

[illegible]

Method of Determination: **Visual inspection**

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

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

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

Yes 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
A0018520	Franklin Electric	60		236-619-6025	12 " well casing

**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
Theoretical						

2. Measurements: Calculated using Groundwater Theoretical Analysis worksheet (Attached).

E. FLOW CALCULATIONSX Additional Computation Sheets

Attached

Measured Method: Theoretical calculations attached.

$$Q = (8.8 \times (\text{HP}) \times (\text{EFF.}) \div \text{TDH})$$

Pump motor is a 65 HP per specs on electrical panel.

Q = 3.945 cfs theoretical.**Permit diversion rate limited to 3.34 cfs.****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation: **None required**

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

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

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

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

This permit is for fire protection at the Fish & Game fisheries research building in Nampa. The permit contact Lee VanDeBogart has retired. Mr. VanDeBogart was located at the main office in Boise, the contact at the Nampa location is Cheryl Zink, Administrative Assistant. I also met Bill Schrader who maintains the building but Ms. Zink is the contact. Ms. Zink had records showing the fire prevention system had been tested back to 2004. She made copies of the 2011 and 2012 testing and inspection of the fire sprinkler system for our files.

The overlap comparison indicated there are two potential overlapping water rights. The first (63-11256) has a POD of Springs – Wilson Drain for Recreation use of 31.07 cfs and 22,494 AF. The second overlap (63-11705) is groundwater for Recreation Storage and Diversion to Storage use of 0.4 cfs and 11.0 AF. Both of these are for Wilson Ponds so there is no overlap. Since WR 63-11705 was listed as groundwater, I expected to find two wells on site. Both F&G people knew of only the single well which I GPS'ed and tagged A0017578. After further analysis back in the office, I determined this location was not the correct well for the fire prevention system (requiring 2nd trip). The well I tagged was a 8" domestic well located approximately 20 feet west of the well house. The driller report of this well is Permit # 63-94-W-0482-000, located at T2N, R2W, Sec 3, SESE, drilled on 20-June 1994. The fire prevention system well is a 12" well located in the well house, Driller report Well Tag # 0030453, located in the same QQ, drilled on 23-Sept-2003. During the 2nd visit, the fire protection well was GPS'ed and tagged A0018520.

The well house has electrical panels for both the domestic and fire protection wells and two pressure tanks. The two well systems are separate and not tied together. The fire protection system consists of the 12" well, a supply pipe up which turns 90 degrees, parallels the ground and turns 90 degrees back down into the ground, coming up in the fire protection room in the main building. The fire protection room is located just north of the main entrance into the fisheries building. There were blue prints of the system located in the room, along with an inspection report with

water supply (flow test) specifications. The blue prints listed the system capacity as 1500 gpm or 3.34 cfs which was the amount requested on the permit.

According to the flow rate design report located in the fire protection room, the flow rate information is:

Sprinkler System Design Criteria	
Area of Water Application	1498 sq. ft
Minimum rate of Water Application	.10 gpm/sq. ft
Area per sprinkler	225 sq. ft
Orifice Size	1/2"
Allowance for inside hose and outside hydrants	100 gpm
At base of riser system requires	377.01 gpm
Water supply (flow test)	
Static Pressure	65 psi
Gallons per minute flowing	1500 gpm *
Residual pressure	20 psi *

*Note: The values for "Gallons per minute flowing" and "Residual pressure" were swapped on the report but I've corrected them here.

I've had a difficult time identifying the size pump for the fire protection system. There are no labels on the electrical panel indicating pump size. Treasure Valley Fire Protection performs the yearly inspection and they have no record of pump size. The drilling company Stevens & Sons Well Drilling has no records. Layne Pump in Nampa also has no records. K & M Water Works performed maintenance on the domestic pump (1.5 hp) but don't have any records on the fire protection pump. I may need to access the inside of the electrical panel to see if any documentation exists.

Notes on 2nd trip: On 25-Oct-2012, I returned for a second visit and met with Kevin Meyer. Kevin turned off the pump electrical panel and inside was located the motor information indicating a Franklin Electric 60 HP motor (See photo). According to the Groundwater Theoretical Analysis equation, a 60 HP pump equates to 3.945 cfs. Since the permit is for 3.34 cfs, the recommendation for the license will be 3.34 cfs.

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

WB Zone condition complied with C. Garbon 10-29-12

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
FIRE PROTECTION	01/01 to 12/31	3.340 CFS	
<u>Totals:</u>		3.340 CFS	

2. Recommended Amendments

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

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

I. AUTHENTICATION

Field Examiner's Name *Glen Garbon* Date *25 Oct 2012*

Reviewer _____ Date _____

State of Idaho
Department of Water Resources

Field Exam POD and POU location map

63-31742

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

R02W



0 0.03 0.06 0.12 Miles

- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters



Field Exam Map for 63-31742

System Diagram



The well house has electrical panels for both the domestic and fire protection wells and two pressure tanks. The two well systems are separate and not tied together. The fire protection system consists of the 12" well, a pipe up which turns 90 degrees, parallels the ground and turns 90 degrees back down into the ground, coming up in the fire protection room in the main building. The fire protection room is located just north of the main entrance into the fisheries building. There were blue prints of the system located in the room, along with an inspection report with water supply (flow test) information. The blue prints listed the system capacity as 1500 gpm or 3.34 cfs which was the amount requested on the permit.

City fire hydrant is located just south of the building.

GROUNDWATER THEORETICAL ANALYSIS

FILE: 63-31742

DATE: 12 Oct 2012

BY: Glen Gardiner

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times \text{HP}) \times (\text{EFF.})}{\text{TDH}}$

Q = CFS

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = Depth to water in FEET from land surface to pumping water level

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

$$Q = \frac{(8.8) \times (\underline{60}) \times (0.70)}{\frac{369.6}{93.7}} = \underline{3.945 \text{ cfs}}$$
$$[(\underline{1.3}) + (\underline{40} \times 2.31)]$$

LIFT FROM:

Measurement ()

Owner ()

Area estimate ()

Well Logs (☒)

Booster (Y) (N)

PSI FROM:

Measurement ()

Owner (☒)

Estimate ()

Owner Gage ()

NOTES ON PUMP:

Motor Make, Serial or ID

Pump Make, Serial or ID, rating

REMARKS: static water level at 4" According to well log.
pressure at 40 psi According to 2011 Fire sprinkler Tests.
Electrical panel indicates 60 HP pump.



