

CONTHERM *Scientific Limited*

TECHNICAL MEMORANDUM

PRODUCT : STEAM UNITS

No : 0087

FROM : Contherm Scientific Ltd

DATE : 14/4/2004

TO : ALL AGENTS

SUBJECT: NON RECIRCULATION OF WATER

There have several instances where the injector pipe on a humidity steam injection system gets clogged after a relatively short period. Having analysed the deposits when this occurs it has been determined that the water has a high concentration of copper (15%), iron (15%) and aluminium (7%). This appears to be caused by the injected steam coming into contact with the copper refrigeration tubing and the aluminium finning used on the refrigeration evaporator. It is therefore recommended that the water used in a steam injection system be drained to waste rather than being recirculated back to the original tank. Where recirculation is not possible – the effect could be reduced by frequently changing the tank water (every two or three days) to reduce the buildup of mineral concentration.

To change the existing tubing from recirculation to waste follow the following procedure.

- Replace the plastic pipe between the steam unit and the pump.
- Cut the cabinet drain tube where it joins the tee connector and let this piece of tubing run to waste out the rear of the cabinet. (will require a drain or bucket or similar container of at least the same capacity as the tank to hold the waste water).
- Remove the remaining tubing, tee piece and filter from the pump and fit new plastic tubing. If the water is NOT being recirculated the filter and tee piece are not required.

This will only allow delivery of clean water to the pump and steam injection system.

