

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

**A. GENERAL INFORMATION**

Permit No: 63-32993

Exam Date: 6/28/18

## 1. Current Owner:

MANAGEMENT TRAINING CORP

500 N MARKETPLACE CENTERVILLE UT 84014 (801) 693-2869

Physical Address of Facility: 15505 PLEASANT VALLEY ROAD KUNA ID 83634

## 2. Accompanied by: Keith Miller

Phone No: (208) 336-9959

Relationship to Permit Holder: Maintenance supervisor at the facility

3. **SOURCE:**

GROUND WATER

**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 SE¼SE¼ Sec. 32, Twp 02N, Rge 02E, B.M. ADA County

Method of Determination: GPS at the time of the field exam, verification with ArcMap and satellite imagery

2. **PLACE OF USE: MUNICIPAL**

| Twp | Rge | Sec | NE     |        |        |    | NW     |        |        |    | SW     |        |        |    | SE     |        |        |    | Totals |
|-----|-----|-----|--------|--------|--------|----|--------|--------|--------|----|--------|--------|--------|----|--------|--------|--------|----|--------|
|     |     |     | N<br>E | N<br>W | S<br>W | SE | N<br>E | N<br>W | S<br>W | SE | N<br>E | N<br>W | S<br>W | SE | N<br>E | N<br>W | S<br>W | SE |        |
| 02N | 02E | 32  |        |        |        |    |        |        |        |    |        |        |        |    |        |        |        | X  |        |

Method of Determination: Permit place of use, ArcMap and satellite imagery, verification during the field exam

3. **MAPS:**

X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

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

X Photo of Diversion and System Attached

## 4.

| Well or Diversion ID No.* | Motor Make        | Hp    | Motor Serial No. | Pump Make | Pump Serial No. or Discharge Size |
|---------------------------|-------------------|-------|------------------|-----------|-----------------------------------|
| D0057716                  | Franklin Electric | 50 Hp | Unknown          | Goulds    | 5THC-14                           |

**D. FLOW MEASUREMENTS**

1.

| Measurement Equipment | Type          | Make          | Model No. | Serial No. |
|-----------------------|---------------|---------------|-----------|------------|
| PanelView Plus 600    | Control Panel | Allen-Bradley | Unknown   | Unknown    |

2. Measurements: Due to sound speed errors on the Panometrics likely due to the bumpy surface texture of the pipe, an accurate flow measurement for the system was not possible. The system operator said the control panel is typically set to pump at 93% capacity when filling the tank. At 93%, the control panel displayed a flow rate of 187 gpm (0.42 cfs). At 100% pumping capacity, a rate of 227 gpm (0.51 cfs) was shown. (see attached photos of the control panel readings)

**E. FLOW CALCULATIONS**

Theoretical flow was calculated based on the pump horsepower, pumping level and discharge pressure (see attached spreadsheet)

Theoretical Rate of Flow 0.48 cfs (215 gpm)

The control panel reading of 0.42 cfs at 93% capacity and 0.51 cfs at 100% capacity seems reasonable based on the theoretical calculation of 0.48 cfs. When comparing these control panel readings to the pump curve for the system, 215- 229 gpm is within range for the 50 Hp pump. Although the highest possible pumping rate based on the Control Panel display is 0.51 cfs, the license is limited by the maximum rate of diversion on the permit. Therefore, the permitted rate of 0.35 cfs will be licensed.

**F. VOLUME CALCULATIONS**

X Additional Computation Sheets  
Attached

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.5 \text{ acres} \times 4.5 \text{ AFA} = 6.8 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 15.5 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \mathbf{6.8 \text{ AFA}}$$

**Supplemental Irrigation for Wastewater Land Applied Crops**

11,600 gallons in 2017 = **0.04 AFA** (see attachment)

2. Volume Calculations for Other Uses:

X Additional Computation Sheets  
Attached

At the time of the field exam, the maintenance supervisor provided information about how frequently the tank is filled and the drawdown/fill level of the tank. Keith reported, "Depending on how much water the facility uses will determine how often the well pump comes on. When the tank is at its full point of 36 feet, it may take a day or two for that level to drop to 28 feet before the well pump starts again. During the winter months that is closer to about every two days, in the summer the well pump may cycle every 24 to 36 hours." This information was used to calculate annual volume.

According to the specification sheet for the tank, the tank capacity is 252,866 gallons. Based on the drawdown level of 28 feet and the fill level of 36 feet, 20% of the volume of the tank or 50,573 gallons are filled each day or two depending on usage. Using 50,573 gallons per day, this is equal to 56.6 acre-feet annually.

To check whether or not this number was accurate, it was compared with multiple theoretical water use calculations. The Federal Energy Management Program (FEMP)<sup>1</sup> provides water use indices for commercial, recreational, and institutional uses. The "typical" daily water use amounts for inmates and employees are 120 gpd and 10 gpd respectively; however, a range of 80-150 gpd per inmate and 5-15 gpd per employee is possible according to their indices. Using these values, a water use of approximately 101 gpd per inmate, in addition to all other water requirements (including employee, visitor, irrigation and supplemental use), shows that water usage according to this method is very similar to what was calculated based on the information about frequency and amount that the tank is filled. An annual amount of 56.4 acre-feet was calculated versus the 56.6 acre-feet annually that was calculated based on the tank filling information.

Water consumption based on Table 3 produces a very similar number. Theoretical water use values (gpd) were used for luxury camps (which includes bath and toilet facilities and all meals), picnic facilities with toilets (for weekend visitors) and day workers. These uses are similar to the water uses in the prison for inmates, weekend visitors and employees. This water use calculation yielded a result of 50,179 gallons per day or 56.2 acre-feet annually.

The total estimated volumes based on the three different methods are shown below. Please note that these calculations also include water usage for irrigation.

| Annual Volume<br>Calculation Method Comparison |      |
|------------------------------------------------|------|
|                                                | AFA  |
| Daily Tank Fill Information                    | 56.6 |
| Federal Water Use Indices                      | 56.4 |
| Table 3 Calculation                            | 56.2 |

It is recommended that this water right is licensed for 56.6 AFA. The information that was provided about the volume and frequency of the tank filling is very similar to the theoretical water usage calculated with Federal Water Use Indices and Table 3 Calculations. Furthermore, it would take a little less than 4.5 hours for the tank to fill from 28 feet to 36 feet as reported based on the operating rate of 0.42 cfs at 93% capacity and the maintenance supervisor said this was likely accurate.

## G. NARRATIVE/ REMARKS/ COMMENTS

### History:

An Application for Permit was submitted by Management Training Corp (MTC) in 2008. The application requested diversion of 0.35 cfs of groundwater for municipal use. The proposal narrative stated, *"Municipal use is for a 432-bed prison and treatment facility for the Idaho Department of Correction. It includes wastewater treatment and land application of waste water (fully consumptive use)....Municipal service area will be SESE 5.32, at least initially."*

Proof of beneficial use was received on August 5, 2013. The Well Driller's Report shows that the well was completed on May 15, 2009.

<sup>1</sup> Office of Energy Efficiency & Renewable Energy. "Federal Water Use Indices," Accessed July 16, 2018.  
<https://www.energy.gov/eere/femp/federal-water-use-indices>

**System Description:**

The facility serves up to 432 male inmates with approximately 85 staff (approximately 50 employees work in the facility each day). There are approximately 120 visitors per weekend who have access to the restrooms and drinking fountain. The facility serves the inmates three meals a day and the facility's water fixtures include toilets, urinals, sinks, drinking fountains, showers, and laundry and kitchen facilities. Approximately 1.5 acres of lawn surrounding the building is irrigated using water pumped that is pumped from the well and stored in the tank. Wastewater is treated on-site and is later pumped from the lagoons for land application on approximately eight acres. Groundwater from the well is used as supplemental irrigation for these acres in the fall.

