacity 6" Submersible Pumps

For 6" and larger wells



Goulds Pumps is a brand of ITT Corporation.

[www.goulds.com](http://www.goulds.com)

*Engineered for life*

### FEATURES

- **Powered for Continuous Operation:** All ratings are within the working limits of the motor manufacturer. Pump can be operated continuously without fear of damage to the motor.
- **Completely Field Serviceable:** Easy to install and service. All parts easily dismantled if field service is ever necessary. No special tools needed. No shipping back to factory.
- **Diverse Application:** Designed for commercial, municipal and agricultural water needs.
- **Bearings:** Replaceable fluted bearings allow excellent abrasives handling and wear resistance.
- **Shaft Sleeves:** Replaceable stainless steel, hex-driven, sleeves help protect shaft from abrasives.
- **Pump Shaft:** Precision straightened hex shaft.
- **Coupling:** Heavy duty stainless steel, splined coupling for maximum load-carrying capability.
- **Bowls:** Cast iron turbine bowl design.
- **Impellers:** Silicon brass impellers dynamically balanced for smooth operation.
- **Suction Strainer:** Stainless steel strainer restricts gravel and other debris from entering the pump.
- **Cable Guard:** Stainless steel cable guard surrounds and protects motor leads.
- **Fasteners:** All fasteners are stainless steel.
- **NEMA Design Motors:** Stainless steel and epoxy coated end bells resist corrosion. Water filled design provides a constant supply of lubrication. Hermetically sealed stator assures moisture free windings. Durable Kingsbury type thrust bearing absorbs all thrust. Replaceable motor lead assembly.



## SPECIFICATIONS

| Model | Horsepower Range | Discharge Connection | Recommended GPM Operating Range | GPM at Best Efficiency | Minimum Well Size | Rotation <sup>①</sup> |
|-------|------------------|----------------------|---------------------------------|------------------------|-------------------|-----------------------|
| 100H  | 5 – 25           | 3" NPT               | 45 – 160                        | 100                    | 6"                | CCW                   |
| 150H  | 5 – 25           | 3" NPT               | 50 – 240                        | 150                    | 6"                | CCW                   |
| 225H  | 5 – 30           | 3" NPT               | 80 – 360                        | 225                    | 6"                | CCW                   |
| 275H  | 10 – 25          | 3" NPT               | 80 – 440                        | 275                    | 6"                | CW <sup>②</sup>       |
|       | 30 – 40          | 4" NPT               |                                 |                        |                   |                       |

② The 275H has clockwise rotation. It can only be used with three (3) phase motors.

## "H" SERIES MATERIALS OF CONSTRUCTION

- 6" Pump.
- 4" Motor Adapter on 3 and 5 HP models.
- 6" Motor Adapter on 7.5 HP and larger models.

- 4" Motor required for 3 HP and 5 HP pumps.
- 6" Motor required for 7.5 HP and larger pumps.

■ **Magnetic Starter:** A magnetic starter and heaters\* are required for all three phase units.

**PUMPS, MOTORS AND CONTROLS MUST BE ORDERED SEPARATELY AND ARE PACKAGED SEPARATELY.**

| Part Name           | Material                          |
|---------------------|-----------------------------------|
| Motor Adapter       | Cast Iron<br>ASTM A48<br>Class 30 |
| Discharge Head      |                                   |
| Bowl                |                                   |
| Shaft 2–6<br>Stage  | ASTM A276<br>AISI T304 SS         |
| Shaft 7–13<br>Stage | Monel<br>ASTM B164                |
| Coupling            | ASTM A582<br>AISI T303 SS         |
| Spline Protector    | Neoprene                          |
| Suction Screen      | ASTM A582<br>AISI T303 SS         |
| Shaft Sleeve        | AISI T316 SS<br>Powder Metal      |
| Bearing             | Viton®                            |
| Impeller            | ASTM B584 C87600                  |
| Cotter Pin          | ASTM A276<br>AISI T304 SS         |
| Wear Ring           | ASTM C90300                       |
| Hex Head Bolts      | ASTM A582<br>AISI T303 SS         |
| Cable Guard         | ASTM A582<br>AISI T303 SS         |
| Lock Washers        | ASTM A582<br>AISI T303 SS         |

**Pump Size/  
Gallons  
per minute  
at Best  
Efficiency Point**

**Pump Series**

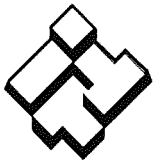
**Number of Stages**

**Horsepower Code**

100 H 05 2

100  
150  
225  
275

05 = 5 HP  
07 = 7.5 HP  
10 = 10 HP  
15 = 15 HP  
20 = 20 HP  
25 = 25 HP  
30 = 30 HP  
40 = 40 HP



# ITT

## GOULDS PUMPS Residential Water Systems

### WATER END (PUMP) DATA

| Series | Order No. | Stages | Required Motor |          | Water End |             |
|--------|-----------|--------|----------------|----------|-----------|-------------|
|        |           |        | HP             | Diameter | Length    | Weight (lb) |
| 100H   | 100H05 2  | 2      | 5              | 4"       | 18.0      | 51          |
|        | 100H07 4  | 4      | 7.5            | 6"       | 29.3      | 84          |
|        | 100H10 5  | 5      | 10             | 6"       | 34.3      | 105         |
|        | 100H15 8  | 8      | 15             | 6"       | 49.3      | 154         |
|        | 100H20 10 | 10     | 20             | 6"       | 59.3      | 185         |
|        | 100H25 13 | 13     | 25             | 6"       | 74.3      | 258         |
| 150H   | 150H05 2  | 2      | 5              | 4"       | 18.0      | 51          |
|        | 150H07 3  | 3      | 7.5            | 6"       | 24.3      | 73          |
|        | 150H10 4  | 4      | 10             | 6"       | 29.3      | 84          |
|        | 150H15 6  | 6      | 15             | 6"       | 39.3      | 136         |
|        | 150H20 8  | 8      | 20             | 6"       | 49.3      | 154         |
|        | 150H25 10 | 10     | 25             | 6"       | 59.3      | 185         |
| 225H   | 225H05 2  | 2      | 5              | 4"       | 18.0      | 51          |
|        | 225H07 2  | 2      | 7.5            | 6"       | 18.0      | 51          |
|        | 225H10 3  | 3      | 10             | 6"       | 24.3      | 73          |
|        | 225H15 4  | 4      | 15             | 6"       | 29.3      | 84          |
|        | 225H20 6  | 6      | 20             | 6"       | 39.3      | 136         |
|        | 225H25 7  | 7      | 25             | 6"       | 44.3      | 139         |
|        | 225H30 8  | 8      | 30             | 6"       | 49.3      | 154         |
|        | 225H30 9  | 9      | 30             | 6"       | 54.3      | 172         |
| 275H * | 275H10 2  | 2      | 10             | 6"       | 19.3      | 51          |
|        | 275H15 3  | 3      | 15             | 6"       | 24.3      | 73          |
|        | 275H20 4  | 4      | 20             | 6"       | 29.3      | 84          |
|        | 275H25 5  | 5      | 25             | 6"       | 34.3      | 105         |
|        | 275H30 6  | 6      | 30             | 6"       | 39.3      | 136         |
|        | 275H30 7  | 7      | 30             | 6"       | 44.3      | 139         |
|        | 275H40 8  | 8      | 40             | 6"       | 49.3      | 154         |
|        | 275H40 9  | 9      | 40             | 6"       | 54.3      | 172         |

\* The 275H rotates Clockwise when viewed from the the top of the pump, therefore, it may only be used with three-phase motors running clockwise. Single-phase motors rotate CCW.



