

***Report on Quarterly Air Monitoring,
Area IV, Second Quarter 2025***

***Santa Susana Field Laboratory
Ventura County, California***



***Prepared for:
United States
Department of Energy***

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**REPORT ON QUARTERLY AIR MONITORING, AREA IV, SECOND QUARTER 2025,
SANTA SUSANA FIELD LABORATORY, VENTURA COUNTY, CA**

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EXECUTIVE SUMMARY

This report summarizes the United States Department of Energy (DOE) air monitoring activities conducted during the second quarter of 2025 (Q2/2025), which is the twenty-ninth quarter (Q29) of the monitoring period (April 1, 2025, to June 30, 2025) at Area IV within the Santa Susana Field Laboratory (SSFL), located in Ventura County, California. The area specifically discussed within this report is the DOE portion, Area IV of SSFL, known as the Energy Technology Engineering Center (ETEC). The program is continuing for an eighth year, which consists of 2025, reporting periods Q28 through Q31.

This quarterly report has been developed by North Wind Portage, Inc., on behalf of DOE in cooperation with The Boeing Company (Boeing) and the National Aeronautics and Space Administration (NASA), as part of the Baseline Air Monitoring Program.

In accordance with the *Final Baseline Air Monitoring Work Plan, Santa Susana Field Laboratory, Ventura County, California* (NASA 2017), the responsible parties are monitoring for particulate matter between 2.5 and 10 microns in aerodynamic diameter (PM₁₀), volatile organic compounds (VOCs), and radionuclides at air monitoring stations DOE-1, DOE-2, DOE-3, and DOE-4 encompassing the ETEC, Area IV portion of SSFL. Having developed the baseline levels for PM₁₀, VOCs, and radionuclides helps distinguish between levels that naturally occur or were previously present at the ETEC site and if onsite remediation activities produce elevated results. Air monitoring will be continued throughout remediation activities to be able to compare results from onsite remediation activities to baseline data in the Annual Air Monitoring Reports.

The following air monitoring activities conducted during Q2/2025, by DOE within Area IV are summarized in this report:

- Collected meteorological data from one location (DOE-4);
- Collected PM₁₀ data from four locations (DOE-1 through DOE-4);
- Collected air samples from four locations (DOE-1 through DOE-4) for VOC laboratory analysis; and
- Collected radionuclide samples for laboratory analysis from four locations (DOE-1 through DOE-4).

PM₁₀ data, meteorological data, and radionuclide data all met the data completeness goal of 80%, and VOC data met the completeness goal of 85% for Q2/2025. The Q3/2025 monitoring period of the Air Monitoring Program is to begin July 1, 2025.

The following site activities were conducted during Q2/2025 by DOE within Area IV:

- Quarterly site-wide groundwater level monitoring;
- CDM Smith conducted groundwater sampling activities at the Former Sodium Disposal Facility as a part of groundwater interim measures; and
- Surveillance and maintenance.

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
μCi	microcurie(s)
μg/m ³	microgram(s) per cubic meter
Boeing	The Boeing Company
CAAQS	California Ambient Air Quality Standards
CFR	Code of Federal Regulations
DASC	Data Assessment Statistical Calculator
DOE	U.S. Department of Energy
DTSC	State of California Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
ETEC	Energy Technology Engineering Center
GC	gas chromatography
Hg	mercury
HHRA	Human Health Risk Assessment
m	meter(s)
m/sec	meter(s) per second
mb	millibar(s)
MDC	minimum detectable concentration
mL	milliliter(s)
mph	miles per hour
MS	mass spectrometry
MDL	method detection limit
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NIST	National Institute of Standards and Technology
pCi	picocurie(s)
PM ₁₀	particulate matter less than 10 microns in aerodynamic diameter
Q29	twenty-ninth quarter
QA	quality assurance
QC	quality control
RAWS	Remote Automatic Weather Stations
RPD	relative percent difference
RSL	regional screening level
SDG	sample delivery group
SSFL	Santa Susana Field Laboratory
VOC	volatile organic compound

1. INTRODUCTION

National Aeronautics and Space Administration (NASA), The Boeing Company (Boeing), and the U.S. Department of Energy (DOE), also known as the responsible parties, are performing air monitoring at the Santa Susana Field Laboratory (SSFL) site located in Ventura County, California. The SSFL was a business segment of Boeing. SSFL includes 2,849 acres located atop a range of hills between the Simi and San Fernando valleys, north of Los Angeles. The westernmost 290 acres of the SSFL, known as Area IV, contains both DOE and Boeing former facilities. The DOE portion is mainly contained within the 90 acres known as the Energy Technology Engineering Center (ETEC).

When opened in the late 1950s, ETEC was ideally remote from population centers to enable development of security-sensitive projects. These projects supported research for DOE and its predecessor agencies for nuclear research and energy development. Area IV included buildings that house test apparatus for large-scale heat transfer and fluid mechanics experiments, mechanical and chemical test facilities, office buildings, and auxiliary facilities.

Air monitoring is being conducted in accordance with the *Final Baseline Air Monitoring Work Plan, Santa Susana Field Laboratory, Ventura County, California* (NASA 2017), which was submitted to the State of California Department of Toxic Substances Control (DTSC) on September 21, 2017. DTSC approved the Work Plan. Final locations of the air monitoring locations were approved by DTSC on January 30, 2018 (DTSC 2018).

The objective of the Air Monitoring Program is to evaluate project conditions and provide a basis for determining the magnitude of deviation from those baseline conditions that may result from onsite remediation activities at SSFL. Responsible parties are monitoring for particulate matter between 2.5 and 10 microns in aerodynamic diameter (PM₁₀), and/or volatile organic compounds (VOCs), at 16 locations at SSFL. Data were collected for four perimeter samplers (DOE-1 through DOE-4) and analyzed for gross alpha and gross beta. Individual radionuclide concentrations were determined by analysis at an offsite laboratory for these same four locations. Meteorological data are also collected as a part of the Air Monitoring Program.

Figure 1 shows the air monitoring locations for the Air Monitoring Program. These locations were selected based on the areas to be remediated, with consideration of winds in the area, topographic features, and accessibility. The air monitoring sites were also selected based on guidance obtained from the U.S. Environmental Protection Agency's (EPA's) *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, Ambient Air Monitoring Program* (EPA 2017) and *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA 2000). Sites were evaluated per 40 Code of Federal Regulations (CFR) 58, Appendix C – Ambient Air Quality Monitoring Methodology. DOE is responsible in this report for DOE-1, DOE-2, DOE-3, and DOE-4 of the 16 monitoring locations, represented in Figure 1. VOCs, PM₁₀, and radionuclides are monitored at the four DOE monitoring locations, and meteorological conditions are monitored at the DOE-4 location. The DOE monitoring locations DOE-1 through DOE-4 are shown in Figure 2.

This report summarizes the results and quality assurance (QA) activities performed during the second quarter of 2025 (Q2/2025), which was from April 1, 2025, through June 30, 2025.

1.1 Regional Climate and Wind Direction

The climate in the SSFL area is characterized as “Mediterranean.” The mean temperature during the winter months is approximately 50 degrees Fahrenheit (°F), and the mean temperature in the summer months is approximately 70°F. Based on climate data from 2021 through 2024 from Weather Currents, average rainfall is on the order of 15.62 inches per year. The majority of the rainfall occurs between December and April, with January and February being the wettest months.

During Q2/2025, the Simi Valley received approximately 0.64 inches of rainfall.

The average hourly wind speed in Simi Valley varies significantly by season. The more turbulent part of the year lasts for 6 months, from November to April, with average western wind speeds of more than 7 miles per hour (mph). The calmer time of year lasts for 6 months, with northerly winds from May to October.

During the fall, winter, and spring, Santa Ana winds can blow from the north or northeast in excess of 35 mph.

2. SUMMARY

This report summarizes the air monitoring data collected during the Q2/2025 reporting period (April 1, 2025, through June 30, 2025).

Quality objectives and data completeness were met for all meteorological, PM₁₀, VOC, and radionuclide data for Q2/2025 of the Air Monitoring Program. Urban background data compared with air monitoring data indicate that the PM₁₀ concentrations measured at stations DOE-1, DOE-2, DOE-3, and DOE-4 during Q2/2025 are comparable to the PM₁₀ concentrations measured at stations characterizing urban background. Other sources that emit VOC characteristics are motor vehicle emissions, fossil fuel combustion, and wildfires. The results are reflected when considering SSFL site's urban background and relatively remote location from vehicle traffic. No PM₁₀ concentrations exceeded the California Ambient Air Quality Standard (CAAQS; 50 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]), and none of these values were above the National Ambient Air Quality Standard (NAAQS; 150 $\mu\text{g}/\text{m}^3$).

During Q2/2025 no downtime was observed for the units at DOE-1, DOE-2, DOE-3, and DOE-4.

During Q2/2025 five VOC analytes were detected above the EPA regional screening level (RSL) or the April 2025 DTSC Human Health Risk Assessment (HHRA) Note 3 Screening Levels. Benzene was detected at DOE-1, DOE-2, DOE-3, and DOE-4; ethyl acetate was detected at DOE-2 and DOE-3; chloroform was detected at DOE-2 and DOE-3; acrylonitrile was detected at DOE-2; and tetrachloroethene was detected at DOE-2. Benzene is a chemical used in a variety of industries and applications, such as gasoline, plastic manufacturing, adhesives, cleaning products, paint thinners, dyes, pesticides, pharmaceuticals, and printing inks. Ethyl acetate is a solvent used in a variety of industries and applications, such as adhesives, paint and coating products, pharmaceuticals, and printing inks. Chloroform is a chemical used as an industrial solvent in the production of pharmaceuticals, plastics, and textiles, as well as to make refrigerants and other chemicals. Acrylonitrile is a chemical used to produce plastics, synthetic rubbers, and acrylic fibers. Tetrachloroethene is a chemical widely used in dry cleaning, fabric finishing, metal degreasing, and other applications. By using the results from the baseline Air Monitoring Program, along with other site characterization information, analytes were selected for routine air monitoring during soil disturbances. Establishing sources for specific contaminants or performing source apportionment was not a requirement for identifying remedial air quality impacts, nor was it within the scope or data quality objectives of the Air Monitoring Program.

Data collected during Q2/2025 agree with data collected, analyzed, and reported by the State of California DTSC, Los Angeles County Emergency Response Organization, the DOE Emergency Response organization, or other Multi-Agency Task Forces. Air monitoring at Area IV of the SSFL is to be continued starting July 1, 2025, for Q3/2025 of the Air Monitoring Program.

Site activities during Q2/2025 included quarterly site-wide groundwater level monitoring, surveillance and maintenance, and groundwater sampling activities conducted by CDM Smith at the Former Sodium Disposal Facility as part of the groundwater interim measures.

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3. ANALYTICAL SAMPLING EVENTS

VOCs are collected according to the EPA Toxic Compendium Method TO-15, *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)* (EPA 1999). Twenty-four-hour time-integrated samples are collected into Summa canisters via a flow controller and sent to an offsite laboratory for analysis. VOCs are collected every other week. There were six VOC sampling events with six field duplicate samples collected during this reporting period.

During Q2/2025, radionuclide samples were collected at four perimeter sampler locations, DOE-1 through DOE-4. These samples were collected on glass fiber (Type A/E) filters that are changed twice a week. After a minimum 120-hour holding time to allow the decay of short-lived radon and thoron daughter products, the samples are simultaneously counted for gross alpha and beta activity with a low-background, thin-window, gas-flow, proportional counting system continually purged with P-10 argon/methane counting gas over a preset time interval. There were 104 airborne radioactivity filter samples collected in Q2/2025 — 26 each at DOE-1, DOE-2, DOE-3, and DOE-4. Following analysis for gross alpha and gross beta radiation, sample filters were combined to form one composite sample representative of each location. The four composite samples were then analyzed for individual radionuclides at an offsite laboratory.

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4. DATA

Sections 4.1 through 4.4 discuss Q2/2025 air monitoring data.

4.1 Meteorological Data

General Summary

Meteorological data, also called weather data, are being collected as part of the ETEC cleanup and restoration effort. This information, particularly the wind direction and wind speed, can be used to help understand how dust and other air pollutants from the site are carried by the wind to possibly affect nearby public and residential areas. This is especially important when the E-BAM particulate monitors at the site detect higher-than-normal amounts of dust in the air. Scientific computer models can be used with this weather data in association with the particulate monitoring data to describe the air quality for the communities near the ETEC site. However, before the weather data can be used with the computer models, it must first be quality tested for completeness and accuracy to ensure it meets acceptance criteria. A detailed description of the weather data collection and quality testing is provided in the following paragraphs.

Monitored meteorology parameters at the DOE-4 station included wind speed, wind direction, air temperature at 2 meters (m) and 10 m, relative humidity, precipitation, barometric pressure, and solar radiation. In addition, statistical parameters provided by the data logger included delta temperature (i.e., the 10-m temperature minus the 2-m temperature), maximum wind speed (i.e., wind gust), and standard deviation of wind direction. Observations were recorded at 15-minute intervals corresponding to minutes :00, :15, :30, and :45 each hour. There were 91 days in this reporting period (Q2/2025) from April 1, 2025, through June 30, 2025, with a total of 8,736 possible 15-minute observations. This is the second quarter of Year 8 of the baseline monitoring.

Data Validation and Statistics

Data validation screening was performed on the recorded meteorological observations pursuant to EPA's *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA 2000), Table 8-4 (Suggested Data Screening Criteria) and Table 8-3 (Suggested Quality Control Codes). Validation screening provided the basis for evaluating data completeness and for determining sensor performance and/or maintenance status. Validation was performed following each weekly data download. Data validation quality control codes applied to the meteorological observations are defined in Table 1.

Table 1. Data screening quality control codes for meteorological data.

Code	Meaning	Description (as used for ETEC meteorological data validation)
0	Valid	PASS – Observation is accurate within the performance limits of the instrument (i.e., value passes all data validation screening criteria).
3	Acceptable	PASS – Observation originally failed initial quality control (QC) check (see Code 6), but additional review using other independent data and meteorological judgment support final validity.
6	Failed initial QC check	FAIL – Observation did not pass data validation screening criteria.
7	Suspect	FAIL – Observation failed initial data validation QC check (see Code 6) and could not be verified through additional review using other independent data.
8	Invalid	FAIL – Observation judged to be inaccurate or in error, and the cause is known.
9	Missing	FAIL – Observation was not collected.

The validation screening involved comparing, on an individual parameter basis, the recorded values (i.e., observations) against the EPA screening criteria shown in Table 2. The data validation procedure involved an initial automated review to apply a first-level QC Code of 0 (valid), 6 (failed), or 9 (missing), as defined in Table 1. Observations initially flagged with a QC Code = 6 were then manually (i.e., second-level) reviewed by a project meteorologist. The procedure is outlined below:

- Values meeting all screening criteria for the respective meteorological parameter were automatically considered “valid” (QC Code = 0).
- Values not meeting a screening criterion were automatically flagged as “failed initial QC” (QC Code = 6). These values were subjected to second-level manual meteorological review using other available observations (e.g., 2-m vs. 10-m temperature at DOE-4 or from nearby Remote Automatic Weather Stations [RAWS] meteorological station CEEC1 in the Cheeseboro Canyon, California, area located 2.6 miles south of the DOE-4 site), and meteorological judgment:
 - Values confirmed by second-level review were deemed “acceptable” (final QC Code = 3).
 - Otherwise, the values were deemed “suspect” (final QC Code = 7).
- Observations known to be inaccurate (QC Code = 8).
- Missing observations were automatically flagged as “missing” (QC Code = 9).

Values that pass validation with a final QC Code of 0 or 3 are included in the data completeness statistics and the final validated meteorological data set. Values with a final QC Code of 7, 8, or 9 are excluded from the final dataset and counted against the data completeness percentage. Quarterly data statistics for the meteorological parameters are listed in Table 2 along with year-to-date and project-to-date results. Year-to-date and project-to-date percentages are calculated as total valid observations through the completed quarters for the year divided by the total possible observations through this same period.

The completeness goal for meteorological data is 80% on an annual basis. Data completeness statistics for all completed reporting quarters in Year 8 of the baseline monitoring are presented in Table 2. Data completeness to-date for Year 8 exceeds 80% for all meteorological parameters being monitored.

Wind Rose

The final validated 15-minute meteorological dataset was used to develop the wind rose for Q2/2025 as presented in Figure 3. A wind rose is a graphical representation of wind speed and direction distribution (or wind climatology) for the period of interest. The frequency of winds blowing from specific directions are shown as petals on the wind rose, with the frequency of wind speeds depicted by color bands. Calm winds are identified as being less than 0.5 meters per second (m/sec).

During Q2/2025, data capture for wind speed and direction at DOE-4 was 100%. The average and maximum wind speeds were 3.39 m/sec and 15.0 m/sec, respectively. The maximum recorded wind gust was 22.5 m/sec. The maximum wind speed is the highest 15-minute averaged observation within the current quarter whereas the maximum wind gust is the highest 1-second wind measurement. The predominant wind directions this quarter were from the east-southeast (ESE) and to a lesser extent from the northwest (NW).

Table 2. Data screening summary for monitored meteorological parameters.

Meteorological Parameter	Screening Criteria ⁽¹⁾ (for valid sensor responses)	Data Completeness Percent (%) ⁽²⁾		
		Q2/2025	Year 8 to Date	Project to Date
Wind Speed	between 0 and 25 m/sec	100	100	96.46
	> 0.1 m/sec variation over 3 hours			
	> 0.5 m/sec variation over 12 hours			
Wind Direction	between 0 and 360 degrees	100	100	97.01
	> 1 degree variation over 3 hours			
	> 10 degree variation over 12 hours			
Standard Deviation of Wind Direction	Inherits the completeness stats of Wind Direction	100	100	97.01
Temperature @ 10 m	≤ local record high (monthly basis)	100	100	97.01
	≥ local record low (monthly basis)			
	> 0.5°C variation over 12 hours			
Temperature @ 2 m	≤ local record high (monthly basis)	100	100	96.97
	≥ local record low (monthly basis)			
	> 0.5°C variation over 12 hours			
Delta Temperature	≤ 0.1°C during daytime	100	100	96.97
	≥ -0.1°C during nighttime			
	between -3.0 and 5.0°C			
Relative Humidity (and Dewpoint Temperature)	relative humidity between 0–100%	100	100	90.15
	dew point T ≤ ambient T			
	dew point T ≤ 5.0°C variation over 1 hour			
	dew point T > 0.5°C variation over 12 hours			
Precipitation	≤ 1 inch in 1 hour	100	100	97.00
	≤ 4 inches in 24 hours			
	≥ 2 inches in 3 months			
Barometric Pressure	between 871 and 982 mb (local) (i.e., between 940 and 1060 mb sea level)	100	100	97.01
	≤ 6 mb variation over 3 hours			
	> 0 at night			
Solar Radiation	≤ maximum possible for date, time, lat/long	100	100	96.98

(1) Screening criteria from EPA Meteorological Monitoring Guidance (EPA 2000), Table 8-4.

