

***Report on Air Monitoring, Area IV,
Fourth Quarter and Annual Summary
2024***

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



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

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**Report on Air Monitoring, Area IV,
Fourth Quarter and Annual Summary 2024**

**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 fourth quarter of 2024 (Q4/2024) of the air monitoring period (October 1, 2024, to December 31, 2024) at Area IV within the Santa Susana Field Laboratory (SSFL), located in Ventura County, California. The report also provides an annual summary for the seventh year of the air monitoring period (Q24 through Q27, January 1, 2024, through December 31, 2024). 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 Q1/2025 through Q4/2025.

This 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 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 the 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. Year 7 observations show a very similar trend when compared to data collected during Years 1, 2, 3, 4, 5, and 6. These stable data trends indicate that site activities are not having an effect on site air conditions. High heat, wind, fires, and holidays such as the Fourth of July all show consistent impacts to the air report readings. 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 quarters Q1/2024 through Q4/2024 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).

Meteorological data and radionuclide data all met the data completeness goal of 80%, and VOC data met the completeness goal of 85% for Q4/2024. PM₁₀ data did not meet the 80% goal during Q4/2024 due to a filter sensor pressure failure caused by battery and power issues at DOE-2 and DOE-3 for a large portion of Q4/2024, resulting in a 75% operational time frame for Q4/2024. The units for DOE-2 and DOE-3 were sent in for repairs but due to repair and maintenance backlogs, the backup units that are usually on-hand for unit replacement were still in for repairs. E-BAM units in for repair were not received back prior to the end of Q4/2024. Due to this maintenance backlog and to minimize future downtimes, four new E-BAM units have been ordered to increase the number of overall units on-hand if a unit goes down in the future. These new E-BAMs are expected to be received in 2025. This was the third time over the 27 quarters that the 80% goal was not met. However, since the start of the project, over the entire 27 quarters, the PM₁₀ operational time has been 93%. The air monitoring is to be continued beginning January 1, 2025, with the twenty-eighth quarter (Year 8) of air monitoring.

The following site activities were conducted during Q4/2024 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
Cs-137	cesium-137
DAC	derived air concentration
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
FSDf	Former Sodium Disposal Facility
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
MDL	method detection limit
mL	milliliter(s)
mph	miles per hour

MRL	method reporting limit
MS	mass spectrometry
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
Q27	twenty-seventh quarter
QA	quality assurance
QC	quality control
Ra-226	radium-226
Ra-228	radium-228
RAWS	Remote Automatic Weather Stations
RMHF	Radioactive Materials Handling Facility
RPD	relative percent difference
RSL	regional screening level
SDG	sample delivery group
SLAMS	State and Local Air Monitoring Stations
Sr-90	strontium-90
SSFL	Santa Susana Field Laboratory
VOC	volatile organic compound

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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 includes buildings that housed a 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 resulting from onsite remediation activities (project) at SSFL. Responsible parties are monitoring for particulate matter between 2.5 and 10 microns in aerodynamic diameter (PM₁₀), and volatile organic compounds (VOCs), at 14 locations at SSFL. Data were collected from 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 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 for DOE-1, DOE-2, DOE-3, and DOE-4 of the 14 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 Q4/2024 quarterly results and quality assurance (QA) activities performed at the DOE locations between October 1, 2024, and December 31, 2024. The report also provides an annual summary for the seventh year of the air monitoring period (Q1/2024 through Q4/2024, January 1, 2024, through December 31, 2024). The air monitoring is to be continued beginning January 1, 2025, with 2025 being the eighth year (beginning with Q1/2025) of the Air Monitoring Program.

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 between 2020 and 2023 from Weather Currents, average 12-month total rainfall is on the order of 14.69 inches. The majority of the rainfall occurs between December and April with January and February being the wettest months.

During Q4/2024, the Simi Valley received approximately 0.35 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 Q4/2024 reporting period. The report also provides an annual summary for the seventh year of the air monitoring period (Q1/2024 through Q4/2024, January 1, 2024, through December 31, 2024).

Quality objectives and data completeness were met for all meteorological, VOC, and radionuclide data for Q4/2024 of the Air Monitoring Program. One PM₁₀ station was not functioning during the majority of Q4/2024 so the data completeness goal was not met for the quarter; however, the cumulative total project data completeness has been calculated as 93% for 2018–2024.

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 Q1/2024 through Q4/2024 are comparable to the PM₁₀ concentrations measured at stations characterizing urban background. Concentrations of VOCs characteristic of motor vehicle emissions, fossil fuel combustion, and wildfires are comparable around SSFL compared with the urban background, reflecting the site's relatively remote location from vehicle traffic. PM₁₀ concentrations exceeded the California Ambient Air Quality Standard (CAAQS; 50 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]) in three locations all on the same day at DOE-1, DOE-3, and DOE-4 during Q4/2024, but the concentrations were below the National Ambient Air Quality Standard (NAAQS; 150 $\mu\text{g}/\text{m}^3$). Graphs 5–8 in Section 4.2 show that the PM₁₀ data for Year 7 are consistent with the baseline data from Years 1 through 6.

During Q4/2024 no VOC analytes were detected above the EPA regional screening level (RSL) or the April 2019 State of California Department of Toxic Substances Control (DTSC) Human Health Risk Assessment (HHRA) Note 3 Screening Levels (DTSC 2019). 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.

During the remainder of Year 7 (Q1/2024, Q2/2024, and Q3/2024), there were seven instances of VOC analytes detected above either the DTSC 2019 or the EPA RSLs. During Q1/2024 there was one VOC analyte (ethyl acetate) detected above the EPA RSL at all four locations (DOE-1, DOE-2, DOE-3, and DOE-4). During Q2/2024 there were two VOC analytes (benzene and ethyl acetate) detected above the DTSC 2019 or the EPA RSLs: three at DOE-1, four at DOE-2, and one at DOE-4. During Q3/2024 there were six VOC analytes (acrylonitrile, benzene, chloroform, ethylbenzene, methylene chloride, and trichloroethene) detected above the DTSC 2019 or the EPA RSLs: one at DOE-1, three at DOE-2, and four at DOE-4. VOC data analyzed during Year 7 are consistent with the baseline data from Years 1 through 6. The distribution of the VOC data cannot be explained by the extensive site database.

During Q1/2024 through Q4/2024, detections for gross alpha and gross beta that exceeded the minimum detectable concentration (MDC) are all naturally occurring radionuclides or global fallout. The naturally occurring radionuclides were much higher than the artificial radionuclides. Detections are expected because the results are calculated at a 95% confidence level. Gross alpha, gross beta, and radionuclide data analyzed during Year 7 are consistent with the baseline data from Years 1 through 6. All radiological data reported for the air filter samples are naturally occurring.

Data collected during Q1/2024 through Q4/2024 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. The remaining data were validated, and there are no statistically significant changes in the air monitoring results. Air monitoring at Area IV of the SSFL is to be continued starting January 1, 2025, with 2025 being the eighth year (beginning with Q1/2025) of the Air Monitoring Program.

Site activities during Q4/2024 included surveillance and maintenance, and groundwater sampling activities conducted by CDM Smith at the Former Sodium Disposal Facility (FSDF) as part of the groundwater interim measures. Routine activities onsite during the period also included general site maintenance; operations of the meteorological stations; the FSDF groundwater interim measure, which started November 2017; and groundwater sampling. When comparing Q4/2024 and the rest of the Year 7 data, to Years 1 through 6 data, the PM₁₀, VOC, and RAD data collected are consistent.

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 in this reporting period. One field duplicate sample was collected during each sampling event.

During Q4/2024, radionuclide samples were collected at four perimeter sampling 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-220 and radon-222 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 103 airborne radioactivity filter samples collected in Q4/2024 — 26 each with DOE-1, DOE-2, and DOE-3; and 25 with DOE-4. Following analysis for gross alpha and gross beta radiation, sample filters from each of the locations 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 Q4/2024 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 and 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 and particulate monitoring data to describe the air quality for the people and communities living near the ETEC site. However, before the weather data can be used with the computer models, it must first be tested for completeness and accuracy. 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., defined as 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 for :00, :15, :30, and :45 minutes each hour. There were 92 days in this reporting period (Q4/2024), which covers October 1, 2024, through December 31, 2024, with a total of 8,832 possible 15-minute observations. During year 7 (Q1/2024 through Q4/2024), there were a total of 35,136 possible 15-minute observations.

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 routinely throughout the reporting period 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 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 quality control (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 all applicable screening criteria 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 “invalid” (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 7 of the baseline monitoring are presented in Table 2.

Wind Rose

The final validated 15-minute meteorological dataset was used to develop wind rose diagrams for Q4/2024 and Year 7 as presented in Figure 3 and Figure 4, respectively. 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 Q4/2024, data capture for wind speed and direction at DOE-4 was 100%. The average and maximum wind speeds were 3.87 m/sec and 19.5 m/sec, respectively. The maximum recorded wind gust was 26.8 m/sec. The predominant wind directions this quarter were from the east-southeast (ESE) and from the northwest (NW) through north-northeast (NNE).

For entire Year 7, data capture for wind speed and direction at DOE-4 was 100%. The annual average and maximum wind speeds were 3.70 m/sec and 26.8 m/sec, respectively. The maximum recorded wind gust for the year was 30.8 m/sec. The predominant wind direction was from the ESE.

Table 2. Data screening summary for monitored meteorological parameters.

Meteorological Parameter	Screening Criteria ⁽¹⁾ (for valid sensor responses)	Data Completeness Percent (%) ⁽²⁾					
		Q1/24	Q2/24	Q3/24	Q4/24	Year 7	Project to Date
Wind Speed	between 0 and 25 m/sec	100	100	100	100	100	96.20
	> 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	100	100	100	96.79
	> 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	100	100	100	96.79
Temperature @ 2 m	≤ local record high (monthly basis)	99.99	100	100	100	99.73	96.75
	≥ local record low (monthly basis)						
	> 0.5 degrees Celsius (°C) variation over 12 hours						
Temperature @ 10 m	≤ local record high (monthly basis)	98.90	100	100	100	100	96.79
	≥ local record low (monthly basis)						
	> 0.5°C variation over 12 hours						
Delta Temperature	≤ 0.1°C during daytime	98.89	100	100	100	99.27	96.75
	≥ -0.1°C during nighttime						
	between -3.0 and 5.0°C						
Relative Humidity (and Dewpoint Temperature)	relative humidity between 0–100%	11.62	100	100	100	78.03	89.42
	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	100	100	100	96.78
	≤ 4 inches in 24 hours						
	≥ 2 inches in 3 months						
Barometric Pressure	between 871 and 982 millibar (mb) (local) (i.e., between 940 and 1060 mb sea level)	100	100	100	100	100	96.79
	≤ 6 mb variation over 3 hours						
Solar Radiation	> 0 at night	100	100	100	100	100	96.75
	≤ maximum possible for date and latitude						

(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.

(3) 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
- Project = 235,488 (to-date)

4.2 PM₁₀ Data

PM₁₀ data, also defined as coarse particles between 2.5 and 10 micrometers in 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 being 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 92 days in the Q4/2024 reporting period.

- DOE-1 had valid readings all 92 days.
- DOE-2 had valid readings 34 out of 92 days.
- DOE-3 had valid readings 57 out of 92 days.
- DOE-4 had valid readings all 92 days

DOE-1 and DOE-4 had 100% data completeness for PM₁₀ in Q4/2024. DOE-2 and DOE-3 had data completeness of 37% and 62%, respectively, for a total data completeness in Q4/2024 of 74.8%, not meeting the project goal of 80% completeness for total samples collected during Q4/2024 (see Table 3). However, the cumulative total project data completeness has been calculated as 93% from 2018–2024. The complete table of DOE-1, DOE-2, DOE-3, and DOE-4 daily averages for Q4/2024 is presented in Appendix A. During Q4/2024 no downtime was observed for the units at DOE-1 and DOE-4. The units at DOE-2 and DOE-3 both experienced downtimes due to battery and power issues and were not operational for large portions of Q4/2024. The units for DOE-2 and DOE-3 were sent in for repairs but due to repair and maintenance backlogs, the backup units that are usually on-hand for unit replacement were still in for repairs. E-BAM units in for repair were not received back prior to the end of Q4/2024. Due to this maintenance backlog and to minimize future downtimes, four new E-BAM units have been ordered to increase the number of overall units on-hand if a unit goes down in the future. These new E-BAMs are expected to be received in 2025.

The nearby State and Local Air Monitoring Stations (SLAMS), Simi Valley – Cochran Street – PM₁₀ Daily Averages, from 01/01/2024 to 07/31/2024 are presented in Appendix A. At the time of writing this report, the data posted are the most current available. Please note, per the EPA website, these 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 October 1, 2024 – December 31, 2024.

Location	Valid Readings (Days)	Possible Readings (Days)	Data Completeness (Percent)
DOE-1	92	92	100
DOE-2	34	92	37
DOE-3	57	92	62
DOE-4	92	92	100
Total Completeness			74.8

During the 365 days of the annual reporting period (Q1/2024–Q4/2024) the PM₁₀ monitoring stations (DOE-1, DOE-2, DOE-3, and DOE-4) exceeded the project goal of 80% data completeness, as shown in Table 4.

Table 4. PM₁₀ data completeness for Year 7, January 1, 2024 – December 31, 2024.

Location	Valid Readings (Days)	Possible Readings (Days)	Data Completeness (Percent)
DOE-1	343	366	94
DOE-2	308	366	84
DOE-3	322	366	88
DOE-4	366	366	100
Total Completeness			91.5

The five highest PM₁₀ results identified for the reporting period are listed in Table 5 along with the CAAQS for PM₁₀. PM₁₀ concentrations were consistent with levels typically found in urban air. Of these top five results, two were recorded at DOE-1, two at DOE-3, and one at DOE-4. Three of the five values were above the CAAQS but below the NAAQS of 150 µg/m³. All of the top five readings were in November and December 2024. Over these dates, elevated winds may have contributed to the elevated readings. From year to year, it has been noticeable that there is a direct correlation between high wind speeds and higher PM₁₀ readings.

Table 5. Top five PM₁₀ 24-hour average concentration days for October 1, 2024 – December 31, 2024.

Date	Location	PM ₁₀ Value (µg/m ³)	CAAQS (µg/m ³)
11/6/2024	DOE-3	79.420	50
11/6/2024	DOE-1	65.166	50
11/6/2024	DOE-4	61.600	50
12/4/2024	DOE-1	45.333	50
12/4/2024	DOE-3	44.550	50

Bold text and gray shaded – Value exceeds CAAQS.

