Synoptic CB: Porewater Sulfide

July 2025 Samples Plate 8

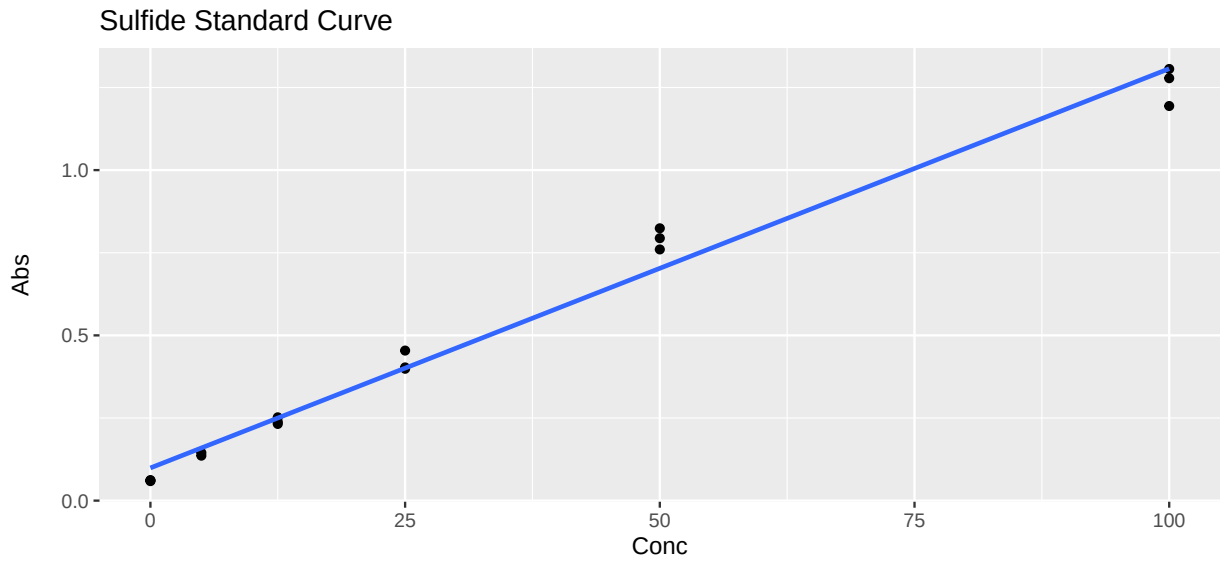
2025-10-24

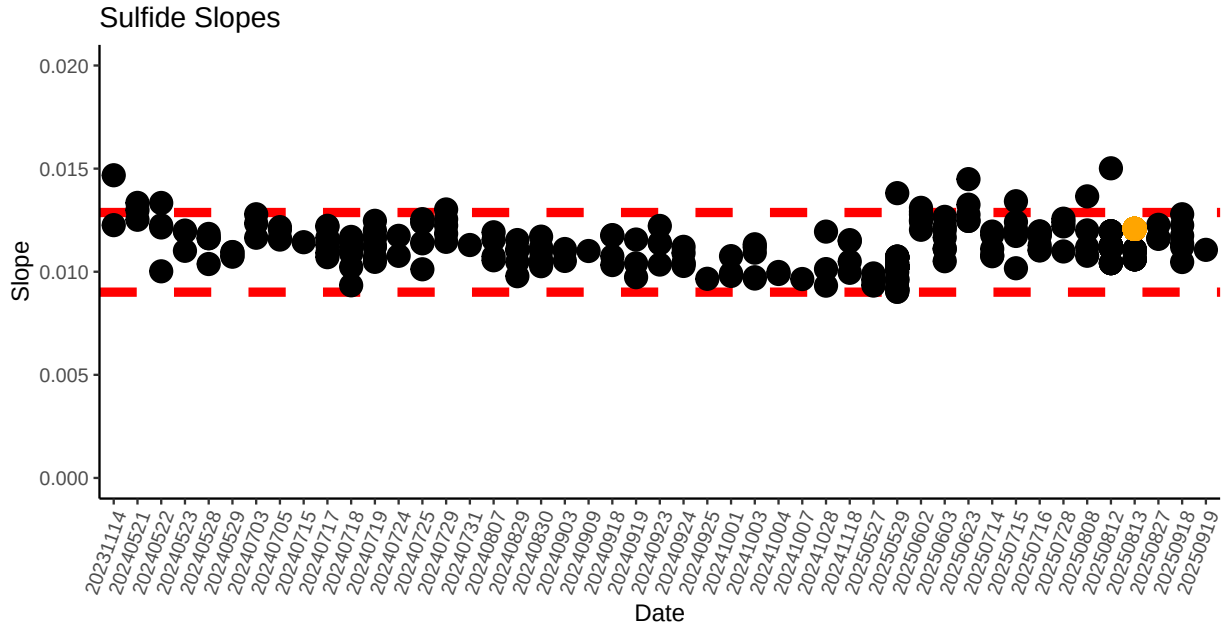
Run Information

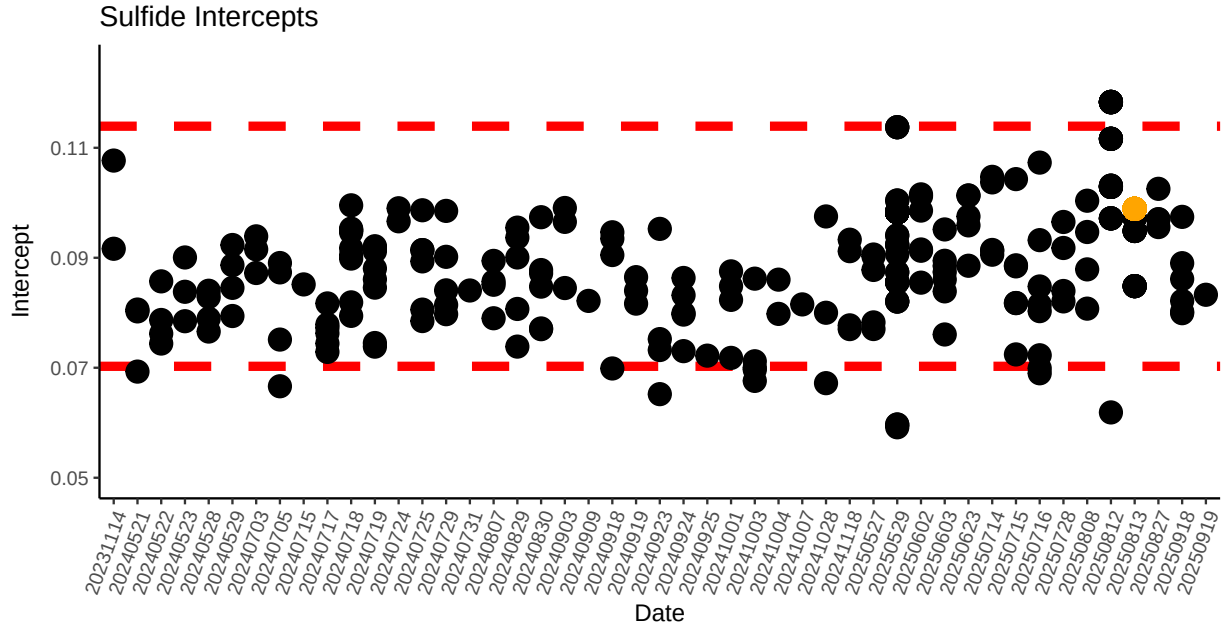
```
###### Run information - PLEASE CHANGE
  Date_Run = "20250813"  #Date that instrument was run
  Plate = "8"
  Month = "July"
  Year = "2025"
  Run_by = "Melanie Giessner"  #Instrument user
  Script_run_by = "Zoe Read" #Code user
  Project = "COMPASS"
  run_notes = "Matrix Check 10 is significantly different from Std 5.
  Samples 100 and 44 still have high CVs after removing one replicate.
  Samples 15 and 43 need to be rerun with dilutions.
  Duplicate 100 had high percent difference.
  Spk 44 had high percent recovery.
  " #any notes from the run

###### STDs to remove manually - NA unless standards have high CVs - CHECK THESE!
  stds_to_remove <- c("B02") #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, 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)
```

```
## Matrix Check 10 is significantly different from Std 5.
##   Samples 100 and 44 still have high CVs after removing one replicate.
##   Samples 15 and 43 need to be rerun with dilutions.
##   Duplicate 100 had high percent difference.
##   Spk 44 had high percent recovery.
##
```

