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JUN 12 2009

DEPARTMENT OF  
WATER RESOURCES

## A. GENERAL INFORMATION

Permit No. 63-31745

1. Owner: Mayfield Springs Water Co., Inc. Phone No. 208-855-0505

**Current Address:** c/o Snake River HOA Mgt, 7231 W. Franklin Rd., Boise, ID 83709

2. Accompanied by: \_\_\_\_\_ EXAM DATE: 6/26/2008

Address: \_\_\_\_\_ Phone No. \_\_\_\_\_

Relationship to Permit Holder: \_\_\_\_\_

3. Source: Ground Water tributary to \_\_\_\_\_

## B. OVERLAP REVIEW

1. Other water rights with the same place of use: 63-31881, 63-12260

2. Other water rights with the same point of diversion: 63-31881, 63-12260

### C. DIVERSION AND DELIVERY SYSTEM

**1. Point(s) of Diversion:**

| Ident No. | Gov't Lot | ¼ | ¼  | ¼  | Sec. | Twp. | Rge. | County | Method of Determination/Remarks |
|-----------|-----------|---|----|----|------|------|------|--------|---------------------------------|
|           | 4         |   | NW | NW | 3    | 1N   | 1E   | Ada    | Exam, 2006 aerial photo         |
|           | 4         |   | NW | NW | 3    | 1N   | 1E   | Ada    | Exam, 2006 aerial photo         |

**2. Place(s) of Use:**

Indicate Method of Determination Field Exam, 2006 Aerial Photography

[illegible]

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe id as applicable. **See attached photos**

Scale: 1" = \_\_\_\_\_

X Copy of USGS Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

X Aerial Photo Attached (required for irrigation of 10+ acres)

X Photo of Diversion and System Attached

4.

| Well or Diversion Identification No.* | Motor Make | Hp  | Motor Serial No. | Pump Make | Pump Serial No. or Discharge Size |
|---------------------------------------|------------|-----|------------------|-----------|-----------------------------------|
| North Well                            | Franklin   | 75  | Submersible      | Berkeley  | 8T60-550                          |
| South Well                            | Franklin   | 30  | Submersible      | Berkeley  | 6T-200                            |
| South Well                            | Franklin   | 125 | Submersible      | Berkeley  | 8T-900                            |

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

#### D. FLOW MEASUREMENTS

1.

| Measurement Equipment | Type      | Make       | Model No. | Serial No. | Size | Calib. Date |
|-----------------------|-----------|------------|-----------|------------|------|-------------|
| Pump curves           |           |            |           |            |      |             |
| Flowmeter             | Ultra Mag | McCrometer | MX04-W    | MX05-0091  | 4"   | 6/23/2005   |
|                       |           |            |           |            |      |             |
|                       |           |            |           |            |      |             |

## 2. Measurements:

|                                 | North Well<br>75 HP Pump | South Well<br>30 HP Pump 125 HP Pump |      |      |          |
|---------------------------------|--------------------------|--------------------------------------|------|------|----------|
| Pump Capacity (gpm)             | 530                      | 225                                  | 900  | 1655 | 3.69 cfs |
| Well Specific Capacity (gpm/ft) | 20                       | 30                                   | 30   |      |          |
| Static                          | 185                      | 185                                  | 185  |      |          |
| Drawdown                        | 27                       | 38                                   | 38   |      |          |
| Interference                    | 6                        | 3                                    | 3    |      |          |
| Discharge Pressure (ft)         | 150                      | 150                                  | 150  | 65   | psi      |
| Column and valve losses         | 15                       | 15                                   | 15   |      |          |
| Total Dynamic Head (ft)         | 383                      | 391                                  | 391  |      |          |
| Capacity (gpm)                  | 600                      | 245                                  | 1000 | 1845 | 4.11 cfs |
| Static (ft)                     | 185                      | 185                                  | 185  |      |          |
| Specific Capacity (gpm/ft)      | 20                       | 30                                   | 30   |      |          |
| Static                          | 185                      | 185                                  | 185  |      |          |
| Drawdown                        | 30                       | 42                                   | 42   |      |          |
| Interference                    | 6                        | 3                                    | 3    |      |          |
| Discharge Pressure (ft)         | 104                      | 104                                  | 104  | 45   | psi      |
| Column and valve losses         | 15                       | 15                                   | 15   |      |          |
| Total Dynamic Head (ft)         | 340                      | 348                                  | 348  |      |          |
| Capacity (gpm)                  | 645                      | 265                                  | 1100 | 2010 | 4.48 cfs |
| Static (ft)                     | 185                      | 185                                  | 185  |      |          |
| Specific Capacity (gpm/ft)      | 20                       | 30                                   | 30   |      |          |
| Static                          | 185                      | 185                                  | 185  |      |          |
| Drawdown                        | 32                       | 46                                   | 46   |      |          |
| Interference                    | 6                        | 3                                    | 3    |      |          |
| Discharge Pressure (ft)         | 46                       | 46                                   | 46   | 20   | psi      |
| Column and valve losses         | 15                       | 15                                   | 15   |      |          |
| Total Dynamic Head (ft)         | 284                      | 295                                  | 295  |      |          |

## E. NARRATIVE/REMARKS/COMMENTS

An 18-inch well is equipped with 30 hp and 125 hp submersible turbine pumps and a 12-inch well is equipped with a 75 hp submersible turbine pump for supply ground water to Arrowrock Ranch Subdivision Nos. 1 and 2 for domestic, landscape irrigation, and fire protection uses. Both wells are located on Lot 2, Block 1, of Subdivision No. 1. The above calculations show that the three pump system has more than enough capacity to provide the permit limit of 1,650 gpm (3.68 cfs) at high normal, low normal, and fire flow discharge pressures.

Subdivision Nos. 1 and 2 consist of 100 lots (50 each) that have been stubbed to the ground water system for internal and external domestic uses. The wells also provide irrigation water to up to 2 acres of common area in Subdivision No. 1 under license 63-31881 and up to 56 acres of common area and residential lot irrigation (greater than ½ acre) in Subdivisions 1 and 2 under permit 63-12260. The two wells have adequate capacity to meet the full potential domestic and irrigation demands under the 63-31745 (1.43 cfs), 63-12260 (1.12 cfs), and 63-31881 (0.04 cfs). The domestic place of use matches that listed in the permit conditions.

Have conditions of permit approval been met? X yes \_\_\_ no

## F. FLOW CALCULATIONS

Measured Method:

Pump curves: 65 psi: 3.69 cfs  
45 psi: 4.11 cfs  
20 psi: 4.48 cfs

Yes Additional Computation Sheets Attached  
(Pump Curves)

Limited to 3.68 cfs per permit

## G. 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:

Potential volume = 3.68 cfs x 365 days x 1.9835 af/cfs-day = 2,664.2 afa

Required volume (Domestic) = 100 homes x 1.2 afa/home = 120 afa  
(Fire Protection) = n/a

## H. RECOMMENDATIONS

### 1. Recommended Amounts

| Beneficial Use  | Period of Use |       | Rate of Diversion<br>Q (cfs) | Annual Volume<br>V (afa) |
|-----------------|---------------|-------|------------------------------|--------------------------|
|                 | From          | To    |                              |                          |
| Domestic        | 1/1           | 12/31 | 1.43                         | 120                      |
| Fire Protection | 1/1           | 12/31 | 2.25                         | n/a                      |
| Totals          |               |       | 3.68                         | 120                      |

### 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 Terry M. Scanlan, P.E., Certified Water Right Examiner 10-129 Date 6/1/09

Field Examiner's Signature 

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

SEAL



**ATTACHMENT A**

**PERMIT RECORD AND PROOF OF BENEFICIAL USE**

[Close](#)IDAHO DEPARTMENT OF WATER RESOURCES  
Water Permit Report

5/31/2009

WATER RIGHT NO. 63-31745

| Owner Type     | Name and Address                                                                                        |
|----------------|---------------------------------------------------------------------------------------------------------|
| Current Owner  | MAYFIELD SPRINGS WATER CO INC<br>C/O GREG JOHNSON<br>PO BOX 344<br>MERIDIAN, ID 83680<br>(208) 888-9946 |
| Original Owner | ARBOR RIDGE LLC<br>C/O GREG JOHNSON<br>PO BOX 344<br>MERIDIAN, ID 83680<br>(208) 888-9946               |

Priority Date: 07/14/2003  
Status: Active

| Source       | Tributary |
|--------------|-----------|
| GROUND WATER |           |

| Beneficial Use  | From  | To    | Diversion Rate | Volume |
|-----------------|-------|-------|----------------|--------|
| DOMESTIC        | 01/01 | 12/31 | 1.43 CFS       |        |
| FIRE PROTECTION | 01/01 | 12/31 | 2.25 CFS       |        |
| Total Diversion |       |       | 3.68 CFS       |        |

Location of Point(s) of Diversion:

GROUND WATER|NWNW Lt 4|Sec. 03|Township 01N|Range 01E|ADA County  
GROUND WATER|NWNW Lt 4|Sec. 03|Township 01N|Range 01E|ADA CountyDOMESTIC Use:  
Number of homes: 100

Place(s) of use:

Place of Use Legal Description: DOMESTIC ADA County

| Township | Range | Section | Lot | Tract | Acres | Lot | Tract | Acres | Lot | Tract | Acres | Lot | Tract | Acres |
|----------|-------|---------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|
| 01N      | 01E   | 3       | 3   | NENW  |       | 4   | NWNW  |       |     | SWNW  |       |     | SENE  |       |

Place of Use Legal Description: FIRE PROTECTION ADA County

| Township | Range | Section | Lot | Tract | Acres | Lot | Tract | Acres | Lot | Tract | Acres | Lot | Tract | Acres |
|----------|-------|---------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|
| 01N      | 01E   | 3       | 3   | NENW  |       | 4   | NWNW  |       |     | SWNW  |       |     | SENE  |       |

Conditions of Approval:

1. 046 Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
2. Water bearing zone to be appropriated is from 200 to 500 feet.
3. 26A Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.
4. X01 Domestic use is for 100 homes.
5. 070 The irrigation occurring under this domestic use shall not exceed 1/2 acre within each platted subdivision lot upon which a home has been constructed. This right does not provide for irrigation of common areas or for irrigation of lots upon which homes have not been constructed.
6. X59 Points of diversion are located within Lot 2, Arrowrock Ranch Subdivision Phase 1.
7. X60 Place of use is located within Lots 4-11, 13-23, 25-32, 35-42, 44-50 and 52-59, Arrowrock Ranch Subdivision Phase 1; Lots 58-65, 66-84, 87-94 and 96-110, Arrowrock Ranch Subdivision Phase 2.
8. 077 Water shall not be diverted for fire protection use under this right except to fight or repel an existing fire.
9. 01M After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
10. 121 The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.