The system consists of a well, a booster pump station with two pumps and a storage tank. The 630 foot deep well uses a Goulds pump with a 50 horsepower, six inch diameter Franklin Electric submersible motor. Water from the well is pumped up to a 40 foot tall, 252,866 gallon storage tank. Two variable speed motors (20 Hp and 100 Hp) supply the facility with water as needed. The maintenance supervisor said the system is typically set to pump at 93% capacity to fill the tank. At 93%, the control panel displayed a flow rate of 187 gpm (0.42 cfs). At 100% flow, a rate of 227 gpm (0.51 cfs) was shown.

**Point of Diversion:**

The point of diversion (POD) for this permit is a well located in the SESE of Section 32 T02N R02E. No amendment is necessary.

**Place of Use:**

The place of use (POU) for this permit is the SESE of Section 32 T02N R02E. No amendment is necessary.

**Diversion Rate:**

Based on the Control Panel, at 100% capacity the pumping rate is 0.51 cfs; however, the license is limited by the maximum rate of diversion that was permitted. Therefore, the permitted rate of 0.35 cfs will be licensed.

**Diversion Volume:**

Diversion volume was calculated in Section F of this report based on reported information of how often the tank is filled and the calculated volume of the tank that is filled. The calculated value of 56.6 afa will be recommended for the license.

**Overlap:**

No point of diversion or place of use overlap was found.

**Ownership:**

According to the Ada County Assessor Land Records website at the time of this field exam, MTC Corrections Holding LLC is the current owner of the parcel where the POD and POU are located. Management Training Corporation is the current owner of the water right.

**Conditions:**

- Conditions 1, 2, 4 (046) and 5 (26A) are standard permit conditions that will be removed at licensing.
- Condition 3 (004) will be removed as the condition is not applicable. The water right holder is the owner of both the POD and POU and all land between the POD and POU.
- Conditions 6 (01M) and 8 (128) will be retained for the license.
- Condition 7 (134) will be removed as it only applies to permits and the condition has been fulfilled. The Public water supply number for the facility is 4010255.
- Condition 9 (180) will be removed for the license as this water right does not use a digital boundary to describe the authorized place of use.
- Condition 10 will be retained for the license.
- Condition 11 (121) will be updated to the license version which is 103.

Have conditions of permit approval been met?

  X   Yes        No**H. RECOMMENDATIONS****1. Recommended Amounts**

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>DIVERSION RATE</u> | <u>ANNUAL VOLUME</u> |
|-----------------------|----------------------|-----------------------|----------------------|
| MUNICIPAL             | 01/01 to 12/31       | 0.35 CFS              | 56.6 AFA             |
| Totals:               |                      | 0.350 CFS             |                      |

**2. Recommended Amendments**

|                                                |                                             |                   |
|------------------------------------------------|---------------------------------------------|-------------------|
| <u>      </u> Change POD as reflected<br>above | <u>      </u> Add POD as reflected<br>above | <u>  X  </u> None |
| <u>      </u> Change POU as reflected<br>above | <u>      </u> Add POU as reflected<br>above | <u>  X  </u> None |

**I. AUTHENTICATION – Rachael Smith, Sr. Water Resource Agent**Field Examiner's Name Rachael SmithDate 7/27/18Reviewer Daniel A. NelsonDate 7-24-18

State of Idaho  
Department of Water Resources  
**Attachment to Field Exam**  
63-32993

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



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

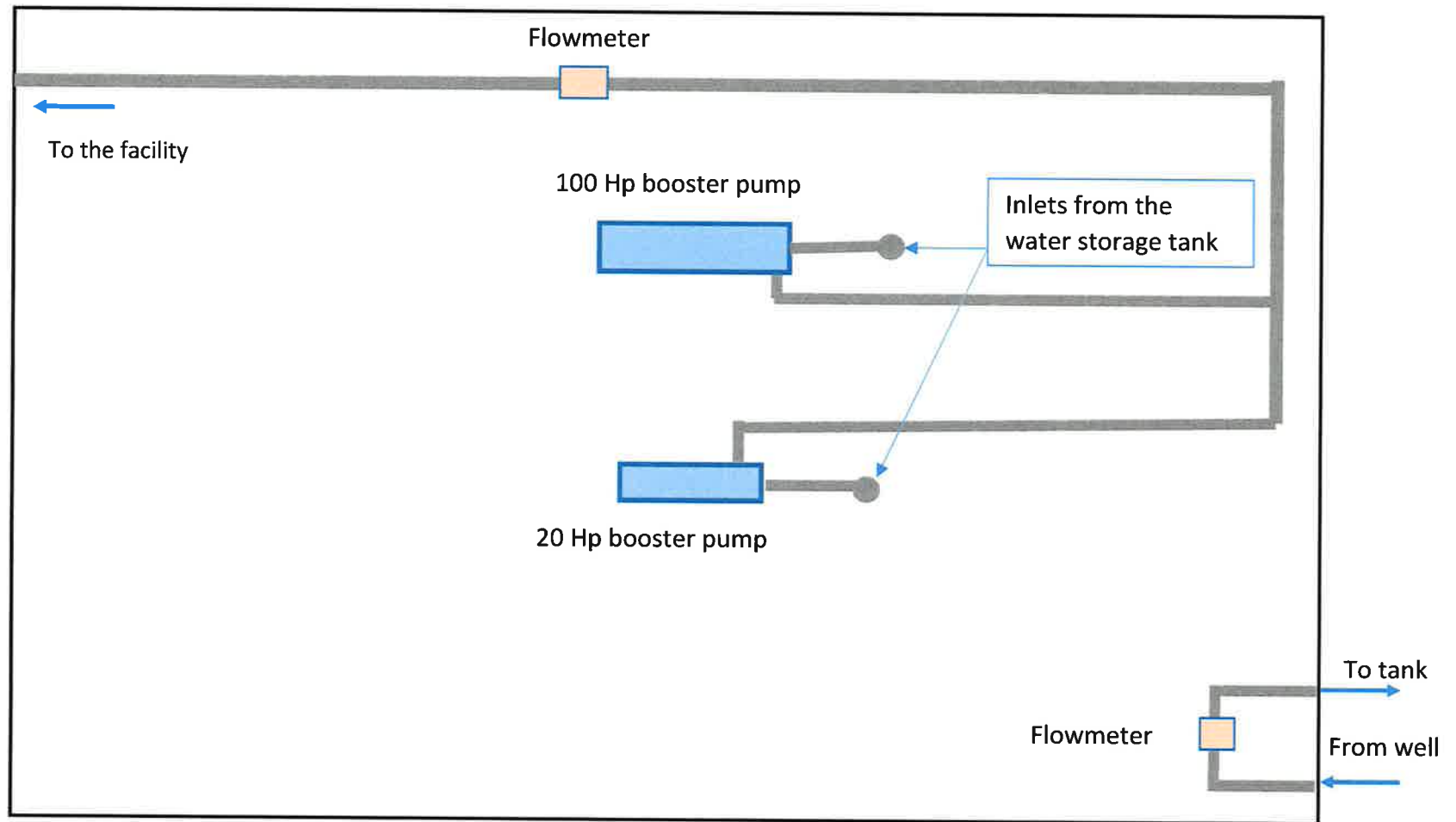


0 250 500 1,000 Feet

# Water Right 63-32 33 System Diagram



**Water Right 63-32993**  
**Booster Pump Station Layout**



# THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 63-32993  
 Reviewer: Rachael Smith  
 Date of Review: 6/28/2018

