



**Ambient Air Quality Testing Report  
Chase Land, LLC Properties  
Jessup, Maryland 21044**

*Prepared for*

Bureau of Environmental Services  
Howard County Department of Public Works  
6751 Columbia Gateway Drive, Suite 514  
Columbia, Maryland 21046

*Prepared by*

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July 2017

EA Project No. 1483547

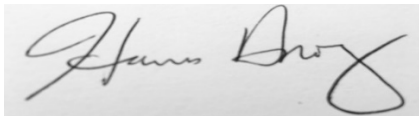
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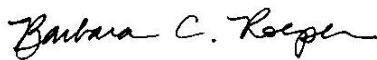


20 July 2017

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July 2017

EA Project No. 1483547

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<u>Number</u>	<u>Title</u>
1	Air Sampling Locations (in Appendix A)

**TABLE**

<u>Number</u>	<u>Title</u>
1-1	Chase Land, LLC Properties Ambient Air Quality Table (In Text)

## LIST OF ACRONYMS

AIHA	American Industrial Hygiene Association
AHERA	Asbestos Hazard Emergency Response Act
CAA	Clean Air Act
CFR	Code of Federal Regulations
COC	Chain of Custody
COMAR	Code of Maryland Regulations
EA	EA Engineering, Science, and Technology, Inc., PBC
EPCRA	Emergency Planning and Community Right to Know Act
ESA	Environmental Site Assessment
F/cc	Fibers per Cubic Centimeter
g/m <sup>3</sup>	Grams per Cubic Meter
L/min	Liters per Minute
MCE	Mixed Cellulose Ester
MDE	Maryland Department of the Environment
µg/m <sup>3</sup>	Micrograms per Cubic Meter
mg/m <sup>3</sup>	Milligrams per Cubic Meter
µm	Micron (1x 10 <sup>-6</sup> meters)
mm	Millimeter (1x 10 <sup>-3</sup> meters)
NOAA	National Oceanic and Atmospheric Administration
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PCM	Phase Contrast Microscopy
PEL	Permissible Exposure Limit
PIA	Public Information Act
PPI	Parallel Particle Impactor
ppm	Parts per million
QC	Quality Control
RH	Relative Humidity
T	Temperature
TRI	Toxic Release Inventory
TWA	Time Weighted Average
U.S. EPA	United States Environmental Protection Agency

## EXECUTIVE SUMMARY

EA Engineering, Science, and Technology, Inc., PBC (EA) conducted an ambient air quality assessment at the Chase Lands Properties (the subject site) located in Jessup, Howard County, Maryland. Howard County intends to construct schools and associated recreational fields at the subject site.

The subject site consists of, either in whole or in part, five individual parcels totaling approximately 79.06 acres of land comprised of one residence, the site of a former farmhouse, and unimproved woodland with small streams. Surrounding properties consist of residential and industrial lands, including the Savage Stone granite quarry. The quarry produces crushed stone, gravel, sand, fill, clay, and associated materials and conducts blasting operations approximately 1-2 times per week.

Based on the intended future use of the subject site, Howard County requested evaluation of ambient air quality at the site to assess the potential for impacts from the adjacent quarry or other off-site sources. This assessment included:

- Review of quarry documents (permits, monitoring and compliance reports)
- Review of existing data (collected by the Maryland Department of Environment, MDE) regarding background concentrations of particulate matter in the area of the site.
- Ambient air sampling at the site

No ongoing compliance issues were identified via review of available permit, monitoring, and reporting information for Savage Stone quarry.

Review of MDE station data (2.25 miles west-southwest of the site) indicated that the 2016 24-hour data for fine particulate matter (PM<sub>2.5</sub>) and coarse particulate matter (PM<sub>10</sub>) are within the federally established health-based limits (the National Ambient Air Quality Standard, NAAQS).

Samples of ambient air were collected at four on-site locations and analyzed for respirable crystalline silica, airborne fibers (including asbestos), respirable dust (PM<sub>4</sub>), fine particulate matter (PM<sub>2.5</sub>) and coarse particulate matter (PM<sub>10</sub>). The wind directions observed on day of sampling (from the west/northwest) were typical for this area, with the site being upwind of the quarry.

All of the results from the on-site ambient air sampling were within health-based limits established by the U.S. Environmental Protection Agency (EPA) and/or the Occupational Safety and Health Administration (OSHA).

Thus, this assessment indicated no adverse impacts to air quality at the subject property from either quarry operations (including blasting) or other off-site sources.

Note that site testing data represent observed, existing conditions documented on the selected test date. Site conditions may change, particularly during site development. Additional air sampling could be performed to further assess worker exposure during site development and at the conclusion of school facilities construction.

## 1. INTRODUCTION

This report presents the methodology and results of an ambient air quality assessment conducted by EA Engineering, Science, and Technology, Inc., PBC (EA) on 8 May 2017, at the Chase Land, LLC properties (the subject site) located in Jessup, Howard County, Maryland. Howard County intends to construct schools and associated recreational fields at the subject site.

The subject site consists of, either in whole or in part, five individual parcels totaling approximately 79.06 acres of land comprised of one residence, the site of a former farmhouse, and unimproved woodland with small streams.

Surrounding properties consist of residential and industrial lands. The subject site is bordered to the north by Mission Road, to the east by a CSX rail line and the Savage Stone granite quarry, to the south by Hub Garth Road and the former Laurel Lumber quarry site, and to the west by the residential development of Aspenwood (Figure 1 in Appendix A).

At the request of the Howard County, EA performed a Phase I Environmental Site Assessment (ESA) in 2016. The site history is detailed in EA's Phase I ESA report. The presence of the adjacent active quarry and former Laurel Lumber quarry site was noted, and information on these properties was obtained by interviewing the property owner.

Based on the intended future use of the subject site, Howard County requested evaluation of ambient air quality at the site to assess the potential for impacts from the adjacent quarry or other off-site sources. Work was performed in accordance with the Consulting Services Agreement #CA 11-10 between EA and Howard County Department of Public Works (DPW).

### 1.1. PURPOSE AND SCOPE

As noted above, an active granite quarry borders the site, and granite quarrying typically generates dust – both small, inhalable particles and visible dust that is too large to inhale.

For public health protection, it is important that ambient air concentrations of inhalable particles (also called particulate matter, or PM, and typically measured as the size-ranges PM<sub>10</sub> and PM<sub>2.5</sub>) be kept within health-based limits; and this study was designed to determine whether concentrations of inhalable PM at the site are or are not within health-based limits.

Granite dust can contain crystalline silica -- which, if small enough to be inhaled, *and* if present in ambient air above a threshold concentration, represents a respiratory concern.

Thus, the primary goal of this study was to measure respirable crystalline silica in air at the site during quarry operations.

Some granite formations may also contain small amounts of asbestos, which can also be hazardous to respiratory health, if present in ambient air at and above threshold concentrations. Asbestos is not known to be present at this quarry, however this investigation also sought to assess asbestos (and other airborne fibers) in ambient air at the site.

Under the Clean Air Act, *per* the National Ambient Air Quality Standards (NAAQS), concentrations of inhalable PM (of all forms combined) are strictly regulated, and the Maryland Department of the Environment (MDE) operates monitoring stations at which the regulated forms of PM (PM<sub>10</sub> and PM<sub>2.5</sub>) are continuously monitored. As part of this evaluation, EA reviewed the results of this PM monitoring at the MDE sampling station closest to the site.

Also as part of this evaluation, EA reviewed documents relevant to the active quarry, such as its operating permits, and monitoring and compliance reports.



## 2. METHODOLOGY

This three-part investigation included: (i) a review of quarry documents (permits, monitoring and compliance reports); (ii) a review of existing data on background concentrations of particulate matter (PM, as collected by MDE) in ambient air near the site; and (iii) one day on site to conduct ambient air sampling. For the on-site testing, samples of ambient air were collected at four locations, and analyzed for respirable dust, PM<sub>2.5</sub>, PM<sub>10</sub>, respirable crystalline silica and airborne fibers (which would include asbestos, if present). At one location (CL-2), the real-time PM<sub>2.5</sub> and PM<sub>10</sub> monitor malfunctioned, but reliable data for these two parameters were available at the other three locations (CL-1, CL-3 and CL-4).

Field work occurred on 8 May 2017 during daylight hours, based on scheduled blasting at the adjacent quarry and the need to conduct the testing during clear weather conditions. The sampling locations were selected to represent different portions of the site (see Figure 1 in Attachment A), such that:

- CL-1 was the westernmost location, and farthest from the quarry. This location is generally upwind of the rest of the site as prevailing winds are typically from the west.
- CL-2 was in the northern corner of the site, next to the CSX rail line, and is the sample location closest to the quarry. The ground surface elevation at sample location CL-2 is several feet lower than the ground surface elevation of the adjacent rail line.
- CL-3 was located south of CL-2 at the eastern boundary of the property, in proximity to the CSX rail line.
- CL-4 was centrally located on the site.

Field data collected during the sampling event are included in Attachment B.

### 2.1. SAMPLING METHODOLOGY – RESPIRABLE DUST & RESPIRABLE CRYSTALLINE SILICA

Samples were collected and analyzed in accordance with NMAM 0600/7500 over an 8-hour period. A pre-calibrated (2.0 Liters per minute [L/min]), battery powered pump was connected to a pre-loaded, parallel particle impactor (PPI) containing a pre-weighed, poly-vinyl chloride, 37-millimeter (mm) filter. The pump clip mount was placed on the protective case that housed the DustTrak (PM monitoring) equipment at the same location, at breathing zone height. An additional calibration of the sampling apparatus was conducted utilizing a pre-calibrated flow rotameter.

The sample “on” and “off” times were recorded for each location during sampling. After sampling, the sample-volume for each location was calculated, based on the total run time and the air flow rate.

EA packaged and shipped the samples for respirable dust and respirable silica analyses under chain of custody (COC) to Analytics Laboratory of Ashland, Virginia *via* commercial carrier (Federal Express). Analytics Laboratory is an American Industrial Hygienist Association (AIHA) and a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. The completed sample COC is included with the laboratory report in Attachment C. The samples were analyzed at the laboratory for respirable dust and silica via NMAM 0600/7500. Results for these analyses are reported in micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ).

## **2.2. SAMPLING METHODOLOGY – AIRBORNE FIBERS**

Samples were collected in accordance with NMAM 7400 over an 8-hour period. A pre-calibrated (at 5.0 L/min), electrically-powered rotary vane pump was connected to a 25-mm cassette containing a 0.8 micrometer ( $\mu\text{m}$ ) mixed cellulose ester (MCE) filter.

The pump clip mount was connected to flexible Tygon tubing, which was connected to the pump, then attached to a tripod mounted at breathing zone height, and then connected to the back of the sampling filter. An additional calibration of the sampling apparatus was conducted utilizing a pre-calibrated flow rotameter.

The sample “on” and “off” times were recorded for each location during sampling. After sampling, the sample-volume for each location was calculated, based on the total run time and the air flow rate.

EA personnel delivered the samples to Batta Environmental Laboratories of Newark, Delaware. Batta is an AIHA and NVLAP accredited laboratory. The completed sample COC is included with the laboratory report in Attachment C. The samples were analyzed at the laboratory for airborne fibers (including asbestos, if present) by PCM via NMAM Method 7400. Results for these analyses are reported in fibers per cubic centimeter of air (f/cc).

## **2.3. SAMPLING METHODOLOGY – PM<sub>2.5</sub> AND PM<sub>10</sub>**

Samples were collected with a DustTrak 8533 monitor over an 8-hour period. EA personnel placed the DustTrak monitors within protective cases at breathing zone height during monitoring. Data was collected in real-time and recorded by the instrument. The DustTrak 8533

monitor is a battery operated, data-logging, real-time aerosol analyzer that utilizes light-scattering, laser photometry and simultaneously measures both mass and particle size fraction. The unit also uses a sheath air system that isolates the aerosol in the optics chamber to keep the optics clean for improved reliability and low maintenance. Each unit was pre-calibrated and zeroed prior to use in the field.

#### **2.4. SAMPLING METHODOLOGY – WIND SPEED AND DIRECTION**

Wind vector data were collected using a digital compass and the Zephyrus Lite Wind Meter, which is a sonic anemometer smartphone application (self-calibrating using an HTC One M8 phone). These data were collected approximately every 15 minutes at one of the four sampling locations during the field work.

#### **2.5. SAMPLING METHODOLOGY – TEMPERATURE AND RELATIVE HUMIDITY**

Temperature and relative humidity were recorded during the sampling event using TSI Q-Trak Air Quality Monitor 7575 instrumentation. Absolute humidity was calculated using the following equation (August-Roche-Magnus formula; a derivative of Clausius-Clapeyron formula):

- Absolute Humidity ( $\text{g}/\text{m}^3$ ) = 
$$\frac{6.112 \times \exp[(17.67 \times T)/(T + 243.5)] \times RH \times 2.1674}{(273.15 + T)}$$

where  $T$  is temperature in degrees Celsius, and  $RH$  is relative humidity in %.

### **3. RESULTS**

#### **3.1. FILE REVIEW DATA**

##### **3.1.1. Savage Stone Records**

Information obtained from Savage Stone included details of the quarry's operating history and procedures, Clean Air Act (CAA) permit information, Emergency Planning and Community Right-to-Know Act (EPCRA) Tier II reporting, U.S. EPA Toxic Release Inventory (TRI) reporting, accidental releases information, stormwater and groundwater monitoring, mining reports, and emissions and noise reports. According to the quarry representative, the Savage Stone quarry has a Permit to Operate (valid through September 30, 2021), a mining permit (valid through December 31, 2018), and a stormwater discharge permit from MDE. Annual air emission reports and quarterly stormwater discharge monitoring reports are submitted to MDE, as required, and MDE completes routine inspections. No ongoing compliance issues were noted. The quarry does not have operations that require a Title V air permit, EPCRA reporting, TRI reporting, or noise monitoring or reporting. The quarry has no record of past spills or accidental releases.

##### **3.1.2. CSX Records**

The CSX rail line is administratively active; however, it does not appear that the line has been used for several years based on visual observation. CSX was contacted via telephone and online inquiry; however, no response was received.

##### **3.1.3. MDE Records**

EA requested similar information from MDE through a Public Information Act (PIA) request in April 2017 on the following adjacent properties: Savage Stone Quarry, Laurel Lumber, Aggregate Management, and CSX Railways. Information was requested from MDE's Mining Program, Water Compliance Program, Air Quality Compliance Program, Air Permits Program, Wetlands/Waterways Program, and On-Site Systems Program.

A review of available files was completed on 30 June 2017. Savage Stone Quarry is operated by Aggregate Management; MDE files were found under Savage Stone. Records pertaining to the former Laurel Lumber property were found under Savage Stone; no records related to the Laurel

Lumber operations were found. No files were available for CSX Railways or Aggregate Management.

Files for Savage Stone were reviewed from the Air and Radiation Management and the Land Management Administrations, file review for the Water and Wetlands/Waterways Programs is pending. Air and Radiation Management files indicate the quarry operates one 1200 ton per hour stone crushing and screening plant equipped with two baghouses and a wet suppression system under MDE permit 027-00489, issued in 2006. Modifications were made to the permit in 2007 for the addition of one dust loadout system with a bin vent filter and in 2011 for the addition of one 12 ft by 12 ft hopper and one 30 ft by 30 inch conveyor.

Construction permits were issued in 2016 for the installation of three portable screening plants to be brought on-site and operated on an as-needed basis to process dirty shot rock. The most recent annual emissions on file for 2015 indicates emissions of 4.36 tons of particulate matter related to rock crushing operations. The emission limit is not quantified on the permit; visible emission limits are to comply with 40 Code of Federal Regulations (CFR) Part 60, Subpart OOO and Code of Maryland Regulations (COMAR) 26.11.06.02C(2). 40 CFR Part 60, Subpart OOO requires opacity limits of 15% for non-capture crushers, 10% for fugitive/transfer point sources, and 7% for stacks/vents. COMAR 26.11.06.02C(2) prohibits visible emissions, other than water in an uncombined form, which is visible to human observers. Numerous unannounced inspections have been conducted in relation to the operating permit, the majority with no violations. Minor violations observed by inspectors were remedied as documented by follow up inspections. A formal notice of violation was issued in 2007 for airborne emissions (particulate matter observed on Route 1); the violation was resolved by the addition of spray bars, planting a screen via landscaping, and more diligent use of water trucks.

Land Management Administration files indicate that an application for the modification and renewal of Surface Mine Permit No. 06-SP-1009 is currently under review. January 2017 MDE correspondence requested changes to existing sediment and erosion control plans. April 2017 email correspondence from Aggregate Management summarized neighboring residences and their concerns and issues related to blasting at the quarry. An MDE site inspection conducted in March 2016 indicated that the Laurel Lumber area has been reclaimed, vegetation was observed to be well established; it is noted the permit is being kept open in case it is needed to stockpile overburden from the neighboring Savage Stone Quarry or to facilitate grading for development. Periodic surface mine inspections are conducted.

### 3.2. BACKGROUND PM MONITORING DATA

The MDE monitoring site in Howard County is 2.25 miles west-southwest of the site. The 2016 24-hour data for fine particulate matter (PM<sub>2.5</sub>, average value = 9.73 µg/m<sup>3</sup>) at this monitoring station are well within the NAAQS, which is 35 µg/m<sup>3</sup> (enforced as an average over 3 years of the 98<sup>th</sup> percentile of 24-hour averages during that 3-year period). The 2016 24-hour data for coarse, inhalable particulate matter (PM<sub>10</sub>, average value = 25 µg/m<sup>3</sup>) at Maryland monitoring stations are also well within the NAAQS, which is 150 µg/m<sup>3</sup> for a 24 hour period.

### 3.3. AMBIENT AIR MONITORING RESULTS

EA conducted on-site ambient air sampling on 8 May 2017, a day with no precipitation that intentionally coincided with blasting at the quarry. The field work included the following:

- Sample collection for respirable dust via NIOSH Manual of Analytical Methods (NMAM) Method 0600.
- Sample collection for respirable silica via NMAM 0600/7500.
- Sample collection for airborne fibers (including asbestos, if present) by phase contrast microscopy (PCM) via NMAM Method 7400.
- Real-time monitoring with a DustTrak 8533 for PM<sub>2.5</sub> and PM<sub>10</sub> at the four above-referenced site locations (CL-1 through CL-4).
- Observation of wind vector data using a compass and the Zephyrus Lite Wind Meter, a sonic anemometer smartphone application. Meteorological data were also obtained from nearby National Weather Service weather stations (Baltimore Inner Harbor [call number KDMH], Baltimore Washington International Thurgood Marshall Airport [BWI, call number KBWI], Fort Meade [call number KFME], Andrews Air Force Base [call number KADW], Martin State Airport [call number KMTN], and U.S. Naval Academy in Annapolis [call number KNAK]) to identify characteristics of the ambient wind patterns and air mass.
- Measurement of temperature (T) and relative humidity (RH) data utilizing a TSI Q-Trak Air Quality Monitor 7575.

The analytical results of the ambient air monitoring are listed in Table 1 and depicted on the figure in Attachment A. Site-specific PM<sub>2.5</sub> and PM<sub>10</sub> monitoring data can be found in Appendix B. Laboratory analytical data are included as Attachment C.

As shown, all results are within occupational and health-based limits. It should be noted that the DustTrak 8533 monitor placed at CL-2 malfunctioned, so that reliable PM<sub>2.5</sub> and PM<sub>10</sub> data could not be collected at this location.

For respirable dust and silica, health-based, Permissible Exposure Limits (PELs) are set by OSHA. These occupational standards are based on an 8-hour time-weighted average (TWA), which coincides with the 8-hour day used for this sampling event.

For airborne fibers, the NMAM 7400 method utilizes phase contrast microscopy (PCM) which counts total fibers (including asbestos).

**Table 1: Chase Land, LLC Properties Ambient Air Quality Test Results**

Sample # Designation	Sample Location	PM <sub>2.5</sub> <sup>1</sup> (µg/m <sup>3</sup> )	PM <sub>10</sub> <sup>2</sup> (µg/m <sup>3</sup> )	Respirable Dust <sup>3</sup> (µg/m <sup>3</sup> )	Respirable Crystalline Silica <sup>4</sup> (µg/m <sup>3</sup> )	Airborne Fibers <sup>5, 6</sup> (F/cc)
CL-1	Western Gate	3	3	<52	<10.4	0.004
CL-2	At railroad/ Mission Road intersection	N/A <sup>7</sup>	N/A <sup>7</sup>	<52	<10.4	0.004
CL-3	Halfway along eastern railroad boundary	4	4	<52	<10.5	<0.001
CL-4	Site Center	7	7	<52	<10.3	0.003
CL-5, CL-6	Blanks (2)	---	---	---	---	N/A
Notes: 1 – 24-hour PM <sub>2.5</sub> Health Based Limit = 35 µg /m <sup>3</sup> (U.S. EPA NAAQS). 2 – 24-Hour PM <sub>10</sub> Health Based Limit = 150 µg /m <sup>3</sup> (U.S. EPA NAAQS). 3 – OSHA Occupational PEL for Respirable Dust = 5,000 µg /m <sup>3</sup> over an 8-hour day. 4 – OSHA Silica PEL (Health Based Limit) is 50 µg /m <sup>3</sup> over an eight (8)-hour workday. 5 – OSHA PEL for asbestos is 0.1 F/cc over an 8-hour day. 6 – U.S. EPA Re-occupancy Standard is 0.01 F/cc. 7 – Not available, due to equipment malfunction.						

### 3.4. LABORATORY RESULTS

#### 3.4.1. Respirable Dust

As shown in Table 1 above, respirable dust was not detected at any on-site location, where the lower limit of detection was 52 µg /m<sup>3</sup>, and the OSHA PEL is 5,000 µg /m<sup>3</sup>.

### **3.4.2. Respirable Crystalline Silica**

No respirable crystalline silica was detected in ambient air at any of the site locations, where the lower limit of detection was  $10 \mu\text{g}/\text{m}^3$ , and the OSHA PEL is  $50 \mu\text{g}/\text{m}^3$ .

### **3.4.3. Airborne Fibers**

Airborne fibers measured at the site were detected at levels well within the OSHA PEL for asbestos of 0.1 F/cc over an 8-hour period. Results are also well within the U.S. EPA re-occupancy or “clean air” standard of no more than 0.01 f/cc as delineated in 40 CFR Part 763 (Asbestos School Hazard Emergency Response Act or AHERA). Reported values ranged from  $<0.001$  F/cc at the railroad midpoint (CL-3), to 0.004 F/cc at both the Western Gate (CL-1) and the junction of the rail line and Mission Road (CL-2). The analysis conducted is a measurement of total airborne fibers of all types, which would include asbestos, if any were present. Therefore, since the total fiber levels in each sample did not exceed the OSHA standard or the U.S. EPA AHERA re-occupancy standard, the potential number of asbestos fibers (if present) could not exceed either standard.