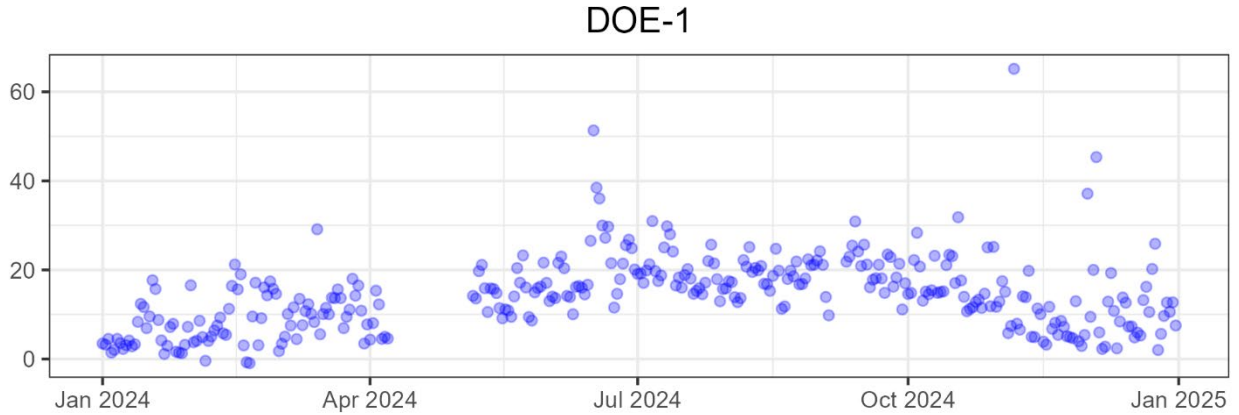
The five highest PM₁₀ results identified for the reporting year are listed in Table 6. Five of the five values were above the CAAQS but below the NAAQS of 150 µg/m³. Wildfires, high temperatures, and high winds all occurred during this recording period and are known to increase air particulates (as shown in the tables and graphs below).

Table 6. Top five PM₁₀ 24-hour average concentration days for January 1, 2024 – December 31, 2024.

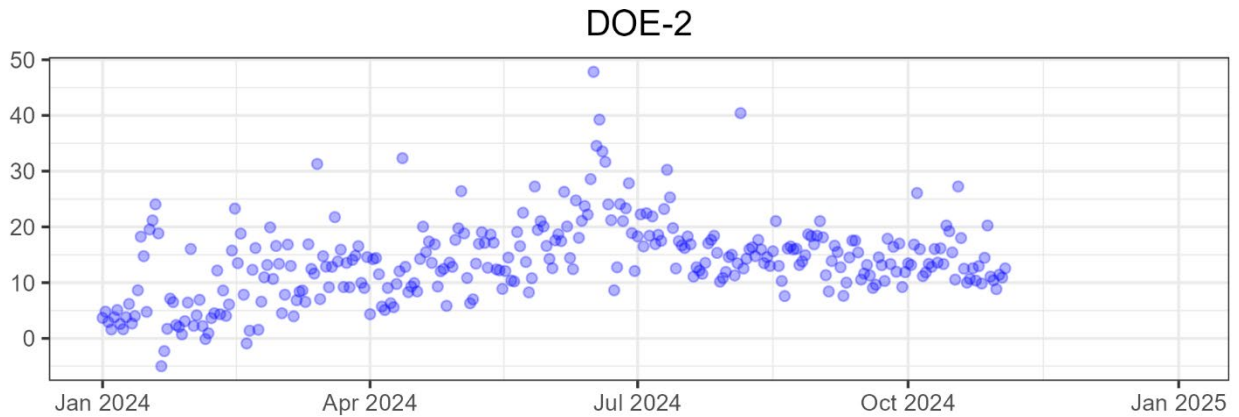
Date	Location	PM ₁₀ Value (µg/m ³)	CAAQS (µg/m ³)
6/30/2024	DOE-3	83.875	50
11/6/2024	DOE-3	79.420	50
4/10/2024	DOE-3	69.416	50
11/6/2024	DOE-1	65.166	50
11/6/2024	DOE-4	61.600	50

Bold text and gray shaded – Value exceeds CAAQS.

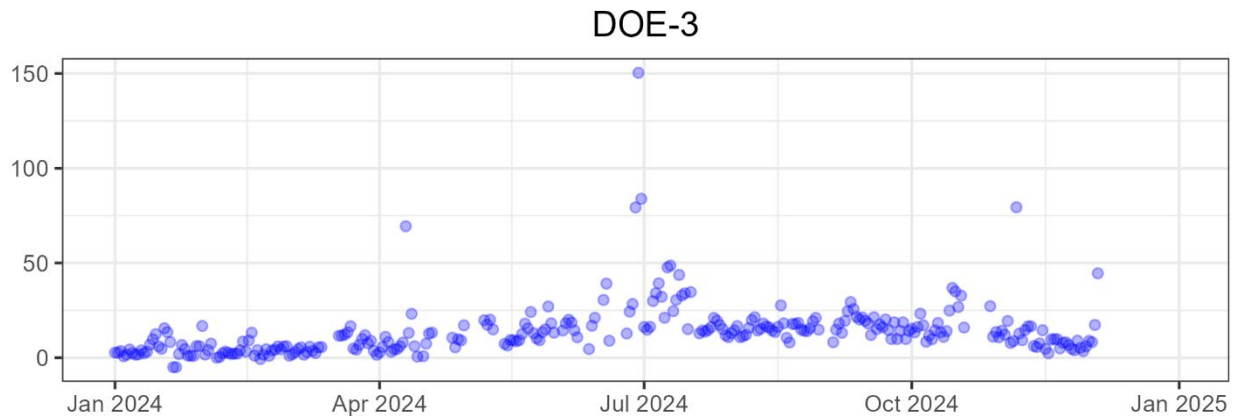
The Year 7 trend data from each monitor are shown below in Graphs 1 through 4. The Year 1 through Year 7 trend data are shown in Graphs 5 through 8 for trend comparison. As Graphs 5 through 8 show, PM₁₀ values have remained constant through baseline and site activities.



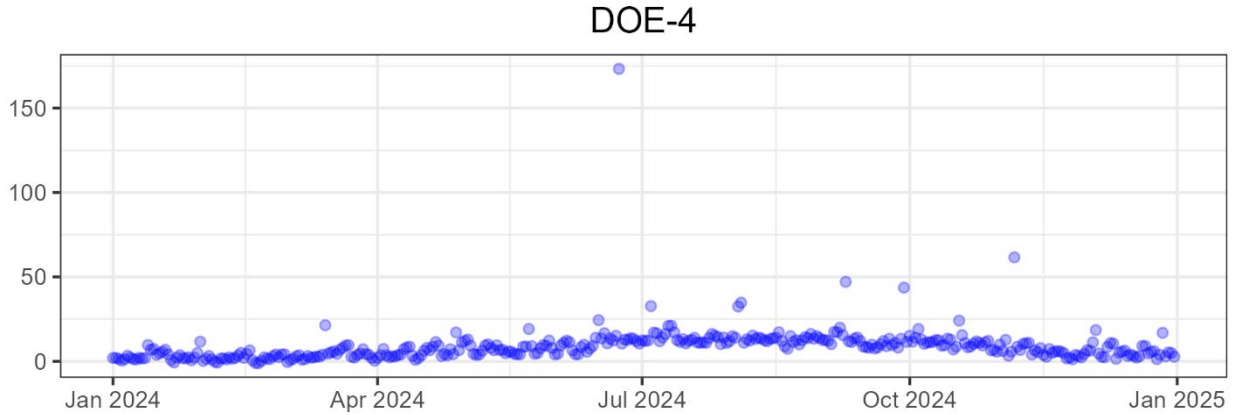
Graph 1. Year 7 trend data, Q1/2024–Q4/2024, for PM₁₀ at monitor DOE-1.



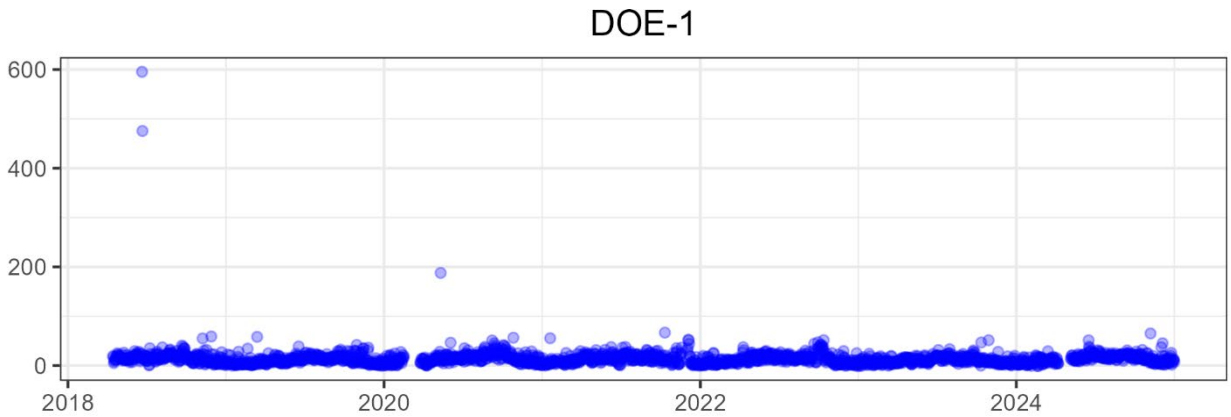
Graph 2. Year 7 trend data, Q1/2024–Q4/2024, for PM₁₀ at monitor DOE-2.



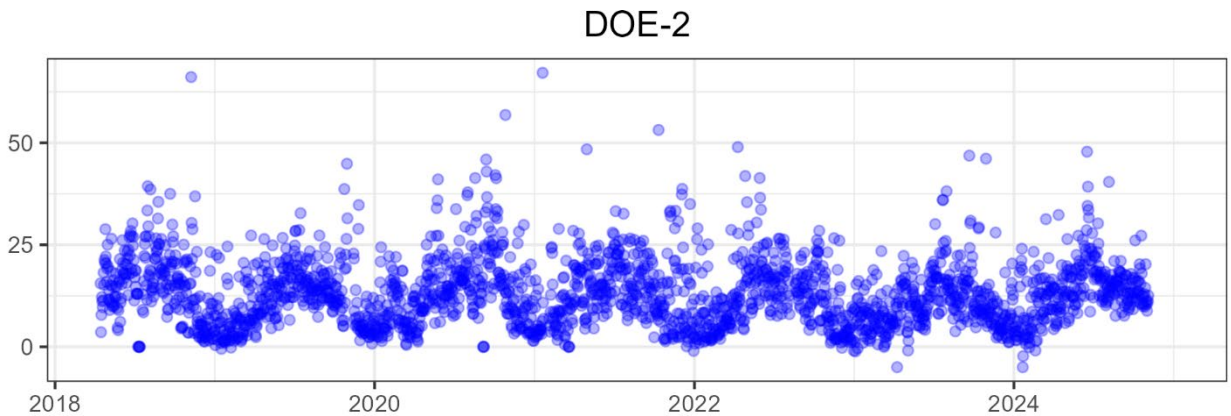
Graph 3. Year 7 trend data, Q1/2024–Q4/2024, for PM₁₀ at monitor DOE-3.



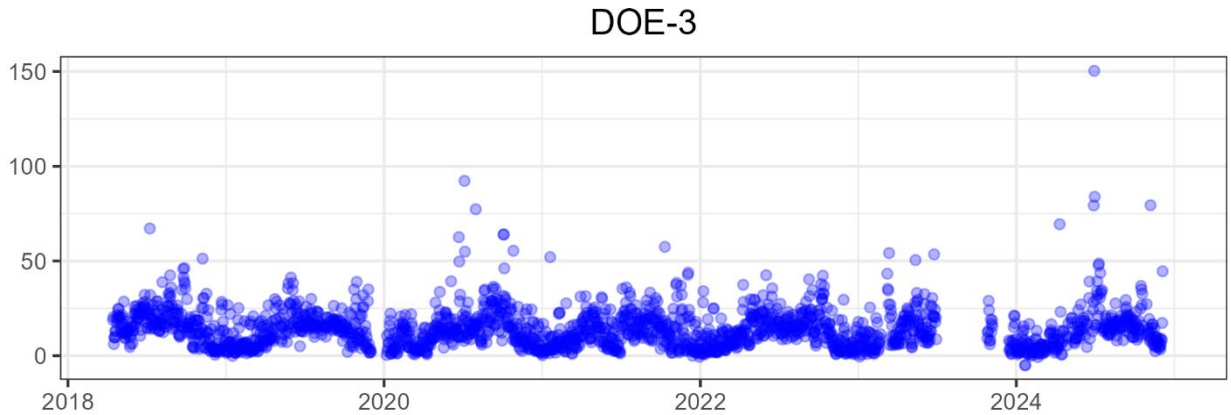
Graph 4. Year 7 trend data, Q1/2024–Q4/2024, for PM₁₀ at monitor DOE-4.



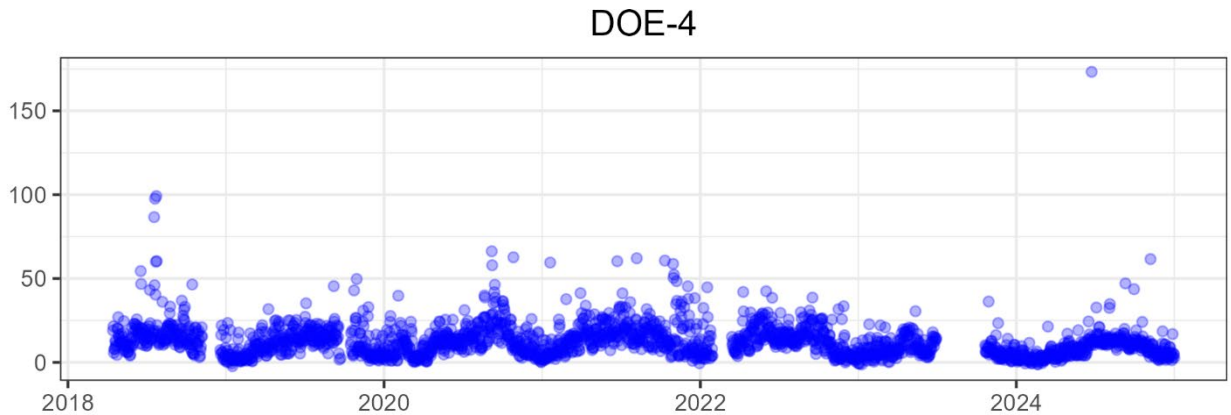
Graph 5. Years 1–7 trend data, 2018–2024, for PM₁₀ at monitor DOE-1.



Graph 6. Years 1–7 trend data, 2018–2024, for PM₁₀ at monitor DOE-2.



Graph 7. Years 1–7 trend data, 2018–2024, for PM₁₀ at monitor DOE-3.



Graph 8. Years 1–7 trend data, 2018–2024, for PM₁₀ at monitor DOE-4.