Point of Diversion:

**MTC Well**

**Pumping Water Level Based on Well Driller's Report**

PUMP HORSEPOWER  
 BOOSTER HORSEPOWER

50

630 well depth  
 398 static water level

PUMPING LEVEL

514

514 pumping water level

DISCHARGE PRESSURE

55.18

RATE OF FLOW (cfs)

0.48

gpm 215

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 system utilizes a Goulds submersible turbine pump with a Franklin Electric 50 horsepower motor. Due to sound speed errors on the Panometrics which was likely due to the bumpy surface texture of the pipe, an accurate flow measurement was not possible. The system operator said the system is typically set to pump at 93% capacity to fill the tank. At 93%, the control panel displayed a flow rate of 187 gpm. At 100% flow, a rate of 227 gpm was shown. (see attached photos)

The above theoretical calculation shows that a lift of 514 feet (estimated pumping water level) would provide 215 gpm flow. Therefore, the the pumping rate of 227 gpm shown on the control panel at the time of the field exam is probable. Furthermore, the pump curve for this pump shows that 227 gpm is within range for the pump capability.

The well depth of 630 feet and the static water level of 398 feet are shown on the Well Driller's Report. The pumping water level was calculated using the Department's standard for estimating pumping water level as shown below:

$$[(630 \text{ ft well depth} - 398 \text{ ft static}) / 2] + 398 \text{ ft static} = 514 \text{ feet pumping water level}$$

The discharge pressure was read from the control panel in the well house (see photos).

63

854803

Form 238-7  
6/07

IDAHO DEPARTMENT OF WATER RESOURCES  
WELL DRILLER'S REPORT

Replacement tag:

1. WELL TAG NO. D 0059388 00057716  
Drilling Permit No. 907228-854803  
Water right or injection well # 63-32993

2. OWNER  
Name Management Training Corporation  
Address 500 N. Market Place Dr  
City Centerville State UT Zip 84014

3. WELL LOCATION:  
Twp. 2 North ☒ or South ☐ Rge. 2 East ☒ or West ☐  
Sec. 32 1/4 NE 1/4 SE 1/4  
Gov't Lot \_\_\_\_\_ County Ada

Lat. \_\_\_\_\_ (Deg. and Decimal minutes)  
Long. \_\_\_\_\_ (Deg. and Decimal minutes)  
Address of Well Site Pleasant Valley Road 250' North of Kuna-Mora  
City Boise

4. USE:  
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection  
☐ Other \_\_\_\_\_

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

6. DRILL METHOD:  
☐ Air Rotary ☒ Mud Rotary ☐ Cable ☐ Other \_\_\_\_\_

| Seal material | From (ft) | To (ft) | Quantity (lbs or ft <sup>3</sup> ) | Placement method/procedure |
|---------------|-----------|---------|------------------------------------|----------------------------|
| Ben. Pellets  | 535'      | 530'    | 20 Lbs                             | Pour                       |
| Neat Cement   | 530'      | 0'      | 14 Yards                           | Tremie                     |

| Diameter (nominal) | From (ft) | To (ft) | Gauge/Schedule | Material | Casing                              | Liner                    | Threaded                 | Welded                              |
|--------------------|-----------|---------|----------------|----------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| 8"                 | 570'      | +3'     | .322           | Steel    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

9. PERFORATIONS/SCREENS:  
Perforations ☐ Y ☒ N Method \_\_\_\_\_  
Manufactured screen ☒ Y ☐ N Type Johnson  
Method of installation \_\_\_\_\_

| From (ft) | To (ft) | Slot size | Number/ft | Diameter (nominal) | Material  | Gauge or Schedule |
|-----------|---------|-----------|-----------|--------------------|-----------|-------------------|
| 610'      | 570'    | .030      |           | 8"                 | Stainless |                   |

Length of Headpipe 2' 4" Length of Tailpipe 9' 4"  
Packer ☒ Y ☐ N Type K-Packer

| Filter Material | From (ft) | To (ft) | Quantity (lbs or ft <sup>3</sup> ) | Placement method |
|-----------------|-----------|---------|------------------------------------|------------------|
| Silica Sand     | 620'      | 530'    | 1610 Lbs                           | Overbore/Pour    |
| Pea Gravel      |           |         |                                    |                  |

11. FLOWING ARTESIAN:  
Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) \_\_\_\_\_  
Describe control device N/A

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 400' Static water level (ft) 398'  
Water temp. (°F) \_\_\_\_\_ Bottom hole temp. (°F) \_\_\_\_\_  
Describe access port \_\_\_\_\_

| Well test:      | Test method:                                                                                                                                    |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Drawdown (feet) | Discharge or yield (gpm)                                                                                                                        |
| <u>21</u>       | <u>225</u>                                                                                                                                      |
|                 | Test duration (minutes)                                                                                                                         |
|                 | <u>480</u>                                                                                                                                      |
|                 | Pump <input checked="" type="checkbox"/> Bailor <input type="checkbox"/> Air <input type="checkbox"/> Flowing artesian <input type="checkbox"/> |

Water Quality test or comments: \_\_\_\_\_  
13. LITHOLOGIC LOG and/or repairs or abandonment:

| Bore Dia. (in) | From (ft) | To (ft) | Remarks, lithology or description of repairs or abandonment, water temp. | Water Y | N |
|----------------|-----------|---------|--------------------------------------------------------------------------|---------|---|
| 16"            | 0'        | 3'      | Sand & Gravel                                                            |         | X |
| 16"            | 3'        | 57'     | Black Basalt                                                             |         | X |
| 16"            | 57'       | 68'     | Gravel                                                                   |         | X |
| 16"            | 68'       | 165'    | Cobbles w/Sand                                                           |         | X |
| 16"            | 165'      | 170'    | Brown Clay                                                               |         | X |
| 14"            | 170'      | 192'    | Brown Clay                                                               |         | X |
| 14"            | 192'      | 250'    | Cobbles                                                                  |         | X |
| 14"            | 250'      | 262'    | Sand                                                                     |         | X |
| 14"            | 262'      | 360'    | Cobbles, some sand & gravel                                              |         | X |
| 14"            | 360'      | 382'    | Brown Clay                                                               |         | X |
| 14"            | 382'      | 400'    | Tan Clay                                                                 |         | X |
| 14"            | 400'      | 630'    | Sand & Gravel                                                            | X       |   |

RECEIVED

JUN 01 2009

WATER RESOURCES  
WESTERN REGION

SCANNED

JUN 03 2009

Completed Depth (Measurable) 620'

Date: Started 03-31-09 Completed 05-15-09

14. DRILLER'S CERTIFICATION

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

Company Name Hiddleston & Son, Inc Co. No. 35

\*Principal Driller [Signature] Date \_\_\_\_\_

\*Driller [Signature] Date \_\_\_\_\_

\*Operator II \_\_\_\_\_ Date \_\_\_\_\_

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

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



# ITT

Turbine

## Goulds Pumps

### 5" – 11" TEXAS PRE-ENGINEERED SUBMERSIBLE TURBINE PUMPS

For 6" and larger wells



## GOULDS PUMPS

Goulds Pumps is a brand of ITT Corporation.