### **3.5. PM<sub>2.5</sub> AND PM<sub>10</sub> DATA**

PM measurements from the DustTrak monitoring at the site are less than the U.S. EPA NAAQS (as previously noted, the data from CL-2 were invalid due to equipment malfunction). Values at each location did not fluctuate significantly throughout the 8-hour recording period. For example, no increases were noted during or after the quarry blasting, which occurred at 1:54 pm. For comparison, the MDE monitoring site in Howard County is 2.25 miles west-southwest of the site, and the 2016 24-hour data are less than the NAAQS (average value =  $9.73 \mu\text{g}/\text{m}^3$ ). The concentrations at CL-1, CL-3, and CL-4 were less than that average throughout the day.



#### 4. CONCLUSION

This assessment found no adverse impacts to air quality at the subject property from either quarry operations (including blasting) or other off-site sources.

Inhalable crystalline silica, which might be emitted from blasting and other operations at the quarry, was not detected on the proposed school site; inhalable fiber concentrations are within health-based limits; and background concentrations of airborne particulate via review of MDE long term monitoring station data and results from site testing are within applicable health-based and occupational limits. Sampling results were consistent throughout the site.

No ongoing compliance issues were identified via review of available permit, monitoring, and reporting information for Savage Stone quarry.

It should be noted that acquired site testing data represents observed, existing conditions documented on the selected test date. Site conditions may change, particularly during site development. Additional background air sampling could be performed to further assess worker exposure during site development and at the conclusion of school facilities construction.

## 5. REFERENCES

EA Engineering, Science, and Technology, Inc., PBC. *Phase I Environmental Site Assessment Report, Chase Lands, Jessup, Maryland 21044*. November 2016.

Maryland Department of the Environment (MDE). Air and Radiation Management Files for Savage Stone (027-489). Including:

- Inspection and Observation/AFS Point Action Forms from 2007-2016 documenting inspections and entry of data
- Emissions Certification Reports 2007-2016
- Permit 027-00489 issued 13 December 2006, expiration 30 September 2011 and subsequent renewal and modifications of the permit and permit related correspondence

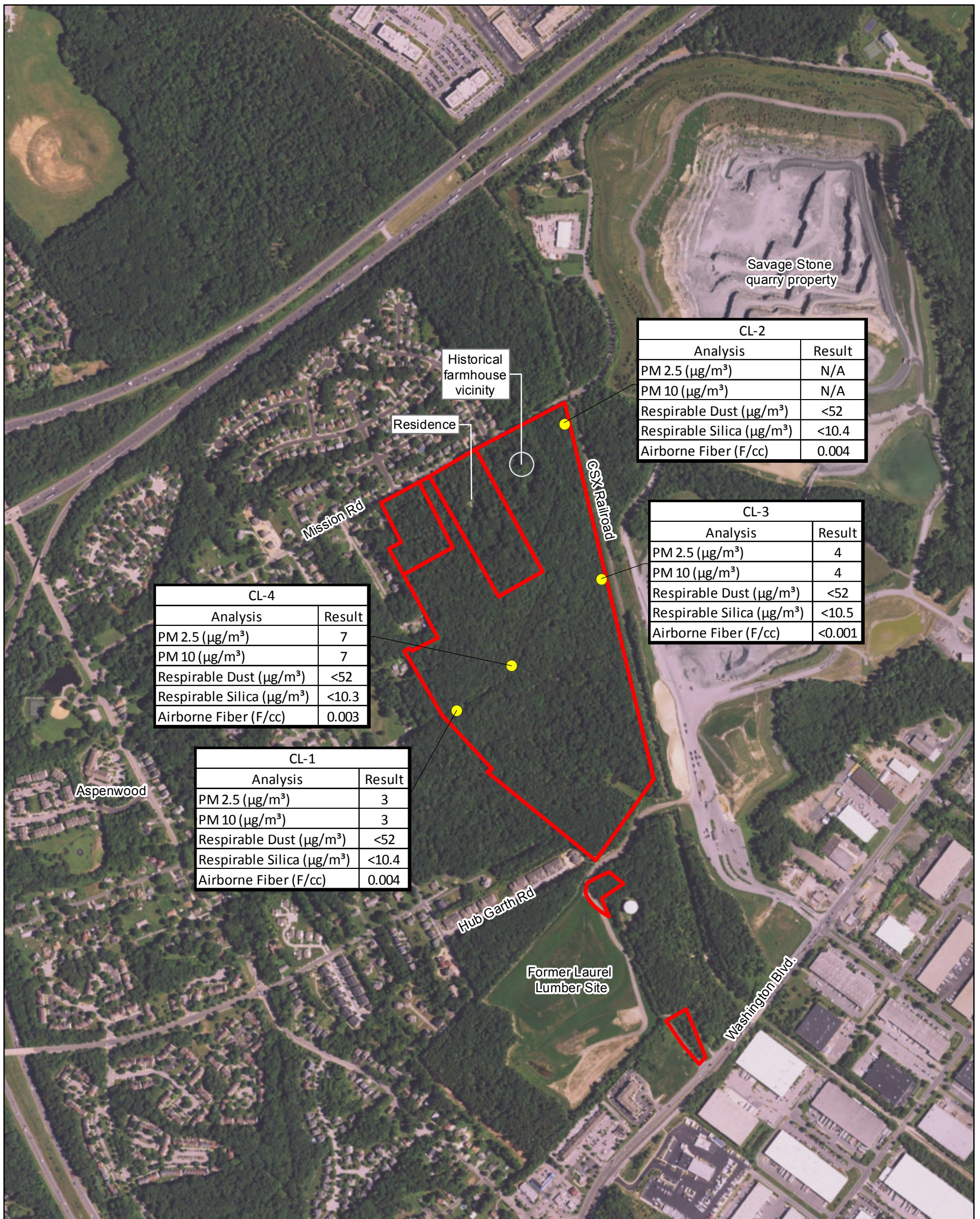
Maryland Department of the Environment (MDE). Land Management Administration Files for Savage Stone (027-489). Including:

- Laurel Lumber Mine Reclamation Plan dated November 2006
- Laurel Lumber Mine Reclamation Plan Permanent Sediment Basin Design dated September 2006
- Permit 06-SP-1009 and subsequent renewal and modifications of the permit and permit related correspondence
- Field Reports detailing site inspections from 2010-2016
- Correspondence regarding mining blasts
- Stormwater Pollution Prevention Plan dated June 2010

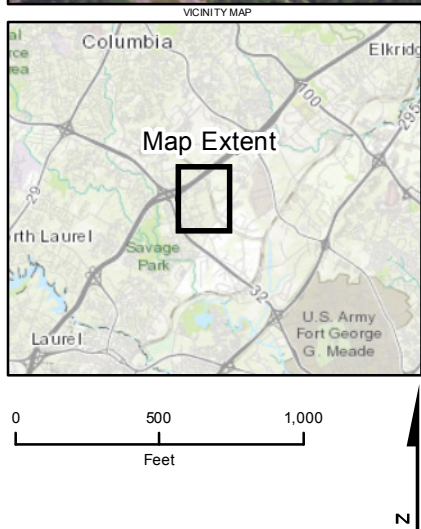
## **Appendix A**

### **Figure**





\\ovetongis\GIS\data\StateandLocal\Northeast\ChaseLands\_Phase1\IMXD\Figure 1 Air Sampling Locations and Results.mxd



- Legend**
- Air Sampling Location
  - Approximate Property Boundary

Acronyms:  
 $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter  
 F/cc = fibers per cubic centimeter

OSHA PEL – Occupational Safety and Health Administration Permissible Exposure Limit  
 TWA – Time Weighted Average

- Notes:
- 1- Particulate Matter (PM) 2.5 - US EPA NAAQS is  $35 \mu\text{g}/\text{m}^3$  over a 24-hour day.
  - 2- PM 10 - US EPA NAAQS is  $150 \mu\text{g}/\text{m}^3$  over a 24-hour day.
  - 3- Respirable Dust - OSHA PEL (TWA) is  $5,000 \mu\text{g}/\text{m}^3$  over an 8-hour workday.
  - 4- Respirable Silica - OSHA PEL (TWA) is  $50 \mu\text{g}/\text{m}^3$  over an 8-hour workday.
  - 5- Airborne Fibers (includes asbestos) - OSHA PEL for asbestos is 0.1 F/cc. US EPA Re-Occupancy Standard is 0.01 F/cc.

**Figure 1**  
**Air Sampling Locations**  
 Chase Land, LLC Properties  
 Jessup, MD

Map Date: 7/20/2017  
 Source: ESRI, 2015  
 Projection: NAD 1983 StatePlane  
 Maryland FIPS 1900 Feet





## **Appendix B**

### **Field Documentation**



**CHASE LAND AIR SAMPLING –WEATHER PARAMETER TABLE**

<b>Location – Description</b>	<b>Time</b>	<b>Temperature (°F)</b>	<b>Relative Humidity (%)</b>	<b>Absolute Humidity (g/m<sup>3</sup>)</b>	<b>Wind Vector (mph, direction)</b>	<b>Observations</b>
1	0755	50.9	40.2	3.316	0.4 SW	Sunny, cool
2	0830	50.6	34.1	2.790	2.0 W	Sunny, cool
3	0905	51.0	32.8	2.712	2.3 NW	Sunny, cool
4	1006	51.0	32.6	2.696	1.2 SW	Sunny, cool
1	1034	53.6	30.1	2.668	1.6 SW	Sunny, cool
4	1043	53.6	29.7	2.633	1.1 W	Sunny, cool
2	1118	55.5	31.2	2.908	1.2 W	Sunny, cool
3	1133	59.5	21.9	2.266	1.3 SW	Sunny
1	1155	55.7	26.2	2.455	1.8 W	Sunny
1	1230	56.4	26.5	2.529	1.4 W	Sunny
4	1241	56.8	23.6	2.276	1.4 SW	Sunny
3	1250	60.0	22.7	2.379	1.8 SW	Sunny
2	1305	61.5	26.1	2.843	2.0 SW	Sunny
4	1325	63.9	20.4	2.363	1.5 NW	Sunny



**CHASE LAND AIR SAMPLING –WEATHER PARAMETER TABLE**

<b>Location – Description</b>	<b>Time</b>	<b>Temperature (°F)</b>	<b>Relative Humidity (%)</b>	<b>Absolute Humidity (g/m<sup>3</sup>)</b>	<b>Wind Vector (mph, direction)</b>	<b>Observations</b>
1	1330	58.1	27.1	2.704	1.8 W	Sunny
1	1412	59.4	27.4	2.828	1.6 NW	Sunny
4	1416	62.5	27.3	3.051	0.7 W	Sunny
3	1425	59.9	22.0	2.300	1.5 SW	Sunny
2	1435	63.2	25.9	2.947	1.4 NW	Sunny
4	1452	61.6	26.6	2.905	1.1 NW	Sunny
1	1517	60.0	29.9	3.134	1.3 NW	Sunny
1	1558	62.6	27.2	3.048	0.2 NW	Sunny
2	1616	62.5	27.2	3.040	1.4 NW	Sunny
3	1701	59.4	31.2	3.220	1.8 NW	Sunny
4	1807	59.3	40.1	4.128	Calm	Sunny

# Test 002

Location CL-1

Site 1 (gate)

Instrument		Data Properties	
Model	DustTrak DRX	Start Date	05/08/2017
Instrument S/N	8533151101	Start Time	07:53:18
		Stop Date	05/08/2017
		Stop Time	15:53:18
		Total Time	0:08:00:00
		Logging Interval	60 seconds

Statistics					
	PM1	PM2.5	RESP	PM10	TOTAL
Avg	0.003 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>
Max	0.008 mg/m <sup>3</sup>	0.008 mg/m <sup>3</sup>	0.008 mg/m <sup>3</sup>	0.012 mg/m <sup>3</sup>	0.015 mg/m <sup>3</sup>
Max Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
Max Time	07:58:18	07:58:18	07:54:18	07:54:18	07:54:18
Min	0.002 mg/m <sup>3</sup>	0.002 mg/m <sup>3</sup>	0.002 mg/m <sup>3</sup>	0.002 mg/m <sup>3</sup>	0.002 mg/m <sup>3</sup>
Min Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
Min Time	08:56:18	08:57:18	08:57:18	08:57:18	08:57:18
TWA (8 hr)	0.003	0.003	0.003	0.003	0.003
TWA Start Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
TWA Start Time	07:53:18	07:53:18	07:53:18	07:53:18	07:53:18
TWA End Time	15:53:18	15:53:18	15:53:18	15:53:18	15:53:18

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
1	05/08/2017	07:54:18	0.007	0.007	0.008	0.012	0.015
2	05/08/2017	07:55:18	0.006	0.006	0.006	0.008	0.009
3	05/08/2017	07:56:18	0.004	0.004	0.005	0.005	0.005
4	05/08/2017	07:57:18	0.005	0.005	0.005	0.005	0.005
5	05/08/2017	07:58:18	0.008	0.008	0.008	0.008	0.009
6	05/08/2017	07:59:18	0.004	0.004	0.004	0.005	0.005
7	05/08/2017	08:00:18	0.004	0.004	0.004	0.005	0.005
8	05/08/2017	08:01:18	0.004	0.004	0.004	0.005	0.005
9	05/08/2017	08:02:18	0.004	0.005	0.005	0.005	0.005
10	05/08/2017	08:03:18	0.004	0.004	0.004	0.004	0.004
11	05/08/2017	08:04:18	0.004	0.004	0.004	0.004	0.004
12	05/08/2017	08:05:18	0.004	0.004	0.004	0.004	0.004
13	05/08/2017	08:06:18	0.004	0.004	0.004	0.004	0.004
14	05/08/2017	08:07:18	0.004	0.004	0.004	0.004	0.004
15	05/08/2017	08:08:18	0.004	0.004	0.004	0.004	0.005
16	05/08/2017	08:09:18	0.003	0.003	0.003	0.004	0.004
17	05/08/2017	08:10:18	0.003	0.003	0.003	0.004	0.004
18	05/08/2017	08:11:18	0.004	0.004	0.004	0.004	0.004
19	05/08/2017	08:12:18	0.003	0.003	0.003	0.004	0.004



Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
20	05/08/2017	08:13:18	0.003	0.003	0.003	0.003	0.003
21	05/08/2017	08:14:18	0.003	0.003	0.003	0.004	0.004
22	05/08/2017	08:15:18	0.003	0.003	0.003	0.004	0.004
23	05/08/2017	08:16:18	0.003	0.003	0.003	0.003	0.003
24	05/08/2017	08:17:18	0.003	0.003	0.004	0.004	0.004
25	05/08/2017	08:18:18	0.003	0.003	0.003	0.003	0.003
26	05/08/2017	08:19:18	0.003	0.003	0.003	0.004	0.004
27	05/08/2017	08:20:18	0.003	0.003	0.003	0.003	0.003
28	05/08/2017	08:21:18	0.003	0.003	0.003	0.003	0.003
29	05/08/2017	08:22:18	0.003	0.003	0.003	0.003	0.003
30	05/08/2017	08:23:18	0.003	0.003	0.003	0.003	0.003
31	05/08/2017	08:24:18	0.003	0.003	0.003	0.003	0.003
32	05/08/2017	08:25:18	0.003	0.003	0.003	0.003	0.003
33	05/08/2017	08:26:18	0.003	0.003	0.003	0.003	0.003
34	05/08/2017	08:27:18	0.003	0.003	0.003	0.003	0.004
35	05/08/2017	08:28:18	0.003	0.003	0.003	0.003	0.003
36	05/08/2017	08:29:18	0.003	0.003	0.003	0.003	0.004
37	05/08/2017	08:30:18	0.003	0.003	0.003	0.003	0.003
38	05/08/2017	08:31:18	0.003	0.003	0.003	0.003	0.003
39	05/08/2017	08:32:18	0.003	0.003	0.003	0.003	0.003
40	05/08/2017	08:33:18	0.003	0.003	0.003	0.003	0.004
41	05/08/2017	08:34:18	0.003	0.003	0.003	0.003	0.003
42	05/08/2017	08:35:18	0.003	0.003	0.003	0.003	0.003
43	05/08/2017	08:36:18	0.003	0.003	0.003	0.003	0.003
44	05/08/2017	08:37:18	0.003	0.003	0.003	0.004	0.004
45	05/08/2017	08:38:18	0.003	0.003	0.003	0.003	0.003
46	05/08/2017	08:39:18	0.003	0.003	0.003	0.003	0.003
47	05/08/2017	08:40:18	0.003	0.003	0.003	0.003	0.003
48	05/08/2017	08:41:18	0.003	0.003	0.003	0.003	0.003
49	05/08/2017	08:42:18	0.003	0.003	0.003	0.003	0.004
50	05/08/2017	08:43:18	0.003	0.003	0.003	0.003	0.003
51	05/08/2017	08:44:18	0.003	0.003	0.003	0.003	0.003
52	05/08/2017	08:45:18	0.003	0.003	0.003	0.003	0.003
53	05/08/2017	08:46:18	0.003	0.003	0.003	0.003	0.004
54	05/08/2017	08:47:18	0.003	0.003	0.003	0.003	0.003
55	05/08/2017	08:48:18	0.003	0.003	0.003	0.003	0.004
56	05/08/2017	08:49:18	0.003	0.003	0.003	0.003	0.003
57	05/08/2017	08:50:18	0.003	0.003	0.003	0.003	0.003
58	05/08/2017	08:51:18	0.003	0.003	0.003	0.003	0.003
59	05/08/2017	08:52:18	0.003	0.003	0.003	0.003	0.003
60	05/08/2017	08:53:18	0.003	0.003	0.003	0.003	0.003
61	05/08/2017	08:54:18	0.003	0.003	0.003	0.003	0.003
62	05/08/2017	08:55:18	0.003	0.003	0.003	0.003	0.003
63	05/08/2017	08:56:18	0.002	0.003	0.003	0.003	0.003
64	05/08/2017	08:57:18	0.002	0.002	0.002	0.002	0.002
65	05/08/2017	08:58:18	0.002	0.003	0.003	0.003	0.003

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
66	05/08/2017	08:59:18	0.002	0.002	0.003	0.003	0.003
67	05/08/2017	09:00:18	0.002	0.003	0.003	0.003	0.003
68	05/08/2017	09:01:18	0.002	0.003	0.003	0.003	0.003
69	05/08/2017	09:02:18	0.002	0.002	0.002	0.003	0.003
70	05/08/2017	09:03:18	0.002	0.003	0.003	0.003	0.004
71	05/08/2017	09:04:18	0.002	0.002	0.003	0.003	0.003
72	05/08/2017	09:05:18	0.002	0.003	0.003	0.003	0.003
73	05/08/2017	09:06:18	0.002	0.002	0.003	0.003	0.003
74	05/08/2017	09:07:18	0.002	0.002	0.002	0.003	0.003
75	05/08/2017	09:08:18	0.002	0.002	0.003	0.003	0.003
76	05/08/2017	09:09:18	0.002	0.003	0.003	0.003	0.003
77	05/08/2017	09:10:18	0.002	0.002	0.002	0.002	0.002
78	05/08/2017	09:11:18	0.003	0.003	0.003	0.003	0.004
79	05/08/2017	09:12:18	0.003	0.003	0.003	0.003	0.003
80	05/08/2017	09:13:18	0.002	0.003	0.003	0.003	0.003
81	05/08/2017	09:14:18	0.002	0.003	0.003	0.003	0.003
82	05/08/2017	09:15:18	0.002	0.002	0.002	0.003	0.003
83	05/08/2017	09:16:18	0.002	0.003	0.003	0.003	0.003
84	05/08/2017	09:17:18	0.002	0.002	0.002	0.002	0.002
85	05/08/2017	09:18:18	0.003	0.003	0.003	0.003	0.003
86	05/08/2017	09:19:18	0.002	0.002	0.003	0.003	0.003
87	05/08/2017	09:20:18	0.002	0.002	0.002	0.002	0.002
88	05/08/2017	09:21:18	0.002	0.003	0.003	0.003	0.003
89	05/08/2017	09:22:18	0.003	0.003	0.003	0.003	0.003
90	05/08/2017	09:23:18	0.003	0.003	0.003	0.003	0.003
91	05/08/2017	09:24:18	0.003	0.003	0.003	0.003	0.004
92	05/08/2017	09:25:18	0.003	0.003	0.003	0.003	0.004
93	05/08/2017	09:26:18	0.003	0.003	0.003	0.003	0.003
94	05/08/2017	09:27:18	0.003	0.003	0.003	0.003	0.003
95	05/08/2017	09:28:18	0.003	0.003	0.003	0.003	0.003
96	05/08/2017	09:29:18	0.003	0.003	0.003	0.003	0.003
97	05/08/2017	09:30:18	0.003	0.003	0.003	0.003	0.003
98	05/08/2017	09:31:18	0.002	0.003	0.003	0.003	0.003
99	05/08/2017	09:32:18	0.002	0.003	0.003	0.003	0.003
100	05/08/2017	09:33:18	0.003	0.003	0.003	0.003	0.003
101	05/08/2017	09:34:18	0.002	0.002	0.002	0.002	0.002
102	05/08/2017	09:35:18	0.002	0.002	0.002	0.003	0.003
103	05/08/2017	09:36:18	0.002	0.002	0.003	0.003	0.003
104	05/08/2017	09:37:18	0.002	0.003	0.003	0.003	0.003
105	05/08/2017	09:38:18	0.003	0.003	0.003	0.003	0.004
106	05/08/2017	09:39:18	0.003	0.003	0.003	0.003	0.003
107	05/08/2017	09:40:18	0.002	0.002	0.002	0.002	0.002
108	05/08/2017	09:41:18	0.004	0.004	0.004	0.006	0.006
109	05/08/2017	09:42:18	0.003	0.003	0.003	0.003	0.003
110	05/08/2017	09:43:18	0.003	0.003	0.003	0.003	0.003
111	05/08/2017	09:44:18	0.003	0.003	0.003	0.003	0.003