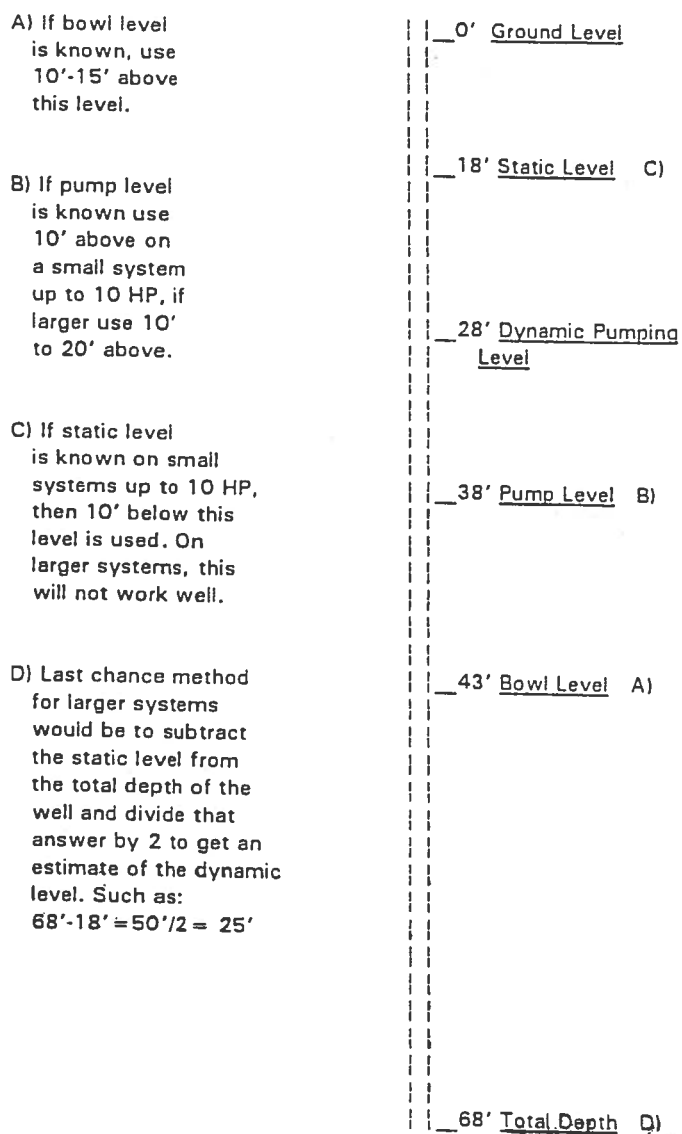
THEORETICAL DYNAMIC PUMPING LEVEL DIAGRAM FOR WELLS

(8/95)rdh

Many considerations may be needed to estimate the dynamic pumping level when you cannot measure it or cannot get the information from either the claimant or the installer of the pump.

Some are: Type of pump, large or small system, type of aquifer, bowl level, pump level, static level and depth of well.

The diagram shown below gives a practical example from A to D, in order of best to least preferred methods, of how you could base your estimate for finding the dynamic pumping level. This is not an absolute or complete set of methods for obtaining your estimates, use only as a guide:



Open Discharge

BW - +10' @ 4.31 PSI

SW - +10' @ 0.00 PSI

Static Level = 18'

(Sign once if Firm Official & Operator)

JOB INVOICE

22409

**TREASURE VALLEY
FIRE PROTECTION, INC.**2731 S. SATURN WAY
BOISE, IDAHO 83709

(208) 362-1888

TO:

FISHERIES RESEARCH CENTER
1414 E. LOCUST LANE
NAMPA ID 83686

PHONE 465-8404	DATE OF ORDER 5/9/2011
ORDER TAKEN BY JON EDES	CUSTOMER ORDER NUMBER

X DAY WORK

CONTRACT

EXTRA

JOB NAME / NUMBER FISHERIES RESEARCH CENTER	
JOB LOCATION SAME	
JOB PHONE	INVOICE DATE 5/20/2011

QUANTITY	MATERIAL	UNIT PRICE	AMOUNT		
1.00	BASIC DRY SYSTEM - QUICK TRIP	300.00	300.00		
1.00	ADDITIONAL WET SYSTEM	35.00	35.00		
1.00	BACKFLOW TEST	40.00	40.00		
1.00	SERVICE TRUCK & EQUIPMENT	40.00	40.00		
TOTAL MATERIALS ►			415.00		
OTHER CHARGES	AMOUNT	LABOR	HOURS	RATE	AMOUNT
TOTAL OTHER ►		TOTAL LABOR ►			
DESCRIPTION OF WORK					
ANNUAL TEST & INSPECTION OF THE FIRE SPRINKLER SYSTEM.					
TERMS	*NET 30 DAYS	DATE COMPLETED	5/9/201	TOTAL MATERIALS 415.00	
WORK ORDERED BY				TOTAL OTHER	
AUTHORIZED SIGNATURE				TOTAL LABOR	
I hereby acknowledge the satisfactory completion of the above described work				TAX	
				TOTAL ► 415.00	

Treasure Valley Fire Protection, Inc.
2731 S. Saturn Way
Boise, ID 83709
208-362-1888

Report Inspection; Water Based Fire Sprinkler

Quarterly _____ Annual ☒ Three Year _____ Five Year _____

Insp. Contract No: _____
Fire Dept.: BOISE
Bill To: FISHERIES RESEARCH
Address: 1414 E. LOCUST LANE
NAMPA, ID 83686

Name of Premise FISHERIES RESEARCH CENTER
Street: 1414 E. LOCUST LANE
City and State: NAMPA, ID

Phone #: 465-8404
Inspector: Jim Edwards
Date: 5-9-11

1 General

- a. Is the building occupied? ☒
- b. Is occupancy same as previous inspection? ☒
- c. Are all systems in service? ☒
- d. Are all fire protection systems same as last inspection? ☒
- e. Is all stock or storage properly below sprinkler piping? ☒
- f. Was property free of fires since last inspection? (Explain any fire on page 2) ☒
- g. In areas protected by wet systems, does the building appear to be properly heated in all areas including blind attics, perimeter areas and are all exterior openings protected against entrance of cold air? ☒
- h. Hydraulic placard in a place? ☒

2 Control Valves

- a. Are all sprinkler system main control valves open? ☒
- b. Are all other valves in proper position? ☒
- c. Are all control valves in good condition and sealed or supervised? ☒
- d. Pressure regulation control valve in open position and not leaking? ☒
- e. Pressure regulation control valves maintain downstream pressure per design criteria? ☒
- f. Pressure regulation control valves passed full flow tests? ☒