Dates:  
 Proof Due Date: 09/01/2013  
 Proof Made Date:  
 Approved Date: 09/04/2003  
 Moratorium Expiration Date:  
 Enlargement Use Priority Date:  
 Enlargement Statute Priority Date:

**ATTACHMENT B**

**WELL LOGS AND ASSOCIATED PUMP CURVES**

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

Office Use Only  
Well ID No. 380529  
Inspected by \_\_\_\_\_  
Twp \_\_\_\_\_ Rge \_\_\_\_\_ Sec \_\_\_\_\_  
\_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4  
Lat : : Long : :

1. WELL TAG NO. D 00030888  
DRILLING PERMIT NO. 880739-809797  
Water Right or Injection Well No. 63-31745

2. OWNER:  
Name Arbor Ridge  
Address PO Box 344  
City Meridian State ID Zip 83680

## 3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 1 North ☒ or South ☐  
Rge. 1 East ☒ or West ☐  
Sec. 3 1/4 N/W 1/4 N/W 1/4  
Gov't Lot \_\_\_\_\_  
Lat: : : Long: : :  
Address of Well Site SE corner of Cloverdale & Mora  
Kuna intersection City \_\_\_\_\_  
(Give at least name of road - Distance to Road or Landmark)  
Lt. \_\_\_\_\_ Blk. \_\_\_\_\_ Sub. Name ArrowRock Sub

## 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 Material   | From | To  | Weight / Volume | Seal Placement Method |
|-----------------|------|-----|-----------------|-----------------------|
| bentonite chips | 0    | 180 | 17,500#         | poured                |
| bentonite grout | 180  | 335 | 3,000#          | pumped                |

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

## 8. CASING/LINER:

| Diameter | From | To  | Gauge | Material | Casing                   | Liner                    | Welded | Threaded                 |
|----------|------|-----|-------|----------|--------------------------|--------------------------|--------|--------------------------|
| 12"      | +2   | 360 | 375   | steel    | XX                       | <input type="checkbox"/> | XX     | <input type="checkbox"/> |
| 8"       | 338  | 360 | 322   | steel    | <input type="checkbox"/> | XX                       | XX     | <input type="checkbox"/> |

Length of Headpipe 22 Length of Tailpipe 0Packer ☒ Y ☐ N Type figure K 12" belled to 8"

## 9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method \_\_\_\_\_

Screen Type & Method of Installation Johnson stainless y wire

| From | To  | Slot Size | Number | Diameter | Material | Casing                   | Liner                    |
|------|-----|-----------|--------|----------|----------|--------------------------|--------------------------|
| 360  | 400 | 40        |        | 8"       |          | <input type="checkbox"/> | <input type="checkbox"/> |

## 10. FILTER PACK

| Filter Material | From | To  | Weight / Volume | Placement Method |
|-----------------|------|-----|-----------------|------------------|
| 6-9 sand        | 335  | 400 | 8,500#          | poured           |

## 11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

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

## 12. WELL TESTS:

☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

| Yield gal./min. | Drawdown | Pumping Level | Time     |
|-----------------|----------|---------------|----------|
| 350             | 14.33    | 200.67        | 30 min   |
| 800             | 38.88    | 225.75        | 1 hr     |
| 1,000           | 52.79    | 239.1         | 6 1/2 hr |

Water Temp. \_\_\_\_\_ Bottom hole temp. \_\_\_\_\_

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

Depth first Water Encounter \_\_\_\_\_

## 13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

| Bore Dia. | From | To  | Remarks: Lithology, Water Quality & Temperature | Y | N |
|-----------|------|-----|-------------------------------------------------|---|---|
| 19        | 0    | 4   | clay topsoil                                    |   | X |
|           | 4    | 19  | basalt                                          |   | X |
|           | 19   | 50  | broken basalt & clay                            |   | X |
|           | 50   | 65  | basalt                                          |   | X |
|           | 65   | 100 | red & black broken basalt                       | X |   |
|           | 100  | 185 | hard basalt                                     |   | X |
|           | 185  | 205 | broken basalt                                   | X |   |
|           | 205  | 215 | basalt                                          |   | X |
|           | 215  | 235 | cemented gravel                                 | X |   |
|           | 235  | 250 | brown clay                                      |   | X |
|           | 250  | 280 | gravel & sand                                   | X |   |
|           | 280  | 315 | coarse sand, small gravel                       | X |   |
|           | 315  | 337 | gravel & sand                                   | X |   |
|           | 337  | 400 | coarse sand & gravel                            | X |   |

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DEC 01 2005

WATER RESOURCES  
WESTERN REGIONCompleted Depth 400 (Measurable)Date: Started 9/10/05 Completed 11/10/05

## 14. DRILLER'S CERTIFICATION

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

Company Name Stevens & Sons Firm No. 153Principal Driller Rob Stevens Date 11/27/05and Driller or Operator II Neil Stevens Date \_\_\_\_\_

Operator I \_\_\_\_\_ Date \_\_\_\_\_

Principal Driller and Rig Operator Required.  
Operator I must have signature of Driller/Operator II.

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

1. WELL TAG NO. D 00030889  
DRILLING PERMIT NO. 880740-809799  
Water Right or Injection Well No. 63-31745

2. OWNER:  
Name Arbor Ridge  
Address PO Box 344  
City Meridian State ID     Zip 83680

3. LOCATION OF WELL by legal description:  
You must provide address or Lot, Blk, Sub. or Directions to well.  
Twp. 1 North ☒ or South ☐  
Rge. 1 East ☒ or West ☐  
Sec. 3 1/4 N/W 1/4 N/W 1/4  
Gov't Lot     County Ada  
Lat:     :     :     Long:     :     :      
Address of Well Site SE corner of Cloverdale & Mora  
Kuna Rds City Kuna  
(Give or describe to Road or Landmark)  
Lt.     Blk.     Sub. Name Arrowrock Ranch Sub  
well #2

4. USE:  
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation  
☐ Thermal ☐ Injection ☐ Other fire protection

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

6. DRILL METHOD:  
☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other reverse rotary

7. SEALING PROCEDURES

| Seal Material                                                                                                  | From | To  | Weight / Volume | Seal Placement Method |
|----------------------------------------------------------------------------------------------------------------|------|-----|-----------------|-----------------------|
| bentonite chips                                                                                                | 0    | 180 | 24000#          | poured                |
| bentonite grout                                                                                                | 180  | 320 | 4000#           | pumped                |
| Was drive shoe used? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Shoe Depth(s) <u>   </u> |      |     |                 |                       |
| Was drive shoe seal tested? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N How? <u>   </u>   |      |     |                 |                       |

8. CASING/LINER:

| Diameter | From | To  | Gauge | Material | Casing                              | Liner                               | Welded                              | Threaded                 |
|----------|------|-----|-------|----------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 18"      | +4   | 350 | 375   | steel    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| 10"      | 329  | 350 | 365   | steel    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Length of Headpipe 21' Length of Tailpipe      
Packer ☒ Y ☐ N Type slip pkr 5'6" long, 12" pipe

9. PERFORATIONS/SCREENS PACKER TYPE

| From | To  | Slot Size | Number | Diameter | Material | Casing                   | Liner                               |
|------|-----|-----------|--------|----------|----------|--------------------------|-------------------------------------|
| 350  | 431 | 40        |        | 10       | stnls    | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

10. FILTER PACK

| Filter Material | From | To | Weight / Volume | Placement Method |
|-----------------|------|----|-----------------|------------------|
| #6-9 sand       |      |    | 4500#           | poured           |

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

809799  
Office Use Only  
Well ID No. 380531  
Inspected by      
Twp     Rge     Sec      
    1/4     1/4     1/4  
Lat:     :     :     Long:     :     :    

12. WELL TESTS:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

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

Water Temp.     Bottom hole temp.    

Water Quality test or comments:    

Depth first Water Encounter    

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

| Bore Dia. | From | To  | Remarks: Lithology, Water Quality & Temperature | Water | Y | N |
|-----------|------|-----|-------------------------------------------------|-------|---|---|
| 24        | 0    | 3   | clay topsoil                                    |       |   | X |
|           | 3    | 17  | basalt, solid                                   |       |   | X |
|           | 17   | 46  | broken basalt & clay                            |       |   | X |
|           | 46   | 65  | basalt, solid                                   |       |   | X |
|           | 65   | 90  | red & black broken basalt                       |       |   | X |
|           | 90   | 120 | hard black basalt                               |       |   | X |
|           | 120  | 200 | basalt                                          |       |   | X |
|           | 200  | 205 | brown clay                                      |       |   | X |
|           | 205  | 235 | cemented gravel                                 | X     |   |   |
|           | 235  | 250 | brown clay                                      |       |   | X |
|           | 250  | 280 | gravel & sand                                   | X     |   |   |
|           | 280  | 315 | coarse sand, small gravel                       | X     |   |   |
|           | 315  | 337 | gravel & sand                                   | X     |   |   |
|           | 337  | 408 | coarse sand & gravel                            | X     |   |   |
|           | 408  | 431 | gravel & sand                                   | X     |   |   |

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JUN 14 2005

WATER RESOURCES  
WESTERN REGION

Completed Depth 431 (Measurable)  
Date: Started 12/21/04 Completed 5/5/05

14. DRILLER'S CERTIFICATION

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

Company Name Stevens & Sons Firm No. 153

Principal Driller     Date 5/10/05

and Driller or Operator II     Date    

Operator I     Date    

Principal Driller and Rig Operator Required.  
Operator I must have signature of Driller/Operator II.

