

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**A. GENERAL INFORMATION**

Permit No: 63-33205

Exam Date: 11/14/2013

1. Current Owner: MIDDLETON BUS LLC  
22973 S 21ST AVE W  
MIDDLETON ID 83644  
(208)459-0195
2. Accompanied by: STEVE VIS – MANAGING PARTNER  
Phone No:  
Address:  
Relationship to Permit Holder: same

3. SOURCE TRIBUTARY  
GROUND WATER BOISE RIVER

**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: NONE
2. Other water rights with the same point of diversion: NONE

**C. DIVERSION AND DELIVERY SYSTEM****1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NW1/4NW1/4 Sec. 12, Twp 04N, Rge 03W, B.M.  
CANYON County

Method of Determination: GARMIN 76 GPS N 43.70583, W -116.65135

2.

**PLACE OF USE:** FIRE PROTECTION

| Twp | Rge | Sec | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
|     |     |     | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 04N | 03W | 12  |    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    |        |

Method of Determination: AERIAL

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☐ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

| <u>Well or Diversion<br/>ID No.*</u> | <u>Motor Make</u> | <u>Hp</u> | <u>Motor Serial No.</u> | <u>Pump Make</u> | <u>Pump Serial No. or Discharge<br/>Size</u> |
|--------------------------------------|-------------------|-----------|-------------------------|------------------|----------------------------------------------|
| WELL                                 | FRANKLIN          | 20        | NOT AVAILABLE           | GRUNDFOS         | 6"                                           |

\*Code to correspond with No. on map and aerial photo

**D. FLOW MEASUREMENTS**

1.

| <u>Measurement<br/>Equipment</u> | <u>Type</u> | <u>Make</u> | <u>Model No.</u> | <u>Serial No.</u> | <u>Size</u> | <u>Calib. Date</u> |
|----------------------------------|-------------|-------------|------------------|-------------------|-------------|--------------------|
|----------------------------------|-------------|-------------|------------------|-------------------|-------------|--------------------|

2. Measurements: NONE TAKEN

**E. FLOW CALCULATIONS**

\_\_\_\_\_Additional Computation Sheets Attached

[1] THEORETICAL CALCULATION: 20 HP, 70% EFFICIENCY, 50 PSI, Z + 50 [PUMP SET AT 65', ASSUME PUMPING LEVEL 15' ABOVE PUMP]

$$8.8 \times 20 \times 0.7 / 50 + [50 \times 2.31] = 121.8 / 165.5 = 0.736 \text{ CFS} = 0.74 \text{ CFS}$$

[2] IDWR REFERENCE SHEET FOR PIPE FLOWS: 6" PIPE = 0.98 CFS

Measured Method:

$$[3] \text{ PUMP CURVE} - \text{FLOW} = 350 \text{ GPM TO } 400 \text{ GPM} = 350/448.4 \text{ TO } 400/448.8 = 0.78 \text{ CFS TO } 0.89 \text{ CFS}$$

**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses: NOT APPLICABLE FOR FIRE PROTECTION

**G. NARRATIVE/REMARKS/COMMENTS**

The permit was issued for 0.80 cfs from ground water for a fire protection use. The fire protection was required by the Middleton Fire Department. I was accompanied on the field exam by Steve Vis, managing partner.

The well is only used for fire protection. The well log is on file with the Department. Steve provided the pump curve and other information obtained by the pump company, Riverside Inc. The pump is set at 65'. A submersible Grundfos 20 hp pump and Franklin motor assembly was installed. The pump is rated for 350 to 400 gpm.

There is 6" diameter pipe from the well to the office – shop building fire sprinkler system.

The diversion rate was calculated 3 ways and the results ranged from 0.74 cfs based on a theoretical calculation with many unknowns, to 0.98 cfs based on the IDWR reference sheet for pipe flows. The pump curve states that at an efficiency of 73% to 78%, the flow is 350 to 400 gpm, or 0.78 cfs to 0.89 cfs. I recommend the license be issued for the permitted diversion rate of 0.80 cfs.

