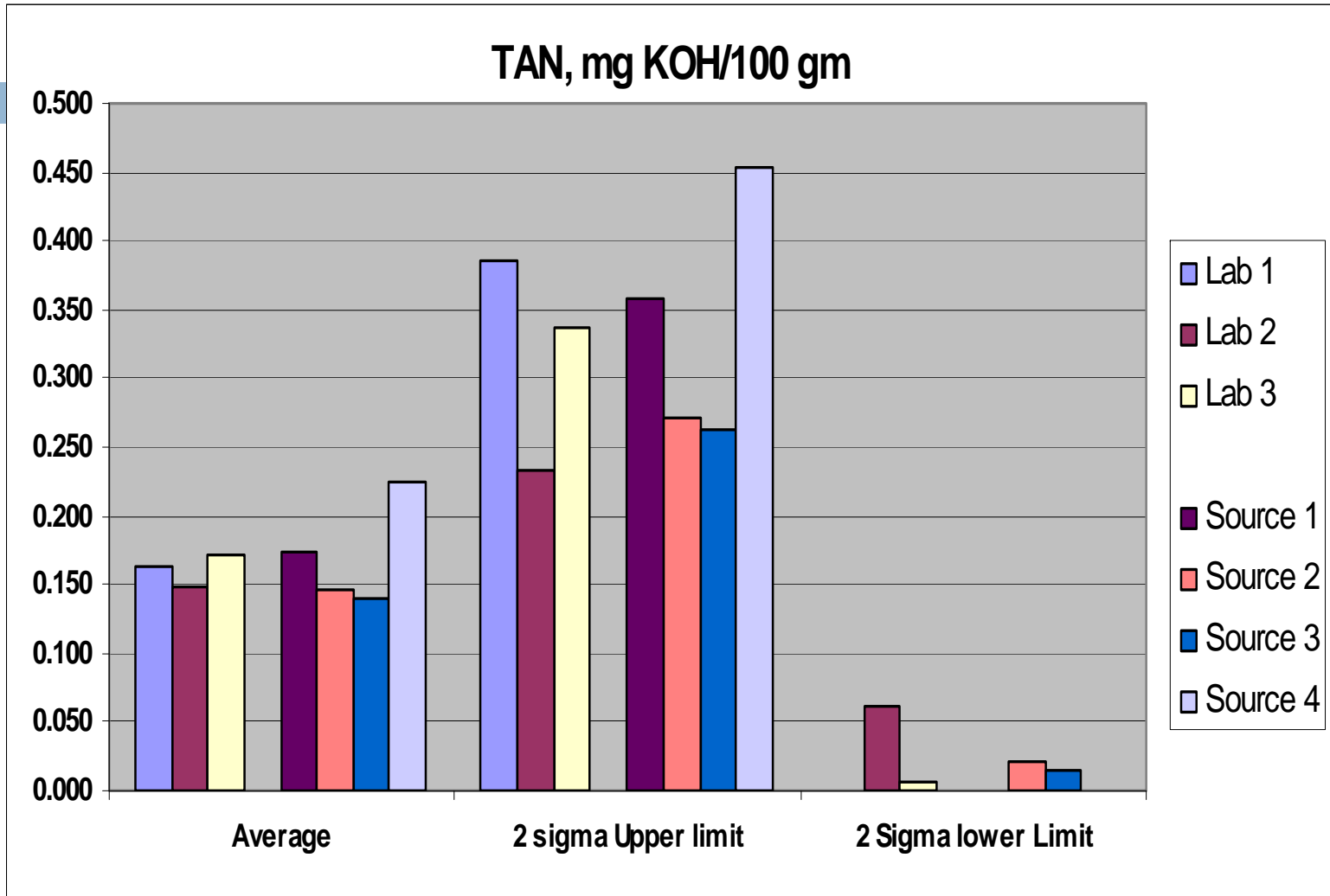




Data Presented by BP Supporting Negatives on Domestic Sweet Ballot

TAN, mg KOH/100 gm

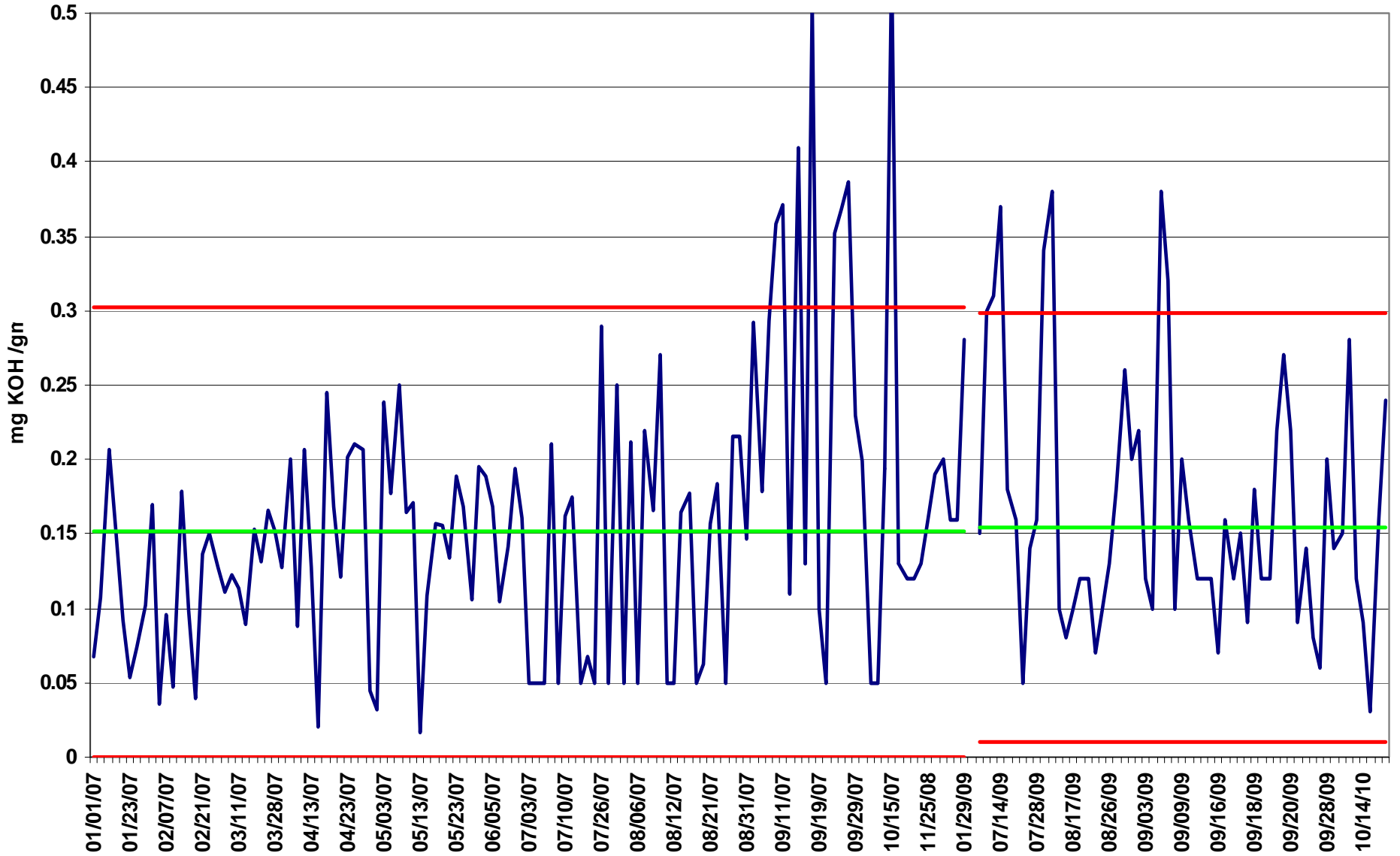


Acid Number - repeatability



- The 2 sigma upper limit had significant scatter between three hand picked labs
- BP experience with other labs shows even greater scatter
- This spec in particular should be established with the testing/enforcement taken in to account