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
112	05/08/2017	09:45:18	0.002	0.003	0.003	0.003	0.003
113	05/08/2017	09:46:18	0.002	0.002	0.002	0.002	0.003
114	05/08/2017	09:47:18	0.002	0.003	0.003	0.003	0.003
115	05/08/2017	09:48:18	0.002	0.003	0.003	0.003	0.003
116	05/08/2017	09:49:18	0.003	0.003	0.003	0.003	0.003
117	05/08/2017	09:50:18	0.003	0.003	0.003	0.003	0.004
118	05/08/2017	09:51:18	0.003	0.003	0.003	0.003	0.003
119	05/08/2017	09:52:18	0.003	0.003	0.003	0.003	0.003
120	05/08/2017	09:53:18	0.002	0.002	0.002	0.003	0.003
121	05/08/2017	09:54:18	0.002	0.002	0.002	0.003	0.003
122	05/08/2017	09:55:18	0.002	0.002	0.003	0.003	0.003
123	05/08/2017	09:56:18	0.002	0.002	0.002	0.002	0.002
124	05/08/2017	09:57:18	0.002	0.002	0.002	0.002	0.002
125	05/08/2017	09:58:18	0.002	0.002	0.002	0.003	0.003
126	05/08/2017	09:59:18	0.002	0.002	0.002	0.003	0.003
127	05/08/2017	10:00:18	0.002	0.002	0.002	0.003	0.003
128	05/08/2017	10:01:18	0.002	0.002	0.002	0.003	0.003
129	05/08/2017	10:02:18	0.002	0.002	0.002	0.003	0.003
130	05/08/2017	10:03:18	0.002	0.002	0.002	0.002	0.002
131	05/08/2017	10:04:18	0.002	0.003	0.003	0.003	0.003
132	05/08/2017	10:05:18	0.002	0.003	0.003	0.003	0.003
133	05/08/2017	10:06:18	0.002	0.003	0.003	0.003	0.003
134	05/08/2017	10:07:18	0.003	0.003	0.003	0.003	0.003
135	05/08/2017	10:08:18	0.002	0.002	0.002	0.003	0.003
136	05/08/2017	10:09:18	0.002	0.002	0.003	0.003	0.003
137	05/08/2017	10:10:18	0.002	0.003	0.003	0.003	0.003
138	05/08/2017	10:11:18	0.003	0.003	0.003	0.003	0.003
139	05/08/2017	10:12:18	0.003	0.003	0.003	0.003	0.003
140	05/08/2017	10:13:18	0.003	0.003	0.003	0.003	0.003
141	05/08/2017	10:14:18	0.003	0.003	0.003	0.003	0.003
142	05/08/2017	10:15:18	0.002	0.003	0.003	0.003	0.003
143	05/08/2017	10:16:18	0.003	0.003	0.003	0.003	0.003
144	05/08/2017	10:17:18	0.003	0.003	0.003	0.003	0.003
145	05/08/2017	10:18:18	0.003	0.003	0.003	0.003	0.003
146	05/08/2017	10:19:18	0.003	0.003	0.003	0.003	0.003
147	05/08/2017	10:20:18	0.002	0.003	0.003	0.003	0.003
148	05/08/2017	10:21:18	0.003	0.003	0.003	0.003	0.003
149	05/08/2017	10:22:18	0.003	0.003	0.003	0.003	0.003
150	05/08/2017	10:23:18	0.003	0.003	0.003	0.003	0.003
151	05/08/2017	10:24:18	0.002	0.003	0.003	0.003	0.003
152	05/08/2017	10:25:18	0.003	0.003	0.003	0.003	0.003
153	05/08/2017	10:26:18	0.002	0.002	0.003	0.003	0.003
154	05/08/2017	10:27:18	0.002	0.003	0.003	0.003	0.003
155	05/08/2017	10:28:18	0.002	0.003	0.003	0.003	0.003
156	05/08/2017	10:29:18	0.003	0.003	0.003	0.004	0.005
157	05/08/2017	10:30:18	0.002	0.003	0.003	0.003	0.003

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
158	05/08/2017	10:31:18	0.003	0.003	0.003	0.003	0.004
159	05/08/2017	10:32:18	0.003	0.004	0.004	0.005	0.006
160	05/08/2017	10:33:18	0.003	0.003	0.003	0.003	0.003
161	05/08/2017	10:34:18	0.002	0.003	0.003	0.003	0.003
162	05/08/2017	10:35:18	0.002	0.002	0.002	0.003	0.003
163	05/08/2017	10:36:18	0.002	0.002	0.003	0.003	0.003
164	05/08/2017	10:37:18	0.003	0.003	0.003	0.004	0.005
165	05/08/2017	10:38:18	0.002	0.002	0.002	0.003	0.003
166	05/08/2017	10:39:18	0.002	0.002	0.002	0.002	0.002
167	05/08/2017	10:40:18	0.002	0.002	0.003	0.003	0.003
168	05/08/2017	10:41:18	0.002	0.002	0.002	0.003	0.003
169	05/08/2017	10:42:18	0.002	0.002	0.002	0.002	0.002
170	05/08/2017	10:43:18	0.003	0.003	0.003	0.003	0.003
171	05/08/2017	10:44:18	0.002	0.002	0.002	0.002	0.002
172	05/08/2017	10:45:18	0.002	0.002	0.002	0.003	0.003
173	05/08/2017	10:46:18	0.002	0.002	0.002	0.002	0.002
174	05/08/2017	10:47:18	0.002	0.002	0.002	0.003	0.003
175	05/08/2017	10:48:18	0.002	0.002	0.002	0.002	0.002
176	05/08/2017	10:49:18	0.002	0.002	0.002	0.002	0.002
177	05/08/2017	10:50:18	0.002	0.002	0.002	0.002	0.002
178	05/08/2017	10:51:18	0.003	0.003	0.003	0.003	0.004
179	05/08/2017	10:52:18	0.002	0.003	0.003	0.003	0.003
180	05/08/2017	10:53:18	0.002	0.002	0.002	0.003	0.003
181	05/08/2017	10:54:18	0.002	0.003	0.003	0.003	0.003
182	05/08/2017	10:55:18	0.002	0.002	0.002	0.003	0.003
183	05/08/2017	10:56:18	0.002	0.002	0.003	0.003	0.003
184	05/08/2017	10:57:18	0.002	0.003	0.003	0.003	0.003
185	05/08/2017	10:58:18	0.002	0.002	0.002	0.002	0.002
186	05/08/2017	10:59:18	0.002	0.002	0.002	0.003	0.003
187	05/08/2017	11:00:18	0.002	0.002	0.002	0.002	0.002
188	05/08/2017	11:01:18	0.002	0.002	0.002	0.003	0.003
189	05/08/2017	11:02:18	0.002	0.002	0.002	0.002	0.002
190	05/08/2017	11:03:18	0.002	0.002	0.002	0.002	0.002
191	05/08/2017	11:04:18	0.002	0.002	0.002	0.003	0.003
192	05/08/2017	11:05:18	0.002	0.002	0.002	0.002	0.002
193	05/08/2017	11:06:18	0.002	0.002	0.003	0.003	0.003
194	05/08/2017	11:07:18	0.002	0.003	0.003	0.003	0.003
195	05/08/2017	11:08:18	0.002	0.002	0.002	0.003	0.003
196	05/08/2017	11:09:18	0.002	0.002	0.002	0.003	0.003
197	05/08/2017	11:10:18	0.002	0.002	0.003	0.003	0.003
198	05/08/2017	11:11:18	0.002	0.002	0.002	0.003	0.003
199	05/08/2017	11:12:18	0.002	0.002	0.003	0.003	0.003
200	05/08/2017	11:13:18	0.002	0.002	0.003	0.003	0.003
201	05/08/2017	11:14:18	0.003	0.003	0.003	0.003	0.003
202	05/08/2017	11:15:18	0.002	0.002	0.003	0.003	0.003
203	05/08/2017	11:16:18	0.002	0.003	0.003	0.003	0.003

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
204	05/08/2017	11:17:18	0.002	0.003	0.003	0.003	0.003
205	05/08/2017	11:18:18	0.002	0.003	0.003	0.003	0.003
206	05/08/2017	11:19:18	0.003	0.003	0.003	0.003	0.003
207	05/08/2017	11:20:18	0.002	0.002	0.003	0.003	0.003
208	05/08/2017	11:21:18	0.003	0.003	0.003	0.003	0.003
209	05/08/2017	11:22:18	0.003	0.003	0.003	0.003	0.003
210	05/08/2017	11:23:18	0.002	0.003	0.003	0.003	0.003
211	05/08/2017	11:24:18	0.003	0.003	0.003	0.003	0.003
212	05/08/2017	11:25:18	0.003	0.003	0.003	0.003	0.003
213	05/08/2017	11:26:18	0.002	0.003	0.003	0.003	0.003
214	05/08/2017	11:27:18	0.002	0.003	0.003	0.003	0.003
215	05/08/2017	11:28:18	0.002	0.002	0.003	0.003	0.003
216	05/08/2017	11:29:18	0.003	0.003	0.003	0.003	0.003
217	05/08/2017	11:30:18	0.003	0.003	0.003	0.003	0.003
218	05/08/2017	11:31:18	0.003	0.003	0.003	0.003	0.004
219	05/08/2017	11:32:18	0.003	0.003	0.003	0.003	0.003
220	05/08/2017	11:33:18	0.003	0.003	0.003	0.003	0.003
221	05/08/2017	11:34:18	0.002	0.003	0.003	0.003	0.003
222	05/08/2017	11:35:18	0.003	0.003	0.003	0.003	0.003
223	05/08/2017	11:36:18	0.002	0.003	0.003	0.003	0.003
224	05/08/2017	11:37:18	0.003	0.003	0.003	0.003	0.003
225	05/08/2017	11:38:18	0.003	0.003	0.003	0.004	0.004
226	05/08/2017	11:39:18	0.003	0.003	0.003	0.003	0.003
227	05/08/2017	11:40:18	0.003	0.003	0.003	0.003	0.003
228	05/08/2017	11:41:18	0.002	0.003	0.003	0.003	0.003
229	05/08/2017	11:42:18	0.002	0.003	0.003	0.003	0.003
230	05/08/2017	11:43:18	0.002	0.003	0.003	0.003	0.003
231	05/08/2017	11:44:18	0.003	0.003	0.003	0.003	0.003
232	05/08/2017	11:45:18	0.002	0.003	0.003	0.003	0.003
233	05/08/2017	11:46:18	0.003	0.003	0.003	0.003	0.003
234	05/08/2017	11:47:18	0.002	0.003	0.003	0.003	0.003
235	05/08/2017	11:48:18	0.002	0.002	0.002	0.003	0.003
236	05/08/2017	11:49:18	0.002	0.002	0.002	0.002	0.002
237	05/08/2017	11:50:18	0.002	0.003	0.003	0.003	0.003
238	05/08/2017	11:51:18	0.002	0.002	0.003	0.003	0.003
239	05/08/2017	11:52:18	0.002	0.002	0.003	0.003	0.003
240	05/08/2017	11:53:18	0.003	0.003	0.003	0.003	0.003
241	05/08/2017	11:54:18	0.003	0.003	0.003	0.003	0.003
242	05/08/2017	11:55:18	0.003	0.003	0.003	0.003	0.003
243	05/08/2017	11:56:18	0.003	0.003	0.003	0.003	0.003
244	05/08/2017	11:57:18	0.003	0.003	0.003	0.003	0.003
245	05/08/2017	11:58:18	0.003	0.003	0.003	0.003	0.003
246	05/08/2017	11:59:18	0.003	0.003	0.003	0.003	0.003
247	05/08/2017	12:00:18	0.003	0.003	0.003	0.003	0.003
248	05/08/2017	12:01:18	0.003	0.003	0.003	0.003	0.003
249	05/08/2017	12:02:18	0.003	0.003	0.003	0.003	0.003

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
250	05/08/2017	12:03:18	0.002	0.003	0.003	0.003	0.003
251	05/08/2017	12:04:18	0.002	0.003	0.003	0.003	0.003
252	05/08/2017	12:05:18	0.003	0.003	0.003	0.003	0.003
253	05/08/2017	12:06:18	0.003	0.003	0.003	0.003	0.003
254	05/08/2017	12:07:18	0.003	0.003	0.003	0.003	0.003
255	05/08/2017	12:08:18	0.003	0.003	0.003	0.003	0.003
256	05/08/2017	12:09:18	0.003	0.003	0.003	0.003	0.003
257	05/08/2017	12:10:18	0.003	0.003	0.003	0.003	0.003
258	05/08/2017	12:11:18	0.003	0.003	0.003	0.003	0.003
259	05/08/2017	12:12:18	0.003	0.003	0.003	0.003	0.003
260	05/08/2017	12:13:18	0.003	0.003	0.003	0.003	0.003
261	05/08/2017	12:14:18	0.003	0.003	0.003	0.003	0.004
262	05/08/2017	12:15:18	0.003	0.003	0.003	0.003	0.003
263	05/08/2017	12:16:18	0.003	0.003	0.003	0.003	0.003
264	05/08/2017	12:17:18	0.003	0.003	0.003	0.003	0.003
265	05/08/2017	12:18:18	0.003	0.003	0.003	0.003	0.003
266	05/08/2017	12:19:18	0.003	0.003	0.003	0.003	0.003
267	05/08/2017	12:20:18	0.003	0.003	0.003	0.003	0.003
268	05/08/2017	12:21:18	0.003	0.003	0.003	0.003	0.003
269	05/08/2017	12:22:18	0.003	0.003	0.003	0.003	0.003
270	05/08/2017	12:23:18	0.003	0.003	0.003	0.003	0.003
271	05/08/2017	12:24:18	0.003	0.003	0.003	0.003	0.003
272	05/08/2017	12:25:18	0.003	0.003	0.003	0.003	0.003
273	05/08/2017	12:26:18	0.003	0.003	0.003	0.004	0.004
274	05/08/2017	12:27:18	0.003	0.003	0.003	0.003	0.003
275	05/08/2017	12:28:18	0.003	0.003	0.003	0.003	0.003
276	05/08/2017	12:29:18	0.003	0.003	0.003	0.003	0.003
277	05/08/2017	12:30:18	0.003	0.003	0.003	0.003	0.003
278	05/08/2017	12:31:18	0.003	0.003	0.003	0.004	0.004
279	05/08/2017	12:32:18	0.003	0.003	0.003	0.004	0.005
280	05/08/2017	12:33:18	0.003	0.003	0.003	0.004	0.004
281	05/08/2017	12:34:18	0.003	0.003	0.003	0.003	0.003
282	05/08/2017	12:35:18	0.003	0.003	0.003	0.003	0.003
283	05/08/2017	12:36:18	0.003	0.003	0.003	0.004	0.004
284	05/08/2017	12:37:18	0.003	0.003	0.003	0.004	0.005
285	05/08/2017	12:38:18	0.003	0.003	0.003	0.003	0.003
286	05/08/2017	12:39:18	0.003	0.003	0.003	0.003	0.003
287	05/08/2017	12:40:18	0.003	0.003	0.003	0.003	0.003
288	05/08/2017	12:41:18	0.003	0.003	0.003	0.003	0.004
289	05/08/2017	12:42:18	0.003	0.003	0.003	0.003	0.003
290	05/08/2017	12:43:18	0.003	0.003	0.003	0.003	0.003
291	05/08/2017	12:44:18	0.003	0.003	0.003	0.003	0.003
292	05/08/2017	12:45:18	0.003	0.003	0.003	0.003	0.003
293	05/08/2017	12:46:18	0.003	0.003	0.003	0.003	0.003
294	05/08/2017	12:47:18	0.003	0.003	0.003	0.003	0.003
295	05/08/2017	12:48:18	0.003	0.003	0.003	0.003	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
296	05/08/2017	12:49:18	0.003	0.003	0.003	0.003	0.003
297	05/08/2017	12:50:18	0.003	0.003	0.003	0.003	0.003
298	05/08/2017	12:51:18	0.003	0.003	0.003	0.003	0.003
299	05/08/2017	12:52:18	0.003	0.003	0.003	0.003	0.003
300	05/08/2017	12:53:18	0.003	0.003	0.003	0.003	0.003
301	05/08/2017	12:54:18	0.003	0.003	0.003	0.004	0.004
302	05/08/2017	12:55:18	0.003	0.003	0.003	0.003	0.003
303	05/08/2017	12:56:18	0.003	0.003	0.003	0.003	0.004
304	05/08/2017	12:57:18	0.003	0.003	0.003	0.003	0.004
305	05/08/2017	12:58:18	0.003	0.003	0.003	0.003	0.003
306	05/08/2017	12:59:18	0.003	0.003	0.003	0.003	0.003
307	05/08/2017	13:00:18	0.003	0.003	0.003	0.003	0.003
308	05/08/2017	13:01:18	0.003	0.003	0.003	0.003	0.003
309	05/08/2017	13:02:18	0.003	0.003	0.003	0.003	0.003
310	05/08/2017	13:03:18	0.003	0.003	0.003	0.004	0.004
311	05/08/2017	13:04:18	0.003	0.003	0.003	0.003	0.003
312	05/08/2017	13:05:18	0.003	0.003	0.003	0.003	0.004
313	05/08/2017	13:06:18	0.003	0.003	0.003	0.003	0.004
314	05/08/2017	13:07:18	0.003	0.003	0.003	0.003	0.003
315	05/08/2017	13:08:18	0.003	0.003	0.003	0.003	0.003
316	05/08/2017	13:09:18	0.003	0.003	0.003	0.004	0.004
317	05/08/2017	13:10:18	0.003	0.003	0.003	0.003	0.004
318	05/08/2017	13:11:18	0.003	0.003	0.003	0.003	0.003
319	05/08/2017	13:12:18	0.003	0.003	0.003	0.004	0.004
320	05/08/2017	13:13:18	0.003	0.003	0.003	0.004	0.004
321	05/08/2017	13:14:18	0.003	0.003	0.003	0.003	0.003
322	05/08/2017	13:15:18	0.003	0.003	0.003	0.004	0.004
323	05/08/2017	13:16:18	0.003	0.003	0.003	0.004	0.004
324	05/08/2017	13:17:18	0.003	0.003	0.003	0.003	0.003
325	05/08/2017	13:18:18	0.003	0.003	0.003	0.003	0.004
326	05/08/2017	13:19:18	0.003	0.003	0.003	0.004	0.004
327	05/08/2017	13:20:18	0.003	0.003	0.003	0.004	0.004
328	05/08/2017	13:21:18	0.003	0.003	0.003	0.004	0.004
329	05/08/2017	13:22:18	0.003	0.003	0.003	0.004	0.004
330	05/08/2017	13:23:18	0.003	0.003	0.003	0.003	0.003
331	05/08/2017	13:24:18	0.003	0.003	0.003	0.003	0.003
332	05/08/2017	13:25:18	0.003	0.003	0.003	0.004	0.004
333	05/08/2017	13:26:18	0.003	0.003	0.003	0.004	0.004
334	05/08/2017	13:27:18	0.003	0.003	0.003	0.003	0.003
335	05/08/2017	13:28:18	0.003	0.003	0.003	0.003	0.003
336	05/08/2017	13:29:18	0.003	0.003	0.003	0.004	0.004
337	05/08/2017	13:30:18	0.003	0.003	0.003	0.003	0.004
338	05/08/2017	13:31:18	0.003	0.003	0.003	0.003	0.004
339	05/08/2017	13:32:18	0.003	0.003	0.003	0.004	0.004
340	05/08/2017	13:33:18	0.003	0.003	0.003	0.004	0.005
341	05/08/2017	13:34:18	0.003	0.003	0.003	0.003	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
342	05/08/2017	13:35:18	0.004	0.004	0.004	0.004	0.005
343	05/08/2017	13:36:18	0.003	0.004	0.004	0.004	0.005
344	05/08/2017	13:37:18	0.003	0.003	0.003	0.003	0.003
345	05/08/2017	13:38:18	0.003	0.003	0.003	0.004	0.004
346	05/08/2017	13:39:18	0.003	0.003	0.003	0.004	0.004
347	05/08/2017	13:40:18	0.003	0.003	0.003	0.004	0.004
348	05/08/2017	13:41:18	0.003	0.003	0.003	0.003	0.003
349	05/08/2017	13:42:18	0.003	0.003	0.003	0.003	0.004
350	05/08/2017	13:43:18	0.003	0.003	0.003	0.003	0.003
351	05/08/2017	13:44:18	0.003	0.003	0.003	0.004	0.004
352	05/08/2017	13:45:18	0.003	0.003	0.003	0.003	0.003
353	05/08/2017	13:46:18	0.003	0.003	0.003	0.004	0.004
354	05/08/2017	13:47:18	0.003	0.003	0.003	0.003	0.003
355	05/08/2017	13:48:18	0.003	0.003	0.003	0.003	0.003
356	05/08/2017	13:49:18	0.003	0.003	0.003	0.004	0.004
357	05/08/2017	13:50:18	0.003	0.003	0.003	0.004	0.004
358	05/08/2017	13:51:18	0.003	0.003	0.003	0.003	0.003
359	05/08/2017	13:52:18	0.003	0.003	0.003	0.004	0.004
360	05/08/2017	13:53:18	0.003	0.003	0.003	0.004	0.004
361	05/08/2017	13:54:18	0.003	0.003	0.003	0.003	0.003
362	05/08/2017	13:55:18	0.003	0.003	0.003	0.004	0.004
363	05/08/2017	13:56:18	0.003	0.003	0.003	0.004	0.004
364	05/08/2017	13:57:18	0.003	0.003	0.003	0.004	0.004
365	05/08/2017	13:58:18	0.003	0.003	0.003	0.004	0.004
366	05/08/2017	13:59:18	0.003	0.003	0.003	0.003	0.003
367	05/08/2017	14:00:18	0.003	0.003	0.003	0.003	0.003
368	05/08/2017	14:01:18	0.003	0.003	0.003	0.003	0.003
369	05/08/2017	14:02:18	0.003	0.003	0.003	0.003	0.004
370	05/08/2017	14:03:18	0.003	0.003	0.003	0.004	0.004
371	05/08/2017	14:04:18	0.003	0.004	0.004	0.004	0.004
372	05/08/2017	14:05:18	0.003	0.003	0.003	0.003	0.003
373	05/08/2017	14:06:18	0.003	0.003	0.003	0.003	0.003
374	05/08/2017	14:07:18	0.004	0.004	0.004	0.005	0.005
375	05/08/2017	14:08:18	0.003	0.003	0.003	0.004	0.004
376	05/08/2017	14:09:18	0.003	0.003	0.003	0.004	0.004
377	05/08/2017	14:10:18	0.003	0.003	0.003	0.004	0.004
378	05/08/2017	14:11:18	0.003	0.003	0.003	0.004	0.004
379	05/08/2017	14:12:18	0.003	0.003	0.003	0.003	0.003
380	05/08/2017	14:13:18	0.005	0.006	0.006	0.010	0.012
381	05/08/2017	14:14:18	0.003	0.003	0.003	0.003	0.003
382	05/08/2017	14:15:18	0.003	0.003	0.003	0.003	0.003
383	05/08/2017	14:16:18	0.003	0.003	0.003	0.003	0.003
384	05/08/2017	14:17:18	0.003	0.003	0.004	0.004	0.004
385	05/08/2017	14:18:18	0.003	0.003	0.003	0.004	0.004
386	05/08/2017	14:19:18	0.003	0.003	0.003	0.004	0.004
387	05/08/2017	14:20:18	0.003	0.003	0.003	0.004	0.004



Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
388	05/08/2017	14:21:18	0.003	0.003	0.003	0.004	0.004
389	05/08/2017	14:22:18	0.003	0.003	0.003	0.003	0.003
390	05/08/2017	14:23:18	0.003	0.003	0.003	0.004	0.004
391	05/08/2017	14:24:18	0.003	0.003	0.003	0.004	0.004
392	05/08/2017	14:25:18	0.003	0.003	0.003	0.004	0.004
393	05/08/2017	14:26:18	0.003	0.003	0.003	0.004	0.004
394	05/08/2017	14:27:18	0.003	0.003	0.003	0.003	0.004
395	05/08/2017	14:28:18	0.003	0.003	0.003	0.003	0.004
396	05/08/2017	14:29:18	0.003	0.003	0.003	0.004	0.005
397	05/08/2017	14:30:18	0.003	0.004	0.004	0.005	0.005
398	05/08/2017	14:31:18	0.003	0.003	0.003	0.004	0.004
399	05/08/2017	14:32:18	0.003	0.003	0.003	0.003	0.003
400	05/08/2017	14:33:18	0.003	0.003	0.003	0.003	0.003
401	05/08/2017	14:34:18	0.003	0.003	0.003	0.003	0.003
402	05/08/2017	14:35:18	0.003	0.003	0.003	0.003	0.003
403	05/08/2017	14:36:18	0.003	0.003	0.003	0.003	0.003
404	05/08/2017	14:37:18	0.003	0.003	0.003	0.003	0.003
405	05/08/2017	14:38:18	0.003	0.003	0.003	0.004	0.004
406	05/08/2017	14:39:18	0.003	0.003	0.003	0.004	0.004
407	05/08/2017	14:40:18	0.003	0.003	0.003	0.003	0.004
408	05/08/2017	14:41:18	0.003	0.003	0.003	0.004	0.004
409	05/08/2017	14:42:18	0.003	0.003	0.003	0.004	0.004
410	05/08/2017	14:43:18	0.003	0.003	0.004	0.004	0.004
411	05/08/2017	14:44:18	0.003	0.003	0.003	0.004	0.004
412	05/08/2017	14:45:18	0.003	0.003	0.003	0.004	0.004
413	05/08/2017	14:46:18	0.003	0.003	0.003	0.004	0.004
414	05/08/2017	14:47:18	0.003	0.003	0.003	0.003	0.004
415	05/08/2017	14:48:18	0.003	0.003	0.004	0.004	0.004
416	05/08/2017	14:49:18	0.003	0.003	0.003	0.004	0.004
417	05/08/2017	14:50:18	0.004	0.004	0.004	0.004	0.004
418	05/08/2017	14:51:18	0.003	0.004	0.004	0.004	0.004
419	05/08/2017	14:52:18	0.003	0.004	0.004	0.004	0.005
420	05/08/2017	14:53:18	0.003	0.003	0.004	0.004	0.004
421	05/08/2017	14:54:18	0.003	0.003	0.003	0.004	0.004
422	05/08/2017	14:55:18	0.003	0.003	0.003	0.004	0.004
423	05/08/2017	14:56:18	0.003	0.003	0.003	0.003	0.004
424	05/08/2017	14:57:18	0.003	0.003	0.003	0.004	0.004
425	05/08/2017	14:58:18	0.003	0.003	0.003	0.004	0.004
426	05/08/2017	14:59:18	0.003	0.003	0.003	0.004	0.004
427	05/08/2017	15:00:18	0.003	0.003	0.004	0.004	0.004
428	05/08/2017	15:01:18	0.003	0.003	0.003	0.003	0.004
429	05/08/2017	15:02:18	0.003	0.003	0.004	0.004	0.004
430	05/08/2017	15:03:18	0.003	0.003	0.003	0.004	0.004
431	05/08/2017	15:04:18	0.003	0.003	0.003	0.004	0.004
432	05/08/2017	15:05:18	0.003	0.003	0.003	0.003	0.003
433	05/08/2017	15:06:18	0.003	0.003	0.003	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
434	05/08/2017	15:07:18	0.003	0.003	0.003	0.003	0.003
435	05/08/2017	15:08:18	0.003	0.003	0.003	0.003	0.003
436	05/08/2017	15:09:18	0.003	0.003	0.004	0.004	0.004
437	05/08/2017	15:10:18	0.003	0.003	0.003	0.003	0.003
438	05/08/2017	15:11:18	0.003	0.003	0.003	0.004	0.004
439	05/08/2017	15:12:18	0.003	0.003	0.003	0.003	0.003
440	05/08/2017	15:13:18	0.003	0.003	0.003	0.003	0.003
441	05/08/2017	15:14:18	0.003	0.003	0.003	0.003	0.003
442	05/08/2017	15:15:18	0.003	0.003	0.003	0.003	0.003
443	05/08/2017	15:16:18	0.003	0.003	0.003	0.004	0.004
444	05/08/2017	15:17:18	0.003	0.003	0.003	0.004	0.004
445	05/08/2017	15:18:18	0.003	0.003	0.003	0.003	0.003
446	05/08/2017	15:19:18	0.003	0.003	0.003	0.004	0.004
447	05/08/2017	15:20:18	0.003	0.003	0.003	0.003	0.003
448	05/08/2017	15:21:18	0.003	0.004	0.004	0.005	0.005
449	05/08/2017	15:22:18	0.003	0.003	0.003	0.003	0.004
450	05/08/2017	15:23:18	0.003	0.003	0.003	0.004	0.004
451	05/08/2017	15:24:18	0.003	0.003	0.003	0.004	0.004
452	05/08/2017	15:25:18	0.003	0.003	0.003	0.003	0.003
453	05/08/2017	15:26:18	0.003	0.003	0.003	0.003	0.003
454	05/08/2017	15:27:18	0.003	0.003	0.003	0.004	0.004
455	05/08/2017	15:28:18	0.003	0.003	0.003	0.003	0.003
456	05/08/2017	15:29:18	0.003	0.003	0.003	0.003	0.003
457	05/08/2017	15:30:18	0.003	0.003	0.003	0.003	0.003
458	05/08/2017	15:31:18	0.003	0.003	0.003	0.003	0.003
459	05/08/2017	15:32:18	0.003	0.003	0.003	0.003	0.003
460	05/08/2017	15:33:18	0.003	0.003	0.003	0.003	0.003
461	05/08/2017	15:34:18	0.003	0.003	0.003	0.003	0.003
462	05/08/2017	15:35:18	0.003	0.003	0.003	0.003	0.003
463	05/08/2017	15:36:18	0.003	0.003	0.003	0.003	0.003
464	05/08/2017	15:37:18	0.003	0.003	0.003	0.003	0.003
465	05/08/2017	15:38:18	0.003	0.003	0.003	0.003	0.004
466	05/08/2017	15:39:18	0.003	0.003	0.003	0.003	0.003
467	05/08/2017	15:40:18	0.003	0.003	0.003	0.003	0.003
468	05/08/2017	15:41:18	0.003	0.003	0.003	0.003	0.003
469	05/08/2017	15:42:18	0.003	0.003	0.004	0.004	0.004
470	05/08/2017	15:43:18	0.003	0.003	0.003	0.004	0.004
471	05/08/2017	15:44:18	0.003	0.003	0.003	0.003	0.003
472	05/08/2017	15:45:18	0.003	0.003	0.003	0.003	0.003
473	05/08/2017	15:46:18	0.003	0.003	0.003	0.004	0.004
474	05/08/2017	15:47:18	0.003	0.004	0.004	0.004	0.004
475	05/08/2017	15:48:18	0.003	0.004	0.004	0.004	0.004
476	05/08/2017	15:49:18	0.004	0.004	0.005	0.006	0.006
477	05/08/2017	15:50:18	0.004	0.004	0.004	0.005	0.006
478	05/08/2017	15:51:18	0.004	0.004	0.004	0.005	0.005
479	05/08/2017	15:52:18	0.004	0.004	0.004	0.004	0.005

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
480	05/08/2017	15:53:18	0.006	0.006	0.006	0.008	0.008

# Test 008

Location CL-3

Site 3 RR

Instrument		Data Properties	
Model	DustTrak DRX	Start Date	05/08/2017
Instrument S/N	8533141003	Start Time	09:00:23
		Stop Date	05/08/2017
		Stop Time	17:00:23
		Total Time	0:08:00:00
		Logging Interval	60 seconds

Statistics					
	PM1	PM2.5	RESP	PM10	TOTAL
Avg	0.004 mg/m <sup>3</sup>	0.004 mg/m <sup>3</sup>	0.004 mg/m <sup>3</sup>	0.004 mg/m <sup>3</sup>	0.004 mg/m <sup>3</sup>
Max	0.009 mg/m <sup>3</sup>	0.009 mg/m <sup>3</sup>	0.011 mg/m <sup>3</sup>	0.019 mg/m <sup>3</sup>	0.036 mg/m <sup>3</sup>
Max Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
Max Time	09:01:23	09:01:23	16:57:23	09:01:23	09:01:23
Min	0.003 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>
Min Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
Min Time	09:54:23	09:54:23	09:58:23	10:22:23	10:22:23
TWA (8 hr)	0.004	0.004	0.004	0.004	0.004
TWA Start Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
TWA Start Time	09:00:23	09:00:23	09:00:23	09:00:23	09:00:23
TWA End Time	17:00:23	17:00:23	17:00:23	17:00:23	17:00:23

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
1	05/08/2017	09:01:23	0.009	0.009	0.010	0.019	0.036
2	05/08/2017	09:02:23	0.006	0.006	0.007	0.010	0.012
3	05/08/2017	09:03:23	0.004	0.004	0.004	0.005	0.005
4	05/08/2017	09:04:23	0.005	0.005	0.005	0.006	0.006
5	05/08/2017	09:05:23	0.004	0.004	0.004	0.005	0.005
6	05/08/2017	09:06:23	0.004	0.004	0.004	0.005	0.005
7	05/08/2017	09:07:23	0.005	0.005	0.006	0.007	0.008
8	05/08/2017	09:08:23	0.004	0.004	0.005	0.005	0.005
9	05/08/2017	09:09:23	0.004	0.004	0.004	0.004	0.005
10	05/08/2017	09:10:23	0.004	0.004	0.004	0.005	0.005
11	05/08/2017	09:11:23	0.004	0.004	0.004	0.004	0.004
12	05/08/2017	09:12:23	0.004	0.004	0.004	0.005	0.005
13	05/08/2017	09:13:23	0.004	0.004	0.004	0.004	0.004
14	05/08/2017	09:14:23	0.004	0.004	0.004	0.004	0.004
15	05/08/2017	09:15:23	0.004	0.004	0.004	0.004	0.004
16	05/08/2017	09:16:23	0.006	0.006	0.006	0.007	0.009
17	05/08/2017	09:17:23	0.004	0.004	0.004	0.004	0.004
18	05/08/2017	09:18:23	0.004	0.004	0.004	0.004	0.004
19	05/08/2017	09:19:23	0.004	0.004	0.004	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
20	05/08/2017	09:20:23	0.004	0.004	0.004	0.004	0.004
21	05/08/2017	09:21:23	0.004	0.004	0.004	0.004	0.005
22	05/08/2017	09:22:23	0.004	0.004	0.004	0.004	0.004
23	05/08/2017	09:23:23	0.004	0.004	0.004	0.004	0.004
24	05/08/2017	09:24:23	0.004	0.004	0.004	0.004	0.005
25	05/08/2017	09:25:23	0.004	0.004	0.004	0.004	0.005
26	05/08/2017	09:26:23	0.004	0.004	0.004	0.004	0.004
27	05/08/2017	09:27:23	0.004	0.004	0.004	0.004	0.004
28	05/08/2017	09:28:23	0.004	0.004	0.004	0.004	0.004
29	05/08/2017	09:29:23	0.005	0.005	0.005	0.006	0.008
30	05/08/2017	09:30:23	0.004	0.004	0.004	0.004	0.004
31	05/08/2017	09:31:23	0.004	0.004	0.004	0.004	0.004
32	05/08/2017	09:32:23	0.004	0.004	0.004	0.004	0.004
33	05/08/2017	09:33:23	0.004	0.004	0.004	0.004	0.004
34	05/08/2017	09:34:23	0.004	0.004	0.004	0.004	0.004
35	05/08/2017	09:35:23	0.004	0.004	0.004	0.004	0.004
36	05/08/2017	09:36:23	0.005	0.005	0.005	0.005	0.006
37	05/08/2017	09:37:23	0.004	0.004	0.004	0.004	0.004
38	05/08/2017	09:38:23	0.004	0.004	0.004	0.004	0.004
39	05/08/2017	09:39:23	0.004	0.004	0.004	0.004	0.004
40	05/08/2017	09:40:23	0.004	0.004	0.004	0.004	0.004
41	05/08/2017	09:41:23	0.004	0.004	0.004	0.004	0.004
42	05/08/2017	09:42:23	0.004	0.004	0.004	0.005	0.006
43	05/08/2017	09:43:23	0.004	0.004	0.004	0.004	0.004
44	05/08/2017	09:44:23	0.004	0.004	0.004	0.004	0.004
45	05/08/2017	09:45:23	0.004	0.004	0.004	0.004	0.004
46	05/08/2017	09:46:23	0.004	0.004	0.004	0.004	0.004
47	05/08/2017	09:47:23	0.004	0.004	0.004	0.004	0.004
48	05/08/2017	09:48:23	0.004	0.004	0.004	0.004	0.004
49	05/08/2017	09:49:23	0.004	0.004	0.004	0.004	0.004
50	05/08/2017	09:50:23	0.004	0.004	0.004	0.005	0.005
51	05/08/2017	09:51:23	0.004	0.004	0.004	0.004	0.004
52	05/08/2017	09:52:23	0.004	0.004	0.004	0.004	0.004
53	05/08/2017	09:53:23	0.004	0.004	0.004	0.004	0.005
54	05/08/2017	09:54:23	0.003	0.003	0.004	0.004	0.004
55	05/08/2017	09:55:23	0.003	0.004	0.004	0.004	0.004
56	05/08/2017	09:56:23	0.004	0.004	0.004	0.005	0.005
57	05/08/2017	09:57:23	0.003	0.003	0.004	0.004	0.004
58	05/08/2017	09:58:23	0.003	0.003	0.003	0.004	0.004
59	05/08/2017	09:59:23	0.004	0.004	0.004	0.004	0.004
60	05/08/2017	10:00:23	0.004	0.004	0.004	0.004	0.004
61	05/08/2017	10:01:23	0.003	0.003	0.004	0.004	0.004
62	05/08/2017	10:02:23	0.004	0.004	0.004	0.004	0.004
63	05/08/2017	10:03:23	0.004	0.004	0.004	0.004	0.004
64	05/08/2017	10:04:23	0.003	0.004	0.004	0.004	0.004
65	05/08/2017	10:05:23	0.004	0.004	0.004	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
66	05/08/2017	10:06:23	0.003	0.004	0.004	0.004	0.004
67	05/08/2017	10:07:23	0.004	0.004	0.004	0.004	0.004
68	05/08/2017	10:08:23	0.004	0.004	0.004	0.004	0.004
69	05/08/2017	10:09:23	0.004	0.004	0.004	0.004	0.004
70	05/08/2017	10:10:23	0.004	0.004	0.004	0.004	0.004
71	05/08/2017	10:11:23	0.004	0.004	0.004	0.004	0.004
72	05/08/2017	10:12:23	0.004	0.004	0.004	0.004	0.004
73	05/08/2017	10:13:23	0.003	0.004	0.004	0.004	0.004
74	05/08/2017	10:14:23	0.004	0.004	0.004	0.004	0.004
75	05/08/2017	10:15:23	0.003	0.003	0.004	0.004	0.004
76	05/08/2017	10:16:23	0.003	0.003	0.004	0.004	0.004
77	05/08/2017	10:17:23	0.003	0.003	0.003	0.004	0.004
78	05/08/2017	10:18:23	0.003	0.003	0.003	0.004	0.004
79	05/08/2017	10:19:23	0.003	0.003	0.004	0.004	0.004
80	05/08/2017	10:20:23	0.003	0.003	0.003	0.004	0.004
81	05/08/2017	10:21:23	0.003	0.003	0.004	0.004	0.004
82	05/08/2017	10:22:23	0.003	0.003	0.003	0.003	0.003
83	05/08/2017	10:23:23	0.003	0.003	0.003	0.003	0.003
84	05/08/2017	10:24:23	0.003	0.003	0.003	0.003	0.003
85	05/08/2017	10:25:23	0.003	0.003	0.003	0.004	0.004
86	05/08/2017	10:26:23	0.003	0.003	0.003	0.004	0.004
87	05/08/2017	10:27:23	0.003	0.003	0.003	0.004	0.004
88	05/08/2017	10:28:23	0.003	0.003	0.003	0.004	0.004
89	05/08/2017	10:29:23	0.003	0.003	0.003	0.004	0.004
90	05/08/2017	10:30:23	0.003	0.003	0.003	0.004	0.004
91	05/08/2017	10:31:23	0.003	0.003	0.003	0.004	0.004
92	05/08/2017	10:32:23	0.003	0.003	0.003	0.004	0.004
93	05/08/2017	10:33:23	0.003	0.003	0.003	0.004	0.004
94	05/08/2017	10:34:23	0.003	0.003	0.003	0.004	0.004
95	05/08/2017	10:35:23	0.003	0.004	0.004	0.004	0.004
96	05/08/2017	10:36:23	0.003	0.003	0.004	0.004	0.004
97	05/08/2017	10:37:23	0.003	0.003	0.003	0.004	0.004
98	05/08/2017	10:38:23	0.003	0.004	0.004	0.004	0.004
99	05/08/2017	10:39:23	0.004	0.004	0.004	0.004	0.004
100	05/08/2017	10:40:23	0.004	0.004	0.004	0.004	0.005
101	05/08/2017	10:41:23	0.003	0.003	0.003	0.004	0.004
102	05/08/2017	10:42:23	0.003	0.003	0.004	0.004	0.004
103	05/08/2017	10:43:23	0.003	0.003	0.004	0.004	0.004
104	05/08/2017	10:44:23	0.003	0.004	0.004	0.004	0.004
105	05/08/2017	10:45:23	0.003	0.003	0.003	0.004	0.004
106	05/08/2017	10:46:23	0.003	0.003	0.004	0.004	0.004
107	05/08/2017	10:47:23	0.003	0.003	0.003	0.004	0.004
108	05/08/2017	10:48:23	0.003	0.003	0.004	0.004	0.004
109	05/08/2017	10:49:23	0.003	0.003	0.004	0.004	0.004
110	05/08/2017	10:50:23	0.003	0.003	0.003	0.003	0.003
111	05/08/2017	10:51:23	0.003	0.003	0.003	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
112	05/08/2017	10:52:23	0.003	0.003	0.003	0.004	0.004
113	05/08/2017	10:53:23	0.003	0.003	0.003	0.003	0.003
114	05/08/2017	10:54:23	0.003	0.003	0.003	0.004	0.004
115	05/08/2017	10:55:23	0.003	0.003	0.003	0.004	0.004
116	05/08/2017	10:56:23	0.003	0.003	0.003	0.004	0.004
117	05/08/2017	10:57:23	0.003	0.003	0.004	0.004	0.004
118	05/08/2017	10:58:23	0.004	0.004	0.004	0.004	0.004
119	05/08/2017	10:59:23	0.003	0.003	0.003	0.003	0.003
120	05/08/2017	11:00:23	0.003	0.003	0.003	0.003	0.003
121	05/08/2017	11:01:23	0.003	0.003	0.003	0.004	0.004
122	05/08/2017	11:02:23	0.003	0.003	0.003	0.004	0.004
123	05/08/2017	11:03:23	0.003	0.003	0.003	0.004	0.004
124	05/08/2017	11:04:23	0.003	0.003	0.003	0.004	0.004
125	05/08/2017	11:05:23	0.003	0.003	0.003	0.003	0.003
126	05/08/2017	11:06:23	0.003	0.003	0.003	0.003	0.003
127	05/08/2017	11:07:23	0.003	0.003	0.003	0.003	0.003
128	05/08/2017	11:08:23	0.003	0.003	0.003	0.004	0.004
129	05/08/2017	11:09:23	0.003	0.003	0.003	0.004	0.005
130	05/08/2017	11:10:23	0.003	0.003	0.003	0.004	0.004
131	05/08/2017	11:11:23	0.003	0.003	0.003	0.003	0.003
132	05/08/2017	11:12:23	0.003	0.003	0.003	0.003	0.003
133	05/08/2017	11:13:23	0.003	0.003	0.003	0.004	0.004
134	05/08/2017	11:14:23	0.003	0.003	0.003	0.004	0.004
135	05/08/2017	11:15:23	0.003	0.003	0.003	0.004	0.004
136	05/08/2017	11:16:23	0.003	0.003	0.003	0.003	0.003
137	05/08/2017	11:17:23	0.003	0.003	0.003	0.003	0.003
138	05/08/2017	11:18:23	0.003	0.003	0.003	0.004	0.004
139	05/08/2017	11:19:23	0.003	0.003	0.003	0.004	0.004
140	05/08/2017	11:20:23	0.003	0.003	0.003	0.004	0.004
141	05/08/2017	11:21:23	0.003	0.003	0.003	0.004	0.004
142	05/08/2017	11:22:23	0.003	0.003	0.003	0.004	0.004
143	05/08/2017	11:23:23	0.003	0.003	0.003	0.004	0.004
144	05/08/2017	11:24:23	0.003	0.003	0.003	0.004	0.004
145	05/08/2017	11:25:23	0.003	0.003	0.003	0.004	0.004
146	05/08/2017	11:26:23	0.003	0.003	0.004	0.004	0.004
147	05/08/2017	11:27:23	0.003	0.003	0.003	0.003	0.004
148	05/08/2017	11:28:23	0.004	0.004	0.004	0.006	0.006
149	05/08/2017	11:29:23	0.004	0.004	0.004	0.005	0.005
150	05/08/2017	11:30:23	0.003	0.003	0.003	0.004	0.004
151	05/08/2017	11:31:23	0.003	0.003	0.003	0.004	0.004
152	05/08/2017	11:32:23	0.003	0.003	0.004	0.004	0.004
153	05/08/2017	11:33:23	0.003	0.003	0.003	0.003	0.003
154	05/08/2017	11:34:23	0.004	0.004	0.005	0.005	0.005
155	05/08/2017	11:35:23	0.004	0.004	0.004	0.004	0.005
156	05/08/2017	11:36:23	0.003	0.003	0.003	0.004	0.004
157	05/08/2017	11:37:23	0.003	0.004	0.004	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
158	05/08/2017	11:38:23	0.003	0.003	0.003	0.004	0.004
159	05/08/2017	11:39:23	0.003	0.003	0.003	0.003	0.003
160	05/08/2017	11:40:23	0.003	0.003	0.003	0.003	0.003
161	05/08/2017	11:41:23	0.003	0.003	0.004	0.004	0.004
162	05/08/2017	11:42:23	0.003	0.003	0.004	0.004	0.004
163	05/08/2017	11:43:23	0.003	0.003	0.003	0.003	0.003
164	05/08/2017	11:44:23	0.003	0.003	0.003	0.004	0.004
165	05/08/2017	11:45:23	0.003	0.003	0.004	0.004	0.004
166	05/08/2017	11:46:23	0.003	0.003	0.003	0.004	0.004
167	05/08/2017	11:47:23	0.003	0.003	0.004	0.004	0.004
168	05/08/2017	11:48:23	0.003	0.003	0.003	0.004	0.004
169	05/08/2017	11:49:23	0.003	0.003	0.003	0.004	0.004
170	05/08/2017	11:50:23	0.003	0.003	0.004	0.004	0.004
171	05/08/2017	11:51:23	0.003	0.003	0.004	0.004	0.004
172	05/08/2017	11:52:23	0.003	0.003	0.003	0.004	0.004
173	05/08/2017	11:53:23	0.003	0.003	0.003	0.003	0.004
174	05/08/2017	11:54:23	0.003	0.003	0.003	0.003	0.003
175	05/08/2017	11:55:23	0.003	0.003	0.003	0.004	0.004
176	05/08/2017	11:56:23	0.003	0.003	0.003	0.004	0.004
177	05/08/2017	11:57:23	0.003	0.003	0.003	0.004	0.004
178	05/08/2017	11:58:23	0.003	0.004	0.004	0.004	0.004
179	05/08/2017	11:59:23	0.003	0.003	0.003	0.003	0.003
180	05/08/2017	12:00:23	0.003	0.003	0.003	0.004	0.004
181	05/08/2017	12:01:23	0.003	0.003	0.003	0.004	0.004
182	05/08/2017	12:02:23	0.003	0.003	0.003	0.003	0.004
183	05/08/2017	12:03:23	0.003	0.003	0.003	0.003	0.003
184	05/08/2017	12:04:23	0.003	0.003	0.003	0.004	0.004
185	05/08/2017	12:05:23	0.003	0.003	0.004	0.004	0.004
186	05/08/2017	12:06:23	0.003	0.003	0.004	0.004	0.004
187	05/08/2017	12:07:23	0.003	0.003	0.004	0.004	0.004
188	05/08/2017	12:08:23	0.003	0.003	0.004	0.004	0.004
189	05/08/2017	12:09:23	0.003	0.003	0.003	0.004	0.004
190	05/08/2017	12:10:23	0.003	0.003	0.003	0.003	0.003
191	05/08/2017	12:11:23	0.003	0.003	0.003	0.004	0.004
192	05/08/2017	12:12:23	0.004	0.004	0.004	0.004	0.004
193	05/08/2017	12:13:23	0.003	0.003	0.004	0.004	0.004
194	05/08/2017	12:14:23	0.003	0.003	0.003	0.003	0.003
195	05/08/2017	12:15:23	0.003	0.003	0.003	0.003	0.003
196	05/08/2017	12:16:23	0.003	0.003	0.003	0.004	0.004
197	05/08/2017	12:17:23	0.004	0.004	0.004	0.004	0.004
198	05/08/2017	12:18:23	0.003	0.003	0.003	0.004	0.004
199	05/08/2017	12:19:23	0.003	0.003	0.004	0.004	0.004
200	05/08/2017	12:20:23	0.004	0.004	0.004	0.004	0.004
201	05/08/2017	12:21:23	0.003	0.003	0.003	0.003	0.003
202	05/08/2017	12:22:23	0.003	0.003	0.003	0.004	0.004
203	05/08/2017	12:23:23	0.003	0.003	0.003	0.004	0.004



Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
204	05/08/2017	12:24:23	0.003	0.003	0.003	0.004	0.004
205	05/08/2017	12:25:23	0.004	0.004	0.004	0.004	0.004
206	05/08/2017	12:26:23	0.003	0.003	0.003	0.004	0.004
207	05/08/2017	12:27:23	0.004	0.004	0.004	0.004	0.004
208	05/08/2017	12:28:23	0.003	0.003	0.003	0.003	0.003
209	05/08/2017	12:29:23	0.003	0.003	0.003	0.003	0.004
210	05/08/2017	12:30:23	0.003	0.003	0.003	0.003	0.003
211	05/08/2017	12:31:23	0.003	0.003	0.003	0.003	0.003
212	05/08/2017	12:32:23	0.003	0.003	0.003	0.003	0.004
213	05/08/2017	12:33:23	0.003	0.003	0.003	0.004	0.004
214	05/08/2017	12:34:23	0.003	0.003	0.003	0.004	0.004
215	05/08/2017	12:35:23	0.003	0.003	0.003	0.003	0.003
216	05/08/2017	12:36:23	0.003	0.003	0.003	0.003	0.003
217	05/08/2017	12:37:23	0.003	0.003	0.003	0.003	0.003
218	05/08/2017	12:38:23	0.003	0.003	0.003	0.003	0.003
219	05/08/2017	12:39:23	0.003	0.003	0.003	0.003	0.003
220	05/08/2017	12:40:23	0.003	0.003	0.003	0.003	0.003
221	05/08/2017	12:41:23	0.003	0.003	0.003	0.003	0.003
222	05/08/2017	12:42:23	0.003	0.003	0.003	0.003	0.003
223	05/08/2017	12:43:23	0.003	0.004	0.004	0.005	0.005
224	05/08/2017	12:44:23	0.003	0.003	0.004	0.004	0.004
225	05/08/2017	12:45:23	0.003	0.003	0.004	0.004	0.004
226	05/08/2017	12:46:23	0.003	0.003	0.003	0.003	0.003
227	05/08/2017	12:47:23	0.003	0.003	0.003	0.003	0.003
228	05/08/2017	12:48:23	0.004	0.004	0.004	0.005	0.005
229	05/08/2017	12:49:23	0.003	0.003	0.003	0.003	0.003
230	05/08/2017	12:50:23	0.003	0.003	0.003	0.003	0.004
231	05/08/2017	12:51:23	0.004	0.004	0.004	0.005	0.006
232	05/08/2017	12:52:23	0.003	0.003	0.003	0.003	0.004
233	05/08/2017	12:53:23	0.003	0.003	0.003	0.003	0.003
234	05/08/2017	12:54:23	0.003	0.003	0.003	0.003	0.004
235	05/08/2017	12:55:23	0.003	0.003	0.003	0.003	0.003
236	05/08/2017	12:56:23	0.003	0.003	0.003	0.003	0.004
237	05/08/2017	12:57:23	0.003	0.003	0.003	0.003	0.003
238	05/08/2017	12:58:23	0.003	0.003	0.003	0.004	0.004
239	05/08/2017	12:59:23	0.003	0.003	0.003	0.003	0.003
240	05/08/2017	13:00:23	0.003	0.003	0.003	0.003	0.003
241	05/08/2017	13:01:23	0.003	0.003	0.003	0.003	0.003
242	05/08/2017	13:02:23	0.003	0.003	0.003	0.003	0.003
243	05/08/2017	13:03:23	0.003	0.003	0.003	0.003	0.003
244	05/08/2017	13:04:23	0.003	0.003	0.003	0.003	0.003
245	05/08/2017	13:05:23	0.003	0.003	0.003	0.003	0.003
246	05/08/2017	13:06:23	0.003	0.003	0.003	0.004	0.004
247	05/08/2017	13:07:23	0.003	0.003	0.003	0.003	0.003
248	05/08/2017	13:08:23	0.003	0.003	0.003	0.003	0.003
249	05/08/2017	13:09:23	0.003	0.003	0.003	0.003	0.003

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
250	05/08/2017	13:10:23	0.003	0.003	0.003	0.003	0.003
251	05/08/2017	13:11:23	0.003	0.003	0.003	0.003	0.003
252	05/08/2017	13:12:23	0.003	0.003	0.003	0.003	0.003
253	05/08/2017	13:13:23	0.003	0.003	0.003	0.003	0.003
254	05/08/2017	13:14:23	0.003	0.003	0.003	0.004	0.004
255	05/08/2017	13:15:23	0.003	0.003	0.003	0.004	0.004
256	05/08/2017	13:16:23	0.003	0.003	0.004	0.004	0.004
257	05/08/2017	13:17:23	0.003	0.003	0.003	0.003	0.003
258	05/08/2017	13:18:23	0.003	0.003	0.003	0.003	0.004
259	05/08/2017	13:19:23	0.003	0.003	0.003	0.004	0.004
260	05/08/2017	13:20:23	0.003	0.003	0.003	0.003	0.003
261	05/08/2017	13:21:23	0.003	0.003	0.003	0.003	0.003
262	05/08/2017	13:22:23	0.003	0.003	0.003	0.003	0.004
263	05/08/2017	13:23:23	0.003	0.003	0.003	0.004	0.004
264	05/08/2017	13:24:23	0.003	0.003	0.003	0.003	0.003
265	05/08/2017	13:25:23	0.003	0.003	0.003	0.003	0.003
266	05/08/2017	13:26:23	0.003	0.003	0.003	0.004	0.004
267	05/08/2017	13:27:23	0.003	0.003	0.003	0.004	0.004
268	05/08/2017	13:28:23	0.003	0.003	0.004	0.004	0.004
269	05/08/2017	13:29:23	0.003	0.004	0.004	0.004	0.004
270	05/08/2017	13:30:23	0.004	0.004	0.004	0.005	0.005
271	05/08/2017	13:31:23	0.003	0.003	0.004	0.004	0.004
272	05/08/2017	13:32:23	0.004	0.004	0.004	0.004	0.004
273	05/08/2017	13:33:23	0.003	0.003	0.003	0.004	0.004
274	05/08/2017	13:34:23	0.003	0.003	0.003	0.004	0.004
275	05/08/2017	13:35:23	0.003	0.003	0.004	0.004	0.004
276	05/08/2017	13:36:23	0.004	0.004	0.004	0.004	0.005
277	05/08/2017	13:37:23	0.003	0.003	0.003	0.004	0.004
278	05/08/2017	13:38:23	0.003	0.003	0.004	0.004	0.004
279	05/08/2017	13:39:23	0.003	0.003	0.003	0.004	0.004
280	05/08/2017	13:40:23	0.003	0.004	0.004	0.005	0.005
281	05/08/2017	13:41:23	0.004	0.004	0.004	0.004	0.004
282	05/08/2017	13:42:23	0.003	0.003	0.004	0.004	0.004
283	05/08/2017	13:43:23	0.003	0.003	0.004	0.004	0.004
284	05/08/2017	13:44:23	0.003	0.003	0.004	0.004	0.004
285	05/08/2017	13:45:23	0.003	0.003	0.003	0.004	0.004
286	05/08/2017	13:46:23	0.004	0.004	0.004	0.004	0.005
287	05/08/2017	13:47:23	0.004	0.004	0.004	0.004	0.004
288	05/08/2017	13:48:23	0.004	0.004	0.004	0.004	0.004
289	05/08/2017	13:49:23	0.004	0.004	0.004	0.004	0.004
290	05/08/2017	13:50:23	0.004	0.004	0.004	0.004	0.005
291	05/08/2017	13:51:23	0.004	0.004	0.004	0.004	0.005
292	05/08/2017	13:52:23	0.004	0.004	0.004	0.004	0.004
293	05/08/2017	13:53:23	0.004	0.004	0.004	0.004	0.004
294	05/08/2017	13:54:23	0.004	0.004	0.004	0.004	0.004
295	05/08/2017	13:55:23	0.004	0.004	0.004	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
296	05/08/2017	13:56:23	0.004	0.004	0.004	0.004	0.004
297	05/08/2017	13:57:23	0.004	0.004	0.004	0.004	0.004
298	05/08/2017	13:58:23	0.004	0.004	0.004	0.004	0.005
299	05/08/2017	13:59:23	0.004	0.004	0.004	0.004	0.004
300	05/08/2017	14:00:23	0.004	0.004	0.004	0.004	0.004
301	05/08/2017	14:01:23	0.004	0.004	0.004	0.004	0.004
302	05/08/2017	14:02:23	0.004	0.004	0.004	0.004	0.005
303	05/08/2017	14:03:23	0.003	0.003	0.003	0.004	0.004
304	05/08/2017	14:04:23	0.003	0.003	0.004	0.004	0.004
305	05/08/2017	14:05:23	0.004	0.004	0.004	0.005	0.005
306	05/08/2017	14:06:23	0.004	0.004	0.004	0.004	0.005
307	05/08/2017	14:07:23	0.004	0.004	0.004	0.004	0.004
308	05/08/2017	14:08:23	0.004	0.004	0.004	0.004	0.004
309	05/08/2017	14:09:23	0.004	0.004	0.004	0.004	0.004
310	05/08/2017	14:10:23	0.004	0.004	0.004	0.004	0.004
311	05/08/2017	14:11:23	0.004	0.004	0.004	0.004	0.004
312	05/08/2017	14:12:23	0.003	0.003	0.004	0.004	0.004
313	05/08/2017	14:13:23	0.006	0.006	0.007	0.009	0.009
314	05/08/2017	14:14:23	0.005	0.005	0.005	0.007	0.007
315	05/08/2017	14:15:23	0.004	0.004	0.004	0.005	0.005
316	05/08/2017	14:16:23	0.004	0.004	0.004	0.004	0.004
317	05/08/2017	14:17:23	0.003	0.003	0.004	0.004	0.004
318	05/08/2017	14:18:23	0.004	0.004	0.004	0.004	0.004
319	05/08/2017	14:19:23	0.003	0.003	0.004	0.004	0.004
320	05/08/2017	14:20:23	0.004	0.004	0.004	0.004	0.005
321	05/08/2017	14:21:23	0.004	0.004	0.004	0.004	0.004
322	05/08/2017	14:22:23	0.003	0.003	0.004	0.004	0.004
323	05/08/2017	14:23:23	0.004	0.004	0.004	0.004	0.004
324	05/08/2017	14:24:23	0.004	0.004	0.004	0.004	0.004
325	05/08/2017	14:25:23	0.003	0.003	0.004	0.004	0.004
326	05/08/2017	14:26:23	0.003	0.003	0.003	0.004	0.004
327	05/08/2017	14:27:23	0.004	0.004	0.004	0.004	0.004
328	05/08/2017	14:28:23	0.004	0.004	0.004	0.004	0.004
329	05/08/2017	14:29:23	0.004	0.004	0.004	0.004	0.004
330	05/08/2017	14:30:23	0.004	0.004	0.004	0.004	0.004
331	05/08/2017	14:31:23	0.003	0.003	0.003	0.003	0.003
332	05/08/2017	14:32:23	0.003	0.003	0.004	0.004	0.004
333	05/08/2017	14:33:23	0.003	0.003	0.004	0.004	0.004
334	05/08/2017	14:34:23	0.004	0.004	0.004	0.004	0.004
335	05/08/2017	14:35:23	0.004	0.004	0.004	0.004	0.004
336	05/08/2017	14:36:23	0.004	0.004	0.004	0.004	0.004
337	05/08/2017	14:37:23	0.004	0.004	0.004	0.004	0.004
338	05/08/2017	14:38:23	0.004	0.004	0.004	0.004	0.004
339	05/08/2017	14:39:23	0.004	0.004	0.004	0.005	0.005
340	05/08/2017	14:40:23	0.004	0.004	0.004	0.004	0.004
341	05/08/2017	14:41:23	0.004	0.004	0.004	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
342	05/08/2017	14:42:23	0.004	0.004	0.004	0.004	0.005
343	05/08/2017	14:43:23	0.004	0.004	0.004	0.004	0.004
344	05/08/2017	14:44:23	0.004	0.004	0.004	0.004	0.004
345	05/08/2017	14:45:23	0.004	0.004	0.004	0.004	0.004
346	05/08/2017	14:46:23	0.004	0.004	0.004	0.005	0.005
347	05/08/2017	14:47:23	0.004	0.004	0.004	0.005	0.005
348	05/08/2017	14:48:23	0.004	0.004	0.004	0.004	0.005
349	05/08/2017	14:49:23	0.004	0.004	0.004	0.004	0.005
350	05/08/2017	14:50:23	0.004	0.004	0.004	0.004	0.004
351	05/08/2017	14:51:23	0.004	0.004	0.004	0.004	0.004
352	05/08/2017	14:52:23	0.004	0.004	0.004	0.004	0.004
353	05/08/2017	14:53:23	0.004	0.004	0.004	0.004	0.004
354	05/08/2017	14:54:23	0.003	0.004	0.004	0.004	0.004
355	05/08/2017	14:55:23	0.004	0.004	0.004	0.004	0.004
356	05/08/2017	14:56:23	0.004	0.004	0.004	0.004	0.004
357	05/08/2017	14:57:23	0.004	0.004	0.004	0.005	0.005
358	05/08/2017	14:58:23	0.004	0.004	0.004	0.004	0.004
359	05/08/2017	14:59:23	0.004	0.004	0.004	0.005	0.006
360	05/08/2017	15:00:23	0.004	0.004	0.004	0.004	0.004
361	05/08/2017	15:01:23	0.004	0.004	0.004	0.004	0.004
362	05/08/2017	15:02:23	0.004	0.004	0.004	0.004	0.004
363	05/08/2017	15:03:23	0.004	0.004	0.004	0.004	0.004
364	05/08/2017	15:04:23	0.004	0.004	0.004	0.004	0.004
365	05/08/2017	15:05:23	0.004	0.004	0.004	0.004	0.004
366	05/08/2017	15:06:23	0.004	0.004	0.004	0.004	0.004
367	05/08/2017	15:07:23	0.004	0.004	0.004	0.004	0.004
368	05/08/2017	15:08:23	0.004	0.004	0.004	0.004	0.004
369	05/08/2017	15:09:23	0.004	0.004	0.004	0.004	0.004
370	05/08/2017	15:10:23	0.004	0.004	0.004	0.004	0.004
371	05/08/2017	15:11:23	0.004	0.004	0.004	0.004	0.004
372	05/08/2017	15:12:23	0.004	0.004	0.004	0.004	0.004
373	05/08/2017	15:13:23	0.004	0.004	0.004	0.004	0.004
374	05/08/2017	15:14:23	0.004	0.004	0.004	0.004	0.004
375	05/08/2017	15:15:23	0.004	0.004	0.004	0.004	0.004
376	05/08/2017	15:16:23	0.003	0.003	0.004	0.004	0.004
377	05/08/2017	15:17:23	0.004	0.004	0.004	0.004	0.004
378	05/08/2017	15:18:23	0.003	0.004	0.004	0.004	0.004
379	05/08/2017	15:19:23	0.004	0.004	0.004	0.005	0.005
380	05/08/2017	15:20:23	0.004	0.004	0.004	0.005	0.005
381	05/08/2017	15:21:23	0.004	0.004	0.004	0.004	0.004
382	05/08/2017	15:22:23	0.004	0.004	0.004	0.004	0.004
383	05/08/2017	15:23:23	0.003	0.004	0.004	0.004	0.004
384	05/08/2017	15:24:23	0.004	0.004	0.004	0.004	0.004
385	05/08/2017	15:25:23	0.004	0.004	0.004	0.004	0.004
386	05/08/2017	15:26:23	0.004	0.004	0.004	0.004	0.005
387	05/08/2017	15:27:23	0.004	0.004	0.004	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
388	05/08/2017	15:28:23	0.004	0.004	0.004	0.004	0.004
389	05/08/2017	15:29:23	0.003	0.003	0.004	0.004	0.004
390	05/08/2017	15:30:23	0.004	0.004	0.004	0.004	0.004
391	05/08/2017	15:31:23	0.003	0.003	0.004	0.004	0.004
392	05/08/2017	15:32:23	0.004	0.004	0.004	0.004	0.004
393	05/08/2017	15:33:23	0.004	0.004	0.004	0.004	0.005
394	05/08/2017	15:34:23	0.004	0.004	0.004	0.004	0.004
395	05/08/2017	15:35:23	0.004	0.004	0.004	0.004	0.004
396	05/08/2017	15:36:23	0.004	0.004	0.004	0.004	0.004
397	05/08/2017	15:37:23	0.004	0.004	0.004	0.005	0.005
398	05/08/2017	15:38:23	0.003	0.003	0.004	0.004	0.004
399	05/08/2017	15:39:23	0.004	0.004	0.004	0.004	0.004
400	05/08/2017	15:40:23	0.004	0.004	0.004	0.004	0.005
401	05/08/2017	15:41:23	0.004	0.004	0.004	0.004	0.004
402	05/08/2017	15:42:23	0.004	0.004	0.004	0.004	0.004
403	05/08/2017	15:43:23	0.004	0.004	0.004	0.004	0.004
404	05/08/2017	15:44:23	0.004	0.004	0.004	0.004	0.004
405	05/08/2017	15:45:23	0.004	0.004	0.004	0.004	0.004
406	05/08/2017	15:46:23	0.003	0.003	0.004	0.004	0.004
407	05/08/2017	15:47:23	0.004	0.004	0.004	0.004	0.004
408	05/08/2017	15:48:23	0.003	0.004	0.004	0.004	0.004
409	05/08/2017	15:49:23	0.005	0.005	0.006	0.007	0.007
410	05/08/2017	15:50:23	0.005	0.005	0.005	0.007	0.007
411	05/08/2017	15:51:23	0.004	0.004	0.005	0.005	0.006
412	05/08/2017	15:52:23	0.004	0.004	0.004	0.004	0.005
413	05/08/2017	15:53:23	0.003	0.004	0.004	0.004	0.004
414	05/08/2017	15:54:23	0.004	0.004	0.004	0.004	0.004
415	05/08/2017	15:55:23	0.003	0.004	0.004	0.004	0.004
416	05/08/2017	15:56:23	0.003	0.003	0.004	0.004	0.004
417	05/08/2017	15:57:23	0.004	0.004	0.004	0.004	0.004
418	05/08/2017	15:58:23	0.003	0.004	0.004	0.004	0.004
419	05/08/2017	15:59:23	0.004	0.004	0.004	0.004	0.004
420	05/08/2017	16:00:23	0.004	0.004	0.004	0.004	0.004
421	05/08/2017	16:01:23	0.004	0.004	0.004	0.004	0.004
422	05/08/2017	16:02:23	0.004	0.004	0.004	0.004	0.004
423	05/08/2017	16:03:23	0.004	0.004	0.004	0.004	0.004
424	05/08/2017	16:04:23	0.004	0.004	0.004	0.004	0.004
425	05/08/2017	16:05:23	0.003	0.004	0.004	0.004	0.004
426	05/08/2017	16:06:23	0.004	0.004	0.004	0.004	0.005
427	05/08/2017	16:07:23	0.004	0.004	0.004	0.004	0.004
428	05/08/2017	16:08:23	0.004	0.004	0.004	0.004	0.004
429	05/08/2017	16:09:23	0.004	0.004	0.004	0.004	0.004
430	05/08/2017	16:10:23	0.004	0.004	0.004	0.004	0.004
431	05/08/2017	16:11:23	0.004	0.004	0.004	0.004	0.004
432	05/08/2017	16:12:23	0.003	0.003	0.004	0.004	0.004
433	05/08/2017	16:13:23	0.004	0.004	0.004	0.004	0.004