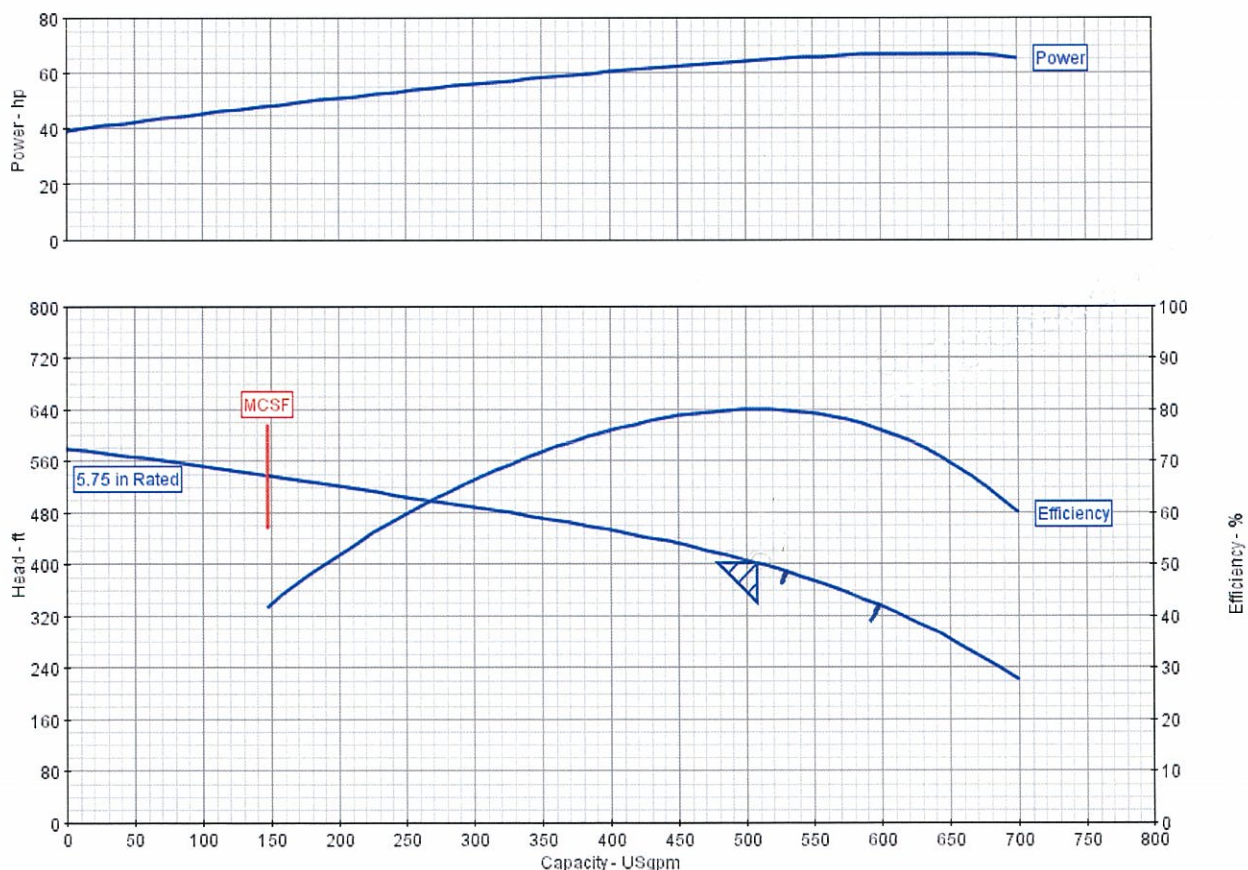
FORWARD WHITE COPY TO WATER RESOURCES

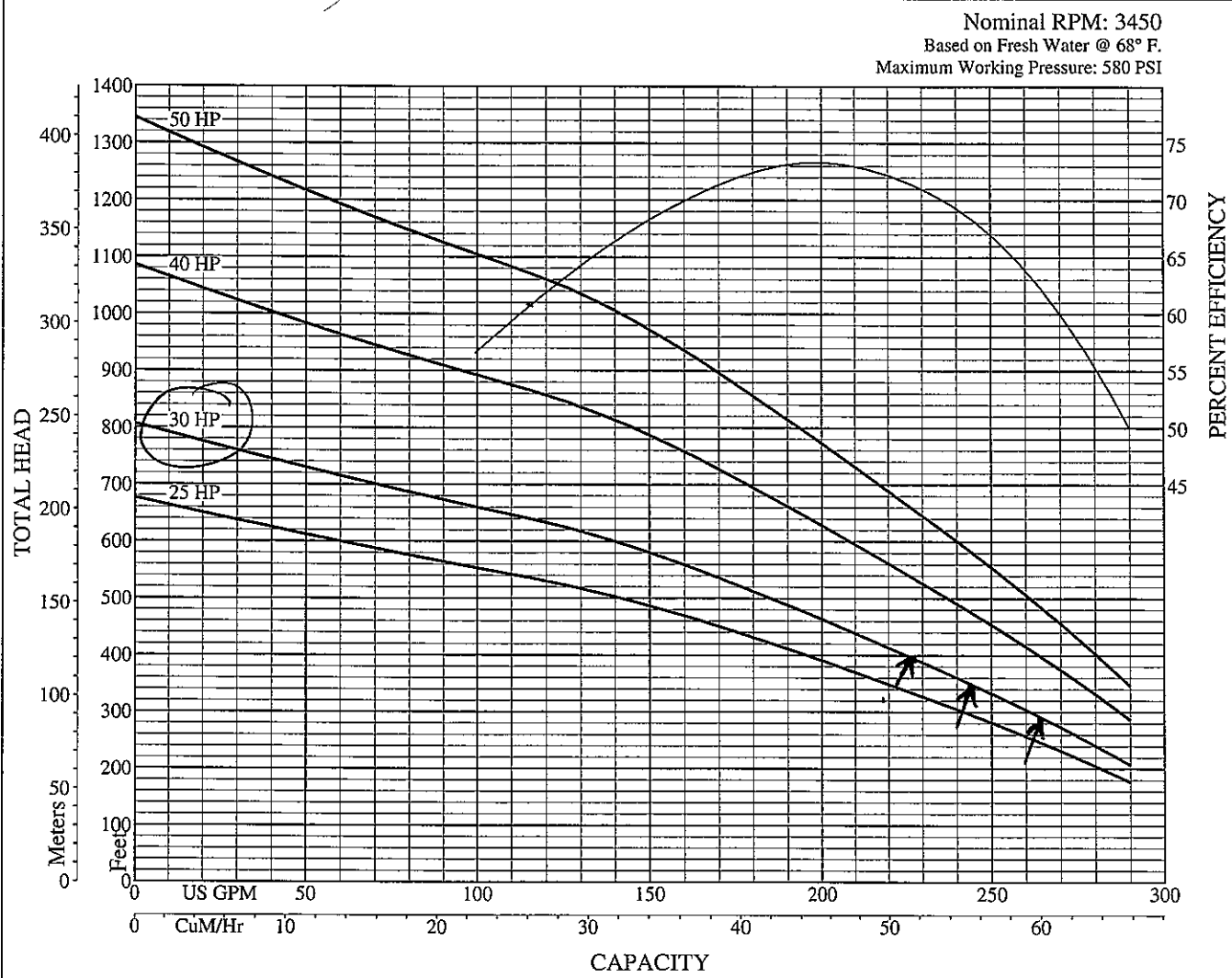
# Pump Performance Datasheet

|                    |     |                       |                           |
|--------------------|-----|-----------------------|---------------------------|
| Customer           | :   | Quote number          | :                         |
| Customer reference | :   | Pump size             | : 8T60-550                |
| Item number        | :   | Stages                | : 5                       |
| Service            | :   | Based on curve number | : 8T60-550(5@5.75x5.0897) |
| Quantity of pumps  | : 1 | Date last saved       | : 14 Feb 2006             |

| Operating Conditions          |                     | Liquid                        |                    |
|-------------------------------|---------------------|-------------------------------|--------------------|
| Flow, rated                   | : 508.5 USgpm       | Liquid type                   | : --Water          |
| Head, rated (requested)       | : 400.3 ft          | Additional liquid description | :                  |
| Head, rated (actual)          | : 400.3 ft          | Solids diameter, max          | : 0.00 in          |
| Suction pressure, rated / max | : 0.00 / 0.00 psi.g | Temperature, max              | : 68.00 deg F      |
| NPSH available, rated         | : Ample             | Fluid density, rated / max    | : 0.998 / 0.998 SG |
| Frequency                     | : 60 Hz             | Viscosity, rated              | : 1.00 cP          |

| Performance                             |                      | Material                         |                               |
|-----------------------------------------|----------------------|----------------------------------|-------------------------------|
| Pump speed, rated                       | : 3,450 rpm          | Material requested               | : Not specified               |
| Impeller diameter, rated                | : 5.75 in            | Material selected                | : Not specified               |
| Impeller diameter, maximum              | : 5.75 in            | Pressure Data                    |                               |
| Impeller diameter, minimum              | : 5.75 in            | Maximum working pressure         | : 250.4 psi.g                 |
| Efficiency                              | : 79.84 %            | Working pressure limit           | : 490.0 psi.g                 |
| NPSH required / margin required         | : N/A / 0.00         | Suction pressure limit           | : N/A                         |
| Specific speed / Suction specific speed | : N/A / 0 US units   | Hydrostatic test pressure        | : N/A                         |
| MCSF                                    | : 147.0 USgpm        | Driver & Power Data              |                               |
| Head, maximum, rated diameter           | : 578.6 ft           | Driver sizing specification      | : Rated power                 |
| Head rise to shutoff                    | : N/A %              | Margin over specification        | : 0.00 %                      |
| Flow, best eff. point (BEP)             | : 508.5 USgpm        | Service factor                   | : 1.00 (used)                 |
| Flow ratio (rated / BEP)                | : 100.00 %           | Power, hydraulic                 | : 51.32 hp                    |
| Diameter ratio (rated / max)            | : 100.00 %           | Power, rated                     | : 64.27 hp                    |
| Head ratio (rated dia / max dia)        | : 100.00 %           | Power, maximum, rated diameter   | : 66.72 hp                    |
| Viscous coefficients (CQ / CH / CE)     | : 1.00 / 1.00 / 1.00 | Minimum recommended motor rating | : 60.00 hp / 44.74 kW (Fixed) |
| Selection status                        | : Acceptable         |                                  |                               |





## OUTLINE DIMENSIONS / WEIGHTS

| HP | stages | Motor size | P length | M* length | MD* dia. | Mtr. wt. | Pump wt. |
|----|--------|------------|----------|-----------|----------|----------|----------|
| 25 | 10     | 6"         | 63.98    | 33.13     | 5.38     | 148      | 233      |
| 30 | 12     | 6"         | 73.98    | 35.69     | 5.38     | 162      | 272      |
| 40 | 16     | 6"         | 93.98    | 40.81     | 5.38     | 195      | 350      |
| 50 | 20     | 6"         | 113.98   | 57.83     | 5.38     | 310      | 429      |

Note: dimensions = inches; weight = U.S. lbs.

