TEMPEST: Porewater Sulfide

2025 Samples Plate 12

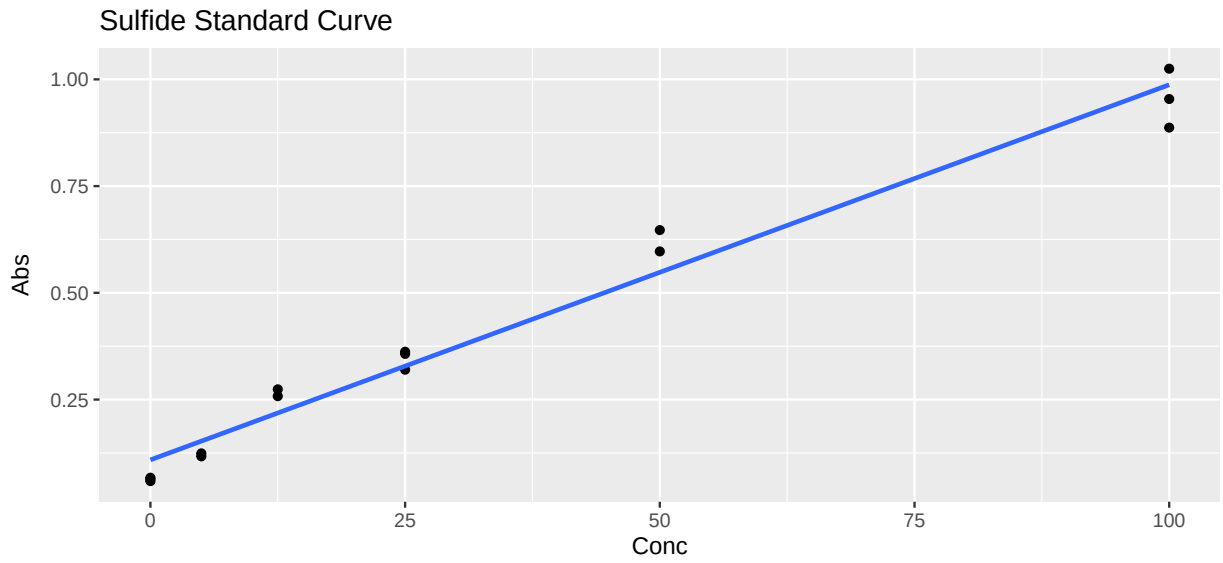
2025-10-30

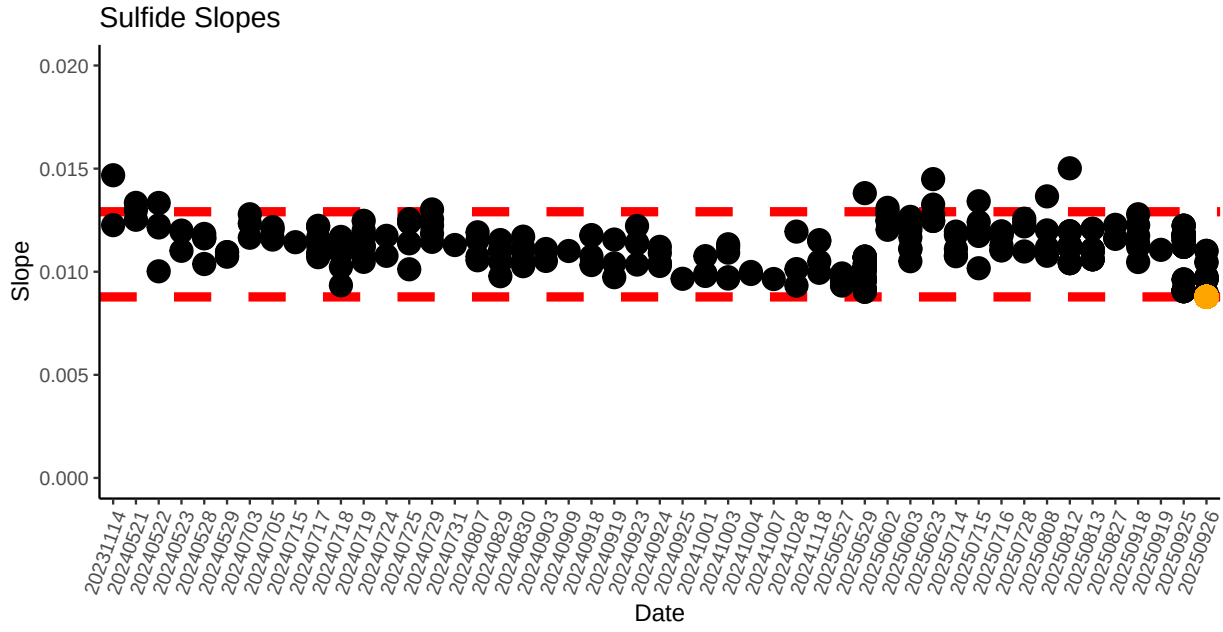
Run Information

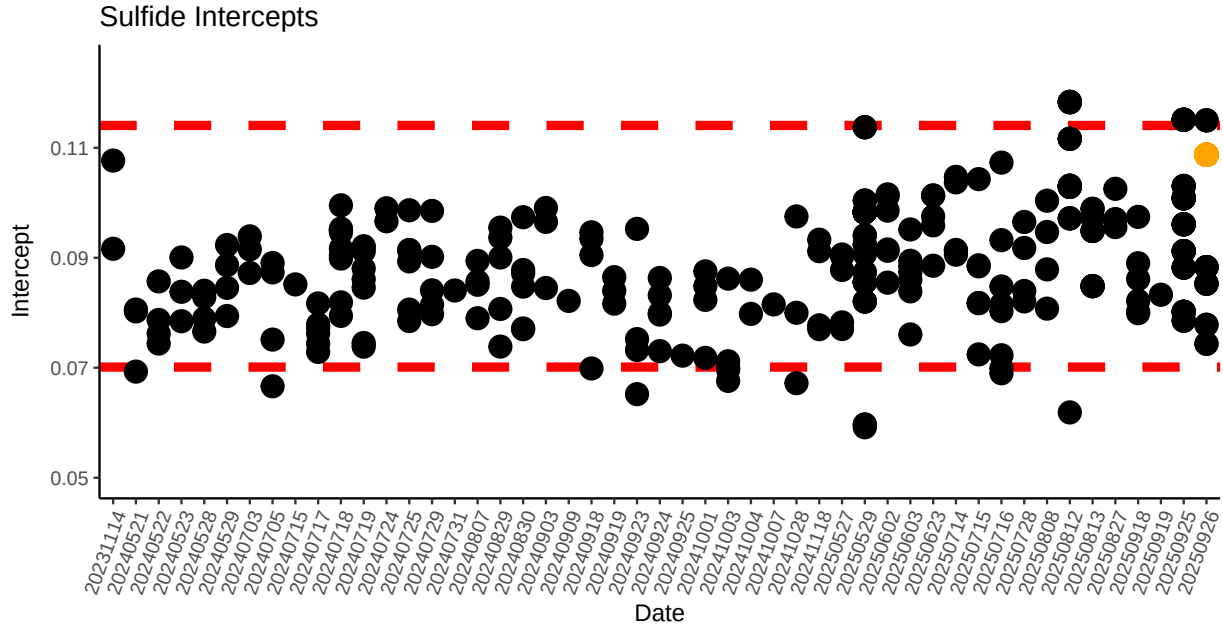
```
###### Run information - PLEASE CHANGE
  Date_Run = "20250926"  #Date that instrument was run
  Plate = "12"
  Year = "2025"
  Run_by = "Zoe Read"  #Instrument user
  Script_run_by = "Zoe Read" #Code user
  Project = "TEMPEST"
  run_notes = "Std Curve r2 is below cutoff: 0.9728355
  Std curve slope is 2 sd different from previous slopes.
  Samples 109 and 133 still have high CVs after removing one duplicate.
  Dup & respective sample had H2S values of 0.
  " #any notes from the run

###### STDs to remove manually - NA unless standards have high CVs
  stds_to_remove <- c("B03", "C03", "E01") #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 = "NA"
# New_ID_1 = "NA"
cat(run_notes)
```

