programs. There thus exists an ongoing need for more sophisticated and effective online and/or automatic methods for monitoring parameters and reducing corrosion in crude units.

The art described in this section is not intended to constitute an admission that any patent, publication or other information referred to herein is "prior art" with respect to this invention, unless specifically designated as such. In addition, this section should not be construed to mean that a search has been made or that no other pertinent information as defined in 37 C.F.R. § 1.56(a) exists.

Brief Summary ~~of the Invention~~

In an aspect, there is provided a method of measuring at least one property of a predominantly liquid sample, the method comprising the steps of:

adding at least one chemical reagent to the sample, the chemical reagent capable of inducing a measurable optical effect when added to the sample that is directly related to the property to be detected,

measuring the optical effect, and

deducing the value of the property by comparing the measured optical effect to pre-determined values associated with the property to be determined,

removing sulfoxy compounds from the sample by adding to it a cleansing composition, the cleansing composition comprising 2-10% peracetic acid in equilibrium with 10-35% hydrogen peroxide, and water,

wherein the relationship between the measured optical effect and the property to be determined is independent of the volume of the liquid sample and independent of the volume of the reagent added to the sample and wherein the cleansing composition has no impact on the

measurable optical effect other than preventing reactions between the sulfoxy compounds and the at least one chemical reagents.

At least one embodiment of the ~~invention~~present disclosure is directed towards a method of measuring at least one property of a predominantly liquid sample. The method comprises the steps of: 1) adding at least one chemical reagent to the sample, the chemical reagent capable of inducing a measurable optical effect when added to the sample that is directly related to the property to be detected, 2) measuring the optical effect, and 3) deducing the value of the property by comparing the measured optical effect to pre-determined values associated with the property to be determined. The relationship between the measured optical effect and the property to be determined is independent of the volume of the liquid sample and independent of the volume of the reagent added to the sample.

The measured property may be one item selected from the list consisting of: pH, iron concentration, chloride concentration, and any combination thereof. The measured optical effect may be a colorimetric effect, turbidity effect, or a fluorescent effect. The reagent may be thoroughly mixed with the sample. The optical effect may be measured by determining an absorbance level at a particular wavelength whose measurement is recognized as an isosbestic