

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATION

63-34188
Permit No. ~~63-31488~~

1. Owner Gayle Manufacturing Co. Inc Phone No. 208-890-6600
Current address 80 N Kings Rd, Nampa, ID 83687
2. Examiner's name Cody Parker EXAM DATE 02/12/2018
3. Accompanied by Chris Mahler Email _____
Address same
- Relationship to permit holder Plant Manager Phone No. 530-681-1580
4. Source Groundwater tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use None
2. Other water rights with the same source and point of diversion None

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
			NE	SW	24	04N	04W	Canyon	GPS

2. Place(s) of Use: Method of determination Tax parcel spatial layer, digital PLS map

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	04W	24									X								

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.

Scale: 1" = _____

- ☐ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☐ Aerial photo attached (required for irrigation of 10+ acres)
☐ 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
D0071967	Clarke	315	PE6068L282503	Aurora	16-2480044 (8")
	(diesel engine)				

*Code to correspond with no. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Pump Curve						

2. Measurements: _____

E. NARRATIVE/REMARKS/COMMENTS

This permit authorizes diversion of 0.5 cfs groundwater for fire protection use. Proof of beneficial use was submitted on November 14, 2016. I completed the field exam on February 12, 2018.

A 315-hp diesel engine powers an Aurora fire pump to divert water from a 24" well with tag no. D0071967. Field test documentation for the well indicates the capacity of the system is around 2500 gpm or 5.58 cfs. The well is located at N 43 40' 07.1" by W 116 45' 50.5" in the NESW of Sec. 24, T04N, R04W, B.M. The well was initially described in the NESW, but the location was corrected based on the GPS coordinates provided in the well driller report to the NWSE. It turns out that the coordinates, rather than the legal description, were incorrect. The driller report and well location should be update to reflect the GPS coordinates taken during the exam.

Water is diverted from the well to a 300,000-gallon storage tank. The storage tank can be filled within a 24-hr period at the permitted diversion rate of 0.50 cfs, so no storage component is necessary. From the tank, water can be diverted to any of the 5 hydrants located on the property as well as to the internal sprinkler system of the buildings.

There are no other uses of the well. A separate well located on the property provides water for domestic use associated with bathrooms and sinks on the property. There does not appear to be an active water right associated with this other use of water.

Using the hydrants, water could be delivered to all of the property owned by the right holder within the NESW.

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

System Capacity => 5.58 cfs

Diversion rate limited by permit (0.50 cfs)

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

None required (IDAPA BU Exam Rule 35.01.j.iv)

300,000 gallon storage can be filled within 24 hours

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Fire Protection	01/01	12/31	0.50 cfs	
Totals:			0.50 cfs	

2. Recommended Amendments

☐ Change P.D. as reflected on page 1☐ Add P.D. as reflected on page 1☒ None☐ Change P.U. as reflected on page 1☐ Add P.U. as reflected on page 1☐ Other**I. AUTHENTICATION**