4.3 Volatile Organic Compound Data

VOCs are organic chemicals that have high vapor pressure, which causes them to evaporate quickly and enter the surrounding air. VOCs can be both 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.

There were six VOC sampling events in the Q4/2024 reporting period. Each of the four DOE locations were sampled during each sampling event. Data completeness goals for VOCs exceeded the project goal of 85% (see Table 7).

Table 7. Ambient air VOC data completeness for Q4/2024.

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

There were 26 annual VOC sampling events. Each of the four locations was sampled during each sampling event. Data completeness goals for VOCs exceeded the project goal of 85% (Table 8).

Table 8. Ambient air VOC data completeness for Q1/2024–Q4/2024.

Location	Valid Readings (Days)	Possible Readings (Days)	Data Completeness (Percent)
DOE-1	26	26	100
DOE-2	26	26	100
DOE-3	26	26	100
DOE-4	26	26	100
Average Total Data Completeness			100

VOC detection results for Q4/2024 are presented in Table B-1 (Appendix B), including comparison to the April 2019 DTSC HHRA Note 3 Screening Levels (DTSC 2019) or the EPA RSLs. During Q4/2024, no VOC analytes were detected above the DTSC 2019 or the EPA RSLs.

VOC analytical results for Q1/2024 through Q4/2024 are presented in Table B-2 (Appendix B). During Q1/2024, one VOC analyte (ethyl acetate) was detected above the EPA RSL at all four locations (DOE-1, DOE-2, DOE-3, and DOE-4). During Q2/2024, two VOC analytes (benzene and ethyl acetate) were detected above the EPA RSL or the DTSC 2019: three at DOE-1, four at DOE-2, and one at DOE-4. During Q3/2024, six VOC analytes (acrylonitrile, benzene, chloroform, ethylbenzene, methylene chloride, and trichloroethene) were detected above the EPA RSL or the DTSC 2019: one at DOE-1, three at DOE-2, and four at DOE-4. During Q4/2024, no VOC analytes were detected above the DTSC 2019 or the EPA RSLs.

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, including Year 1, Year 2, Year 3, Year 4, Year 5, Year 6, and Year 7 baseline monitoring, indicating that these VOCs were not caused by the 2021–2022 building demolition activities that were performed. 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.

VOC data analyzed for Year 7 are consistent with VOC data analyzed for Years 1–6 baseline data. Please note that time-versus-concentration plots for VOCs are presented in Appendix E. Specifically, only chemicals detected above the relevant screening level at least three times since the start of the monitoring programs through the current period have been plotted. Each VOC has its own separate plot with individual symbols for each monitoring station. And each plot includes a horizontal line indicating reporting limit as well as a horizontal line indicating the screening level.

After changes in management of this project and historical research, North Wind Portage has determined that the laboratory has been reporting VOC data to method reporting limits (MRLs) and not to method

detection limits (MDLs). This is contrary to the request by DTSC in an October 25, 2021, letter that laboratory reports and report tables display to MDLs. North Wind Portage's new management of this project has corrected this error and will ensure reporting to MDLs starting with the Q1/2025 data and report. The time-versus-concentration plots show the non-detections at the MRL and starting in 2025 will be reported down and shown on these plots to the MDL.

4.4 Radionuclide Data

DOE continuously monitors air at multiple locations for radioactive particles. This activity is performed for two reasons: (1) to determine the background airborne radioactivity concentration so that any possible releases from future work activities can be detected, and (2) to detect any possible release from existing activities. During Q4/2024, the background airborne radioactive contamination continued at low and stable concentrations, and there was no detected release of material. Based on EPA's 3,000 soil samples, the radionuclides of concern are strontium-90 (Sr-90) and cesium-137 (Cs-137). The locations with elevated concentrations of both radionuclides are near the Radioactive Materials Handling Facility (RMHF), beneath the RMHF asphalt, and in the rocky terrain area south of the Sodium Reactor Experiment complex. There has been no dust-producing activity in the Sr-90 and Cs-137 impacted soil areas to contribute to any sample. The EPA's data show the majority of Area IV to be free of these radiological contaminants.

There were 103 airborne radioactivity samples collected in Q4/2024 — 26 each with DOE-1, DOE-2, and DOE-3; and 25 with 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.

Gross alpha and gross beta data are used to evaluate whether site remediation work is potentially causing airborne radionuclide emissions. The gross alpha and beta analyses are performed at the site using a Protean alpha/beta radiation counter and a Ludlum 2929 gross alpha/beta counter.

The individual filters are analyzed within approximately one week following collection. The delay in analysis is required for the naturally occurring short-lived radon daughters to decay and not affect the analysis results. The benefit of analyzing the filters at the site is to allow for an early warning of potential site remediation-caused elevated radionuclide emissions.

The air sample analysis results are tabulated and reviewed for trends. Some results are less than zero once background is subtracted, some are above background, and some are above MDC, a value statistically above background. The MDC is tracked and reviewed with every analysis to determine if the instrument performance is stable. Any variation will be investigated and may provoke a repair or a calibration.

While approximately 11% of the gross alpha results and most (86%) of the gross beta-gamma results are above the MDC, none of these results are significant. 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 results do correlate in time with the regional fires that release natural radioactive materials into the air.

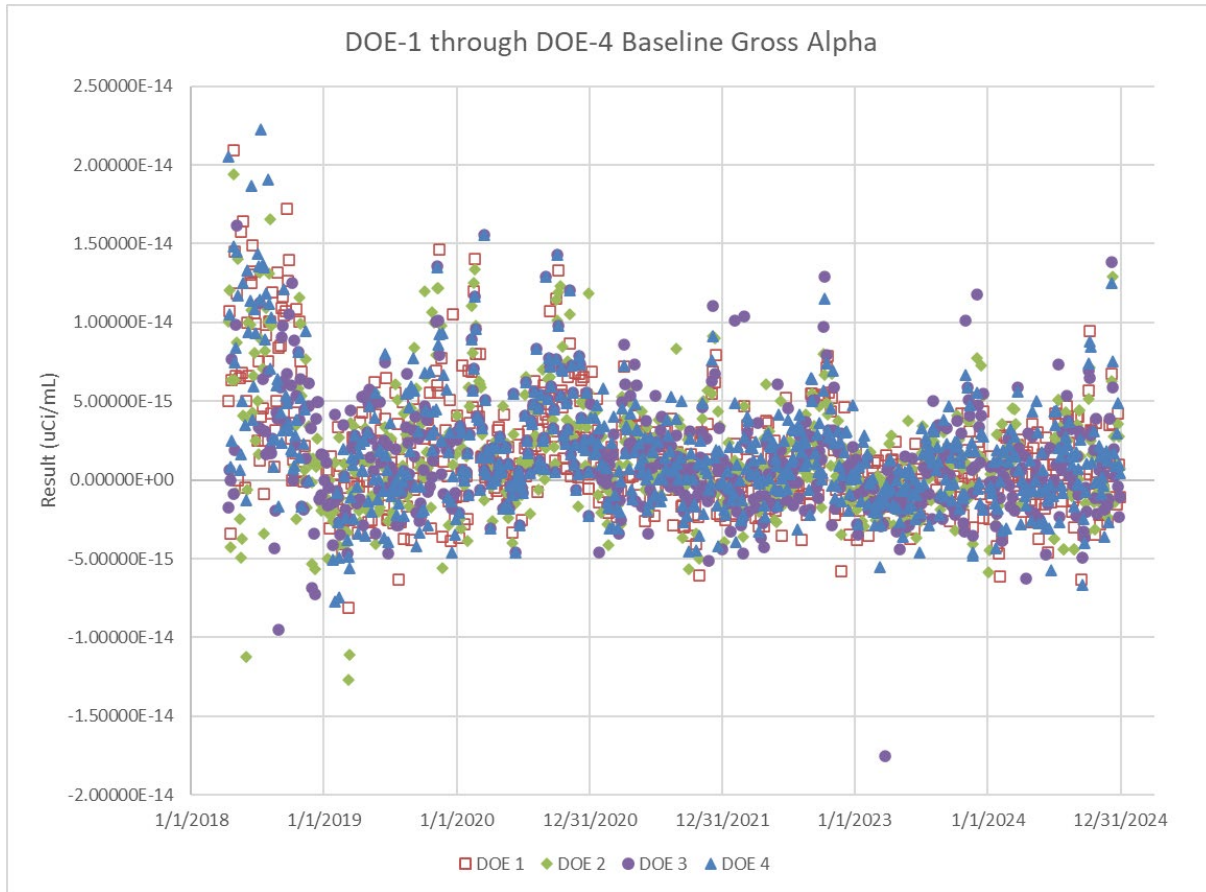
For conservatism, the air sample gross counting results are reviewed considering that all alpha activity is from the most restrictive expected radionuclide (plutonium-239 [Pu-239]), and all beta activity is from the

most restrictive expected radionuclide (strontium/yttrium-90). In all cases the results are less than 1% of the airborne limit for the most conservative radionuclide.

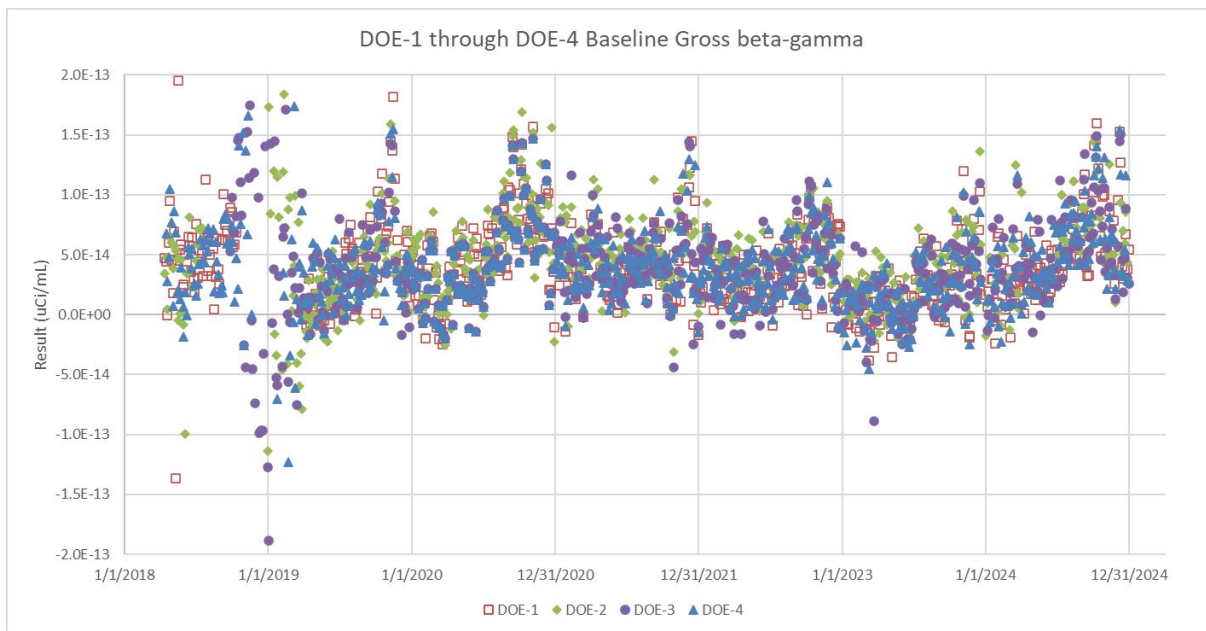
After the end of a quarter, the samples are composited and sent to a laboratory for detailed isotopic analysis. All analyses to date show a broad range of radioactive material consistent with background material and global fallout. These results vary seasonally, and do not show any contribution from ETEC activities. There is a small spike in November 2020 that is attributed to environmental factors external to SSFL. A similar spike was seen in November 2019. Gross alpha and gross beta results along with the radionuclide analytical results for Q4/2024 and Year 7 (Q1/2024–Q4/2024) can be found in Appendix C. The gross alpha and gross beta results for Year 1 through Year 7 are presented in Graph 9 and Graph 10, respectively, with multiple years included to show the natural variability. To give a full picture of the significance in background variation, Graph 11 presents the gross alpha results for Year 1 through Year 7 compared to the Pu-239 limit. Graph 11 shows how the air samples are less than 1% of the limit, hover around 0.1%, and are sometimes less than zero.

Table 9. Gross alpha and beta-gamma average results for Q4/2024.

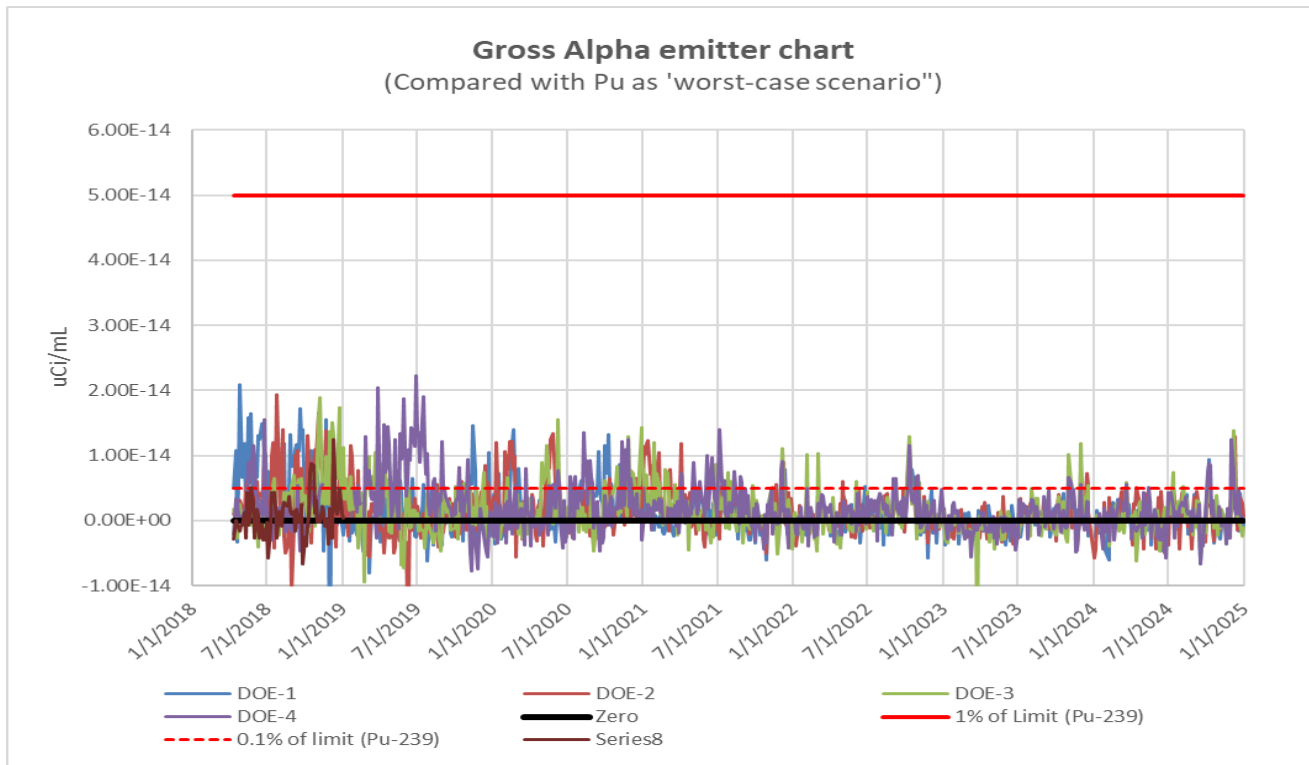
Location	Average alpha result (μCi/mL)	Average alpha MDC (μCi/mL)	Average beta result (μCi/mL)	Average beta MDC (μCi/mL)
DOE-1	1.02E-15	6.31E-15	7.62E-14	2.42E-14
DOE-2	1.55E-15	6.31E-15	7.67E-14	2.41E-14
DOE-3	1.67E-15	6.32E-15	7.13E-14	2.41E-14
DOE-4	2.39E-15	6.40E-15	7.59E-14	2.44E-14
Average	1.65E-15	6.33E-15	7.50E-14	2.42E-14



Graph 9. Gross alpha results for Years 1–7.