A volume is not necessary for a fire protection use.

Have conditions of permit approval been met? ☒ Yes ☐ No

Condition no. 7 should be modified to "Fire protection is for an office and bus shop."

#### H. RECOMMENDATIONS

- 1) Permit amount 0.80 cfs
- 2) Beneficial use limit n/a cfs
- 3) System measurement 0.78 cfs pump curve indicated flows from 0.78 cfs to 0.89 cfs
- 4) Proof fee amount 1 cfs

#### 1. Recommended Amounts

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>DIVERSION RATE</u> | <u>ANNUAL VOLUME</u> |
|-----------------------|----------------------|-----------------------|----------------------|
| FIRE PROTECTION       | 01/01 to 12/31       | 0.800 CFS             |                      |
| <u>Totals:</u>        |                      | 0.800 CFS             |                      |

#### 2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

#### I. AUTHENTICATION

Field Examiner's Name Wing Umic Date 11-14-13

Reviewer \_\_\_\_\_ Date \_\_\_\_\_



63-333205 - 2011 BING PHOTOGRAPHY -- Middleton Bus LLC. POU outlined in light blue. POD is the green point. Delivery system piping is red and labeled.



111 South Roswell Blvd  
P.O.Box 720 Parma, ID 83660  
Office (208) 722-6731  
Fax (208) 722-6736  
Email riverside@rsicorp.net



Customer No.: VIS STEVE  
Invoice No.: 36147

Bill To: **STEVE VIS**  
22973 S. 21 ST AVE  
WEST  
MIDDLETON, ID

Ship To: **INSTALL AND WIRE IN A 20 HP PUMP  
SYSTEM WITH A VFD**

| Date                  |  | Due Date |  | Ship Via    |  | F.O.B.                                                                      |  | Terms          |                  |         |  |
|-----------------------|--|----------|--|-------------|--|-----------------------------------------------------------------------------|--|----------------|------------------|---------|--|
| 01/22/10              |  | 01/22/10 |  |             |  | Origin                                                                      |  | Due on receipt |                  |         |  |
| Purchase Order Number |  |          |  | Order Date  |  | Sales Person                                                                |  |                | Our Order Number |         |  |
|                       |  |          |  |             |  |                                                                             |  |                |                  |         |  |
| Quantity              |  |          |  | Item Number |  | Description                                                                 |  | Unit Price     |                  | Amount  |  |
| Required              |  | Shipped  |  |             |  |                                                                             |  |                |                  |         |  |
| 1                     |  | 1        |  |             |  | 400GPM ROBECO PUMP, 20HP 230<br>VOLT 3 PHASE SUBMERSIBLE<br>MOTOR AND PANEL |  | 6323.00        |                  | 6323.00 |  |
| 1                     |  | 1        |  |             |  | ABB VARIABLE FREQUENCY DRIVE                                                |  | 6893.00        |                  | 6893.00 |  |
| 1                     |  | 1        |  |             |  | 4" WELD ON PITLESS ADAPTER                                                  |  | 1027.00        |                  | 1027.00 |  |
| 4                     |  | 4        |  |             |  | 4" X 21' STEEL PIPE                                                         |  | 210.00         |                  | 840.00  |  |
| 70                    |  | 70       |  |             |  | #4 SUBMERSIBLE WIRE                                                         |  | 4.00           |                  | 280.00  |  |
| 2                     |  | 2        |  |             |  | SPLICE KITS                                                                 |  | 16.00          |                  | 32.00   |  |
| 1                     |  | 1        |  |             |  | 10 GALLONS CHLORINE                                                         |  | 92.00          |                  | 92.00   |  |
| 2                     |  | 2        |  |             |  | 6" FLANGES                                                                  |  | 22.00          |                  | 44.00   |  |
| 1                     |  | 1        |  |             |  | 6" STEEL PIPE                                                               |  | 20.00          |                  | 20.00   |  |
| 1                     |  | 1        |  |             |  | 12" STEEL FLANGE                                                            |  | 37.50          |                  | 37.50   |  |
| 1                     |  | 1        |  |             |  | 12" STEEL BLIND FLANGE                                                      |  | 112.50         |                  | 112.50  |  |
| 2                     |  | 2        |  |             |  | 4" 90 DEGREE ELBOWS GALV                                                    |  | 95.60          |                  | 191.20  |  |
| 2                     |  | 2        |  |             |  | 2"X 6" GALV NIPPLE                                                          |  | 21.50          |                  | 43.00   |  |
| 5                     |  | 5        |  |             |  | GREEN TAPE                                                                  |  | 13.50          |                  | 67.50   |  |
| 1                     |  | 1        |  |             |  | 4" CHECK VALVE                                                              |  | 322.00         |                  | 322.00  |  |
| 1                     |  | 1        |  |             |  | 4" X 6" STEEL PIPE NIPPLE                                                   |  | 24.60          |                  | 24.60   |  |
| 1                     |  | 1        |  |             |  | 4" DRESSER COUPLER                                                          |  | 214.28         |                  | 214.28  |  |
| 1                     |  | 1        |  |             |  | 4"X5" STEEL BUSHING REDUCER                                                 |  | 56.00          |                  | 56.00   |  |
| 1                     |  | 1        |  |             |  | 4" BALL VALVE                                                               |  | 269.00         |                  | 269.00  |  |
| 1                     |  | 1        |  |             |  | 6" BUTTERFLY VALVE                                                          |  | 131.42         |                  | 131.42  |  |
| 1                     |  | 1        |  |             |  | #1 THHN COPPER WIRE                                                         |  | 95.25          |                  | 95.25   |  |
| 1                     |  | 1        |  |             |  | # 6 THHN COPPER WIRE                                                        |  | 15.29          |                  | 15.29   |  |