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
434	05/08/2017	16:14:23	0.004	0.004	0.004	0.004	0.004
435	05/08/2017	16:15:23	0.003	0.003	0.004	0.004	0.004
436	05/08/2017	16:16:23	0.003	0.004	0.004	0.004	0.004
437	05/08/2017	16:17:23	0.004	0.004	0.004	0.004	0.004
438	05/08/2017	16:18:23	0.004	0.004	0.004	0.004	0.004
439	05/08/2017	16:19:23	0.003	0.003	0.004	0.004	0.004
440	05/08/2017	16:20:23	0.004	0.004	0.004	0.004	0.004
441	05/08/2017	16:21:23	0.004	0.004	0.004	0.004	0.004
442	05/08/2017	16:22:23	0.004	0.004	0.004	0.004	0.004
443	05/08/2017	16:23:23	0.004	0.004	0.004	0.004	0.004
444	05/08/2017	16:24:23	0.004	0.004	0.004	0.004	0.005
445	05/08/2017	16:25:23	0.004	0.004	0.004	0.004	0.004
446	05/08/2017	16:26:23	0.003	0.003	0.004	0.004	0.004
447	05/08/2017	16:27:23	0.004	0.004	0.004	0.004	0.004
448	05/08/2017	16:28:23	0.004	0.004	0.004	0.004	0.005
449	05/08/2017	16:29:23	0.004	0.004	0.004	0.004	0.004
450	05/08/2017	16:30:23	0.004	0.004	0.004	0.004	0.004
451	05/08/2017	16:31:23	0.004	0.004	0.004	0.004	0.004
452	05/08/2017	16:32:23	0.004	0.004	0.004	0.004	0.005
453	05/08/2017	16:33:23	0.004	0.004	0.004	0.004	0.004
454	05/08/2017	16:34:23	0.004	0.004	0.004	0.004	0.004
455	05/08/2017	16:35:23	0.003	0.003	0.004	0.004	0.004
456	05/08/2017	16:36:23	0.003	0.003	0.004	0.004	0.004
457	05/08/2017	16:37:23	0.007	0.007	0.007	0.007	0.007
458	05/08/2017	16:38:23	0.004	0.004	0.004	0.004	0.004
459	05/08/2017	16:39:23	0.004	0.004	0.004	0.004	0.004
460	05/08/2017	16:40:23	0.003	0.004	0.004	0.004	0.004
461	05/08/2017	16:41:23	0.004	0.004	0.004	0.004	0.004
462	05/08/2017	16:42:23	0.004	0.005	0.005	0.006	0.006
463	05/08/2017	16:43:23	0.007	0.008	0.008	0.011	0.011
464	05/08/2017	16:44:23	0.004	0.004	0.004	0.004	0.005
465	05/08/2017	16:45:23	0.004	0.004	0.004	0.004	0.004
466	05/08/2017	16:46:23	0.004	0.004	0.004	0.004	0.004
467	05/08/2017	16:47:23	0.007	0.007	0.007	0.007	0.007
468	05/08/2017	16:48:23	0.004	0.004	0.004	0.005	0.005
469	05/08/2017	16:49:23	0.004	0.004	0.004	0.004	0.004
470	05/08/2017	16:50:23	0.004	0.004	0.004	0.004	0.004
471	05/08/2017	16:51:23	0.004	0.004	0.004	0.005	0.005
472	05/08/2017	16:52:23	0.007	0.007	0.008	0.011	0.012
473	05/08/2017	16:53:23	0.006	0.006	0.007	0.008	0.008
474	05/08/2017	16:54:23	0.006	0.006	0.007	0.009	0.010
475	05/08/2017	16:55:23	0.006	0.006	0.008	0.011	0.011
476	05/08/2017	16:56:23	0.008	0.008	0.010	0.013	0.013
477	05/08/2017	16:57:23	0.009	0.009	0.011	0.017	0.017
478	05/08/2017	16:58:23	0.007	0.007	0.008	0.013	0.013
479	05/08/2017	16:59:23	0.006	0.006	0.007	0.009	0.010

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
480	05/08/2017	17:00:23	0.004	0.004	0.004	0.004	0.005

# Test 001

Location CL-4

Site 4 Centroid

Instrument		Data Properties	
Model	DustTrak DRX	Start Date	05/08/2017
Instrument S/N	8533113406	Start Time	09:54:26
		Stop Date	05/08/2017
		Stop Time	18:05:26
		Total Time	0:08:11:00
		Logging Interval	60 seconds

Statistics					
	PM1	PM2.5	RESP	PM10	TOTAL
Avg	0.007 mg/m <sup>3</sup>	0.007 mg/m <sup>3</sup>	0.007 mg/m <sup>3</sup>	0.007 mg/m <sup>3</sup>	0.007 mg/m <sup>3</sup>
Max	0.022 mg/m <sup>3</sup>	0.023 mg/m <sup>3</sup>	0.024 mg/m <sup>3</sup>	0.029 mg/m <sup>3</sup>	0.033 mg/m <sup>3</sup>
Max Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
Max Time	09:55:26	09:55:26	09:55:26	09:55:26	09:55:26
Min	0.004 mg/m <sup>3</sup>	0.004 mg/m <sup>3</sup>	0.004 mg/m <sup>3</sup>	0.004 mg/m <sup>3</sup>	0.004 mg/m <sup>3</sup>
Min Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
Min Time	09:56:26	09:56:26	09:56:26	09:59:26	09:59:26
TWA (8 hr)	0.007	0.007	0.007	0.007	0.007
TWA Start Date	05/08/2017	05/08/2017	05/08/2017	05/08/2017	05/08/2017
TWA Start Time	09:54:26	09:54:26	09:54:26	09:54:26	09:54:26
TWA End Time	18:05:26	18:05:26	18:05:26	18:05:26	18:05:26

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
1	05/08/2017	09:55:26	0.022	0.023	0.024	0.029	0.033
2	05/08/2017	09:56:26	0.004	0.004	0.004	0.005	0.006
3	05/08/2017	09:57:26	0.004	0.004	0.004	0.005	0.005
4	05/08/2017	09:58:26	0.005	0.005	0.005	0.006	0.006
5	05/08/2017	09:59:26	0.004	0.004	0.004	0.004	0.004
6	05/08/2017	10:00:26	0.004	0.004	0.005	0.005	0.005
7	05/08/2017	10:01:26	0.004	0.004	0.004	0.004	0.004
8	05/08/2017	10:02:26	0.004	0.004	0.004	0.005	0.005
9	05/08/2017	10:03:26	0.005	0.005	0.005	0.007	0.007
10	05/08/2017	10:04:26	0.016	0.016	0.017	0.021	0.026
11	05/08/2017	10:05:26	0.004	0.004	0.004	0.004	0.004
12	05/08/2017	10:06:26	0.004	0.004	0.004	0.004	0.004
13	05/08/2017	10:07:26	0.004	0.004	0.004	0.004	0.004
14	05/08/2017	10:08:26	0.004	0.004	0.004	0.004	0.004
15	05/08/2017	10:09:26	0.004	0.004	0.004	0.004	0.004
16	05/08/2017	10:10:26	0.004	0.004	0.004	0.004	0.004
17	05/08/2017	10:11:26	0.004	0.004	0.004	0.004	0.004
18	05/08/2017	10:12:26	0.004	0.004	0.004	0.004	0.004
19	05/08/2017	10:13:26	0.004	0.004	0.004	0.004	0.004



Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
20	05/08/2017	10:14:26	0.004	0.004	0.004	0.004	0.004
21	05/08/2017	10:15:26	0.004	0.004	0.004	0.004	0.004
22	05/08/2017	10:16:26	0.004	0.004	0.004	0.004	0.004
23	05/08/2017	10:17:26	0.004	0.004	0.005	0.005	0.005
24	05/08/2017	10:18:26	0.004	0.004	0.005	0.005	0.005
25	05/08/2017	10:19:26	0.004	0.004	0.004	0.004	0.004
26	05/08/2017	10:20:26	0.004	0.004	0.004	0.004	0.004
27	05/08/2017	10:21:26	0.004	0.004	0.004	0.004	0.005
28	05/08/2017	10:22:26	0.004	0.004	0.004	0.004	0.004
29	05/08/2017	10:23:26	0.004	0.004	0.004	0.005	0.005
30	05/08/2017	10:24:26	0.004	0.004	0.005	0.005	0.005
31	05/08/2017	10:25:26	0.004	0.004	0.004	0.004	0.004
32	05/08/2017	10:26:26	0.004	0.004	0.004	0.005	0.005
33	05/08/2017	10:27:26	0.004	0.004	0.004	0.005	0.005
34	05/08/2017	10:28:26	0.004	0.005	0.005	0.005	0.005
35	05/08/2017	10:29:26	0.004	0.004	0.005	0.005	0.005
36	05/08/2017	10:30:26	0.005	0.005	0.005	0.005	0.005
37	05/08/2017	10:31:26	0.005	0.005	0.005	0.005	0.005
38	05/08/2017	10:32:26	0.005	0.005	0.005	0.005	0.005
39	05/08/2017	10:33:26	0.004	0.005	0.005	0.005	0.005
40	05/08/2017	10:34:26	0.005	0.005	0.005	0.005	0.005
41	05/08/2017	10:35:26	0.005	0.005	0.005	0.005	0.005
42	05/08/2017	10:36:26	0.005	0.005	0.005	0.005	0.005
43	05/08/2017	10:37:26	0.005	0.005	0.005	0.005	0.005
44	05/08/2017	10:38:26	0.005	0.005	0.005	0.005	0.005
45	05/08/2017	10:39:26	0.005	0.005	0.005	0.005	0.005
46	05/08/2017	10:40:26	0.005	0.005	0.005	0.005	0.005
47	05/08/2017	10:41:26	0.005	0.005	0.005	0.005	0.005
48	05/08/2017	10:42:26	0.005	0.005	0.005	0.005	0.005
49	05/08/2017	10:43:26	0.005	0.005	0.005	0.005	0.005
50	05/08/2017	10:44:26	0.005	0.005	0.005	0.005	0.005
51	05/08/2017	10:45:26	0.005	0.005	0.005	0.005	0.006
52	05/08/2017	10:46:26	0.005	0.005	0.005	0.005	0.005
53	05/08/2017	10:47:26	0.005	0.005	0.005	0.005	0.005
54	05/08/2017	10:48:26	0.005	0.005	0.005	0.005	0.006
55	05/08/2017	10:49:26	0.005	0.005	0.005	0.005	0.005
56	05/08/2017	10:50:26	0.005	0.005	0.005	0.005	0.005
57	05/08/2017	10:51:26	0.005	0.005	0.005	0.005	0.006
58	05/08/2017	10:52:26	0.005	0.005	0.005	0.005	0.005
59	05/08/2017	10:53:26	0.005	0.005	0.005	0.005	0.005
60	05/08/2017	10:54:26	0.005	0.005	0.005	0.005	0.005
61	05/08/2017	10:55:26	0.005	0.005	0.006	0.006	0.006
62	05/08/2017	10:56:26	0.005	0.005	0.005	0.005	0.005
63	05/08/2017	10:57:26	0.005	0.005	0.005	0.005	0.005
64	05/08/2017	10:58:26	0.005	0.005	0.005	0.005	0.005
65	05/08/2017	10:59:26	0.005	0.005	0.005	0.006	0.006

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
66	05/08/2017	11:00:26	0.005	0.005	0.005	0.005	0.005
67	05/08/2017	11:01:26	0.005	0.005	0.005	0.006	0.006
68	05/08/2017	11:02:26	0.006	0.006	0.006	0.006	0.006
69	05/08/2017	11:03:26	0.005	0.006	0.006	0.006	0.006
70	05/08/2017	11:04:26	0.006	0.006	0.006	0.006	0.006
71	05/08/2017	11:05:26	0.006	0.006	0.006	0.006	0.006
72	05/08/2017	11:06:26	0.006	0.006	0.006	0.006	0.006
73	05/08/2017	11:07:26	0.006	0.006	0.006	0.006	0.006
74	05/08/2017	11:08:26	0.006	0.006	0.006	0.006	0.006
75	05/08/2017	11:09:26	0.006	0.006	0.006	0.006	0.006
76	05/08/2017	11:10:26	0.006	0.006	0.006	0.006	0.006
77	05/08/2017	11:11:26	0.006	0.006	0.006	0.007	0.007
78	05/08/2017	11:12:26	0.006	0.006	0.006	0.006	0.006
79	05/08/2017	11:13:26	0.006	0.006	0.006	0.006	0.006
80	05/08/2017	11:14:26	0.006	0.006	0.006	0.006	0.006
81	05/08/2017	11:15:26	0.006	0.006	0.006	0.006	0.006
82	05/08/2017	11:16:26	0.006	0.006	0.006	0.006	0.006
83	05/08/2017	11:17:26	0.006	0.006	0.006	0.006	0.006
84	05/08/2017	11:18:26	0.006	0.006	0.006	0.006	0.006
85	05/08/2017	11:19:26	0.006	0.006	0.006	0.006	0.006
86	05/08/2017	11:20:26	0.006	0.006	0.006	0.007	0.007
87	05/08/2017	11:21:26	0.006	0.006	0.006	0.006	0.006
88	05/08/2017	11:22:26	0.006	0.006	0.006	0.006	0.006
89	05/08/2017	11:23:26	0.006	0.006	0.006	0.006	0.006
90	05/08/2017	11:24:26	0.006	0.006	0.006	0.006	0.007
91	05/08/2017	11:25:26	0.006	0.006	0.007	0.007	0.007
92	05/08/2017	11:26:26	0.006	0.006	0.006	0.007	0.007
93	05/08/2017	11:27:26	0.006	0.006	0.006	0.006	0.006
94	05/08/2017	11:28:26	0.006	0.006	0.006	0.007	0.007
95	05/08/2017	11:29:26	0.006	0.006	0.006	0.006	0.006
96	05/08/2017	11:30:26	0.006	0.006	0.007	0.007	0.007
97	05/08/2017	11:31:26	0.007	0.007	0.007	0.007	0.007
98	05/08/2017	11:32:26	0.006	0.007	0.007	0.007	0.007
99	05/08/2017	11:33:26	0.006	0.006	0.006	0.007	0.007
100	05/08/2017	11:34:26	0.007	0.007	0.007	0.008	0.008
101	05/08/2017	11:35:26	0.006	0.007	0.007	0.007	0.007
102	05/08/2017	11:36:26	0.007	0.007	0.007	0.007	0.007
103	05/08/2017	11:37:26	0.007	0.007	0.007	0.007	0.007
104	05/08/2017	11:38:26	0.007	0.007	0.007	0.007	0.007
105	05/08/2017	11:39:26	0.007	0.007	0.007	0.007	0.007
106	05/08/2017	11:40:26	0.007	0.007	0.007	0.007	0.007
107	05/08/2017	11:41:26	0.007	0.007	0.007	0.007	0.007
108	05/08/2017	11:42:26	0.007	0.007	0.007	0.007	0.007
109	05/08/2017	11:43:26	0.007	0.007	0.007	0.007	0.007
110	05/08/2017	11:44:26	0.007	0.007	0.007	0.008	0.008
111	05/08/2017	11:45:26	0.007	0.007	0.007	0.007	0.007

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
112	05/08/2017	11:46:26	0.007	0.007	0.007	0.008	0.008
113	05/08/2017	11:47:26	0.007	0.007	0.007	0.007	0.007
114	05/08/2017	11:48:26	0.007	0.007	0.007	0.007	0.007
115	05/08/2017	11:49:26	0.007	0.007	0.007	0.007	0.007
116	05/08/2017	11:50:26	0.007	0.007	0.007	0.007	0.007
117	05/08/2017	11:51:26	0.007	0.007	0.007	0.007	0.007
118	05/08/2017	11:52:26	0.007	0.007	0.007	0.007	0.007
119	05/08/2017	11:53:26	0.007	0.007	0.007	0.007	0.007
120	05/08/2017	11:54:26	0.007	0.007	0.007	0.007	0.008
121	05/08/2017	11:55:26	0.007	0.007	0.007	0.007	0.008
122	05/08/2017	11:56:26	0.007	0.007	0.007	0.007	0.007
123	05/08/2017	11:57:26	0.007	0.007	0.007	0.007	0.007
124	05/08/2017	11:58:26	0.007	0.007	0.007	0.007	0.007
125	05/08/2017	11:59:26	0.007	0.007	0.007	0.007	0.007
126	05/08/2017	12:00:26	0.007	0.007	0.007	0.007	0.008
127	05/08/2017	12:01:26	0.007	0.007	0.007	0.008	0.008
128	05/08/2017	12:02:26	0.007	0.007	0.007	0.007	0.007
129	05/08/2017	12:03:26	0.007	0.007	0.008	0.008	0.008
130	05/08/2017	12:04:26	0.007	0.007	0.007	0.007	0.007
131	05/08/2017	12:05:26	0.007	0.007	0.007	0.007	0.007
132	05/08/2017	12:06:26	0.007	0.007	0.007	0.007	0.007
133	05/08/2017	12:07:26	0.007	0.007	0.007	0.007	0.007
134	05/08/2017	12:08:26	0.007	0.007	0.007	0.007	0.007
135	05/08/2017	12:09:26	0.007	0.007	0.007	0.007	0.007
136	05/08/2017	12:10:26	0.007	0.007	0.007	0.007	0.007
137	05/08/2017	12:11:26	0.007	0.007	0.007	0.007	0.007
138	05/08/2017	12:12:26	0.007	0.007	0.008	0.008	0.008
139	05/08/2017	12:13:26	0.007	0.007	0.007	0.007	0.007
140	05/08/2017	12:14:26	0.007	0.007	0.007	0.008	0.008
141	05/08/2017	12:15:26	0.007	0.007	0.007	0.007	0.007
142	05/08/2017	12:16:26	0.007	0.007	0.007	0.008	0.008
143	05/08/2017	12:17:26	0.007	0.007	0.008	0.008	0.008
144	05/08/2017	12:18:26	0.007	0.007	0.007	0.008	0.008
145	05/08/2017	12:19:26	0.007	0.007	0.008	0.008	0.008
146	05/08/2017	12:20:26	0.008	0.008	0.008	0.008	0.008
147	05/08/2017	12:21:26	0.008	0.008	0.008	0.008	0.008
148	05/08/2017	12:22:26	0.007	0.007	0.007	0.008	0.008
149	05/08/2017	12:23:26	0.007	0.008	0.008	0.008	0.008
150	05/08/2017	12:24:26	0.007	0.007	0.007	0.008	0.008
151	05/08/2017	12:25:26	0.008	0.008	0.008	0.008	0.008
152	05/08/2017	12:26:26	0.008	0.008	0.008	0.008	0.008
153	05/08/2017	12:27:26	0.007	0.008	0.008	0.008	0.008
154	05/08/2017	12:28:26	0.008	0.008	0.008	0.008	0.008
155	05/08/2017	12:29:26	0.008	0.008	0.008	0.008	0.008
156	05/08/2017	12:30:26	0.008	0.008	0.008	0.008	0.008
157	05/08/2017	12:31:26	0.008	0.008	0.008	0.008	0.008

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
158	05/08/2017	12:32:26	0.007	0.007	0.008	0.008	0.008
159	05/08/2017	12:33:26	0.007	0.007	0.007	0.008	0.008
160	05/08/2017	12:34:26	0.008	0.008	0.008	0.008	0.008
161	05/08/2017	12:35:26	0.007	0.007	0.008	0.008	0.008
162	05/08/2017	12:36:26	0.007	0.007	0.008	0.008	0.008
163	05/08/2017	12:37:26	0.008	0.008	0.008	0.009	0.009
164	05/08/2017	12:38:26	0.007	0.008	0.008	0.008	0.008
165	05/08/2017	12:39:26	0.008	0.008	0.008	0.009	0.009
166	05/08/2017	12:40:26	0.008	0.008	0.008	0.008	0.008
167	05/08/2017	12:41:26	0.008	0.008	0.008	0.008	0.008
168	05/08/2017	12:42:26	0.008	0.008	0.008	0.008	0.008
169	05/08/2017	12:43:26	0.008	0.008	0.008	0.008	0.008
170	05/08/2017	12:44:26	0.008	0.008	0.008	0.008	0.008
171	05/08/2017	12:45:26	0.008	0.008	0.008	0.008	0.008
172	05/08/2017	12:46:26	0.008	0.008	0.008	0.008	0.008
173	05/08/2017	12:47:26	0.008	0.008	0.008	0.008	0.008
174	05/08/2017	12:48:26	0.008	0.008	0.008	0.008	0.008
175	05/08/2017	12:49:26	0.008	0.008	0.008	0.008	0.008
176	05/08/2017	12:50:26	0.008	0.008	0.008	0.008	0.008
177	05/08/2017	12:51:26	0.008	0.008	0.008	0.008	0.008
178	05/08/2017	12:52:26	0.008	0.008	0.008	0.008	0.008
179	05/08/2017	12:53:26	0.008	0.008	0.008	0.009	0.009
180	05/08/2017	12:54:26	0.008	0.008	0.008	0.008	0.008
181	05/08/2017	12:55:26	0.008	0.008	0.008	0.008	0.008
182	05/08/2017	12:56:26	0.008	0.008	0.008	0.008	0.008
183	05/08/2017	12:57:26	0.008	0.008	0.008	0.008	0.008
184	05/08/2017	12:58:26	0.008	0.008	0.008	0.008	0.008
185	05/08/2017	12:59:26	0.008	0.008	0.008	0.008	0.008
186	05/08/2017	13:00:26	0.008	0.008	0.008	0.009	0.009
187	05/08/2017	13:01:26	0.008	0.008	0.008	0.008	0.008
188	05/08/2017	13:02:26	0.008	0.008	0.008	0.008	0.008
189	05/08/2017	13:03:26	0.008	0.008	0.008	0.008	0.008
190	05/08/2017	13:04:26	0.008	0.008	0.008	0.008	0.008
191	05/08/2017	13:05:26	0.008	0.008	0.008	0.008	0.008
192	05/08/2017	13:06:26	0.008	0.008	0.008	0.008	0.008
193	05/08/2017	13:07:26	0.008	0.008	0.008	0.008	0.008
194	05/08/2017	13:08:26	0.008	0.008	0.008	0.008	0.008
195	05/08/2017	13:09:26	0.008	0.008	0.008	0.008	0.009
196	05/08/2017	13:10:26	0.008	0.008	0.008	0.008	0.008
197	05/08/2017	13:11:26	0.008	0.008	0.008	0.008	0.008
198	05/08/2017	13:12:26	0.008	0.008	0.008	0.008	0.008
199	05/08/2017	13:13:26	0.008	0.008	0.008	0.008	0.008
200	05/08/2017	13:14:26	0.008	0.008	0.008	0.008	0.008
201	05/08/2017	13:15:26	0.008	0.008	0.008	0.008	0.008
202	05/08/2017	13:16:26	0.008	0.008	0.008	0.008	0.008
203	05/08/2017	13:17:26	0.008	0.008	0.008	0.008	0.008