Field Examiner's Signature

Date

2-13-18

Reviewer

Date

2/13/18

SEAL

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT
Picture Attachment



Figure 1 The metal tag on the well with number D0071967



Figure 2 Inside the pump house

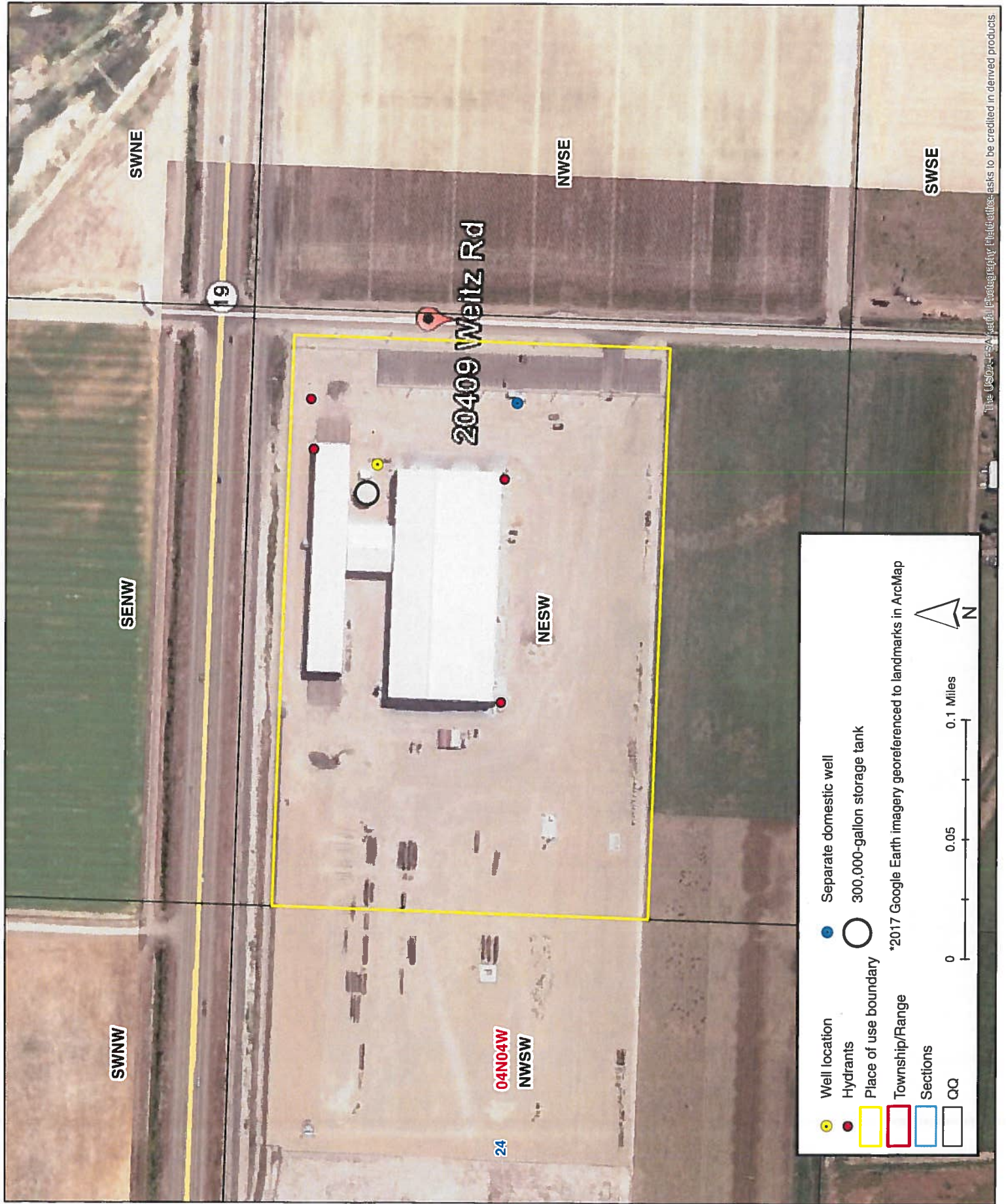
STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT
Picture Attachment



Figure 3 The 300,000-gallon storage tank where water is stored for fire protection use. The tank can be filled within a 24-hr period, so no storage component is required on the right. Water from the tank is distributed to the 5 hydrants on the property and to the internal sprinkler system inside the building.



Figure 4 Connections at the pump house where the fire department can hook up to to fight fire.



Print Form

DIESEL DRIVEN FIRE PUMP STARTUP AND FIELD TEST DATA REPORT

Submit by Email

NICKERSON CO. INC., 2143 W. INDIANA AVE., SALT LAKE CITY, UT 84104 (801) 973-8888

EQUIPMENT SYMBOL OR REFERENCE #

DATE: 12-8-16 NICO REF. # 16-169 TESTED BY: JOHN BROWN

INSTALLING CONTRACTOR: AMERICAN FIRE PROTECTION END USER: GAYLE MFG

PUMP MANUFACTURER: AURORA S/N: 16-2480044 MODEL: 8-481-17B

SUCTION SIZE: 10" DISCHARGE SIZE: 8"

RATINGS: GPM 2500 PSI 120 TDH/HF RPM 1760

CERTIFIED FACTORY TEST CURVE # 238127 TEST CURVE S.O.H. PSI: 137.7 HF:

ENGINE MANUFACTURER: CLARKE S/N: PE6068L282503 MODEL: JU6H-UFAD98

RATED RPM: 1760 MAXIMUM USABLE HORSEPOWER 315

CONTROLLER MANUFACTURER: FIRETROL S/N: 136208-01RE MODEL: FTA1100

COMPLETE MODEL NUMBER: FTA1100-JL12N-ECM-LE

FLOW TEST CONDUCTED WITH: FLOWMETER MODEL #: K-2500-8 PIPE SIZE: 8"

STATIC SUCTION PRESSURE: 7 PSI SUCTION SOURCE: STORAGE TANK

OVERALL INSTALLATION: GOOD ALIGNMENT: OK

BEARINGS: OK COOLING REGULATOR SET: YES STUFFING BOXES ADJUSTED: YES

CAPACITY POINT	GPM POINT	FLOWMETER GPM RDG	PITOT RDG	DISCH PSI	SUCTION PSI	NET PSI PSI/HF	RPM	OIL PRESSURE	WATER TEMP.
CHURN	0	0		147	7	140	1762	58 PSI	176 DEG F
100%	2500	2500		142	7	135	1758	53 PSI	174 DEG F
150%	3750	3750		140	7	133	1760	51 PSI	176 DEG F

STARTS: (A) MANUAL: ☒ ☒ ☒ ☒ ☒ ☒ ☐ ☐ ☐ (B) AUTOMATIC: ☒ ☒ ☒ ☒ ☒ ☒ ☐ ☐ ☐PRESSURE SETTINGS: (A) JOCKEY PUMP: STOP 150 PSI (B) FIRE PUMP: STOP 140 PSI STOP SETTING
START 140 PSI START 130 PSI 30 MINUTE RUN TIME

MAIN RELIEF VALVE SET: YES JOCKEY PUMP RELIEF VALVE SET: NA JOCKEY PUMP RUN TIMER: 0 SEC

CONTROLLER ALARM CONTACTS CHECKED ☒

REMOTE ALARMS CHECKED

PERSONNEL PRESENT:

JOHN BROWN - NICKERSON COMPANY

AMERICAN FIRE PERSONNEL

BRAD TURNER - SMITH POWER

PUMP MANUFACTURER'S REP. SIGNATURE:

John Brown

CONTROLLER MANUFACTURER'S REP. SIGNATURE:

John Brown

ENGINE MANUFACTURER'S REP. SIGNATURE

John Brown for Brad Turner

Smith Power Products

[Signature]

