

Synoptic CB: Porewater Sulfide

May 2025 Samples

2025-10-16

Run Information

```
##### Run information - PLEASE CHANGE
Date_Run = "20250529" #Date that instrument was run
Run_by = "Melanie Giessner" #Instrument user
Script_run_by = "Zoe Read" #Code user
Project = "COMPASS"
run_notes = "Some sample IDs were entered incorrectly so they had to be fixed in code.
Samples 15 and 16 need to be diluted and rerun.
" #any notes from the run

##### File Names - PLEASE CHANGE
#file path and name for raw summary data file
raw_file_name_id_dil = "Raw Data/2025May_H2S_Datasheets.xlsx"
Sheet = "Plate 1"
raw_file_name_data = "Raw Data/20250529_COMPASS_H2S_Plate1.xlsx"

#file path and name of processed data file
tidy_file_name = "Tidy Data/20250529_COMPASS_H2S_Plate1_tidy.csv"
processed_file_name = "Processed Data/COMPASS_H2S_20250529_Plate1.csv"
samples_need_dilution_name = "Processed Data/COMPASS_H2S_20250529_Plate1_SamplesNeedDilution.csv"
samples_high_cv_name = "Processed Data/COMPASS_H2S_20250529_Plate1_SamplesHighCV.csv"

##### Log Files - PLEASE CHECK
#downloaded metadata csv - downloaded from Google drive as csv for this year
Raw_Metadata = "Raw Data/COMPASS_SynopticCB_PW_SampleLog_2025.csv"
Raw_IDs = "Raw Data/20250529_COMPASS_H2S_IDs.xlsx"

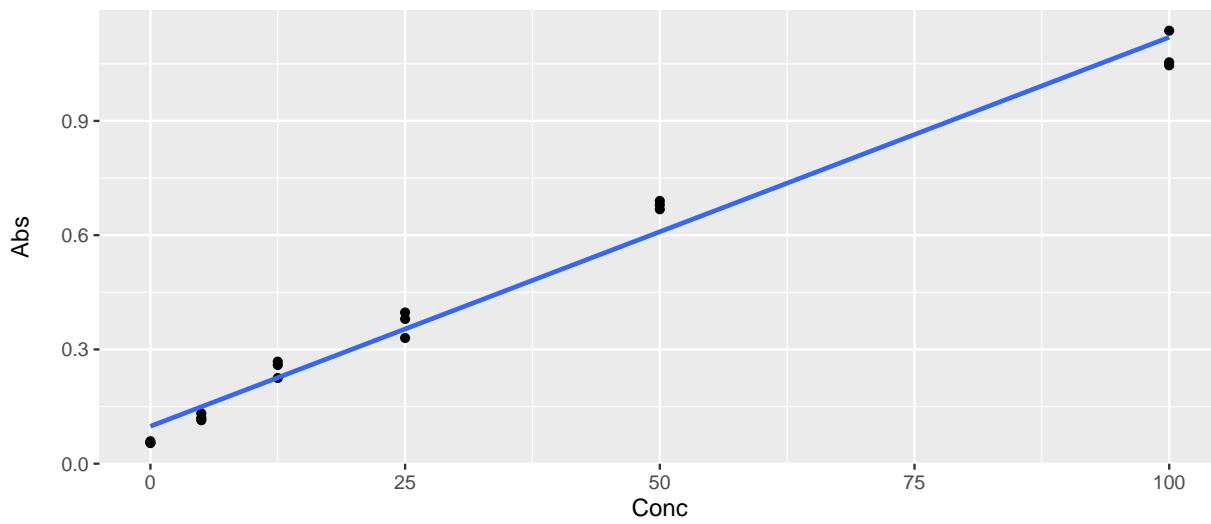
#qaqc log file path for this year
Log_path = "Raw Data/Sulfide_STD_QAQC.csv"
```