Graph 10. Gross beta results for Years 1– 7.



Graph 11. Years 1–7 gross alpha worst-case emitter chart.

When radionuclides are collated and compared, it is clear that the primary contributors are background radioactive materials. The two most common indicators of artificial radionuclides are Cs-137 and cobalt-60, which have short half-lives. These radionuclides are either negative values, or below the MDC in all cases. For this analysis, the radioisotopic analyses from Year 7 were summed, then compared to the airborne radioactivity limits (derived air concentration [DAC]) (Table 10).

Table 10. Comparison of air sample results with DAC.

Radionuclide	Average (no Zero) $\mu\text{Ci/mL}$	% contribution to total alpha activity	DAC alpha	% DAC (of measured nuclides)	DAC beta	% of DAC (of measured nuclides)	% contribution to beta-gamma activity
Cesium-137	0.00E+00				8.00E-08	0.00E+00	0.00%
Strontium-90	0.00E+00				1.00E-08	0.00E+00	0.00%
Cobalt-60	4.50E-16				3.00E-08	1.50E-08	0.27%
Potassium-40	6.14E-14				1.00E-07	6.14E-07	36.74%
Beryllium-7	1.05E-13				2.00E-08	5.27E-06	62.99%
Artificial Radionuclides							
Plutonium-238	5.35E-17	0.21%	5.00E-11	0.000%			
Polonium-210	1.34E-14	52.46%	2.00E-10	0.007%			
Plutonium-241	1.33E-15	5.23%	2.00E-10	0.001%			
Thorium-230	8.48E-16	3.33%	3.00E-12	0.028%			
Thorium-228	4.98E-16	1.95%	2.00E-11	0.002%			
Actinium-228	2.59E-15	10.15%	6.00E-09	0.000%			
Americium-241	9.02E-17	0.35%	5.00E-12	0.002%			
Plutonium-239	3.13E-17	0.12%	5.00E-12	0.001%			
Ra-228 – total	1.98E-15	7.78%	1.00E-10	0.002%			
Radium-226, -228 combined	2.26E-15	8.89%	2.00E-10	0.001%			
Thorium-232	6.38E-16	2.50%	3.00E-12	0.021%			
Uranium-238	9.78E-16	3.84%	3.00E-10	0.000%			
Uranium-233/234	7.85E-16	3.08%	2.00E-10	0.000%			
Uranium-235/236	2.82E-17	0.11%	3.00E-10	0.000%			
Natural Radionuclides							

Artificial Radionuclides
Natural Radionuclides

Most of the alpha-emitting radionuclide activity is from background radioactive materials, indicating airborne dust. Less than 1% of the alpha contribution is from artificial radionuclides (e.g., plutonium). As discussed above, it is likely that most of the airborne radioactivity is from the environment, either cosmogenic or global fallout. There is no indication of a local release, as there is no clear mixture associated with fission reactions, given the absence of Cs-137 and Sr-90. The air sample results are compared using conservative assumptions. Since the results hover near or below the detection limit of the instruments, there are no plans to investigate minor variations in background. These radionuclide data are consistent with Years 1 through 6, and Year 7 baseline data.

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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 Q4/2024 are presented in Appendix A along with the monthly average minimum, maximum, and 95th percentile for each station location. In addition, the nearby SLAMS, Simi Valley – Cochran Street – PM₁₀ Daily Averages, from 01/01/2024 to 07/31/2024 along with the monthly average minimum, maximum, and 95th percentile for the Simi Valley – Cochran Street location, has been presented in Appendix A. 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.

Flow Rate 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. E-BAM units are occasionally swapped out for maintenance, and preliminary audits of the new units are performed. 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 Q4/2024, there were no monitor swap-outs. However, the monitor at DOE-2 stopped functioning in early November 2024, but no replacement unit was available at the time because all spare E-BAM units were undergoing maintenance/repair. Consequently, only one monthly audit was performed for the unit at DOE-2 during this quarter while three were performed for the units at the other DOE (-1, -3, and -4) sites. The Q4/2024 quarterly flow rate bias percentages at the four E-BAM sites ranged from -3.25 to -1.33%. These results were within the flow rate measurement quality objective of +/- 4%.

Complete audit reports and flow verification results for Q4/2024 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

A minimum of 20% of the VOC results are undergoing third-party data validation. During Q4/2024, two of the six sample delivery groups (SDGs), #P2404326 and P2404533, underwent 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.

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 Q4/2024 effort. Thirteen sample and duplicate analyte detections were within the quality objective of +/- 15% RPD. 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):

- Ethyl acetate in P2404326, P2404533, P2404129, and P2404770.
- Dichlorodifluoromethane (CFC 12) and ethyl acetate in P2405066.

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 -4.5 inches mercury (Hg) to -1 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 in 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. While some QC tests for radium appeared to be biased low, the results do not indicate a release of radium, which is not a contaminant of concern at the site because it is a natural radionuclide. Since Q13, 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 Section 5.1.8.1 and Section 5.1.8.2, respectively. 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

As described in sections above, during Q4/2024, the monitor at DOE-2 stopped functioning in early November 2024, but no replacement unit was available at the time because all spare E-BAM units were undergoing maintenance/repair. Consequently, only one monthly audit was performed for the unit at DOE-2 during this quarter, while three were performed for the units at the other DOE (-1, -3, and -4) sites. The Q4/2024 quarterly flow rate bias percentages at the four E-BAM sites ranged from -3.25 to -1.33%. These results were within the flow rate measurement quality objective of +/- 4%.

The corrective action for not having more units on-hand due to repair and maintenance backlogs is to purchase more units. Four new E-BAM units have been ordered to increase the number of overall units on-hand, so when a unit goes down in the future there will be access to more units. These new E-BAMs are expected to be received in 2025.

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 percent completion goal of ≥80% was met during Q4/2024 for all parameters except Relative Humidity. Quality issues this quarter included: (1) continued post-processing of the delta temperature data to resolve a datalogger programming equation where the 10-m and 2-m temperature parameters are reversed, and (2) the <80% year-to-date data completion for relative humidity that is a result of data loss that occurred from a failed sensor during the first quarter of the year. Though this sensor had been replaced late in Q1/2024, there were not enough remaining 15-minute observation periods to overcome the earlier data loss to achieve annual data completeness for this parameter. Also, the recommended sensor maintenance schedule is provided 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. However, the datalogger was improperly programmed to calculate the inverse of delta temperature when the station was replaced after the Woolsey Wildfire. Consequently, delta temperature observations are being calculated 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” adjustment 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) Relative Humidity Sensor:

- Data Quality Issue:

- The relative humidity sensor that failed late in Q4/2023 (on 12/20/2023) was not replaced until 3/21/2024 resulting in 7,721 lost relative humidity 15-minute observations (i.e., 1/1/2024 through 3/21/2024). Although the new relative humidity sensor has continued to perform within quality specifications for the remainder of year 2024, there were not enough valid 15-minute observations to overcome the earlier data loss needed to achieve ≥80% annual data completeness for this parameter. The Q1/2024 data completeness of 11.62% limited the year 2024 maximum annual data completeness for relative humidity to 78%.

- Corrective Action:

- Data collection continued for this parameter with the understanding that an annual data completion goal of 80% could not be achieved for relative humidity for year 2024. Although the failed sensor was ultimately replaced, the 3-month response time for the replacement was inadequate, which led to an unacceptable data completeness percentage for the year. More frequent meteorological data downloads and more diligent efforts for rapid replacement are needed to minimize data loss that results from a failed meteorological sensor.

(3) 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 11 lists the recommended maintenance schedules for the Met One sensors installed at the DOE-4 meteorological station.

Table 11. 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 and 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 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 certified clean canisters are discussed by ALS in the case narrative of each SDG.

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 12 lists the dates for audits conducted in October through December. 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 12. PM₁₀ audit completeness.

Location	Met One E-BAM Serial Number	Parameter	Date
DOE-1	W23314	PM ₁₀	10/25/2024
DOE-2	Y12096	PM ₁₀	10/25/2024
DOE-3	B20070	PM ₁₀	10/28/2024
DOE-4	B18932	PM ₁₀	10/25/2024
DOE-1	W23314	PM ₁₀	11/22/2024
DOE-2	—	PM ₁₀	11/22/2024
DOE-3	B20070	PM ₁₀	11/22/2024
DOE-4	B18932	PM ₁₀	11/22/2024
DOE-1	W23314	PM ₁₀	12/18/2024
DOE-2	—	PM ₁₀	12/18/2024
DOE-3*	B20070	PM ₁₀	12/18/2024
DOE-4	B18932	PM ₁₀	12/18/2024

Notes:

Gray-shaded boxes indicate a filter sensor pressure failure due to battery and power issues, and no replacements were available since three units were in the repair shop.

*DOE-3 was running in early December and for the audit on December 18, 2024, but DOE-3 stopped running over the Christmas break and the unit was not downloaded prior to being shipped off for repairs, so the daily average data was lost.

6. CONCLUSION

The Year 7 data (PM₁₀, VOC, gross alpha and gross beta, and RAD) show a very similar pattern when compared to the baseline data collected during Years 1–6 (2018–2023). This conclusion is supported by the data shown in the graphs for Years 1–7, PM₁₀ data, and radionuclide data, shown in Section 4 of this report. These stable trends indicate that onsite remediation activities performed in Year 4 had no recordable impact on the site air conditions.

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7. REFERENCES

- 10 Code of Federal Regulations (CFR) 20, Appendix B, “Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage,” Table 2.
- 40 CFR 58, Appendix C – Ambient Air Quality Monitoring Methodology.
- 40 CFR 136, Appendix B – Definition and Procedure for the Determination of the Method Detection Limit.
- California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2018. *Approval of the Final Air Monitoring Station Locations for the Santa Susana Field Laboratory, Ventura County, California*. January.
- California Environmental Protection Agency, DTSC. 2022. Human and Ecological Risk Office Human Health Risk Assessment Note Number 3, DTSC-modified Screening Levels. April. Available online at: [Human Health Risk Assessment Note 3 -June 2020 revised May 2022 \(ca.gov\)](https://www.ca.gov/human-health-risk-assessment-note-3-june-2020-revised-may-2022) and [HHRA-Note-3-Tables-June2020-Revised-May2022A.xlsx \(live.com\)](https://www.live.com/HHRA-Note-3-Tables-June2020-Revised-May2022A.xlsx).
- National Aeronautics and Space Administration (NASA). 2017. *Santa Susana Field Laboratory Baseline Air Monitoring Report Work Plan Report*. Prepared for California Department of Toxic Substances Control. Prepared on behalf of National Aeronautics and Space Administration, George C. Marshall Space Flight Center, The Boeing Company, and Department of Energy, Energy Technology and Engineering Center. September. Available online at: [SSFL Baseline Air Monitoring Work Plan](https://www.nasa.gov/ssfl-baseline-air-monitoring-work-plan)
- U.S. Environmental Protection Agency (EPA). 1999. *Air Method, Toxic Organics-15 (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 625/R-96/010b. January. Available online at: <https://www.epa.gov/homeland-security-research/epa-air-method-toxic-organics-15-15-determination-volatile-organic>
- U.S. EPA. 2000. *Meteorological Monitoring Guidance for Regulatory Modeling Applications, United States Environmental Protection Agency, Office of Air Quality Planning and Standards*. EPA-454/R-99-005. February.
- U.S. EPA. 2004. *The Particle Pollution Report, Current Understanding of Air Quality and Emissions through 2003, United States Environmental Protection Agency, Office of Air Quality Planning and Standards*. EPA-454-R-04-002. December.
- U.S. EPA. 2007. *Guideline on the Meaning and the Use of Precision and Bias Data Required by 40 CFR Part 58 Appendix A, Version 1.1*. EPA-454/B-07-001. October.
- U.S. EPA. 2017. *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, Ambient Air Monitoring Program*. EPA-454/B-17-001. January.
- U.S. EPA. 2023. Air Data, Pre-Generated Data Files, Particulates 2024 PM10 Daily Mass. https://aqs.epa.gov/aqsweb/airdata/download_files.html#Meta. November 19.
- U.S. EPA. 2024. Regional Screening Levels – Generic Tables. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>.