# ITT

## GOULDS PUMPS Residential Water Systems

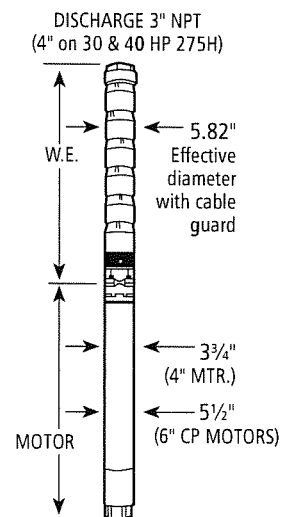
### WATER END (PUMP) DATA

**NOTE:** 4" Diameter motors are required for 3 and 5 HP "L" Series pumps  
6" Diameter motors are required for 7.5 HP and larger "L" Series pumps.

### CentriPro Motors

| Single Phase Motors – Dimensions and Weights |     |                |       |                 |              |
|----------------------------------------------|-----|----------------|-------|-----------------|--------------|
| Motor Order No.                              | HP  | Motor Diameter | Volts | Length (inches) | Weight (lbs) |
| M50412                                       | 5   | 4"             | 230   | 27.7            | 70           |
| 6M071                                        | 7.5 | 6"             | 230   | 29.9            | 128          |
| 6M101                                        | 10  |                |       | 33.5            | 148          |
| 6M151                                        | 15  |                |       |                 |              |
| Three Phase Motors – Dimensions and Weights  |     |                |       |                 |              |
| M50432                                       | 5   | 4"             | 230   | 21.7            | 55           |
| M50434                                       |     |                | 460   |                 |              |
| 6M072                                        | 7.5 | 6"             | 230   | 24.8            | 99           |
| 6M074                                        |     |                | 460   |                 |              |
| 6M102                                        | 10  |                | 230   | 27.0            | 110          |
| 6M104                                        |     |                | 460   |                 |              |
| 6M152                                        | 15  |                | 230   | 29.9            | 128          |
| 6M154                                        |     |                | 460   |                 |              |
| 6M202                                        | 20  |                | 230   | 31.5            | 137          |
| 6M204                                        |     |                | 460   |                 |              |
| 6M252                                        | 25  |                | 230   | 36.2            | 161          |
| 6M254                                        |     |                | 460   |                 |              |
| 6M302                                        | 30  |                | 230   | 38.2            | 176          |
| 6M304                                        |     |                | 460   |                 |              |
| 6M404                                        | 40  |                | 460   | 40.6            | 187          |

- 200V, 6" motors are now offered, call for availability





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**GOULDS PUMPS**  
Residential Water Systems

## Model 100H

### SELECTION CHART

Horsepower Range 5 – 25, Recommended Range 45 – 160 GPM, 60 Hz, 3450 RPM

| Pump Model             | Depth to Water in Feet/Ratings in GPM (Gallons per Minute) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------------------|------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                        | HP                                                         | PSI | 25  | 50  | 75  | 100 | 125 | 150 | 175 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
| 100H05 2<br>2 Stages   | 5                                                          | 0   |     | 165 | 140 | 115 | 83  |     |     |     |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 20  | 145 | 119 | 90  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 30  | 120 | 90  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 40  | 95  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 60  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 100H07 4<br>4 Stages   | 7.5                                                        | 0   |     |     |     | 160 | 150 | 140 | 127 | 112 | 65  |     |     |     |     |     |     |     |     |
|                        |                                                            | 20  |     |     | 153 | 140 | 130 | 113 | 97  | 68  |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 30  |     | 153 | 140 | 130 | 113 | 99  | 70  |     |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 40  | 155 | 143 | 132 | 118 | 103 | 72  |     |     |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 50  | 145 | 132 | 118 | 103 | 72  |     |     |     |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 60  | 133 | 118 | 104 | 78  |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 100H10 5<br>5 Stages   | 10                                                         | 0   |     |     |     | 171 | 164 | 156 | 147 | 138 | 116 | 92  |     |     |     |     |     |     |     |
|                        |                                                            | 20  |     | 172 | 165 | 157 | 149 | 140 | 129 | 119 | 95  | 50  |     |     |     |     |     |     |     |
|                        |                                                            | 30  | 172 | 166 | 158 | 150 | 140 | 130 | 119 | 108 | 76  |     |     |     |     |     |     |     |     |
|                        |                                                            | 40  | 166 | 158 | 150 | 141 | 131 | 120 | 109 | 96  | 52  |     |     |     |     |     |     |     |     |
|                        |                                                            | 50  | 159 | 151 | 141 | 132 | 121 | 110 | 97  | 80  |     |     |     |     |     |     |     |     |     |
|                        |                                                            | 60  | 151 | 143 | 132 | 122 | 110 | 99  | 81  | 60  |     |     |     |     |     |     |     |     |     |
| 100H15 8<br>8 Stages   | 15                                                         | 0   |     |     |     |     |     |     |     |     | 152 | 139 | 127 | 112 | 93  | 68  |     |     |     |
|                        |                                                            | 20  |     |     |     |     |     |     | 158 | 152 | 140 | 128 | 113 | 95  | 72  |     |     |     |     |
|                        |                                                            | 30  |     |     |     |     |     | 158 | 152 | 147 | 134 | 120 | 105 | 85  |     |     |     |     |     |
|                        |                                                            | 40  |     |     |     |     | 158 | 153 | 148 | 142 | 128 | 113 | 97  | 73  |     |     |     |     |     |
|                        |                                                            | 50  |     |     |     | 158 | 153 | 148 | 143 | 135 | 122 | 107 | 88  |     |     |     |     |     |     |
|                        |                                                            | 60  |     |     | 158 | 153 | 148 | 143 | 136 | 129 | 115 | 98  | 73  |     |     |     |     |     |     |
| 100H20 10<br>10 Stages | 20                                                         | 0   |     |     |     |     |     |     | 174 | 171 | 163 | 156 | 147 | 137 | 127 | 117 | 90  |     |     |
|                        |                                                            | 20  |     |     |     |     | 175 | 171 | 168 | 164 | 156 | 148 | 138 | 128 | 117 | 105 | 75  |     |     |
|                        |                                                            | 30  |     |     |     | 175 | 172 | 168 | 165 | 160 | 152 | 143 | 133 | 123 | 112 | 99  | 65  |     |     |
|                        |                                                            | 40  |     |     | 175 | 172 | 169 | 165 | 161 | 157 | 148 | 139 | 129 | 118 | 106 | 92  | 51  |     |     |
|                        |                                                            | 50  |     | 175 | 172 | 169 | 165 | 161 | 157 | 153 | 144 | 135 | 124 | 113 | 100 | 85  |     |     |     |
|                        |                                                            | 60  | 175 | 172 | 169 | 165 | 161 | 157 | 153 | 149 | 140 | 130 | 119 | 107 | 93  | 78  |     |     |     |
| 100H25 13<br>13 Stages | 25                                                         | 0   |     |     |     |     |     |     |     |     | 172 | 167 | 161 | 155 | 148 | 140 | 125 | 107 | 86  |
|                        |                                                            | 20  |     |     |     |     |     |     | 175 | 172 | 167 | 161 | 155 | 148 | 141 | 133 | 117 | 99  | 73  |
|                        |                                                            | 30  |     |     |     |     |     | 175 | 172 | 170 | 164 | 158 | 152 | 145 | 137 | 130 | 113 | 94  | 63  |
|                        |                                                            | 40  |     |     |     |     | 175 | 173 | 170 | 168 | 162 | 156 | 149 | 142 | 134 | 126 | 109 | 88  | 52  |
|                        |                                                            | 50  |     |     |     | 175 | 173 | 170 | 168 | 165 | 159 | 153 | 146 | 138 | 130 | 122 | 105 | 82  |     |
|                        |                                                            | 60  |     |     | 175 | 173 | 170 | 168 | 165 | 162 | 156 | 150 | 142 | 135 | 126 | 118 | 100 | 75  |     |