Fix data that was entered incorrectly

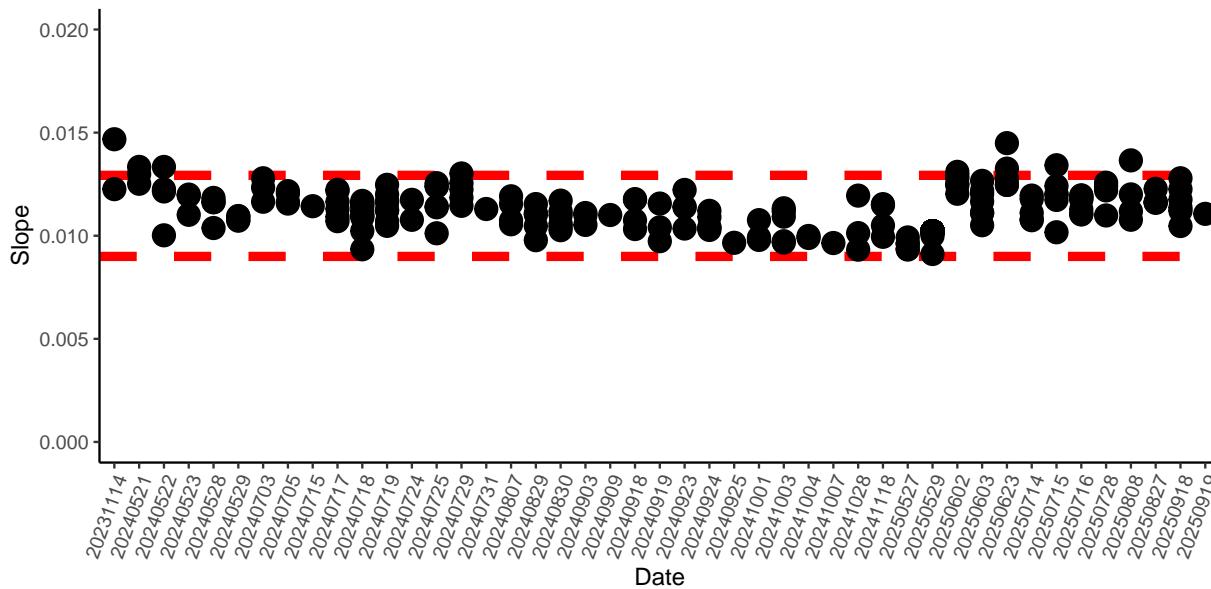
```
##Sample data entered incorrectly
dat$IDs[dat$IDs == "17 Dup"] <- "16 Dup"
dat$IDs[dat$IDs == "18 Dup"] <- "16 Dup"
##Chk stds entered incorrectly
dat$IDs[dat$IDs == "ChkStd 1"] <- "ChkStd 0"
dat$IDs[dat$IDs == "ChkStd 2"] <- "ChkStd 0"
dat$IDs[dat$IDs == "ChkStd 5"] <- "ChkStd 4"
dat$IDs[dat$IDs == "ChkStd 6"] <- "ChkStd 4"

## [1] "Std Curve R squared: 0.9818"
```