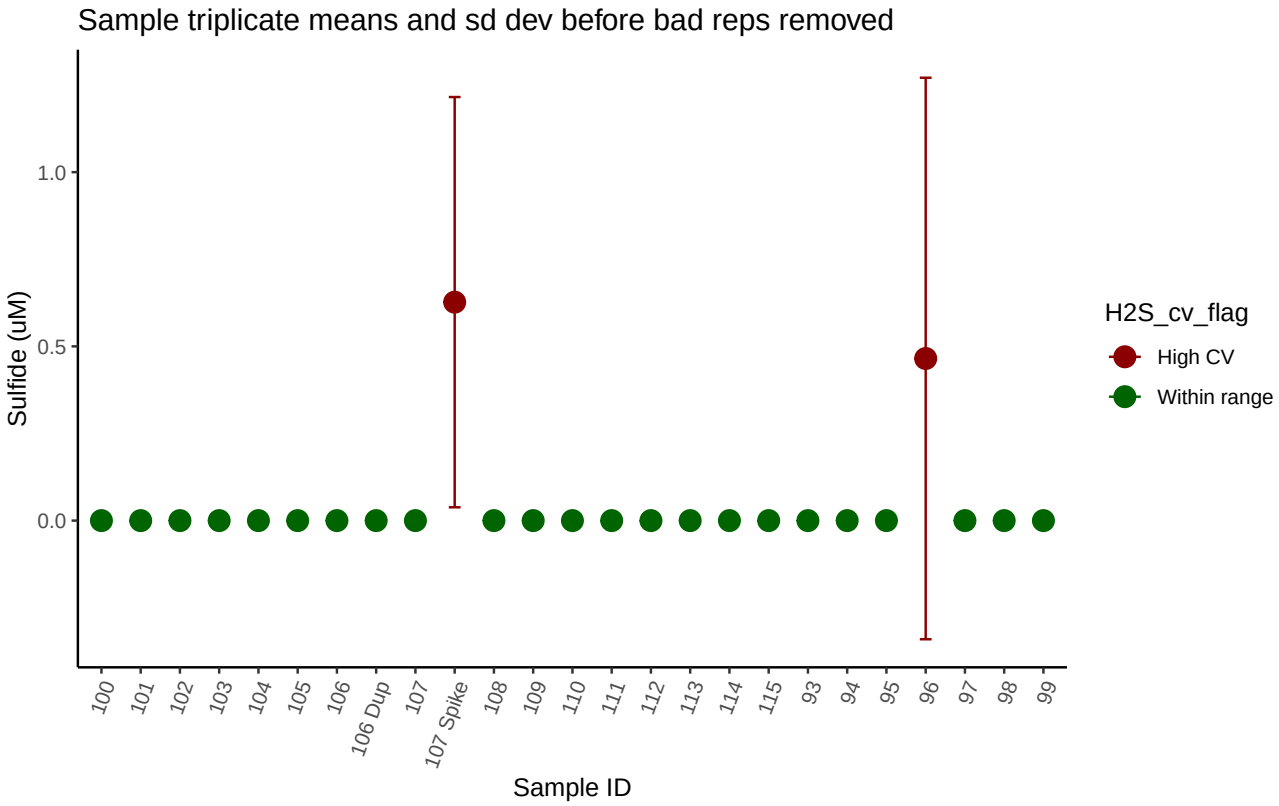
```
## Std Curve r2 is below cutoff: 0.9728355
##   Std curve slope is 2 sd different from previous slopes.
##   Samples 109 and 133 still have high CVs after removing one duplicate.
##   Dup & respective sample had H2S values of 0.
##
```

