

## AQRP Monthly Technical Report

<b>PROJECT TITLE</b>	Quantification and Characterization of Ozone Formation in Central San Antonio	<b>PROJECT #</b>	20-028
<b>PROJECT PARTICIPANTS</b>	Ezra Wood, Alexa Rhoads, Andrew Lindsay	<b>DATE SUBMITTED</b>	10/9/2020
<b>REPORTING PERIOD</b>	<b>From:</b> 9/1/2020 <b>To:</b> 9/30/2020	<b>REPORT #</b>	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 15<sup>th</sup> of the month following the reporting period shown above.

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### Detailed Accomplishments by Task

The goal of Task #1 is to prepare for the field deployment to San Antonio which is currently scheduled for the first two weeks of May 2021. The main part of this task conducted during the reporting period was commencing the training of graduate student Alexa Rhoads to use the ECHAMP peroxy radical sensor. PI Ezra Wood has trained her to use the basic tools of the lab and worked with her to get her up to speed using the software tools required to analyze the ECHAMP data (Matlab). Additionally PI Wood has kept in contact with Rob Griffin from Rice University and agreed to the tentative dates for the field deployment of early May in San Antonio.

No work has been done on Task #2 (Field Deployment), Task #3 (Data Quality Assurance), or Task #4 (Data Analysis). Limited work has been done for Task #5 (Project Reporting and Presentation) including this report.

### Preliminary Analysis

No preliminary analysis has been conducted.

### Data Collected

No data have been collected.

### Identify Problems or Issues Encountered and Proposed Solutions or Adjustments

COVID19-related restrictions at Drexel University have limited us to only having one person in our research lab at a time which has slightly lowered the pace of progress. We are now approved to have two people working in lab at a time which should increase the pace of progress.

## **Goals and Anticipated Issues for the Succeeding Reporting Period**

Alex Rhoads will continue her training to use the ECHAMP peroxy radical sensor and the required analytical software tools. Our plan is for her to conduct calibrations of the instrument using one of the two calibration methods we use (the water vapor photolysis method). This will be conducted with guidance from Andrew Lindsay (graduate student) and PI Ezra Wood.

## **Detailed Analysis of the Progress of the Task Order to Date**

Tasks 1 and 5 are in progress. Tasks 2, 3, and 4 have not started.

**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.**

Yes       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       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       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       No

**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       No

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Submitted to AQRP by

Ezra Wood,  
Principal Investigator