Synoptic CB: Porewater Sulfide

July 2025 Samples Plate 3

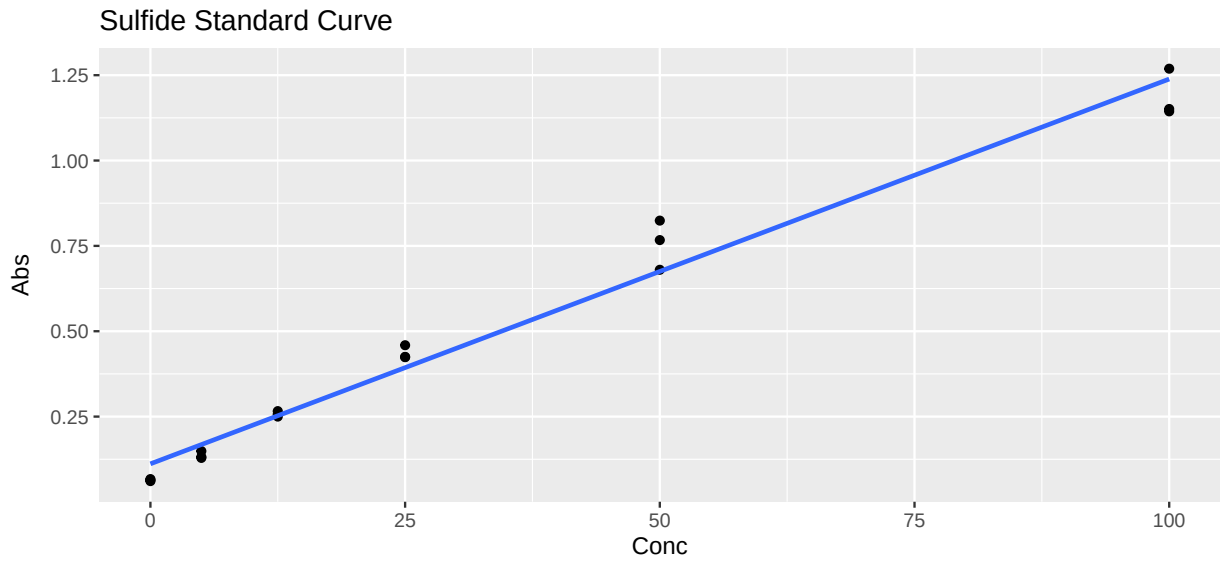
2025-10-24

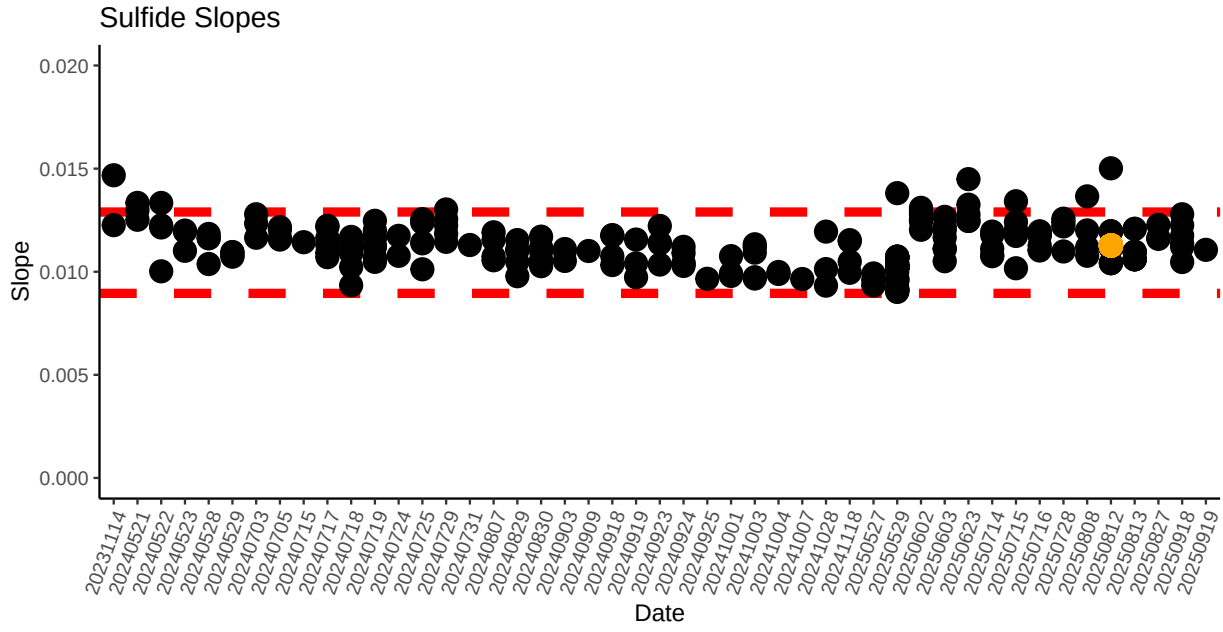
Run Information

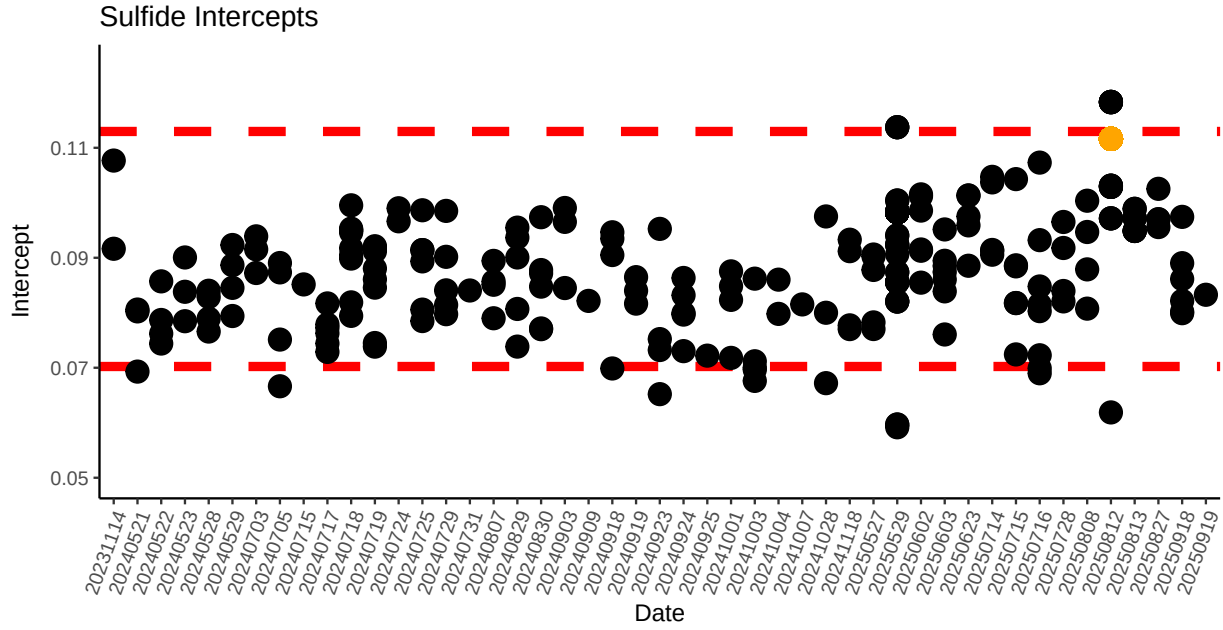
```
###### Run information - PLEASE CHANGE
  Date_Run = "20250812"  #Date that instrument was run
  Plate = "3"
  Month = "July"
  Year = "2025"
  Run_by = "Melanie Giessner"  #Instrument user
  Script_run_by = "Zoe Read" #Code user
  Project = "COMPASS"
  run_notes = "Std curve R squared is slightly lower than cutoff 0.9753122.
  Samples 35, 37, 33, and 41 still have high CVs after one replicate removed.
  Dup 41 had high percent difference from sample.
  Spk 42 had low percent recovery.
  " #any notes from the run

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

  Chkstds_to_remove <- c("H11")

  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)
```