3 Water Supply (See Section 14)--Water flow test and results satisfactory?

4 Tanks Pump, Fire Dept. Connections

- a. Are fire pumps, gravity tanks, reservoirs and pressure tanks in good condition and properly maintained? ☒
- b. Are fire dept. connections visible and accessible and in satisfactory condition--couplings free, caps in place and check valves tight and identification sign in place? ☒

5 Wet Systems

- a. Are cold weather valves open or closed as necessary? ☒
- b. Have anti-freeze systems been tested and left in satisfactory condition--Temperature? ☒
- c. Are alarm valves, water flow indicators and retards in satisfactory condition and all valves in correct position? ☒
1. Fifth year: Alarm valves and their associated strainers, filters, and orifices passed internal inspection. ☒

6 Dry System, Pre-Action Systems (see dry valve trip test report)

- a. Is dry valve in service and in good condition? ☒
- b. Is air pressure and priming water level normal? ☒
- c. Is air compressor in good condition? ☒
- d. Were low points drained during fall and winter inspections? ☒
- e. Are quick opening devices in service? ☒
- f. No history of abnormally frequent false tripping of dry pipe valves? ☒
- g. Interior of pipe which passes through freezers free of ice blockage? ☒
- h. Have dry valves been trip tested satisfactorily as required: (every third year, full flow trip test) ☒
- i. Are dry valves adequately protected from freezing? ☒
- j. Valve house and heater condition satisfactory, minimum 40 degrees? ☒
- k. Fifth year: strainers, filters restricted orifices and diaphragm chambers passed internal inspection. ☒
- l. Electric components in service? ☒

7 Alarms

- a. Water motor and gong test satisfactory? ☒
- b. Electric alarm test satisfactory: Inspection test: Wet / Div 23 / 33 Seconds. Bypass: _____ Sec ☒
- c. Valve supervisory alarm service test satisfactory? ☒
- d. Low air alarm on dry and / or pre-action test satisfactory? ☒
- e. Offsite central station received signals? ☒

8 Sprinklers-Piping

- a. Are all sprinklers in good condition, not obstructed, and free of corrosion or loading? ☒
- b. Are all sprinklers less than 50 years old (fast response less than 20 years old)? ☒
- c. Are proper number of extra sprinklers readily available with head wrench? ☒
- d. Is condition of piping, drain valves, check valves, hangers, seismic bracing, pressure gauges, open sprinklers, strainers satisfactory? ☒
1. Fifth year: Gauges checked against calibrated gauge or replaced? ☒
- e. Are all sprinklers of proper temperature rating? ☒

Name of premise: Fisheries Research Center

9. Backflow Devices

- a. Relief port on reduced pressure backflow assembly free from continuous discharge?
b. Control valves in correct position and sealed or supervised?
c. Backflow device passed backflow test?
d. Backflow device passed full flow test?

Yes	N.A.	No
	X	
X		
X		
X		

10. Hydraulic Placard

Density/ Gallons per minute per square foot
Area of application/square feet

<u>Wet</u>		<u>Dry</u>				
Remote Area	Remote Area	Remote Area	Remote Area	Remote Area	Remote Area	Remote Area
110	10					
1498	2593					

It is assumed that the design criteria has been approved by the authority having jurisdiction as adequate for the hazard to be protected

The responsibility to remain in compliance with original approval is solely the Owner's or Occupants.

Treasure Valley Fire Protection, Inc. does not, hereby, confirm the adequacy of the design.

11. Wet Systems

Number 1

Made and model

Made and model

Made and model

Back Flow w/ Flowwick

12. Dry Systems

Number 1

Made and model

Made and model

Made and model

Preaction, Deluge

4" Reladog Mol "D"

13. Control Valves

	Number	Type	Open		Secured		Closed		Sign		Condition
			Yes	No	Yes	No	Yes	No	Yes	No	
Tank											
Pump											
Sectional	<u>2</u>	<u>B-FLY</u>	<u>X</u>		<u>X</u>			<u>X</u>	<u>X</u>		<u>Good</u>
System	<u>2</u>	<u>OSFLY</u>	<u>X</u>		<u>X</u>			<u>X</u>	<u>X</u>		<u>Good</u>

14. Water Flow Test

Main drain test

X Yes

No: If no drain test, why?

Test pipe located	Test Pipe	Size	Pressure	Flow	Pressure
		Before	After		
<u>Riser w/ey</u>	<u>2"</u>	<u>70</u>	<u>40</u>	<u>83</u>	

- a. No obstructive materials discharged during flow test
b. No heavy discoloration of water during drain test
c. No plugging of inspectors tests
d. System has not been out of service for more than one year.

Yes	No
X	
X	
X	
X	

15. Explanation of "No" Answers and Comments

16. Adjustments or Corrections Made

Owners Representative: _____

Date: _____

Inspectors Signature [Signature]

Date 5-9-11

DRY PIPE VALVE TRIP TEST REPORT

BY

TREASURE VALLEY FIRE PROTECTION, INC
2731 S. SATURN WAY
BOISE, IDAHO 83709
PH. 362-1888

FOR FISHERIES RESEARCH CENTER INSPECTION NO. _____
STREET 1414 E. LOCUST LANE CITY NAMPA STATE IDAHO CONTRACT NO. _____
DATE OF TRIP TEST 5-9-11 INSPECTION Annual DAY WORK NO. _____

NOTE: BEFORE ANY DRY PIPE VALVE IS TRIP TESTED, THE WATER SUPPLY LINE TO IT SHOULD BE THOROUGHLY FLUSHED. THE TWO INCH DRAIN BELOW THE VALVE SHOULD BE OPENED WIDE, AND WATER AT FULL PRESSURE SHOULD BE DISCHARGED LONG ENOUGH TO CLEAR THE PIPE OF ANY ACCUMULATION OF SCALE OR FOREIGN MATERIAL. IF THERE IS A HYDRANT ON THE SUPPLY LINE, THIS HYDRANT SHOULD BE FLUSHED BEFORE THE TWO INCH DRAIN IS OPENED. THE DRIP VALVE ON THE DRY PIPE VALVE SHOULD BE CHECKED BEFORE TRIPPING THE DRY PIPE VALVE, TO SEE THAT IT IS IN OPERATING CONDITION.