(2) Data Completeness % = [Observations Passing] / [Possible Observations].

- a. Missing or suspect observations count against data completeness statistics.
- b. Year Two is an abbreviated data collection year spanning the period Apr 15–Dec 31, 2019 (i.e., Quarters 5, 6, and 7). This was done to synchronize future data collection years with calendar years.
- c. Last column in this table represents the cumulative Completeness % for all completed quarterly reporting periods.

Note: The number of possible 15-minute observations in the completed reporting periods:

- Q01 = 8,736
- Q02 = 8,832
- Q03 = 8,832
- Q04 = 8,640
- Year One = 35,040
- Q05 = 8,736
- Q06 = 8,832
- Q07 = 7,488
- (only 3 quarters)
- Year Two = 25,056 (abbreviated)
- Q08 = 8,736
- Q09 = 8,736
- Q10 = 8,832
- Q11 = 8,832
- Year Three = 35,136
- Q12 = 8,640
- Q13 = 8,736
- Q14 = 8,832
- Q15 = 8,832
- Year Four = 35,040
- Q16 = 8,640
- Q17 = 8,736
- Q18 = 8,832
- Q19 = 8,832
- Year Five = 35,040
- Q20 = 8,640
- Q21 = 8,736
- Q22 = 8,832
- Q23 = 8,832
- Year Six = 35,040
- Q24 = 8,736
- Q25 = 8,736
- Q26 = 8,832
- Q27 = 8,832
- Year Seven = 35,136
- Q28 = 8,640
- Q29 = 8,736
- Year Eight = 17,376 (to date)
- Project = 252,864 (to-date)

4.2 PM₁₀ Data

PM₁₀ data, defined as coarse particles between 2.5 and 10 microns in aerodynamic diameter, are measured at the ETEC site. Sources of particulate matter can be naturally occurring or caused by human activity. The air monitoring conducted at ETEC is used to determine if any suspended particles are from activities conducted onsite or if they are consistent with surrounding air quality data. Some of the naturally occurring particles can originate from high winds, forest or grass fires, burning of fossil fuels in vehicles, or stirred-up road dust.

PM₁₀ data are collected with Met One E-BAM monitors at four monitoring locations. The Met One E-BAM uses the principle of beta attenuation to provide a determination of mass concentration. Twenty-four-hour concentrations are calculated from the hourly concentrations. There were 91 days in this reporting period.

- DOE-1 had valid readings all 91 days.
- DOE-2 had valid readings all 91 days.
- DOE-3 had valid readings all 91 days.
- DOE-4 had valid readings all 91 days.

DOE-1, DOE-2, DOE-3, and DOE-4 had data completeness of 100% for PM₁₀ in Q2/2025, for a total data completeness of 100%, exceeding the project goal of 80% completeness for total samples collected during Q2/2025 (see Table 3). The cumulative total project data completeness has been calculated as 93% from April 2018 through June 2025. The complete table of daily averages for Q2/2025 is presented in Appendix A. During Q2/2025 no downtime was observed for the units at DOE-1, DOE-2, DOE-3, or DOE-4.

The nearby State and Local Air Monitoring Stations (SLAMS), Simi Valley – Cochran Street – PM₁₀ Daily Averages, from 08/01/2024 to 05/31/2025 are presented in Appendix A (2025). At the time of writing this report, the data posted are the most current available. Please note, per the EPA website, the EPA data are updated twice per year: once in June to capture the complete data for the prior year, and once in December to capture the data for the summer (ozone season).

Table 3. PM₁₀ data completeness for April 1, 2025, to June 30, 2025.

Location	Valid Readings (Days)	Possible Readings (Days)	Data Completeness (Percent)
DOE-1	91	91	100%
DOE-2	91	91	100%
DOE-3	91	91	100%
DOE-4	91	91	100%

Average Total Data Completeness 100%

The five highest PM₁₀ results identified for the reporting period are listed in Table 4 along with the CAAQS for PM₁₀. PM₁₀ concentrations were consistent with levels typically found in urban air. Of these top five results, four were recorded at DOE-1, and one at DOE-4. In total for Q2/2025, no values were above the CAAQS of 50 µg/m³ and none of the values were above the NAAQS of 150 µg/m³. Historically, a direct correlation between wildfires, high wind speeds, and higher PM₁₀ readings has been noticeable.

Table 4. Top five PM₁₀ 24-hour average concentration days for Q2/2025.

Date	Location	PM ₁₀ Value (µg/m ³)	CAAQS (µg/m ³)
6/9/2025	DOE-4	45.875	50
6/23/2025	DOE-1	37.916	50
4/14/2025	DOE-1	37.250	50
5/25/2025	DOE-1	36.291	50
5/12/2025	DOE-1	36.125	50

4.3 Volatile Organic Compound Data

VOCs are organic chemicals that have a high vapor pressure, which causes them to evaporate quickly and enter the surrounding air. VOCs can be naturally occurring or man-made. The VOC data collected can help distinguish between man-made detections from onsite activities or naturally existing organic chemicals. The VOC data collected are compared against screening levels. These screening levels are risk-based concentrations derived from standardized equations combining exposure information with toxicity data.

All four DOE locations were sampled during each of the six VOC sampling events this period. Data completeness goals for VOCs exceeded the project goal of 85% (see Table 5).

Table 5. Ambient air VOC data completeness.

Location	Valid Readings (Days)	Possible Readings (Days)	Data Completeness (Percent)
DOE-1	6	6	100%
DOE-2	6	6	100%
DOE-3	6	6	100%
DOE-4	6	6	100%

Average Total Data Completeness 100%

VOC detection results with associated screening levels are presented in Table B-1 (Appendix B), including comparison to the April 2025 DTSC HHRA Note 3 Screening Levels (DTSC 2025) or the EPA RSLs (EPA 2024).

- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m³ during the April 10, 2025, sampling at all four locations at concentrations of 0.34 J;J µg/m³, 0.31 J;J µg/m³, 0.63 J;J µg/m³, and 0.28 J;J µg/m³.
- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m³ during the April 23, 2025, sampling at all four locations at concentrations of 0.34 J;J µg/m³, 0.29 J;J µg/m³, 0.24 J;J µg/m³, and 0.25 J;J µg/m³. In addition, acrylonitrile was detected above the EPA RSL limit of 0.041 µg/m³ during the April 23, 2025, sampling at one location at a concentration of 2.3 ; µg/m³.
- There were no detections above the EPA RSL limits or the DTSC HHRA Note 3 level limits during the May 6, 2025, sampling.
- Ethyl acetate was detected above the EPA RSL limit of 73 µg/m³ during the May 21, 2025, sampling at one location at a concentration of 74 ; µg/m³.
- Chloroform was detected above the EPA RSL limit of 0.12 µg/m³ during the June 6, 2025, sampling at two locations both at a concentration of 0.14 J; µg/m³. In addition, tetrachloroethene was detected above the DTSC HHRA Note 3 level limit of 0.46 µg/m³ during the June 6, 2025, sampling at one location at a concentration of 0.52 J; µg/m³.

- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 $\mu\text{g}/\text{m}^3$ during the June 18, 2025, sampling at one location at a concentration of 0.56 $\mu\text{g}/\text{m}^3$. In addition, ethyl acetate was detected above the EPA RSL limit of 0.73 $\mu\text{g}/\text{m}^3$ during the June 18, 2025, sampling at one location at a concentration of 89 $\mu\text{g}/\text{m}^3$.

Two man-made VOC analytes, dichlorodifluoromethane (freon-12) and ethyl acetate, have been detected routinely at all four monitoring stations during all quarterly sampling events and in duplicate samples, indicating that these VOCs were not caused by the building demolition activities performed during June 2020 through February 2022. These analytes were also detected as estimated values at NASA stations but were not detected at Boeing stations. Based on laboratory QC data (method blanks, clean canister certifications), the sampling process and laboratory process are not the sources of the two analytes. The onsite source of the analytes is currently unknown.

Neither the establishment of sources for specific contaminants nor the performance of source apportionment was required for identifying remedial air quality impacts, nor was either within the scope or data quality objectives of the Air Monitoring Program.

4.4 Radionuclide Data

ETEC continuously monitors air at multiple locations for radioactive particles. This is performed for two reasons: (1) to determine the background airborne radioactivity concentration so that any possible releases from work activities can be detected, and (2) to detect any possible release from existing activities.

There were 104 airborne radioactivity filter samples collected in Q2/2025 — 26 each for DOE-1, DOE-2, DOE-3, and DOE-4. Each sample was collected on a glass-fiber filter (as discussed in Section 3) and was analyzed using a “low background” Protean radiation counter system onsite. These samples included background radioactive materials and the potential of Area IV-specific radioactive materials.

The alpha and beta data are presented in Table C-1 (Appendix C). The onsite analysis determined only “alpha” or “beta/gamma” and did not analyze for specific isotopes. Isotopic analysis was performed later by an offsite laboratory. Each sample produced a gross alpha and beta-gamma count. The analysis compared these values with the background radiation count rates, and using the volume of air collected determined the net counts and the minimum detectable concentration (MDC) for each sampling event. Some results in Table C-1 (Appendix C) are shown as negative values (because detector background is subtracted from the result).

While approximately 3% of the gross alpha results and approximately 78% of the gross beta-gamma results are above the MDC, none of these results are significant and all were well below the effluent limits specified in California regulations. This is because the “background” value is computed with a clean filter, not a filter exposed to background airborne concentrations. While a proportion of the beta results were detectable, the average results remained low. The elevated (but still low) results may be due to more airborne dust or smoke. Historically, there has been a noticeable direct correlation between high wind speeds and higher beta results.

Following collection and onsite analysis, the air filters were composited and analyzed for specific radionuclides by an offsite laboratory. The data are shown in Table C-2 (Appendix C). The laboratory analysis determined that most radioactive material present was natural in origin, consisting of

beryllium-7, polonium-210, potassium-40, combined radium-226 and radium-228, thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235/236, and uranium-238.

While artificial radionuclides (e.g., cesium-137, strontium-90, plutonium-239) were present in very small amounts, none of the results were above the MDC in Q2/2025. The presence of these radionuclides is considered a part of the normal variation of global fallout and resuspension activities.

A summary of the gross air sampling data is shown in Table 6.

Table 6. Gross alpha and beta-gamma average results for Q2/2025.

Location	Average alpha result (μCi/mL)	Average alpha MDC (μCi/mL)	Average beta result (μCi/mL)	Average beta MDC (μCi/mL)
DOE-1	1.74E-15	5.37E-15	5.63E-14	2.40E-14
DOE-2	1.31E-15	5.37E-15	3.96E-14	2.40E-14
DOE-3	1.49E-15	5.43E-15	3.97E-14	2.42E-14
DOE-4	1.59E-15	5.37E-15	4.95E-14	2.40E-14
Average	1.53E-15	5.38E-15	4.63E-14	2.40E-14

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5. QA/QC ACTIVITIES

The following QA/QC activities were conducted for the PM₁₀, VOC, radionuclide, and meteorological data collection and analysis.

5.1 Field QA/QC

5.1.1 PM₁₀

The 24-hour daily averages for Q2/2025 are presented in Appendix A along with the monthly minimum, maximum, and 95th percentile for each station location. In addition, the nearby SLAMS, Simi Valley – Cochran Street – PM₁₀ Daily Averages, from 08/01/2024 to 05/31/2025 along with the monthly average minimum, maximum, and 95th percentile for the Simi Valley – Cochran Street location, are presented in Appendix A (2025). Please note, only the Simi Valley PM₁₀ data from the SLAMS have been reported. The Simi Valley PM_{2.5} and the Reseda PM_{2.5} have not been reported here since this report discusses only PM₁₀ data, not PM_{2.5} data. In addition, per the EPA website, the EPA data are updated twice per year: once in June to capture the complete data for the prior year, and once in December to capture the data for the summer (ozone season). At the time of writing this report, the data posted are the most current available.

Flow Verifications

Functionality of the Met One E-BAM units is verified and recorded monthly during instrument audits; however, the instruments are also checked several times a week for operability. During the monthly audits, the Met One E-BAM temperature, pressure, and flow rate are verified against a National Institute of Standards and Technology (NIST) traceable flowmeter. The flow rate audit results are presented as bias percentages. The average quarterly bias for each DOE site (DOE-1, DOE-2, DOE-3, and DOE-4) is compared to the flow rate measurement quality objective of +/- 4%.

E-BAM units are occasionally swapped out for maintenance. When this occurs during a quarter, the reported quarterly bias percentage for the affected DOE site is based on the combined monthly audit results for the E-BAM units that operated at the site during that quarter. During Q2/2025, there were no E-BAM unit swap-outs. The Q2/2025 quarterly flow rate bias percentages at the four E-BAM sites ranged from -2.99 to -0.38%. These results were within the flow rate measurement quality objective of +/- 4%.

Complete audit reports and flow verification results for Q2/2025 are presented in Appendix D of this document. The flow rate verifications were based on 40 CFR 58, Appendix A, 3.3.1 and 4.2.2 through 4.2.3, along with the *Guideline on the Meaning and the Use of Precision and Bias Data Required by 40 CFR Part 58 Appendix A* (EPA 2007). The *Data Assessment Statistical Calculator* (DASC) tool, which is an EPA Excel-based software application, was used to perform the necessary statistical calculations based on the flowrate data collected during the monthly audits. Sections 2 and 2.5 of this EPA guidance document (EPA 2007) provide additional information and instruction for using the DASC tool.

5.1.2 VOCs

All data underwent at least two levels of QC review at the laboratory prior to transmission to North Wind. A minimum of 20% of the transmitted VOC results undergo Level IV data validation, annually. During this quarter, two of the six SDGs, P2501283 and P2501463, underwent Level IV data validation. The data validation ensures that the required analytical measurement quality objectives are met to ensure the data are of sufficient quality for their intended purpose.

Each location had valid readings on the six sample days for a sample completeness of 100%. Data completeness goals for VOCs exceeded the project goal of 85%.

5.1.3 Field Duplicates

Six field duplicates were collected during this reporting period. Six sampling events were conducted for the Q2/2025 effort. Forty-nine sample and duplicate analyte detections were within the quality objective of +/- 15% RPD. Nineteen sample and duplicate analyte detections exceeded the quality objective of +/- 15% RPD, but warrant no qualification since the parent and field duplicate results were either non-detect or <MDL. There were no other detections associated with the samples and associated duplicates collected during this reporting period. The following analytes in the field duplicate pairs exceeded the quality objective of +/- 15% relative percent difference (RPD):

- Carbon disulfide, ethyl acetate, benzene, and toluene in P2501868.
- Ethyl acetate in P2502067.
- Ethyl acetate and toluene in P2502219.

5.1.4 Canister Pressure

Vacuum in the canisters is measured before and after sampling with an analog pressure gauge to ensure proper function. Final canister vacuums ranged from -6.0 inches mercury (Hg) to -1.0 inches Hg during this reporting period.

5.1.5 Radiological

The detector for onsite gross alpha and beta sample analysis is calibrated annually by a third-party vendor using sources traceable to the NIST. The detector is checked by counting alpha- and beta-emitting sources at the site when received from the vendor following calibration. This establishes an acceptable performance range for daily source checks. On each day the detector is used, performance is determined with the site source. The detector may be used if the daily check is within the acceptable performance range.

Samples analyzed at the offsite laboratory are QC-checked at the laboratory. These QC checks include blanks, laboratory replicates, matrix spikes, and matrix spike duplicates. Barium, which behaves chemically similar to radium, is used as a carrier to determine the yield of the chemical extraction.

Since Q2/2021, 100% of the radiological analytical results have undergone Level IV, third-party data validation. The data validation ensures that the required analytical measurement quality objectives are met to ensure the data are of sufficient quality for their intended purpose.

5.1.6 Meteorological

During the reporting period, a weekly data validation screening and review was performed on the monitored meteorological parameters based on the EPA guidance document *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA 2000), Table 8-4 – Suggested Data Screening Criteria, as outlined in Section 4.1. The data validation procedure provided the basis for evaluating data completeness and for determining sensor performance and/or maintenance status.

5.1.7 Maintenance

Routine visual checks were performed on the meteorological station during weekly data downloading site visits. This included inspection of the meteorological tower sensors, E-BAM monitoring unit wind sensors, and solar-powered batteries to ensure proper functioning.

5.1.8 Corrective Action

Issues and corrective actions regarding the PM₁₀ monitors and the meteorological station are noted in Sections 5.1.8.1 and 5.1.8.2, respectively. Issues and corrective actions regarding the E-BAM monitors are noted in Section 4.2. No issues or corrective actions were noted regarding the remaining monitoring equipment or sampling events during this reporting period.

5.1.8.1 PM₁₀ Monitors

E-BAM units are occasionally swapped out for maintenance or repair. Refer to Section 4.2 for a detailed description of PM₁₀ air monitoring equipment issues.

5.1.8.2 Meteorological Station

This section covers data quality issues and associated corrective actions that occurred during the current monitoring quarter. The year-to-date annual data percentage completion goal of $\geq 80\%$ was met during Q2/2025 for all parameters. Quality issues this quarter included: (1) continued post-processing of the delta temperature data to correct a datalogger programming equation where the 10-m and 2-m temperature parameters are reversed; and (2) implementation of the recommended sensor maintenance schedule (shown in Table 7 for reference).