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

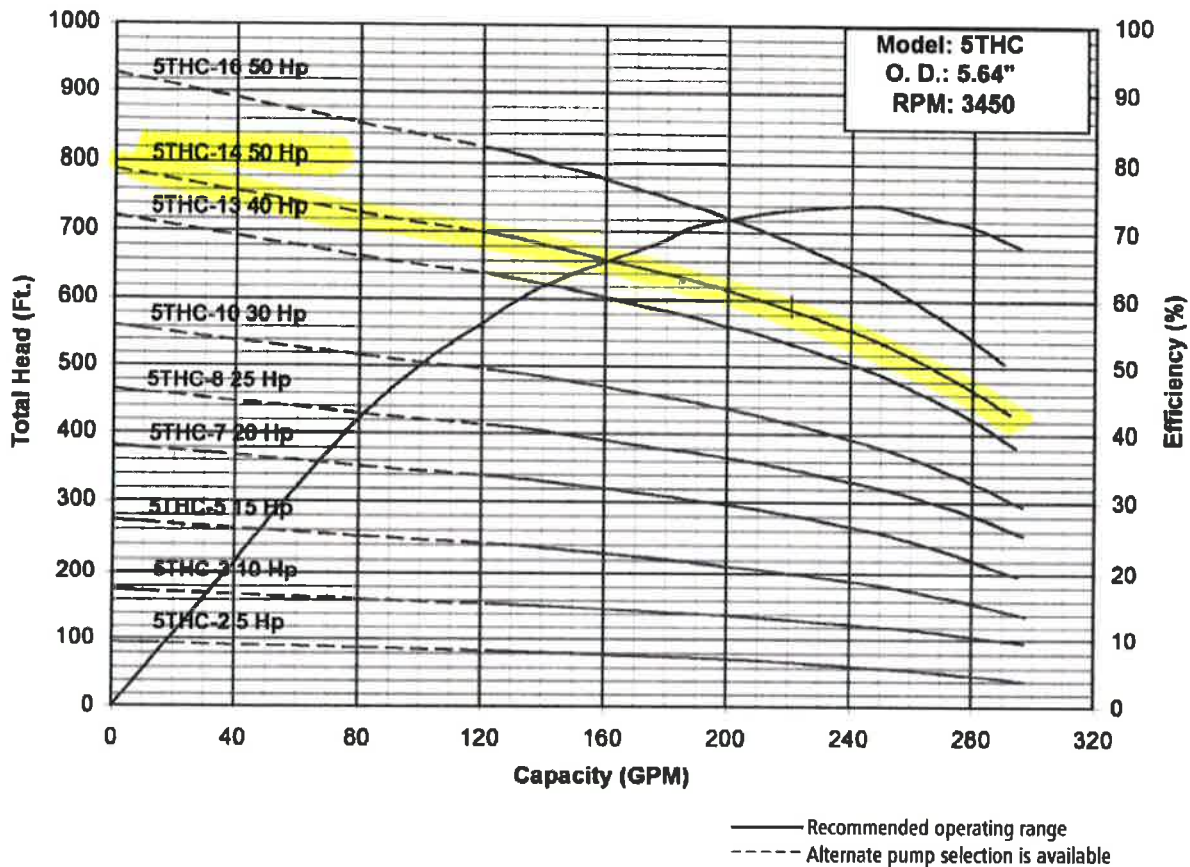
*Engineered for life*

#### FEATURES

- **Discharge Bowl:** Several discharge sizes available (NPT).
- **Discharge Bearing:** Extra long sealed top bronze bearing insures shaft alignment and stabilization for extended life.
- **Intermediate Bowl:** Class 30 cast iron. Glass coating on 6" and larger bowls for maximum efficiency and abrasion resistance.
- **Intermediate Bearings:** Available in either no-lead bronze or rubber.
- **Impellers:** Designed for maximum efficiency with a wide range hydraulic coverage. Made of low zinc and no lead material suitable for drinking water applications.
- **Taperlock:** Accurately machined to ensure positive locking of the impeller to the pump shaft.
- **Upthrust Collar:** Designed with extra margin of safety against momentary upthrust at start-up.
- **Suction Adapter:** Designed to ensure proper pump/motor alignment. Open area permits easy access to pump/motor coupling. Casting made of ductile iron for increased strength.
- **Pump to Motor Coupling:** Stainless steel coupling accurately machined for perfect alignment, balance and power transmission.
- **Pump Shaft:** 100,000 PSI high tensile type 416 stainless steel provides strength and corrosion resistance. Ground and polished for smooth bearing surface.
- **Powered for Continuous Operation:** All horsepower ratings are within the service limits of the motor and pump can be operated continuously without fear of damage to the motor.
- **CentriPro Motors:**
  - Corrosion-resistant construction.
  - Stainless steel splined shaft.
  - Hermetically sealed windings on 6" motors. 8" and 10" motors are water tight rewindable.
  - Sand resistant slinger and lip seals.
  - Water filled design.
  - Filter check valve.
  - Kingsbury-type thrust bearing.
  - 6 through 30 HP motors are dual voltage (230/460) design. Easily changed with a voltage plug.

# Model 5THC 240 GPM

**GOULDS PUMPS**  
Turbine



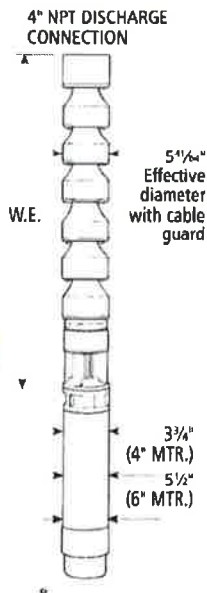
## DIMENSIONS AND WEIGHTS

| HP | Stages | W.E. Order Number | W.E. Length | W.E. Wt. (lbs.) |
|----|--------|-------------------|-------------|-----------------|
| 5  | 2      | C05THC005A44B     | 20.9        | 57              |
|    |        | C05THC005A64B     | 23.3        | 62              |
| 10 | 3      | C05THC010A64B     | 28.0        | 75              |
| 15 | 5      | C05THC015A64B     | 37.6        | 101             |
| 20 | 7      | C05THC020A64B     | 47.3        | 127             |
| 25 | 8      | C05THC025A64B     | 52.0        | 153             |
| 30 | 10     | C05THC030A64B     | 61.7        | 166             |
| 40 | 13     | C05THC040A64B     | 76.0        | 218             |
| 50 | 14     | C05THC050A64B     | 80.7        | 221             |
| 50 | 16     | C05THC050A64B     | 90.6        | 257             |

(All dimensions in inches and weights in lbs. Do not use for construction purposes.)

### NOTES:

1. All dimensions in inches and weights in lbs.
2. Solid line is recommended operating range.
3. For Intermediate horsepower pumps consult factory.
4. Please specify all options changes in W.E. order number.



## MATERIALS OF CONSTRUCTION

| Part Name                 | Material                |
|---------------------------|-------------------------|
| Shaft                     | ASTM A582 S41600        |
| Coupling                  | ASTM A582 S41600        |
| Suction Adapter           | ASTM A536 Gr. 60-40-18  |
| Suction Bearing           | ASTM B584 C89835        |
| Impeller                  | ASTM A744 CF8M          |
| Taperlock                 | ASTM A108 Gr. 1018      |
| Intermediate Bowl         | ASTM A49 CI. 30B        |
| Intermediate Bowl Bearing | ASTM B584 C89835 (Std.) |
| Intermediate Bowl Bearing | Rubber (optional)       |
| Upthrust Collar           | Polyethylene            |
| Discharge Bowl            | ASTM A48 CI. 30B        |
| Discharge Bowl Bearing    | ASTM B584 C89835        |
| Fasteners                 | SAE J429 Gr. 8          |
| Cable Guard               | ASTM A240 S30400        |
| Suction Strainer          | ASTM A240 S30400        |

## Product Data



A complete line of single-phase control boxes is available from Franklin Electric.