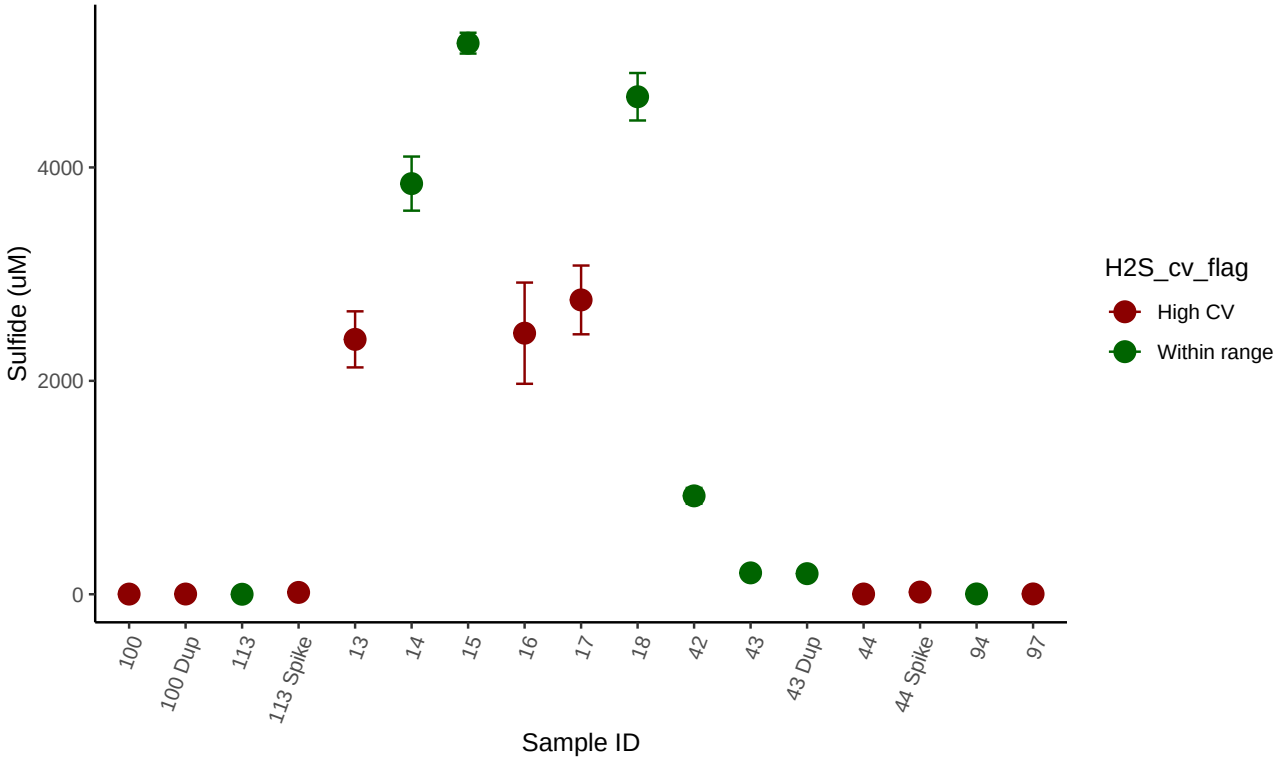
```
## [1] "Std Curve R squared: 0.9832"
```