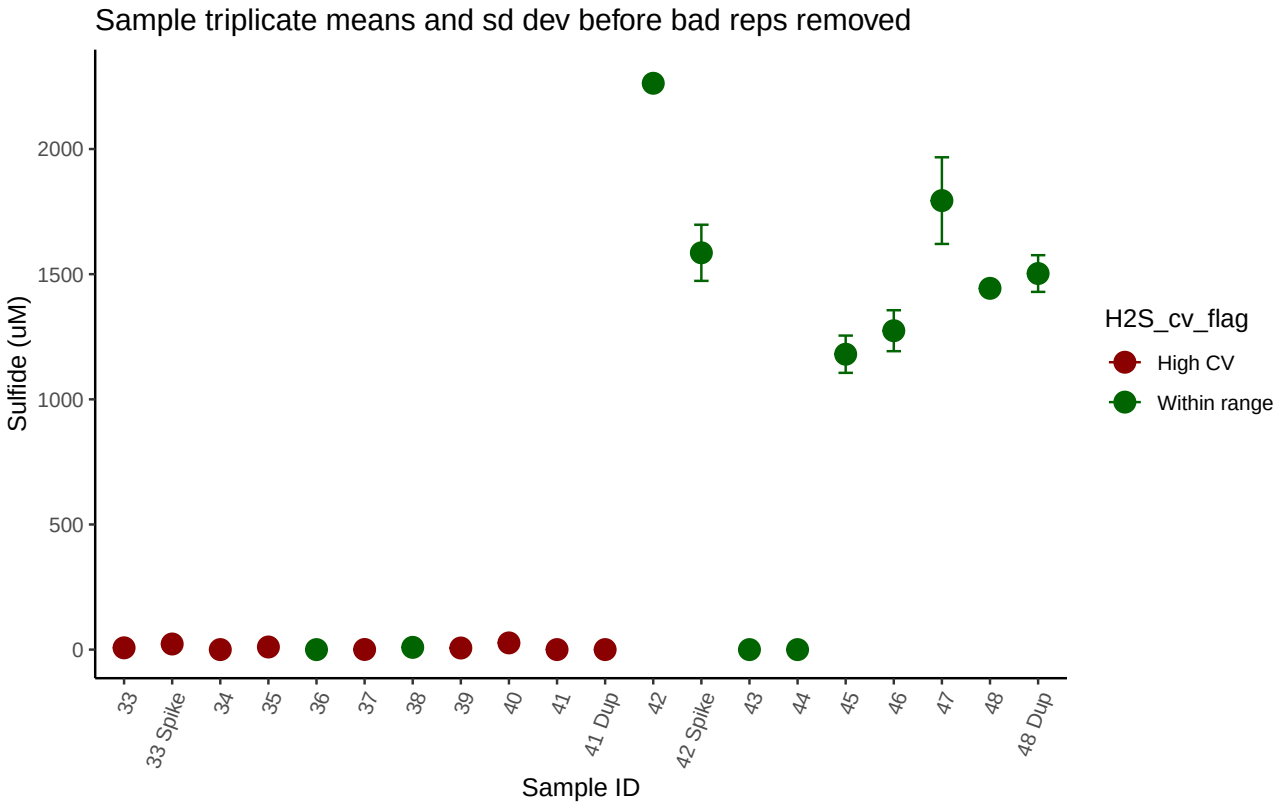
```
## Std curve R squared is slightly lower than cutoff 0.9753122.
##   Samples 35, 37, 33, and 41 still have high CVs after one replicate removed.
##   Dup 41 had high percent difference from sample.
##   Spk 42 had low percent recovery.
##
```