DRY PIPE VALVES		SYSTEM NO. ()	SYSTEM NO. ()	SYSTEM NO. ()	SYSTEM NO. ()
VALVE SERIAL NUMBER		41629 B			
MANUFACTURER (NAME)		Reliable			
VALVE MODEL		D			
VALVE SIZE		4 INCH	INCH	INCH	INCH
CONTROLLING SPRINKLERS	(LOCATION)	Attic			
	(NUMBER)	160 (APPROX)	(APPROX)	(APPROX)	(APPROX)
DATE LAST TRIP TESTED?		5-12-10			
DATE LAST OPERATED?		5-12-10			
PRESSURE BEFORE TEST	AIR	35 LBS	LBS	LBS	LBS
	WATER	76 LBS	LBS	LBS	LBS
SIZE AND LOCATION OF TEST VALVE		1/2 Remote South			
WAS GATE VALVE BELOW DRY VALVE OPEN WIDE AT TEST? (IF NOT, HOW MANY TURNS?)		3 turns			
VALVE TRIPPED AT	AIR PRESSURE	12 LBS	LBS	LBS	LBS
	WATER PRESSURE	76 LBS	LBS	LBS	LBS
	TIME	MIN 33 SEC	MIN SEC	MIN SEC	MIN SEC
IF SYSTEM FLOODED, LIST TIME WATER REACHED TEST OPENING		MIN SEC	MIN SEC	MIN SEC	MIN SEC
PERFORMANCE		Good			
VALVE CONDITION	INTERIOR OF BODY	Good			
	MOVING PARTS	Good			
	RUBBER FACING	Good			
	SEATS	Good			
	RESET?	Yes			
DID ALARMS OPERATE AT TRIP TEST?		Yes			
ALL LOW POINT DRAINS BLOWN OUT?		Yes			
WATER CONTROL VALVE LEFT OPEN AND SEALED?		Yes			
ALARM CONTROL VALVE LEFT OPEN AND SEALED?		Yes			
QUICK OPENING DEVICES		SYSTEM NO. ()	SYSTEM NO. ()	SYSTEM NO. ()	SYSTEM NO. ()
DEVICE SERIAL NUMBER					
MANUFACTURER (NAME)					
TYPE AND MODEL		NA			
AIR PRESSURE IN UPPER CHAMBER		LBS	LBS	LBS	LBS
QUICK OPENING DEVICE TRIPPED AT		SEC LBS	SEC LBS	SEC LBS	SEC LBS
PERFORMANCE					
QUICK OPENING DEVICE LEFT IN SERVICE AND CONTROL OPEN AND SEALED?					

LIST ANY UNSATISFACTORY CONDITIONS:

REMARKS: Next Full Flow in 2013.



Treasure Valley Fire Protection, Inc.

2731 S. Saturn Way
(208) 362-1888

Boise, ID 83709
(208) 362-2207

NAME OF FACILITY FISHERIES RESEARCH CENTER
NAME OF OWNER FISHERIES RESEARCH CENTER
CONTACT PERSON CHERYL
TELEPHONE NUMBER 465-8404
SERVICE ADDRESS 1414 E. LOCUST LANE
NAMPA, ID
MAILING ADDRESS 1414 E. LOCUST LANE
NAMPA, ID
LOCATION Fire Base West

OFFICE USE ONLY

A/C NUMBER:
GC CERTIFICATE #:
TEST KIT S/N#:
CALIBRATION DUE:

DEVICE

SIZE: 4"
BRAND: Wilkins
TYPE: DC
MODEL: 350
SERIAL # 05703

NEW DEVICE

☐ Y ☒ N

SYSTEM PSI

70

	CHECK VALVE #1 PSI ACROSS <u>4.4</u> LBS.	CHECK VALVE #2 PSI ACROSS <u>5.0</u> LBS.	DIFFERENTIAL PSI RELIEF VALVE	PRESSURE VACUUM BREAKER
INITIAL TEST	1. LEAKED ☐ 2. CLOSED TIGHT ☒	1. LEAKED ☐ 2. CLOSED TIGHT ☒	OPENED @ _____ LBS. OPENED UNDER 2 LBS OR DID NOT OPEN	AIR POPPIT OPENED @ _____ OPENED UNDER 1 LBS. OR DID NOT OPEN.
REPAIRS	CLEANED ☐ REPLACED: DISC ☐ SPRING ☐ GUIDE ☐ PIN FEATHER ☐ HINGE PIN ☐ SEAT ☐ DIAPHRAGM ☐ OTHER: DESCRIBE	CLEANED ☐ REPLACED: DISC ☐ SPRING ☐ GUIDE ☐ PIN FEATHER ☐ HINGE PIN ☐ SEAT ☐ DIAPHRAGM ☐ OTHER: DESCRIBE	CLEANED ☐ REPLACED: DISC ☐ SPRING ☐ GUIDE ☐ PIN FEATHER ☐ HINGE PIN ☐ SEAT ☐ DIAPHRAGM ☐ OTHER: DESCRIBE	CHECK VALVE: CLOSED TIGHT ☐ DID NOT CLOSE ☐ CLEANED ☐ REPLACED: AIR INLET DISC ☐ CHECK DISC ☐ AIR INLET SPRING ☐ CHECK SPRING ☐ OTHER ☐ DESCRIBE:
FINAL TEST	PSI ACROSS: CLOSED TIGHT ☐	PSI ACROSS: CLOSED TIGHT: ☐	OPENED @ _____ LBS. REDUCED PRESSURE	SATISFACTORY ☐

TESTED BY: [Signature]

CERT # 796

DATE: 5-9-11

REPAIRED BY: _____

DATE: _____

FINAL TEST BY: _____

CERT # _____

DATE: _____

AIR GAP PROVIDED Y ☐ N ☒

WATER SERVICE RESTORED ☒ YES ☐ NO

CUSTOMER SIGNATURE: _____ DATE: _____

JOB INVOICE

23740

**TREASURE VALLEY
FIRE PROTECTION, INC.**

2731 S. SATURN WAY
BOISE, IDAHO 83709

(208) 362-1888

TO:

FISHERIES RESEARCH CENTER
1414 E. LOCUST LANE
NAMPA, ID 83686

PHONE 465-8404	DATE OF ORDER 5/15/2012
ORDER TAKEN BY JON EDES	CUSTOMER ORDER NUMBER

X DAY WORK CONTRACT EXTRA

JOB NAME / NUMBER FISHERIES RESEARCH CENTER	
JOB LOCATION 1414 E. LOCUST LANE - NAMPA	
JOB PHONE 465-8404	INVOICE DATE 5/21/2012