(1) Delta Temperature Calculation

- Data Quality Issue:
 - For meteorological monitoring, delta temperature should be defined as T at the higher level minus T at the lower level. The original datalogger was programmed to calculate this correctly. However, after the 2018 Woolsey Wildfire and replacement of the entire meteorological station, the replacement datalogger was improperly programmed to calculate the inverse of delta temperature. Consequently, delta temperature observations continue to be calculated by the datalogger with an opposite sign compared to the values from the original data logger.
- Corrective Action:
 - Datalogger Equation – Instead of reprogramming the datalogger to correctly calculate delta temperature, an adjustment multiplication factor of “-1” has been applied to the delta temperature values from the new data logger prior to performing the data validation.

Resolution – With application of the “-1” multiplication factor, delta temperature values in the validated project dataset accurately present delta temperature as:

$$\text{Delta Temperature} = [\text{Temperature @ 10 m}] \text{ minus } [\text{Temperature @ 2 m}]$$

(2) Recommended Maintenance Schedule:

Although not a corrective action, the manufacturer’s recommended maintenance frequency for meteorological sensors is presented below for information purposes. Proper and timely maintenance of the meteorological sensors is critical for ensuring that the data are not only valid (based on screening criteria) but also accurate. Schedules for maintenance and calibration are provided in the sensor user manuals and based on the in-service time of the sensor. Table 7 lists the recommended maintenance schedules for the Met One sensors installed at the DOE-4 meteorological station.

Table 7. Meteorological sensor recommended maintenance frequency (Met One).

Sensor	Frequency	Maintenance
WS	6–12 Month	Inspect for proper operation (manual check of pulses per revolution, bearing condition, anemometer cup condition, and bearing replacement if warranted)
	12–24 Month	Return to Met One for complete overhaul
WD	6–12 Month	Inspect for proper operation (manual check of sensor readings through 360°)
	6–12 Month	Field calibration
	12–24 month	Replace bearings & potentiometer
T	6–12 Month	Inspect sensor for proper operation (field comparison sensor reading against a precision mercury thermometer)
RH	6–12 Month	Inspect sensor for proper operation (compare sensor reading against local weather service or field psychrometer)
	12 Month	Return sensor to Met One for calibration and replacement of O-rings and filter membrane
Rain Gauge	6 Month	Clean sensor and bucket and field verify proper operation
Pressure	12 Month	Return sensor to Met One for calibration and replacement of O-rings and filter membrane
Radiometer	Monthly	Clean sensor glass dome with clean rag/tissue

Note: Maintenance schedules are as specified in the respective Met One sensor user manuals.

5.2 Laboratory QA/QC

This report covers 30 air monitoring samples for VOCs collected and analyzed according to the EPA Toxic Compendium Method TO-15, *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)* (EPA 1999). These samples were reported under six SDGs by the laboratory. All six SDG analyses were performed by ALS in Simi Valley, CA. For each SDG, the laboratory ran continuing calibration verification, a method blank, and laboratory control samples, and verified surrogate recoveries for each sample.

The laboratory provided certified clean canisters for the sampling events. The certification of the canister batch is considered the equipment blank for each sampling event. The ALS case narrative discusses the cleaning of the canisters.

5.3 Audit Results

The PM₁₀ instruments were calibrated at the manufacturer and were functioning properly upon installation. The PM₁₀ instruments were audited monthly with a secondary NIST traceable flow meter. Although audits occur only monthly, the instruments were checked several times a week to ensure that they were functioning. Table 8 lists the dates for audits conducted in April through June 2025. No flow rate comparisons exceeded the project’s acceptance criterion of +/- 4. The sample nozzles and support vanes were cleaned as needed. Complete audit reports are presented in Appendix D.

Table 8. PM₁₀ audit completeness.

Location	Met One E-BAM Serial Number	Parameter	Date
DOE-1	W23314	PM ₁₀	04/28/2025
DOE-2	Y12096	PM ₁₀	04/28/2025
DOE-3	W23313	PM ₁₀	04/28/2025
DOE-4	X16067	PM ₁₀	04/28/2025
DOE-1	W23314	PM ₁₀	05/23/2025
DOE-2	Y12096	PM ₁₀	05/23/2025
DOE-3	W23313	PM ₁₀	05/23/2025
DOE-4	X16067	PM ₁₀	05/22/2025
DOE-1	W23314	PM ₁₀	06/25/2025
DOE-2	Y12096	PM ₁₀	06/25/2025
DOE-3	W23313	PM ₁₀	06/25/2025
DOE-4	X16067	PM ₁₀	06/25/2025

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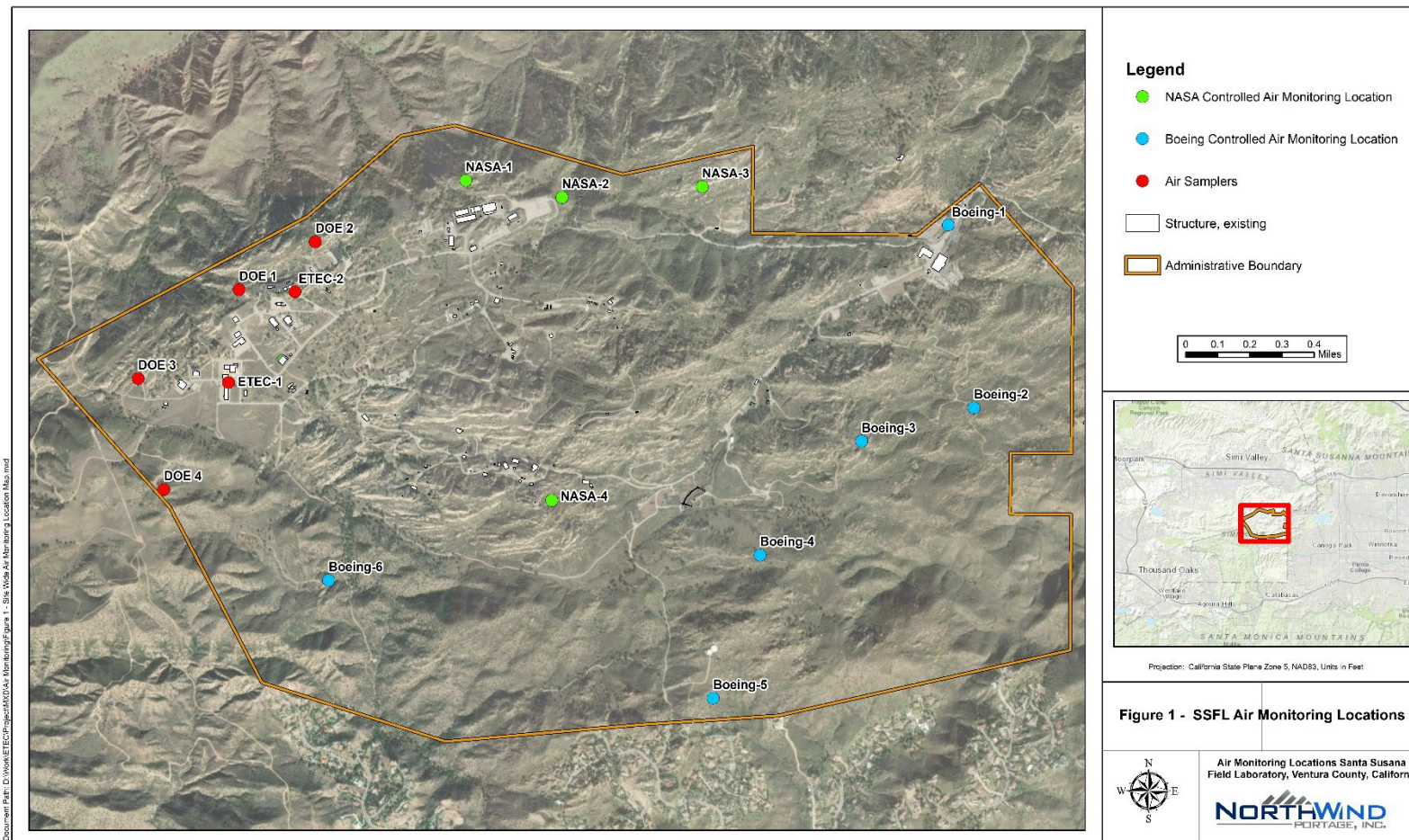
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Figure 1 – SSFL Air Monitoring Locations



Document Path: D:\Work\ETEC\Projects\SSFL\Monitoring\Figure 1 - Site Wide Air Monitoring Location Map.mxd

Figure 2 – DOE Air Monitoring Locations

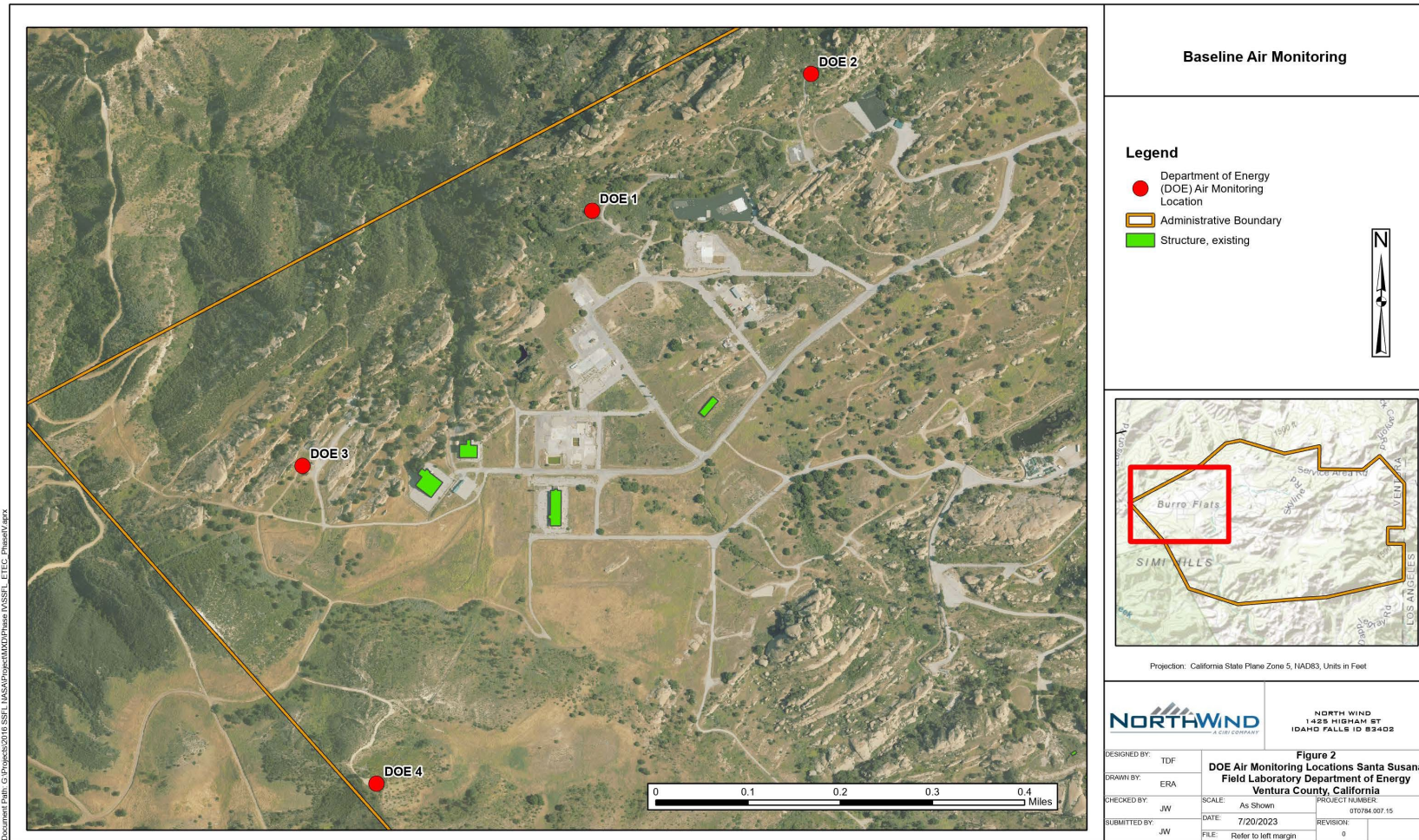
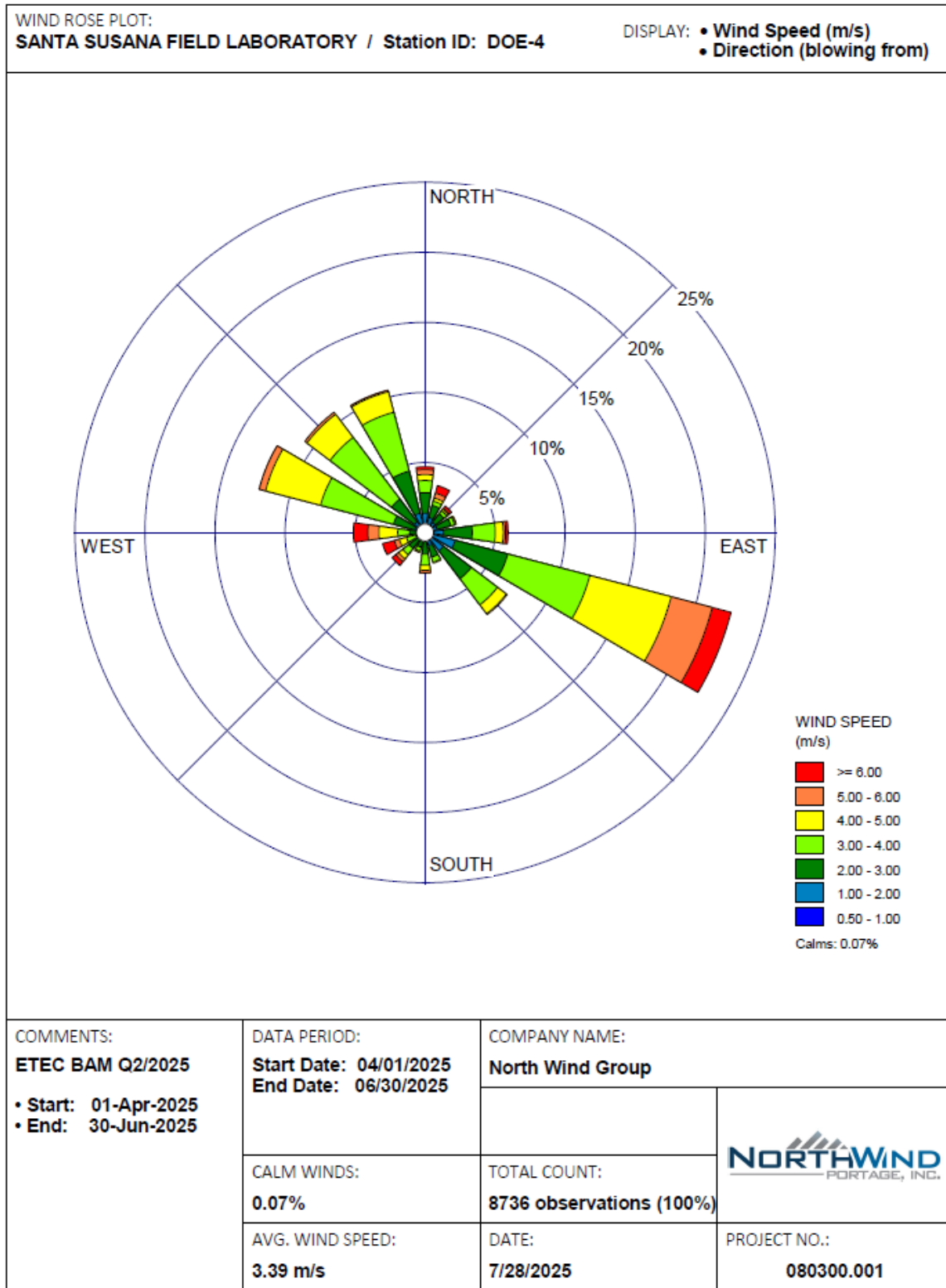


Figure 3 – DOE Quarterly Wind Rose



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APPENDIX A

PM₁₀ Daily Averages and Monthly Statistics

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PM₁₀ Daily Averages

Site ID	DOE-1	DOE-2	DOE-3	DOE-4
Sample Date	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
04/01/2025	12.291	8.500	7.625	6.666
04/02/2025	9.708	6.375	11.000	10.333
04/03/2025	14.125	10.875	13.000	9.958
04/04/2025	12.541	5.208	5.541	6.750
04/05/2025	4.000	4.583	3.916	4.250
04/06/2025	8.083	6.333	5.875	5.666
04/07/2025	9.791	9.416	9.791	10.041
04/08/2025	15.375	11.916	10.875	10.375
04/09/2025	13.875	12.166	11.208	12.095
04/10/2025	13.833	13.541	13.625	13.875
04/11/2025	15.958	14.708	14.750	15.277
04/12/2025	20.875	19.291	19.500	18.708
04/13/2025	28.375	17.833	22.541	19.333
04/14/2025	37.250	13.125	14.250	12.833
04/15/2025	18.750	13.208	14.083	9.583
04/16/2025	19.416	11.708	13.750	13.333
04/17/2025	15.333	7.666	8.250	6.375
04/18/2025	22.291	7.833	8.416	8.041
04/19/2025	16.125	11.083	9.875	8.875
04/20/2025	12.500	11.291	10.875	10.875
04/21/2025	25.750	15.458	16.041	16.250
04/22/2025	22.250	12.916	16.041	12.166
04/23/2025	22.125	13.375	16.958	14.250
04/24/2025	27.416	13.583	16.083	17.875
04/25/2025	15.291	10.958	13.166	9.333
04/26/2025	26.750	2.750	5.791	3.250
04/27/2025	10.000	3.000	4.875	3.791
04/28/2025	18.500	7.666	8.916	6.666
04/29/2025	29.750	12.291	11.583	11.166
04/30/2025	30.250	13.041	14.833	9.583
05/01/2025	25.958	9.416	9.833	10.250
05/02/2025	23.416	6.583	12.923	7.125
05/03/2025	25.833	4.250	8.500	4.583
05/04/2025	15.583	7.083	9.666	6.791
05/05/2025	28.750	13.208	18.833	15.791
05/06/2025	14.375	7.458	11.083	7.375

