We have had several questions concerning clay vessel operation and cartridge changeout. Velcon recommends the following procedures. This information is available on our web site - go to the “Library” page, then click on “Vessel Manuals” and then “Clay Vessel Manual”. See page 8 of the manual.

**CARTRIDGE CHANGE REQUIREMENTS.**
Clay Cartridges should be changed whenever one of the following events occurs:
A. Differential pressure exceeds 15 psid.
B. Effluent quality checks indicate the clay is spent and is no longer removing surfactant materials. (E.g. Unsatisfactory filter membrane color, MSEP, or IFT Readings)
C. After one year of operation.

**CARTRIDGE CHANGE OR INSPECTION PROCEDURE.**
A. Shut off the pump.
B. Close the inlet and outlet pipe valves.
C. Open drain valves and remove product from the Clay Vessel.
D. Open the manual air eliminator valve. This will permit the unit to drain faster.
E. Open cover and inspect cover gasket. Replace gasket if it is damaged.
F. Remove spent cartridges.
G. Wipe off or wash down any foreign matter from the vessel interior.
H. Install elements in accordance with installation instructions, PN 09-843, Form 1046.
Check cover gasket for alignment, replace cover and secure tightly. The Clay Vessel is now ready for the start-up procedure.

Velcon has a product, the SWIFTKIT, a practical device that determines the Interfacial Tension (IFT) of aviation jet fuel in the field, taking the guesswork out of changeout. By comparing the upstream and downstream IFT values of jet fuel, you can determine whether the clay treatment is still effective. Higher IFT values indicate low surfactant levels; therefore IFT should increase after clay treatment. For more information on this patented tool, please see the SWIFTKIT page on our web site: http://www.velcon.com/aviation/swIFTkit.html as well as data sheet # 1759, or check with your local distributor. To order ask for Part Number “SWK1.”