Sulfide Standard Curve
Abs
1.0
0.5
0.0
0
25
50
75
100
Conc

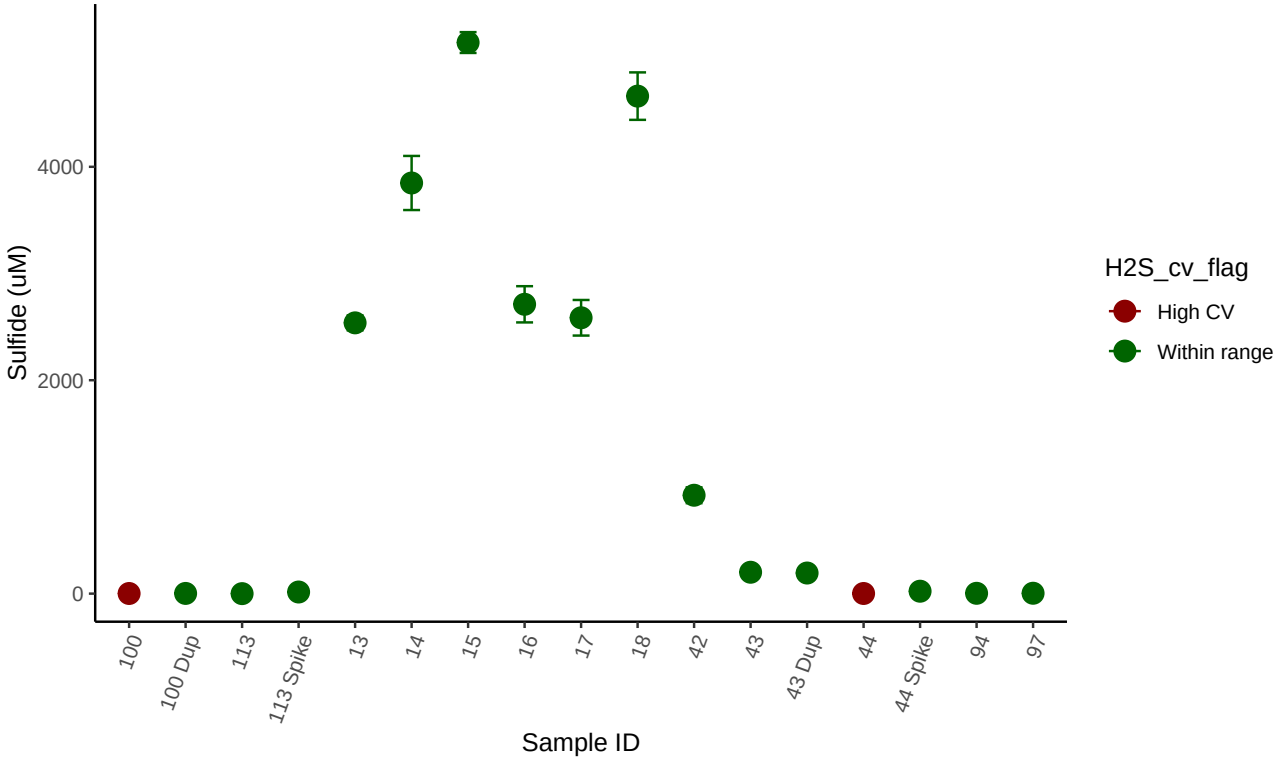

Sulfide Slopes
Slope
0.020
0.015
0.010
0.005
0.000
Date