### **SUBTROL-PLUS® OVERLOAD OPTION FOR THREE-PHASE MOTORS**

A field proven and contractor friendly premium motor protection system. It protects the motor against overload, underload, overheating and rapid cycling. It also extends the motor warranty to a full three years. The motor must be manufactured with a Subtrol-Plus® heat sensor.



**MADE IN THE U.S.A.**

## **6" ENCAPSULATED SUBMERSIBLE MOTORS**

5 through 15 horsepower single-phase.  
5 through 60 horsepower three-phase.  
200 to 575 volts-60 and 50 hertz.

### **APPLICATION DATA**

These motors are built for dependable operation in 6" diameter or larger water wells. Temperature and time ratings are continuous in 86° F (30° C) water at 1/2 ft./sec. flow past motor. Rotation: single-phase, CCW facing shaft end; three-phase, electrically reversible.

### **BASIC FEATURES**

- Full 3450 RPM design point
- Maximum temperature winding wire NEMA class 200
- Anti-track self-healing resin system
- Hermetically-sealed windings
- Removable Water-Bloc™ lead
- Double flange design
- Stainless steel shell
- Stainless steel splined shaft
- Kingsbury-type water lubricated thrust bearing
- Pressure equalizing diaphragm
- Sand slinger
- 3-lead & 6-lead (Wye Delta) configurations for 3-phase
- Copper bar rotor

### **SPECIAL FEATURES**

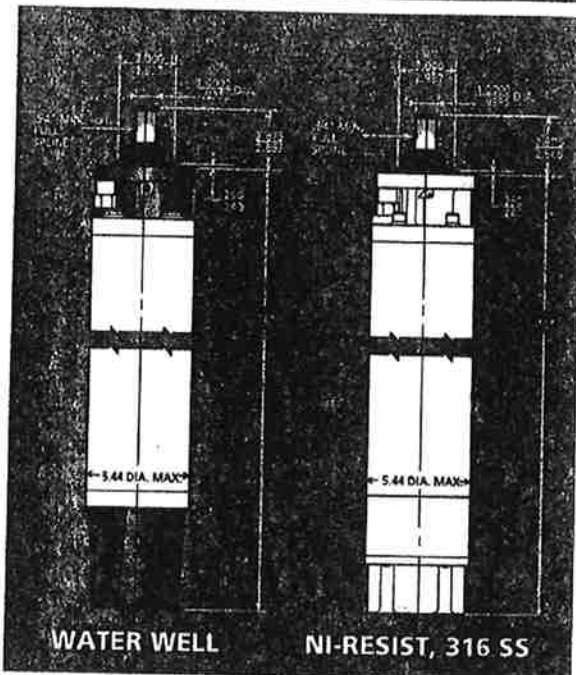
- **Ni-Resist:** Special construction option for some Salt Water and high pH applications. All Ni-Resist motors include a Subtrol-Plus heat sensor.
- **316 Stainless Steel:** Special construction option for Acid, low pH, and Seawater applications. All 316 SS motors include a Subtrol-Plus heat sensor.
- **Sand Fighter™** models available for sandy wells.
- **Mining And Offshore Application Motors** available with flat jacketed nitrile lead and Sand Fighter™ sealing system, consult factory.



**Franklin Electric**

# 3" Submersible Motors

## DIMENSIONS



## AVAILABILITY<sup>®</sup>

Single-Phase Capacitor start, capacitor run (control box required)

| HP | KW   | WATER WELL<br>"L" DIM |      | NI-RESIST 316 SS<br>"L" DIM |      | 316 SS<br>SHIPPING WEIGHT |     |
|----|------|-----------------------|------|-----------------------------|------|---------------------------|-----|
|    |      | INS                   | CM   | INS                         | CM   | LBS                       | KGS |
| 5  | 3.7  | 25.4                  | 64.6 | 25.0                        | 63.6 | 112                       | 51  |
| 7½ | 5.5  | 28.0                  | 71.1 | 27.6                        | 70.1 | 125                       | 57  |
| 10 | 7.5  | 30.6                  | 77.7 | 30.2                        | 76.6 | 143                       | 65  |
| 15 | 11.0 | 33.1                  | 84.2 | 32.7                        | 83.1 | 156                       | 71  |

### Three-Phase

|    |      |      |       |      |       |     |     |
|----|------|------|-------|------|-------|-----|-----|
| 5  | 3.7  | 22.9 | 58.1  | 22.5 | 57.1  | 103 | 47  |
| 7½ | 5.5  | 24.2 | 61.4  | 23.8 | 60.4  | 110 | 50  |
| 10 | 7.5  | 25.4 | 64.6  | 25.0 | 63.6  | 118 | 54  |
| 15 | 11.0 | 28.0 | 71.1  | 27.6 | 70.1  | 131 | 60  |
| 20 | 15.0 | 30.6 | 77.6  | 30.2 | 76.6  | 147 | 67  |
| 25 | 18.5 | 33.1 | 84.2  | 32.7 | 83.1  | 158 | 72  |
| 30 | 22.0 | 35.7 | 90.7  | 35.3 | 89.6  | 176 | 80  |
| 40 | 30.0 | 40.8 | 103.7 | 40.4 | 102.6 | 206 | 94  |
| 50 | 37.0 | 55.3 | 140.5 | 55.7 | 141.5 | 304 | 138 |
| 60 | 45.0 | 61.3 | 155.7 | 61.7 | 156.8 | 334 | 152 |

