Synoptic CB: Porewater Sulfide

September 2025 Samples Plate 3

2025-10-30

Run Information

```
###### Run information - PLEASE CHANGE
  Date_Run = "20250925"  #Date that instrument was run
  Plate = "3"
  Month = "Sept"
  Year = "2025"
  Run_by = "Steph Wilson and Zoe Read"  #Instrument user
  Script_run_by = "Zoe Read" #Code user
  Project = "COMPASS"
  run_notes = "Std curve intercept is 2 sd different from previous intercepts.
  Matrix Check 20 is significantly different from Std 5.
  Samples 58 and 56 still have high CVs after one replicate removed.
  Sample 45 needs to be diluted.
  Duplicate & sample had H2S values of 0.
  Spike 58 had high recovery.
  10 uL of spike added.
  " #any notes from the run

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

  Chkstds_to_remove <- c(NA)

  MCs_to_remove <- c("H03")

##Sample data that was entered incorrectly
  # The Old ID is the original, incorrecly-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)
```
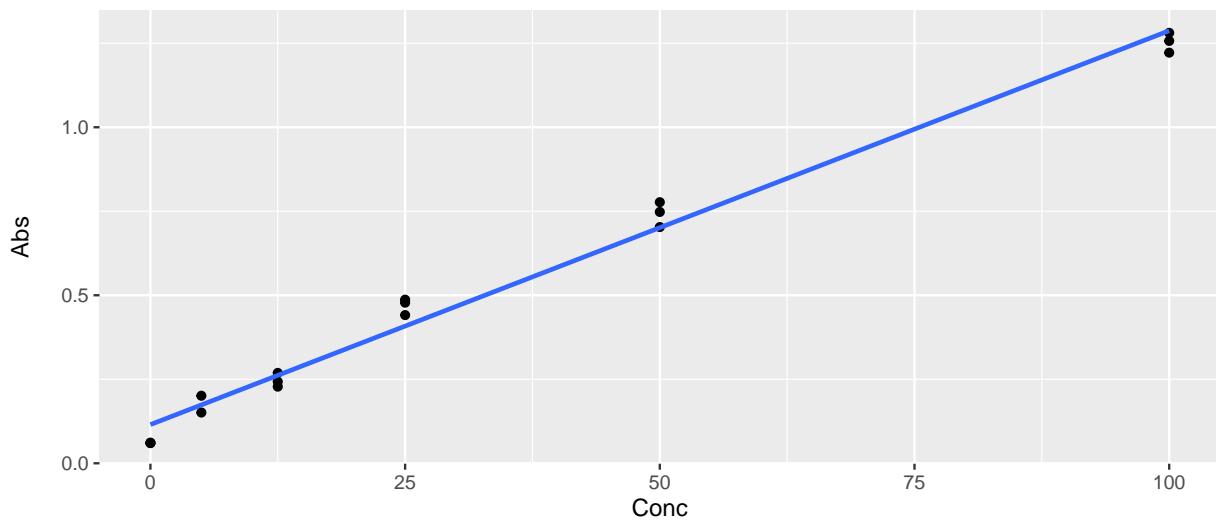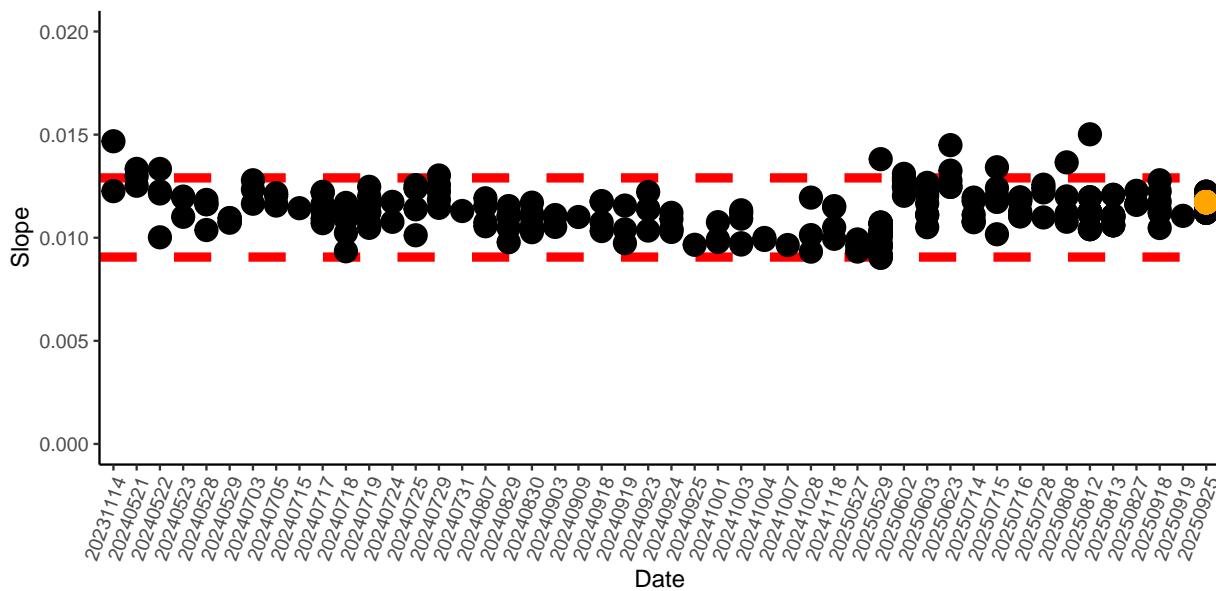
```
## Std curve intercept is 2 sd different from previous intercepts.