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
204	05/08/2017	13:18:26	0.008	0.008	0.008	0.008	0.008
205	05/08/2017	13:19:26	0.008	0.008	0.008	0.008	0.008
206	05/08/2017	13:20:26	0.008	0.008	0.008	0.009	0.009
207	05/08/2017	13:21:26	0.008	0.008	0.008	0.008	0.008
208	05/08/2017	13:22:26	0.008	0.008	0.008	0.008	0.008
209	05/08/2017	13:23:26	0.008	0.008	0.008	0.009	0.009
210	05/08/2017	13:24:26	0.008	0.008	0.008	0.009	0.009
211	05/08/2017	13:25:26	0.008	0.008	0.008	0.009	0.009
212	05/08/2017	13:26:26	0.008	0.008	0.008	0.009	0.009
213	05/08/2017	13:27:26	0.008	0.008	0.008	0.008	0.008
214	05/08/2017	13:28:26	0.008	0.008	0.008	0.008	0.008
215	05/08/2017	13:29:26	0.008	0.008	0.008	0.008	0.008
216	05/08/2017	13:30:26	0.008	0.008	0.008	0.008	0.008
217	05/08/2017	13:31:26	0.008	0.008	0.008	0.008	0.008
218	05/08/2017	13:32:26	0.008	0.008	0.008	0.008	0.008
219	05/08/2017	13:33:26	0.008	0.008	0.008	0.008	0.008
220	05/08/2017	13:34:26	0.008	0.008	0.008	0.008	0.008
221	05/08/2017	13:35:26	0.008	0.008	0.008	0.008	0.008
222	05/08/2017	13:36:26	0.008	0.008	0.008	0.009	0.009
223	05/08/2017	13:37:26	0.008	0.008	0.008	0.008	0.008
224	05/08/2017	13:38:26	0.008	0.008	0.008	0.008	0.008
225	05/08/2017	13:39:26	0.008	0.008	0.008	0.009	0.009
226	05/08/2017	13:40:26	0.008	0.008	0.008	0.008	0.008
227	05/08/2017	13:41:26	0.008	0.008	0.008	0.008	0.008
228	05/08/2017	13:42:26	0.008	0.008	0.008	0.008	0.008
229	05/08/2017	13:43:26	0.008	0.008	0.008	0.008	0.008
230	05/08/2017	13:44:26	0.008	0.008	0.008	0.008	0.008
231	05/08/2017	13:45:26	0.008	0.008	0.008	0.008	0.008
232	05/08/2017	13:46:26	0.008	0.008	0.008	0.008	0.008
233	05/08/2017	13:47:26	0.008	0.008	0.008	0.008	0.009
234	05/08/2017	13:48:26	0.008	0.008	0.008	0.009	0.009
235	05/08/2017	13:49:26	0.008	0.008	0.009	0.009	0.009
236	05/08/2017	13:50:26	0.008	0.008	0.008	0.009	0.009
237	05/08/2017	13:51:26	0.008	0.008	0.008	0.008	0.008
238	05/08/2017	13:52:26	0.009	0.009	0.009	0.009	0.009
239	05/08/2017	13:53:26	0.008	0.008	0.009	0.009	0.009
240	05/08/2017	13:54:26	0.008	0.008	0.008	0.009	0.009
241	05/08/2017	13:55:26	0.008	0.008	0.008	0.008	0.008
242	05/08/2017	13:56:26	0.008	0.008	0.008	0.009	0.009
243	05/08/2017	13:57:26	0.008	0.008	0.008	0.009	0.009
244	05/08/2017	13:58:26	0.008	0.008	0.008	0.008	0.008
245	05/08/2017	13:59:26	0.008	0.008	0.009	0.009	0.009
246	05/08/2017	14:00:26	0.008	0.008	0.008	0.008	0.008
247	05/08/2017	14:01:26	0.008	0.008	0.008	0.009	0.009
248	05/08/2017	14:02:26	0.008	0.008	0.008	0.008	0.008
249	05/08/2017	14:03:26	0.008	0.008	0.008	0.008	0.008

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
250	05/08/2017	14:04:26	0.008	0.008	0.008	0.009	0.009
251	05/08/2017	14:05:26	0.008	0.008	0.008	0.008	0.008
252	05/08/2017	14:06:26	0.008	0.008	0.008	0.009	0.009
253	05/08/2017	14:07:26	0.008	0.008	0.008	0.009	0.009
254	05/08/2017	14:08:26	0.008	0.008	0.008	0.008	0.008
255	05/08/2017	14:09:26	0.008	0.008	0.008	0.008	0.008
256	05/08/2017	14:10:26	0.008	0.008	0.008	0.008	0.008
257	05/08/2017	14:11:26	0.008	0.008	0.008	0.008	0.008
258	05/08/2017	14:12:26	0.008	0.008	0.008	0.008	0.008
259	05/08/2017	14:13:26	0.008	0.008	0.008	0.009	0.009
260	05/08/2017	14:14:26	0.008	0.008	0.008	0.009	0.009
261	05/08/2017	14:15:26	0.009	0.009	0.009	0.010	0.010
262	05/08/2017	14:16:26	0.008	0.008	0.008	0.009	0.009
263	05/08/2017	14:17:26	0.008	0.008	0.008	0.009	0.009
264	05/08/2017	14:18:26	0.008	0.008	0.008	0.008	0.008
265	05/08/2017	14:19:26	0.008	0.008	0.008	0.008	0.008
266	05/08/2017	14:20:26	0.008	0.008	0.008	0.008	0.008
267	05/08/2017	14:21:26	0.008	0.008	0.009	0.009	0.009
268	05/08/2017	14:22:26	0.008	0.008	0.008	0.008	0.008
269	05/08/2017	14:23:26	0.008	0.008	0.008	0.008	0.008
270	05/08/2017	14:24:26	0.008	0.008	0.008	0.009	0.009
271	05/08/2017	14:25:26	0.008	0.008	0.008	0.008	0.008
272	05/08/2017	14:26:26	0.008	0.008	0.008	0.008	0.008
273	05/08/2017	14:27:26	0.008	0.008	0.008	0.009	0.009
274	05/08/2017	14:28:26	0.008	0.008	0.008	0.008	0.008
275	05/08/2017	14:29:26	0.008	0.008	0.008	0.009	0.009
276	05/08/2017	14:30:26	0.008	0.008	0.008	0.009	0.009
277	05/08/2017	14:31:26	0.008	0.008	0.008	0.008	0.008
278	05/08/2017	14:32:26	0.008	0.008	0.008	0.008	0.008
279	05/08/2017	14:33:26	0.008	0.008	0.008	0.008	0.008
280	05/08/2017	14:34:26	0.008	0.008	0.008	0.008	0.008
281	05/08/2017	14:35:26	0.008	0.008	0.008	0.008	0.008
282	05/08/2017	14:36:26	0.008	0.008	0.008	0.008	0.008
283	05/08/2017	14:37:26	0.008	0.008	0.008	0.008	0.008
284	05/08/2017	14:38:26	0.008	0.008	0.008	0.008	0.008
285	05/08/2017	14:39:26	0.008	0.008	0.008	0.008	0.008
286	05/08/2017	14:40:26	0.008	0.008	0.008	0.008	0.008
287	05/08/2017	14:41:26	0.008	0.008	0.008	0.008	0.008
288	05/08/2017	14:42:26	0.008	0.008	0.008	0.008	0.008
289	05/08/2017	14:43:26	0.008	0.008	0.008	0.009	0.009
290	05/08/2017	14:44:26	0.008	0.008	0.008	0.009	0.009
291	05/08/2017	14:45:26	0.008	0.008	0.008	0.008	0.008
292	05/08/2017	14:46:26	0.008	0.008	0.008	0.008	0.008
293	05/08/2017	14:47:26	0.008	0.008	0.008	0.008	0.008
294	05/08/2017	14:48:26	0.008	0.008	0.008	0.008	0.008
295	05/08/2017	14:49:26	0.008	0.008	0.008	0.008	0.008

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
296	05/08/2017	14:50:26	0.008	0.008	0.009	0.009	0.009
297	05/08/2017	14:51:26	0.008	0.008	0.008	0.008	0.008
298	05/08/2017	14:52:26	0.009	0.009	0.009	0.011	0.011
299	05/08/2017	14:53:26	0.008	0.008	0.008	0.008	0.009
300	05/08/2017	14:54:26	0.008	0.008	0.008	0.008	0.008
301	05/08/2017	14:55:26	0.008	0.008	0.008	0.008	0.008
302	05/08/2017	14:56:26	0.008	0.008	0.008	0.008	0.008
303	05/08/2017	14:57:26	0.008	0.008	0.008	0.009	0.009
304	05/08/2017	14:58:26	0.008	0.008	0.008	0.008	0.008
305	05/08/2017	14:59:26	0.008	0.008	0.008	0.008	0.008
306	05/08/2017	15:00:26	0.008	0.008	0.008	0.008	0.008
307	05/08/2017	15:01:26	0.008	0.008	0.008	0.008	0.008
308	05/08/2017	15:02:26	0.008	0.008	0.008	0.008	0.008
309	05/08/2017	15:03:26	0.008	0.008	0.008	0.008	0.008
310	05/08/2017	15:04:26	0.008	0.008	0.008	0.008	0.008
311	05/08/2017	15:05:26	0.008	0.008	0.008	0.008	0.008
312	05/08/2017	15:06:26	0.008	0.008	0.008	0.008	0.008
313	05/08/2017	15:07:26	0.008	0.008	0.008	0.008	0.008
314	05/08/2017	15:08:26	0.008	0.008	0.008	0.008	0.008
315	05/08/2017	15:09:26	0.008	0.008	0.008	0.008	0.008
316	05/08/2017	15:10:26	0.008	0.008	0.008	0.008	0.008
317	05/08/2017	15:11:26	0.008	0.008	0.008	0.008	0.008
318	05/08/2017	15:12:26	0.008	0.008	0.008	0.008	0.008
319	05/08/2017	15:13:26	0.008	0.008	0.008	0.008	0.008
320	05/08/2017	15:14:26	0.008	0.008	0.008	0.008	0.008
321	05/08/2017	15:15:26	0.008	0.008	0.008	0.008	0.008
322	05/08/2017	15:16:26	0.008	0.008	0.008	0.008	0.008
323	05/08/2017	15:17:26	0.008	0.008	0.008	0.008	0.009
324	05/08/2017	15:18:26	0.008	0.008	0.008	0.008	0.008
325	05/08/2017	15:19:26	0.008	0.008	0.008	0.008	0.008
326	05/08/2017	15:20:26	0.008	0.008	0.008	0.008	0.008
327	05/08/2017	15:21:26	0.008	0.008	0.008	0.008	0.008
328	05/08/2017	15:22:26	0.008	0.008	0.008	0.008	0.008
329	05/08/2017	15:23:26	0.008	0.008	0.008	0.008	0.009
330	05/08/2017	15:24:26	0.008	0.008	0.008	0.008	0.008
331	05/08/2017	15:25:26	0.008	0.008	0.008	0.008	0.008
332	05/08/2017	15:26:26	0.008	0.008	0.008	0.008	0.008
333	05/08/2017	15:27:26	0.008	0.008	0.008	0.008	0.008
334	05/08/2017	15:28:26	0.008	0.008	0.008	0.008	0.008
335	05/08/2017	15:29:26	0.008	0.008	0.008	0.008	0.008
336	05/08/2017	15:30:26	0.008	0.008	0.008	0.008	0.008
337	05/08/2017	15:31:26	0.007	0.007	0.008	0.008	0.008
338	05/08/2017	15:32:26	0.008	0.008	0.008	0.008	0.008
339	05/08/2017	15:33:26	0.008	0.008	0.008	0.008	0.008
340	05/08/2017	15:34:26	0.008	0.008	0.008	0.008	0.008
341	05/08/2017	15:35:26	0.008	0.008	0.008	0.008	0.008

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
342	05/08/2017	15:36:26	0.007	0.007	0.007	0.008	0.008
343	05/08/2017	15:37:26	0.007	0.007	0.008	0.008	0.008
344	05/08/2017	15:38:26	0.008	0.008	0.008	0.008	0.008
345	05/08/2017	15:39:26	0.008	0.008	0.008	0.008	0.008
346	05/08/2017	15:40:26	0.008	0.008	0.008	0.008	0.008
347	05/08/2017	15:41:26	0.008	0.008	0.008	0.008	0.008
348	05/08/2017	15:42:26	0.008	0.008	0.008	0.008	0.008
349	05/08/2017	15:43:26	0.008	0.008	0.008	0.008	0.008
350	05/08/2017	15:44:26	0.008	0.008	0.008	0.008	0.008
351	05/08/2017	15:45:26	0.008	0.008	0.008	0.008	0.008
352	05/08/2017	15:46:26	0.008	0.008	0.008	0.009	0.009
353	05/08/2017	15:47:26	0.008	0.008	0.008	0.008	0.008
354	05/08/2017	15:48:26	0.008	0.008	0.008	0.008	0.008
355	05/08/2017	15:49:26	0.008	0.008	0.008	0.008	0.008
356	05/08/2017	15:50:26	0.008	0.008	0.008	0.008	0.008
357	05/08/2017	15:51:26	0.008	0.008	0.008	0.008	0.008
358	05/08/2017	15:52:26	0.008	0.008	0.008	0.008	0.008
359	05/08/2017	15:53:26	0.008	0.008	0.008	0.008	0.008
360	05/08/2017	15:54:26	0.008	0.008	0.008	0.008	0.008
361	05/08/2017	15:55:26	0.007	0.008	0.008	0.008	0.008
362	05/08/2017	15:56:26	0.008	0.008	0.008	0.008	0.008
363	05/08/2017	15:57:26	0.007	0.008	0.008	0.008	0.008
364	05/08/2017	15:58:26	0.007	0.007	0.007	0.007	0.007
365	05/08/2017	15:59:26	0.007	0.007	0.008	0.008	0.008
366	05/08/2017	16:00:26	0.008	0.008	0.008	0.008	0.008
367	05/08/2017	16:01:26	0.008	0.008	0.008	0.008	0.008
368	05/08/2017	16:02:26	0.008	0.008	0.008	0.008	0.008
369	05/08/2017	16:03:26	0.008	0.008	0.008	0.008	0.008
370	05/08/2017	16:04:26	0.008	0.008	0.008	0.008	0.008
371	05/08/2017	16:05:26	0.007	0.008	0.008	0.008	0.008
372	05/08/2017	16:06:26	0.008	0.008	0.008	0.008	0.008
373	05/08/2017	16:07:26	0.008	0.008	0.008	0.008	0.008
374	05/08/2017	16:08:26	0.008	0.008	0.008	0.008	0.008
375	05/08/2017	16:09:26	0.008	0.008	0.008	0.008	0.008
376	05/08/2017	16:10:26	0.008	0.008	0.008	0.008	0.008
377	05/08/2017	16:11:26	0.008	0.008	0.008	0.008	0.008
378	05/08/2017	16:12:26	0.007	0.008	0.008	0.008	0.008
379	05/08/2017	16:13:26	0.008	0.008	0.008	0.008	0.008
380	05/08/2017	16:14:26	0.008	0.008	0.008	0.008	0.008
381	05/08/2017	16:15:26	0.008	0.008	0.008	0.008	0.008
382	05/08/2017	16:16:26	0.008	0.008	0.008	0.008	0.008
383	05/08/2017	16:17:26	0.008	0.008	0.008	0.008	0.008
384	05/08/2017	16:18:26	0.008	0.008	0.008	0.008	0.008
385	05/08/2017	16:19:26	0.008	0.008	0.008	0.008	0.008
386	05/08/2017	16:20:26	0.007	0.007	0.008	0.008	0.008
387	05/08/2017	16:21:26	0.008	0.008	0.008	0.008	0.008



Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
388	05/08/2017	16:22:26	0.008	0.008	0.008	0.008	0.008
389	05/08/2017	16:23:26	0.007	0.008	0.008	0.008	0.008
390	05/08/2017	16:24:26	0.008	0.008	0.008	0.008	0.008
391	05/08/2017	16:25:26	0.008	0.008	0.008	0.008	0.008
392	05/08/2017	16:26:26	0.008	0.008	0.008	0.008	0.008
393	05/08/2017	16:27:26	0.008	0.008	0.008	0.008	0.008
394	05/08/2017	16:28:26	0.008	0.008	0.008	0.008	0.008
395	05/08/2017	16:29:26	0.008	0.008	0.008	0.008	0.008
396	05/08/2017	16:30:26	0.008	0.008	0.008	0.008	0.008
397	05/08/2017	16:31:26	0.008	0.008	0.008	0.008	0.008
398	05/08/2017	16:32:26	0.007	0.008	0.008	0.008	0.008
399	05/08/2017	16:33:26	0.008	0.008	0.008	0.008	0.008
400	05/08/2017	16:34:26	0.007	0.007	0.008	0.008	0.008
401	05/08/2017	16:35:26	0.007	0.008	0.008	0.008	0.008
402	05/08/2017	16:36:26	0.008	0.008	0.008	0.008	0.008
403	05/08/2017	16:37:26	0.007	0.008	0.008	0.008	0.008
404	05/08/2017	16:38:26	0.008	0.008	0.008	0.008	0.008
405	05/08/2017	16:39:26	0.007	0.007	0.008	0.008	0.008
406	05/08/2017	16:40:26	0.007	0.007	0.007	0.008	0.008
407	05/08/2017	16:41:26	0.007	0.007	0.007	0.008	0.008
408	05/08/2017	16:42:26	0.008	0.008	0.008	0.008	0.008
409	05/08/2017	16:43:26	0.007	0.007	0.007	0.008	0.008
410	05/08/2017	16:44:26	0.007	0.007	0.007	0.008	0.008
411	05/08/2017	16:45:26	0.007	0.007	0.008	0.008	0.008
412	05/08/2017	16:46:26	0.007	0.007	0.007	0.008	0.008
413	05/08/2017	16:47:26	0.008	0.008	0.008	0.008	0.008
414	05/08/2017	16:48:26	0.007	0.007	0.007	0.008	0.008
415	05/08/2017	16:49:26	0.007	0.007	0.007	0.008	0.008
416	05/08/2017	16:50:26	0.008	0.008	0.008	0.008	0.008
417	05/08/2017	16:51:26	0.008	0.008	0.008	0.008	0.008
418	05/08/2017	16:52:26	0.008	0.008	0.008	0.008	0.008
419	05/08/2017	16:53:26	0.008	0.008	0.008	0.008	0.008
420	05/08/2017	16:54:26	0.008	0.008	0.008	0.008	0.008
421	05/08/2017	16:55:26	0.007	0.007	0.007	0.007	0.007
422	05/08/2017	16:56:26	0.007	0.008	0.008	0.008	0.008
423	05/08/2017	16:57:26	0.008	0.008	0.008	0.008	0.008
424	05/08/2017	16:58:26	0.007	0.007	0.007	0.008	0.008
425	05/08/2017	16:59:26	0.007	0.007	0.007	0.007	0.007
426	05/08/2017	17:00:26	0.007	0.007	0.007	0.007	0.007
427	05/08/2017	17:01:26	0.007	0.007	0.007	0.007	0.007
428	05/08/2017	17:02:26	0.007	0.007	0.007	0.007	0.007
429	05/08/2017	17:03:26	0.007	0.007	0.007	0.008	0.008
430	05/08/2017	17:04:26	0.007	0.007	0.007	0.007	0.007
431	05/08/2017	17:05:26	0.007	0.007	0.007	0.007	0.007
432	05/08/2017	17:06:26	0.007	0.007	0.007	0.008	0.008
433	05/08/2017	17:07:26	0.007	0.007	0.007	0.007	0.007