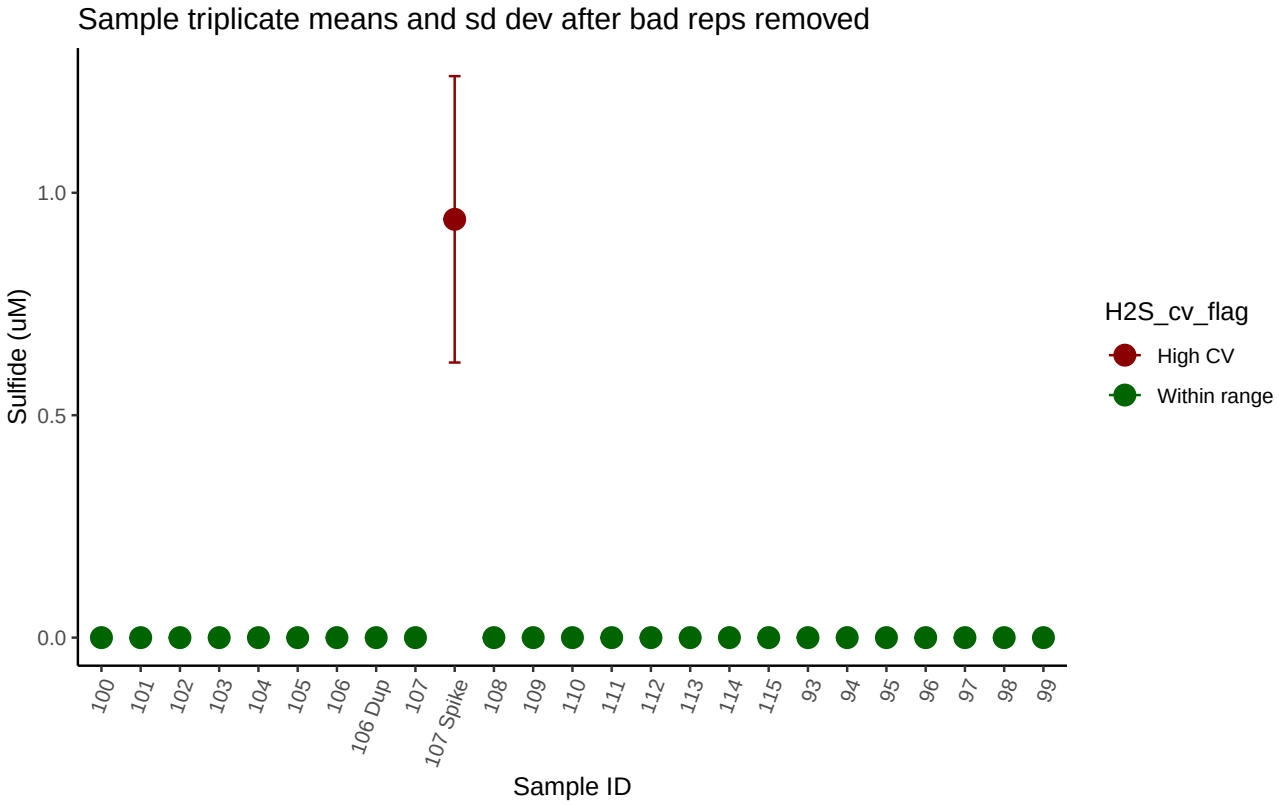
```
## [1] "Std Curve R squared: 0.9728"
```