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**GOULDS PUMPS**  
Residential Water Systems

## Model 150H

### SELECTION CHART

Horsepower Range 5 – 25, Recommended Range 50 – 240 GPM, 60 Hz, 3450 RPM

| Pump Model             | Depth to Water in Feet/Ratings in GPM (Gallons per Minute) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|------------------------|------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
|                        | HP                                                         | PSI | 25  | 50  | 75  | 100 | 125 | 150 | 175 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |    |
| 150H05 2<br>2 Stages   | 5                                                          | 0   | 254 | 230 | 200 | 164 | 102 |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 20  | 206 | 172 | 120 |     |     |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 30  | 174 | 122 |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 40  | 126 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 60  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 150H07 3<br>3 Stages   | 7.5                                                        | 0   |     | 250 | 234 | 215 | 192 | 164 | 126 |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 20  | 237 | 220 | 194 | 170 | 130 | 78  |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 30  | 220 | 197 | 174 | 134 | 78  |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 40  | 200 | 174 | 140 | 84  |     |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 50  | 176 | 142 | 90  |     |     |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 60  | 144 | 100 |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 150H10 4<br>4 Stages   | 10                                                         | 0   |     |     | 251 | 238 | 223 | 205 | 186 | 163 | 92  |     |     |     |     |     |     |    |
|                        |                                                            | 20  | 253 | 240 | 225 | 210 | 190 | 168 | 140 | 104 |     |     |     |     |     |     |     |    |
|                        |                                                            | 30  | 240 | 226 | 210 | 190 | 170 | 140 | 104 |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 40  | 228 | 212 | 193 | 172 | 146 | 108 |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 50  | 213 | 193 | 172 | 147 | 111 |     |     |     |     |     |     |     |     |     |     |    |
|                        |                                                            | 60  | 194 | 176 | 148 | 116 |     |     |     |     |     |     |     |     |     |     |     |    |
| 150H15 6<br>6 Stages   | 15                                                         | 0   |     |     |     | 255 | 246 | 236 | 226 | 216 | 192 | 164 | 122 |     |     |     |     |    |
|                        |                                                            | 20  |     | 257 | 248 | 238 | 228 | 218 | 206 | 194 | 167 | 128 |     |     |     |     |     |    |
|                        |                                                            | 30  | 258 | 248 | 238 | 228 | 218 | 206 | 194 | 181 | 150 | 100 |     |     |     |     |     |    |
|                        |                                                            | 40  | 248 | 240 | 230 | 220 | 208 | 196 | 184 | 168 | 130 |     |     |     |     |     |     |    |
|                        |                                                            | 50  | 240 | 230 | 220 | 209 | 196 | 184 | 170 | 154 | 107 |     |     |     |     |     |     |    |
|                        |                                                            | 60  | 234 | 220 | 210 | 198 | 185 | 172 | 154 | 136 | 78  |     |     |     |     |     |     |    |
| 150H20 8<br>8 Stages   | 20                                                         | 0   |     |     |     |     | 259 | 252 | 244 | 237 | 221 | 204 | 183 | 163 | 134 | 95  |     |    |
|                        |                                                            | 20  |     |     | 260 | 253 | 246 | 238 | 230 | 223 | 206 | 187 | 166 | 138 | 100 |     |     |    |
|                        |                                                            | 30  |     | 260 | 253 | 246 | 239 | 231 | 223 | 214 | 197 | 177 | 154 | 120 |     |     |     |    |
|                        |                                                            | 40  |     | 254 | 247 | 240 | 232 | 224 | 216 | 208 | 188 | 168 | 140 | 102 |     |     |     |    |
|                        |                                                            | 50  | 255 | 247 | 240 | 232 | 224 | 216 | 208 | 199 | 180 | 156 | 125 | 80  |     |     |     |    |
|                        |                                                            | 60  | 247 | 240 | 232 | 225 | 216 | 209 | 199 | 190 | 170 | 142 | 106 |     |     |     |     |    |
| 150H25 10<br>10 Stages | 25                                                         | 0   |     |     |     |     |     |     | 258 | 252 | 240 | 226 | 212 | 198 | 182 | 165 | 113 |    |
|                        |                                                            | 20  |     |     |     |     |     | 259 | 253 | 247 | 240 | 227 | 213 | 199 | 183 | 166 | 144 | 78 |
|                        |                                                            | 30  |     |     |     | 260 | 253 | 247 | 240 | 234 | 220 | 207 | 192 | 175 | 156 | 132 | 100 |    |
|                        |                                                            | 40  |     |     | 260 | 254 | 247 | 241 | 234 | 228 | 214 | 200 | 184 | 168 | 146 | 118 |     |    |
|                        |                                                            | 50  |     | 260 | 254 | 248 | 242 | 235 | 229 | 222 | 208 | 193 | 177 | 158 | 134 | 104 |     |    |
|                        |                                                            | 60  | 260 | 254 | 248 | 242 | 235 | 230 | 222 | 216 | 201 | 186 | 169 | 148 | 120 | 84  |     |    |



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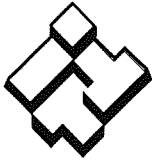
**GOULDS PUMPS**  
Residential Water Systems

