Monthly Fire Pump Churn Test Procedure

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

<table>
<thead>
<tr>
<th>Site and Location</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

- 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

<table>
<thead>
<tr>
<th>Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>