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Figure 1
SSFL air monitoring locations

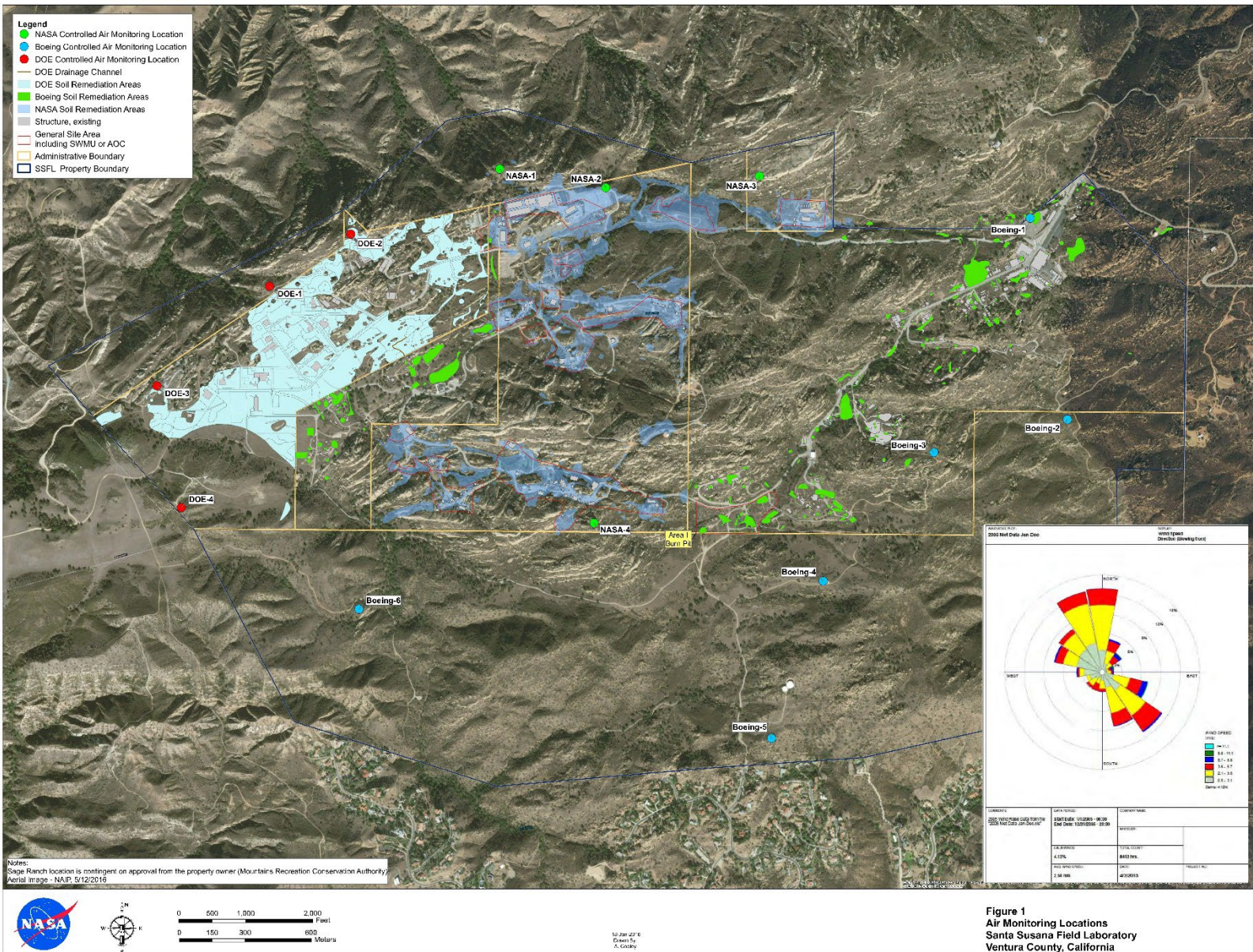


Figure 2
DOE air monitoring locations

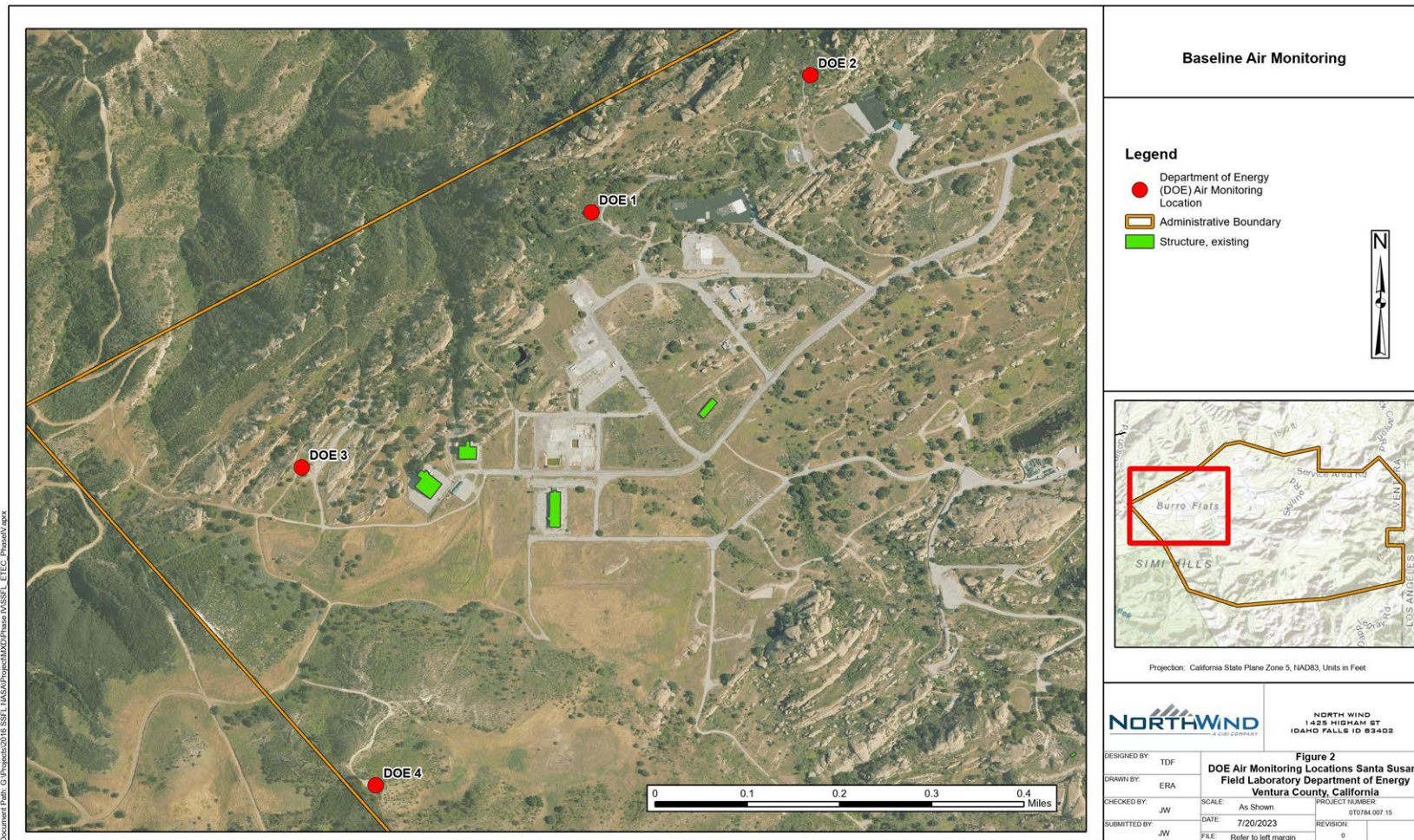
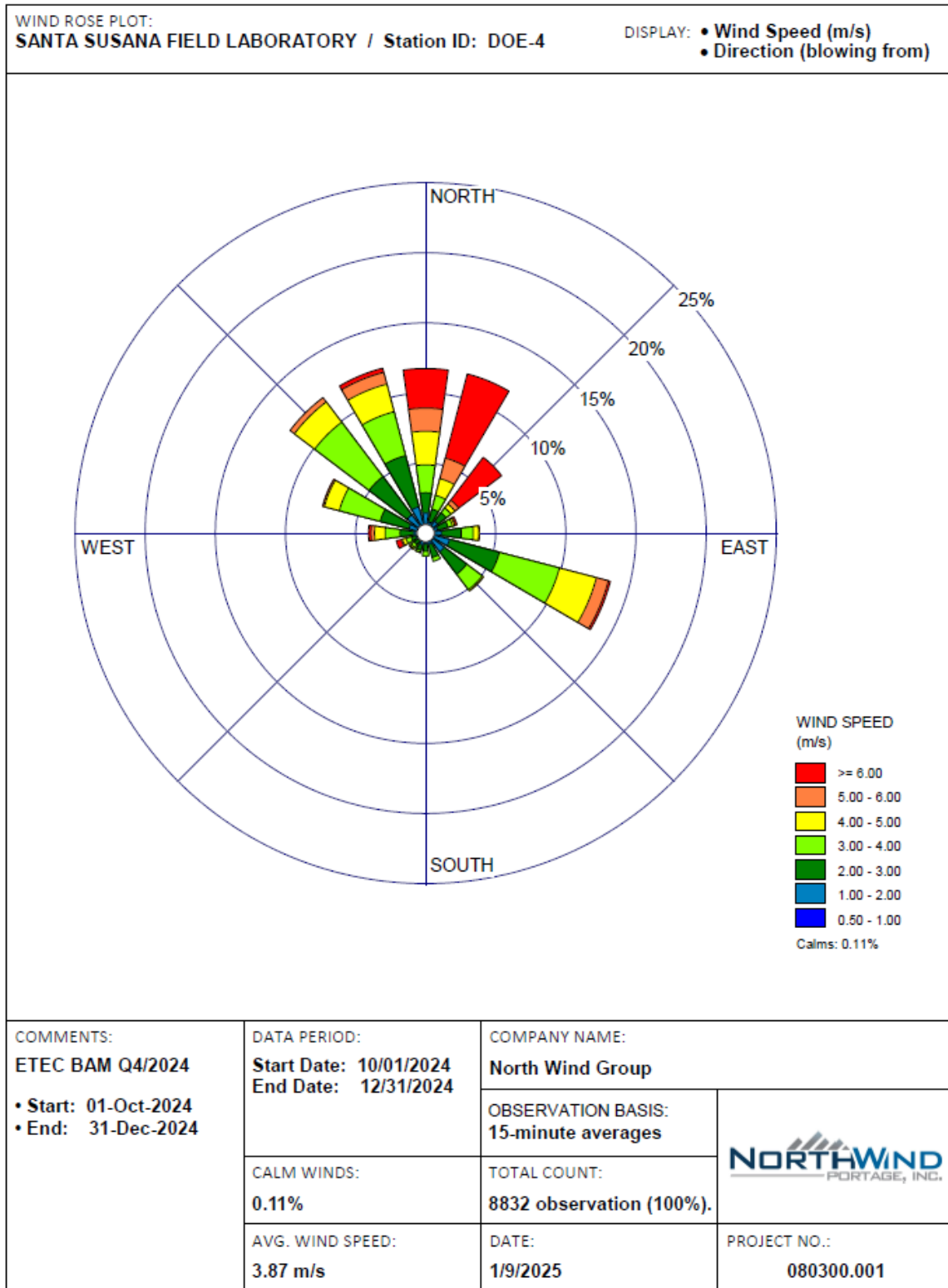
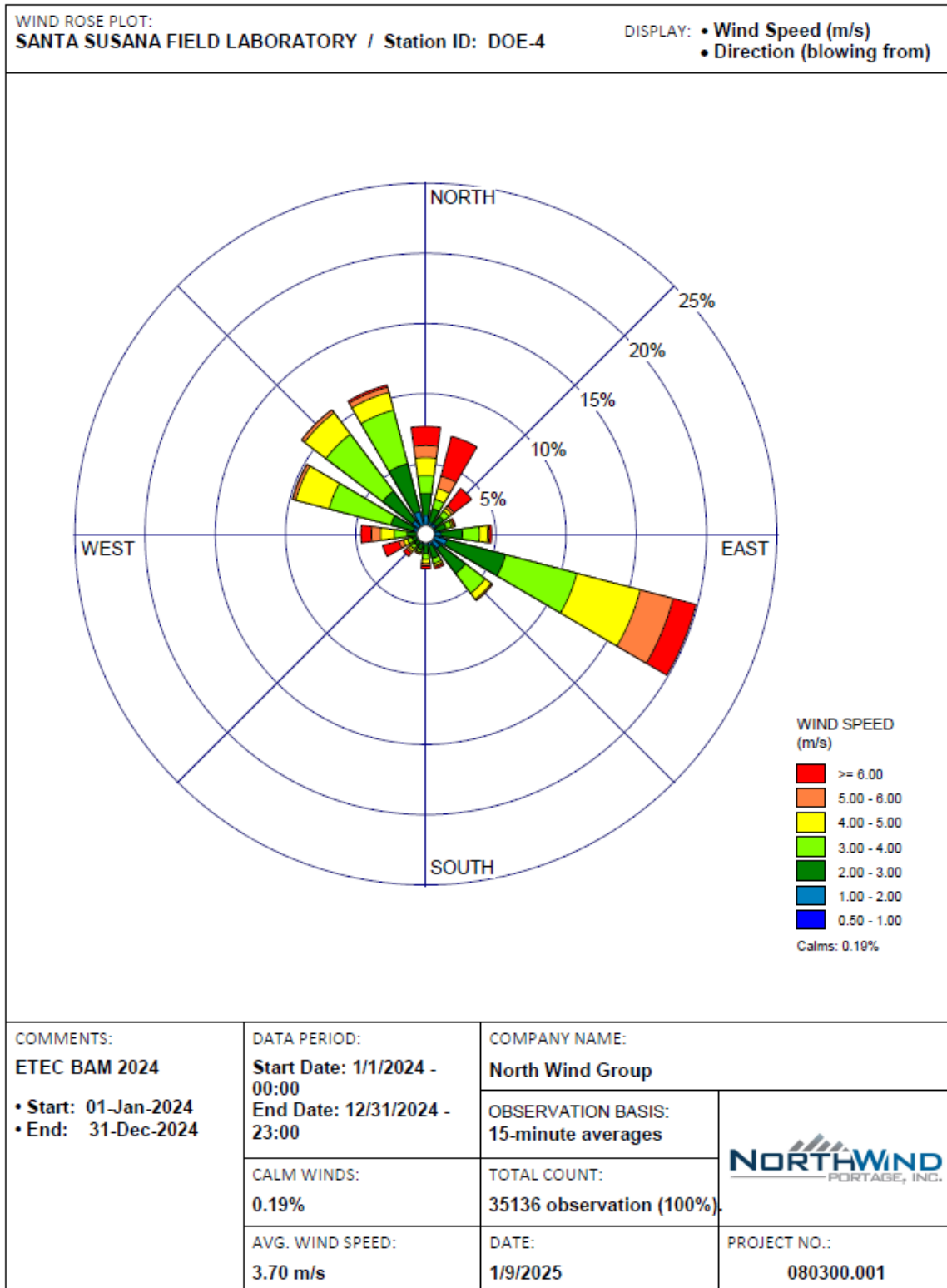


Figure 3 – DOE quarterly wind rose



WRDI OT View - Lakes Environmental Software

Figure 4 – DOE annual wind rose



APPENDIX A

PM₁₀ Daily Averages and Monthly Statistics

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PM₁₀ Daily Averages, Q4/2024