## Model 225H

### SELECTION CHART

Horsepower Range 5 – 30, Recommended Range 80 – 360 GPM, 60 Hz, 3450 RPM

| Pump Model      | Depth to Water in Feet/Ratings in GPM (Gallons per Minute) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------------|------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                 | HP                                                         | PSI | 25  | 50  | 75  | 100 | 125 | 150 | 175 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
| 225H05 2 Stages | 5                                                          | 0   | 230 | 282 | 220 | 100 |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 20  | 236 | 136 |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 30  | 140 |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 40  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 60  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 225H07 2 Stages | 7.5                                                        | 0   |     | 320 | 270 | 210 |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 20  | 280 | 222 | 120 |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 30  | 226 | 116 |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 40  | 136 |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 60  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 225H10 3 Stages | 10                                                         | 0   |     | 350 | 320 | 285 | 250 | 210 | 140 |     |     |     |     |     |     |     |
|                 |                                                            | 20  | 324 | 292 | 258 | 216 | 154 |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 30  | 294 | 260 | 220 | 160 |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 40  | 262 | 230 | 166 |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 50  | 226 | 174 |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 60  | 178 |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 225H15 4 Stages | 15                                                         | 0   |     |     | 334 | 320 | 296 | 272 | 242 | 210 |     |     |     |     |     |     |
|                 |                                                            | 20  | 350 | 326 | 302 | 276 | 250 | 216 | 276 |     |     |     |     |     |     |     |
|                 |                                                            | 30  | 326 | 302 | 277 | 251 | 220 | 180 |     |     |     |     |     |     |     |     |
|                 |                                                            | 40  | 304 | 280 | 252 | 222 | 182 |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 50  | 282 | 258 | 224 | 186 |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 60  | 258 | 226 | 192 |     |     |     |     |     |     |     |     |     |     |     |
| 225H20 6 Stages | 20                                                         | 0   |     |     |     | 352 | 336 | 320 | 304 | 287 | 251 | 207 | 130 |     |     |     |
|                 |                                                            | 20  |     | 354 | 340 | 324 | 307 | 290 | 273 | 254 | 212 | 140 |     |     |     |     |
|                 |                                                            | 30  | 355 | 340 | 325 | 308 | 292 | 274 | 254 | 236 | 184 |     |     |     |     |     |
|                 |                                                            | 40  | 341 | 326 | 309 | 293 | 275 | 257 | 236 | 215 | 148 |     |     |     |     |     |
|                 |                                                            | 50  | 326 | 310 | 294 | 276 | 258 | 238 | 216 | 190 |     |     |     |     |     |     |
|                 |                                                            | 60  | 312 | 295 | 278 | 260 | 240 | 220 | 194 | 156 |     |     |     |     |     |     |
| 225H25 7 Stages | 25                                                         | 0   |     |     |     | 360 | 348 | 334 | 320 | 306 | 277 | 245 | 208 | 150 |     |     |
|                 |                                                            | 20  |     |     | 350 | 336 | 322 | 308 | 294 | 280 | 248 | 212 | 158 |     |     |     |
|                 |                                                            | 30  |     | 351 | 327 | 324 | 310 | 296 | 281 | 264 | 232 | 190 | 110 |     |     |     |
|                 |                                                            | 40  | 350 | 340 | 324 | 311 | 296 | 282 | 266 | 250 | 212 | 164 | 116 |     |     |     |
|                 |                                                            | 50  | 340 | 324 | 312 | 296 | 282 | 266 | 252 | 234 | 196 | 120 |     |     |     |     |
|                 |                                                            | 60  | 327 | 312 | 298 | 284 | 269 | 252 | 236 | 218 | 168 |     |     |     |     |     |
| 225H30 8 Stages | 30                                                         | 0   |     |     |     |     | 356 | 344 | 332 | 320 | 296 | 270 | 242 | 208 | 162 |     |
|                 |                                                            | 20  |     |     | 358 | 346 | 334 | 322 | 310 | 300 | 272 | 244 | 212 | 168 |     |     |
|                 |                                                            | 30  |     | 358 | 347 | 335 | 323 | 311 | 300 | 286 | 260 | 230 | 194 | 131 |     |     |
|                 |                                                            | 40  | 360 | 348 | 336 | 324 | 312 | 300 | 287 | 274 | 246 | 214 | 172 |     |     |     |
|                 |                                                            | 50  | 349 | 337 | 326 | 313 | 301 | 288 | 275 | 262 | 232 | 197 | 140 |     |     |     |
|                 |                                                            | 60  | 338 | 326 | 314 | 302 | 290 | 276 | 262 | 248 | 218 | 176 |     |     |     |     |
| 225H30 9 Stages | 30                                                         | 0   |     |     |     |     |     | 352 | 342 | 332 | 311 | 289 | 265 | 240 | 209 | 167 |
|                 |                                                            | 20  |     |     |     | 354 | 344 | 334 | 324 | 313 | 291 | 268 | 242 | 212 | 172 | 92  |
|                 |                                                            | 30  |     |     | 354 | 344 | 334 | 324 | 313 | 302 | 280 | 256 | 228 | 194 | 144 |     |
|                 |                                                            | 40  |     | 356 | 346 | 336 | 325 | 314 | 303 | 292 | 269 | 244 | 214 | 176 | 102 |     |
|                 |                                                            | 50  | 356 | 346 | 336 | 326 | 315 | 304 | 294 | 282 | 258 | 230 | 198 | 150 |     |     |
|                 |                                                            | 60  | 347 | 337 | 326 | 316 | 306 | 294 | 282 | 270 | 244 | 216 | 178 | 110 |     |     |



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**GOULDS PUMPS**  
Residential Water Systems