M\* Maximum length (Franklin Electric Motor)

MD\* Motor diameter (Franklin Electric Motor)

## SPECIFICATIONS

|                                                        |              |
|--------------------------------------------------------|--------------|
| Minimum Well I.D.                                      | 6.0 Inches   |
| Minimum Submergence @ BEP (above inlet)                | 10.0 Feet    |
| Capacity Range                                         | 95 - 290 GPM |
| Discharge                                              | 3" F NPT     |
| See manufacturer's data for motor cooling requirements |              |

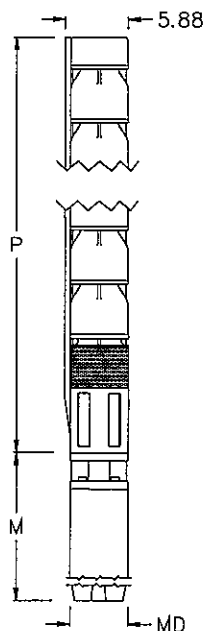
SUPERSEDES

All Previous

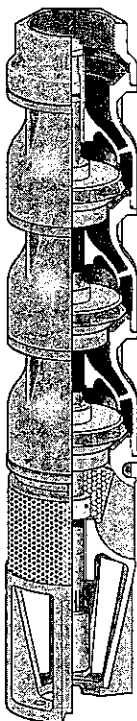
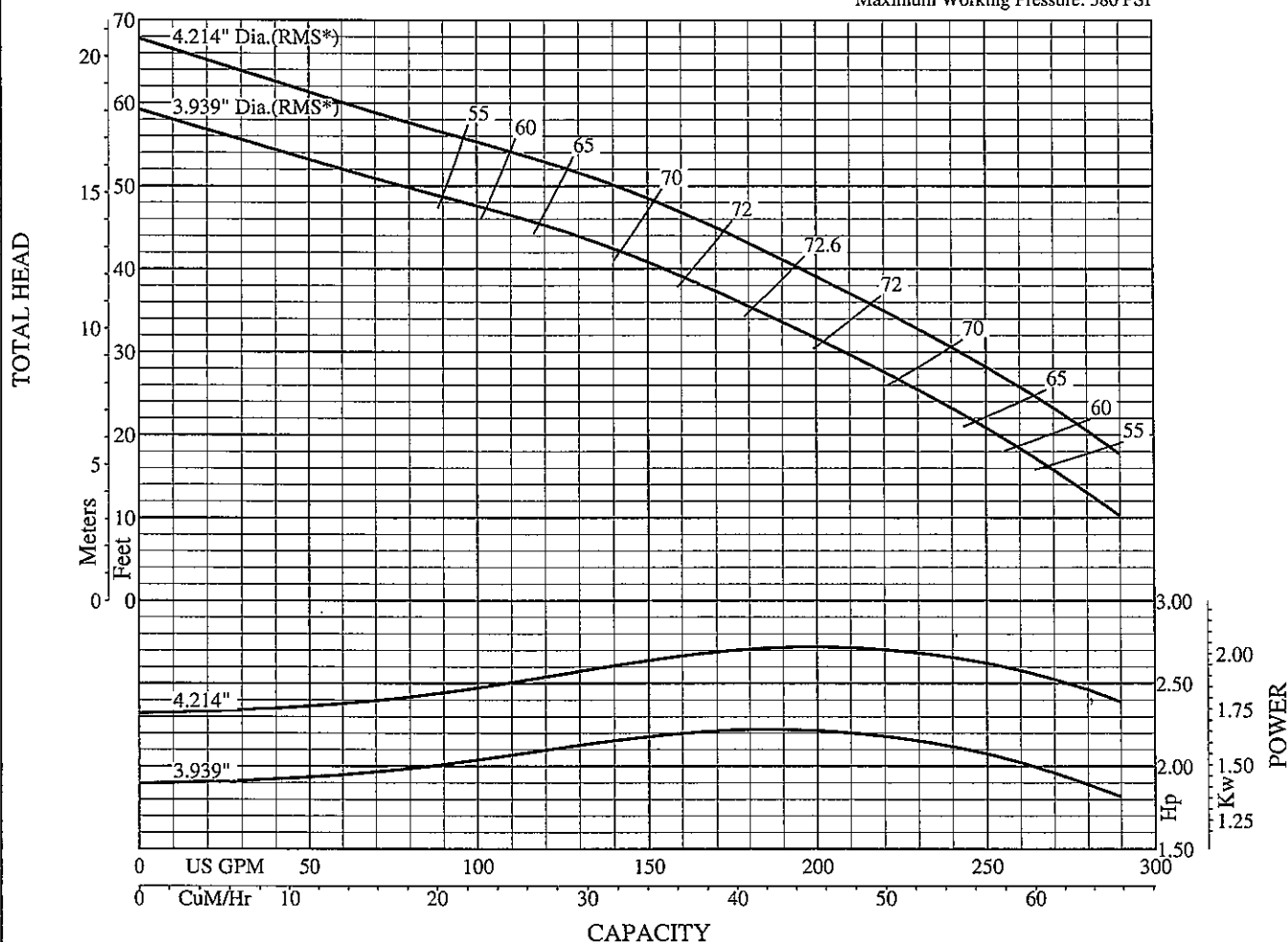
Date 04/15/96

Section **ST**

Page 13.03



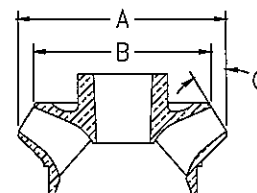
Nominal RPM: 3450  
Based on Fresh Water @ 68° F.  
Maximum Working Pressure: 580 PSI



### IMPELLER DIMENSIONS

| RMS* Diameter | A Diameter | B Diameter | C Angle |
|---------------|------------|------------|---------|
| 4.214         | 4.523      | 3.880      | 32°     |
| 3.939         | 4.268      | 3.580      | 32°     |

\* Root-Mean-Square



### MATERIALS OF CONSTRUCTION

| Part Name                      | Common Material Name | Material Spec Number   |
|--------------------------------|----------------------|------------------------|
| Discharge Adapter              | Cast Iron            | ASTM A48 Class 30      |
| Top Bowl                       | Cast Iron            | ASTM A48 Class 30      |
| Intermediate Bowl              | Cast Iron            | ASTM A48 Class 30      |
| Bearings, Top and Suction Case | Bronze               | ASTM B144-3B (SAE 660) |
| Impeller                       | Silicon Bronze       | ASTM B584 UNS C87500   |
| Pump Shaft                     | Stainless Steel      | AISI 416               |
| Impeller Collets               | Steel                | 1226                   |
| Suction Bracket                | Cast Iron            | ASTM A48 Class 30      |
| Bowl Bearing                   | Rubber               | Neoprene               |
| Sand Cap                       | Bronze               | ASTM B144-3B (SAE 660) |
| Strainer                       | Stainless Steel      | AISI 302 UNS S30200    |
| Cable Guard                    | Stainless Steel      | AISI 302 UNS S30200    |
| Shaft Coupling                 | Stainless Steel      | AISI 416 UNS S41600    |

Note: Efficiency based on average staging

SUPERSEDES

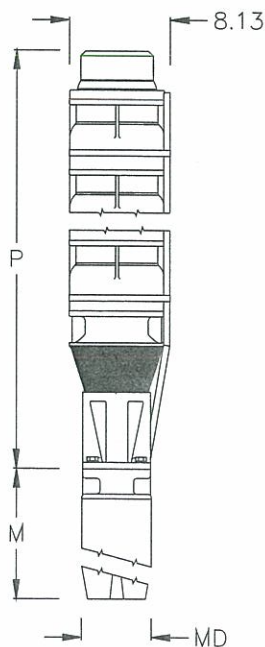
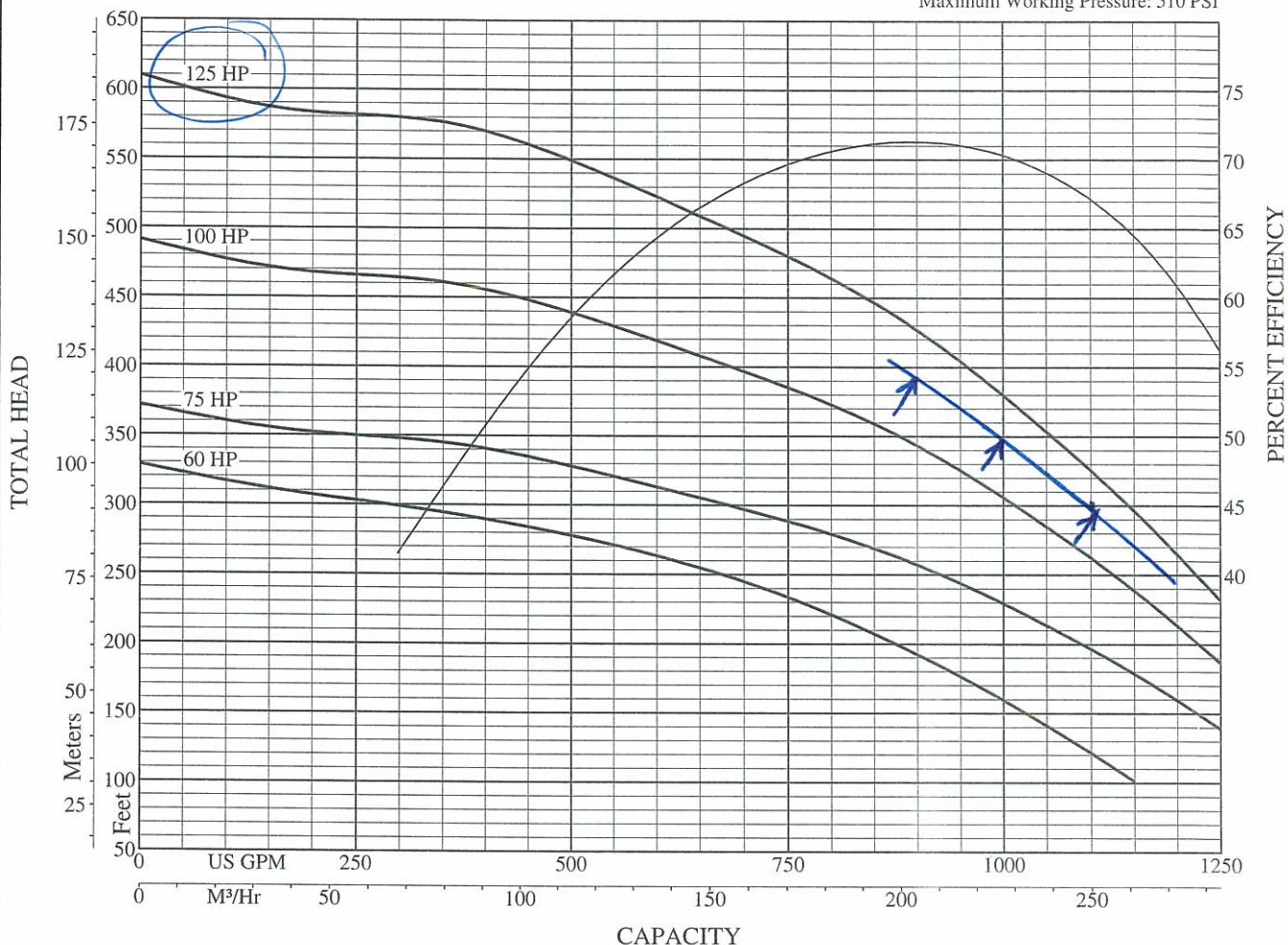
All Previous

Date **04/15/96**

Section **ST**

Page **13.04**

Nominal RPM: 3450  
Based on Fresh Water @ 68° F.  
Maximum Working Pressure: 510 PSI



**OUTLINE DIMENSIONS / WEIGHTS**

| HP  | stages | Motor size | P length | M* length | MD* dia. | Mtr. wt. | Pump wt. |
|-----|--------|------------|----------|-----------|----------|----------|----------|
| 60  | 3      | 6"         | 43.00    | 61.30     | 5.44     | 335      | 145      |
| 75  | 3      | 8"         | 43.75    | 54.90     | 7.50     | 433      | 148      |
| 100 | 4      | 8"         | 50.50    | 58.90     | 7.50     | 478      | 177      |
| 125 | 5      | 8"         | 57.25    | 68.80     | 7.70     | 709      | 206      |

Note: dimensions = inches; weight = U.S. lbs.