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)
10/01/2024	14.583	13.458	15.291	15.150
10/02/2024	14.833	13.166	13.375	11.616
10/03/2024	22.208	16.833	16.208	13.941
10/04/2024	28.333	26.083	23.250	19.104
10/05/2024	20.750	16.000	17.125	12.966
10/06/2024	13.083	11.166	8.416	10.308
10/07/2024	15.125	11.833	11.714	11.158
10/08/2024	14.541	13.375	9.789	11.341
10/09/2024	15.416	12.833	14.416	11.554
10/10/2024	23.166	16.041	18.333	12.650
10/11/2024	14.833	13.583	13.416	12.429
10/12/2024	15.041	16.166	11.000	9.254
10/13/2024	15.166	13.333	14.041	9.525
10/14/2024	21.083	20.250	24.875	13.429
10/15/2024	23.416	19.208	36.833	12.858
10/16/2024	23.083	15.416	35.000	7.033
10/17/2024	17.041	10.541	26.750	8.666
10/18/2024	31.833	27.250	32.750	24.112
10/19/2024	17.625	18.000	15.958	15.466
10/20/2024	13.958	12.500	--	10.787
10/21/2024	10.708	10.000	--	8.304
10/22/2024	11.250	10.666	--	8.833
10/23/2024	11.625	12.583	--	10.466
10/24/2024	12.791	10.375	--	11.779
10/25/2024	13.333	12.958	--	10.869
10/26/2024	11.458	9.833	--	9.362
10/27/2024	14.666	14.458	--	11.229
10/28/2024	25.041	20.250	27.225	12.120
10/29/2024	11.833	11.083	11.100	6.412
10/30/2024	25.166	10.416	13.554	6.808
10/31/2024	11.708	8.833	10.804	5.662
11/01/2024	12.875	11.416	14.245	9.912
11/02/2024	17.458	10.916	12.208	6.162
11/03/2024	15.083	12.555	19.391	12.712
11/04/2024	5.791	--	7.804	3.300
11/05/2024	7.416	--	8.795	5.741
11/06/2024	65.166	--	79.420	61.600

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)
11/07/2024	7.916	--	12.716	8.620
11/08/2024	6.583	--	9.237	6.683
11/09/2024	14.083	--	14.625	10.304
11/10/2024	13.875	--	16.550	10.700
11/11/2024	19.791	--	16.575	10.866
11/12/2024	4.958	--	6.187	3.983
11/13/2024	4.916	--	5.633	6.495
11/14/2024	11.333	--	7.550	5.458
11/15/2024	10.041	--	14.504	7.795
11/16/2024	3.875	--	4.716	3.750
11/17/2024	3.208	--	2.383	2.700
11/18/2024	11.708	--	9.654	7.233
11/19/2024	6.750	--	9.787	5.008
11/20/2024	8.125	--	9.800	5.833
11/21/2024	5.416	--	4.933	5.991
11/22/2024	8.541	--	7.820	5.750
11/23/2024	7.208	--	8.175	4.829
11/24/2024	5.083	--	6.716	1.712
11/25/2024	4.916	--	4.687	2.179
11/26/2024	4.666	--	3.970	1.204
11/27/2024	12.958	--	8.983	3.758
11/28/2024	3.958	--	5.133	3.154
11/29/2024	2.916	--	3.462	2.266
11/30/2024	5.375	--	6.066	4.337
12/01/2024	37.125	--	8.887	6.545
12/02/2024	9.458	--	8.225	6.237
12/03/2024	20.000	--	17.300	11.191
12/04/2024	45.333	--	44.550	18.512
12/05/2024	5.958	--	--	4.612
12/06/2024	2.250	--	--	2.675
12/07/2024	2.750	--	--	2.383
12/08/2024	12.875	--	--	8.491
12/09/2024	19.291	--	--	10.741
12/10/2024	10.791	--	--	10.545
12/11/2024	2.375	--	--	1.458
12/12/2024	8.416	--	--	5.100
12/13/2024	13.791	--	--	5.791
12/14/2024	12.625	--	--	6.300

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)
12/15/2024	7.250	--	--	3.158
12/16/2024	7.291	--	--	3.970
12/17/2024	4.833	--	--	3.162
12/18/2024	5.916	--	--	2.181
12/19/2024	5.250	--	--	2.975
12/20/2024	13.208	--	--	9.141
12/21/2024	16.208	--	--	9.033
12/22/2024	10.541	--	--	4.650
12/23/2024	20.208	--	--	5.575
12/24/2024	25.875	--	--	6.012
12/25/2024	2.000	--	--	1.275
12/26/2024	5.625	--	--	3.820
12/27/2024	9.666	--	--	16.862
12/28/2024	12.666	--	--	2.929
12/29/2024	10.583	--	--	5.262
12/30/2024	12.708	--	--	4.866
12/31/2024	7.500	--	--	2.691

Notes:

-- indicate a filter sensor pressure failure.

Gray-shaded boxes with bold numbers indicate value exceeded CAAQS but is below the NAAQS of 150 µg/m³.

PM₁₀ Daily Averages, Q1/2024 through Q4/2024

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)
Q1/2024				
01/01/24	3.458	3.666	2.708	2.008
01/02/24	3.208	4.791	2.666	1.987
01/03/24	4.500	2.916	3.541	1.441
01/04/24	1.416	1.583	0.750	0.420
01/05/24	2.041	3.791	1.583	1.283
01/06/24	4.500	5.083	4.333	3.283
01/07/24	3.541	2.583	2.500	2.137
01/08/24	2.250	1.625	1.583	1.325
01/09/24	3.083	3.791	1.750	1.095
01/10/24	4.125	6.166	3.833	2.062
01/11/24	2.833	2.666	2.375	1.654

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)
01/12/24	3.291	4.000	3.208	1.845
01/13/24	8.333	8.625	6.916	9.654
01/14/24	12.375	18.250	9.708	6.883
01/15/24	11.666	14.750	12.458	7.295
01/16/24	6.916	4.750	6.041	3.841
01/17/24	9.541	19.541	4.708	4.780
01/18/24	17.666	21.166	15.541	5.604
01/19/24	15.708	24.041	13.500	6.833
01/20/24	8.750	18.833	8.291	4.033
01/21/24	4.166	-5.000	-5.000	0.725
01/22/24	1.125	-2.291	-5.000	-0.679
01/23/24	2.958	1.708	1.916	2.120
01/24/24	7.166	7.125	6.708	3.575
01/25/24	7.875	6.500	4.583	1.829
01/26/24	1.625	2.375	1.083	1.695
01/27/24	1.416	2.041	1.125	2.300
01/28/24	1.291	0.708	0.916	0.595
01/29/24	3.166	3.083	6.125	2.212
01/30/24	7.208	6.416	6.083	4.908
01/31/24	16.541	16.041	16.750	11.633
02/01/24	3.750	2.250	1.625	0.229
02/02/24	4.083	4.125	3.958	1.500
02/03/24	8.583	6.916	7.458	3.125
02/04/24	4.916	2.208	--	1.162
02/05/24	-0.416	-0.125	-0.001	-0.337
02/06/24	4.041	0.916	0.458	-0.712
02/07/24	5.041	3.625	2.333	1.591
02/08/24	6.416	4.500	3.208	1.787
02/09/24	7.500	12.166	2.541	1.100
02/10/24	9.291	4.333	1.916	2.329
02/11/24	5.750	8.583	2.208	1.504
02/12/24	5.416	4.041	2.208	1.995
02/13/24	11.250	6.083	3.875	3.437
02/14/24	16.416	15.750	8.541	5.004
02/15/24	21.208	23.291	3.208	2.029
02/16/24	15.625	13.500	9.125	4.341
02/17/24	19.000	18.791	13.208	6.462

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)
02/18/24	3.041	7.833	1.083	0.520
02/19/24	-0.750	-0.916	4.041	-1.020
02/20/24	-0.958	1.375	-0.708	-1.125
02/21/24	9.541	12.291	1.541	0.250
02/22/24	17.125	16.208	4.500	2.329
02/23/24	3.083	1.541	1.000	1.562
02/24/24	9.166	6.583	3.791	1.375
02/25/24	16.083	10.958	4.208	2.962
02/26/24	14.291	13.166	5.958	4.020
02/27/24	17.416	19.916	4.416	2.479
02/28/24	15.750	10.666	5.916	4.016
02/29/24	14.625	16.583	6.083	4.129
03/01/24	1.750	13.375	1.041	-0.425
03/02/24	3.416	4.500	1.833	0.704
03/03/24	5.000	7.833	3.041	1.508
03/04/24	10.083	16.833	4.625	2.970
03/05/24	7.500	13.000	5.458	3.575
03/06/24	11.583	3.958	1.583	0.945
03/07/24	4.458	6.833	2.916	1.333
03/08/24	13.500	8.375	5.791	3.116
03/09/24	7.583	8.583	3.666	2.083
03/10/24	10.750	6.541	2.541	2.333
03/11/24	12.291	16.875	5.416	2.820
03/12/24	10.125	12.458	5.625	2.754
03/13/24	8.291	11.625	--	3.883
03/14/24	29.125	31.291	--	21.354
03/15/24	5.541	7.041	--	4.579
03/16/24	10.083	14.750	--	5.283
03/17/24	11.458	12.875	--	5.875
03/18/24	10.041	9.166	11.600	4.466
03/19/24	13.750	12.833	11.666	6.787
03/20/24	13.666	21.750	12.208	8.000
03/21/24	15.625	13.791	13.416	9.316
03/22/24	13.666	15.916	16.625	9.562
03/23/24	6.916	9.208	4.875	2.725
03/24/24	9.458	13.541	4.291	2.195
03/25/24	11.083	9.166	6.833	3.716

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)
03/26/24	18.000	14.083	9.875	4.600
03/27/24	14.208	14.833	11.916	7.120
03/28/24	16.500	16.541	7.625	4.240
03/29/24	10.833	9.958	8.916	3.841
03/30/24	3.458	9.041	3.625	1.900
03/31/24	7.750	14.583	1.541	0.312
Q2/2024				
04/01/24	4.333	4.333	2.750	1.995
04/02/24	8.041	14.208	5.666	3.604
04/03/24	15.333	14.416	11.000	7.279
04/04/24	12.250	11.500	8.250	3.491
04/05/24	4.500	5.708	3.125	2.366
04/06/24	4.958	5.083	4.416	2.945
04/07/24	4.583	9.041	4.541	2.850
04/08/24	--	6.291	6.041	3.650
04/09/24	--	5.583	8.000	3.995
04/10/24	--	9.750	69.416	7.158
04/11/24	--	12.041	13.041	8.237
04/12/24	--	32.333	23.166	8.654
04/13/24	--	12.833	6.041	3.291
04/14/24	--	8.291	0.583	0.891
04/15/24	--	9.291	--	1.795
04/16/24	--	9.916	0.791	3.575
04/17/24	--	8.416	7.416	6.341
04/18/24	--	14.250	12.750	7.945
04/19/24	--	20.041	13.208	6.579
04/20/24	--	15.458	--	8.633
04/21/24	--	17.375	--	11.404
04/22/24	--	13.541	--	9.266
04/23/24	--	16.875	--	3.112
04/24/24	--	9.291	--	4.283
04/25/24	--	12.041	--	3.537
04/26/24	--	12.458	10.541	7.125
04/27/24	--	5.833	5.500	4.241
04/28/24	--	13.583	9.750	17.104
04/29/24	--	12.833	9.125	6.575
04/30/24	--	17.666	17.083	11.220

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)
05/01/24	--	19.750	--	12.216
05/02/24	--	26.416	--	12.912
05/03/24	--	18.833	--	9.229
05/04/24	--	10.833	--	4.420
05/05/24	--	6.291	--	3.775
05/06/24	14.166	7.000	--	4.100
05/07/24	13.583	13.416	19.791	6.287
05/08/24	19.708	16.958	17.458	9.320
05/09/24	21.125	19.041	20.041	10.041
05/10/24	15.875	17.125	14.958	8.020
05/11/24	10.541	12.666	--	6.583
05/12/24	15.833	18.625	--	9.470
05/13/24	15.708	17.166	--	6.666
05/14/24	14.791	12.375	7.333	6.791
05/15/24	11.416	12.208	6.458	4.745
05/16/24	9.125	8.875	9.333	5.845
05/17/24	11.125	12.083	9.208	5.654
05/18/24	10.875	14.500	8.666	4.483
05/19/24	9.458	10.375	9.250	4.150
05/20/24	14.041	10.208	12.541	4.195
05/21/24	20.416	19.083	18.000	8.575
05/22/24	17.125	16.541	15.500	8.758
05/23/24	23.250	22.541	24.125	19.137
05/24/24	16.041	13.708	12.916	9.037
05/25/24	9.416	8.250	10.208	4.445
05/26/24	8.625	10.791	9.208	4.845
05/27/24	14.958	27.250	13.500	7.737
05/28/24	15.916	19.458	14.958	9.629
05/29/24	16.250	21.041	27.041	9.120
05/30/24	21.625	20.083	18.166	12.304
05/31/24	17.083	16.583	13.208	7.829
06/01/24	13.000	14.250	--	4.050
06/02/24	14.000	12.583	--	4.508
06/03/24	13.666	17.583	14.333	9.279
06/04/24	21.583	18.666	18.208	10.933
06/05/24	23.000	17.458	20.041	12.233
06/06/24	20.375	26.291	18.583	11.291

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)
06/07/24	14.166	20.083	14.458	6.433
06/08/24	13.916	14.416	10.791	4.170
06/09/24	10.041	12.416	--	4.179
06/10/24	16.166	24.750	--	8.462
06/11/24	16.375	18.041	--	9.808
06/12/24	16.000	21.083	4.583	5.616
06/13/24	14.500	23.750	16.875	7.529
06/14/24	16.666	22.208	21.083	9.183
06/15/24	26.541	28.583	--	13.945
06/16/24	51.333	47.833	--	24.387
06/17/24	38.458	34.541	30.500	13.575
06/18/24	36.041	39.250	39.125	16.645
06/19/24	29.958	33.541	8.958	10.600
06/20/24	27.208	31.666	--	13.487
06/21/24	29.708	24.041	--	12.283
06/22/24	21.500	21.208	--	15.125
06/23/24	11.541	8.625	--	173.300
06/24/24	14.625	12.750	--	10.495
06/25/24	17.916	24.083	12.791	12.870
06/26/24	21.416	21.041	24.318	12.666
06/27/24	25.541	23.333	28.375	13.695
06/28/24	26.791	27.833	79.333	13.333
06/29/24	24.875	18.875	150.375	11.925
06/30/24	20.083	12.083	83.875	10.500
Q3/2024				
7/1/2024	19.083	18.291	16.208	12.395
7/2/2024	19.208	22.250	14.791	12.070
7/3/2024	17.083	16.500	16.291	12.312
7/4/2024	19.875	22.458	29.916	32.700
7/5/2024	21.250	18.416	34.041	17.058
7/6/2024	30.958	21.875	39.277	16.608
7/7/2024	19.750	16.916	32.176	11.900
7/8/2024	17.500	18.583	21.083	14.125
7/9/2024	18.750	17.500	47.666	16.191
7/10/2024	25.041	23.208	48.666	21.008
7/11/2024	29.791	30.250	24.583	21.062
7/12/2024	28.000	25.291	30.500	17.179