QUANTITY	MATERIAL	UNIT PRICE	AMOUNT		
1	BASIC DRY SYSTEM	300.00	300.00		
1	ADDITIONAL WET SYSTEM	35.00	35.00		
1	SERVICE TRUCK & EQUIPMENT	40.00	40.00		
1	BACKFLOW	40.00	40.00		
TOTAL MATERIALS ▶			415.00		
OTHER CHARGES	AMOUNT	LABOR	HOURS	RATE	AMOUNT
TOTAL OTHER ▶		TOTAL LABOR ▶			
DESCRIPTION OF WORK					
ANNUAL TEST & INSPECTION OF FIRE SPINKLER SYSTEM					
TERMS NET 30 DAYS		DATE COMPLETED 5/15/2012		TOTAL MATERIALS TOTAL OTHER TOTAL LABOR TAX	
WORK ORDERED BY				TOTAL ▶ 415.00	
AUTHORIZED SIGNATURE I hereby acknowledge the satisfactory completion of the above described work.				TOTAL ▶ 415.00	

Treasure Valley Fire Protection, Inc.
2731 S. Saturn Way
Boise, ID 83709
208-362-1888

Report of Inspection; Water Based Fire Sprinkler

Quarterly _____ Annual ☒ Three Year _____ Five Year _____

Insp. Contract No: **23740**
Fire Dept.: **NAMPA**
Bill To: **FISHERIES RESEARCH**
Address: **1414 E. LOCUST LANE**
NAMPA, ID 83686

Name of Premise: **FISHERIES RESEARCH CENTER**
Street: **1414 E. LOCUST LANE**
City and State: **NAMPA, ID**

Phone #: **465-8404**
Inspector: **Jon Fdes**
Date: **5-15-12**

1 General

- a. Is the building occupied? ☒
- b. Is occupancy same as previous inspection? ☒
- c. Are all systems in service? ☒
- d. Are all fire protection systems same as last inspection? ☒
- e. Is all stock or storage properly below sprinkler piping? ☒
- f. Was property free of fires since last inspection? (Explain any fire on page 2) ☒
- g. In areas protected by wet systems, does the building appear to be properly heated in all areas including blind attics, perimeter areas and are all exterior openings protected against entrance of cold air? ☒
- h. Hydraulic placard in a place? ☒

2 Control Valves

- a. Are all sprinkler system main control valves open? ☒
- b. Are all other valves in proper position? ☒
- c. Are all control valves in good condition and sealed or supervised? ☒
- d. Pressure regulation control valve in open position and not leaking? ☒
- e. Pressure regulation control valves maintain downstream pressure per design criteria? ☒
- f. Pressure regulation control valves passed full flow tests? ☒

3 Water Supply (See Section 14)—Water flow test and results satisfactory? ☒

4 Tanks Pump, Fire Dept. Connections

- a. Are fire pumps, gravity tanks, reservoirs and pressure tanks in good condition and properly maintained? ☒
- b. Are fire dept. connections visible and accessible and in satisfactory condition—couplings free, caps in place and check valves tight and identification sign in place? ☒

5 Wet Systems

- a. Are cold weather valves open or closed as necessary? ☒
- b. Have anti-freeze systems been tested and left in satisfactory condition—Temperature? ☒
- c. Are alarm valves, water flow indicators and relays in satisfactory condition on all valves in correct position? ☒
1. Fifth year: Alarm valves and their associated strainers, filters, and orifices passed internal inspection. ☒

6 Dry System, Pre-Action Systems (see dry valve trip test report)

- a. Is dry valve in service and in good condition? ☒
- b. Is air pressure and priming water level normal? ☒
- c. Is air compressor in good condition? ☒
- d. Were low points drained during fall and winter inspections? ☒
- e. Are quick opening devices in services? ☒
- f. No history of abnormally frequent false tripping of dry pipe valves? ☒
- g. Interior of pipe which passes through freezers free of ice blockage? ☒
- h. Have dry valves been trip tested satisfactorily as required: (every third year, full flow trip test) ☒
- i. Are dry valves adequately protected from freezing? ☒
- j. Valve house and heater condition satisfactory, minimum 40 degrees? ☒
- k. Fifth year: strainers, filters restricted orifices and diaphragm chambers passed internal inspection. ☒
- l. Electric components in service? ☒

7 Alarms

- a. Water motor and gong test satisfactory? ☒
- b. Electric alarm test satisfactory: Inspection test: **Wet / Dry**
24 / 33 Seconds. Bypass: _____ Sec ☒
- c. Valve supervisory alarm service test satisfactory? ☒
- d. Low air alarm on dry and / or pre-action test satisfactory? ☒
- e. Offsite central station received signals? ☒

8 Sprinklers-Piping

- a. Are all sprinklers in good condition, not obstructed, and free of corrosion or loading? ☒
- b. Are all sprinklers less than 50 years old (fast response less than 20 years old)? ☒
- c. Are proper number of extra sprinklers readily available with head wrench? ☒
- d. Is condition of piping, drain valves, check valves, hangers, seismic bracing, pressure gauges, open sprinklers, strainers satisfactory? ☒
1. Fifth year: Gauges checked against calibrated gauge or replaced? ☒
- e. Are all sprinklers of proper temperature rating? ☒

Name of premise: Fisheries Research Center

9. Backflow Devices

- a. Relief port on reduced pressure backflow assembly free from continuous discharge?
b. Control valves in correct position and sealed or supervised?
c. Backflow device passed backflow test?
d. Backflow device passed full flow test?

Yes	N.A.	No
	X	
X		
X		
	X	

10. Hydraulic Placard

Density/ Gallons per minute per square foot
Area of application/square feet

Wet		Dry		Remote Area	Remote Area	Remote Area	Remote Area	Remote Area	Remote Area	Remote Area
				10	10					
				1498	2593					

It is assumed that the design criteria has been approved by the authority having jurisdiction as adequate for the hazard to be protected

The responsibility to remain in compliance with original approval is solely the Owner's or Occupants.

Treasure Valley Fire Protection, Inc. does not, hereby, confirm the adequacy of the design.