M\* Maximum length (Franklin Electric Motor)

MD\* Motor diameter (Franklin Electric Motor)

**SPECIFICATIONS**

|                                                        |                |
|--------------------------------------------------------|----------------|
| Minimum Well I.D.                                      | 10.0 Inches    |
| Minimum Submergence @ BEP (above inlet)                | 15.0 Feet      |
| Capacity Range                                         | 227 – 1300 GPM |
| Discharge                                              | 6" F NPT       |
| See manufacturer's data for motor cooling requirements |                |

**SUPERSEDES**

All Previous

Date **04/15/98**

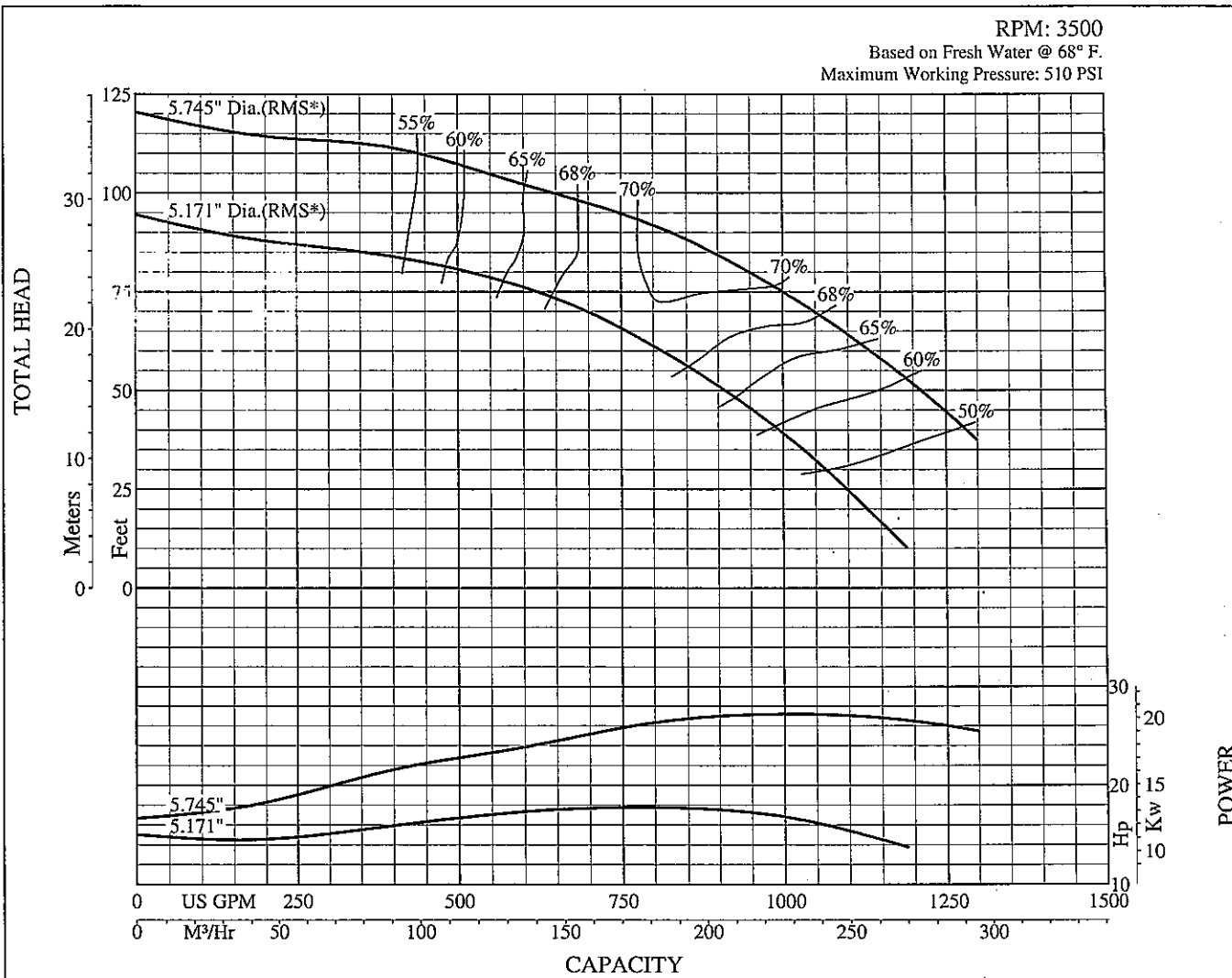
Section **ST**

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# SUBMERSIBLE TURBINE SINGLE STAGE PERFORMANCE

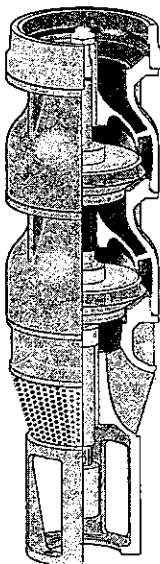
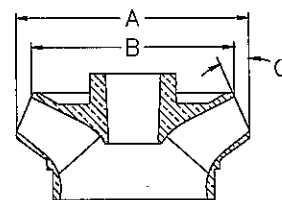
## 8T-900



### IMPELLER DIMENSIONS

| RMS* Diameter | A Diameter | B Diameter | C Angle |
|---------------|------------|------------|---------|
| 5.745         | 6.149      | 5.310      | 25°     |
| 5.171         | 5.635      | 4.661      | 25°     |

\* Root-Mean-Square



### MATERIALS OF CONSTRUCTION

| Part Name                      | Common Material Name | Material Spec Number   |
|--------------------------------|----------------------|------------------------|
| Discharge Adapter              | Cast Iron            | ASTM A48 Class 30      |
| Top Bowl                       | Cast Iron            | ASTM A48 Class 30      |
| Intermediate Bowl              | Cast Iron            | ASTM A48 Class 30      |
| Bearings, Top and Suction Case | Bronze               | ASTM B144-3B (SAE 660) |
| Impeller                       | Silicon Bronze       | ASTM B584 UNS C87500   |
| Pump Shaft                     | Stainless Steel      | AISI 416               |
| Impeller Collets               | Steel                | 1226                   |
| Suction Bracket                | Cast Iron            | ASTM A48 Class 30      |
| Bowl Bearing                   | Rubber               | Neoprene               |
| Sand Cap                       | Bronze               | ASTM B144-3B (SAE 660) |
| Strainer                       | Stainless Steel      | AISI 302 UNS S30200    |
| Cable Guard                    | Stainless Steel      | AISI 302 UNS S30200    |
| Shaft Coupling                 | Stainless Steel      | AISI 416 UNS S41600    |

SUPERSEDES

New

Date 04/15/98

Section **ST**

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Note: Efficiency based on average staging

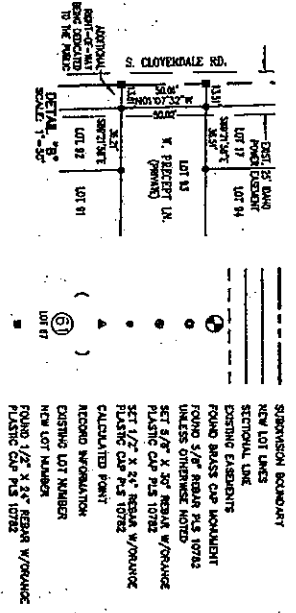
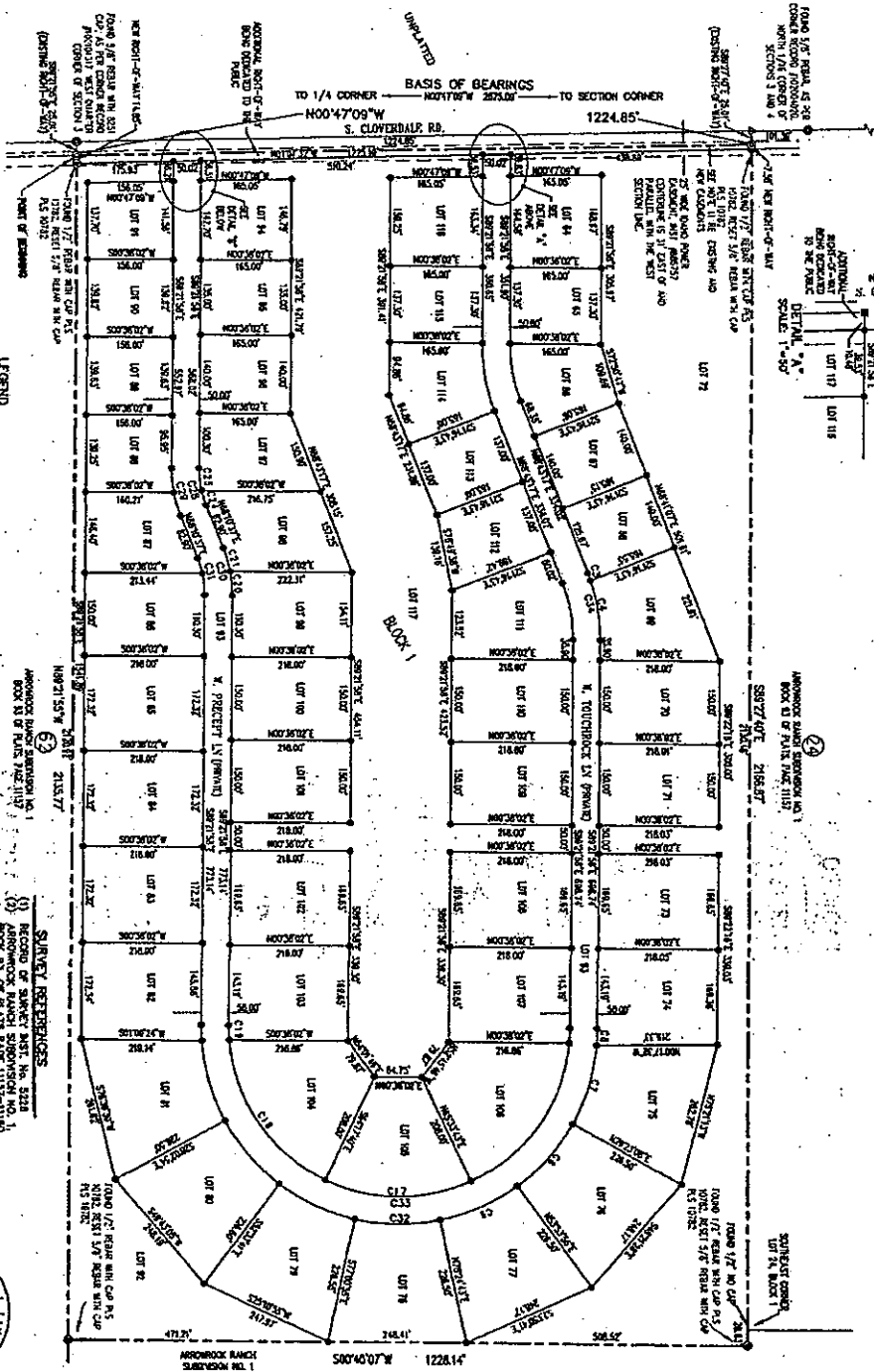
**ATTACHMENT C**

