From:	William H Orem
To:	Axelrad, Don
Cc:	gilmourc@si.edu
Subject:	Re: Everglades surface water sulfide
Date:	Friday, January 30, 2009 1:25:19 PM

Don:

We published some of the surface water sulfide data we had in a 1997 OFR. I tried to send it but your server sent it back at me. The ref is: Orem, W.H., Lerch, H.E., and Rawlik, P., 1997, Descriptive geochemistry of surface and pore water from USGS 1994 and 1995 coring sites in south Florida wetlands: USGS Open-File Report 97-454, 70 pp. Basically we see surface water sulfate at or below the detection limit, except at very heavily sulfur contaminated sites like F1, where we see sulfide levels of severl hundred ppb. We use the sulfide electrode method, adding SAOB to FILTERED water samples in the field. The high pH of the SAOB drive all sulfur species towards S2-, which is the species detected by the electrode. Thus, the electrode really measures the Sum of all sulfide species. I realize that EPA sees higher surface water sulfide than we do, and we discussed the possible reasons for this eralier. Not to put EPA down, and just between us, I think their surface water sulfide values are problematic. Just my opinion.

Bill