11. Wet Systems

Number 1

Made and model

Made and model

Made and model

Back flow w/ flow switch

12. Dry Systems

Number 1

Made and model

Made and model

Made and model

4" Reliable mod "D"

Preaction, Deluge

13. Control Valves

Number	Type	Open		Secured		Closed		Sign		Condition
		Yes	No	Yes	No	Yes	No	Yes	No	
Tank										
Pump										
Sectional	<u>2 B-Flt</u>	X		X			X	X		<u>Good</u>
System	<u>2 OSty</u>	X		X			X	X		<u>Good</u>

14. Water Flow Test

Main drain test X Yes No: If no drain test, why?

Size Pressure Flow Pressure

Test pipe located Test Pipe Before Pressure After

<u>Riser W.</u>	<u>2"</u>	<u>66</u>	<u>41</u>	<u>67</u>

- a. No obstructive materials discharged during flow test
b. No heavy discoloration of water during drain test
c. No plugging of inspectors tests
d. System has not been out of service for more than one year.

Yes	No
X	
X	
X	
X	

15. Explanation of "No" Answers and Comments

16. Adjustments or Corrections Made

Owners Representative: Cheryl Fike

Date: 05/15/2012

Inspectors Signature: Jim Gales

Date: 5-15-12



Treasure Valley Fire Protection, Inc.

2731 S. Saturn Way
(208) 362-1888

Boise, ID 83709
(208) 362-2207

NAME OF FACILITY FISHERIES RESEARCH CENTER
NAME OF OWNER FISHERIES RESEARCH CENTER
CONTACT PERSON CHERYL
TELEPHONE NUMBER 465-8404
SERVICE ADDRESS 1414 E. LOCUST LANE
NAMPA, ID
MAILING ADDRESS 1414 E. LOCUST LANE
NAMPA, ID
LOCATION Riser Room West
NEW DEVICE ☐ Y ☒ N SYSTEM PSI 60

OFFICE USE ONLY

A/C NUMBER: <u>23740</u>
GC CERTIFICATE #:
TEST KIT S/N#:
CALIBRATION DUE:
DEVICE
SIZE: <u>4"</u>
BRAND: <u>Wilkins</u>
TYPE: <u>DC</u>
MODEL: <u>350</u>
SERIAL # <u>05703</u>

	CHECK VALVE #1 PSI ACROSS <u>3.0</u> LBS.	CHECK VALVE #2 PSI ACROSS <u>2.0</u> LBS.	DIFFERENTIAL PSI RELIEF VALVE	PRESSURE VACUUM BREAKER
INITIAL TEST	1. LEAKED ☐ 2. CLOSED TIGHT ☒	1. LEAKED ☐ 2. CLOSED TIGHT ☒	OPENED @ _____ LBS. OPENED UNDER 2 LBS OR DID NOT OPEN	AIR POPPET OPENED @ OPENED UNDER 1LBS. OR DID NOT OPEN.
REPAIRS	CLEANED ☐ REPLACED: DISC ☐ SPRING ☐ GUIDE ☐ PIN FEATHER ☐ HINGE PIN ☐ SEAT ☐ DIAPHRAGM ☐ OTHER: DESCRIBE	CLEANED ☐ REPLACED: DISC ☐ SPRING ☐ GUIDE ☐ PIN FEATHER ☐ HINGE PIN ☐ SEAT ☐ DIAPHRAGM ☐ OTHER: DESCRIBE	CLEANED ☐ REPLACED: DISC ☐ SPRING ☐ GUIDE ☐ PIN FEATHER ☐ HINGE PIN ☐ SEAT ☐ DIAPHRAGM ☐ OTHER: DESCRIBE	CHECK VALVE: CLOSED TIGHT ☐ DID NOT CLOSE ☐ CLEANED ☐ REPLACED: AIR INLET DISC ☐ CHECK DISC ☐ AIR INLET SPRING ☐ CHECK SPRING ☐ OTHER ☐ DESCRIBE:
FINAL TEST	PSI ACROSS: CLOSED TIGHT ☐	PSI ACROSS: CLOSED TIGHT: ☐	OPENED @ _____ LBS. REDUCED PRESSURE	SATISFACTORY ☐

TESTED BY: Kerry Turner

CERT # 17411

DATE: 5-15-12

REPAIRED BY: _____

DATE: _____

FINAL TEST BY: _____

CERT # _____

DATE: _____

AIR GAP PROVIDED Y ☐ N ☒ NA. WATER SERVICE RESTORED ☒ YES ☐ NO

CUSTOMER SIGNATURE: Cheryl Zuk DATE: 05/15/2012

DRY PIPE VALVE TRIP TEST REPORT

BY **TREASURE VALLEY FIRE PROTECTION, INC**
 2731 S. SATURN WAY
 BOISE, IDAHO 83709
 PH. 362-1888

FOR FISHERIES RESEARCH CENTER INSPECTION NO. 23740
 STREET 1414 E. LOCUST LANE CITY NAMPA STATE IDAHO CONTRACT NO. _____
 DATE OF TRIP TEST 5-15-12 INSPECTION Annual - Quick DAY WORK NO. _____

NOTE: BEFORE ANY DRY PIPE VALVE IS TRIP TESTED, THE WATER SUPPLY LINE TO IT SHOULD BE THOROUGHLY FLUSHED. THE TWO INCH DRAIN BELOW THE VALVE SHOULD BE OPENED WIDE, AND WATER AT FULL PRESSURE SHOULD BE DISCHARGED LONG ENOUGH TO CLEAR THE PIPE OF ANY ACCUMULATION OF SCALE OR FOREIGN MATERIAL. IF THERE IS A HYDRANT ON THE SUPPLY LINE, THIS HYDRANT SHOULD BE FLUSHED BEFORE THE TWO INCH DRAIN IS OPENED. THE DRAIN VALVE ON THE DRY PIPE VALVE SHOULD BE CHECKED BEFORE TRIPPING THE DRY PIPE VALVE, TO SEE THAT IT IS IN OPERATING CONDITION.