⊙ 60 Hz - Nominal 3,450 RPM

50 Hz - Nominal 2,875 RPM

## CONSTRUCTION MATERIALS

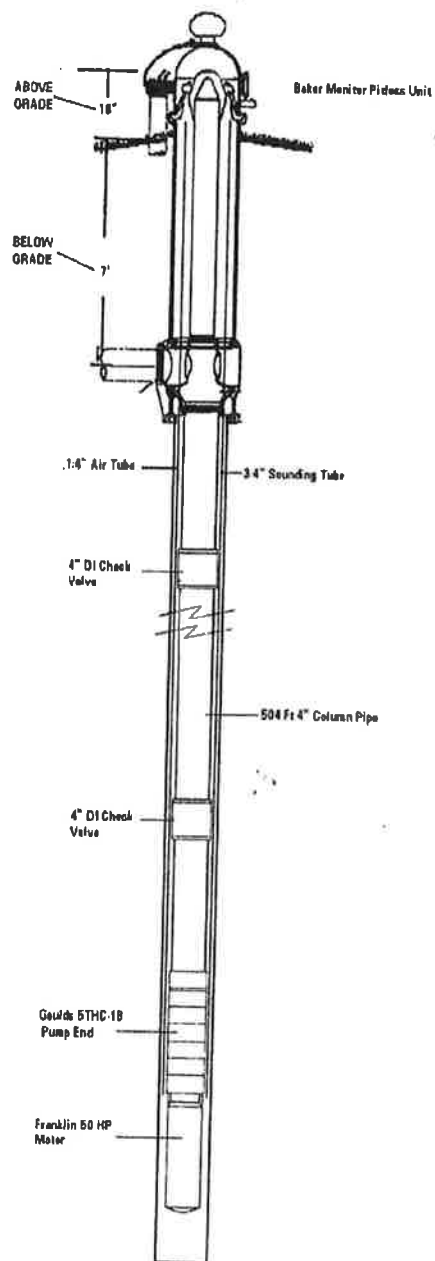
| Component            | Standard Water Well               | Environment Type          |                           |
|----------------------|-----------------------------------|---------------------------|---------------------------|
|                      |                                   | Ni-Resist                 | 316 SS                    |
| Castings             | Gray Iron                         | Ni-Resist Type 1B         | 316 SS                    |
| Stator Shell         | 301 SS                            | 316 SS                    | 316 SS                    |
| Stator Ends          | Low Carbon Steel                  | 316 SS                    | 316 SS                    |
| Shaft Extension      | 303 SS, Except 17-4 SS On 40-60hp | 17-4 SS                   | 17-4 SS                   |
| Fasteners            | 300 & 400 Series SS               | 316 SS                    | 316 SS                    |
| Seal Cover           | 304 SS & Sintered Bronze          | 316 SS                    | 316 SS                    |
| Seal                 | Carbon/Ceramic Face               | Sand Fighter™ Seal System | Sand Fighter™ Seal System |
| Diaphragm            | Nitrile Rubber                    | Nitrile Rubber            | Nitrile Rubber            |
| Diaphragm Plate      | 304 SS                            | 316 SS                    | 316 SS                    |
| Diaphragm Spring     | 302 SS                            | 17-7 SS                   | 17-7 SS                   |
| Slinger              | Nitrile Rubber                    | Type 100 Hydrin           | Type 100 Hydrin           |
| Lead Wire (or Cable) | Hypalon 75°C                      | Hypalon 75°C              | Hypalon 75°C              |
| Lead Potting         | Epoxy                             | Epoxy                     | Epoxy                     |
| Filter               | Delrin & Polyester                | 316 SS Plug               | 316 SS Plug               |
| Insulation           | Class F                           | Class F                   | Class F                   |

Specifications subject to change without notice. Contact Franklin Electric if current material types are required for bid specifications.



**Franklin Electric**

400 East Spring Street, Bluffton, Indiana 46714  
Tel: 260.824.2900 Fax: 260.824.2909  
www.franklin-electric.com



|                            |         |                                                     |  |  |  |
|----------------------------|---------|-----------------------------------------------------|--|--|--|
| Hiddleston Drilling & Pump |         | IDAHO CAPP FACILITY<br>PROPOSED PUMPED INSTALLATION |  |  |  |
|                            | 4/13/09 |                                                     |  |  |  |

**BOLTED STANDPIPE INSPECTION REPORT**

JOB NO: 318128 INSPECTOR: David McLevain (CE)  
TANK OWNER: Correctional Alternative Placement Program  
OWNER'S REPRESENTATIVE: Mr. Keith Miller  
TITLE: Maintenance Manager  
MAILING ADDRESS: 15505 S. Pleasant Valley Rd. Kuna, ID 83634  
PHYSICAL ADDRESS: 15505 S. Pleasant Valley Rd. Kuna, ID 83634  
E-MAIL: Keith.miller@mtctrains.com  
CITY, STATE: Kuna, ID ZIP: 83634 COUNTY: Ada County  
TELEPHONE: (208) 336-9959 FAX: Not Provided  
LOCATION OF TANK: 15505 S. Pleasant Valley Rd, Kuna, ID 83634

**Correctional Alternative Placement Program  
15505 S. Pleasant Valley Rd.  
Kuna, ID 83634  
May 14, 2018  
Mr. Keith Miller  
Maintenance Manager  
(208) 336-9959**

ORIGINAL CONTRACT NO: 09-4416 YEAR BUILT: 9-09  
ORIGINAL MANUFACTURER: Columbian TecTank CAPACITY: 252,866 Gallon  
DATE OF LAST INSPECTION: Not Provided TYPE: Fire Protection/Potable  
DIAMETER: 32'-0" HEIGHT: 40'-0"  
OVERFLOW: 8" INLET: 4"  
TYPE CONSTRUCTION: WELDED:        RIVETED:        BOLTED: X  
ACCOUNT EXECUTIVE: Larry Leslie

## Summary of Water Use Calculations

| Summary of Water Use Calculations                        |                                                                   |                    |            |
|----------------------------------------------------------|-------------------------------------------------------------------|--------------------|------------|
| Method of Calculation                                    | Irrigation                                                        |                    | Total AFA  |
|                                                          | In-Facility Use (AFA)                                             | Requirements (AFA) |            |
| Daily Tank Fill Information                              | -                                                                 | -                  | 56.6       |
| Federal Water Use Indices                                | 49.6                                                              | 6.8                | 56.4       |
| Table 3 Calculation                                      | 49.4                                                              | 6.8                | 56.2       |
| Irrigation Water Use                                     |                                                                   |                    |            |
| Irrigation                                               |                                                                   |                    |            |
|                                                          | 1.5 acres in 2013 when proof of beneficial use was filed          |                    |            |
|                                                          | 0.03 flow (cfs)                                                   |                    |            |
|                                                          | 4.5 headgate requirement                                          |                    |            |
|                                                          | 260 days in irrigation season                                     |                    |            |
|                                                          |                                                                   |                    | <b>AFA</b> |
|                                                          | $V(IR) = 1.5 \text{ acres} \times 4.5 \text{ AFA}$                |                    | <b>6.8</b> |
|                                                          | $V(DR) = 0.03 \text{ cfs} \times 260 \text{ days} \times 1.9835$  |                    | 15.5       |
| Supplemental Irrigation on Wastewater Land Applied Crops |                                                                   |                    |            |
|                                                          | 8 land application acres requiring supplemental irrigation in the |                    |            |
|                                                          | 11,600 gallons used to irrigate these acres in 2017               |                    |            |
|                                                          | 0.04 AFA used for supplemental irrigation                         |                    |            |
| Total Irrigation Requirement                             |                                                                   | <b>6.79</b>        | <b>AFA</b> |
| Conversions                                              |                                                                   |                    |            |
| cfs to gpd                                               | 646,317                                                           |                    |            |
| gallons to acre-feet                                     | 3.07E-06                                                          |                    |            |

| Total Water Usage Calculated Using Tank Fill Information |  |                     |                       |                           |              |
|----------------------------------------------------------|--|---------------------|-----------------------|---------------------------|--------------|
|                                                          |  | tank capacity (gal) | # feet filled per day | equivalent gallons filled | volume (AFA) |
|                                                          |  | 252,866             | 8                     | 50,573                    | 56.6         |
|                                                          |  |                     |                       |                           |              |

| Total Water Usage Calculated Using Table 3 |     |            |                    |             |              |                                                                       |
|--------------------------------------------|-----|------------|--------------------|-------------|--------------|-----------------------------------------------------------------------|
|                                            | #   | gpd/person | total (gpd)        | total (gpy) | volume (AFA) |                                                                       |
| Inmates                                    | 432 | 100        | 43,200             | 15,768,000  | 48.4         | <i>*based on mid-range value for luxury camp (all meals/services)</i> |
| Employees                                  | 50  | 15         | 750                | 273,750     | 0.8          | <i>*based on day worker per person/shift (Table 3)</i>                |
| Visitors                                   | 120 | 10         | # weekend visitors | 62,400      | 0.2          | <i>*based on picnicker with toilet facilities (Table 3)</i>           |
|                                            |     |            |                    | 16,104,150  | 49.4         |                                                                       |
|                                            |     |            |                    |             |              |                                                                       |

|           | #   | gpd/person | total (gpd)        | total (gpy)   | volume (AFA) |                                                                       |
|-----------|-----|------------|--------------------|---------------|--------------|-----------------------------------------------------------------------|
| Inmates   | 432 | 100        | 43,200             | 15,768,000    | 48.4         | <i>*based on mid-range value for luxury camp (all meals/services)</i> |
| Employees | 50  | 15         | 750                | 273,750       | 0.8          | <i>*based on day worker per person/shift (Table 3)</i>                |
| Visitors  | 120 | 10         | # weekend visitors | <u>62,400</u> | <u>0.2</u>   | <i>*based on picnicker with toilet facilities (Table 3)</i>           |
|           |     |            |                    | 16,104,150    | 49.4         |                                                                       |
|           |     |            |                    |               |              |                                                                       |