**PLAT MAPS, TOPO MAP AND 2006 AERIAL PHOTO**



# ARROWROCK RANCH SUBDIVISION NO. 2

A RESUBDIVISION OF LOT 61, BLOCK 1, OF ARROWROCK RANCH SUBDIVISION NO. 1  
 WITHIN THE S 1/2 OF THE NW 1/4 OF SECTION 3,  
 T.1 N., R.1 E., B.M., ADA COUNTY, IDAHO  
 2007



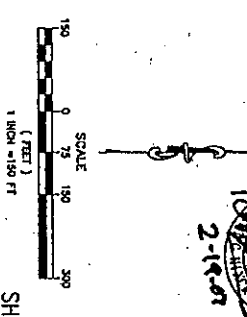
## CENTRAL DISTRICT HEALTH DEPARTMENT

SAFETY RESTRICTIONS AS REQUIRED BY IDAHO CODE, TITLE 50,  
 CHAPTER 13 HAVE NOT BEEN SANITIZED AND ARE IN FORCE FOR  
 THE FOLLOWING LOTS:

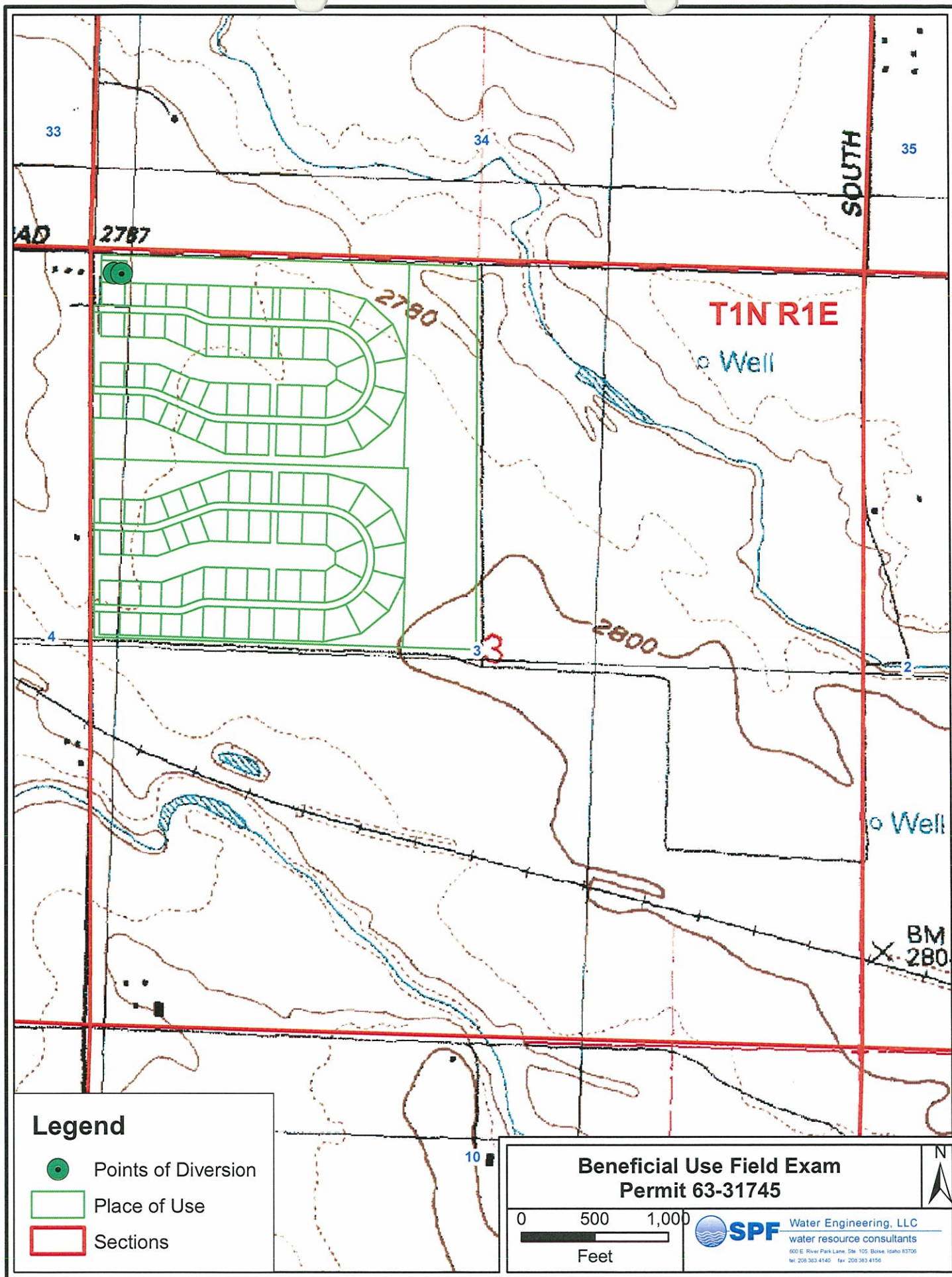
BLOCK 1 LOTS 64-117

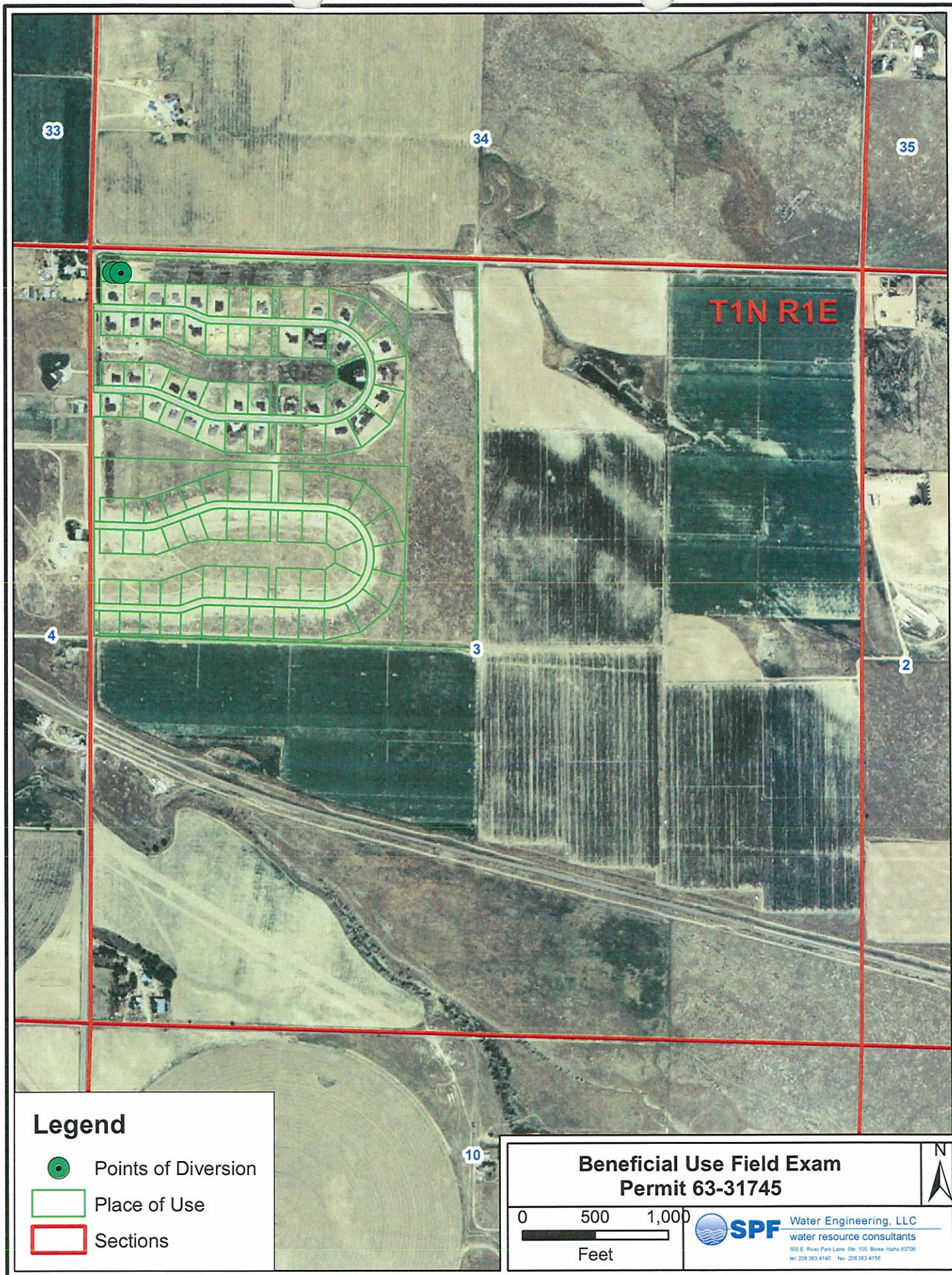
NO OWNER SHALL CONSTRUCT ANY BUILDING, DWELLING, OR  
 SHELTER WHICH NECESSitates THE SUPPLYING OF WATER OR  
 SEWAGE FACILITIES FOR PERSONS USING SUCH PERMITS UNIT.  
 SANITARY RESTRICTIONS REQUIREMENTS ARE SANITIZED AND LIFTED.