TAN - Cushing Domestic Sweet
2 sigma limits
Outliers included in plot



— Data — Average — 2 Sigma Limits —

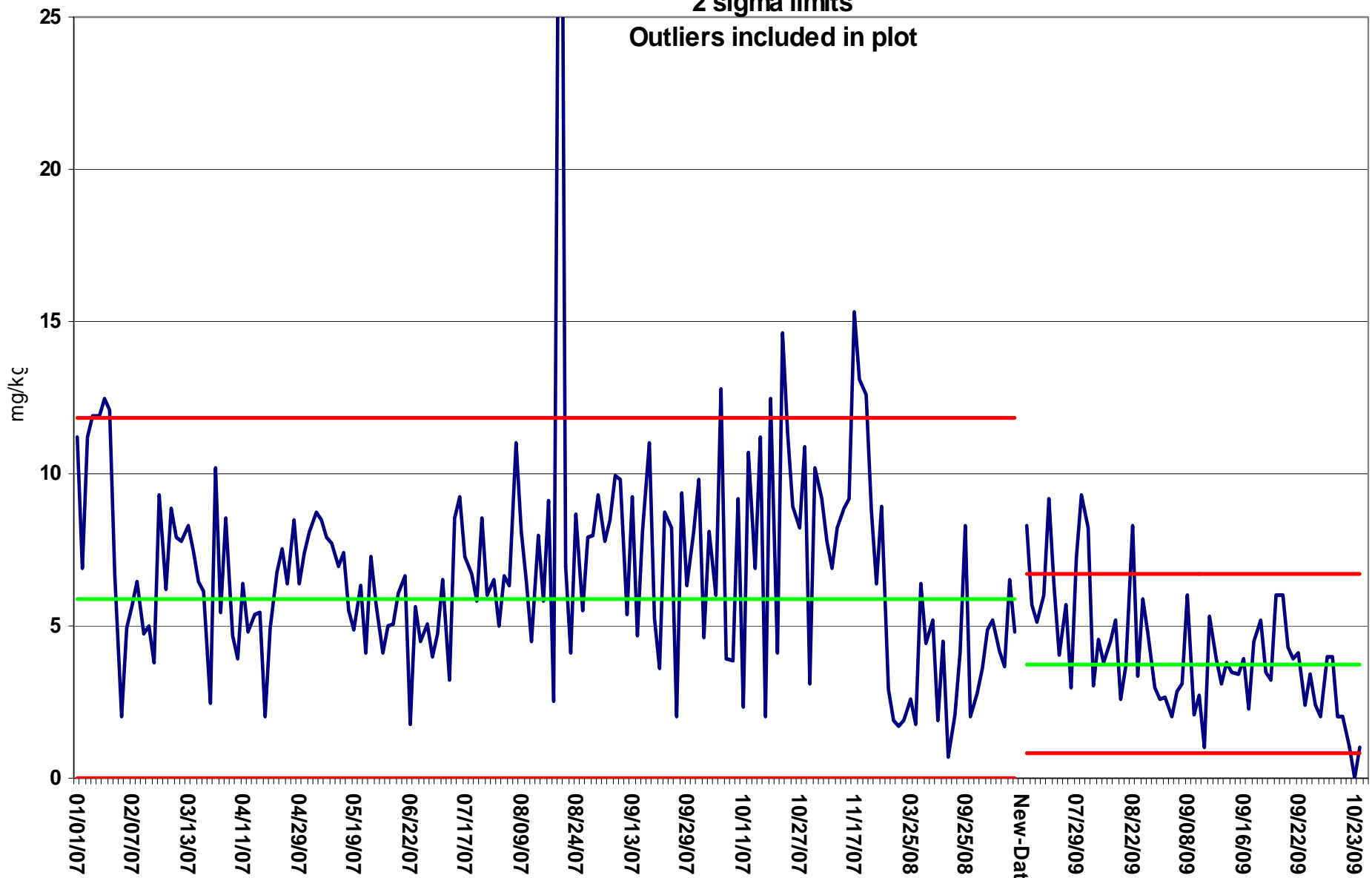
BP TAN Negative

| ASTM Robust Mean n = 80 | COQA Robust Mean n = 61 | COQA Recom'dation | BP Recom'dation |
|-------------------------------|-------------------------------|----------------------|--------------------|
| 0.11 +2 σ = 0.188 | 0.154 +2 σ = 0.299 | ≤ 0.28 | ≤ 0.40 |