[illegible]

## FEDERAL ENERGY MANAGEMENT PROGRAM

## Federal Water Use Indices

[Home](#) » Federal Water Use Indices

FEMP provides water use indices as a guide for Federal agencies. Note that each is a rough estimate of water usage at different types of sites. Your site may vary considerably.

The following indices should be used only to assist in determining baseline data when no other information is available on site water usage.

[Conversion factors](#) for the Federal water use indices are also available.

Source: American Water Works Association 1996. *Data represents gallons per unit per day.*

## COMMERCIAL

| USER            | UNIT      | RANGE   | TYPICAL |
|-----------------|-----------|---------|---------|
| Airport         | Passenger | 4-5     | 3       |
| Apartment house | Person    | 100-200 | 100     |
| Boarding house  | Person    | 25-50   | 40      |
| Hotel           | Guest     | 40-60   | 50      |
|                 | Employee  | 8-13    | 10      |

## FEDERAL ENERGY MANAGEMENT PROGRAM

## INSTITUTIONAL

| USER                            | UNIT     | RANGE  | TYPICAL |
|---------------------------------|----------|--------|---------|
| Assembly hall                   | Seat     | 2-4    | 3       |
| Medical Hospital                | Bed      | 80-150 | 120     |
|                                 | Employee | 5-15   | 10      |
| Prison                          | Inmate   | 80-150 | 120     |
|                                 | Employee | 5-15   | 10      |
| Rest Home                       | Resident | 5-120  | 90      |
|                                 | Employee | 5-15   | 10      |
| School, Day                     |          |        |         |
| With cafeteria, gym and showers | Student  | 15-30  | 25      |
| With cafeteria only             | Student  | 10-20  | 15      |
| Without cafe and gym            | Student  | 5-15   | 10      |
| School, Boarding                | Student  | 50-100 | 75      |

## CONVERSION FACTORS FOR FEDERAL WATER USE INDICES

## Volume conversion

|                                 |                       |
|---------------------------------|-----------------------|
| 1 gallon (gal)                  | = 8.34 pounds         |
| 1 cubic foot (ft <sup>3</sup> ) | = 7.48 gallons        |
| 1 unit (Ccf)                    | = 748 gallons         |
| 1 acre-foot (AF)                | = 325,851 gallons     |
| 1 acre-foot (AF)                | = 43,560 cubic feet   |
| 1 million gallons/day (MGD)     | = 1121 acre feet/year |

Table 3

## NON-IRRIGATION WATER REQUIREMENTS

| Types of Establishments                                    | <u>Gallons/day</u> |
|------------------------------------------------------------|--------------------|
| Airports (per passenger)                                   | 3-5                |
| Apartments, multiple family (per resident)                 | 60                 |
| Bathhouses (per bather)                                    | 10                 |
| Camps:                                                     |                    |
| Construction, semi-permanent (per worker)                  | 50                 |
| Day with no meals served (per camper)                      | 15                 |
| Luxury (per camper)                                        | 100-150            |
| Resorts, day & night, limited plumbing<br>(per camper)     | 50                 |
| Tourist, central bath & toilet facilities<br>(per person)  | 35                 |
| Cottages with seasonal occupancy (per resident)            | 50                 |
| Courts, tourist with individual bath units<br>(per person) | 50                 |
| Clubs:                                                     |                    |
| Country (per resident member)                              | 100                |
| Country (per non-resident member)                          | 25                 |
| Dwellings:                                                 |                    |
| Boardinghouses (per boarder)                               | 50                 |
| Kitchen requirements (per boarder)                         | 10                 |
| Multiple family apartments (per resident)                  | 40                 |
| Roominghouses (per resident)                               | 60                 |
| Single family (per resident)                               | 50-75              |
| Estates (per resident)                                     | 100-150            |
| Hotels:                                                    |                    |
| With private baths (2 persons/room)                        | 60                 |
| Without private baths (per person)                         | 50                 |
| Hospitals (per bed)                                        | 250-400            |
| Institutions other than hospitals (per person)             | 75-125             |
| Laundries (per washing/customer)                           | 50                 |

Livestock (per animal):

|                |    |
|----------------|----|
| Cattle (range) | 12 |
| Cattle (dairy) | 35 |
| Goat           | 2  |
| Hog            | 4  |
| Horse          | 12 |
| Mule           | 12 |
| Sheep          | 2  |

|                    |       |
|--------------------|-------|
| Chickens (per 100) | 5-10  |
| Turkeys (per 100)  | 10-18 |

Motels:

|                                                  |    |
|--------------------------------------------------|----|
| With bath, toilet & kitchen facilities (per bed) | 50 |
| With bed & toilet (per bed)                      | 40 |

Parks:

|                                                  |    |
|--------------------------------------------------|----|
| Overnight with flush toilets (per camper)        | 25 |
| Trailers with individual bath units (per camper) | 50 |

Picnic:

|                                                             |    |
|-------------------------------------------------------------|----|
| With bathhouses, showers & flush toilets<br>(per picnicker) | 20 |
| With toilet facilities only (per picnicker)                 | 10 |

Restaurants:

|                                                     |      |
|-----------------------------------------------------|------|
| With toilet facilities (per patron)                 | 7-10 |
| Without toilet facilities (per patron)              | 3    |
| With bars & cocktail lounge (additional per patron) | 2    |

Schools:

|                                                    |        |
|----------------------------------------------------|--------|
| Boarding (per pupil)                               | 75-100 |
| Day with cafeteria, gyms & showers (per pupil)     | 25     |
| Day with cafeteria, no gyms or showers (per pupil) | 20     |
| Day without cafeteria, gym or showers (per pupil)  | 15     |

|                                |    |
|--------------------------------|----|
| Service stations (per vehicle) | 10 |
|--------------------------------|----|

|                          |     |
|--------------------------|-----|
| Stores (per toilet room) | 400 |
|--------------------------|-----|

|                              |    |
|------------------------------|----|
| Swimming pools (per swimmer) | 10 |
|------------------------------|----|

Theaters:

|                             |   |
|-----------------------------|---|
| Drive-in (per car space)    | 5 |
| Movie (per auditorium seat) | 5 |

Workers:

|                                 |    |
|---------------------------------|----|
| Construction (per person/shift) | 50 |
| Day (per person/shift)          | 15 |