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)
7/13/2024	24.125	19.791	43.700	12.558
7/14/2024	16.500	12.541	32.894	11.562
7/15/2024	18.291	17.458	34.000	13.154
7/16/2024	16.000	16.666	15.111	10.629
7/17/2024	18.833	16.208	34.625	12.166
7/18/2024	20.166	18.291	--	12.704
7/19/2024	18.041	16.875	--	13.912
7/20/2024	14.625	11.083	12.875	11.104
7/21/2024	15.291	12.750	14.333	10.933
7/22/2024	15.916	12.166	13.791	11.279
7/23/2024	14.541	11.583	14.666	10.954
7/24/2024	17.125	13.541	16.125	13.800
7/25/2024	22.000	17.041	21.000	16.200
7/26/2024	25.666	17.666	19.583	15.112
7/27/2024	21.458	18.416	17.291	14.325
7/28/2024	17.916	15.333	15.083	10.170
7/29/2024	12.958	10.166	11.791	14.062
7/30/2024	15.708	10.833	10.875	10.837
7/31/2024	15.833	11.916	12.916	11.887
8/1/2024	17.458	14.583	14.458	14.858
8/2/2024	17.250	15.000	16.708	13.970
8/3/2024	13.875	11.291	10.875	32.470
8/4/2024	12.750	13.458	11.333	34.733
8/5/2024	13.666	40.416	12.125	11.029
8/6/2024	22.208	12.541	15.708	13.066
8/7/2024	20.708	14.291	19.875	12.225
8/8/2024	25.125	16.000	21.375	15.216
8/9/2024	19.541	16.333	14.375	13.300
8/10/2024	20.458	14.750	15.291	14.037
8/11/2024	19.916	17.666	18.041	13.554
8/12/2024	20.875	15.958	16.541	12.437
8/13/2024	16.875	13.500	15.916	11.866
8/14/2024	16.791	14.583	14.416	13.275
8/15/2024	15.291	13.000	13.583	13.566
8/16/2024	18.666	15.625	16.250	13.970
8/17/2024	24.750	21.041	27.625	17.195
8/18/2024	19.833	13.000	18.166	12.045

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)
8/19/2024	11.250	10.291	10.500	8.854
8/20/2024	11.791	7.583	8.041	7.445
8/21/2024	17.958	16.125	17.875	14.912
8/22/2024	19.833	16.500	17.708	11.487
8/23/2024	18.541	15.958	18.375	12.475
8/24/2024	21.875	16.083	14.875	10.029
8/25/2024	16.750	13.166	14.208	12.433
8/26/2024	16.833	13.791	14.000	14.320
8/27/2024	18.083	14.916	15.583	13.779
8/28/2024	22.375	18.666	19.250	16.141
8/29/2024	21.041	18.333	21.041	13.404
8/30/2024	21.166	16.875	14.833	14.895
8/31/2024	22.125	18.416	--	13.758
9/1/2024	24.166	21.041	--	12.641
9/2/2024	21.125	18.125	--	12.633
9/3/2024	13.916	11.333	--	12.062
9/4/2024	9.791	8.416	8.187	10.137
9/5/2024	--	13.875	14.791	17.437
9/6/2024	--	16.625	18.041	17.258
9/7/2024	--	15.500	13.136	19.950
9/8/2024	--	12.750	19.400	15.508
9/9/2024	--	7.625	24.583	47.083
9/10/2024	21.833	10.000	29.375	11.929
9/11/2024	22.958	14.500	25.708	11.462
9/12/2024	25.458	17.541	21.583	13.450
9/13/2024	30.875	17.541	20.208	14.070
9/14/2024	24.125	15.416	21.250	12.050
9/15/2024	20.875	10.541	19.458	8.720
9/16/2024	25.666	11.625	18.083	8.454
9/17/2024	21.208	13.166	12.000	8.008
9/18/2024	16.083	11.291	21.375	9.879
9/19/2024	17.791	9.041	15.125	7.575
9/20/2024	18.125	9.625	17.500	8.287
9/21/2024	21.166	14.541	16.166	10.075
9/22/2024	18.083	13.125	20.166	11.954
9/23/2024	14.833	10.291	14.583	8.995
9/24/2024	23.458	17.875	9.875	13.354

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)
9/25/2024	22.875	13.333	18.708	9.620
9/26/2024	16.250	16.416	9.875	10.900
9/27/2024	18.291	11.958	14.166	8.129
9/28/2024	21.375	17.000	18.708	13.337
9/29/2024	11.125	9.208	9.875	43.658
9/30/2024	17.000	11.875	14.167	11.520
Q4/2024				
10/01/2024	14.583	13.458	15.291	15.150
10/02/2024	14.833	13.166	13.375	11.616
10/03/2024	22.208	16.833	16.208	13.941
10/04/2024	28.333	26.083	23.250	19.104
10/05/2024	20.750	16.000	17.125	12.966
10/06/2024	13.083	11.166	8.416	10.308
10/07/2024	15.125	11.833	11.714	11.158
10/08/2024	14.541	13.375	9.789	11.341
10/09/2024	15.416	12.833	14.416	11.554
10/10/2024	23.166	16.041	18.333	12.650
10/11/2024	14.833	13.583	13.416	12.429
10/12/2024	15.041	16.166	11.000	9.254
10/13/2024	15.166	13.333	14.041	9.525
10/14/2024	21.083	20.250	24.875	13.429
10/15/2024	23.416	19.208	36.833	12.858
10/16/2024	23.083	15.416	35.000	7.033
10/17/2024	17.041	10.541	26.750	8.666
10/18/2024	31.833	27.250	32.750	24.112
10/19/2024	17.625	18.000	15.958	15.466
10/20/2024	13.958	12.500	--	10.787
10/21/2024	10.708	10.000	--	8.304
10/22/2024	11.250	10.666	--	8.833
10/23/2024	11.625	12.583	--	10.466
10/24/2024	12.791	10.375	--	11.779
10/25/2024	13.333	12.958	--	10.869
10/26/2024	11.458	9.833	--	9.362
10/27/2024	14.666	14.458	--	11.229
10/28/2024	25.041	20.250	27.225	12.120
10/29/2024	11.833	11.083	11.100	6.412
10/30/2024	25.166	10.416	13.554	6.808

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)
10/31/2024	11.708	8.833	10.804	5.662
11/01/2024	12.875	11.416	14.245	9.912
11/02/2024	17.458	10.916	12.208	6.162
11/03/2024	15.083	12.555	19.391	12.712
11/04/2024	5.791	--	7.804	3.300
11/05/2024	7.416	--	8.795	5.741
11/06/2024	65.166	--	79.420	61.600
11/07/2024	7.916	--	12.716	8.620
11/08/2024	6.583	--	9.237	6.683
11/09/2024	14.083	--	14.625	10.304
11/10/2024	13.875	--	16.550	10.700
11/11/2024	19.791	--	16.575	10.866
11/12/2024	4.958	--	6.187	3.983
11/13/2024	4.916	--	5.633	6.495
11/14/2024	11.333	--	7.550	5.458
11/15/2024	10.041	--	14.504	7.795
11/16/2024	3.875	--	4.716	3.750
11/17/2024	3.208	--	2.383	2.700
11/18/2024	11.708	--	9.654	7.233
11/19/2024	6.750	--	9.787	5.008
11/20/2024	8.125	--	9.800	5.833
11/21/2024	5.416	--	4.933	5.991
11/22/2024	8.541	--	7.820	5.750
11/23/2024	7.208	--	8.175	4.829
11/24/2024	5.083	--	6.716	1.712
11/25/2024	4.916	--	4.687	2.179
11/26/2024	4.666	--	3.970	1.204
11/27/2024	12.958	--	8.983	3.758
11/28/2024	3.958	--	5.133	3.154
11/29/2024	2.916	--	3.462	2.266
11/30/2024	5.375	--	6.066	4.337
12/01/2024	37.125	--	8.887	6.545
12/02/2024	9.458	--	8.225	6.237
12/03/2024	20.000	--	17.300	11.191
12/04/2024	45.333	--	44.550	18.512
12/05/2024	5.958	--	--	4.612
12/06/2024	2.250	--	--	2.675

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)
12/07/2024	2.750	--	--	2.383
12/08/2024	12.875	--	--	8.491
12/09/2024	19.291	--	--	10.741
12/10/2024	10.791	--	--	10.545
12/11/2024	2.375	--	--	1.458
12/12/2024	8.416	--	--	5.100
12/13/2024	13.791	--	--	5.791
12/14/2024	12.625	--	--	6.300
12/15/2024	7.250	--	--	3.158
12/16/2024	7.291	--	--	3.970
12/17/2024	4.833	--	--	3.162
12/18/2024	5.916	--	--	2.181
12/19/2024	5.250	--	--	2.975
12/20/2024	13.208	--	--	9.141
12/21/2024	16.208	--	--	9.033
12/22/2024	10.541	--	--	4.650
12/23/2024	20.208	--	--	5.575
12/24/2024	25.875	--	--	6.012
12/25/2024	2.000	--	--	1.275
12/26/2024	5.625	--	--	3.820
12/27/2024	9.666	--	--	16.862
12/28/2024	12.666	--	--	2.929
12/29/2024	10.583	--	--	5.262
12/30/2024	12.708	--	--	4.866
12/31/2024	7.500	--	--	2.691

Notes:

Negative values mean that the background exceeded the particulate count.

-- indicates a filter sensor pressure failure.

Gray-shaded boxes with bold numbers indicate that value exceeded CAAQS but is below the NAAQS of 150 µg/m³.

Orange-shaded boxes with bold numbers indicate that value exceeded CAAQS and the NAAQS of 150 µg/m³.

EPA – Simi Valley – Cochran Street – PM₁₀ Daily Averages, 01/01/2024–07/31/2024

	Simi Valley AQS # 061112002
Simi Valley PM₁₀ Sample Date	PM₁₀ (µg/m³) (CAAQS 50 µg/m³)
01/01/24	10
01/02/24	11
01/03/24	7
01/04/24	5
01/05/24	15
01/06/24	12
01/07/24	6
01/08/24	6
01/13/24	14
01/14/24	21
01/15/24	19
01/16/24	12
01/17/24	15
01/18/24	22
01/19/24	23
01/20/24	9
01/21/24	4
01/22/24	2
01/23/24	3
01/24/24	14
01/25/24	8
01/26/24	3
01/27/24	1
01/28/24	2
01/29/24	9
01/30/24	12
01/31/24	20
02/01/24	3
02/02/24	9
02/03/24	9
02/04/24	3
02/05/24	1
02/06/24	1

	Simi Valley AQS # 061112002
Simi Valley PM₁₀ Sample Date	PM₁₀ (µg/m³) (CAAQS 50 µg/m³)
02/07/24	5
02/08/24	4
02/09/24	4
02/10/24	4
02/11/24	5
02/12/24	5
02/13/24	10
02/14/24	13
02/15/24	8
02/16/24	12
02/17/24	14
02/18/24	3
02/19/24	0
02/20/24	0
02/21/24	3
02/22/24	8
02/23/24	4
02/24/24	6
02/25/24	8
02/26/24	10
02/27/24	7
02/28/24	11
02/29/24	11
03/01/24	1
03/02/24	3
03/03/24	6
03/04/24	7
03/05/24	9
03/06/24	5
03/07/24	3
03/08/24	11
03/09/24	8
03/10/24	6
03/11/24	7

	Simi Valley AQS # 061112002
Simi Valley PM₁₀ Sample Date	PM₁₀ (µg/m³) (CAAQS 50 µg/m³)
03/12/24	11
03/13/24	12
03/14/24	47
03/15/24	11
03/16/24	12
03/17/24	12
03/18/24	11
03/19/24	18
03/20/24	18
03/21/24	21
03/22/24	21
03/23/24	9
03/24/24	4
03/25/24	11
03/26/24	18
03/27/24	16
03/28/24	11
03/29/24	9
03/30/24	3
03/31/24	1
04/01/24	4
04/02/24	9
04/03/24	11
04/04/24	10
04/05/24	5
04/06/24	6
04/07/24	8
04/08/24	8
04/09/24	9
04/10/24	16
04/11/24	20
04/12/24	19
04/13/24	8
04/14/24	3

	Simi Valley AQS # 061112002
Simi Valley PM₁₀ Sample Date	PM₁₀ (µg/m³) (CAAQS 50 µg/m³)
04/15/24	5
04/16/24	8
04/17/24	12
04/18/24	19
04/19/24	20
04/20/24	21
04/21/24	20
04/22/24	19
04/23/24	7
04/24/24	13
04/25/24	10
04/26/24	21
04/27/24	13
04/28/24	15
04/29/24	21
04/30/24	29
05/01/24	36
05/02/24	32
05/03/24	31
05/04/24	17
05/05/24	6
05/06/24	9
05/07/24	16
05/08/24	26
05/09/24	34
05/10/24	29
05/11/24	23
05/12/24	18
05/13/24	25
05/14/24	23
05/15/24	16
05/16/24	16
05/17/24	15
05/18/24	14

	Simi Valley AQS # 061112002
Simi Valley PM₁₀ Sample Date	PM₁₀ (µg/m³) (CAAQS 50 µg/m³)
05/19/24	11
05/20/24	15
05/21/24	25
05/22/24	24
05/23/24	27
05/24/24	25
05/25/24	12
05/26/24	13
05/27/24	20
05/28/24	21
05/29/24	24
05/30/24	27
05/31/24	24
06/01/24	17
06/02/24	14
06/03/24	19
06/04/24	28
06/05/24	25
06/06/24	23
06/07/24	16
06/08/24	14
06/09/24	8
06/10/24	18
06/11/24	20
06/12/24	22
06/13/24	15
06/14/24	25
06/15/24	31
06/16/24	57
06/17/24	41
06/18/24	42
06/19/24	38
06/20/24	33
06/21/24	32

	Simi Valley AQS # 061112002
Simi Valley PM₁₀ Sample Date	PM₁₀ (µg/m³) (CAAQS 50 µg/m³)
06/22/24	28
06/23/24	13
06/24/24	20
06/25/24	29
06/26/24	32
06/27/24	33
06/28/24	35
06/29/24	31
06/30/24	16
07/01/24	24
07/02/24	29
07/03/24	27
07/04/24	27
07/05/24	36
07/06/24	35
07/07/24	21
07/08/24	24
07/09/24	29
07/10/24	36
07/11/24	34
07/12/24	24
07/14/24	16
07/15/24	23
07/16/24	24
07/17/24	27
07/18/24	31
07/19/24	28
07/20/24	20
07/21/24	21
07/22/24	28
07/23/24	26
07/24/24	28
07/25/24	36
07/26/24	31

	Simi Valley AQS # 061112002
Simi Valley PM₁₀ Sample Date	PM₁₀ (µg/m³) (CAAQS 50 µg/m³)
07/27/24	26
07/28/24	19
07/29/24	22
07/30/24	25
07/31/24	26

Notes:

Data supplied from: https://aqs.epa.gov/aqsweb/airdata/download_files.html. 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.