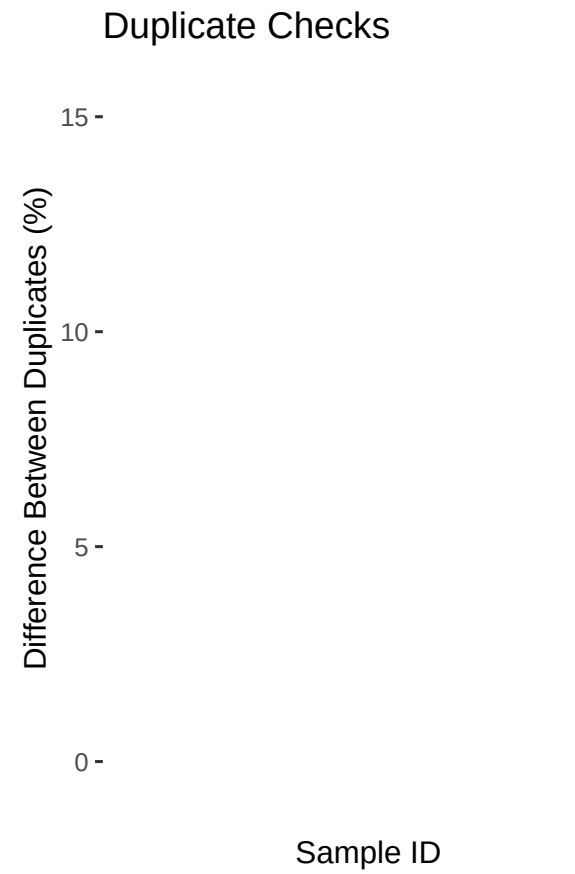

Sulfide Standard Curve
Abs
1.00
0.75
0.50
0.25
0
25
50
75
100
Conc

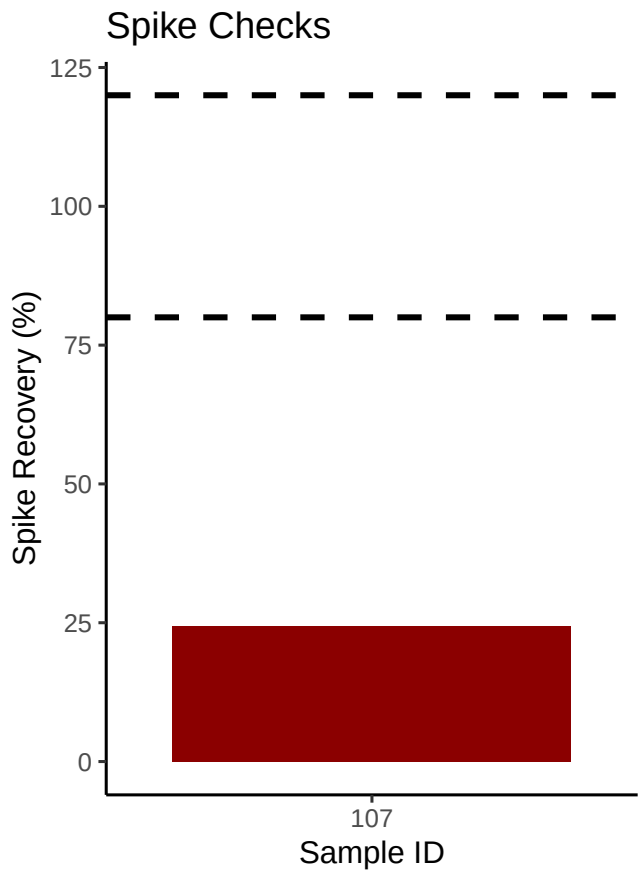

Sulfide Slopes
Slope
0.020
0.015
0.010
0.005
0.000
Date

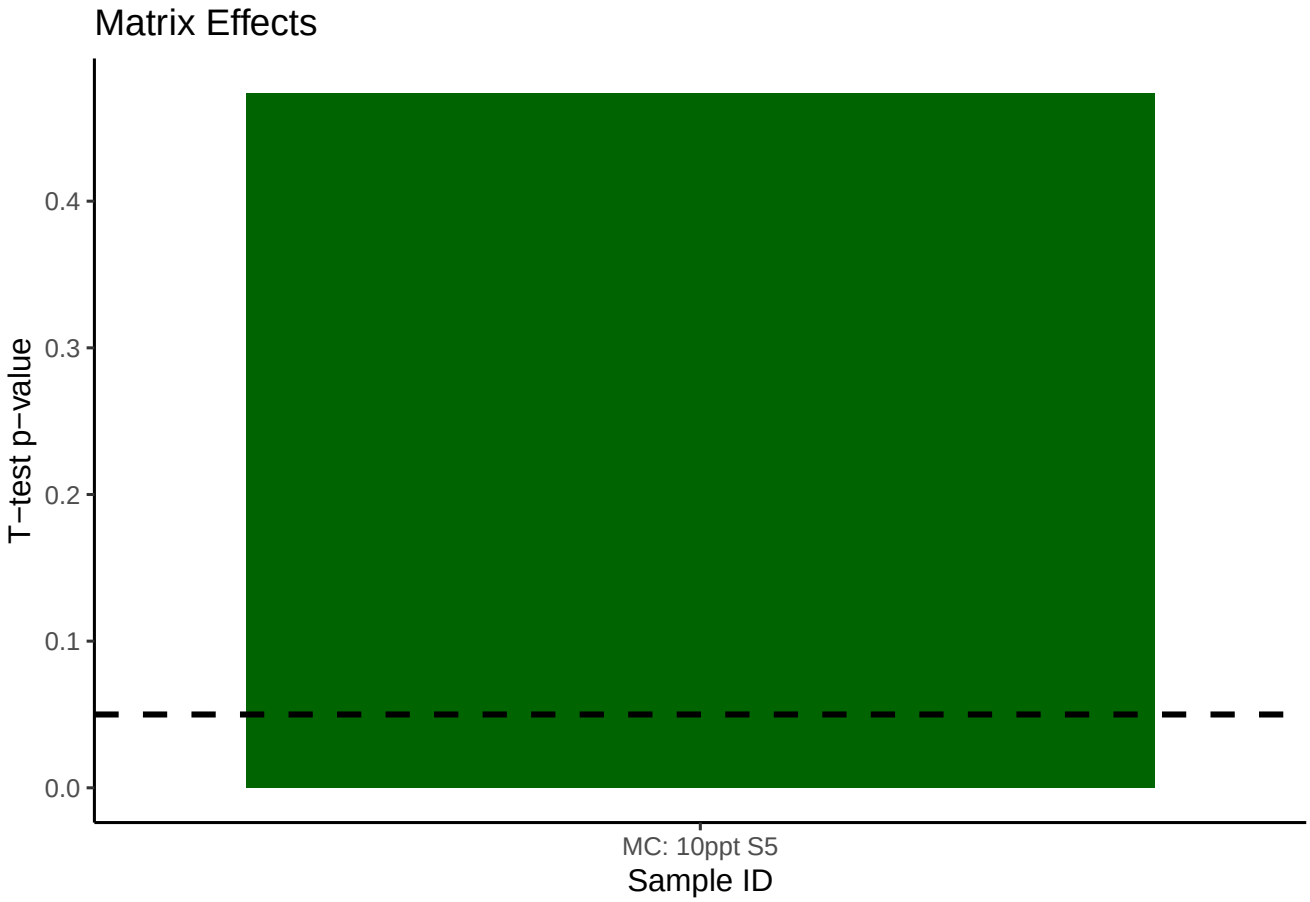

Sulfide Intercepts
Intercept
0.11
0.09
0.07
0.05
Date


Sample triplicate means and sd dev before bad reps removed
Sulfide (uM)
1.0
0.5
0.0
100
101
102
103
104
105
106
106 Dup
107
107 Spike
108
109
110
111
112
113
114
115
93
94
95
96
97
98
99
Sample ID
H2S_cv_flag
High CV
Within range


Sample triplicate means and sd dev after bad reps removed
Sulfide (uM)
1.0
0.5
0.0
100
101
102
103
104
105
106
106 Dup
107
107 Spike
108
109
110
111
112
113
114
115
93
94
95
96
97
98
99
Sample ID
H2S_cv_flag
High CV
Within range


Duplicate Checks
Difference Between Duplicates (%)
15
10
5
0
Sample ID


Spike Checks
Spike Recovery (%)
125
100
75
50
25
0
107
Sample ID


Matrix Effects
T−test p−value
0.4
0.3
0.2
0.1
0.0
MC: 10ppt S5
Sample ID

```
## All sample IDs are present in metadata.
```