Site ID	DOE-1	DOE-2	DOE-3	DOE-4
Sample Date	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
05/07/2025	15.500	10.416	11.833	9.750
05/08/2025	18.041	14.583	18.166	16.083
05/09/2025	15.791	12.708	13.666	11.625
05/10/2025	13.083	11.625	11.916	10.583
05/11/2025	18.166	14.125	16.625	13.125
05/12/2025	36.125	19.541	27.750	28.000
05/13/2025	20.083	11.875	14.708	14.458
05/14/2025	20.333	11.958	14.166	14.166
05/15/2025	24.708	14.791	25.750	20.416
05/16/2025	26.750	20.333	26.125	19.750
05/17/2025	20.583	10.958	25.583	9.875
05/18/2025	17.000	11.500	13.875	9.666
05/19/2025	20.041	11.541	13.625	11.375
05/20/2025	15.041	12.708	14.875	12.333
05/21/2025	16.166	13.708	15.833	14.208
05/22/2025	27.750	21.875	19.791	18.375
05/23/2025	28.625	29.375	24.041	24.291
05/24/2025	25.750	21.708	23.833	21.625
05/25/2025	36.291	20.041	24.250	16.375
05/26/2025	32.125	17.125	23.041	18.875
05/27/2025	21.416	15.166	19.458	15.958
05/28/2025	25.041	14.791	17.958	15.916
05/29/2025	21.583	14.333	16.208	17.125
05/30/2025	24.458	17.750	18.666	16.958
05/31/2025	32.708	18.125	21.625	15.416
06/01/2025	27.500	16.333	15.083	18.958
06/02/2025	16.750	11.875	18.875	16.458
06/03/2025	31.291	6.416	20.250	14.708
06/04/2025	28.333	8.791	17.625	9.666
06/05/2025	18.958	8.458	15.208	9.833
06/06/2025	18.125	14.083	16.291	15.750
06/07/2025	25.375	11.375	19.750	9.041
06/08/2025	24.000	14.625	22.500	16.833
06/09/2025	24.708	16.208	20.458	45.875
06/10/2025	30.875	15.958	29.000	19.000
06/11/2025	20.375	13.500	20.083	15.083

Site ID	DOE-1	DOE-2	DOE-3	DOE-4
Sample Date	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
06/12/2025	28.583	20.208	33.166	20.916
06/13/2025	21.750	16.333	28.250	15.208
06/14/2025	20.750	15.083	19.708	22.666
06/15/2025	23.041	18.916	20.541	18.291
06/16/2025	25.166	20.375	21.041	20.833
06/17/2025	20.416	18.375	18.333	16.875
06/18/2025	23.666	22.916	30.500	21.083
06/19/2025	31.666	26.458	30.625	28.208
06/20/2025	32.916	19.458	24.500	19.958
06/21/2025	36.041	31.083	33.416	26.000
06/22/2025	26.041	20.375	21.333	16.416
06/23/2025	37.916	25.208	33.625	26.083
06/24/2025	24.541	17.291	22.666	12.083
06/25/2025	27.625	18.291	18.250	15.833
06/26/2025	25.916	17.708	28.458	19.166
06/27/2025	31.708	18.125	18.583	18.416
06/28/2025	16.666	14.208	20.166	12.125
06/29/2025	9.875	8.291	8.083	8.625
06/30/2025	12.458	9.041	10.250	8.000

EPA – Simi Valley – Cochran Street – PM₁₀ Daily Averages, 08/01/2024–05/31/2025

Simi Valley PM ₁₀ Sample Date	Simi Valley AQS # 061112002
	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
8/1/2024	29
8/2/2024	32
8/3/2024	21
8/4/2024	18
8/5/2024	24
8/6/2024	29
8/7/2024	26
8/8/2024	28
8/9/2024	30
8/10/2024	30
8/11/2024	27
8/12/2024	27
8/13/2024	27
8/14/2024	32
8/15/2024	29
8/16/2024	28
8/17/2024	28
8/18/2024	20
8/19/2024	19
8/20/2024	18
8/21/2024	30
8/22/2024	27
8/23/2024	25
8/24/2024	20
8/25/2024	20
8/26/2024	27
8/27/2024	28
8/28/2024	27
8/29/2024	26
8/30/2024	25
8/31/2024	26
9/1/2024	27
9/2/2024	28
9/3/2024	21
9/4/2024	20
9/5/2024	29
9/6/2024	38
9/7/2024	29
9/8/2024	20

Simi Valley PM ₁₀ Sample Date	Simi Valley AQS # 061112002
	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
9/9/2024	18
9/10/2024	27
9/11/2024	27
9/12/2024	31
9/13/2024	36
9/14/2024	28
9/15/2024	16
9/16/2024	20
9/17/2024	21
9/18/2024	23
9/19/2024	19
9/20/2024	17
9/21/2024	20
9/22/2024	20
9/23/2024	24
9/24/2024	22
9/25/2024	20
9/26/2024	22
9/27/2024	23
9/28/2024	21
9/29/2024	17
9/30/2024	28
10/1/2024	29
10/2/2024	29
10/3/2024	34
10/4/2024	37
10/5/2024	28
10/6/2024	19
10/7/2024	26
10/8/2024	29
10/9/2024	30
10/10/2024	30
10/11/2024	26
10/12/2024	20
10/13/2024	17
10/14/2024	24
10/15/2024	29
10/16/2024	24
10/17/2024	22
10/18/2024	58

Simi Valley PM ₁₀ Sample Date	Simi Valley AQS # 061112002
	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
10/19/2024	29
10/20/2024	20
10/21/2024	22
10/22/2024	22
10/23/2024	26
10/24/2024	25
10/25/2024	29
10/26/2024	24
10/27/2024	23
10/28/2024	26
10/29/2024	16
10/30/2024	18
10/31/2024	18
11/1/2024	25
11/2/2024	14
11/3/2024	20
11/4/2024	13
11/5/2024	30
11/6/2024	110
11/7/2024	10
11/8/2024	25
11/9/2024	27
11/10/2024	26
11/11/2024	19
11/12/2024	8
11/13/2024	15
11/14/2024	24
11/15/2024	19
11/16/2024	6
11/17/2024	6
11/18/2024	13
11/19/2024	14
11/20/2024	18
11/21/2024	19
11/22/2024	18
11/23/2024	9
11/24/2024	3
11/25/2024	5
11/26/2024	5
11/27/2024	6

Simi Valley PM ₁₀ Sample Date	Simi Valley AQS # 061112002
	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
11/28/2024	5
11/29/2024	4
11/30/2024	8
12/1/2024	13
12/2/2024	20
12/3/2024	19
12/4/2024	38
12/5/2024	25
12/6/2024	8
12/7/2024	8
12/8/2024	17
12/9/2024	16
12/10/2024	13
12/11/2024	9
12/12/2024	14
12/13/2024	21
12/14/2024	14
12/15/2024	10
12/16/2024	15
12/17/2024	9
12/18/2024	6
12/19/2024	15
12/20/2024	28
12/21/2024	23
12/22/2024	18
12/23/2024	20
12/24/2024	19
12/25/2024	4
12/26/2024	13
12/27/2024	12
12/28/2024	11
12/29/2024	11
12/30/2024	11
12/31/2024	17
1/1/2025	12
1/2/2025	11
1/3/2025	23
1/4/2025	8
1/5/2025	7
1/6/2025	12

Simi Valley PM ₁₀ Sample Date	Simi Valley AQS # 061112002
	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
1/7/2025	45
1/8/2025	54
1/11/2025	13
1/12/2025	4
1/13/2025	7
1/14/2025	3
1/15/2025	8
1/16/2025	13
1/17/2025	20
1/18/2025	19
1/19/2025	21
1/20/2025	28
1/23/2025	12
1/24/2025	15
1/25/2025	25
1/26/2025	7
1/27/2025	8
1/28/2025	11
1/29/2025	19
1/30/2025	18
1/31/2025	20
2/1/2025	15
2/2/2025	17
2/3/2025	20
2/4/2025	8
2/5/2025	1
2/6/2025	1
2/7/2025	6
2/8/2025	7
2/9/2025	9
2/10/2025	18
2/11/2025	18
2/12/2025	7
2/13/2025	3
2/14/2025	14
2/15/2025	6
2/16/2025	7
2/17/2025	12
2/18/2025	15
2/19/2025	12

Simi Valley PM ₁₀ Sample Date	Simi Valley AQS # 061112002
	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
2/20/2025	12
2/21/2025	6
2/22/2025	5
2/23/2025	9
2/24/2025	17
2/25/2025	17
2/26/2025	8
2/27/2025	10
2/28/2025	17
3/1/2025	21
3/2/2025	14
3/3/2025	12
3/4/2025	22
3/5/2025	15
3/6/2025	7
3/7/2025	6
3/8/2025	8
3/9/2025	11
3/10/2025	10
3/11/2025	8
3/12/2025	4
3/13/2025	4
3/14/2025	6
3/15/2025	10
3/16/2025	18
3/17/2025	15
3/18/2025	6
3/19/2025	8
3/20/2025	12
3/21/2025	13
3/22/2025	17
3/23/2025	23
3/24/2025	15
3/25/2025	19
3/26/2025	9
3/27/2025	6
3/28/2025	16
3/29/2025	15
3/30/2025	6
3/31/2025	4

Simi Valley PM ₁₀ Sample Date	Simi Valley AQS # 061112002
	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
4/1/2025	14
4/2/2025	12
4/3/2025	17
4/4/2025	11
4/5/2025	9
4/6/2025	11
4/7/2025	20
4/8/2025	22
4/9/2025	25
4/10/2025	27
4/11/2025	30
4/12/2025	29
4/13/2025	30
4/14/2025	24
4/15/2025	23
4/16/2025	15
4/17/2025	12
4/18/2025	14
4/19/2025	18
4/20/2025	18
4/21/2025	27
4/22/2025	26
4/23/2025	22
4/24/2025	22
4/25/2025	20
4/26/2025	7
4/27/2025	5
4/28/2025	11
4/29/2025	18
4/30/2025	26
5/1/2025	20
5/2/2025	19
5/3/2025	16
5/4/2025	19
5/5/2025	27
5/6/2025	21
5/7/2025	23
5/8/2025	28
5/9/2025	27
5/10/2025	21

Simi Valley PM ₁₀ Sample Date	Simi Valley AQS # 061112002
	PM ₁₀ (µg/m ³) (CAAQS 50 µg/m ³)
5/11/2025	20
5/12/2025	26
5/13/2025	18
5/14/2025	21
5/15/2025	30
5/16/2025	35
5/17/2025	20
5/18/2025	17
5/19/2025	25
5/20/2025	26
5/21/2025	27
5/22/2025	37
5/23/2025	33
5/24/2025	29
5/25/2025	26
5/26/2025	23
5/27/2025	31
5/28/2025	23
5/29/2025	29
5/30/2025	32
5/31/2025	27

Notes:

Data supplied from https://aqg.epa.gov/aqgweb/airdata/download_files.html#Meta (2025) Only the Simi Valley PM₁₀ data from the State and Local Air Monitoring Stations (SLAMS) have been reported here. The Simi Valley PM_{2.5} and the Reseda PM_{2.5} have not been reported here since this report discusses only PM₁₀ data, not PM_{2.5} data. This webpage page contains pre-generated files of data available for download. The files are updated twice per year: once in June to capture the complete data for the prior year, and once in December to capture the data for the summer (ozone season). At the time of writing this report, the data posted are the most current available.

Gray-shaded box with bold number indicates that the value exceeded CAAQS but is below the NAAQS of 150 µg/m³.

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PM₁₀ Monthly Statistics

Location ID	April 2025			May 2025			Jun 2025		
	PM ₁₀			PM ₁₀			PM ₁₀		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
DOE-1	37.25	4	30.025	36.291	13.083	34.416	37.916	9.875	34.635
DOE-2	19.291	2.75	16.764	29.375	4.25	21.791	31.083	6.416	25.895
DOE-3	22.541	3.916	18.356	27.75	8.5	25.938	33.625	8.083	33.303
DOE-4	19.333	3.25	18.333	28	4.583	22.958	45.875	8	27.252

PCTL = percentile

EPA – Simi Valley – Cochran Street – PM₁₀ Monthly Statistics, 08/01/2024–05/31/2025

Location ID	August 2024			September 2024			October 2024		
	PM 10			PM 10			PM 10		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
Simi Valley AQS # 061112002 (PM10)	32.00000	18.00000	31.00000	38.00000	16.00000	33.75000	58.00000	16.00000	35.50000

Location ID	November 2024			December 2024			January 2025		
	PM 10			PM 10			PM 10		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
Simi Valley AQS # 061112002 (PM10)	110.00000	3.00000	28.65000	38.00000	4.00000	26.50000	54.00000	3.00000	39.90000

Location ID	February 2025			March 2025			April 2025		
	PM 10			PM 10			PM 10		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
Simi Valley AQS # 061112002 (PM10)	20.00000	1.00000	18.00000	23.00000	4.00000	21.50000	30.00000	5.00000	29.55000

Location ID	May 2025		
	PM 10		
	High	Low	95th PCTL
Simi Valley AQS # 061112002 (PM10)	37.00000	16.00000	34.00000

Notes:

Data supplied from https://aqs.epa.gov/aqsweb/airdata/download_files.html#Meta (2025). Only the Simi Valley PM₁₀ data from the State and Local Air Monitoring Stations (SLAMS) have been reported here. The Simi Valley PM_{2.5} and the Reseda PM_{2.5} have not been reported here since this report discusses only PM₁₀ data, not PM_{2.5} data. This webpage page contains pre-generated files of data available for download. The files are updated twice per year: once in June to capture the complete data for the prior year, and once in December to capture the data for the summer (ozone season).

APPENDIX B

Analytical Results for Ambient Air VOCs

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Table B-1. Ambient air VOC detection results compared to Screening Level Values.

ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	4/10/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.67	µg/m ³	0.51 J; J
DOE-1	4/10/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.12	0.78	µg/m ³	0.12 J; J
DOE-1	4/10/2025	2-butanone	-	5200	0.35	1.5	µg/m ³	0.89 J; J
DOE-1	4/10/2025	Benzene	0.097	-	0.11	0.74	µg/m ³	0.34 J; J
DOE-1	4/10/2025	Carbon tetrachloride	-	0.47	0.11	0.74	µg/m ³	0.40 J; J
DOE-1	4/10/2025	Chloromethane	-	94	0.12	0.77	µg/m ³	0.23 J; J
DOE-1	4/10/2025	Dichlorodifluoromethane	-	100	0.13	0.73	µg/m ³	2.2 ;
DOE-1	4/10/2025	Ethyl acetate	-	73	1.1	2.8	µg/m ³	4.0 ;
DOE-1	4/10/2025	Isopropanol	-	210	0.32	1.5	µg/m ³	0.66 J; J
DOE-1	4/10/2025	Methylene chloride	1	-	0.22	0.66	µg/m ³	0.34 J; J
DOE-1	4/10/2025	Toluene	310	-	0.094	0.79	µg/m ³	0.52 J; J
DOE-1	4/10/2025	Trichlorofluoromethane	1300	-	0.12	0.73	µg/m ³	1.1 ;
DOE-2	4/10/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.73	µg/m ³	0.51 J; J
DOE-2	4/10/2025	2-butanone	-	5200	0.38	1.6	µg/m ³	0.76 J; J
DOE-2	4/10/2025	Benzene	0.097	-	0.12	0.81	µg/m ³	0.31 J; J
DOE-2	4/10/2025	Carbon tetrachloride	-	0.47	0.12	0.81	µg/m ³	0.42 J; J
DOE-2	4/10/2025	Chloromethane	-	94	0.14	0.84	µg/m ³	0.24 J; J
DOE-2	4/10/2025	Dichlorodifluoromethane	-	100	0.14	0.80	µg/m ³	2.1 ;
DOE-2	4/10/2025	Ethyl acetate	-	73	1.2	3.1	µg/m ³	2.5 J; J
DOE-2	4/10/2025	Isopropanol	-	210	0.35	1.6	µg/m ³	0.62 J; J
DOE-2	4/10/2025	Methylene chloride	1	-	0.24	0.72	µg/m ³	0.35 J; J
DOE-2	4/10/2025	Toluene	310	-	0.10	0.87	µg/m ³	0.51 J; J
DOE-2	4/10/2025	Trichlorofluoromethane	1300	-	0.13	0.80	µg/m ³	1.1 ;
DOE-3	4/10/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.10	0.63	µg/m ³	0.51 J; J
DOE-3	4/10/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.11	0.73	µg/m ³	0.12 J; J
DOE-3	4/10/2025	2-butanone	-	5200	0.33	1.4	µg/m ³	0.89 J; J
DOE-3	4/10/2025	Benzene	0.097	-	0.10	0.69	µg/m ³	0.63 J; J
DOE-3	4/10/2025	Carbon disulfide	-	730	0.22	1.4	µg/m ³	0.22 J; J
DOE-3	4/10/2025	Carbon tetrachloride	-	0.47	0.10	0.69	µg/m ³	0.43 J; J
DOE-3	4/10/2025	Chloroform	-	0.12	0.097	0.72	µg/m ³	0.10 J; J
DOE-3	4/10/2025	Chloromethane	-	94	0.12	0.72	µg/m ³	0.19 J; J
DOE-3	4/10/2025	Dichlorodifluoromethane	-	100	0.12	0.69	µg/m ³	2.1 ;
DOE-3	4/10/2025	Ethyl acetate	-	73	1.0	2.7	µg/m ³	8.9 ;
DOE-3	4/10/2025	Isopropanol	-	210	0.30	1.4	µg/m ³	2.6 ;
DOE-3	4/10/2025	Methylene chloride	1	-	0.20	0.62	µg/m ³	0.87 ;
DOE-3	4/10/2025	Toluene	310	-	0.088	0.74	µg/m ³	0.76 ;
DOE-3	4/10/2025	Trichlorofluoromethane	1300	-	0.11	0.69	µg/m ³	1.1 ;
DOE-4	4/10/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.68	µg/m ³	0.49 J; J

ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-4	4/10/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.12	0.79	µg/m ³	0.12 J; J
DOE-4	4/10/2025	2-butanone	-	5200	0.35	1.5	µg/m ³	0.74 J; J
DOE-4	4/10/2025	Benzene	0.097	-	0.11	0.75	µg/m ³	0.28 J; J
DOE-4	4/10/2025	Carbon tetrachloride	-	0.47	0.11	0.75	µg/m ³	0.42 J; J
DOE-4	4/10/2025	Chloromethane	-	94	0.13	0.78	µg/m ³	0.19 J; J
DOE-4	4/10/2025	Dichlorodifluoromethane	-	100	0.13	0.74	µg/m ³	2.1 ;
DOE-4	4/10/2025	Isopropanol	-	210	0.32	1.5	µg/m ³	0.41 J; J
DOE-4	4/10/2025	Methylene chloride	1	-	0.22	0.67	µg/m ³	0.35 J; J
DOE-4	4/10/2025	Toluene	310	-	0.096	0.80	µg/m ³	0.46 J; J
DOE-4	4/10/2025	Trichlorofluoromethane	1300	-	0.12	0.74	µg/m ³	1.1 ;
DOE-1	4/23/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.75	µg/m ³	0.45 J; J
DOE-1	4/23/2025	2-butanone	-	5200	0.39	1.7	µg/m ³	0.42 J; J
DOE-1	4/23/2025	Benzene	0.097	-	0.13	0.83	µg/m ³	0.34 J; J
DOE-1	4/23/2025	Carbon tetrachloride	-	0.47	0.12	0.83	µg/m ³	0.39 J; J
DOE-1	4/23/2025	Chloromethane	-	94	0.14	0.86	µg/m ³	0.88 ;
DOE-1	4/23/2025	Dichlorodifluoromethane	-	100	0.14	0.82	µg/m ³	2.4 ;
DOE-1	4/23/2025	Ethyl acetate	-	73	1.2	3.2	µg/m ³	3.5 ; J+
DOE-1	4/23/2025	Isopropanol	-	210	0.36	1.7	µg/m ³	0.56 J; J
DOE-1	4/23/2025	Methylene chloride	1	-	0.24	0.74	µg/m ³	0.43 J; J
DOE-1	4/23/2025	Toluene	310	-	0.11	0.89	µg/m ³	0.30 J; J
DOE-1	4/23/2025	Trichlorofluoromethane	1300	-	0.13	0.82	µg/m ³	1.2 ;
DOE-2	4/23/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.13	0.78	µg/m ³	0.45 J; J
DOE-2	4/23/2025	2-butanone	-	5200	0.41	1.7	µg/m ³	0.56 J; J
DOE-2	4/23/2025	Acrylonitrile	-	0.041	0.42	1.8	µg/m ³	2.3 ;
DOE-2	4/23/2025	Benzene	0.097	-	0.13	0.86	µg/m ³	0.29 J; J
DOE-2	4/23/2025	Carbon tetrachloride	-	0.47	0.13	0.86	µg/m ³	0.39 J; J
DOE-2	4/23/2025	Chloromethane	-	94	0.15	0.90	µg/m ³	0.90 ;
DOE-2	4/23/2025	Dichlorodifluoromethane	-	100	0.15	0.85	µg/m ³	2.5 ;
DOE-2	4/23/2025	Ethyl acetate	-	73	1.3	3.3	µg/m ³	2.4 J; J+
DOE-2	4/23/2025	Methylene chloride	1	-	0.25	0.77	µg/m ³	0.45 J; J
DOE-2	4/23/2025	Toluene	310	-	0.11	0.92	µg/m ³	0.24 J; J
DOE-2	4/23/2025	Trichlorofluoromethane	1300	-	0.14	0.85	µg/m ³	1.2 ;
DOE-3	4/23/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.69	µg/m ³	0.46 J; J
DOE-3	4/23/2025	2-butanone	-	5200	0.36	1.5	µg/m ³	0.45 J; J
DOE-3	4/23/2025	Benzene	0.097	-	0.12	0.77	µg/m ³	0.24 J; J
DOE-3	4/23/2025	Carbon tetrachloride	-	0.47	0.11	0.77	µg/m ³	0.38 J; J
DOE-3	4/23/2025	Chloromethane	-	94	0.13	0.80	µg/m ³	0.89 ;
DOE-3	4/23/2025	Dichlorodifluoromethane	-	100	0.13	0.76	µg/m ³	2.5 ;
DOE-3	4/23/2025	Ethyl acetate	-	73	1.1	2.9	µg/m ³	3.5 ; J+
DOE-3	4/23/2025	Methylene chloride	1	-	0.23	0.69	µg/m ³	0.40 J; J
DOE-3	4/23/2025	Toluene	310	-	0.098	0.82	µg/m ³	0.21 J; J
DOE-3	4/23/2025	Trichlorofluoromethane	1300	-	0.12	0.76	µg/m ³	1.2 ;

ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-4	4/23/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.67	µg/m ³	0.45 J; J
DOE-4	4/23/2025	2-butanone	-	5200	0.35	1.5	µg/m ³	0.67 J; J
DOE-4	4/23/2025	Benzene	0.097	-	0.11	0.74	µg/m ³	0.25 J; J
DOE-4	4/23/2025	Carbon tetrachloride	-	0.47	0.11	0.74	µg/m ³	0.38 J; J
DOE-4	4/23/2025	Chloromethane	-	94	0.13	0.77	µg/m ³	0.88 ;
DOE-4	4/23/2025	Dichlorodifluoromethane	-	100	0.13	0.74	µg/m ³	2.3 ;
DOE-4	4/23/2025	Ethyl acetate	-	73	1.1	2.8	µg/m ³	2.1 J; J+
DOE-4	4/23/2025	Isopropanol	-	210	0.32	1.5	µg/m ³	0.60 J; J
DOE-4	4/23/2025	Methylene chloride	1	-	0.22	0.66	µg/m ³	0.39 J; J
DOE-4	4/23/2025	Toluene	310	-	0.095	0.80	µg/m ³	0.22 J; J
DOE-4	4/23/2025	Trichlorofluoromethane	1300	-	0.12	0.74	µg/m ³	1.2 ;
DOE-1	5/6/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.69	µg/m ³	0.48 J;
DOE-1	5/6/2025	2-butanone	-	5200	0.36	1.5	µg/m ³	0.70 J;
DOE-1	5/6/2025	Carbon tetrachloride	-	0.47	0.11	0.77	µg/m ³	0.38 J;
DOE-1	5/6/2025	Chloromethane	-	94	0.13	0.80	µg/m ³	0.91 ;
DOE-1	5/6/2025	Dichlorodifluoromethane	-	100	0.13	0.76	µg/m ³	2.7 ;
DOE-1	5/6/2025	Ethyl acetate	-	73	0.26	2.9	µg/m ³	5.7 ;
DOE-1	5/6/2025	Methylene chloride	1	-	0.23	0.69	µg/m ³	0.42 J;
DOE-1	5/6/2025	Tetrahydrofuran	-	2100	0.32	1.4	µg/m ³	0.81 J;
DOE-1	5/6/2025	Toluene	310	-	0.098	0.82	µg/m ³	0.21 J;
DOE-1	5/6/2025	Trichlorofluoromethane	1300	-	0.12	0.76	µg/m ³	1.2 ;
DOE-2	5/6/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.68	µg/m ³	0.47 J;
DOE-2	5/6/2025	2-butanone	-	5200	0.35	1.5	µg/m ³	0.40 J;
DOE-2	5/6/2025	Carbon tetrachloride	-	0.47	0.11	0.75	µg/m ³	0.42 J;
DOE-2	5/6/2025	Chloromethane	-	94	0.13	0.78	µg/m ³	0.98 ;
DOE-2	5/6/2025	Dichlorodifluoromethane	-	100	0.13	0.74	µg/m ³	2.7 ;
DOE-2	5/6/2025	Ethyl acetate	-	73	0.25	2.9	µg/m ³	3.8 ;
DOE-2	5/6/2025	Methylene chloride	1	-	0.22	0.67	µg/m ³	0.45 J;
DOE-2	5/6/2025	Toluene	310	-	0.096	0.80	µg/m ³	0.22 J;
DOE-2	5/6/2025	Trichlorofluoromethane	1300	-	0.12	0.74	µg/m ³	1.2 ;
DOE-3	5/6/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.69	µg/m ³	0.49 J;
DOE-3	5/6/2025	2-butanone	-	5200	0.36	1.5	µg/m ³	0.62 J;
DOE-3	5/6/2025	Carbon tetrachloride	-	0.47	0.11	0.76	µg/m ³	0.41 J;
DOE-3	5/6/2025	Chloromethane	-	94	0.13	0.79	µg/m ³	0.95 ;
DOE-3	5/6/2025	Dichlorodifluoromethane	-	100	0.13	0.75	µg/m ³	2.6 ;
DOE-3	5/6/2025	Ethyl acetate	-	73	0.25	2.9	µg/m ³	0.84 J;
DOE-3	5/6/2025	Methylene chloride	1	-	0.22	0.68	µg/m ³	0.43 J;
DOE-3	5/6/2025	Toluene	310	-	0.097	0.81	µg/m ³	0.18 J;
DOE-3	5/6/2025	Trichlorofluoromethane	1300	-	0.12	0.75	µg/m ³	1.2 ;
DOE-4	5/6/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.71	µg/m ³	0.48 J;
DOE-4	5/6/2025	2-butanone	-	5200	0.37	1.6	µg/m ³	0.38 J;

ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-4	5/6/2025	Carbon tetrachloride	-	0.47	0.11	0.79	µg/m ³	0.42 J;
DOE-4	5/6/2025	Chloromethane	-	94	0.13	0.82	µg/m ³	1.0 ;
DOE-4	5/6/2025	Dichlorodifluoromethane	-	100	0.13	0.78	µg/m ³	2.8 ;
DOE-4	5/6/2025	Ethyl acetate	-	73	0.26	3.0	µg/m ³	1.0 J;
DOE-4	5/6/2025	Methylene chloride	1	-	0.23	0.71	µg/m ³	0.45 J;
DOE-4	5/6/2025	Toluene	310	-	0.10	0.84	µg/m ³	0.20 J;
DOE-4	5/6/2025	Trichlorofluoromethane	1300	-	0.13	0.78	µg/m ³	1.2 ;
DOE-1	5/21/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.69	µg/m ³	0.53 J;
DOE-1	5/21/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.13	0.80	µg/m ³	0.17 J;
DOE-1	5/21/2025	2-butanone	-	5200	0.36	1.5	µg/m ³	0.88 J;
DOE-1	5/21/2025	Carbon disulfide	-	730	0.24	1.5	µg/m ³	3.0 ;
DOE-1	5/21/2025	Carbon tetrachloride	-	0.47	0.11	0.76	µg/m ³	0.42 J;
DOE-1	5/21/2025	Chloroform	-	0.12	0.11	0.79	µg/m ³	0.11 J;
DOE-1	5/21/2025	Chloromethane	-	94	0.13	0.79	µg/m ³	0.28 J;
DOE-1	5/21/2025	Dichlorodifluoromethane	-	100	0.13	0.75	µg/m ³	1.8 ;
DOE-1	5/21/2025	Ethyl acetate	-	73	0.25	2.9	µg/m ³	20 ;
DOE-1	5/21/2025	Methylene chloride	1	-	0.22	0.68	µg/m ³	0.55 J;
DOE-1	5/21/2025	Toluene	310	-	0.097	0.81	µg/m ³	0.75 J;
DOE-1	5/21/2025	Trichlorofluoromethane	1300	-	0.12	0.75	µg/m ³	1.3 ;
DOE-1	5/21/2025	Vinyl acetate	-	210	1.8	7.9	µg/m ³	2.4 J;
DOE-2	5/21/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.71	µg/m ³	0.57 J;
DOE-2	5/21/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.13	0.83	µg/m ³	0.14 J;
DOE-2	5/21/2025	2-butanone	-	5200	0.37	1.6	µg/m ³	0.61 J;
DOE-2	5/21/2025	Carbon disulfide	-	730	0.25	1.6	µg/m ³	1.0 J;
DOE-2	5/21/2025	Carbon tetrachloride	-	0.47	0.11	0.79	µg/m ³	0.44 J;
DOE-2	5/21/2025	Chloromethane	-	94	0.13	0.82	µg/m ³	0.30 J;
DOE-2	5/21/2025	Dichlorodifluoromethane	-	100	0.13	0.78	µg/m ³	1.8 ;
DOE-2	5/21/2025	Ethyl acetate	-	73	0.26	3.0	µg/m ³	74 ;
DOE-2	5/21/2025	Methylene chloride	1	-	0.23	0.70	µg/m ³	0.45 J;
DOE-2	5/21/2025	o-Xylene (1,2-dimethylbenzene)	-	100	0.12	0.83	µg/m ³	0.63 J;
DOE-2	5/21/2025	Tetrahydrofuran	-	2100	0.32	1.5	µg/m ³	0.89 J;
DOE-2	5/21/2025	Toluene	310	-	0.10	0.84	µg/m ³	1.4 ;
DOE-2	5/21/2025	Trichlorofluoromethane	1300	-	0.12	0.78	µg/m ³	1.3 ;
DOE-2	5/21/2025	Xylenes, total	-	100	0.22	1.6	µg/m ³	0.78 J;
DOE-3	5/21/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.71	µg/m ³	0.56 J;
DOE-3	5/21/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.13	0.83	µg/m ³	0.13 J;
DOE-3	5/21/2025	2-butanone	-	5200	0.37	1.6	µg/m ³	0.59 J;
DOE-3	5/21/2025	Carbon disulfide	-	730	0.25	1.6	µg/m ³	1.6 ;
DOE-3	5/21/2025	Carbon tetrachloride	-	0.47	0.11	0.79	µg/m ³	0.42 J;
DOE-3	5/21/2025	Chloromethane	-	94	0.13	0.82	µg/m ³	0.37 J;

ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-3	5/21/2025	Dichlorodifluoromethane	-	100	0.13	0.78	µg/m ³	1.8 ;
DOE-3	5/21/2025	Ethyl acetate	-	73	0.26	3.0	µg/m ³	12 ;
DOE-3	5/21/2025	Methylene chloride	1	-	0.23	0.70	µg/m ³	0.41 J;
DOE-3	5/21/2025	Toluene	310	-	0.10	0.84	µg/m ³	0.44 J;
DOE-3	5/21/2025	Trichlorofluoromethane	1300	-	0.12	0.78	µg/m ³	1.3 ;
DOE-4	5/21/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.74	µg/m ³	0.49 J;
DOE-4	5/21/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.14	0.87	µg/m ³	0.15 J;
DOE-4	5/21/2025	2-butanone	-	5200	0.39	1.6	µg/m ³	0.57 J;
DOE-4	5/21/2025	Carbon disulfide	-	730	0.26	1.7	µg/m ³	0.86 J;
DOE-4	5/21/2025	Carbon tetrachloride	-	0.47	0.12	0.82	µg/m ³	0.45 J;
DOE-4	5/21/2025	Chloromethane	-	94	0.14	0.85	µg/m ³	0.41 J;
DOE-4	5/21/2025	Dichlorodifluoromethane	-	100	0.14	0.81	µg/m ³	1.9 ;
DOE-4	5/21/2025	Ethyl acetate	-	73	0.27	3.1	µg/m ³	14 ;
DOE-4	5/21/2025	Methylene chloride	1	-	0.24	0.73	µg/m ³	0.40 J;
DOE-4	5/21/2025	Toluene	310	-	0.10	0.88	µg/m ³	0.47 J;
DOE-4	5/21/2025	Trichlorofluoromethane	1300	-	0.13	0.81	µg/m ³	1.3 ;
DOE-1	6/6/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.69	µg/m ³	0.59 J;
DOE-1	6/6/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.13	0.80	µg/m ³	0.13 J;
DOE-1	6/6/2025	2-butanone	-	5200	0.36	1.5	µg/m ³	0.54 J;
DOE-1	6/6/2025	Carbon disulfide	-	730	0.24	1.5	µg/m ³	0.29 J;
DOE-1	6/6/2025	Carbon tetrachloride	-	0.47	0.11	0.76	µg/m ³	0.39 J;
DOE-1	6/6/2025	Chloroform	-	0.12	0.11	0.79	µg/m ³	0.12 J;
DOE-1	6/6/2025	Chloromethane	-	94	0.13	0.79	µg/m ³	0.35 J;
DOE-1	6/6/2025	Dichlorodifluoromethane	-	100	0.13	0.75	µg/m ³	1.4 ;
DOE-1	6/6/2025	Ethyl acetate	-	73	0.25	2.9	µg/m ³	6.8 ;
DOE-1	6/6/2025	Methylene chloride	1	-	0.22	0.68	µg/m ³	0.41 J;
DOE-1	6/6/2025	Tetrahydrofuran	-	2100	0.31	1.4	µg/m ³	0.66 J;
DOE-1	6/6/2025	Toluene	310	-	0.097	0.81	µg/m ³	0.52 J;
DOE-1	6/6/2025	Trichlorofluoromethane	1300	-	0.12	0.75	µg/m ³	1.2 ;
DOE-1	6/6/2025	Vinyl acetate	-	210	1.8	7.9	µg/m ³	1.8 J;
DOE-2	6/6/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.11	0.67	µg/m ³	0.58 J;
DOE-2	6/6/2025	1,2-Dichlorotetrafluoroethane	-	83000	0.12	0.79	µg/m ³	0.12 J;
DOE-2	6/6/2025	2-butanone	-	5200	0.35	1.5	µg/m ³	0.55 J;
DOE-2	6/6/2025	Carbon tetrachloride	-	0.47	0.11	0.74	µg/m ³	0.41 J;
DOE-2	6/6/2025	Chloroform	-	0.12	0.10	0.77	µg/m ³	0.14 J;
DOE-2	6/6/2025	Chloromethane	-	94	0.13	0.77	µg/m ³	0.40 J;
DOE-2	6/6/2025	Dichlorodifluoromethane	-	100	0.13	0.74	µg/m ³	1.4 ;
DOE-2	6/6/2025	Ethyl acetate	-	73	0.25	2.8	µg/m ³	6.7 ;
DOE-2	6/6/2025	Methylene chloride	1	-	0.22	0.66	µg/m ³	0.41 J;
DOE-2	6/6/2025	Tetrachloroethene	0.46	-	0.10	0.78	µg/m ³	0.52 J;

ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-2	6/6/2025	Toluene	310	-	0.095	0.80	µg/m ³	0.47 J;
DOE-2	6/6/2025	Trichlorofluoromethane	1300	-	0.12	0.74	µg/m ³	1.3 ;
DOE-3	6/6/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.70	µg/m ³	0.60 J;
DOE-3	6/6/2025	2-butanone	-	5200	0.36	1.6	µg/m ³	0.45 J;
DOE-3	6/6/2025	Carbon tetrachloride	-	0.47	0.11	0.78	µg/m ³	0.39 J;
DOE-3	6/6/2025	Chloroform	-	0.12	0.11	0.81	µg/m ³	0.14 J;
DOE-3	6/6/2025	Chloromethane	-	94	0.13	0.81	µg/m ³	0.42 J;
DOE-3	6/6/2025	Dichlorodifluoromethane	-	100	0.13	0.77	µg/m ³	1.4 ;
DOE-3	6/6/2025	Ethyl acetate	-	73	0.26	3.0	µg/m ³	7.2 ;
DOE-3	6/6/2025	Methylene chloride	1	-	0.23	0.69	µg/m ³	0.42 J;
DOE-3	6/6/2025	Toluene	310	-	0.099	0.83	µg/m ³	0.44 J;
DOE-3	6/6/2025	Trichlorofluoromethane	1300	-	0.12	0.77	µg/m ³	1.3 ;
DOE-4	6/6/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.74	µg/m ³	0.54 J;
DOE-4	6/6/2025	2-butanone	-	5200	0.39	1.6	µg/m ³	0.63 J;
DOE-4	6/6/2025	Carbon tetrachloride	-	0.47	0.12	0.82	µg/m ³	0.39 J;
DOE-4	6/6/2025	Chloroform	-	0.12	0.11	0.85	µg/m ³	0.12 J;
DOE-4	6/6/2025	Chloromethane	-	94	0.14	0.85	µg/m ³	0.37 J;
DOE-4	6/6/2025	Dichlorodifluoromethane	-	100	0.14	0.81	µg/m ³	1.3 ;
DOE-4	6/6/2025	Ethyl acetate	-	73	0.27	3.1	µg/m ³	4.1 ;
DOE-4	6/6/2025	Isopropylbenzene	-	420	0.12	0.85	µg/m ³	1.6 ;
DOE-4	6/6/2025	Methylene chloride	1	-	0.24	0.73	µg/m ³	0.41 J;
DOE-4	6/6/2025	Toluene	310	-	0.10	0.88	µg/m ³	0.81 J;
DOE-4	6/6/2025	Trichlorofluoromethane	1300	-	0.13	0.81	µg/m ³	1.2 ;
DOE-1	6/18/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.73	µg/m ³	0.45 J;
DOE-1	6/18/2025	2-butanone	-	5200	0.38	1.6	µg/m ³	0.66 J;
DOE-1	6/18/2025	4-isopropyltoluene	-	-	0.13	0.83	µg/m ³	0.33 J;
DOE-1	6/18/2025	Carbon disulfide	-	730	0.25	1.6	µg/m ³	2.5 ;
DOE-1	6/18/2025	Carbon tetrachloride	-	0.47	0.12	0.81	µg/m ³	0.34 J;
DOE-1	6/18/2025	Chloromethane	-	94	0.14	0.84	µg/m ³	0.57 J;
DOE-1	6/18/2025	Dichlorodifluoromethane	-	100	0.14	0.80	µg/m ³	2.2 ;
DOE-1	6/18/2025	Ethyl acetate	-	73	0.27	3.1	µg/m ³	45 ;
DOE-1	6/18/2025	Hexane, n-	-	730	0.17	0.83	µg/m ³	0.21 J;
DOE-1	6/18/2025	Methylene chloride	1	-	0.24	0.72	µg/m ³	0.37 J;
DOE-1	6/18/2025	Tetrahydrofuran	-	2100	0.33	1.5	µg/m ³	1.5 ;
DOE-1	6/18/2025	Toluene	310	-	0.10	0.87	µg/m ³	0.74 J;
DOE-1	6/18/2025	Trichlorofluoromethane	1300	-	0.13	0.80	µg/m ³	1.0 ;
DOE-2	6/18/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.70	µg/m ³	0.44 J;
DOE-2	6/18/2025	2-butanone	-	5200	0.37	1.6	µg/m ³	0.71 J;
DOE-2	6/18/2025	Benzene	0.097	-	0.44	1.5	µg/m ³	0.56 J;
DOE-2	6/18/2025	Carbon tetrachloride	-	0.47	0.11	0.78	µg/m ³	0.35 J;
DOE-2	6/18/2025	Chloromethane	-	94	0.13	0.81	µg/m ³	0.62 J;
DOE-2	6/18/2025	Dichlorodifluoromethane	-	100	0.13	0.77	µg/m ³	2.2 ;

ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-2	6/18/2025	Ethyl acetate	-	73	0.26	3.0	µg/m ³	26 ;
DOE-2	6/18/2025	Hexane, n-	-	730	0.17	0.80	µg/m ³	0.21 J;
DOE-2	6/18/2025	Isopropanol	-	210	1.0	6.3	µg/m ³	1.0 J;
DOE-2	6/18/2025	Methylene chloride	1	-	0.23	0.70	µg/m ³	0.37 J;
DOE-2	6/18/2025	Toluene	310	-	0.099	0.83	µg/m ³	0.63 J;
DOE-2	6/18/2025	Trichlorofluoromethane	1300	-	0.12	0.77	µg/m ³	1.1 ;
DOE-3	6/18/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.72	µg/m ³	0.44 J;
DOE-3	6/18/2025	1,2,4-trimethylbenzene	-	63	0.12	0.82	µg/m ³	0.13 J;
DOE-3	6/18/2025	2-butanone	-	5200	0.37	1.6	µg/m ³	0.65 J;
DOE-3	6/18/2025	Carbon tetrachloride	-	0.47	0.12	0.80	µg/m ³	0.34 J;
DOE-3	6/18/2025	Chloromethane	-	94	0.13	0.83	µg/m ³	0.64 J;
DOE-3	6/18/2025	Dichlorodifluoromethane	-	100	0.14	0.79	µg/m ³	2.2 ;
DOE-3	6/18/2025	Ethyl acetate	-	73	0.27	3.0	µg/m ³	89 ;
DOE-3	6/18/2025	Hexane, n-	-	730	0.17	0.81	µg/m ³	0.20 J;
DOE-3	6/18/2025	Isopropanol	-	210	1.0	6.4	µg/m ³	1.0 J;
DOE-3	6/18/2025	Methylene chloride	1	-	0.23	0.71	µg/m ³	0.36 J;
DOE-3	6/18/2025	Toluene	310	-	0.10	0.85	µg/m ³	0.90 ;
DOE-3	6/18/2025	Trichlorofluoromethane	1300	-	0.13	0.79	µg/m ³	1.0 ;
DOE-4	6/18/2025	1,1,2-trichloro-1,2,2-trifluoroethane	-	5200	0.12	0.74	µg/m ³	0.42 J;
DOE-4	6/18/2025	2-butanone	-	5200	0.38	1.6	µg/m ³	0.61 J;
DOE-4	6/18/2025	Carbon tetrachloride	-	0.47	0.12	0.82	µg/m ³	0.36 J;
DOE-4	6/18/2025	Chloromethane	-	94	0.14	0.85	µg/m ³	0.57 J;
DOE-4	6/18/2025	Dichlorodifluoromethane	-	100	0.14	0.81	µg/m ³	2.2 ;
DOE-4	6/18/2025	Ethyl acetate	-	73	0.27	3.1	µg/m ³	35 ;
DOE-4	6/18/2025	Hexane, n-	-	730	0.18	0.83	µg/m ³	0.19 J;
DOE-4	6/18/2025	Methylene chloride	1	-	0.24	0.73	µg/m ³	0.41 J;
DOE-4	6/18/2025	Toluene	310	-	0.10	0.87	µg/m ³	0.63 J;
DOE-4	6/18/2025	Trichloroethene	-	0.48	0.12	0.84	µg/m ³	0.13 J;
DOE-4	6/18/2025	Trichlorofluoromethane	1300	-	0.13	0.81	µg/m ³	1.1 ;

Notes:

¹ Indicates non-cancerous screening level value, utilized only when cancerous values are not established.

Peach shading indicates the result is above DTSC HHRA NOTE 3.

Pink shading indicates the result is above the US EPA RSL.

Bold text indicates result above MDL.

"—" indicates no value.

MDL = Method Detection Limit

MRL = Method Reporting Limit

J = Result is an estimated quantity. Associated numerical value is approximate concentration of analyte in sample.

; = separates lab qualifiers from data validation qualifiers. If no qualifier(s) then just the ; may be reported.

µg/m³ = micrograms per meter cubed

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APPENDIX C
Radionuclide Results

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Table C-1. Gross alpha and gross beta air sample results for air samplers.

Sample Collection Date / Time	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
Sample location DOE-1				
4/4/25 8:53	-1.53E-15	4.79E-15	3.84E-14	2.08E-14
4/7/25 10:35	1.28E-15	6.22E-15	6.14E-14	2.70E-14
4/11/25 9:12	3.03E-15	4.85E-15	7.11E-14	2.10E-14
4/14/25 8:54	-1.70E-15	6.39E-15	8.31E-14	2.77E-14
4/17/25 10:19	-1.01E-15	6.25E-15	7.90E-14	2.71E-14
4/21/25 8:43	2.53E-15	4.86E-15	7.47E-14	2.10E-14
4/25/25 9:36	1.22E-15	4.73E-15	6.68E-14	2.05E-14
4/28/25 9:10	2.32E-15	6.41E-15	1.95E-14	2.77E-14
5/2/25 8:54	2.04E-15	4.60E-15	5.68E-14	2.08E-14
5/5/25 9:20	5.03E-15	6.08E-15	2.40E-14	2.75E-14
5/9/25 8:44	2.55E-15	4.61E-15	4.35E-14	2.09E-14
5/12/25 8:26	2.72E-15	6.14E-15	6.65E-14	2.78E-14
5/16/25 8:33	1.02E-15	4.58E-15	5.39E-14	2.07E-14
5/20/25 8:05	2.80E-15	4.61E-15	8.08E-14	2.09E-14
5/23/25 8:37	-9.71E-16	6.07E-15	5.62E-14	2.75E-14
5/27/25 9:40	7.65E-16	4.54E-15	2.79E-14	2.05E-14
5/30/25 8:23	-3.14E-16	6.23E-15	7.11E-14	2.82E-14
6/2/25 8:23	6.14E-15	5.97E-15	7.60E-14	2.71E-14
6/6/25 9:29	1.61E-15	4.43E-15	2.29E-14	2.01E-14
6/9/25 9:03	2.85E-15	6.01E-15	4.88E-14	2.73E-14
6/13/25 9:32	2.61E-15	4.46E-15	4.43E-14	2.03E-14
6/16/25 9:20	3.83E-15	5.99E-15	8.72E-14	2.72E-14
6/20/25 9:44	8.79E-16	4.46E-15	6.07E-14	2.03E-14
6/23/25 9:29	3.83E-15	5.99E-15	6.67E-14	2.72E-14
6/27/25 8:42	2.14E-15	4.52E-15	2.60E-14	2.05E-14
6/30/25 8:58	-4.74E-16	5.95E-15	5.78E-14	2.70E-14

Sample Collection Date / Time	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
Sample location DOE-2				
4/4/25 9:03	1.24E-15	4.79E-15	1.33E-14	2.08E-14
4/7/25 10:45	6.26E-16	6.22E-15	8.25E-14	2.69E-14
4/11/25 9:12	3.03E-15	4.85E-15	7.11E-14	2.10E-14
4/14/25 9:05	3.08E-16	6.39E-15	5.34E-14	2.77E-14
4/17/25 10:27	3.01E-16	6.25E-15	3.51E-14	2.71E-14
4/21/25 9:00	4.88E-16	4.85E-15	4.51E-14	2.10E-14
4/25/25 9:44	1.22E-15	4.74E-15	5.65E-14	2.05E-14
4/28/25 9:18	-2.04E-15	6.40E-15	2.24E-14	2.77E-14
5/2/25 9:14	2.78E-15	4.59E-15	3.25E-14	2.08E-14
5/5/25 9:30	2.36E-15	6.09E-15	4.39E-14	2.76E-14
5/9/25 8:56	1.28E-15	4.61E-15	5.45E-14	2.09E-14
5/12/25 8:34	2.38E-15	6.12E-15	3.04E-14	2.76E-14
5/16/25 8:39	-2.30E-16	4.57E-15	2.22E-14	2.06E-14
5/20/25 8:14	-4.83E-16	4.59E-15	2.81E-14	2.07E-14
5/23/25 8:45	3.58E-16	6.05E-15	3.42E-14	2.72E-14
5/27/25 9:53	-4.75E-16	4.52E-15	1.40E-14	2.03E-14
5/30/25 8:31	1.05E-15	6.21E-15	2.11E-14	2.80E-14
6/2/25 8:37	5.15E-16	5.96E-15	5.51E-14	2.71E-14
6/6/25 9:39	2.34E-15	4.43E-15	3.78E-14	2.01E-14
6/9/25 9:11	2.52E-15	6.01E-15	5.30E-14	2.73E-14
6/13/25 9:39	1.38E-16	4.46E-15	2.43E-14	2.03E-14
6/16/25 9:28	2.17E-15	5.98E-15	4.44E-14	2.72E-14
6/20/25 9:52	2.85E-15	4.46E-15	6.62E-14	2.03E-14
6/23/25 9:44	4.82E-15	5.98E-15	2.52E-14	2.72E-14
6/27/25 8:50	2.39E-15	4.52E-15	2.17E-14	2.05E-14
6/30/25 9:07	2.16E-15	5.95E-15	4.23E-14	2.70E-14

Sample Collection Date / Time	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
Sample location DOE-3				
4/4/25 9:14	-7.76E-16	4.80E-15	1.22E-14	2.08E-14
4/7/25 10:57	1.28E-15	6.22E-15	4.99E-14	2.69E-14
4/11/25 9:28	2.78E-15	4.85E-15	5.27E-14	2.10E-14
4/14/25 9:14	-1.03E-15	6.39E-15	3.69E-14	2.77E-14
4/17/25 10:39	2.27E-15	6.25E-15	6.89E-14	2.70E-14
4/21/25 9:09	9.61E-15	6.33E-15	1.07E-13	2.74E-14
4/25/25 9:53	4.45E-15	4.74E-15	3.75E-14	2.05E-14
4/28/25 9:30	-3.05E-15	6.40E-15	7.68E-15	2.77E-14
5/2/25 9:23	2.01E-17	4.58E-15	1.74E-14	2.06E-14
5/5/25 9:40	-6.39E-16	6.08E-15	4.04E-14	2.73E-14
5/9/25 9:04	2.02E-17	4.60E-15	6.68E-14	2.07E-14
5/12/25 8:46	2.04E-15	6.12E-15	2.47E-14	2.75E-14
5/16/25 8:46	1.52E-15	4.57E-15	3.62E-14	2.06E-14
5/20/25 8:21	7.75E-16	4.59E-15	3.26E-14	2.07E-14
5/23/25 8:52	4.67E-15	6.05E-15	3.29E-14	2.72E-14
5/27/25 10:01	-9.70E-16	4.52E-15	1.46E-14	2.03E-14
5/30/25 8:39	-3.13E-16	6.21E-15	1.21E-14	2.80E-14
6/2/25 8:48	-4.75E-16	5.96E-15	3.75E-14	2.71E-14
6/6/25 9:46	2.10E-15	4.43E-15	2.34E-14	2.02E-14
6/9/25 9:20	1.85E-15	6.01E-15	5.30E-14	2.73E-14
6/13/25 9:48	3.35E-15	4.46E-15	5.14E-14	2.03E-14
6/16/25 9:36	3.17E-15	5.99E-15	7.20E-14	2.72E-14
6/20/25 10:03	3.35E-15	4.46E-15	4.62E-14	2.03E-14
6/23/25 9:58	-1.47E-15	5.98E-15	2.45E-14	2.72E-14
6/27/25 8:59	3.65E-15	4.53E-15	2.95E-14	2.06E-14
6/30/25 9:18	5.13E-16	5.95E-15	4.30E-14	2.70E-14

Sample Collection Date / Time	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
Sample location DOE-4				
4/4/25 9:33	7.35E-16	4.80E-15	2.83E-14	2.08E-14
4/7/25 11:06	2.26E-15	6.24E-15	6.29E-14	2.70E-14
4/11/25 9:35	4.56E-15	4.85E-15	7.44E-14	2.10E-14
4/14/25 9:25	2.98E-15	6.38E-15	5.37E-14	2.76E-14
4/17/25 10:46	-2.62E-17	6.25E-15	4.28E-14	2.71E-14
4/21/25 9:19	9.97E-16	4.85E-15	7.44E-14	2.10E-14
4/25/25 10:04	1.22E-15	4.74E-15	5.89E-14	2.05E-14
4/28/25 9:37	1.32E-15	6.41E-15	4.03E-14	2.78E-14
5/2/25 9:35	7.72E-16	4.57E-15	3.75E-14	2.06E-14
5/5/25 9:48	-3.07E-16	6.08E-15	2.35E-14	2.74E-14
5/9/25 9:11	2.72E-16	4.60E-15	3.75E-14	2.07E-14
5/12/25 8:54	1.03E-15	6.12E-15	5.45E-14	2.75E-14
5/16/25 8:53	1.52E-15	4.57E-15	1.95E-14	2.06E-14
5/20/25 8:29	1.78E-15	4.59E-15	5.18E-14	2.07E-14
5/23/25 8:59	6.90E-16	6.05E-15	5.25E-14	2.72E-14
5/27/25 10:09	1.75E-15	4.52E-15	5.57E-14	2.03E-14
5/30/25 8:47	-2.02E-15	6.21E-15	5.43E-14	2.80E-14
6/2/25 8:58	9.75E-15	5.96E-15	6.14E-14	2.71E-14
6/6/25 9:57	1.12E-15	4.43E-15	2.39E-14	2.01E-14
6/9/25 9:33	2.51E-15	6.00E-15	2.71E-14	2.73E-14
6/13/25 9:58	1.62E-15	4.46E-15	3.88E-14	2.03E-14
6/16/25 9:45	1.51E-15	5.99E-15	7.06E-14	2.72E-14
6/20/25 10:17	2.60E-15	4.45E-15	6.96E-14	2.02E-14
6/23/25 10:10	-4.77E-16	5.98E-15	4.43E-14	2.72E-14
6/27/25 9:06	1.39E-15	4.53E-15	5.52E-14	2.06E-14
6/30/25 9:25	1.83E-15	5.94E-15	7.49E-14	2.70E-14

Note: Some values are negative after background subtraction.

