

# Chelate (EDTA) Test Procedure

## Procedure:

Take a 25 ml. sample.

Add 5 drops hardness buffer **EC-R0619**.

Add 1 dipper full of hardness indicator powder **EC-R0620**.

Swirl until dissolved.

If sample turns blue EDTA, (chelates) are present.

Add magnesium chloride reagent **EC-R0755** dropwise, swirling and counting after each drop, until colour changes from blue to red.

(Number of drops X 2) = ppm EDTA (chelates) present.

## Precautions:

1. Any boilers on a chelate (EDTA) program must have chelate tests done daily.
2. Recommended limits may be altered by an **ENERCON** Technical Field Representative as conditions warrant.
3. Boiler feed water must be softened.
4. Care must be taken to insure that no dissolved oxygen exists in the boiler water. In order to insure that no dissolved oxygen exists a good sulphite residual must be maintained

## Recommended Parameters:

Due to changes in feed water and boiler operating conditions, these recommendations must be considered as best approximations.

Steam boilers .....Minimum 10 ppm to Maximum 16 ppm

## Interpretation of Analytical Results:

Chelates (EDTA) over 16 ppm.....cut back on chelate feed rate.

Chelates (EDTA) at 10 - 16 ppm .....no change in treatment.

Chelates (EDTA) less than 10 ppm .....increase chelate feed rate.

**Consult your ENERCON Technical Field Representative.**

3606 - 6th Avenue North Lethbridge, AB T1H 5C4  
Phone (403) 328-9730 - 1-800-248-1195 - Fax (403) 327-4375  
Website: [www.enercon.ca](http://www.enercon.ca) - E-Mail: [ewt@enerconwt.com](mailto:ewt@enerconwt.com)

