

AQRP Monthly Technical Report

PROJECT TITLE	Spatial and temporal resolution of primary and secondary particulate matter in Houston during DISCOVER-AQ	PROJECT #	14-029
PROJECT PARTICIPANTS	Rebecca J. Sheesley Sascha Usenko	DATE SUBMITTED	9/8/2014
REPORTING PERIOD	From: July 10, 2014 To: August 31, 2014	REPORT #	1

A Financial Status Report (FSR) and Invoice will be submitted separately from each of the Project Participants reflecting charges for this Reporting Period. I understand that the FSR and Invoice are due to the AQRP by the 15th of the month following the reporting period shown above.

Detailed Accomplishments by Task

In July and August, 2014 we focused on training students and method optimization. As outlined in the timeline, we worked on water-soluble organic carbon (WSOC) and organic tracer analysis. The WSOC is on target to be completed and shared with Dr. Hildebrandt-Ruiz by the end of September. The organic tracer method optimization is nearly complete including significant progress towards a manuscript. Laboratory consumables were purchased for both analyses. Two abstracts were submitted to the national conference of the American Geophysical Union covering the DISCOVER-AQ analysis under 14-029:

“Spatial trends in surface-based carbonaceous aerosol, including organic, water-soluble and elemental carbon, during DISCOVER-AQ in Houston, TX”

“The application of a novel pressurized liquid extraction method to quantify organic tracers combined with historic and novel organic contaminants for the DISCOVER-AQ Houston field experiment”

Participated in conference call with AQRP program officer and DISCOVER-AQ aerosol focus group collaborators (grants 14-024 and 14-009).

Preliminary Analysis

No data is ready to be shared at this point.

Data Collected

NA

Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

Water blank issues arose during August for the WSOC analysis, but have since been resolved. This caused a small delay, but time had been included within the timeline for analysis issues and there will be no delay in the WSOC data sharing.

Goals and Anticipated Issues for the Succeeding Reporting Period

The WSOC data for Conroe will be shared during September with Hildebrandt-Ruiz (contract 14-024) as stipulated under the data sharing. We are anticipating receiving ACSM data from Hildebrandt-Ruiz (14-024) and bulk AMS data from Griffin (14-009).

Detailed Analysis of the Progress of the Task Order to Date

- Trained students in QAQC protocols
- Method optimization and initial manuscript preparation for organic tracer analysis
- WSOC analysis is underway for Manvel Croix
- Submitted two abstracts to the AGU conference (Dec 2014)

Submitted to AQRP by: Rebecca J. Sheesley

Principal Investigator: Rebecca J. Sheesley