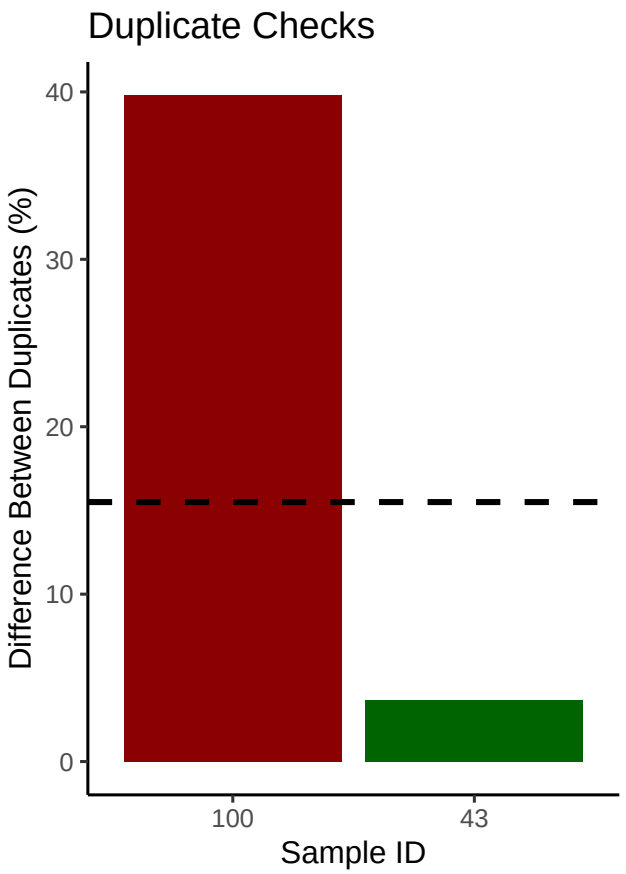

Sulfide Intercepts
Intercept
0.11
0.09
0.07
0.05
Date

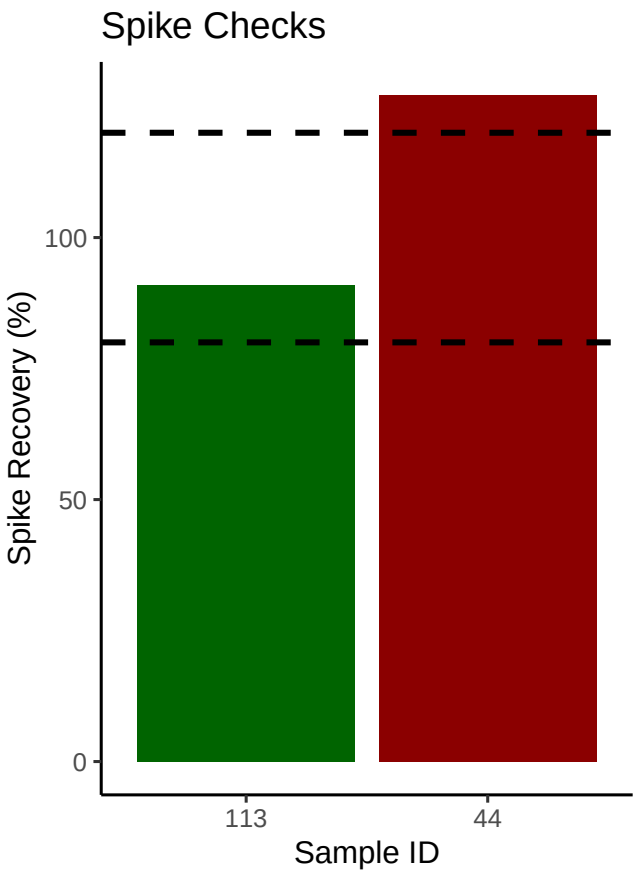
Sample triplicate means and sd dev before bad reps removed