## Model 275H

### SELECTION CHART

Horsepower Range 10 – 40, Recommended Range 80 – 440 GPM, 60 Hz, 3450 RPM

| Pump Model      | Depth to Water in Feet/Ratings in GPM (Gallons per Minute) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------------|------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                 | HP                                                         | PSI | 25  | 50  | 75  | 100 | 125 | 150 | 175 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
| 275H10 2 Stages | 10                                                         | 0   |     | 425 | 356 | 255 | 108 |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 20  | 370 | 283 | 135 |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 30  | 293 | 140 |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 40  | 145 |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 60  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 275H15 3 Stages | 15                                                         | 0   |     |     | 416 | 375 | 325 | 248 | 140 |     |     |     |     |     |     |     |
|                 |                                                            | 20  | 423 | 383 | 335 | 268 | 158 |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 30  | 385 | 338 | 270 | 160 |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 40  | 343 | 283 | 170 |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 50  | 288 | 175 |     |     |     |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 60  | 178 |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 275H20 4 Stages | 20                                                         | 0   |     |     |     | 419 | 385 | 350 | 308 | 248 | 78  |     |     |     |     |     |
|                 |                                                            | 20  |     | 435 | 393 | 355 | 315 | 263 | 180 | 96  |     |     |     |     |     |     |
|                 |                                                            | 30  | 425 | 392 | 356 | 315 | 263 | 183 | 103 |     |     |     |     |     |     |     |
|                 |                                                            | 40  | 395 | 363 | 323 | 273 | 185 | 118 |     |     |     |     |     |     |     |     |
|                 |                                                            | 50  | 363 | 326 | 275 | 195 | 120 |     |     |     |     |     |     |     |     |     |
|                 |                                                            | 60  | 325 | 268 | 200 | 123 |     |     |     |     |     |     |     |     |     |     |
| 275H25 5 Stages | 25                                                         | 0   |     |     |     | 448 | 423 | 398 | 370 | 338 | 250 | 115 |     |     |     |     |
|                 |                                                            | 20  |     | 448 | 433 | 403 | 375 | 343 | 310 | 265 | 130 |     |     |     |     |     |
|                 |                                                            | 30  | 450 | 428 | 405 | 376 | 345 | 313 | 267 | 195 |     |     |     |     |     |     |
|                 |                                                            | 40  | 430 | 407 | 378 | 345 | 313 | 267 | 196 |     |     |     |     |     |     |     |
|                 |                                                            | 50  | 410 | 380 | 345 | 313 | 268 | 203 |     |     |     |     |     |     |     |     |
|                 |                                                            | 60  | 382 | 345 | 314 | 269 | 206 |     |     |     |     |     |     |     |     |     |
| 275H30 6 Stages | 30                                                         | 0   |     |     |     |     | 441 | 421 | 400 | 375 | 325 | 250 | 135 |     |     |     |
|                 |                                                            | 20  |     |     | 446 | 425 | 403 | 378 | 356 | 330 | 257 | 145 |     |     |     |     |
|                 |                                                            | 30  |     | 447 | 427 | 405 | 380 | 358 | 331 | 300 | 198 |     |     |     |     |     |
|                 |                                                            | 40  | 448 | 428 | 406 | 382 | 360 | 332 | 302 | 268 | 160 |     |     |     |     |     |
|                 |                                                            | 50  | 430 | 407 | 383 | 363 | 334 | 304 | 270 | 210 |     |     |     |     |     |     |
|                 |                                                            | 60  | 408 | 385 | 365 | 335 | 305 | 273 | 211 |     |     |     |     |     |     |     |
| 275H30 7 Stages | 30                                                         | 0   |     |     |     |     |     | 439 | 420 | 403 | 363 | 315 | 250 | 165 |     |     |
|                 |                                                            | 20  |     |     |     | 442 | 425 | 405 | 388 | 368 | 320 | 258 | 183 | 78  |     |     |
|                 |                                                            | 30  |     |     | 443 | 426 | 405 | 389 | 368 | 345 | 293 | 215 | 132 |     |     |     |
|                 |                                                            | 40  |     | 444 | 427 | 406 | 390 | 369 | 347 | 323 | 265 | 180 | 90  |     |     |     |
|                 |                                                            | 50  | 445 | 428 | 407 | 391 | 369 | 348 | 324 | 300 | 223 | 143 |     |     |     |     |
|                 |                                                            | 60  | 430 | 408 | 392 | 370 | 350 | 325 | 300 | 265 | 183 | 90  |     |     |     |     |
| 275H40 8 Stages | 40                                                         | 0   |     |     |     |     |     |     | 436 | 421 | 387 | 353 | 311 | 250 | 175 | 95  |
|                 |                                                            | 20  |     |     |     |     | 440 | 425 | 408 | 392 | 356 | 346 | 258 | 183 | 105 |     |
|                 |                                                            | 30  |     |     |     | 440 | 425 | 409 | 393 | 375 | 338 | 290 | 220 | 150 |     |     |
|                 |                                                            | 40  |     |     | 441 | 426 | 410 | 394 | 376 | 359 | 318 | 262 | 188 | 113 |     |     |
|                 |                                                            | 50  |     | 442 | 427 | 412 | 395 | 377 | 360 | 341 | 300 | 225 | 158 |     |     |     |
|                 |                                                            | 60  | 443 | 428 | 413 | 396 | 378 | 361 | 341 | 321 | 268 | 190 | 118 |     |     |     |
| 275H40 9 Stages | 40                                                         | 0   |     |     |     |     |     |     | 448 | 435 | 407 | 376 | 338 | 303 | 249 | 180 |
|                 |                                                            | 20  |     |     |     |     | 450 | 435 | 423 | 410 | 378 | 342 | 307 | 242 | 185 | 122 |
|                 |                                                            | 30  |     |     |     | 449 | 438 | 423 | 411 | 395 | 365 | 332 | 285 | 253 | 155 | 80  |
|                 |                                                            | 40  |     |     | 448 | 439 | 424 | 413 | 396 | 381 | 350 | 310 | 260 | 193 | 125 |     |
|                 |                                                            | 50  |     | 447 | 440 | 425 | 414 | 396 | 382 | 366 | 333 | 288 | 225 | 163 | 86  |     |
|                 |                                                            | 60  | 446 | 440 | 425 | 415 | 397 | 383 | 367 | 350 | 313 | 263 | 193 | 128 |     |     |

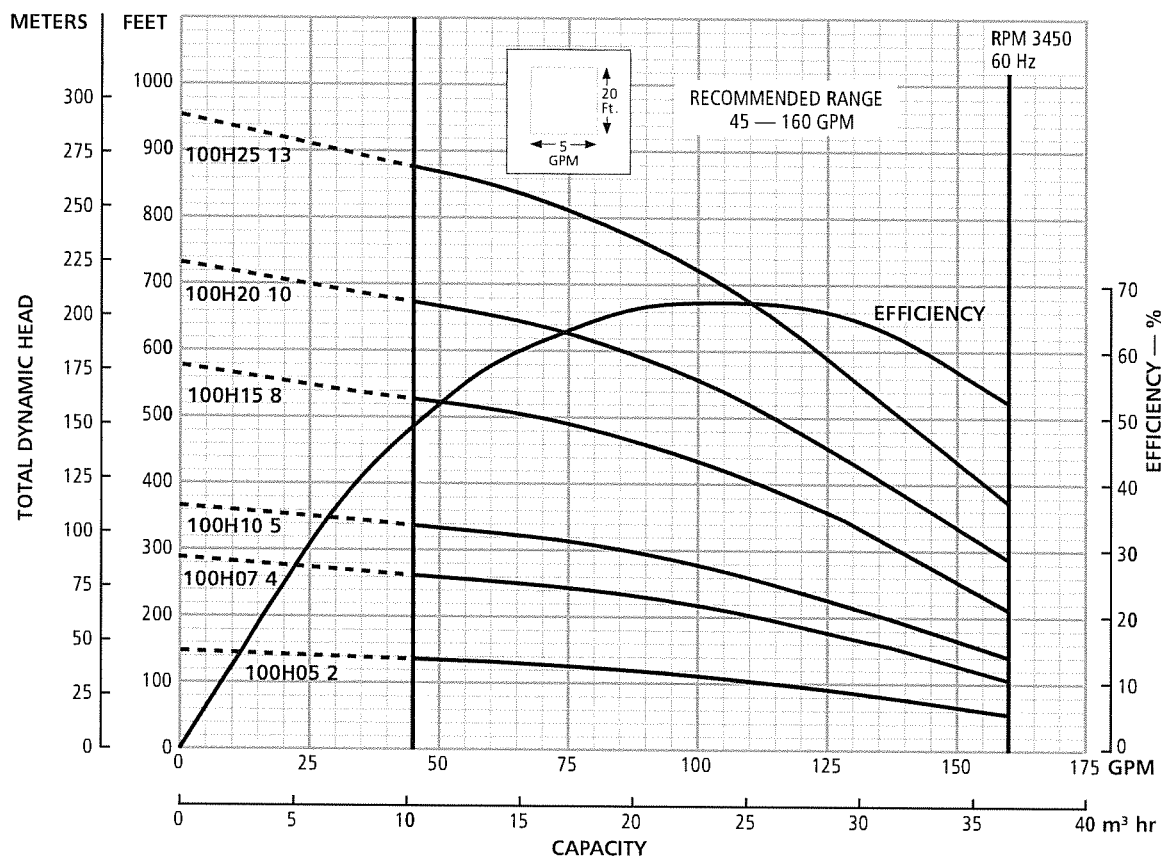
USE ONLY WITH 3 PHASE MOTORS. ROTATION IS DIFFERENT THAN 1 PHASE MOTORS.