DRY PIPE VALVES		SYSTEM NO. ()	SYSTEM NO. ()	SYSTEM NO. ()	SYSTEM NO. ()
VALVE SERIAL NUMBER		41629 B			
MANUFACTURER (NAME)		Reliable			
VALVE MODEL		D			
VALVE SIZE		4" INCH	INCH	INCH	INCH
CONTROLLING SPRINKLERS	(LOCATION)	Attic			
	(NUMBER)	100 (APPROX)	(APPROX)	(APPROX)	(APPROX)
DATE LAST TRIP TESTED?		5-9-11			
DATE LAST OPERATED?		5-9-11			
PRESSURE BEFORE TEST	AIR	41 LBS	LBS	LBS	LBS
	WATER	74 LBS	LBS	LBS	LBS
SIZE AND LOCATION OF TEST VALVE		1/2 Remote S.			
WAS GATE VALVE BELOW DRY VALVE OPEN WIDE AT TEST? (IF NOT, HOW MANY TURNS?)		3 turns			
VALVE TRIPPED AT	AIR PRESSURE	11 LBS	LBS	LBS	LBS
	WATER PRESSURE	74 LBS	LBS	LBS	LBS
	TIME	MIN 33 SEC	MIN SEC	MIN SEC	MIN SEC
IF SYSTEM FLOODED, LIST TIME WATER REACHED TEST OPENING		— MIN — SEC	MIN SEC	MIN SEC	MIN SEC
PERFORMANCE		Good			
VALVE CONDITION	INTERIOR OF BODY				
	MOVING PARTS				
	RUBBER FACING				
	SEATS				
	RESET?	yes			
DID ALARMS OPERATE AT TRIP TEST?		yes			
ALL LOW POINT DRAINS BLOWN OUT?		yes			
WATER CONTROL VALVE LEFT OPEN AND SEALED?		yes			
ALARM CONTROL VALVE LEFT OPEN AND SEALED?		yes			
QUICK OPENING DEVICES		SYSTEM NO. ()	SYSTEM NO. ()	SYSTEM NO. ()	SYSTEM NO. ()
DEVICE SERIAL NUMBER		NA			
MANUFACTURER (NAME)					
TYPE AND MODEL					
AIR PRESSURE IN UPPER CHAMBER		LBS	LBS	LBS	LBS
QUICK OPENING DEVICE TRIPPED AT		SEC LBS	SEC LBS	SEC LBS	SEC LBS
PERFORMANCE					
QUICK OPENING DEVICE LEFT IN SERVICE AND CONTROL OPEN AND SEALED?					

LIST ANY UNSATISFACTORY CONDITIONS:

REMARKS:

Quick Trip.

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FILE NUMBER 63-31742



The well on the right is the domestic well, tag ID A0017578. The fire prevention well is located inside the well house. No tag ID for the fire protection well.



Photo of the 12" fire protection well in corner of well house. Water comes up, turns 90 degrees into the red device.

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FILE NUMBER 63-31742



Water line travels back underground, under parking lot and back up in fire protection room in building.



Fire protection room door located to left of flag pole. Main entrance right of flag pole.

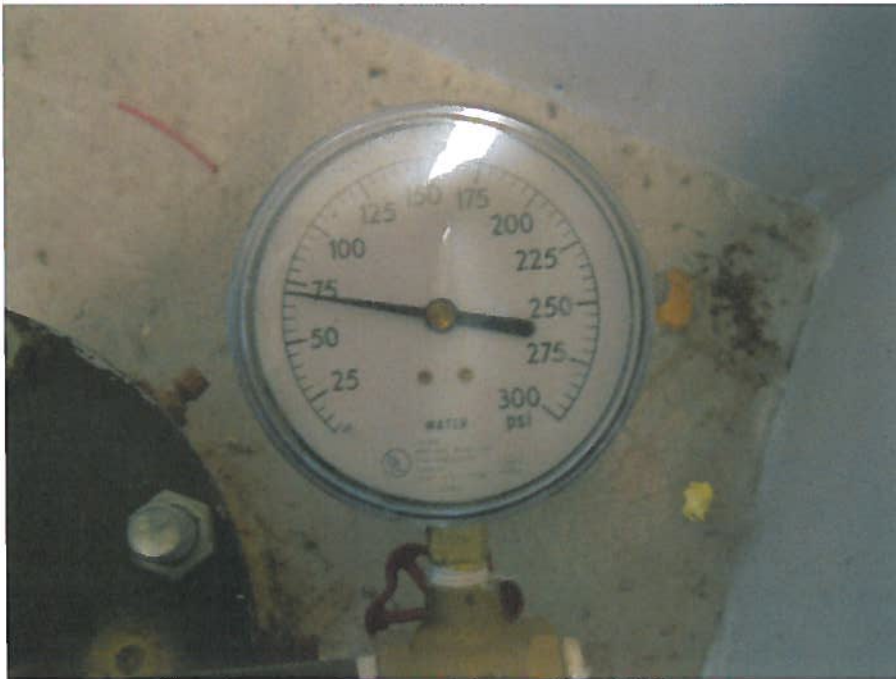


Photo showing pipe from well house and pressure gauge reading 74 psi.

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FILE NUMBER 63-31742

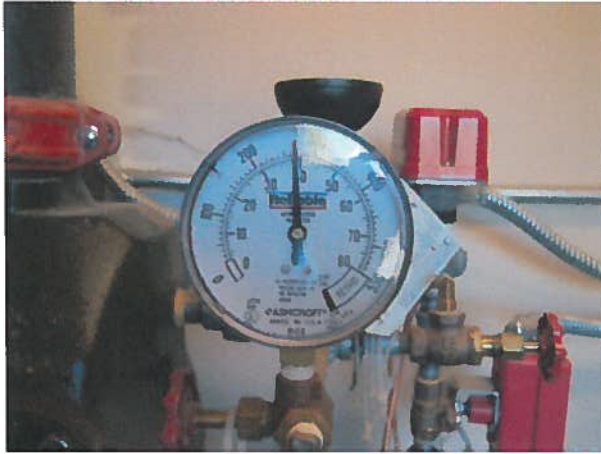


Photo showing fire protection lines in building. System specifications located towards top of right pipe. See close up photos below.

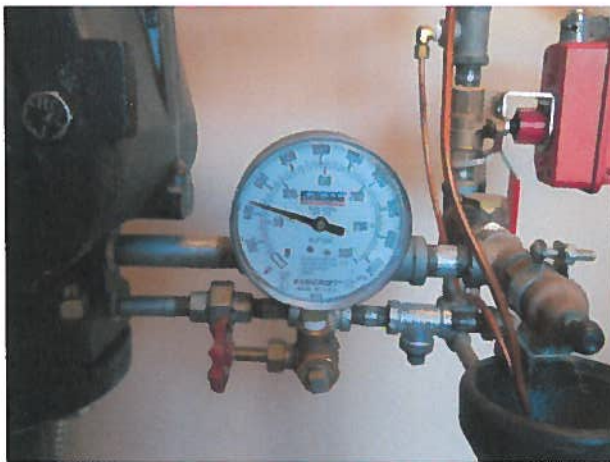
(Break in middle of picture caused by amateur photographer – sorry).