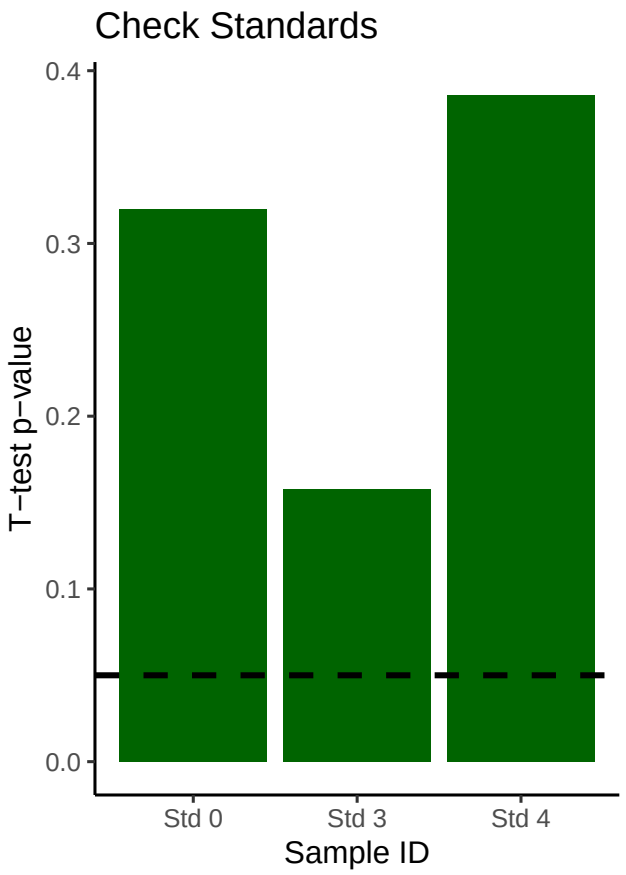


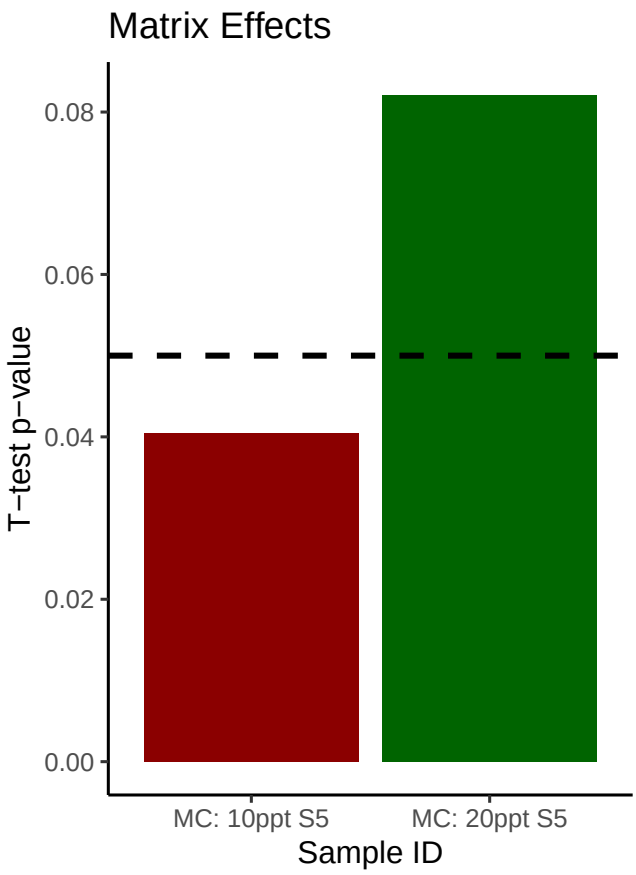
Sample triplicate means and sd dev after bad reps removed




Duplicate Checks
Difference Between Duplicates (%)
40
30
20
10
0
100
43
Sample ID


Spike Checks
Spike Recovery (%)
100
50
0
113
44
Sample ID


Check Standards
T−test p−value
0.4
0.3
0.2
0.1
0.0
Std 0
Std 3
Std 4
Sample ID


Matrix Effects
T−test p−value
0.08
0.06
0.04
0.02
0.00
MC: 10ppt S5
MC: 20ppt S5
Sample ID