Table C-2. Individual radionuclide analysis for composite filter samples.

Radionuclide	DOE 5400.5 Fig III-1 D	DOE 5400.5 Fig III-1 W	DOE 5400.5 Fig III-1 Y	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier	Airborne Concentration (µCi/mL)
Q2/2025 Location DOE-1 Air Volume/Sample 9.84E+8mL							
Actinium-228	4E-11	1E-10	1E-10	1.97	47.3	U ; U	2.00E-15
Americium-241	-	2E-14	-	0.0649	1.42	U ; UJ	6.60E-17
Beryllium-7	-	5E-8	4E-8	120	123	U ; U	1.22E-13
Cesium-137	4E-10	-	-	1.21	11.7	U ; U	1.23E-15
Cobalt-60	-	4E-10	8E-11	8.53	18.6	U ; U	8.67E-15
Plutonium-238	-	3E-14	4E-14	-0.0142	0.497	U ; U	-1.44E-17
Plutonium-239	-	2E-14	4E-14	0.108	0.392	U ; U	1.10E-16
Plutonium-241	-	1E-12	2E-12	-16.5	27.9	U ; U	-1.68E-14
Polonium-210	1E-12	1E-12	-	7.75	0.438	;	7.88E-15
Potassium-40	9E-10	-	-	121	221	U ; U	1.23E-13
Ra-226 – total	-	1E-12	-	4.93	2.22	;	5.01E-15
Ra-228	-	3E-12	-	6.55	3.52	; J	6.66E-15
Strontium-90	5E-11	-	9E-12	-1.94	2.94	U ; UJ	-1.97E-15
Thorium-228	-	5E-14	4E-14	0.823	0.788	;	8.36E-16
Thorium-230	-	4E-14	5E-14	1.30	0.616	;	1.32E-15
Thorium-232	-	7E-15	1E-14	1.38	0.483	;	1.40E-15
Uranium-233/234	4E-12	2E-12	9E-14	0.763	0.553	;	7.75E-16
Uranium-235/236	5E-12	2E-12	1E-13	0.000	0.220	U ; U	0.00E+0
Uranium-238	5E-12	2E-12	1E-13	1.09	0.460	;	1.11E-15
Q2/2025 Location DOE-2 Air Volume/Sample 9.84E+8mL							
Actinium-228	4E-11	1E-10	1E-10	5.90	70.1	U ; U	6.00E-15
Americium-241	-	2E-14	-	-0.0968	0.822	U ; U	-9.84E-17
Beryllium-7	-	5E-8	4E-8	118	170	U ; U	1.20E-13
Cesium-137	4E-10	-	-	0.0710	16.4	U ; U	7.22E-17
Cobalt-60	-	4E-10	8E-11	3.63	17.9	U ; U	3.69E-15
Plutonium-238	-	3E-14	4E-14	0.0488	0.428	U ; U	4.96E-17
Plutonium-239	-	2E-14	4E-14	0.0487	0.427	U ; U	4.95E-17
Plutonium-241	-	1E-12	2E-12	-2.25	31.3	U ; U	-2.29E-15
Polonium-210	1E-12	1E-12	-	6.56	0.495	;	6.67E-15

Radionuclide	DOE 5400.5 Fig III-1 D	DOE 5400.5 Fig III-1 W	DOE 5400.5 Fig III-1 Y	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier	Airborne Concentration (µCi/mL)
Potassium-40	9E-10	-	-	22.3	228	U ; U	2.27E-14
Ra-226 – total	-	1E-12	-	3.53	1.69	;	3.59E-15
Ra-228	-	3E-12	-	8.68	3.95	; J	8.82E-15
Strontium-90	5E-11	-	9E-12	-0.716	2.86	U ; UJ	-7.28E-16
Thorium-228	-	5E-14	4E-14	0.854	0.558	;	8.68E-16
Thorium-230	-	4E-14	5E-14	0.762	0.499	;	7.74E-16
Thorium-232	-	7E-15	1E-14	0.981	0.369	;	9.97E-16
Uranium-233/234	4E-12	2E-12	9E-14	0.957	0.491	;	9.73E-16
Uranium-235/236	5E-12	2E-12	1E-13	0.0357	0.380	U ; U	3.63E-17
Uranium-238	5E-12	2E-12	1E-13	0.946	0.366	;	9.61E-16
Q2/2025 Location DOE-3 Air Volume/Sample 9.74E+8mL							
Actinium-228	4E-11	1E-10	1E-10	25.7	56.3	U ; U	2.64E-14
Americium-241	-	2E-14	-	0.494	1.32	U ; UJ	5.07E-16
Beryllium-7	-	5E-8	4E-8	113	130	U ; U	1.16E-13
Cesium-137	4E-10	-	-	-3.69	10.4	U ; U	-3.79E-15
Cobalt-60	-	4E-10	8E-11	7.91	21.1	U ; U	8.12E-15
Plutonium-238	-	3E-14	4E-14	-0.0404	0.343	U ; U	-4.15E-17
Plutonium-239	-	2E-14	4E-14	-0.0941	0.434	U ; U	-9.66E-17
Plutonium-241	-	1E-12	2E-12	-2.60	27.7	U ; U	-2.67E-15
Polonium-210	1E-12	1E-12	-	5.38	0.515	;	5.52E-15
Potassium-40	9E-10	-	-	31.9	205	U ; U	3.28E-14
Ra-226 – total	-	1E-12	-	4.62	3.65	;	4.74E-15
Ra-228	-	3E-12	-	12.7	4.17	; J	1.30E-14
Strontium-90	5E-11	-	9E-12	0.295	2.92	U ; UJ	3.03E-16
Thorium-228	-	5E-14	4E-14	0.941	0.476	;	9.66E-16
Thorium-230	-	4E-14	5E-14	0.889	0.553	;	9.13E-16
Thorium-232	-	7E-15	1E-14	1.03	0.284	;	1.06E-15
Uranium-233/234	4E-12	2E-12	9E-14	0.698	0.649	;	7.17E-16
Uranium-235/236	5E-12	2E-12	1E-13	-0.0396	0.457	U ; U	-4.07E-17
Uranium-238	5E-12	2E-12	1E-13	0.921	0.468	;	9.46E-16

Radionuclide	DOE 5400.5 Fig III-1 D	DOE 5400.5 Fig III-1 W	DOE 5400.5 Fig III-1 Y	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier	Airborne Concentration (µCi/mL)
Q2/2025 Location DOE-4 Air Volume/Sample 9.84E+8mL							
Actinium-228	4E-11	1E-10	1E-10	1.74	46.8	U ; U	1.77E-15
Americium-241	-	2E-14	-	0.000	0.380	U ; U	0.00E+0
Beryllium-7	-	5E-8	4E-8	4.14	189	U ; U	4.21E-15
Cesium-137	4E-10	-	-	2.65	14.9	U ; U	2.69E-15
Cobalt-60	-	4E-10	8E-11	-0.0616	13.0	U ; U	-6.26E-17
Plutonium-238	-	3E-14	4E-14	0.0894	0.424	U ; U	9.09E-17
Plutonium-239	-	2E-14	4E-14	0.0160	0.350	U ; U	1.63E-17
Plutonium-241	-	1E-12	2E-12	-8.29	28.2	U ; U	-8.42E-15
Polonium-210	1E-12	1E-12	-	6.13	0.464	;	6.23E-15
Potassium-40	9E-10	-	-	-46.5	129	U ; U	-4.73E-14
Ra-226 – total	-	1E-12	-	1.80	1.72	;	1.83E-15
Ra-228	-	3E-12	-	6.32	4.86	; J	6.42E-15
Strontium-90	5E-11	-	9E-12	0.0612	2.88	U ; UJ	6.22E-17
Thorium-228	-	5E-14	4E-14	1.16	0.623	;	1.18E-15
Thorium-230	-	4E-14	5E-14	1.42	0.560	;	1.44E-15
Thorium-232	-	7E-15	1E-14	0.786	0.376	;	7.99E-16
Uranium-233/234	4E-12	2E-12	9E-14	0.953	0.389	;	9.68E-16
Uranium-235/236	5E-12	2E-12	1E-13	0.109	0.296	U ; U	1.11E-16
Uranium-238	5E-12	2E-12	1E-13	1.29	0.240	;	1.31E-15

Notes and Data Qualifier meanings:

DOE Order 5400.5 – Derived Concentration Guides for Air and Water, Figure III-1

Intake limits are based on removal half-times from the lung (D = 0.5 days, W = 50 days, Y = 500 days)

MDC – Minimum Detectable Concentration

Airborne Concentration (µCi/mL) = (Result (pCi/sample)) / ((Air Volume (mL)/Sample)*1000000)

;- separates lab qualifiers from data validation qualifiers

pCi/sample – Picocuries per sample

uCi/mL – Microcuries per milliliter

mL – milliliters

"—" indicates no value.

U U – Analyte was analyzed for but not detected and is qualified as a non-detect.

UJ – The analyte was not detected; however, the result is estimated because of discrepancies in meeting certain analyte-specific QC criteria.

J – The analyte was detected; however, the result is estimated because of discrepancies in meeting certain analyte-specific QC criteria.

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APPENDIX D

PM₁₀ Monthly Audit Reports and Flow Verification Results

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One-Point Flow Rate Bias Estimate

ETEC Site: DOE-1				Pollutant type: PM10				Bias (%)	
-------------------------	--	--	--	-----------------------------	--	--	--	-----------------	--

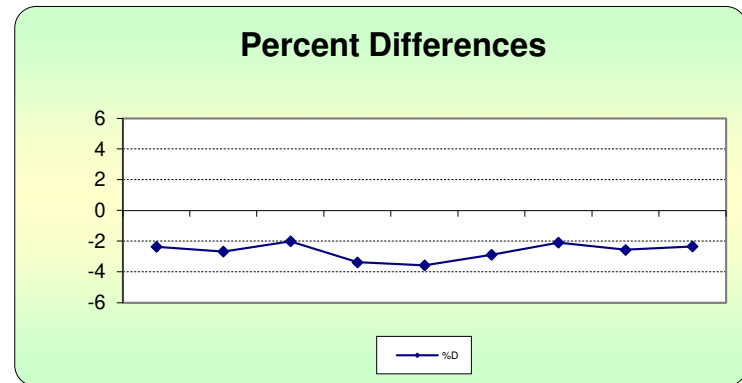
Quarter	E-BAM	Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	Percentile	d ²	d	d ²
Q2 / 2025 (Q29)	W23314	4/28/2025	14.00	14.34	-2.371	25th -2.886	5.622	2.371	5.622
			16.70	17.16	-2.681		7.186	2.681	7.186
			17.50	17.86	-2.016		4.063	2.016	4.063
Q2 / 2025	W23314	5/23/2025	14.00	14.49	-3.382	75th -2.344	11.436	3.382	11.436
			16.70	17.32	-3.580		12.814	3.580	12.814
			17.50	18.02	-2.886		8.327	2.886	8.327
Q2 / 2025	W23314	6/25/2025	14.00	14.30	-2.098		4.401	2.098	4.401
			16.70	17.14	-2.567		6.590	2.567	6.590
			17.50	17.92	-2.344		5.493	2.344	5.493

n	$\sum d $	"AB" (Eqn 4)
9	23.923	2.658
n-1	$\sum d ^2$	"AS" (Eqn 5)
8	65.932	0.541

Bias (%) (Eqn 3)	Both Signs Positive
2.99	FALSE
Signed Bias (%)	Both Signs Negative
-2.99	TRUE

Note: No quality issues reported this quarter.

Reference: U.S. EPA, Ambient Monitoring Technology Information Center (AMTIC)
 Quality Indicator Assessment Reports
 Data Assessment Statistical Calculator - Software to calculate precision and bias statistics
 MS EXCEL filename - "11/3/2017 (dasc)11_3_17.xls"
<https://www3.epa.gov/tnn/amtic/qareport.html>





One-Point Flow Rate Bias Estimate

ETEC Site: DOE-2					Pollutant type: PM10				Bias (%)	
------------------	--	--	--	--	----------------------	--	--	--	----------	--

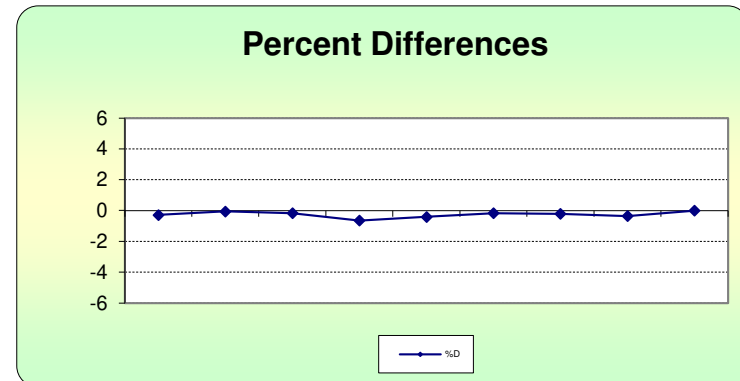
Quarter	E-BAM	Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	Percentile	d ²	d	d ²
Q2 / 2025 (Q29)	Y12096	4/28/2025	14.00	14.04	-0.285	25th -0.358	0.081	0.285	0.081
			16.70	16.71	-0.060		0.004	0.060	0.004
			17.50	17.53	-0.171		0.029	0.171	0.029
Q2 / 2025	Y12096	5/23/2025	14.00	14.09	-0.639	75th -0.171	0.408	0.639	0.408
			16.70	16.77	-0.417		0.174	0.417	0.174
			17.50	17.53	-0.171		0.029	0.171	0.029
Q2 / 2025	Y12096	6/25/2025	14.00	14.03	-0.214		0.046	0.214	0.046
			16.70	16.76	-0.358		0.128	0.358	0.128
			17.50	17.50	0.000		0.000	0.000	0.000

n	Σ d	"AB" (Eqn 4)
9	2.315	0.257
n-1	Σ d ²	"AS" (Eqn 5)
8	0.899	0.195

Bias (%) (Eqn 3)	Both Signs Positive
0.38	FALSE
Signed Bias (%)	Both Signs Negative
-0.38	TRUE

Note: No quality issues reported this quarter.

Reference: U.S. EPA, Ambient Monitoring Technology Information Center (AMTIC)
 Quality Indicator Assessment Reports
 Data Assessment Statistical Calculator - Software to calculate precision and bias statistics
 MS EXCEL filename - "11/3/2017 (dasc)11_3_17.xls"
<https://www3.epa.gov/tnn/amtic/qareport.html>





One-Point Flow Rate Bias Estimate

ETEC Site: DOE-3	Pollutant type: PM10	Bias (%)
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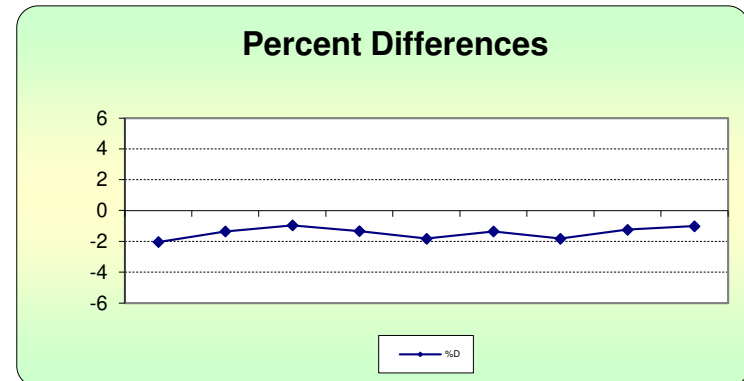
Quarter	E-BAM	Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	Percentile	d ²	d	d ²
Q2 / 2025 (Q29)	W23313	4/28/2025	14.00	14.29	-2.029	25th -1.822	4.118	2.029	4.118
			16.70	16.93	-1.359		1.846	1.359	1.846
			17.50	17.67	-0.962		0.926	0.962	0.926
Q2 / 2025	W23313	5/23/2025	14.00	14.19	-1.339	75th -1.242	1.793	1.339	1.793
			16.70	17.01	-1.822		3.321	1.822	3.321
			17.50	17.74	-1.353		1.830	1.353	1.830
Q2 / 2025	W23313	6/25/2025	14.00	14.26	-1.823		3.324	1.823	3.324
			16.70	16.91	-1.242		1.542	1.242	1.542
			17.50	17.68	-1.018		1.037	1.018	1.037

n	$\sum d $	"AB" (Eqn 4)
9	12.948	1.439
n-1	$\sum d^2$	"AS" (Eqn 5)
8	19.737	0.373

Bias (%) (Eqn 3)	Both Signs Positive
1.67	FALSE
Signed Bias (%)	Both Signs Negative
-1.67	TRUE

Note: No quality issues reported this quarter.