Values in mg KOH/g

Nickel - Cushing Domestic Sweet 2 sigma limits

Outliers included in plot



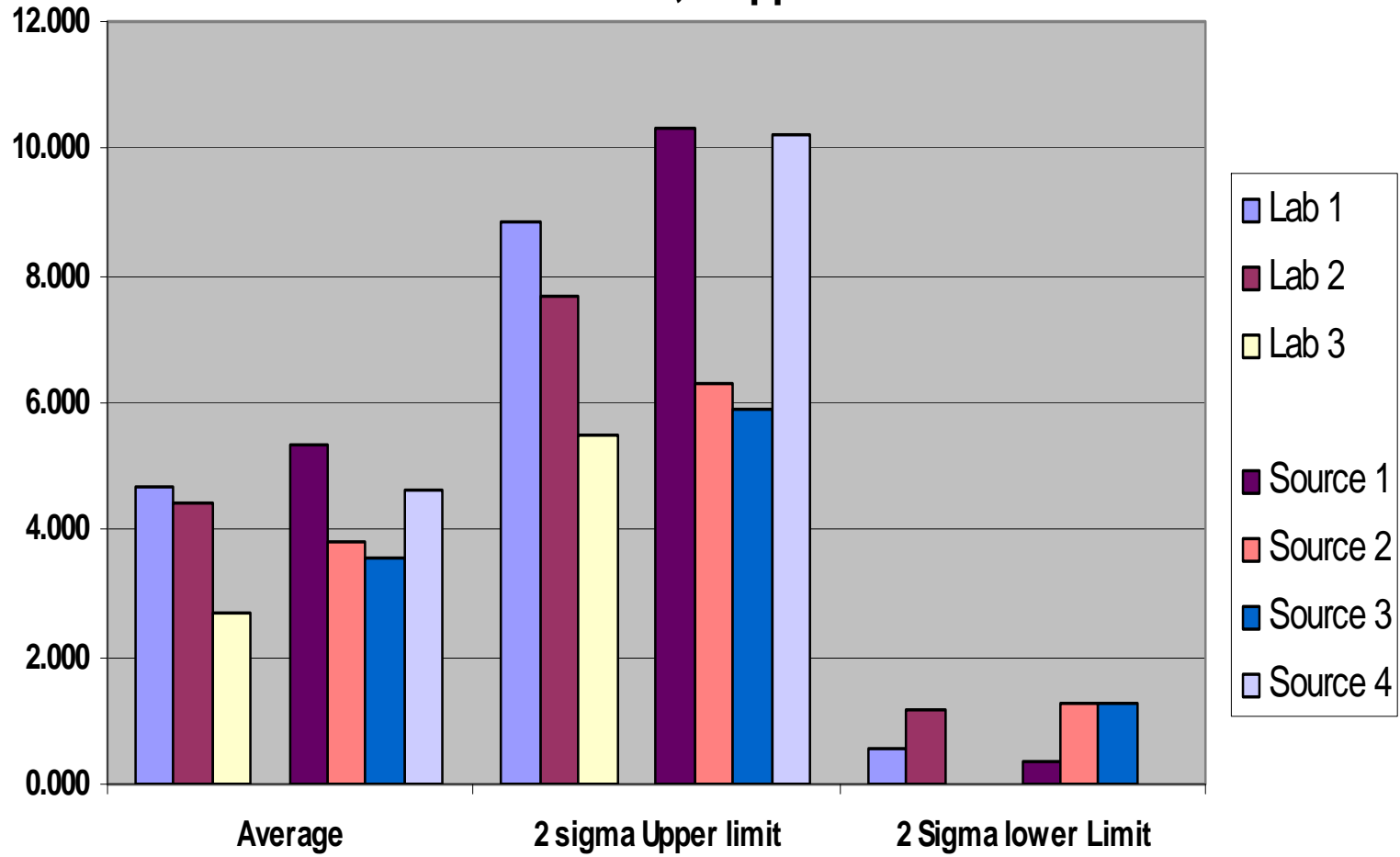
— Data — Average — 2 Sigma limits

Nickel



- Significant scatter in the larger data set.
- Which testing regime will the measurement and enforcement of the specs be executed under?
- Need to weigh the problems numerous false positives would cause versus setting a spec at such a low number.
- We have multiple other properties aimed at limiting residual content and quality

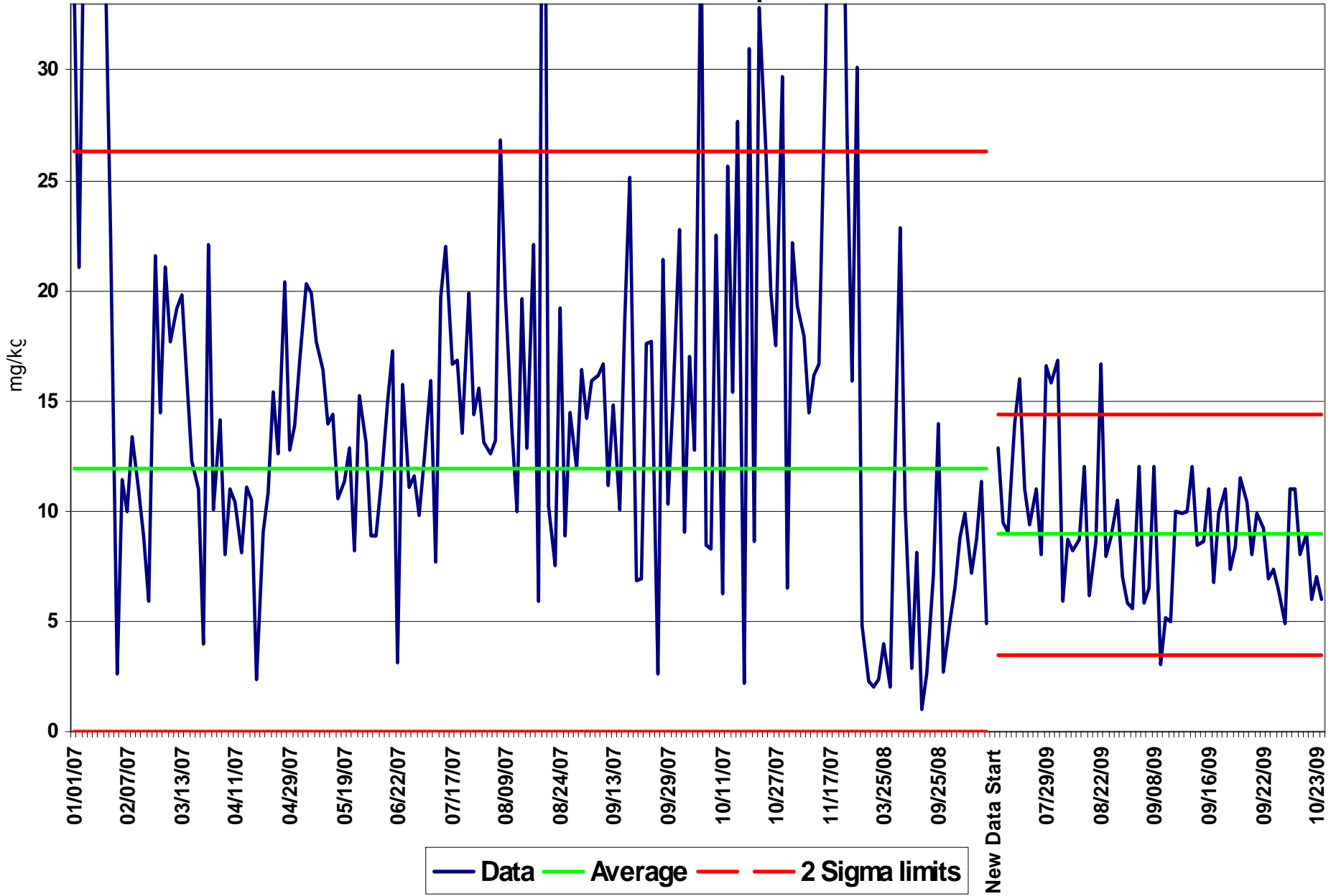
Nickel, Wt ppm



Vanadium - Cushing Domestic Sweet

2 sigma limits

Outliers included in plot



BP Ni Negative

| ASTM Robust Mean n = 18 | COQA Robust Mean n = 61 | COQA Recom'dation | BP Recom'dation |
|-------------------------------|-------------------------------|----------------------|--------------------|
| 5.9 +2 σ = 7.46 | 3.75 +2 σ = 6.68 | ≤ 8 | ≤ 10 |