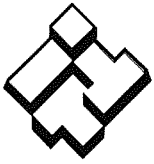
# ITT

**GOULDS PUMPS**  
Residential Water Systems

## Model 100H



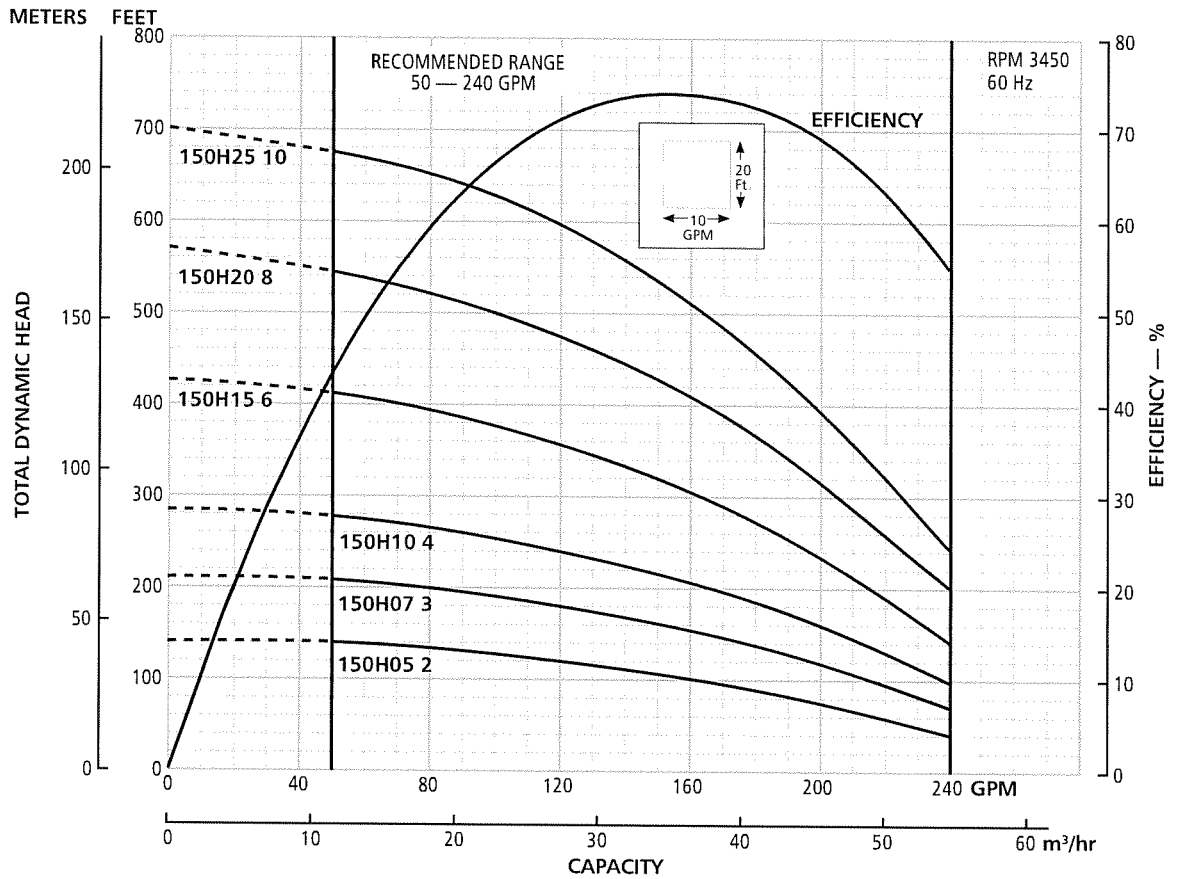
Curve Reference SU 0021RO



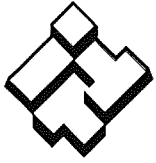
# ITT

**GOULDS PUMPS**  
Residential Water Systems

## Model 150H



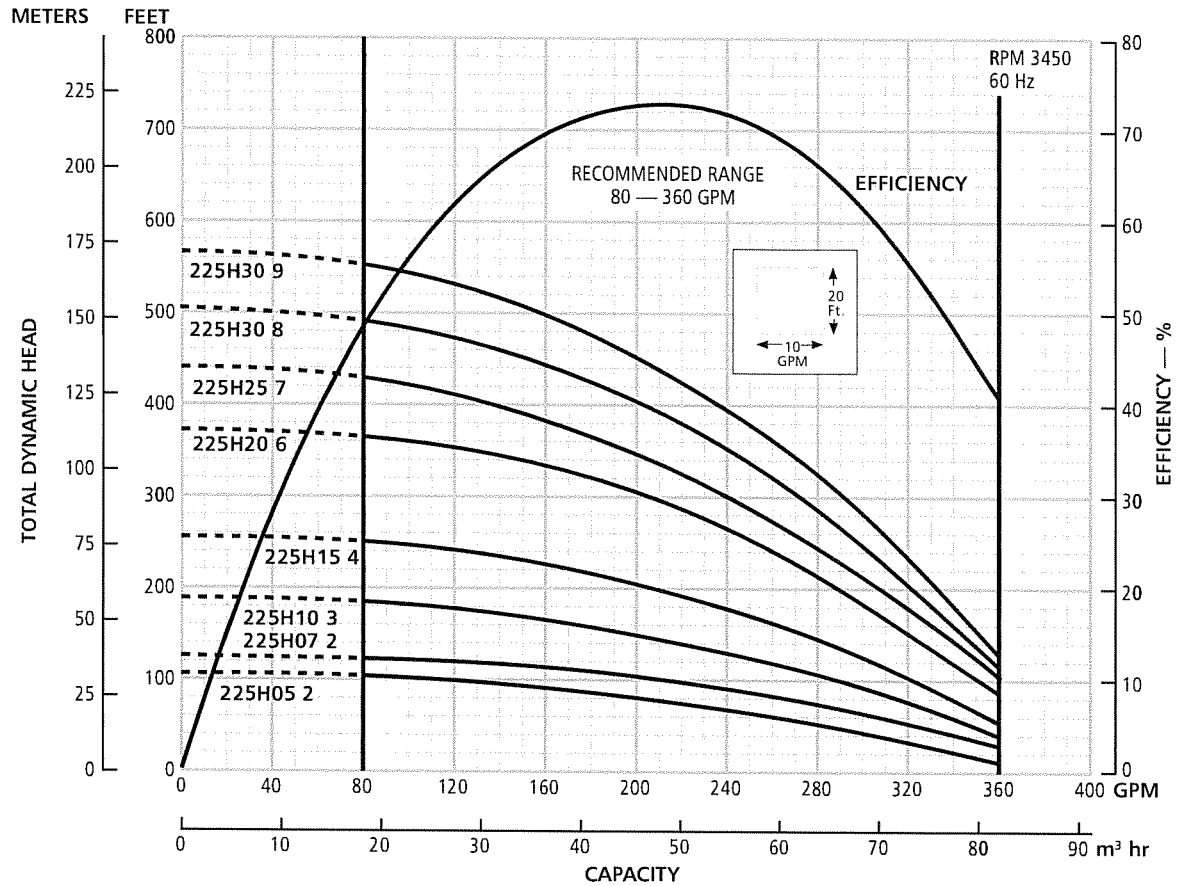
Curve Reference SU 507



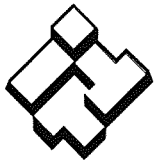
# ITT

**GOULDS PUMPS**  
Residential Water Systems

## Model 225H



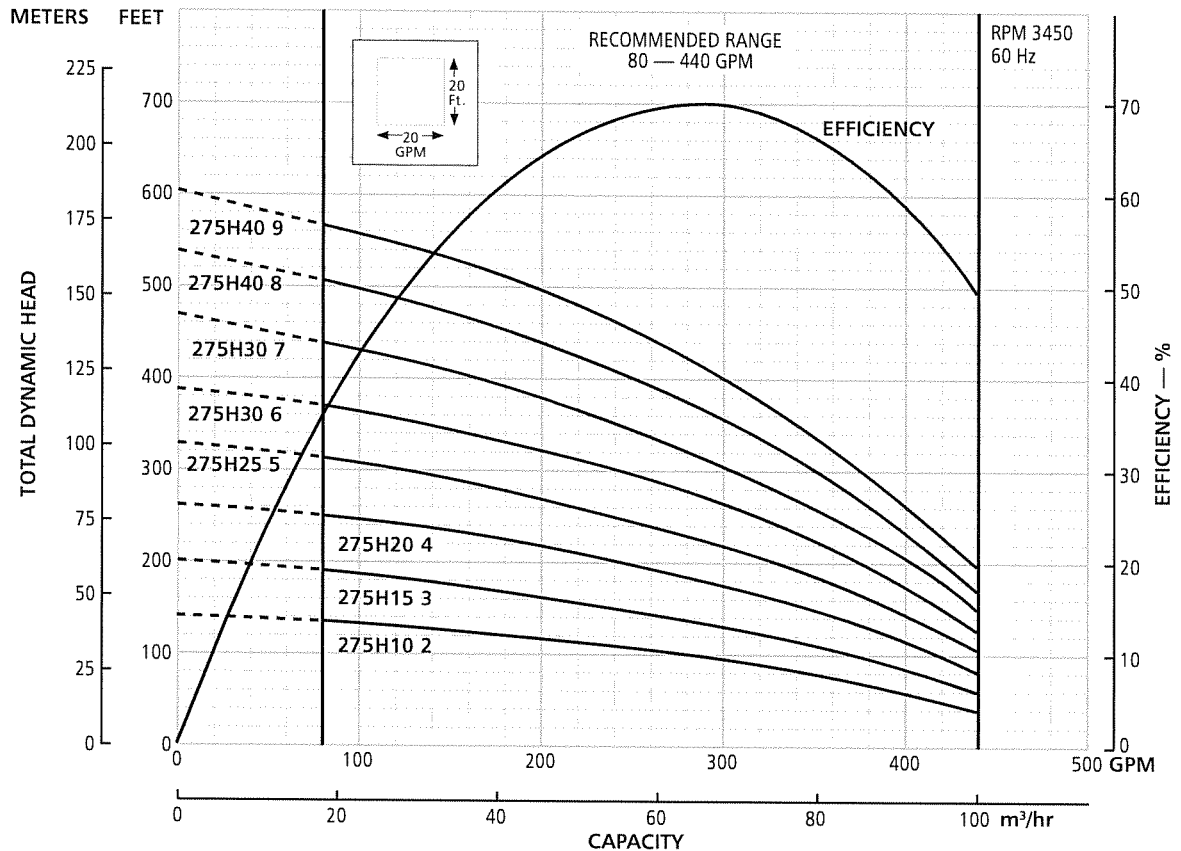
Curve Reference SU 508



# ITT

## Residential Water Systems

### Model 275H



Three Phase Only, due to required CW Rotation.

Curve Reference SU 484



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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

**B100-275H February, 2009**

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*Engineered for life*



## State of Idaho

# DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Web Site: [www.idwr.idaho.gov](http://www.idwr.idaho.gov)

C. L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Interim Director

September 19, 2011

BEVERLY GODING  
PO BOX 397  
SAGLE ID 83860

RE: Water Right Permit No. 96-09004

Dear Ms. Goding:

I am in the process of reviewing the file for water right 96-09004, and have found that the water system is being run by Sagle Valley Water and Sewer. In order the beneficial use for water right 96-09004 to be classified as "municipal" use, instead of "domestic and irrigation" use, the water right must be in the name of a municipality and not an individual person's name. For this reason, I have enclosed an Assignment of Permit form for you to sign.

