Synoptic CB: Porewater Sulfide

November 2025 Samples Plate 3 20251114

2025-12-01

Run Information

```
###### Run information - PLEASE CHANGE
  Date_Run = "20251114"  #Date that instrument was run
  Plate = "3"
  Month = "Nov"
  Year = "2025"
  Run_by = "Zoe Read"  #Instrument user
  Script_run_by = "Zoe Read" #Code user
  Project = "COMPASS"
  run_notes = "Std curve is slightly below cutoff (0.979 vs 0.98).
  Std curve slope is 2 sd different from previous slopes.
  Samples 15, 35, 38, 12, and 16 still have high CVs after one replicate was removed.
  Sample 10 needs to be diluted.
  Dup and spk was bad.
  50 uL of spike added.
  " #any notes from the run

###### STDs to remove manually - NA unless standards have high CVs
  stds_to_remove <- c("D10") #Ex. c("A02", "B02")

  Chkstds_to_remove <- c(NA)

  MCs_to_remove <- c(NA)

##Sample data that was entered incorrectly
  # The Old ID is the original, incorrectly-entered ID and the New ID is the correct ID to change it to.
# Old_ID_1 = "17 Dup"
# New_ID_1 = "16 Dup"
cat(run_notes)
```
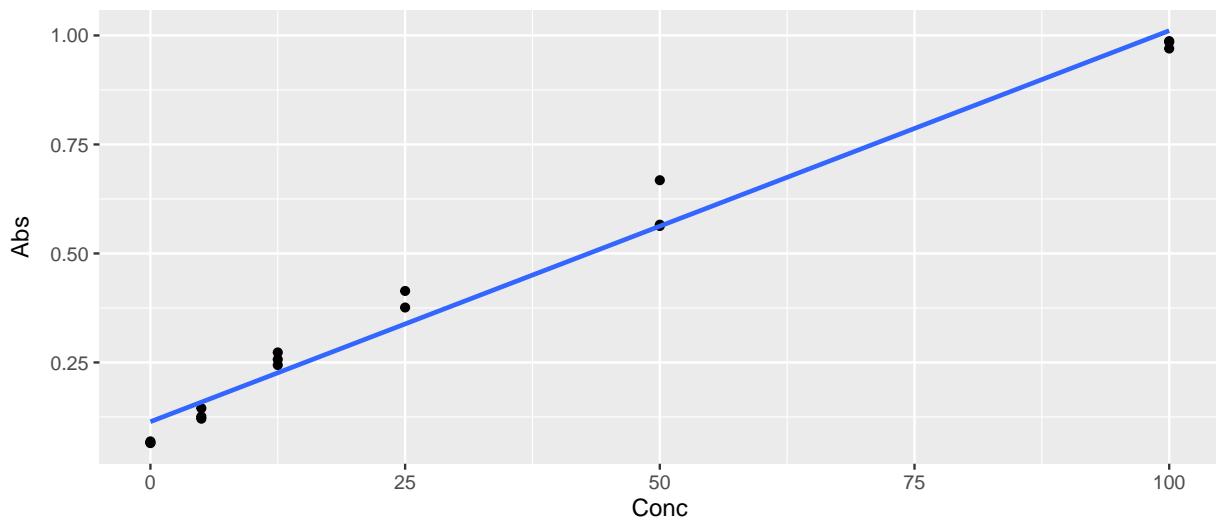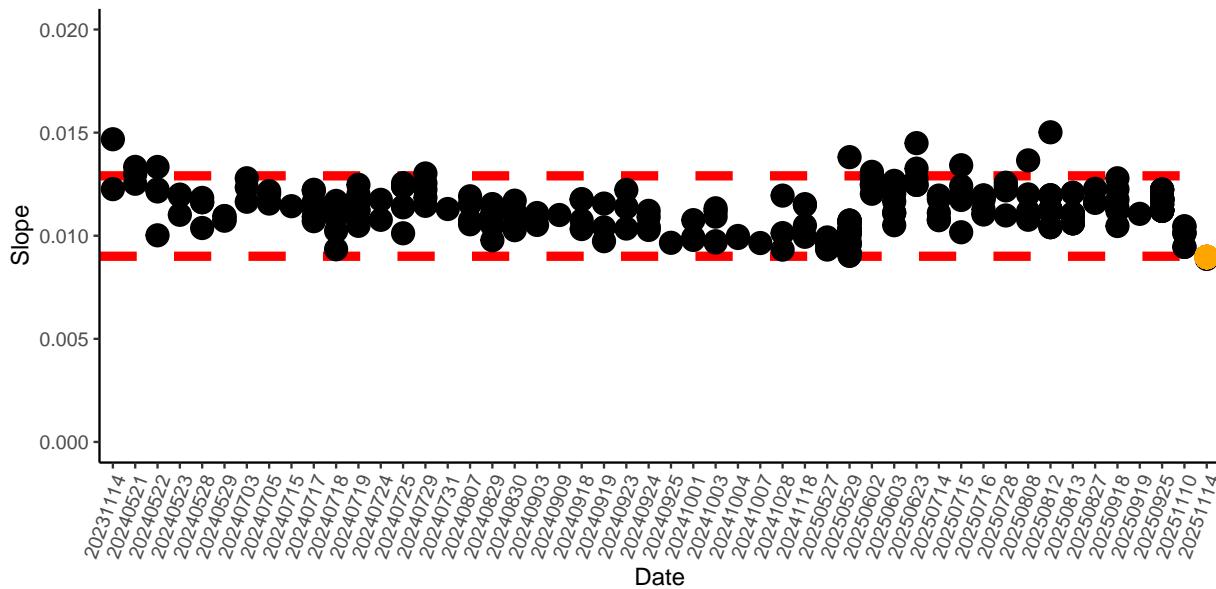
```
## Std curve is slightly below cutoff (0.979 vs 0.98).
##   Std curve slope is 2 sd different from previous slopes.