05/26/2016
Date

Certified By

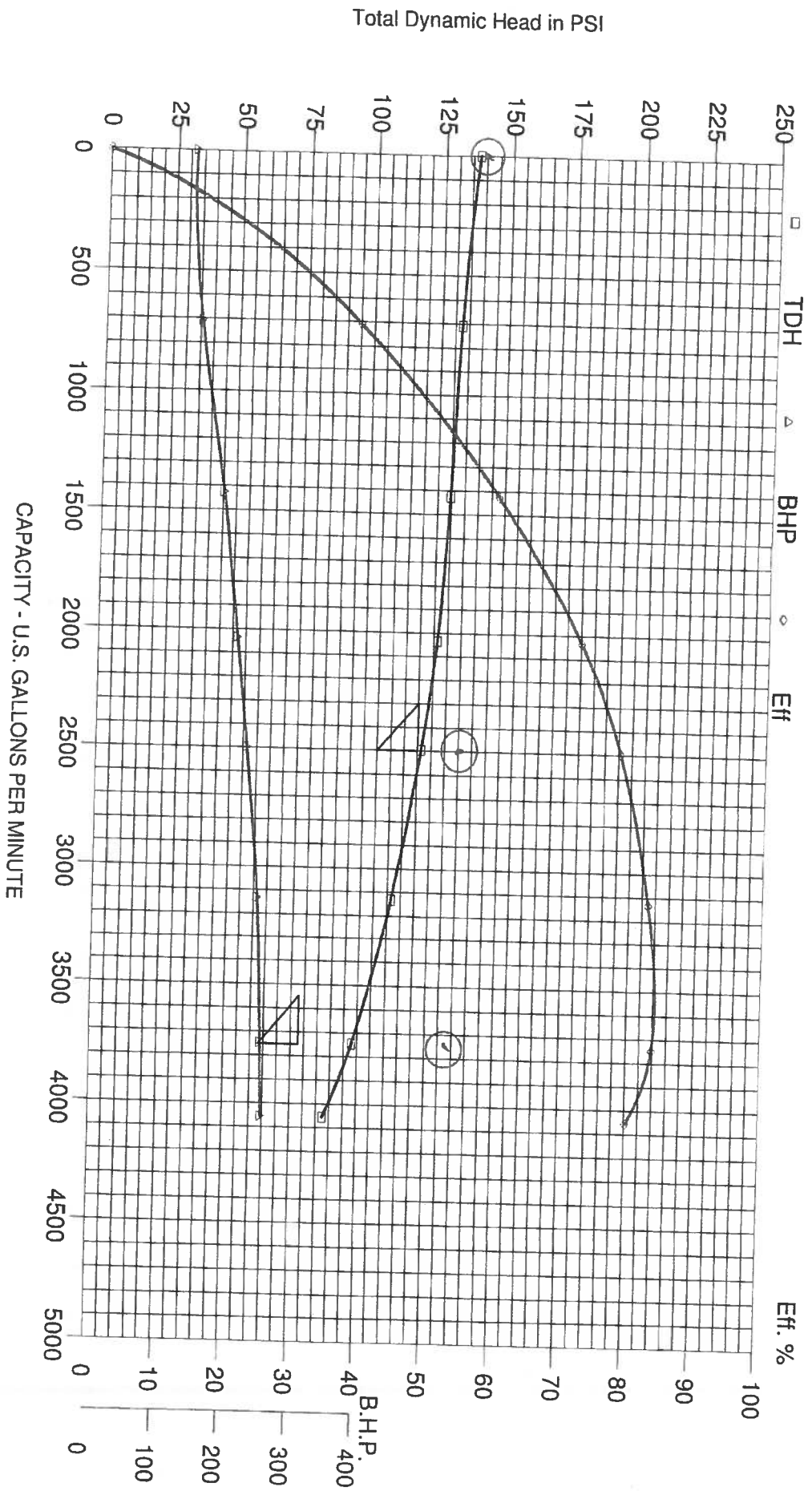
FIELD TEST POINTS 12-8-16



AURORA

NICKERSON CO
Customer

Sales Order: 2714579
Size: 8-481-17B
Type: 1760
R.P.M.: 1760
Stage: 1
Spec. Gravity: 1.0
Imp. Dia.: 16.875
WO/Serial No.: 2480044
Curve No: 238127
Test No: 516513
Plotted By: 5260, DM
Date: 5/26/2016



CLARKE

Fire Protection Products, Inc.

CLARKE UK, LTD.

Fire Protection Products

START-UP INSPECTION (S.U.I) CHECKLIST

Facility Identification (Name): GAYLE MANUFACTURING			
Address: HWY 19 & WEITZ ROAD		City : CALDWELL	
State/Providence: IDAHO	Postal Code: 83607	Country: USA	
S.U.I. Test Date: 12-8-16	Clarke Engine Model: JU6H UFAD98	Engine Serial Number: PE6068L282503	
Pump Mfr.: AURORA	Pump Model: 8-481-17B	Pump Speed: 1760 RPM	Right Angle Gear Ratio: NA
Pump Rating (GPM): 2500 GPM	Pump Pressure PSI: 120 PSI	Controller Mfr.: FIRETROL	Controller Model: FTA1100-JL 12N
Inspection Requirements			
Engine Full Load RPM:		Engine Oil Pressure at Full Load (PSI):	Stabilized Engine Temp. at Full Load(*F):

Check and Correct as Necessary

(Make necessary comments at bottom of form)

STATIC CHECKS (Pre-Start - up):

- ☒ Pump set is secured to foundation
- ☒ Pump set base is grouted
- ☒ Coupling or driveshaft aligned and serviced
- ☒ Coolant plugs and coolant installed
- ☒ Heat Exchanger discharge piping installed and secured
- ☒ Engine pre-heater connected to a dedicated AC power source
- ☒ Crankcase oil level full
- ☒ Fuel supply and return lines connected, - no galvanized or copper piping, tank at proper elevation, tank filled
- ☒ Pump room air supply and ventilation equipment complete, adequate, and functional
Size of inlet air louver 39" x 36"
- ☒ Air cleaner mounted, protective covering removed
- ☒ Pump set is properly protected and temperature controlled if necessary.
- ☒ Exhaust system complete and supported by the building structure, rain protected
- ☒ Controller wired according to supplier's instructions
- ☒ Batteries filled, secured, connected, and charged

