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## Monthly Fire Pump Churn Test Procedure

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### BEFORE PUMP IS OPERATED

- ▶ Fire pump churn test log should be used to verify test – *form on reverse side*.
- ▶ Notify alarm company of pending churn test.
- ▶ Shut off jockey pump.
- ▶ Check drip pockets under packing gland for proper drainage.
- ▶ Check packing adjustment – approximately one drop per second is necessary to keep packing lubricated.
- ▶ Confirm fire pump is in automatic mode.

### START PUMP FOR CHURN TEST

- ▶ Open small pet cock valve on side or under pump controller to begin pressure drop. Keep valve open until pump starts automatically.
- ▶ **PRECAUTION:** Attach small drain hose to pet cock valve or place five-gallon container under the valve to catch the discharged water.
- ▶ Close pet cock valve once pump starts.

### WHILE PUMP IS OPERATING

- ▶ Read suction and discharge gauges – difference between these readings indicates churn pressure, which should match churn pressure as shown on pump nameplate (record on test sheet).
- ▶ Observe packing glands for proper leakage for cooling of packing (note on test sheet).
- ▶ Observe discharge from casing relief valve – adequate flow keeps pump case from overheating (note on test sheet).
- ▶ Allow pump to run for seven (7) minutes.
- ▶ Shut pump off after seven (7) minutes.
- ▶ Note on test sheet if no adverse conditions were found during the test.

### AFTER CHURN TEST IS COMPLETED

- ▶ Reset fire pump to automatic mode.
- ▶ Reset jockey pump to automatic mode.
- ▶ Notify alarm company that test is completed; return fire pump alarms to service.
- ▶ Test sheet shall be dated and signed by test personnel.
- ▶ Adverse conditions shall be brought to attention of facility manager.

# MONTHLY FIRE PUMP CHURN TEST LOG

**Site and Location**

**Date**

Fire pump starts in response to pressure drop

Casing relief valve flows to drain while fire pump is running

Casing relief valve stops flowing when fire pump shuts off

Log suction operating pressure

Log discharge operating pressure

Monitor pump packing temperature

Stuffing box drains freely

Pump operation signals fire alarm panel service

Jockey pump returned to automatic

Fire pump returned to automatic

Fire alarm panel returned to service

**Operator**

**Comments**