If we do not receive by October 3, 2011 a completed and signed form, or warranty deed stating that the water right is now owned by Sagle Valley Water and Sewer, we will continue processing the license, and issue the license as it was permitted, in the name of Beverly Goding.

If you have any questions, please give me a call directly at (208) 287-4920.

Sincerely,

A handwritten signature in black ink that reads "Sandy Hemenway". The signature is fluid and cursive, with the first name "Sandy" being more prominent and the last name "Hemenway" following in a similar style.

Sandy Hemenway  
Sr. Water Resource Agent

Enclosure

Cc: Tim Blankenship/James Sewell & Associates, LLC

## Hemenway, Sandy

---

**From:** Hemenway, Sandy  
**Sent:** Monday, August 08, 2011 8:49 AM  
**To:** 'Suzanne.Scheidt@deq.idaho.gov'  
**Cc:** 'Wsmibob@aol.com'  
**Subject:** RE: FW: Information Request for PWS# 1090249 (water right #96-9004)

Hi Suzanne/Bob,

I spoke with Beverly Goding this morning, and she will be signing an "assignment" which will change the water right 96-9004 into the name of Sagle Valley Water District. Once that is received, I will be able to issue the License for Water Right 96-9004. A copy of the assignment form was mailed to her on 8/4/2011.