Comments: _____

RUNNING CHECKS:

- ☒ Manual start at engine gauge panel with fire pump controller in off position
- ☒ Manual start at Fire Pump Controller with Engine Gauge Panel in automatic position
- ☒ Water solenoid operation, verify raw water discharge
- ☒ Cooling loop pressure gauge reading 35 psi
- ☒ Engine gauges functioning correctly
- ☒ No leaks at fuel, water, exhaust
- ☒ High coolant temperature alarm verification
- ☒ Low oil pressure alarm verification
- ☒ Overspeed shutdown using verification procedure
- ☒ Clean Y-strainers in cooling loop after all testing is completed
- ☒ Final hour meter reading: 1.2
- ☒ Work performed by: BRAD TURNER
- ☐ Warranty Registration for engine submitted on-line at www.clarkefire.com

For Electronic Engines Only:

- ☒ With engine off, switch ECM Selector to Alternate ECM to verify alarm
- ☒ Start engine in Alternate ECM, verify speed setting and no additional alarms
- ☒ With engine off, switch ECM Selector to Primary ECM and start engine to verify normal operation

Pump Dealer: NICKERSON COMPANY, INC.
 Address: 2301 WEST INDIANA AVE
 City: SALT LAKE CITY, UT
 Postal Code: 84104 Country: USA

Serviced by: SMITH POWER PRODUCTS
 Address: 4045 TRANSPORT
 City: BOISE, IDAHO
 Postal Code: 83705 Country: USA

12

[illegible]

[illegible]

WRA Cody Parker

63-33838	AXA EQUIT GROUND WATER
63-34188	GAYLE MAIGROUND WATER
63-34372	FILLMORE, WASTE WATER
63-11252	WINTERS, I WASTE WATER
63-20672	TRACY, GAIGROUND WATER
63-20700	CLASON, G GROUND WATER
63-20702	CLASON, G GROUND WATER
63-20708	BECK, J R; t WEST END DRAIN
63-21387	WINTERS, I GROUND WATER
63-21538	SIMPLOT I I GROUND WATER
63-21539	SIMPLOT I I GROUND WATER
63-21540	SIMPLOT I I GROUND WATER
63-2549A	TRACY, GA I WEST END DRAIN
63-25498	GEO A WEI WEST END DRAIN
63-2652A	WINTERS, I GROUND WATER
63-27863	DANIELS, E GROUND WATER
63-3371	BADJOLA, E UNNAMED DRAIN

[illegible]



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

January 22, 2018

GAYLE MANUFACTURING CO INC
80 N KINGS RD
NAMPA ID 83687

RE: Water Right Permit No. 63-34188

Dear Permit Holders,

I am writing today in regard to the water right permit referenced above which authorizes the diversion of 0.50 cfs groundwater for fire protection use. On November 14, 2016, you submitted Proof of Beneficial Use for this permit stating that your project is fully developed. The next step in the water appropriation process is to complete a Beneficial Use Field Examination to determine the extent to which water use was developed under the permit. The field examination is the final step before the Department can issue a water right license.

If you did not develop a beneficial use of water during the development period, a license cannot be issued and the permit should be relinquished. If the use *was* developed, but you have ceased using the water and have no further interest in pursuing a water right license, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

Please contact me within the next thirty (30) days to schedule a field examination for your water right permit. You can reach me by phone at 208-334-2190 or by email at cody.parker@idwr.idaho.gov. If you no longer own the place of use, the Department will work with the current property owner to issue a license or void the permit. If you still own the property, but do not make a timely response in this regard, the permit will be voided.

Please let me know if you have any questions regarding the content of this letter. I appreciate your attention to this matter, and I look forward to hearing from you.

Respectfully,

Cody Parker
Water Resource Agent
IDWR Western Region

Enclosed: WR Report, WR Map, Relinquishment of Permit