From: Axelrad, Don
To: William H Orem
Cc: gilmourc@si.edu
Subject: RE: Everglades surface water sulfide
Date: Friday, January 30, 2009 2:35:57 PM

Bill,

Thanks, I looked over the data in Orem et al. 1997, and that and the methods explanation info you gave me strongly suggests we have undissociated H2S at > 2 ppb in surface water in the northern Everglades.

From what you, Cindy and Bill Landing told me of the methylene blue method as used by EPA, I'll leave those data alone.

Thanks,

Don

PS
Computer problems here too: This morning I lost everything I wrote (a whole 2 pp. so far) on Section 6 of the paper and thought I'd have to start over, but my computer tech saved me. We cannot even print at present with the network so unstable.

From: William H Orem [mailto:borem@usgs.gov]
Sent: Friday, January 30, 2009 2:03 PM
To: Axelrad, Don
Cc: gilmourc@si.edu
Subject: Re: Everglades surface water sulfide

Don:

Have had some email issues this morning, so please excuse if you already received this email. We have some of our surface water sulfide data published in the following USGS OFR: 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. In general, we see surface water sulfide at or below the detection limit (0.1 ppb), except at heavily contaminated sites like F1 where sulfide can be several 100s of ppb. We use the electrode method on FILTERED water samples, adding SAOB in the field. The SAOB has a very high pH which drives all sulfur species towards S2-, thus you are measuring the SUM of all dissolved sulfide species. I know EPA sees higher sulfide levels in surface water, and this may be an artefact of their methodology.

Bill