BY: *[Signature]*  
 CENTRAL DISTRICT HEALTH DEPARTMENT  
 DATE: 2/26/07



| DATE | LOT | OWNER          | DETAILED | OWNER          | DETAILED |
|------|-----|----------------|----------|----------------|----------|
| 01   | 100 | DAVID L. SMITH | 100      | DAVID L. SMITH | 100      |
| 02   | 101 | DAVID L. SMITH | 101      | DAVID L. SMITH | 101      |
| 03   | 102 | DAVID L. SMITH | 102      | DAVID L. SMITH | 102      |
| 04   | 103 | DAVID L. SMITH | 103      | DAVID L. SMITH | 103      |
| 05   | 104 | DAVID L. SMITH | 104      | DAVID L. SMITH | 104      |
| 06   | 105 | DAVID L. SMITH | 105      | DAVID L. SMITH | 105      |
| 07   | 106 | DAVID L. SMITH | 106      | DAVID L. SMITH | 106      |
| 08   | 107 | DAVID L. SMITH | 107      | DAVID L. SMITH | 107      |
| 09   | 108 | DAVID L. SMITH | 108      | DAVID L. SMITH | 108      |
| 10   | 109 | DAVID L. SMITH | 109      | DAVID L. SMITH | 109      |
| 11   | 110 | DAVID L. SMITH | 110      | DAVID L. SMITH | 110      |
| 12   | 111 | DAVID L. SMITH | 111      | DAVID L. SMITH | 111      |
| 13   | 112 | DAVID L. SMITH | 112      | DAVID L. SMITH | 112      |
| 14   | 113 | DAVID L. SMITH | 113      | DAVID L. SMITH | 113      |
| 15   | 114 | DAVID L. SMITH | 114      | DAVID L. SMITH | 114      |
| 16   | 115 | DAVID L. SMITH | 115      | DAVID L. SMITH | 115      |
| 17   | 116 | DAVID L. SMITH | 116      | DAVID L. SMITH | 116      |
| 18   | 117 | DAVID L. SMITH | 117      | DAVID L. SMITH | 117      |
| 19   | 118 | DAVID L. SMITH | 118      | DAVID L. SMITH | 118      |
| 20   | 119 | DAVID L. SMITH | 119      | DAVID L. SMITH | 119      |
| 21   | 120 | DAVID L. SMITH | 120      | DAVID L. SMITH | 120      |
| 22   | 121 | DAVID L. SMITH | 121      | DAVID L. SMITH | 121      |
| 23   | 122 | DAVID L. SMITH | 122      | DAVID L. SMITH | 122      |
| 24   | 123 | DAVID L. SMITH | 123      | DAVID L. SMITH | 123      |
| 25   | 124 | DAVID L. SMITH | 124      | DAVID L. SMITH | 124      |
| 26   | 125 | DAVID L. SMITH | 125      | DAVID L. SMITH | 125      |
| 27   | 126 | DAVID L. SMITH | 126      | DAVID L. SMITH | 126      |
| 28   | 127 | DAVID L. SMITH | 127      | DAVID L. SMITH | 127      |
| 29   | 128 | DAVID L. SMITH | 128      | DAVID L. SMITH | 128      |
| 30   | 129 | DAVID L. SMITH | 129      | DAVID L. SMITH | 129      |
| 31   | 130 | DAVID L. SMITH | 130      | DAVID L. SMITH | 130      |
| 32   | 131 | DAVID L. SMITH | 131      | DAVID L. SMITH | 131      |
| 33   | 132 | DAVID L. SMITH | 132      | DAVID L. SMITH | 132      |
| 34   | 133 | DAVID L. SMITH | 133      | DAVID L. SMITH | 133      |
| 35   | 134 | DAVID L. SMITH | 134      | DAVID L. SMITH | 134      |
| 36   | 135 | DAVID L. SMITH | 135      | DAVID L. SMITH | 135      |
| 37   | 136 | DAVID L. SMITH | 136      | DAVID L. SMITH | 136      |
| 38   | 137 | DAVID L. SMITH | 137      | DAVID L. SMITH | 137      |
| 39   | 138 | DAVID L. SMITH | 138      | DAVID L. SMITH | 138      |
| 40   | 139 | DAVID L. SMITH | 139      | DAVID L. SMITH | 139      |
| 41   | 140 | DAVID L. SMITH | 140      | DAVID L. SMITH | 140      |
| 42   | 141 | DAVID L. SMITH | 141      | DAVID L. SMITH | 141      |
| 43   | 142 | DAVID L. SMITH | 142      | DAVID L. SMITH | 142      |
| 44   | 143 | DAVID L. SMITH | 143      | DAVID L. SMITH | 143      |
| 45   | 144 | DAVID L. SMITH | 144      | DAVID L. SMITH | 144      |
| 46   | 145 | DAVID L. SMITH | 145      | DAVID L. SMITH | 145      |
| 47   | 146 | DAVID L. SMITH | 146      | DAVID L. SMITH | 146      |
| 48   | 147 | DAVID L. SMITH | 147      | DAVID L. SMITH | 147      |
| 49   | 148 | DAVID L. SMITH | 148      | DAVID L. SMITH | 148      |
| 50   | 149 | DAVID L. SMITH | 149      | DAVID L. SMITH | 149      |
| 51   | 150 | DAVID L. SMITH | 150      | DAVID L. SMITH | 150      |
| 52   | 151 | DAVID L. SMITH | 151      | DAVID L. SMITH | 151      |
| 53   | 152 | DAVID L. SMITH | 152      | DAVID L. SMITH | 152      |
| 54   | 153 | DAVID L. SMITH | 153      | DAVID L. SMITH | 153      |
| 55   | 154 | DAVID L. SMITH | 154      | DAVID L. SMITH | 154      |
| 56   | 155 | DAVID L. SMITH | 155      | DAVID L. SMITH | 155      |
| 57   | 156 | DAVID L. SMITH | 156      | DAVID L. SMITH | 156      |
| 58   | 157 | DAVID L. SMITH | 157      | DAVID L. SMITH | 157      |
| 59   | 158 | DAVID L. SMITH | 158      | DAVID L. SMITH | 158      |
| 60   | 159 | DAVID L. SMITH | 159      | DAVID L. SMITH | 159      |
| 61   | 160 | DAVID L. SMITH | 160      | DAVID L. SMITH | 160      |
| 62   | 161 | DAVID L. SMITH | 161      | DAVID L. SMITH | 161      |
| 63   | 162 | DAVID L. SMITH | 162      | DAVID L. SMITH | 162      |
| 64   | 163 | DAVID L. SMITH | 163      | DAVID L. SMITH | 163      |
| 65   | 164 | DAVID L. SMITH | 164      | DAVID L. SMITH | 164      |
| 66   | 165 | DAVID L. SMITH | 165      | DAVID L. SMITH | 165      |
| 67   | 166 | DAVID L. SMITH | 166      | DAVID L. SMITH | 166      |
| 68   | 167 | DAVID L. SMITH | 167      | DAVID L. SMITH | 167      |
| 69   | 168 | DAVID L. SMITH | 168      | DAVID L. SMITH | 168      |
| 70   | 169 | DAVID L. SMITH | 169      | DAVID L. SMITH | 169      |
| 71   | 170 | DAVID L. SMITH | 170      | DAVID L. SMITH | 170      |
| 72   | 171 | DAVID L. SMITH | 171      | DAVID L. SMITH | 171      |
| 73   | 172 | DAVID L. SMITH | 172      | DAVID L. SMITH | 172      |
| 74   | 173 | DAVID L. SMITH | 173      | DAVID L. SMITH | 173      |
| 75   | 174 | DAVID L. SMITH | 174      | DAVID L. SMITH | 174      |
| 76   | 175 | DAVID L. SMITH | 175      | DAVID L. SMITH | 175      |
| 77   | 176 | DAVID L. SMITH | 176      | DAVID L. SMITH | 176      |
| 78   | 177 | DAVID L. SMITH | 177      | DAVID L. SMITH | 177      |
| 79   | 178 | DAVID L. SMITH | 178      | DAVID L. SMITH | 178      |
| 80   | 179 | DAVID L. SMITH | 179      | DAVID L. SMITH | 179      |
| 81   | 180 | DAVID L. SMITH | 180      | DAVID L. SMITH | 180      |
| 82   | 181 | DAVID L. SMITH | 181      | DAVID L. SMITH | 181      |
| 83   | 182 | DAVID L. SMITH | 182      | DAVID L. SMITH | 182      |
| 84   | 183 | DAVID L. SMITH | 183      | DAVID L. SMITH | 183      |
| 85   | 184 | DAVID L. SMITH | 184      | DAVID L. SMITH | 184      |
| 86   | 185 | DAVID L. SMITH | 185      | DAVID L. SMITH | 185      |
| 87   | 186 | DAVID L. SMITH | 186      | DAVID L. SMITH | 186      |
| 88   | 187 | DAVID L. SMITH | 187      | DAVID L. SMITH | 187      |
| 89   | 188 | DAVID L. SMITH | 188      | DAVID L. SMITH | 188      |
| 90   | 189 | DAVID L. SMITH | 189      | DAVID L. SMITH | 189      |
| 91   | 190 | DAVID L. SMITH | 190      | DAVID L. SMITH | 190      |
| 92   | 191 | DAVID L. SMITH | 191      | DAVID L. SMITH | 191      |
| 93   | 192 | DAVID L. SMITH | 192      | DAVID L. SMITH | 192      |
| 94   | 193 | DAVID L. SMITH | 193      | DAVID L. SMITH | 193      |
| 95   | 194 | DAVID L. SMITH | 194      | DAVID L. SMITH | 194      |
| 96   | 195 | DAVID L. SMITH | 195      | DAVID L. SMITH | 195      |
| 97   | 196 | DAVID L. SMITH | 196      | DAVID L. SMITH | 196      |
| 98   | 197 | DAVID L. SMITH | 197      | DAVID L. SMITH | 197      |
| 99   | 198 | DAVID L. SMITH | 198      | DAVID L. SMITH | 198      |
| 100  | 199 | DAVID L. SMITH | 199      | DAVID L. SMITH | 199      |
| 101  | 200 | DAVID L. SMITH | 200      | DAVID L. SMITH | 200      |