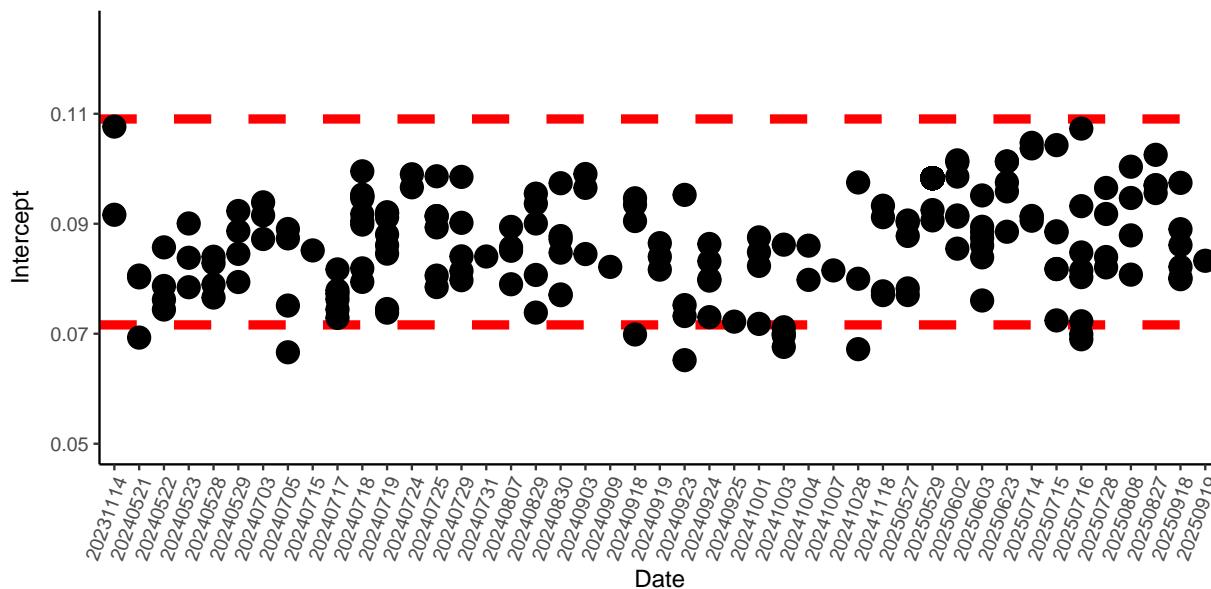
Sulfide Standard Curve



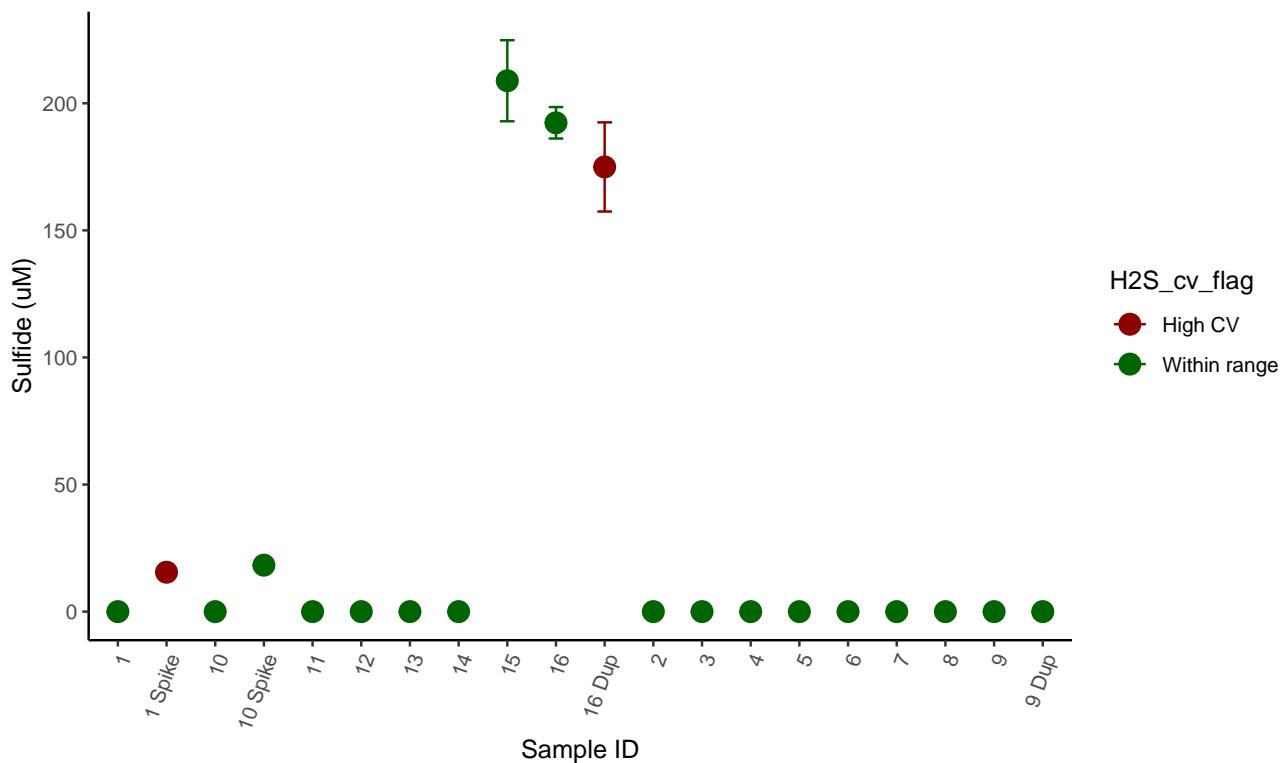
Sulfide Slopes



Sulfide Intercepts



Sample triplicate means and sd dev before bad reps removed



Sample triplicate means and sd dev after bad reps removed