Thank You



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|                       |         |          |  |             |                                                                                                          |                       |        |                |                  |        |  |
| Quantity              |         |          |  | Item Number |                                                                                                          | Description           |        | Unit Price     |                  | Amount |  |
| Regulred              | Shipped | B.O.     |  |             |                                                                                                          |                       |        |                |                  |        |  |
| 1                     | 1       |          |  |             |                                                                                                          | # 4 THHN COPPER WIRE  |        | 75.00          | 75.00            |        |  |
| 1                     | 1       |          |  |             |                                                                                                          | # 8 THHN COPPER WIRE  |        | 10.50          | 10.50            |        |  |
| 1                     | 1       |          |  |             |                                                                                                          | 10" X 10" X 6" J BOX  |        | 45.30          | 45.30            |        |  |
| 1                     | 1       |          |  |             |                                                                                                          | 4'X 6"X6" GUTTER BOX  |        | 89.00          | 89.00            |        |  |
| 1                     | 1       |          |  |             |                                                                                                          | MISC ELECTRICAL PARTS |        | 325.00         | 325.00           |        |  |
| 1                     | 1       |          |  |             |                                                                                                          | 0-100 PSI TRANSDUCER  |        | 373.50         | 373.50           |        |  |
| 44.600                | 44.600  |          |  | ELECTRICAL  | ELECTRICAL CONTRACTING LABOR<br>TIME TO INSTALL AND WIRE<br>CONTROL BOX AND VFD                          |                       | 60.00  | 2676.00        |                  |        |  |
| 13.000                | 13.000  |          |  | BOOM TRK+2  | BOOM TRUCK + 2 MEN LABOR<br>1ST WELL TIME TO INSTALL,<br>PULL PUMP AND RESET FOR<br>DEVELOPMENT ON WELL. |                       | 155.00 | 2015.00        |                  |        |  |
| 23.500                | 23.500  |          |  | BOOM TRK+2  | BOOM TRUCK + 2 MEN LABOR<br>2ND WELL TEST WELL WITH OUR<br>PUMP AND INSTALL NEW PUMP                     |                       | 155.00 | 3642.50        |                  |        |  |
| 45.700                | 45.700  |          |  | MECH PUMP   | MECHANICAL LABOR- PUMP SHOP<br>1ST WELL INSTALL PIPING,<br>TEST WELL AND DEVELOP                         |                       | 60.00  | 2742.00        |                  |        |  |
| 41.600                | 41.600  |          |  | MECH PUMP   | MECHANICAL LABOR- PUMP SHOP<br>2ND WELL REINSTALL PIPING,<br>TEST WELL AND FLOW TEST                     |                       | 60.00  | 2496.00        |                  |        |  |