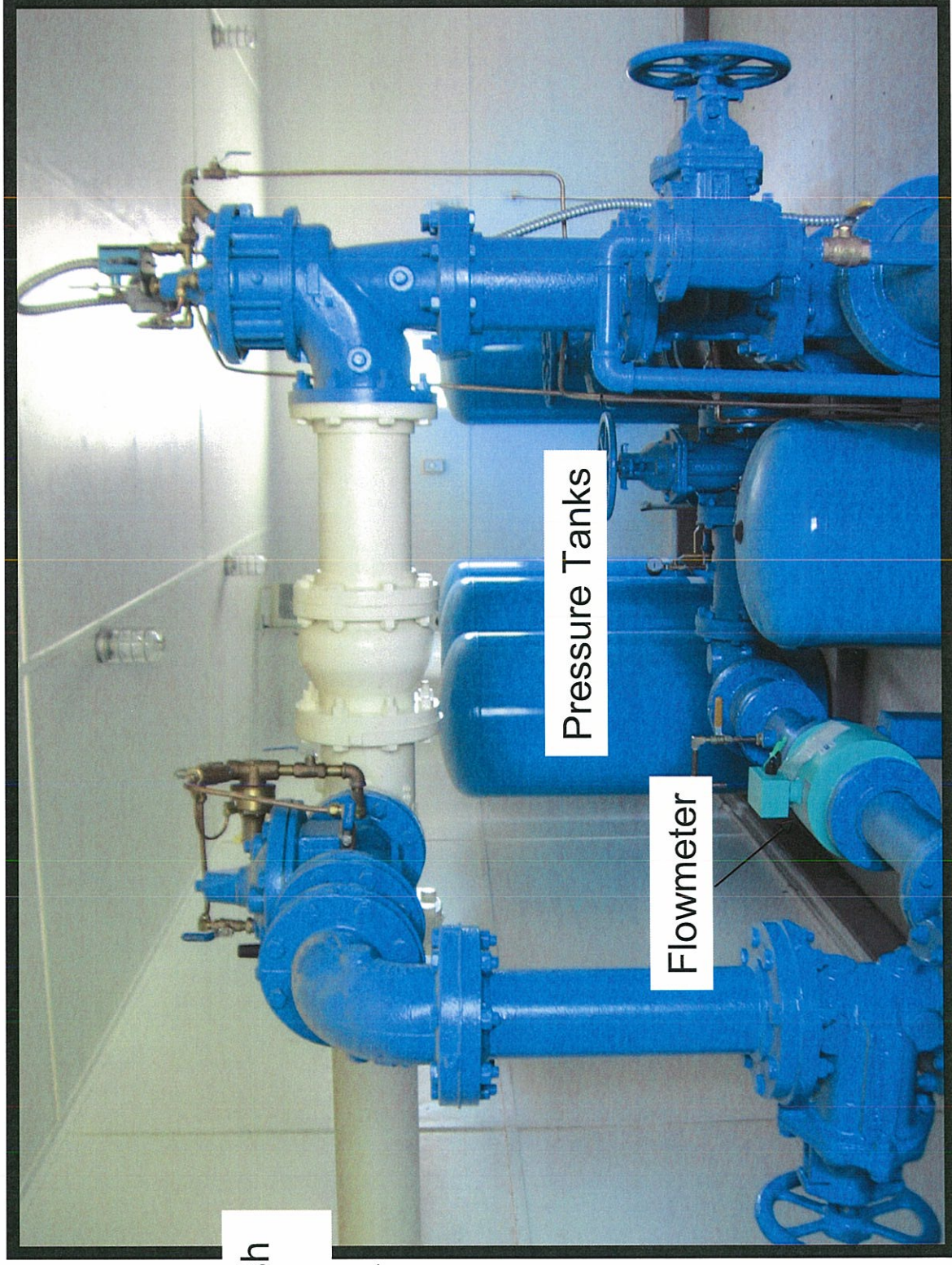
**ATTACHMENT D**  
**PHOTOS**



Pump/Well House and Generator



VFD and Main Electrical Controlling Works



To Flush  
Cone



Pressure Tanks

Flowmeter

System Overview

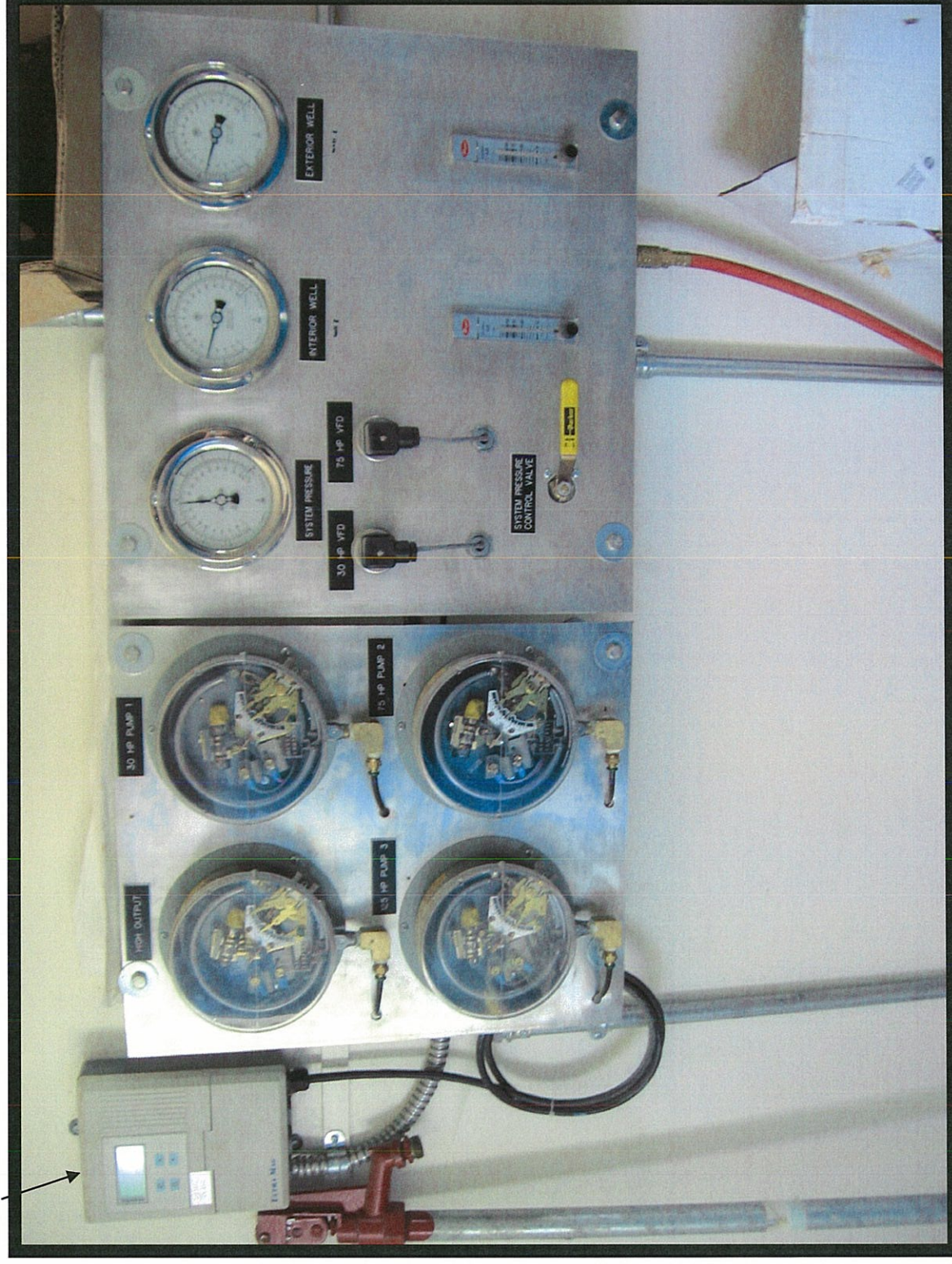


System Overview

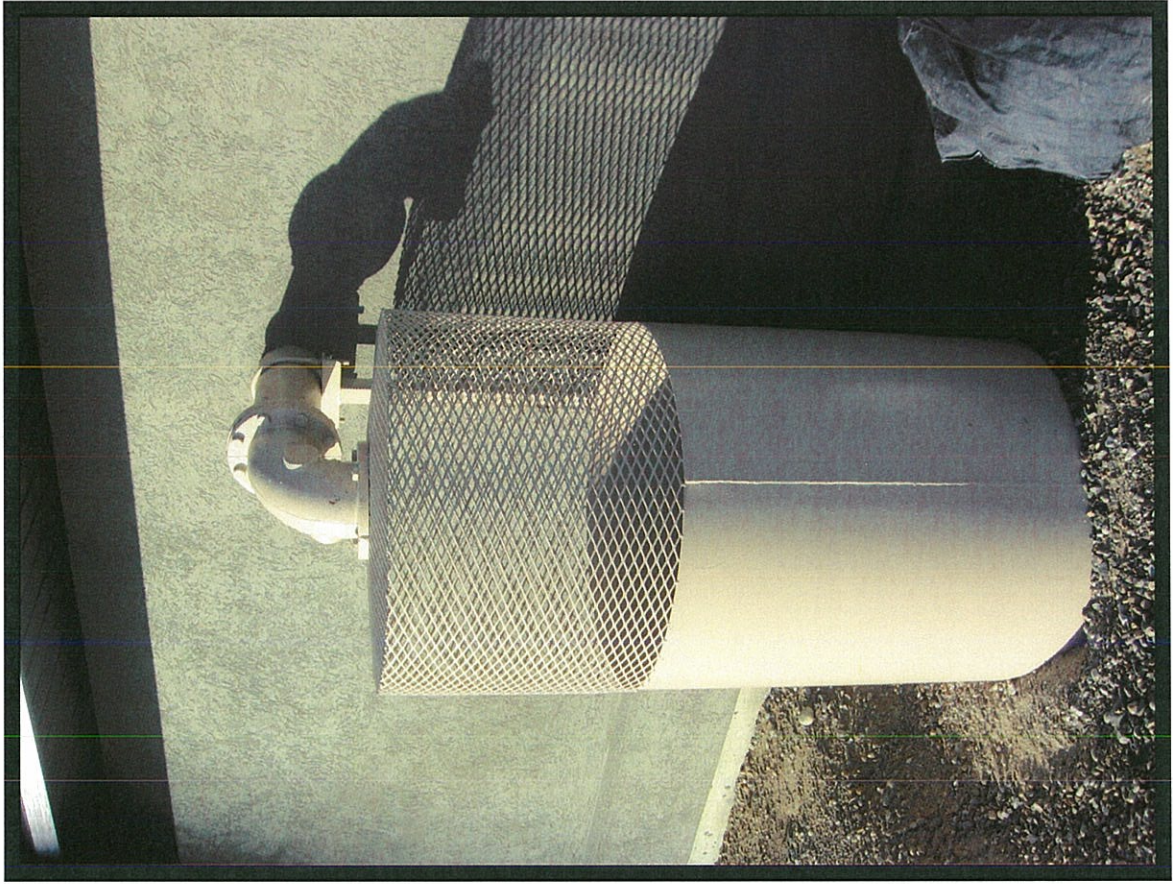


McCrometer Ultra Mag Flowmeter

Flowmeter Monitor



System Pressure and Water Level Gauges



Flush Cone



Back-Flow Preventer



Domestic Use (Looking East in Lot 2, Subdivision No. 1)



RECEIVED

JUN 12 2009

DEPARTMENT OF  
WATER RESOURCES

June 10, 2009

Deborah J. Gibson  
Idaho Department of Water Resources  
P.O. Box 83720  
Boise, ID 83720-0098

Subject: Beneficial Use Field Report and Proof of Beneficial Use – Permit 63-31745

Dear Debbie:

Enclosed on behalf of Mayfield Springs Water Co., Inc. is (1) a *Beneficial Use Field Report* for permit 63-31745 and (2) a *Statement of Completion for Submitting Proof of Beneficial Use* for permit 63-31745.

Please contact me with any questions.

Sincerely,

A handwritten signature in blue ink that reads "Terry M. Scanlan".

Terry M. Scanlan, P.E., P.G.  
Certified Water Right Examiner No. 10-129

Cc: Greg Johnson

Enclosures

SPF File: 329.0030