AQRP Monthly Technical Report

PROJECT TITLE	Identifying and Apportioning Ozone Producing Volatile Organic Compounds in Central Texas	PROJECT #	17-053
PROJECT PARTICIPANTS	Aerodyne Research, Inc.	DATE SUBMITTED	6/8/2017
REPORTING PERIOD	From: May 1, 2017 To: May 31, 2017	REPORT #	5

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

Calendar: The project was executed. Data was actively collected from May 11th to May 31st at three sites, per the experimental plan. Analysis and data quality assurance will commence now.

There will be a meeting on 6/9 to discuss next steps.

- 1. Logistic wrap-ups
- 2. Caravel & ownCloud
- 3. The formal one minute timebase discussion, tools and procedures
- 4. Specific Vectors for 1 minute timebase
 - a. CO_2
 - b. CO, N₂O, H₂O;
 - c. HCHO, HCOOH, H₂O/ H₂O₂, HONO
 - d. Ethane, methane, propane
 - e. HCN, C_2H_2
 - f. FID
 - g. NO, NO₂, O₃
 - h. I-CIMS
 - i. PTR-MS
 - j. AMS
 - k. j-NO₂ \rightarrow j-O₃, HCHO
 - l. lat, lon, wind
 - m. other datasets
- 5. GC-EI-FID timebase and plans
- 6. Calendar dates
- 7. Data-Report goals

Preliminary Analysis

The other report indicates some of the initial observations and these will not be repeated here. The principal task associated with this reporting involve the next steps. Two time bases have been established for final data. One is a 1 minute reporting vector and the other is average value between the start and stop sample time for the gas chromatogram. The solar elevation angle has been computed and put on the one minute time base as a 'pilot' vector.

Data Collected

The campaign data is backed up fully in multiple locations.

Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

The GC-EI-FID had some operational problems and will not produce full coverage.

Goals and Anticipated Issues for the Succeeding Reporting Period *We plan to write a data report.*

Detailed Analysis of the Progress of the Task Order to Date

Do you have any publications related to this project currently under development? If so, please provide a working title, and the journals you plan to submit to.

<u>Yes</u> <u>x</u>No Do you have any publications related to this project currently under review by a journal? If so, what is the working title and the journal name? Have you sent a copy of the article to your AQRP Project Manager and your TCEQ Liaison?

___Yes __x__No

Do you have any bibliographic publications related to this project that have been published? If so, please list the reference information. List all items for the lifetime of the project.

___Yes x__No

Do you have any presentations related to this project currently under development? If so, please provide working title, and the conference you plan to present it (this does not include presentations for the AQRP Workshop).

____Yes ____x_No, all presentations are internal or amongst performers

Do you have any presentations related to this project that have been published? If so, please list reference information. List all items for the lifetime of the project.

___Yes __x_No

Submitted to AQRP by Scott Herndon and Tara Yacovitch

Principal Investigators