Inspection tag located under right pressure gauge dated 2012. Lower pressure gauge hidden behind inspection tag.

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Top pressure gauge on right, reading 39 psi.



Lower pressure gauge on right, reading 65 psi.



Pressure gauge on left, reading 74 psi.

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EMERGENCY TELEPHONE (200) 362-1000

JOB NAME FISHERIES RESEARCH CENTER
JOB NUMBER 398

This system is hydraulically designed to protect:
UNSEATED OFFICES, WET SYSTEM

SPRINKLER SYSTEM DESIGN CRITERIA

A) Area of Water Application	1498	Sq. Ft.
B) Minimum Rate of Water Application (Density)	.10	G.P.M./Sq. Ft.
C) Area Per Sprinkler	225	Sq. Ft.
D) Orifice Size	1/2"	
E) Allowance for inside hose and outside hydrants	100	G.P.M.
F) At base of riser system requires	377.01	G.P.M. at Residual

WATER SUPPLY (FLOW TEST)

A) Static Pressure	65	P.S.I.
B) Gallons per minute flowing	20	G.P.M.
C) Residual pressure	1500	P.S.I.
D) Agency Supply flow test		OWNER

DESIGN CRITERIA

	1498	Sq. Ft.
Water Application (Density)	.10	G.P.M./Sq. Ft.
	225	Sq. Ft.
	1/2"	
Allowance for inside hose and outside hydrants	100	G.P.M.
At base of riser system requires	377.01	G.P.M. at Residual

WATER SUPPLY (FLOW TEST)

	65	P.S.I.
	20	G.P.M.
	1500	P.S.I.
OWNER		

Photos of design specs taped to right riser pipe.

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FILE NUMBER 63-31742

CALCULATION DESIGN INFORMATION		CALCULATION DESIGN INFORMATION	
AREA:	WET	AREA:	DRY
OCCUPANCY:	UNUSED ATTIC	OCCUPANCY:	UNUSED ATTIC
HAZARD:	LIGHT HAZARD	HAZARD:	LIGHT HAZARD
AREA OF OPERATION:	1497	AREA OF OPERATION:	2593
DENSITY:	10	DENSITY:	10
AREA PER HEAD:	225	AREA PER HEAD:	130
HOSE WATER ALLOWANCE		HOSE WATER ALLOWANCE	
INSIDE:	-----	INSIDE:	-----
OUTSIDE:	100	OUTSIDE:	100
SYSTEM DEMAND		SYSTEM DEMAND	
PSI AT BASE OF RISER:	53.28	PSI AT BASE OF RISER:	49.31
GPM AT BASE OF RISER:	277.01	GPM AT BASE OF RISER:	483.50
PSI AVAILABLE AT SOURCE:	81.51	PSI AVAILABLE AT SOURCE:	57.17
GPM AVAILABLE AT SOURCE:	377.01	GPM AVAILABLE AT SOURCE:	583.50
PRESSURE REMAINING:	7.44	PRESSURE REMAINING:	7.86

CALCULATION DESIGN INFORMATION		FLOW TEST SUMMARY	
AREA:	UNUSED ATTIC	STATIC PSI:	65
OCCUPANCY:	LIGHT HAZARD	RESIDUAL PSI:	20
HAZARD:		GPM:	1500
AREA OF OPERATION:	2593	DATE:	OWNER PROVIDED WELL
DENSITY:	10	LOCATION:	OWNER PROVIDED WELL
AREA PER HEAD:	130	BY:	OWNER
HOSE WATER ALLOWANCE			
INSIDE:	-----		
OUTSIDE:	100		
SYSTEM DEMAND			
PSI AT BASE OF RISER:	49.31		
GPM AT BASE OF RISER:	483.50		
PSI AVAILABLE AT SOURCE:	57.17		
GPM AVAILABLE AT SOURCE:	583.50		
PRESSURE REMAINING:	7.86		

Photos of design specs from blue prints.

PHOTOGRAPHER AND DATE OF PHOTOS Glen Gardiner 25-Oct-2012
FILE NUMBER 63-31742



Photo showing location of ID tag.

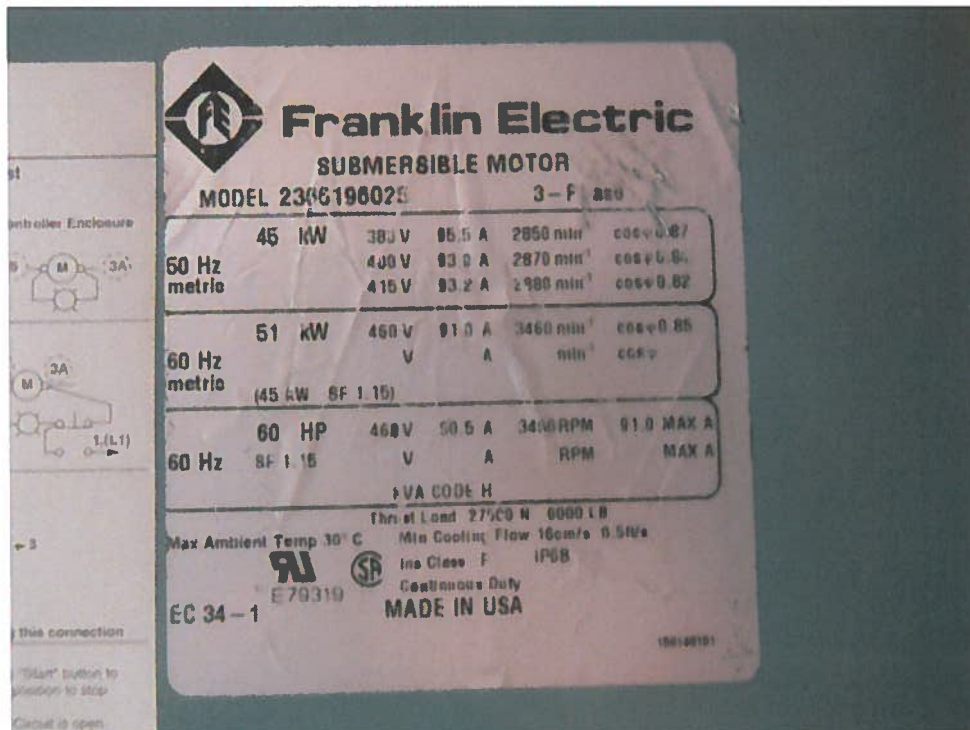


Photo of information tag located inside electrical panel showing 60 HP motor.