Reference: U.S. EPA, Ambient Monitoring Technology Information Center (AMTIC)
 Quality Indicator Assessment Reports
 Data Assessment Statistical Calculator - Software to calculate precision and bias statistics
 MS EXCEL filename - "11/3/2017 (dasc)11_3_17.xls"
<https://www3.epa.gov/tnn/amtic/qareport.html>





One-Point Flow Rate Bias Estimate

ETEC Site: DOE-4	Pollutant type: PM10	Bias (%)
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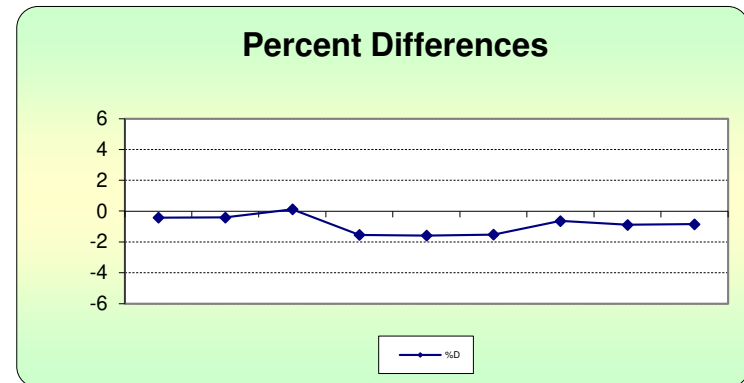
Quarter	E-BAM	Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	Percentile	d ²	d	d ²
Q2 / 2025 (Q29)	X16067	4/28/2025	14.00	14.06	-0.427	25th -1.519	0.182	0.427	0.182
			16.70	16.77	-0.417		0.174	0.417	0.174
			17.50	17.48	0.114		0.013	0.114	0.013
Q2 / 2025	X16067	5/22/2025	14.00	14.22	-1.547	75th -0.427	2.394	1.547	2.394
			16.70	16.97	-1.591		2.531	1.591	2.531
			17.50	17.77	-1.519		2.309	1.519	2.309
Q2 / 2025	X16067	6/25/2025	14.00	14.09	-0.639		0.408	0.639	0.408
			16.70	16.85	-0.890		0.792	0.890	0.792
			17.50	17.65	-0.850		0.722	0.850	0.722

n	$\sum d $	"AB" (Eqn 4)
9	7.995	0.888
n-1	$\sum d ^2$	"AS" (Eqn 5)
8	9.526	0.550

Bias (%) (Eqn 3)	Both Signs Positive
1.23	FALSE
Signed Bias (%)	Both Signs Negative
-1.23	TRUE

Note: No quality issues reported this quarter.

Reference: U.S. EPA, Ambient Monitoring Technology Information Center (AMTIC)
 Quality Indicator Assessment Reports
 Data Assessment Statistical Calculator - Software to calculate precision and bias statistics
 MS EXCEL filename - "11/3/2017 (dasc)11_3_17.xls"
<https://www3.epa.gov/tnn/amtic/qareport.html>





Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-1

Serial # W23314

Audit Date: 4/28/25

Audited By: TS williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 2/11/2025

Leak Check Value: as found: 0.5 as left: 0.5

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>14.0</u> °C	<u>13.3</u> °C	as left:	<u>14.0</u> °C	<u>13.3</u> °C
Barometric Pressure:	as found:	<u>715.2</u> mmHg	<u>716.2</u> mmHg	as left:	<u>715.2</u> mmHg	<u>716.2</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>17.16</u> lpm	as left:	<u>16.7</u> lpm	<u>17.16</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.34</u> lpm	as left:	<u>14.0</u> lpm	<u>14.34</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.86</u> lpm	as left:	<u>17.5</u> lpm	<u>17.86</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test		Pump Test		
Expected Span Mass (mg/cm2) :	<u>0.984</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2) :	<u>0.993</u>			
Difference (mg/cm2) :	<u>0.009</u>			
% Difference / <u>Pass</u> or Fail:	<u>0.91%</u>	<u>15.0</u>	<u>416.1</u>	<u>Good/Marginal</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>0924</u>	<u>0924</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>1</u>	<u>1</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 No new Messages</u>	<u>4/28/25</u>	<u>0931</u>			
<u>2</u>					
<u>3</u>					

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-2

Serial # Y12096

Audit Date: 4/28/25

Audited By: T.S. Williams

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 2/11/2025

Leak Check Value: as found: 0.5 as left: 0.5

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>16.4</u> °C	<u>16.0</u> °C	as left:	<u>16.4</u> °C	<u>16.0</u> °C
Barometric Pressure:	as found:	<u>711.7</u> mmHg	<u>713.7</u> mmHg	as left:	<u>711.7</u> mmHg	<u>713.7</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.71</u> lpm	as left:	<u>16.7</u> lpm	<u>16.71</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.04</u> lpm	as left:	<u>14.0</u> lpm	<u>14.04</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.53</u> lpm	as left:	<u>17.5</u> lpm	<u>17.53</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Pump Test

Expected Span Mass (mg/cm2) :	<u>0.891</u>	Flow Rate	Vacuum	Quality Category
Measured Span Mass (mg/cm2) :	<u>0.876</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm2) :	<u>0.015</u>	(lpm)	(Hg)	
% Difference / <u>Pass</u> or Fail:	<u>1.70%</u>	<u>14.9</u>	<u>397.5</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1030</u>	<u>1030</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>2</u>	<u>2</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 No new Messages</u>	<u>4/28/25</u>	<u>1036</u>			
<u>2</u>					
<u>3</u>					

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-3

Serial # W23313

Audit Date: 4/28/25

Audited By: B Williford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 2/11/2025

Leak Check Value: as found: 0.5 as left: 0.5

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>19.2</u> °C	<u>18.7</u> °C	as left:	<u>19.2</u> °C	<u>18.7</u> °C
Barometric Pressure:	as found:	<u>715.2</u> mmHg	<u>715.2</u> mmHg	as left:	<u>715.2</u> mmHg	<u>715.2</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.93</u> lpm	as left:	<u>16.7</u> lpm	<u>16.93</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.29</u> lpm	as left:	<u>14.0</u> lpm	<u>14.29</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.67</u> lpm	as left:	<u>17.5</u> lpm	<u>17.67</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Pump Test

Expected Span Mass (mg/cm2): <u>0.885</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2): <u>0.909</u>			
Difference (mg/cm2): <u>0.024</u>			
% Difference / <u>Pass</u> or Fail: <u>2.68%</u>	<u>14.0</u>	<u>395.7</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>11:33</u>	<u>11:33</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>3</u>	<u>3</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 No new messages</u>	<u>4/28/25</u>	<u>1146</u>			
<u>2</u>					
<u>3</u>					

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-4
 Audit Date: 4/28/25

Serial # X 16067
 Audited By: T Swillford

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 2/11/2025

Leak Check Value: as found: 0.5 as left: 0.5

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>23.2</u> °C	<u>22.1</u> °C	as left:	<u>23.2</u> °C	<u>22.1</u> °C
Barometric Pressure:	as found:	<u>706.7</u> mmHg	<u>706.7</u> mmHg	as left:	<u>706.7</u> mmHg	<u>706.7</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.77</u> lpm	as left:	<u>16.7</u> lpm	<u>16.77</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.06</u> lpm	as left:	<u>14.0</u> lpm	<u>14.06</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.48</u> lpm	as left:	<u>17.5</u> lpm	<u>17.48</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test

Pump Test

Expected Span Mass (mg/cm2):	<u>0.950</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2):	<u>0.968</u>			
Difference (mg/cm2):	<u>0.018</u>			
% Difference / <u>Pass</u> or Fail:	<u>1.88%</u>	<u>14.0</u>	<u>385.6</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1234</u>	<u>1234</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>4</u>	<u>4</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 No new Messages</u>	<u>4/28/25</u>	<u>1240</u>			
<u>2</u>		<u>5</u>			
<u>3</u>		<u>6</u>			

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-1 Serial # W23314
 Audit Date: 5/23/25 Audited By: TS Williford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/11/2025
Leak Check Value:	as found: <u>0.5</u>	as left:	<u>0.5</u>		
Ambient Temperature:	as found: <u>23.7</u> °C	Ref. Std.:	<u>22.0</u> °C	as left:	<u>23.7</u> °C
Barometric Pressure:	as found: <u>712.7</u> mmHg	Ref. Std.:	<u>714.2</u> mmHg	as left:	<u>712.7</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	Ref. Std.:	<u>17.32</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	Ref. Std.:	<u>14.49</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	Ref. Std.:	<u>18.02</u> lpm	as left:	<u>17.5</u> lpm

Mechanical Audits (Y = Yes N = No)					
Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>	

Manual Span Membrane Test	Pump Test		
Expected Span Mass (mg/cm2) : <u>0.984</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2) : <u>0.967</u>			
Difference (mg/cm2) : <u>0.017</u>			
% Difference / <u>Pass</u> or Fail: <u>1.74%</u>	<u>14.4</u>	<u>405.5</u>	<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1132</u>	<u>1132</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>1</u>	<u>1</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new messages</u>	<u>5/23/25</u>	<u>1136</u>				
<u>2</u>						
<u>3</u>						

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-2 Serial # Y12096
Audit Date: 5/23/25 Audited By: TS Williford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/11/2025
Leak Check Value:	as found: <u>0.5</u>		as left: <u>0.5</u>		
Ambient Temperature:	as found:	E-BAM	Ref. Std.	as left:	E-BAM
		<u>23.0</u> °C	<u>23.4</u> °C		<u>23.0</u> °C
Barometric Pressure:	as found:	<u>709.3</u> mmHg	<u>711.2</u> mmHg	as left:	<u>709.3</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.77</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.09</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.53</u> lpm	as left:	<u>17.5</u> lpm

Mechanical Audits (Y = Yes N = No)					
Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>	

Manual Span Membrane Test		Pump Test		
Expected Span Mass (mg/cm2):	<u>0.891</u>	Flow Rate	Vacuum	Quality Category
Measured Span Mass (mg/cm2):	<u>0.848</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm2):	<u>0.043</u>	(lpm)	(Hg)	
% Difference <u>Pass</u> or Fail:	<u>4.95%</u>	<u>14.5</u>	<u>397.4</u>	<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1040</u>	<u>1040</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>2</u>	<u>2</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new Messages</u>	<u>5/23/25</u>	<u>1045</u>				
<u>2</u>						
<u>3</u>						

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-3 Serial # W23313
 Audit Date: 5/23/25 Audited By: TS williford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/11/2025
Leak Check Value:	as found: <u>0.5</u>		as left: <u>0.5</u>		
Ambient Temperature:	as found:	E-BAM	Ref. Std.	as left:	E-BAM
		<u>28.4</u> °C	<u>27.6</u> °C		<u>28.4</u> °C
Barometric Pressure:	as found:	<u>713.0</u> mmHg	<u>713.2</u> mmHg	as left:	<u>713.0</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>17.01</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.19</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.74</u> lpm	as left:	<u>17.5</u> lpm

Mechanical Audits (Y = Yes N = No)					
Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>	

Manual Span Membrane Test	Pump Test		
Expected Span Mass (mg/cm2) : <u>0.885</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2) : <u>0.905</u>			
Difference (mg/cm2) : <u>0.02</u>			
% Difference / <u>Pass</u> or Fail: <u>2.23%</u>	<u>14.0</u>	<u>892.5</u>	<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1201</u>	<u>1201</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>3</u>	<u>3</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new messages</u>	<u>5/23/25</u>	<u>1206</u>	<u>4</u>			
<u>2</u>			<u>5</u>			
<u>3</u>			<u>6</u>			

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-4 Serial # X16067
 Audit Date: 5/22/25 Audited By: TS Williford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/11/2025
Leak Check Value:	as found: <u>0.5</u>		as left: <u>0.5</u>		
Ambient Temperature:	as found:	E-BAM	Ref. Std.	as left:	E-BAM
		<u>29.3</u> °C	<u>26.8</u> °C		<u>29.3</u> °C
Barometric Pressure:	as found:	<u>705.2</u> mmHg	<u>705.1</u> mmHg	as left:	<u>705.2</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.97</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.22</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.77</u> lpm	as left:	<u>17.5</u> lpm

Mechanical Audits (Y = Yes N = No)					
Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>	

Manual Span Membrane Test	Pump Test		
Expected Span Mass (mg/cm2): <u>0.950</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2): <u>0.955</u>			
Difference (mg/cm2):			
% Difference <u>Pass</u> or Fail:	<u>14.8</u>	<u>397.8</u>	<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1109</u>	<u>1109</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>4</u>	<u>4</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new messages</u>	<u>5/22/25</u>	<u>11:15</u>	4			
<u>2</u>			5			
<u>3</u>			6			

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-1 Serial # W23314
 Audit Date: 6/25/25 Audited By: TS Williford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/11/2025
Leak Check Value:	as found: <u>0.5</u>		as left: <u>0.5</u>		
Ambient Temperature:	as found: <u>15.5</u> °C	Ref. Std.:	<u>14.8</u> °C	as left:	<u>15.5</u> °C
Barometric Pressure:	as found: <u>714.0</u> mmHg	Ref. Std.:	<u>715.0</u> mmHg	as left:	<u>714.0</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	Ref. Std.:	<u>17.14</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	Ref. Std.:	<u>14.30</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	Ref. Std.:	<u>17.92</u> lpm	as left:	<u>17.5</u> lpm

Mechanical Audits (Y = Yes N = No)					
Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>	

Manual Span Membrane Test		Pump Test		
Expected Span Mass (mg/cm2) :	<u>0.984</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2) :	<u>0.968</u>			
Difference (mg/cm2) :	<u>0.016</u>			
% Difference / <u>Pass</u> or Fail:	<u>1.64%</u>	<u>14.6</u>	<u>405.4</u>	<u>Good / Marg</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>0729</u>	<u>0729</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>1</u>	<u>1</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new messages</u>	<u>6/25/25</u>	<u>0732</u>	<u>4</u>			
<u>2</u>			<u>5</u>			
<u>3</u>			<u>6</u>			

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-2 Serial # Y12096
 Audit Date: 6/25/25 Audited By: TS. Williford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/11/2025
Leak Check Value:	as found: <u>0.5</u>		as left: <u>0.5</u>		
Ambient Temperature:	as found:	E-BAM	Ref. Std.	as left:	E-BAM
		<u>17.8</u> °C	<u>18.4</u> °C		<u>17.8</u> °C
Barometric Pressure:	as found:	<u>710.6</u> mmHg	<u>712.7</u> mmHg	as left:	<u>710.6</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.76</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.03</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.5</u> lpm	as left:	<u>17.5</u> lpm

Mechanical Audits (Y = Yes N = No)					
Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>	
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>	
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>	

Manual Span Membrane Test	Pump Test		
Expected Span Mass (mg/cm2) : <u>0.891</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2) : <u>0.862</u>			
Difference (mg/cm2) : <u>0.029</u>			
% Difference / Pass or Fail: <u>3.31%</u>	<u>15.0</u>	<u>408.3</u>	<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>0832</u>	<u>0832</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>2</u>	<u>2</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
1 <u>No new messages</u>	<u>6/25/25</u>	<u>0834</u>	4			
2			5			
3			6			

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-3 Serial # W23313
 Audit Date: 6/25/25 Audited By: T.S. Williams

Flow Audit

Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 2/11/2025

Leak Check Value: as found: 0.5 as left: 0.5

		E-BAM	Ref. Std.		E-BAM	Ref. Std.
Ambient Temperature:	as found:	<u>24.5</u> °C	<u>23.9</u> °C	as left:	<u>24.5</u> °C	<u>23.9</u> °C
Barometric Pressure:	as found:	<u>714.1</u> mmHg	<u>714.2</u> mmHg	as left:	<u>714.1</u> mmHg	<u>714.2</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>16.91</u> lpm	as left:	<u>16.7</u> lpm	<u>16.91</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.26</u> lpm	as left:	<u>14.0</u> lpm	<u>14.26</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.68</u> lpm	as left:	<u>17.5</u> lpm	<u>17.68</u> lpm

Mechanical Audits (Y = Yes N = No)

Sample nozzle clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left	<u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left	<u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left	<u>Y</u>

Manual Span Membrane Test		Pump Test		
Expected Span Mass (mg/cm2) :	<u>0.885</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2) :	<u>0.900</u>			
Difference (mg/cm2) :	<u>0.015</u>			
% Difference / <u>Pass</u> or Fail:	<u>1.68%</u>	<u>15.0</u>	<u>397.8</u>	<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1019</u>	<u>1019</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>03</u>	<u>03</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 P. new messages</u>	<u>6/25/25</u>	<u>1023</u>			
<u>2</u>					
<u>3</u>					

Audit Notes:



Baseline Air Monitoring Program - DOE

E-BAM Monthly Audit and Maintenance

Station # DOE-4 Serial # X 16067
 Audit Date: 6/25/25 Audited By: TS Williford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/11/2025
Leak Check Value:	as found: <u>0.5</u>	as left:	<u>0.5</u>		
Ambient Temperature:	as found: <u>31.2</u> °C	Ref. Std.:	<u>28.6</u> °C	as left:	<u>31.2</u> °C
Barometric Pressure:	as found: <u>706.1</u> mmHg	Ref. Std.:	<u>706.2</u> mmHg	as left:	<u>706.1</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	Ref. Std.:	<u>16.85</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	Ref. Std.:	<u>14.09</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	Ref. Std.:	<u>17.65</u> lpm	as left:	<u>17.5</u> lpm

Mechanical Audits (Y = Yes N = No)			
Sample nozzle clean:	as found	<u>Y</u>	as left <u>Y</u>
Tape support vane clean:	as found	<u>Y</u>	as left <u>Y</u>
Tape spool covers tight:	as found	<u>Y</u>	as left <u>Y</u>
PM10 particle trap clean:	as found	<u>Y</u>	as left <u>Y</u>
PM10 drip jar empty:	as found	<u>Y</u>	as left <u>Y</u>
PM10 bug screen clear:	as found	<u>Y</u>	as left <u>Y</u>

Manual Span Membrane Test	Pump Test		
Expected Span Mass (mg/cm2) : <u>0.950</u>	Flow Rate 14.0 - 15.0 (lpm)	Vacuum Value (Hg)	Quality Category Good / Marginal / Poor
Measured Span Mass (mg/cm2) : <u>0.995</u>			
Difference (mg/cm2) : <u>0.045</u>			
% Difference / <u>Pass</u> or Fail: <u>4.63%</u>	<u>15.0</u>	<u>403.0</u>	<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1104</u>	<u>1104</u>	Analog Mode	Hourly	<u>✓</u>	Flow Type	Actual	<u>✓</u>
Location	<u>04</u>	<u>04</u>	Baud Rate	9600	<u>✓</u>	Restart Voltage	12.5 v	<u>✓</u>
Tape Advance	24 hrs	<u>✓</u>	RH Setpoint	45%	<u>✓</u>	Std Cond Temp	25 C	<u>✓</u>
Realtime Avg	60 mins	<u>✓</u>	Delta T Setpoint	15 C	<u>✓</u>	DAC	8.0 v	<u>✓</u>
Machine Type	PM-10	<u>✓</u>	RH Control	On	<u>✓</u>	RH Connect	No	<u>✓</u>
Analog FS	1.0 v	<u>✓</u>	Flow Setpoint	16.7	<u>✓</u>	Pump Protect	Off	<u>✓</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
1 <u>No need messages</u>	<u>6/25/25</u>	<u>1109</u>	4			
2			5			
3			6			

Audit Notes:

