

Improved Pigment Detection and Quantitation for Quality-Assured HPLC Production Analysis

Crystal Thomas

Code 614.2

Ocean Ecology Branch

NASA-Goddard Space Flight Center

Science Systems and Applications, Inc.

Greenbelt, MD USA

HPLC analysis moves to GSFC

- What changes
 - Location
 - Some personnel
 - HPLC instrumentation
 - Possibly the HPLC method
- What doesn't
 - Lead HPLC analyst
 - General sample, data exchange procedures
 - Need for replicates as part of sampling procedure
 - Overall approach/commitment to quality

Quality Assurance

- Method validation
- Strict adherence to QAP
 - Standardized procedures (SOPs)
 - Corrective actions
- Continuous quality assessment
 - accuracy, precision, Rs (control charts-WL, CL)
- Participation in, and learning lessons from, round robins (Ex. SeaHARRE)

What does this transition entail?



Lab renovation

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New HPLC



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What does this mean for PIs?

- Temporary hold on shipping samples

Timeline

April	New HPLC and freezer purchased
May	HPLC installed
	Liquid N2 backup installed on -80 freezers
	Emergency call system installed on -80 freezers
	Renovation started on new lab
	Initial method development on new HPLC
June	Complete HPLC method development
	Begin HPLC method validation
July	Lab renovations scheduled to be completed
	Begin move to new lab
August	Complete method validation
	Begin accepting HPLC samples
	Finish move to new lab
	Hire HPLC technician

Method Validation

- Define analytical requirement
- Performance parameters
 - Accuracy, precision capabilities
 - Specificity
 - LOD, LOQ
 - Working, linear ranges
 - Calibration-repeatability, reproducibility
 - Ruggedness
 - Performance Metrics

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