##   Samples 15, 35, 38, 12, and 16 still have high CVs after one replicate was removed.
##   Sample 10 needs to be diluted.
##   Dup and spk was bad.
##   50 uL of spike added.
##
```

```
## [1] "Std Curve R squared: 0.9792"
```
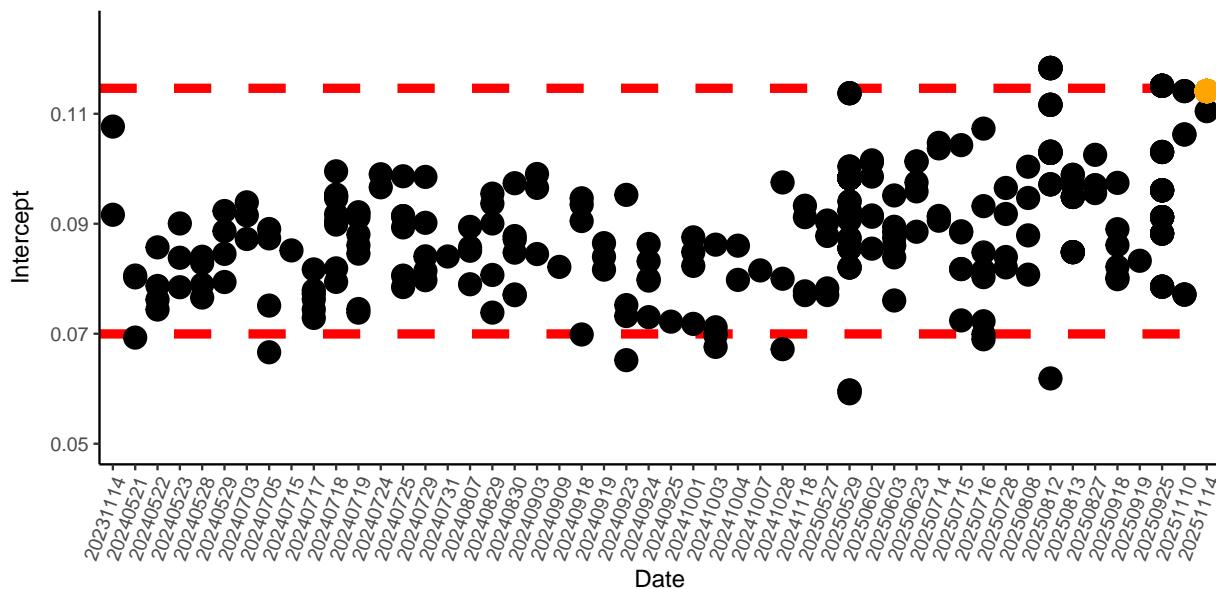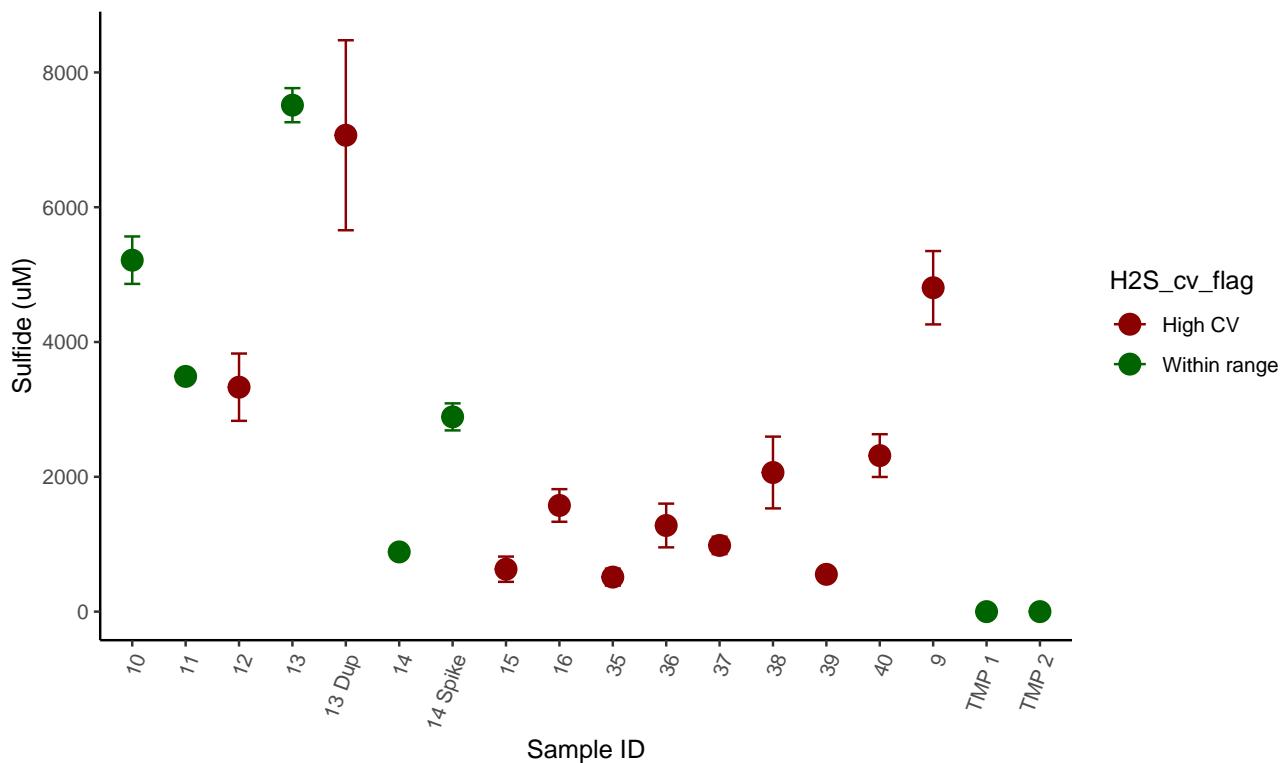
Sulfide Standard Curve

Sulfide Slopes

Sulfide Intercepts

Sample triplicate means and sd dev before bad reps removed

Sample triplicate means and sd dev after bad reps removed

Duplicate Checks

Difference Between Duplicates (%)

Sample ID: 13

Spike Checks

Spike Recovery (%)

Sample ID: 14

Matrix Effects

T−test p−value

Sample ID: MC: 10ppt S5, MC: 20ppt S5