AQRP Monthly Technical Report

PROJECT TITLE	Quantifying Ozone Production from Light Alkenes Using Novel Measurements of Hydroxynitrate Reaction Products in Houston	**PROJECT #**	14-026
PROJECT PARTICIPANTS	Dr. Tom Ryerson (NOAA) Dr. Greg Yarwood (Ramboll Environ) Dr. David Parrish	**DATE SUBMITTED**	7/8/2015
REPORTING PERIOD	**From:** June 1, 2015 **To:** June 30, 2015	**REPORT #**	13

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

- CB6r2 and hydroxynitrate chemistry updates from SCICHEM 3.0 Beta were ported to the final release version of SCICHEM 3.0 (released June 19, 2015).
- Conducted preliminary SCICHEM simulations for the 18 Sep 2013 flight and prepared plots showing the transport of the Ship Channel plume and the formation of ozone and formaldehyde in the plume as it traveled to the WNW.
- Greg Yarwood presented data analysis and preliminary modeling results at the AQRP Workshop at UT Austin on June 17 and 18, 2015.

Preliminary Analysis

Data Collected

Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

Goals and Anticipated Issues for the Succeeding Reporting Period

- Conduct more detailed reactive plume modeling analysis of the 18 September 2013 flight
- Dr. Parrish will provide meteorological data and background concentrations to Ramboll Environ colleagues for remaining SEAC^{4}RS flights (8/19, 9/4, and 9/23)
- Continue writing peer-reviewed data analysis manuscript.

Detailed Analysis of the Progress of the Task Order to Date

Submitted to AQRP by: Greg Yarwood

Principal Investigator: Tom Ryerson