The one thing that I still need though before I can issue the License is something showing the flow measurements from the system. If daily, weekly, or monthly flow measurements records were not kept, is there any way that someone could confirm the actual or preferably the peak demand measurement for these wells (cfs or gallons per minute)? Also, unless there are any records showing total annual volume, I will license this water right at 51 stubbed lots X 1.2 af/lot (IDWR's standard for domestic) = 61.2 af.

Thanks,  
Sandy

---

**From:** [Suzanne.Scheidt@deq.idaho.gov](mailto:Suzanne.Scheidt@deq.idaho.gov) [<mailto:Suzanne.Scheidt@deq.idaho.gov>]  
**Sent:** Friday, August 05, 2011 4:19 PM  
**To:** Hemenway, Sandy  
**Subject:** FW: FW: Information Request for PWS# 1090249 (water right #96-9004)

Hi Sandy, Hope you are well. Here is the updated information regarding the well from the system operator. Thanks, Suzanne

---

**From:** [Wsmibob@aol.com](mailto:Wsmibob@aol.com) [<mailto:Wsmibob@aol.com>]  
**Sent:** Friday, August 05, 2011 3:07 PM  
**To:** Suzanne Scheidt  
**Cc:** Stephen Tanner; Jean Felker; Troy Wassink  
**Subject:** Re: FW: Information Request for PWS# 1090249 (water right #96-9004)

Suzanne,

It looks like the old Cedar Grove water right should be transferred to the Sagle Valley Water District. You might want to check with the engineering firm that worked on putting things together for combining the systems (Sewell Eng.- Tim Blankenship) and see if they have already taken care of this.

Also, if they have not already done so, the District might want to file for an extension to get closer to build out prior to filing for "PROOF".

Hope this helps - if you need anything else from me, please let me know.

Bob Hansen  
Water Systems Mgt., Inc.  
(208) 265-4270

In a message dated 8/4/2011 2:23:07 P.M. Pacific Daylight Time, [Suzanne.Scheidt@deq.idaho.gov](mailto:Suzanne.Scheidt@deq.idaho.gov) writes:

Hi Bob, As the Cedar Grove well has been incorporated into the Sagle Valley system, I thought I'd check with you to see if you might have any thoughts on this issue before we provide a response to Sandy Hemenway w/IDWR. Thanks, Suzanne

---

**From:** Thomas Herron  
**Sent:** Thursday, August 04, 2011 1:54 PM  
**To:** 'Hemenway, Sandy'  
**Cc:** Stephen Tanner; Suzanne Scheidt  
**Subject:** RE: Information Request for PWS# 1090249 (water right #96-9004)

Hi Sandy,

I am going to forward your e-mail to the Engineering/Drinking Water folks here at DEQ to see if they have anything for you. I could probably come up with a surface flow somewhere nearby, but it wouldn't do much for you by your description.

Thanks,

Tom

Thomas Herron

Surface Water Program Manager

DEQ Regional Office Coeur d'Alene

208-769-1422

[Thomas.Herron@deq.idaho.gov](mailto:Thomas.Herron@deq.idaho.gov)

<http://www.deq.idaho.gov>

---

**From:** Hemenway, Sandy [<mailto:Sandy.Hemenway@idwr.idaho.gov>]  
**Sent:** Thursday, August 04, 2011 8:57 AM  
**To:** Thomas Herron  
**Cc:** Hemenway, Sandy  
**Subject:** Information Request for PWS# 1090249 (water right #96-9004)  
**Importance:** High

Tom,

I am in the process of conducting the review for licensing for water right 96-9004 Beverly Ralph Goding/Cedar Grove Water LLC PWS# 1090249.

Do you have any records that would indicate the monthly or annual rate and volume for this water systems 2 wells, or records from a sanitary survey that would indicate the rate and volume for this system? If so, is there any way that I could get a copy?

Thank you for your time.

Sincerely,

Sandy Hemenway

Sr. Water Resource Agent  
IDWR/State Office  
*PO Box 83720 or 322 E. Front St.  
Boise, ID 83720-0098  
OFFICE: (208) 287-4920  
CELL: (208) 761-0280  
FAX: (208) 287-6700  
Email: [sandy.hemenway@idwr.idaho.gov](mailto:sandy.hemenway@idwr.idaho.gov)*

## Hemenway, Sandy

---

**From:** Hemenway, Sandy  
**Sent:** Thursday, August 04, 2011 8:57 AM  
**To:** 'thomas.herron@deq.idaho.gov'  
**Cc:** Hemenway, Sandy  
**Subject:** Information Request for PWS# 1090249 (water right #96-9004)

**Importance:** High

Tom,

I am in the process of conducting the review for licensing for water right 96-9004 Beverly & Ralph Goding/Cedar Grove Water LLC PWS# 1090249.

Do you have any records that would indicate the monthly or annual rate and volume for this water systems 2 wells, or records from a sanitary survey that would indicate the rate and volume for this system? If so, is there any way that I could get a copy?

Thank you for your time.

Sincerely,

Sandy Hemenway  
Sr. Water Resource Agent  
IDWR/State Office  
*PO Box 83720 or 322 E. Front St.  
Boise, ID 83720-0098  
OFFICE: (208) 287-4920  
CELL: (208) 761-0280  
FAX: (208) 287-6700  
Email: [sandy.hemenway@idwr.idaho.gov](mailto:sandy.hemenway@idwr.idaho.gov)*



## State of Idaho

# DEPARTMENT OF WATER RESOURCES

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August 4, 2011

C. L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Interim Director

BEVERLY GODING  
PO BOX 397  
SAGLE ID 83860

RE: Permit No. 96-9004 Goding, Request for Additional Information

Dear Ms. Goding:

Permit 96-9004 is currently being reviewed for Licensing. The Department's field examiner recommended licensing your water right with a diversion rate of 0.48 cfs, and changing the beneficial use from Domestic, Irrigation and Fire Protection, to Municipal Use. The Proof of Beneficial Use that you submitted stated that this water system was a regulated public water system PWS# 1090249 going by the name of Cedar Grove Water LLC.

In order for us to complete the licensing process for Permit No. 96-9004, we need the following information within thirty (30) days:

- (1) Documentation showing historical diversion rate, and volume (daily, monthly or annual records) to confirm actual use.
- (2) To meet the definition of a "municipal provider," going by the name of Cedar Grove Water LLC, the permit would need to be assigned to Cedar Grove Water LLC, (a copy would need to be signed and returned to the department).

If you have any question, please contact me as soon as possible at (208) 287-4920.

Sincerely,

Sandy Hemenway  
Sr. Water Resource Agent

Enclosures (copy of assignment of permit)