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
434	05/08/2017	17:08:26	0.007	0.007	0.007	0.007	0.007
435	05/08/2017	17:09:26	0.007	0.007	0.007	0.008	0.008
436	05/08/2017	17:10:26	0.007	0.007	0.007	0.008	0.008
437	05/08/2017	17:11:26	0.007	0.007	0.007	0.007	0.007
438	05/08/2017	17:12:26	0.007	0.007	0.007	0.007	0.007
439	05/08/2017	17:13:26	0.007	0.007	0.007	0.007	0.007
440	05/08/2017	17:14:26	0.007	0.007	0.007	0.007	0.007
441	05/08/2017	17:15:26	0.007	0.007	0.007	0.007	0.008
442	05/08/2017	17:16:26	0.007	0.007	0.007	0.007	0.007
443	05/08/2017	17:17:26	0.007	0.007	0.007	0.007	0.007
444	05/08/2017	17:18:26	0.007	0.007	0.007	0.007	0.008
445	05/08/2017	17:19:26	0.007	0.007	0.007	0.007	0.007
446	05/08/2017	17:20:26	0.007	0.007	0.007	0.007	0.007
447	05/08/2017	17:21:26	0.007	0.007	0.007	0.007	0.008
448	05/08/2017	17:22:26	0.007	0.007	0.007	0.007	0.007
449	05/08/2017	17:23:26	0.007	0.007	0.007	0.007	0.007
450	05/08/2017	17:24:26	0.007	0.007	0.007	0.007	0.007
451	05/08/2017	17:25:26	0.007	0.007	0.007	0.007	0.007
452	05/08/2017	17:26:26	0.007	0.007	0.007	0.008	0.008
453	05/08/2017	17:27:26	0.007	0.007	0.007	0.007	0.007
454	05/08/2017	17:28:26	0.007	0.007	0.007	0.007	0.007
455	05/08/2017	17:29:26	0.007	0.007	0.007	0.007	0.007
456	05/08/2017	17:30:26	0.007	0.007	0.007	0.007	0.007
457	05/08/2017	17:31:26	0.007	0.007	0.007	0.007	0.007
458	05/08/2017	17:32:26	0.007	0.007	0.007	0.008	0.008
459	05/08/2017	17:33:26	0.007	0.007	0.007	0.007	0.007
460	05/08/2017	17:34:26	0.007	0.007	0.007	0.007	0.007
461	05/08/2017	17:35:26	0.007	0.007	0.007	0.007	0.007
462	05/08/2017	17:36:26	0.007	0.007	0.007	0.007	0.007
463	05/08/2017	17:37:26	0.007	0.007	0.007	0.007	0.008
464	05/08/2017	17:38:26	0.007	0.007	0.007	0.007	0.007
465	05/08/2017	17:39:26	0.007	0.007	0.007	0.007	0.007
466	05/08/2017	17:40:26	0.007	0.007	0.007	0.007	0.007
467	05/08/2017	17:41:26	0.007	0.007	0.007	0.007	0.007
468	05/08/2017	17:42:26	0.007	0.007	0.007	0.007	0.007
469	05/08/2017	17:43:26	0.007	0.007	0.007	0.007	0.007
470	05/08/2017	17:44:26	0.007	0.007	0.007	0.007	0.007
471	05/08/2017	17:45:26	0.007	0.007	0.007	0.007	0.007
472	05/08/2017	17:46:26	0.007	0.007	0.007	0.007	0.007
473	05/08/2017	17:47:26	0.007	0.007	0.007	0.007	0.007
474	05/08/2017	17:48:26	0.007	0.007	0.007	0.007	0.007
475	05/08/2017	17:49:26	0.007	0.007	0.007	0.007	0.007
476	05/08/2017	17:50:26	0.007	0.007	0.007	0.007	0.008
477	05/08/2017	17:51:26	0.007	0.007	0.007	0.007	0.007
478	05/08/2017	17:52:26	0.007	0.007	0.007	0.008	0.008
479	05/08/2017	17:53:26	0.007	0.007	0.007	0.007	0.007

Test Data							
Data Point	Date	Time	PM1 mg/m <sup>3</sup>	PM2.5 mg/m <sup>3</sup>	RESP mg/m <sup>3</sup>	PM10 mg/m <sup>3</sup>	TOTAL mg/m <sup>3</sup>
480	05/08/2017	17:54:26	0.007	0.007	0.007	0.007	0.007
481	05/08/2017	17:55:26	0.007	0.007	0.007	0.007	0.007
482	05/08/2017	17:56:26	0.007	0.007	0.007	0.007	0.007
483	05/08/2017	17:57:26	0.007	0.007	0.007	0.007	0.007
484	05/08/2017	17:58:26	0.007	0.007	0.007	0.007	0.007
485	05/08/2017	17:59:26	0.007	0.007	0.007	0.007	0.007
486	05/08/2017	18:00:26	0.007	0.007	0.007	0.007	0.007
487	05/08/2017	18:01:26	0.007	0.007	0.007	0.007	0.007
488	05/08/2017	18:02:26	0.007	0.007	0.007	0.007	0.007
489	05/08/2017	18:03:26	0.007	0.007	0.007	0.007	0.007
490	05/08/2017	18:04:26	0.007	0.007	0.007	0.007	0.007
491	05/08/2017	18:05:26	0.007	0.007	0.007	0.007	0.007

## **Appendix C**

### **Analytical Laboratory Results**



Analytics Corporation  
10329 Stony Run Lane  
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Phone: (804) 365-3000 Fax: (804) 365-3002  
AIHA Accreditation # 176, ID 100531

May 17, 2017

H.BRODY  
E A ENGINEERING, SCIENCE & TECH  
225 SCHILLING CIRCLE, SUITE 400  
SPARKS, MD 21031

**Laboratory Workorder ID: V131006**

Client Project ID: HOWARD COUNTY CHASE

Received: May 11, 2017

Reported: May 17, 2017

Attached are the results we obtained on the analysis of your samples submitted to Analytics. Any Chains-of-Custody associated by this sample group are enclosed. Air concentrations are calculated as a convenience to the client and the overall accuracy of this result depends on both the accuracy of the air volume and the amount found by analysis. Theoretical air volumes for passive monitors are calculated using the sampling time submitted and the manufacture's listed sampling rate for each compound. Results provided in this report relate only to the items tested.

For blanks and non-detects the results indicated with a '<' value represents the reporting limit for the analysis. Unless otherwise noted results are not corrected for blank values.

Unless the signature of the appropriate manager(s) appears on this report, this report should be considered PRELIMINARY and is subject to change.

We appreciate your confidence in allowing Analytics to be your testing laboratory. Any questions regarding this report can be addressed by calling our customer services department at (800) 888-8061.

A handwritten signature in black ink that reads "Andrew L. Teague". The signature is written in a cursive, flowing style.

---

Andrew L. Teague, CIH  
Technical Director

Enclosures



## Final Report

### Work Order V131006

E A ENGINEERING, SCIENCE & TECH  
225 SCHILLING CIRCLE, SUITE 400  
SPARKS, MD 21031

Customer: 19814595  
Attention: H.BRODY  
PO Number H.BRODY

Date Received: 05/11/17  
Client Project ID HOWARD COUNTY CHASE

Lab ID: V131006001 Sample ID: CL-1 0758-1559 Media: C-70 Resp. PPI/PWPVC Sample Date: 5/8/2017 Sampling Time:

Analyte	Method	Analysis Date	Volume	Reporting Limit	Front	Rear	Total	Concentration
Respirable Dust	NIOSH 0600	05/11/17	962 L	.05 mg			< 0.05 mg	< 0.052 mg/M3
Cristobalite, Respirable	NIOSH 7500M	05/17/17	962 L	5.0 ug			< 5 ug	< 5.2 ug/M3
Quartz, Respirable	NIOSH 7500M	05/17/17	962 L	5.0 ug			< 5 ug	< 5.2 ug/M3
Respirable Crystalline Silica	NIOSH 7500M	05/17/17	962 L	10.0 ug			< 10 ug	< 10.4 ug/M3

Lab ID: V131006002 Sample ID: CL-2 0827-1627 Media: C-70 Resp. PPI/PWPVC Sample Date: 5/8/2017 Sampling Time:

Analyte	Method	Analysis Date	Volume	Reporting Limit	Front	Rear	Total	Concentration
Respirable Dust	NIOSH 0600	05/11/17	960 L	.05 mg			< 0.05 mg	< 0.052 mg/M3
Cristobalite, Respirable	NIOSH 7500M	05/17/17	960 L	5.0 ug			< 5 ug	< 5.2 ug/M3
Quartz, Respirable	NIOSH 7500M	05/17/17	960 L	5.0 ug			< 5 ug	< 5.2 ug/M3
Respirable Crystalline Silica	NIOSH 7500M	05/17/17	960 L	10.0 ug			< 10 ug	< 10.4 ug/M3

Lab ID: V131006003 Sample ID: CL-3 0907-1705 Media: C-70 Resp. PPI/PWPVC Sample Date: 5/8/2017 Sampling Time:

Analyte	Method	Analysis Date	Volume	Reporting Limit	Front	Rear	Total	Concentration
Respirable Dust	NIOSH 0600	05/11/17	956 L	.05 mg			< 0.05 mg	< 0.052 mg/M3
Cristobalite, Respirable	NIOSH 7500M	05/17/17	956 L	5.0 ug			< 5 ug	< 5.2 ug/M3



**Final Report**

**Work Order V131006**

<b>Lab ID:</b> V131006003	<b>Sample ID:</b> CL-3 0907-1705	<b>Media:</b> C-70 Resp. PPI/PWPVC	<b>Sample Date:</b> 5/8/2017	<b>Sampling Time:</b>
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Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
Quartz, Respirable	NIOSH 7500M	05/17/17	956	L	5.0 ug			< 5 ug	< 5.2 ug/M3
Respirable Crystalline Silica	NIOSH 7500M	05/17/17	956	L	10.0 ug			< 10 ug	< 10.5 ug/M3

<b>Lab ID:</b> V131006004	<b>Sample ID:</b> CL-4 1005-1810	<b>Media:</b> C-70 Resp. PPI/PWPVC	<b>Sample Date:</b> 5/8/2017	<b>Sampling Time:</b>
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Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
Respirable Dust	NIOSH 0600	05/11/17	970	L	.05 mg			< 0.05 mg	< 0.052 mg/M3
Cristobalite, Respirable	NIOSH 7500M	05/17/17	970	L	5.0 ug			< 5 ug	< 5.2 ug/M3
Quartz, Respirable	NIOSH 7500M	05/17/17	970	L	5.0 ug			< 5 ug	< 5.2 ug/M3
Respirable Crystalline Silica	NIOSH 7500M	05/17/17	970	L	10.0 ug			< 10 ug	< 10.3 ug/M3

<b>Lab ID:</b> V131006005	<b>Sample ID:</b> BLANK 1-031617-12	<b>Media:</b> C-70 Resp. PPI/PWPVC	<b>Sample Date:</b> 5/8/2017	<b>Sampling Time:</b>
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Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
Respirable Dust	NIOSH 0600	05/11/17	0	L	.05 mg			< 0.05 mg	--
Cristobalite, Respirable	NIOSH 7500M	05/17/17	0	L	5.0 ug			< 5 ug	--
Quartz, Respirable	NIOSH 7500M	05/17/17	0	L	5.0 ug			< 5 ug	--
Respirable Crystalline Silica	NIOSH 7500M	05/17/17	0	L	10.0 ug			< 10 ug	--



Analytics Corporation  
10329 Stony Run Lane  
Ashland, Va 23005  
Phone: (804) 365-3000 Fax: (804) 365-3002  
AIHA Accreditation # 176, ID 100531

## Final Report

### Work Order V131006

Lab ID: V131006006	Sample ID: BLANK 2-031617-11	Media: C-70 Resp. PPI/PWPVC	Sample Date: 5/8/2017	Sampling Time:
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Analyte	Method	Analysis Date	Volume	Reporting Limit	Front	Rear	Total	Concentration
Respirable Dust	NIOSH 0600	05/11/17	0 L	.05 mg			< 0.05 mg	--
Cristobalite, Respirable	NIOSH 7500M	05/17/17	0 L	5.0 ug			< 5 ug	--
Quartz, Respirable	NIOSH 7500M	05/17/17	0 L	5.0 ug			< 5 ug	--
Respirable Crystalline Silica	NIOSH 7500M	05/17/17	0 L	10.0 ug			< 10 ug	--

Presence of Tridymite checked on samples analyzed for silica & reported if found. NIOSH 7500 Sampling and Analytical Error value: 0.15





Analytics Corporation  
10329 Stony Run Lane  
Ashland, Va 23005  
Phone: (804) 365-3000 Fax: (804) 365-3002  
AIHA Accreditation # 176, ID 100531

## Final Report

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### Work Order V131006

#### General Laboratory Comments

Abbreviations:

ug = micrograms; mg=milligrams; g = grams, ppm=parts per million (volume), ppb = parts per billion (volume), mg/M3=milligrams per cubic meter of air, ug/M3=micrograms per cubic meter of air; Min=minutes, Qual=Qualifiers

# LABORATORY TEST REQUEST

E A ENGINEERING SCIENCE & TECH  
ACCOUNT NUMBER, NAME AND ADDRESS

225 SCHILLING CIRCLE, SUITE 400  
SPARKS, MD 21031  
Phone: 443-466-8836  
Fax:  
PROJ#: 19814595



10329 St  
Ashlan  
(804)  
TOLL FREE  
FAX (8



DATE SHIPPED	# OF SAMPLES <b>6</b>	SAMPLE TYPE/MEDIA <b>SKC PPE IMPACT</b>	PROJECT NAME OR NUMBER <b>Howard County Chase Lands</b>	
PURCHASE ORDER NO.		CONTACT <b>H Brody</b>	TELEPHONE NUMBER	
TURN AROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 1 DAY <input type="checkbox"/> CALL FOR AVAILABILITY		SPECIAL INSTRUCTIONS AND/OR UNUSUAL CONDITIONS: <b>TIME ON/OFF Below Sample # SAMPLES RUN AT 2 LPM</b>		<input type="checkbox"/> FAX RESULTS FAX NUMBER: ( ) <input type="checkbox"/> EMAIL RESULTS - EMAIL:
FOR LABORATORY USE ONLY	SAMPLE # OR SAMPLE AREA	SAMPLE DATE	SAMPLE VOLUME/LITERS	ANALYSIS REQUESTED-PLEASE USE SEPARATE LABORATORY TEST REQUEST FOR EACH SAMPLE TYPE
	<b>CL-1</b> <b>CL-1</b> 0758-1559	<b>5/8/17</b>	<b>962</b> Liters	<b>Respirable DUST &amp; Silica</b> (NIOSH METHODS 0600 & 7500)
	<b>CL-2</b> <b>CL-2</b> 0827-1627	↓	<b>960</b> Liters	↓
	<b>CL-3</b> <b>CL-3</b> 0907-1705		<b>956</b> Liters	
	<b>CL-4</b> <b>CL-4</b> 1005-1810		<b>970</b> Liters	
	<b>031617-12</b> <b>BLANK-1</b>		—	
	<b>031617-11</b> <b>BLANK-2</b>		—	
	<del>BLANK</del>			
	<b>1</b>			

## CHAIN OF CUSTODY RECORD

SAMPLES HAVE BEEN SEALED FOR TRANSPORT AND DELIVERED TO LABORATORY VIA:

**FED Ex**  
CARRIER

IF "ANALYTICS COURIER" SIGN HERE

SIGN HERE TO INITIATE CHAIN OF CUSTODY

**5/10/17**  
DATE

DATE/TIME	CONDITION OF SAMPLE	SAMPLES RECEIVED BY:	SAMPLES RELEASED BY:
<b>05/11/17</b> <b>0943</b>	<b>INT</b>	SIGNATURE(SAMPLE RECEIVING) <b>C Catfan</b>	SIGNATURE(SAMPLE RECEIVING)
		SIGNATURE(SAMPLE ADMINISTRATION)	SIGNATURE(SAMPLE ADMINISTRATION)
		SIGNATURE(LAB)	SIGNATURE(LAB)
		SIGNATURE(LAB)	SIGNATURE(LAB)

PLEASE RETAIN PART 3 FOR YOUR RECORDS

FOLEY COMPANY - P.O. BOX 442, RICHMOND, VA 23248 804-649-9038

Dedicated to a Cleaner  
Environment Since 1982



E.P.A. LAB ID # DE 004

**BATTA LABORATORIES, LLC**

A Certified MBE Company

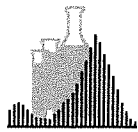
Delaware Industrial Park, 6 Garfield Way,  
Newark, DE 19713-5817  
Tel. (302) 737-3376 Fax (302) 737-5764



A.I.H.A. /NLLAP  
#100448  
PCM and Lead



NVLAP  
#101032  
PLM and TEM



NYELAP #11993  
PCM, PLM and Lead

Web : <http://www.battaenv.com> E-mail : [battaenv@battaenv.com](mailto:battaenv@battaenv.com)

**CERTIFICATE OF PCM ANALYSIS**

Page 1 of 2

Test Method: NIOSH 7400, Issue 2: 15 August 1994

Report Date: 5/15/2017

**Sampling Data**

BLI Project#: L446705  
Project Name: EA ENGINEERING-WI-1483547.0002

Date Sampled: N/A  
Sampled By: CLIENT  
Date Analyzed: 5/14/17


**Analytical Parameters**

Effective Filter Area (mm<sup>2</sup>): 385

Graticule Field Area(mm<sup>2</sup>): 0.00785

Lab Sample #	Client Sample #	Sample Location	Sample Type	Sample Volume(L)	Fields	Fibers	Detection Limit(F/cc)	Results	
								F/mm <sup>2</sup>	F/cc
925938	CL-1	HOWARD CO CHASELANDS 1	N/A	2400	100	21.5	0.001	27.4	0.004
925939	CL-2	HOWARD CO CHASELANDS 2	N/A	2405	100	18	0.001	22.9	0.004
925940	CL-3	HOWARD CO CHASELANDS 3	N/A	2420	100	<5.5	0.001	<7.0	<0.001
925941	CL-4	HOWARD CO CHASELANDS 4	N/A	2430	100	14.5	0.001	18.5	0.003
925942	CL-5	BLANK	N/A	0	100	<5.5	N/A	<7.0	N/A

**ANALYST:** C. LITTLE

**REVIEWED BY:**   
N.C. Batta / R. Shumate  
(QA/QC Officer)

- \* Results pertain only to the items tested.
- \* This report does not constitute endorsement by AIHA and/or any other U.S. government agencies.
- \* Named analyst may not be sole analyst. Refer to Chain of Custody for additional analysts.
- \* Sample volumes are calculated from data supplied by the client. Batta Laboratories, Inc. does not accept liability for results expressed in fibers per cubic centimeter. Furthermore, Batta Laboratories assumes no responsibility for the accuracy of results reflected by the use of improper collection techniques or equipment.
- \* Current YTD Sr value is 0.40 for intralaboratory and 0.33 for interlaboratory. This value may change slightly over ti
- \* Sample results listed above are not blank-corrected. NIOSH 7400 requires submission of blanks (minimum 2 or 10%) with samples. Batta assumes no responsibility for collection inconsistent with the method.
- \* MU Values based on inter-lab data: 5-20 f/100 fields: (LCL: 13.6, UCL: 16.9), 20.5-50 f/100 fields: (LCL: 39.9, UCL 46.1), >50 f/100 fields: (LCL: 137.8, UCL: 176.0)

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Environment Since 1982



E.P.A. LAB ID # DE 004

**BATTA LABORATORIES, LLC**

A Certified MBE Company

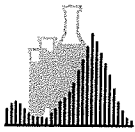
Delaware Industrial Park, 6 Garfield Way,  
Newark, DE 19713-5817  
Tel. (302) 737-3376 Fax (302) 737-5764



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NVLAP  
#101032  
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NYELAP #11993  
PCM, PLM and Lead

Web : <http://www.battaenv.com> E-mail : [battaenv@battaenv.com](mailto:battaenv@battaenv.com)

**CERTIFICATE OF PCM ANALYSIS**

Page 2 of 2

Test Method: NIOSH 7400, Issue 2: 15 August 1994

Report Date: 5/15/2017

**Sampling Data**

BLI Project#: L446705  
Project Name: EA ENGINEERING-WI-1483547.0002

Date Sampled: N/A  
Sampled By: CLIENT  
Date Analyzed: 5/14/17


**Analytical Parameters**

Effective Filter Area ( mm<sup>2</sup> ): 385

Graticule Field Area( mm<sup>2</sup> ): 0.00785

Lab Sample #	Client Sample #	Sample Location	Sample Type	Sample Volume(L)	Fields	Fibers	Detection Limit(F/cc)	Results	
								F/mm <sup>2</sup>	F/cc
925943	CL-6	BLANK 2	N/A	0	100	<5.5	N/A	<7.0	N/A

**ANALYST:** C. LITTLE

**REVIEWED BY:**   
N.C. Batta / R. Shumate  
(QA/QC Officer)

- \* Results pertain only to the items tested.
- \* This report does not constitute endorsement by AIHA and/or any other U.S. government agencies.
- \* Named analyst may not be sole analyst. Refer to Chain of Custody for additional analysts.
- \* Sample volumes are calculated from data supplied by the client. Batta Laboratories, Inc. does not accept liability for results expressed in fibers per cubic centimeter. Furthermore, Batta Laboratories assumes no responsibility for the accuracy of results reflected by the use of improper collection techniques or equipment.
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# CHAIN OF CUSTODY

Page of  
 NVLAP # 101032  
 AIHA LAP, LLC # 100448  
 NY ELAP # 11993  
 EPA Lab #: DE004



Delaware Industrial Park  
 6 Garfield Way, Newark, DE 19713-5817  
 Tel: (302) 737-3376 Fax: (302) 737-5764  
 E-mail: [battaenv@battaenv.com](mailto:battaenv@battaenv.com)  
 Web: <http://www.battaenv.com>

Dedicated to a Cleaner Environment Since 1982

**Customer Billing Information** Tel: 302-650-0442  
 Customer Name: Chartered Airco / EA Picked up by BLI  
 Billing Address 1: 225 Schville Circle Delivered by Customer  
 Billing Address 2: Suite 400 Hunt Valley, MD 21031 Shipped by Customer  
 Send Results To: [sample@eaest.com](mailto:sample@eaest.com) Project Name: H2O Chesapeake  
 E-mail: Project Location: Jessup, M.D.

**Shipping Information**  
 Asbestos:  Immediate \*  24 Hrs  72 Hrs  5 Days  
 Lead & Metals:  Rush/24 Hrs  48 Hrs  72 Hrs  5-7 Days

Turn Around Time (TAT)  
 Other TAT Request:

Lab Project #: 14467  
 Client Project #: 143547  
 0202

BLI Use Only	Sample ID #	Sample Location/Description	Sample Date/Time	Start Time	Stop Time	Flow Rate	Volume/Area	Sample Type	Test Method	Results	Date of Analysis	Analyst
	939	Howard Chesapeake I	07510 PM	0829	0830	5 L/min	2405 L	PCM	215/100	0.004		
	940	" 2	0829	0830			2420	PCM	18/100	0.004		
	941	* Filter Blank	0906	0530			2430	PCM	45/100	<0.001		
	942	Blank	1004	0630					145/100	0.1003		
	943	Blank 2							0.5/100	N/A		
									0.5/100	N/A		

Sample Relinquished by: Chartered Airco Date: 5-9-2017 Time: 4:00  
 Sample Received by: [Signature] Date: 5/11/17 Time: 0830  
 Sample Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Sample Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**Customer Special Request/Comments (if applicable):**  
 Email to sample@eaest.com only. For possible TEM REANALYSIS. HOWD

Note to Customers: BLI requests customers submit field blanks with their industrial hygiene and environmental lead samples.

BLI Use Only  
 Logged in by: [Signature] Date of Login: 5/11/17 Time: 0900

Lab Note:  
 Lab will follow the analytical method to determine the number of layers of a submitted sample if not all clearly identified by the client on the COC. The friability if not specified on the COC but required by the method will be determined in the laboratory condition only.

For water samples only: samples must be shipped on ice, and received by the laboratory within 48 hrs of collection. For NY samples by NIOSH 7400 & 7402: at least two field blanks must be submitted and analyzed by NY ELAP rules.