# MTC Idaho C. PP Supplemental Irrigation Flow Log 2017

| DATE       | READING | FLOW AMOUNT | COMMENTS                  |
|------------|---------|-------------|---------------------------|
| 8/21/2017  | 41143   |             | Meter reading at start    |
| 8/22/2017  | 41719   | 576         |                           |
| 8/23/2017  | 42220   | 501         |                           |
| 8/24/2017  | 43512   | 1292        |                           |
| 8/25/2017  | 44627   | 1115        |                           |
| 8/28/2017  | 46107   | 1480        |                           |
| 8/29/2017  | 47687   | 1580        |                           |
| 8/30/2017  | 49151   | 1464        |                           |
| 9/1/2017   | 52712   | 3561        |                           |
| 9/4/2017   | 52712   | 0           | Holiday - No Watering     |
| 9/5/2017   | 52743   | 31          |                           |
| 9/6/2017   | 52743   | 0           | No watering as per Farmer |
| 9/7/2017   | 52743   | 0           | Waiting to be cut         |
| 9/8/2017   | 52743   | 0           | Waiting to be cut         |
| 9/11/2017  | 52743   | 0           | Waiting to be cut         |
| 9/12/2017  | 52743   | 0           | Waiting to be cut         |
| 9/13/2017  | 52743   | 0           | Waiting to be cut         |
| 9/14/2017  | 52743   | 0           | Waiting to be cut         |
| 9/15/2017  | 52743   | 0           | Waiting to be cut         |
| 9/18/2017  | 52743   | 0           | Waiting to be cut         |
| 9/19/2017  | 52743   | 0           | Waiting to be cut         |
| 9/20/2017  | 52743   | 0           | Waiting to be cut         |
| 9/21/2017  | 52743   | 0           | Waiting to be cut         |
| 9/22/2017  | 52743   | 0           | Waiting to be cut         |
| 9/25/2017  | 52743   | 0           | Field cut not bailed      |
| 9/26/2017  | 52743   | 0           | Field cut not bailed      |
| 9/27/2017  | 52743   | 0           | Field cut not bailed      |
| 9/28/2017  | 52743   | 0           | Field cut not bailed      |
| 9/29/2017  | 52743   | 0           | Field cut not bailed      |
| 9/30/2017  | 52743   | 0           | Field cut not bailed      |
| 10/2/2017  | 52743   | 0           |                           |
| 10/3/2017  | 52743   | 0           |                           |
| 10/4/2017  | 52743   | 0           |                           |
| 10/5/2017  | 52743   | 0           |                           |
| 10/6/2017  | 52743   | 0           |                           |
| 10/9/2017  | 52743   | 0           | Field Bailed              |
| 10/10/2017 | 52743   | 0           | Field cleared             |
| 10/11/2017 | 52743   | 0           |                           |
| 10/12/2017 | 52743   | 0           |                           |
| 10/13/2017 | 52743   | 0           | Winterized System         |
|            |         |             |                           |
|            | Total   | 11,600      |                           |

## Smith, Rachael

---

**From:** Keith Miller <Keith.Miller@mtctrains.com>  
**Sent:** Wednesday, July 11, 2018 6:55 AM  
**To:** Smith, Rachael  
**Subject:** RE: Idaho CAPP Information

Rachel,

The Influent Flows is the amount of water leaving the facility going into the treatment pond. As for the tank levels, depending on how much water the facility uses will determine how often the well pump comes on. When the tank is at its full point of 36', it may take a day or two for that level to drop to 28' before the well pump starts again. During the winter months that is closer to about every two days, in the summer the well pump may cycle every 24 to 36 hours. There tends to be more showers during the summer months and we water the lawns. Hope this makes sense. Let me know if you need anything else.

Best regards,

**Keith Miller**

**Maintenance Supervisor/ Risk Manager**

MTC Idaho CAPP

15505 S. Pleasant Valley Road

Kuna, ID 83634

**208-336-9959 x 228**

[keith.miller@mtctrains.com](mailto:keith.miller@mtctrains.com)



**From:** Smith, Rachael [mailto:Rachael.Smith@idwr.idaho.gov]  
**Sent:** Tuesday, July 10, 2018 1:53 PM  
**To:** Keith Miller <Keith.Miller@mtctrains.com>  
**Subject:** RE: Idaho CAPP Information

Hi Keith,

I hope you're having a great week. Thanks for sending the information. I've been working on the report for the facility and have a few questions.

Is the "Influent Flow Log (lift station)" that was attached to the last e-mail for wastewater influent? I just wanted to verify that these flows pertain to wastewater influent and not water going into the building.

Also, I'm cross checking a few calculations to make sure they make sense. Did you say that the tank is typically filled daily when the level drops to 28 to 36 feet and this will typically take 2-3 hours?

Thank you,

Rachael Smith  
Water Resource Agent, Sr.  
Idaho Dept of Water Resources  
322 E. Front Street PO Box 83720

Boise, ID 83720-0098  
[Rachael.Smith@idwr.idaho.gov](mailto:Rachael.Smith@idwr.idaho.gov)  
208.287.4912

**From:** Keith Miller [<mailto:Keith.Miller@mtctrains.com>]  
**Sent:** Monday, July 02, 2018 11:06 AM  
**To:** Smith, Rachael <[Rachael.Smith@idwr.idaho.gov](mailto:Rachael.Smith@idwr.idaho.gov)>  
**Subject:** Idaho CAPP Information

Rachael,

Attached is the information that you had asked for. Let me know if there is anything else that you may need. Also, the correct count for the restroom fixtures are as follows;

Toilets – 45  
Urinals - 17  
Sinks – 69

Best regards,

**Keith Miller**

**Maintenance Supervisor/ Risk Manager**

MTC Idaho CAPP

15505 S. Pleasant Valley Road

Kuna, ID 83634

**208-336-9959 x 228**

[keith.miller@mtctrains.com](mailto:keith.miller@mtctrains.com)



**Management Training Corporation**  
Water Right 63-32993  
Field Exam Completed: 6/28/18  
IDWR Staff: Rachael Smith/ Dan Nelson



Overall view from the front of the facility



North side of facility and water tank



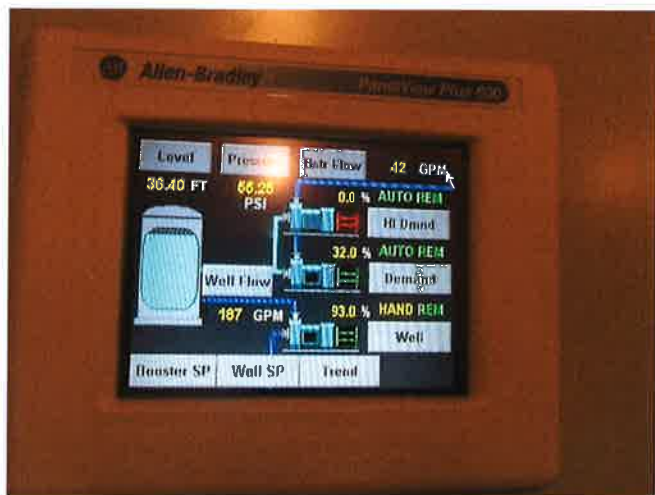
40' high 252,866 gallon water storage tank  
(wellhead visible on bottom left side)



IDEQ Site ID: EO 008481  
Drilling Permit ID: D0057716



Overall view inside booster pump station



Booster pumps at 93% capacity (187 gpm)



Booster pumps at 100% capacity (227 gpm)



Small motor (20 Hp)



Large motor (100 Hp)

## Smith, Rachael

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Water Resource Agent, Sr.

Idaho Dept of Water Resources

322 E. Front Street PO Box 83720

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