



Presentation : The Hidden Problems of Phosphate ester EHC Fluids

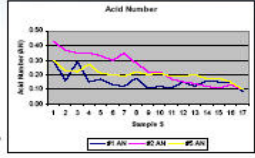

Electro Hydraulic Control (EHC) systems of Steam Turbine operating Phosphate ester Fluids are often prone to fluid degradation and mechanical problems. These problems often result in equipment malfunction such as valve sticking ,pitting, erosion of Servo valves and premature fluid degradation and replacement. Due to the critical nature of Phosphate ester EHC fluid systems, equipment malfunction can result in significant costs and lost production.

EPT, Inc have been the leading provider of Phosphate ester maintenance solutions. EPT Products have achieved over 19 million hours of performance on Phosphate Ester EHC Fluid ,making them the most experienced and successful products of their kind.

EPT, Inc uses a unique form of Ion Exchange called Ion Charge Bonding to recover and maintain EHC Phosphate Ester fluids. To date EPT systems are installed on over 250 Phosphate ester Systems, and on 10 of the largest power stations in the world. Over 4 million liters of Phosphate ester and been recovered to new fluid condition using the EPT product. The cost savings associated with the EPT product are very significant, with one Asian Power station reporting cost savings over US\$7million.

Phosphate ester/ Fyrquel® Filtration using EPT ICB® Power Seraya, Singapore

- 6 Parsons ST, 3039MW
- Converted all 6 units to EPT ICB, by Jan 2003
- AN reduced from >0.40 to <0.10
- Cost savings estimated at >US\$ 5,000,000, using LLC approach
- Improved reliability and efficiency



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® ICB is a registered trademark of EPT Inc

EPT
www.cleanoil.com

"We're all about solutions."

The Hidden Problems of Phosphate ester EHC fluids will be presented by Mr. Peter Dufrense of EPT ,Inc - Canada . www.cleanoil.com

Date & Time : Tuesday 4 October 2005 at 13.30 –16.00 hours

Location : Novotel Bangna Hotel , Bangkok Catteleya Room

Seminar Fee : -

For reservation , please contact : Khun Kritporn

Focus Laboratories Ltd

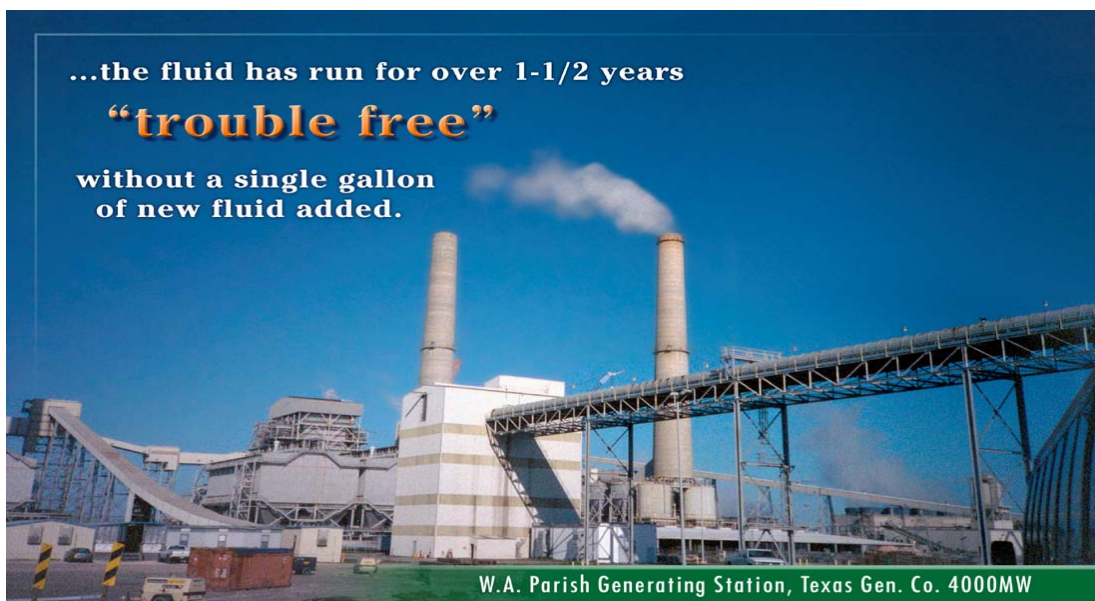
Tel : 0-23618600 –3 Fax : 0-23618567

Email : focuslab@focuslab.co.th

Website : www.focuslab.co.th




The photo below shows the largest power station in the USA. In 1999 this station was experiencing servo valve sticking and being told by the fluid supplier that their EHC systems required chemical flushes and fluid replacement. As an alternative, EPT products were installed, servo valve sticking was eliminated, and after 18 months no fluid was added. **The presentation from EPT, Inc will show direct actions that can be taken in your power plant to resolve common Phosphate ester EHC fluid problems.**



Phosphate ester/ Fyrquel® Filtration using EPT ICB®
Tucson Electric

- 2 ABB/BBC ST, 1600MW
- Converted 2 units to EPT ICB, by June 2001
- AN reduced from >0.90 to <0.05 using portable filter cart
- Immediate increase in AN after filter cart disconnected
- Permanent solution achieved when OEM filtration system upgraded to EPT ICB
- Cost savings >\$80,000/yr
- Reduced fluid consumption by 1500 gallons/year



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Case Study :Tucson Electric

More Details about EPT ,Inc , go to www.cleanoil.com