##   Matrix Check 20 is significantly different from Std 5.
##   Samples 58 and 56 still have high CVs after one replicate removed.
##   Sample 45 needs to be diluted.
##   Duplicate & sample had H2S values of 0.
##   Spike 58 had high recovery.
##   10 uL of spike added.
##
```

```
## [1] "Std Curve R squared: 0.9862"
```
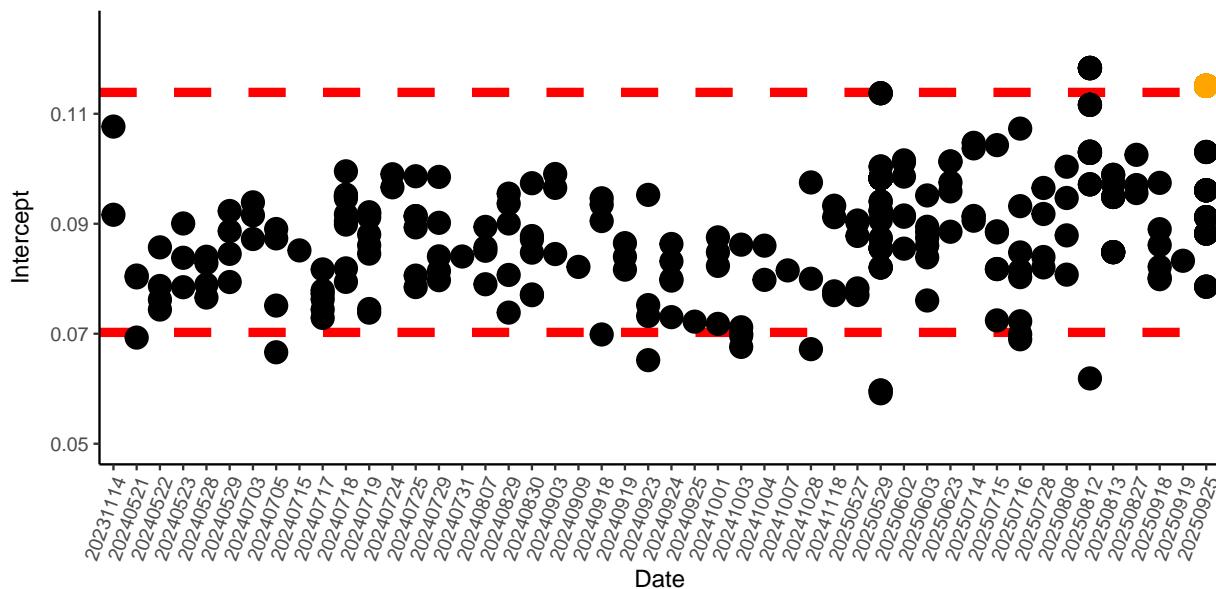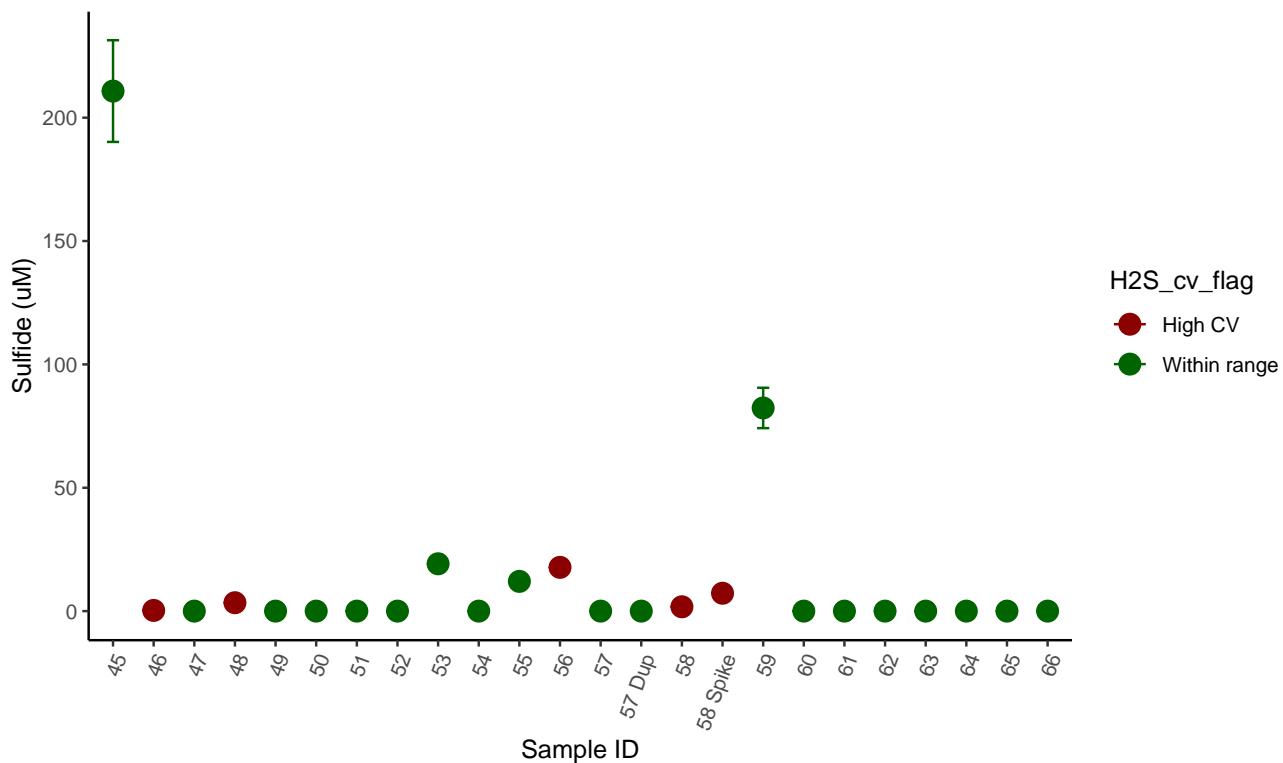
Sulfide Standard Curve

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

Spike Checks

Spike Recovery (%)

58

Sample ID

Matrix Effects

T-test p-value

MC: 10ppt S5   MC: 20ppt S5

Sample ID