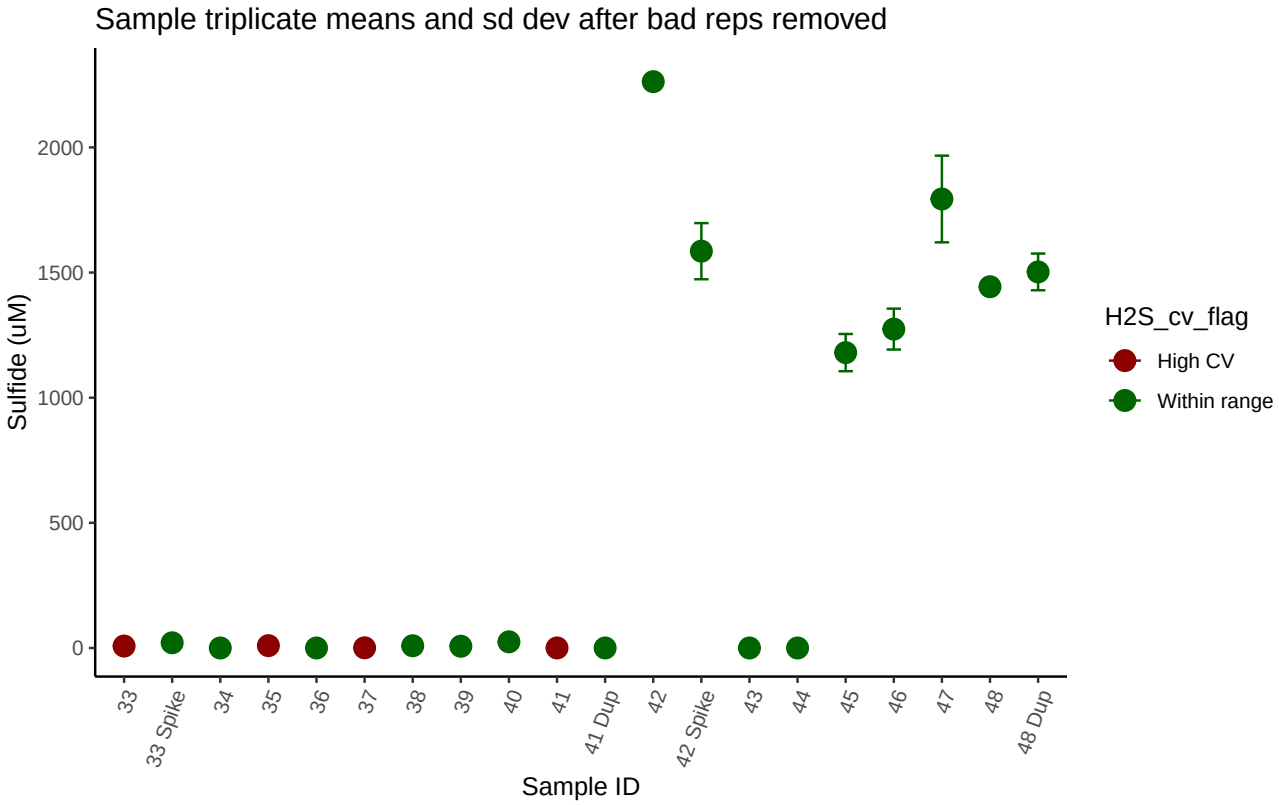
```
## [1] "Std Curve R squared: 0.9753"
```