THE ACTUAL HOURS FOR THE 2ND  
WELL MECHANICAL IS 66.6 HOUR  
WE REMOVED 25 HOURS OFF OF  
THIS TIME

Invoice subtotal 31620.34  
Sales tax @ 6.000% 1021.31  
Invoice total 32641.65

Thank You

Pump setting = 65'

Hp = 20hp

GPM = 350-400

Motor = Franklin 3phase

steve if I remember correctly this pump is set in a Saker  
pitless, after it leaves the well I'm not sure where the plumbing  
goes.



Selected from catalog: Robbco Submersible.60 Vers: 1.1

\* Signature of Principal Driller and rig operator are required.

|                                                                                                                                                        |                                                                                       |                                                                                                                                    |                                                       |       |         |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------|---------|-------------|
| No. <b>W 9025</b>                                                                                                                                      | <b>Due no later than Jun 30, 2013</b><br><b>Annual Report Form</b>                    |                                                                                                                                    | 2. Registered Agent and Address<br><b>(NO PO BOX)</b> |       |         |             |
| Return to:<br>SECRETARY OF STATE<br>700 WEST JEFFERSON<br>PO BOX 83720<br>BOISE, ID 83720-0080<br><br><b>NO FILING FEE IF<br/>RECEIVED BY DUE DATE</b> | 1. Mailing Address: Correct in this box if needed.                                    |                                                                                                                                    | LEONARD A VIS<br>22973 HWY 44<br>CALDWELL ID 83605    |       |         |             |
|                                                                                                                                                        | MIDDLETON BUS, L.L.C.<br>LORRAINE A VIS<br>1423 ROCHESTER<br>CALDWELL ID 83605<br>USA |                                                                                                                                    | 3. <u>New</u> Registered Agent Signature:*            |       |         |             |
| 4. Limited Liability Companies: Enter Names and Addresses of at least one Member or Manager.                                                           |                                                                                       |                                                                                                                                    |                                                       |       |         |             |
| Office Held                                                                                                                                            | Name                                                                                  | Street or PO Address                                                                                                               | City                                                  | State | Country | Postal Code |
| MANAGER                                                                                                                                                | LEONARD A VIS                                                                         | 1423 ROCHESTER                                                                                                                     | CALDWELL                                              | ID    | USA     | 83605       |
| MANAGER                                                                                                                                                | LORRAINE A VIS                                                                        | 1423 ROCHESTER                                                                                                                     | CALDWELL                                              | ID    | USA     | 83605       |
| 5. Organized Under the Laws of:<br><br><b>ID</b><br><b>W 9025</b>                                                                                      |                                                                                       | 6. Annual Report must be signed.*<br>Signature: Debra L Vis<br>Name (type or print): Debra L Vis<br>Date: 04/25/2013<br>Title: Cpa |                                                       |       |         |             |
| Processed 04/25/2013                                                                                                                                   |                                                                                       | * Electronically provided signatures are accepted as original signatures.                                                          |                                                       |       |         |             |

63-33205 – Middleton Bus LLC – Field exam photographs



Place of use: office – shop building.



Interior of office – shop building.



Bus shop.



The well [point of diversion] is located on the north side of the office- shop building.