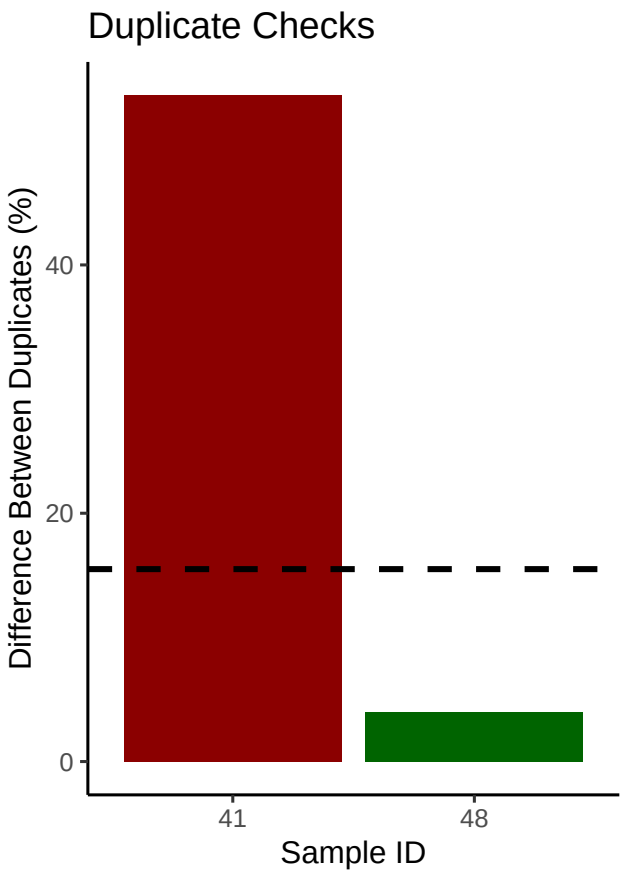

Sulfide Standard Curve
Abs
1.25
1.00
0.75
0.50
0.25
0
25
50
75
100
Conc

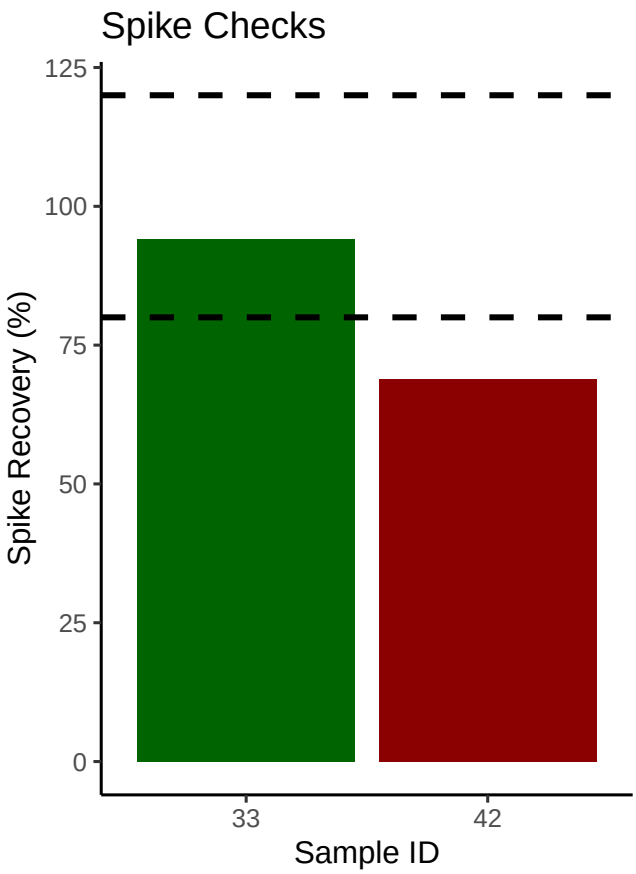

Sulfide Slopes
Slope
0.020
0.015
0.010
0.005
0.000
Date

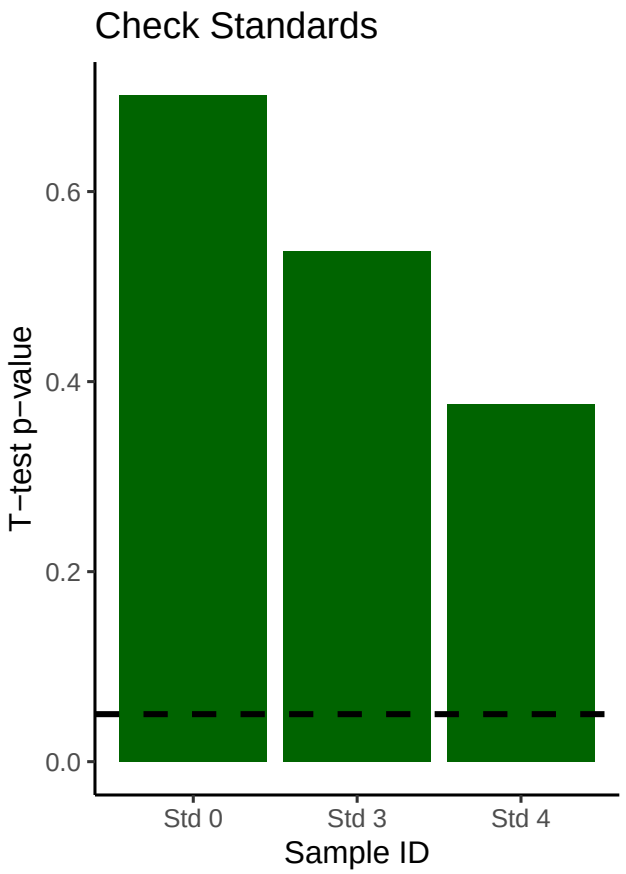

Sulfide Intercepts
Intercept
0.11
0.09
0.07
0.05
Date

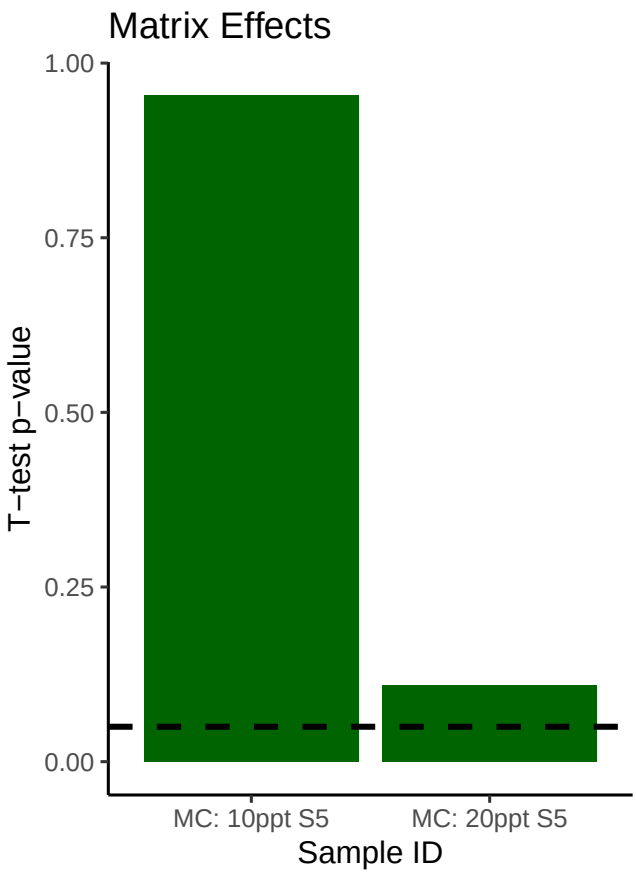

Sample triplicate means and sd dev before bad reps removed
Sulfide (uM)
2000
1500
1000
500
0
33
33 Spike
34
35
36
37
38
39
40
41
41 Dup
42
42 Spike
43
44
45
46
47
48
48 Dup
Sample ID
H2S_cv_flag
High CV
Within range


Sample triplicate means and sd dev after bad reps removed
Sulfide (uM)
2000
1500
1000
500
0
33
33 Spike
34
35
36
37
38
39
40
41
41 Dup
42
42 Spike
43
44
45
46
47
48
48 Dup
Sample ID
H2S_cv_flag
High CV
Within range


Duplicate Checks
Difference Between Duplicates (%)
0
20
40
41
48
Sample ID


Spike Checks
Spike Recovery (%)
0
25
50
75
100
125
33
42
Sample ID


Check Standards
T−test p−value
0.0
0.2
0.4
0.6
Std 0
Std 3
Std 4
Sample ID


Matrix Effects
T−test p−value
0.00
0.25
0.50
0.75
1.00
MC: 10ppt S5
MC: 20ppt S5
Sample ID