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

PM₁₀ Monthly Statistics, Q4/2024

Location ID	October 2024			November 2024			December 2024		
	PM ₁₀			PM ₁₀			PM ₁₀		
	High	Low	95 th PCTL	High	Low	95 th PCTL	High	Low	95 th PCTL
DOE-1	31.833	10.708	26.749	65.166	2.916	18.741	45.333	2.00	31.5
DOE-2	27.25	8.833	23.166	12.555	10.916	12.441	--	--	--
DOE-3	36.833	8.416	34.775	79.42	2.383	18.124	44.55	8.225	40.462
DOE-4	24.112	5.662	17.285	61.6	1.204	11.881	18.512	1.275	14.026

µg/m³ = micrograms per cubic meter

-- indicates a filter sensor pressure failure with no value

PCTL = percentile

PM₁₀ Monthly Statistics, Q1/2024 through Q4/2024

Location ID	January 2024			February 2024			March 2024		
	PM ₁₀			PM ₁₀			PM ₁₀		
	High	Low	95 th PCTL	High	Low	95 th PCTL	High	Low	95 th PCTL
DOE-1	17.666	1.125	16.125	21.208	-0.958	18.366	29.125	1.750	17.250
DOE-2	24.041	-5.000	20.354	23.291	-0.916	19.466	31.291	3.958	19.313
DOE-3	16.750	-5.000	14.521	13.208	-0.708	8.921	16.625	1.041	13.114
DOE-4	11.633	-0.679	8.475	6.462	-1.125	4.739	21.354	-0.425	9.439
Location ID	April 2024			May 2024			June 2024		
	PM ₁₀			PM ₁₀			PM ₁₀		
	High	Low	95 th PCTL	High	Low	95 th PCTL	High	Low	95 th PCTL
DOE-1	15.333	4.333	14.408	23.250	8.625	21.500	51.333	10.041	37.370
DOE-2	32.333	4.333	18.972	27.250	6.291	24.479	47.833	8.625	37.131
DOE-3	69.416	0.583	22.558	27.041	6.458	23.921	150.375	4.583	93.850
DOE-4	17.104	0.891	11.321	19.137	3.775	12.608	173.300	4.050	20.903

Location ID	July 2024			August 2024			September 2024		
	PM ₁₀			PM ₁₀			PM ₁₀		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
DOE-1	30.958	12.958	28.896	25.125	11.250	23.563	30.875	9.791	25.624
DOE-2	30.250	10.166	24.250	40.416	7.583	19.854	21.041	7.625	18.013
DOE-3	48.666	10.875	46.080	27.625	8.041	21.225	29.375	8.187	25.371
DOE-4	32.700	10.170	21.035	34.733	7.445	24.833	47.083	7.575	32.989
Location ID	October 2024			November 2024			December 2024		
	PM ₁₀			PM ₁₀			PM ₁₀		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
DOE-1	31.833	10.708	26.749	65.166	2.916	18.741	45.333	2.00	31.5
DOE-2	27.25	8.833	23.166	12.555	10.916	12.441	--	--	--
DOE-3	36.833	8.416	34.775	79.42	2.383	18.124	44.55	8.225	40.462
DOE-4	24.112	5.662	17.285	61.6	1.204	11.881	18.512	1.275	14.026

µg/m³ = micrograms per cubic meter

-- indicates a filter sensor pressure failure with no value

PCTL = percentile

Note: DOE-2 had no valid readings in December 2024.

EPA – Simi Valley – Cochran Street – PM₁₀ Monthly Statistics, 01/01/2024–07/31/2024

Location ID	January 2024			February 2024			March 2024		
	PM 10			PM 10			PM 10		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
Simi Valley AQS #061112002 (PM ₁₀)	23.00000	1.00000	21.70000	14.00000	0.00000	12.60000	47.00000	1.00000	21.00000

Location ID	April 2024			May 2024			June 2024		
	PM 10			PM 10			PM 10		
	High	Low	95th PCTL	High	Low	95th PCTL	High	Low	95th PCTL
Simi Valley AQS #061112002 (PM ₁₀)	29.00000	3.00000	21.00000	36.00000	6.00000	33.00000	57.00000	8.00000	41.55000

Location ID	July 2024		
	PM 10		
	High	Low	95th PCTL
Simi Valley AQS #061112002 (PM ₁₀)	36.00000	16.00000	36.00000

Notes:

PCTL = percentile

Data supplied from: https://aqs.epa.gov/aqsweb/airdata/download_files.html. Only the Simi Valley PM₁₀ data from the State and Local Air Monitoring Stations (SLAMS) has 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.

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APPENDIX B

Analytical Results for Ambient Air VOCs

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Table B-1. Ambient air VOC detection results compared to RSLs for Q4/2024.

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	10/9/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.4
DOE-1	10/9/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	24
DOE-1	10/9/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.1
DOE-2	10/9/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.3
DOE-2	10/9/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	20
DOE-2	10/9/2024	Trichlorofluoromethane	1300		0.13	0.80	µg/m ³	1.2
DOE-3	10/9/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.3
DOE-3	10/9/2024	Ethyl acetate		73	1.2	3.0	µg/m ³	13
DOE-3	10/9/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.1
DOE-4	10/9/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.3
DOE-4	10/9/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	17
DOE-4	10/9/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.1
DOE-1	10/24/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.0
DOE-1	10/24/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.1
DOE-2	10/24/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.0
DOE-2	10/24/2024	Toluene	310		0.10	0.83	µg/m ³	0.95
DOE-2	10/24/2024	Trichlorofluoromethane	1300		0.12	0.79	µg/m ³	1.1
DOE-3	10/24/2024	Dichlorodifluoromethane		100	0.12	0.71	µg/m ³	2.0
DOE-3	10/24/2024	Trichlorofluoromethane	1300		0.11	0.69	µg/m ³	1.1
DOE-4	10/24/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.0
DOE-4	10/24/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	3.4
DOE-4	10/24/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.1
DOE-1	11/8/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.0
DOE-1	11/8/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	11
DOE-1	11/8/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.0
DOE-2	11/8/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.0
DOE-2	11/8/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	13
DOE-2	11/8/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.0
DOE-3	11/8/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.0
DOE-3	11/8/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	12 ;J
DOE-3	11/8/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.0

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-4	11/8/2024	Chloromethane		94	0.13	0.79	µg/m ³	0.80
DOE-4	11/8/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.0
DOE-4	11/8/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	24
DOE-4	11/8/2024	Trichlorofluoromethane	1300		0.12	0.74	µg/m ³	0.99
DOE-1	11/21/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	6.9
DOE-1	11/21/2024	Isopropanol		210	0.33	1.5	µg/m ³	2.6
DOE-1	11/21/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.1
DOE-2	11/21/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.3
DOE-2	11/21/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	5.7
DOE-2	11/21/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.2
DOE-3	11/21/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.3
DOE-3	11/21/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	4.7
DOE-3	11/21/2024	Trichlorofluoromethane	1300		0.12	0.72	µg/m ³	1.2
DOE-4	11/21/2024	Dichlorodifluoromethane		100	0.14	0.81	µg/m ³	2.4
DOE-4	11/21/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	13
DOE-4	11/21/2024	Trichlorofluoromethane	1300		0.13	0.80	µg/m ³	1.2
DOE-1	12/3/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.2
DOE-1	12/3/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.1
DOE-2	12/3/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.2
DOE-2	12/3/2024	Trichlorofluoromethane	1300		0.12	0.79	µg/m ³	1.2
DOE-3	12/3/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.3
DOE-3	12/3/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.1
DOE-4	12/3/2024	Dichlorodifluoromethane		100	0.14	0.84	µg/m ³	2.3
DOE-4	12/3/2024	Trichlorofluoromethane	1300		0.13	0.83	µg/m ³	1.2
DOE-1	12/13/2024	Dichlorodifluoromethane		100	0.12	0.72	µg/m ³	2.2
DOE-1	12/13/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	7.2
DOE-1	12/13/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.1
DOE-2	12/13/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.2
DOE-2	12/13/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	4.0
DOE-2	12/13/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.1
DOE-3	12/13/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.1
DOE-3	12/13/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	3.3

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-3	12/13/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.1
DOE-4	12/13/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.1
DOE-4	12/13/2024	Trichlorofluoromethane	1300		0.12	0.74	µg/m ³	1.1

Notes:

Bold text indicates detection above reporting limit.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

µg/m³ = micrograms per meter cubed

Table B-2. Year 7 ambient air VOC detection results compared to RSLs.

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	1/4/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.2
DOE-1	1/4/2024	Ethyl acetate		73	0.38	2.9	µg/m ³	14
DOE-1	1/4/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.1
DOE-2	1/4/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.2
DOE-2	1/4/2024	Ethyl acetate		73	0.41	3.1	µg/m ³	22
DOE-2	1/4/2024	Trichlorofluoromethane	1300		0.12	0.76	µg/m ³	1.1
DOE-3	1/4/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.2
DOE-3	1/4/2024	Ethyl acetate		73	0.42	3.1	µg/m ³	26
DOE-3	1/4/2024	Toluene	310		0.097	0.79	µg/m ³	1.0
DOE-3	1/4/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.1
DOE-4	1/4/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.1
DOE-4	1/4/2024	Ethyl acetate		73	0.41	3.1	µg/m ³	100
DOE-4	1/4/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.0
DOE-1	1/19/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.1
DOE-1	1/19/2024	Ethyl acetate		73	0.41	3.1	µg/m ³	6.4
DOE-1	1/19/2024	Tetrahydrofuran		2100	0.098	0.74	µg/m ³	1.2
DOE-1	1/19/2024	Toluene	310		0.096	0.78	µg/m ³	1.3
DOE-1	1/19/2024	Trichlorofluoromethane	1300		0.12	0.76	µg/m ³	1.1
DOE-2	1/19/2024	Chloromethane		94	0.12	0.30	µg/m ³	0.72 ;J
DOE-2	1/19/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.2
DOE-2	1/19/2024	Ethyl acetate		73	0.40	3.0	µg/m ³	5.6 ;J
DOE-2	1/19/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.1
DOE-3	1/19/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.2
DOE-3	1/19/2024	Ethyl acetate		73	0.42	3.2	µg/m ³	6.3
DOE-3	1/19/2024	Isopropanol		210	0.33	1.5	µg/m ³	2.2
DOE-3	1/19/2024	Trichlorofluoromethane	1300		0.12	0.79	µg/m ³	1.1
DOE-4	1/19/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.2
DOE-4	1/19/2024	Ethyl acetate		73	0.42	3.2	µg/m ³	7.4
DOE-4	1/19/2024	Trichlorofluoromethane	1300		0.12	0.79	µg/m ³	1.1
DOE-1	2/2/2024	Dichlorodifluoromethane		100	0.11	0.69	µg/m ³	2.7
DOE-1	2/2/2024	Ethyl acetate		73	0.36	2.7	µg/m ³	8.5

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	2/2/2024	Isopropanol		210	0.29	1.3	µg/m ³	1.7
DOE-1	2/2/2024	Trichlorofluoromethane	1300		0.11	0.68	µg/m ³	1.2
DOE-2	2/2/2024	Dichlorodifluoromethane		100	0.12	0.70	µg/m ³	2.7
DOE-2	2/2/2024	Ethyl acetate		73	0.37	2.8	µg/m ³	7.1
DOE-2	2/2/2024	Trichlorofluoromethane	1300		0.11	0.69	µg/m ³	1.3
DOE-3	2/2/2024	Dichlorodifluoromethane		100	0.12	0.70	µg/m ³	2.6
DOE-3	2/2/2024	Ethyl acetate		73	0.37	2.8	µg/m ³	6.4
DOE-3	2/2/2024	Trichlorofluoromethane	1300		0.11	0.69	µg/m ³	1.3
DOE-4	2/2/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.7
DOE-4	2/2/2024	Ethyl acetate		73	0.41	3.1	µg/m ³	27
DOE-4	2/2/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.3
DOE-1	2/15/2024	Dichlorodifluoromethane		100	0.12	0.70	µg/m ³	2.5
DOE-1	2/15/2024	Ethyl acetate		73	1.0	2.7	µg/m ³	4.4
DOE-1	2/15/2024	Trichlorofluoromethane	1300		0.11	0.69	µg/m ³	1.4
DOE-2	2/15/2024	Dichlorodifluoromethane		100	0.12	0.72	µg/m ³	2.4
DOE-2	2/15/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	7.4
DOE-2	2/15/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.3
DOE-3	2/15/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.5
DOE-3	2/15/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	8.3
DOE-3	2/15/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.4
DOE-4	2/15/2024	Dichlorodifluoromethane		100	0.13	0.75	µg/m ³	2.4
DOE-4	2/15/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	36
DOE-4	2/15/2024	Trichlorofluoromethane	1300		0.12	0.74	µg/m ³	1.4
DOE-1	2/28/2024	Chloromethane		94	0.12	0.78	µg/m ³	1.3
DOE-1	2/28/2024	Dichlorodifluoromethane		100	0.13	0.75	µg/m ³	2.2
DOE-1	2/28/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	29
DOE-1	2/28/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.2
DOE-2	2/28/2024	Chloromethane		94	0.13	0.80	µg/m ³	1.4
DOE-2	2/28/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	2.3
DOE-2	2/28/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	18
DOE-2	2/28/2024	Trichlorofluoromethane	1300		0.12	0.76	µg/m ³	1.2
DOE-3	2/28/2024	2-butanone		5200	0.36	1.5	µg/m ³	1.6

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-3	2/28/2024	Chloromethane		94	0.13	0.81	µg/m ³	1.5
DOE-3	2/28/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.2
DOE-3	2/28/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	11
DOE-3	2/28/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.2
DOE-4	2/28/2024	Chloromethane		94	0.13	0.82	µg/m ³	1.6
DOE-4	2/28/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.3
DOE-4	2/28/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	13
DOE-4	2/28/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.2
DOE-1	3/12/2024	Chloromethane		94	0.12	0.75	µg/m ³	1.4
DOE-1	3/12/2024	Dichlorodifluoromethane		100	0.12	0.72	µg/m ³	2.3
DOE-1	3/12/2024	Ethyl acetate		73	1.0	2.8	µg/m ³	220
DOE-1	3/12/2024	Isopropanol		210	0.30	1.4	µg/m ³	1.7
DOE-1	3/12/2024	Methylene chloride	1		0.21	0.63	µg/m ³	0.83
DOE-1	3/12/2024	Trichlorofluoromethane	1300		0.11	0.70	µg/m ³	1.2
DOE-2	3/12/2024	Chloromethane		94	0.12	0.78	µg/m ³	1.4
DOE-2	3/12/2024	Dichlorodifluoromethane		100	0.13	0.75	µg/m ³	2.4
DOE-2	3/12/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	250
DOE-2	3/12/2024	Methylene chloride	1		0.22	0.67	µg/m ³	0.85
DOE-2	3/12/2024	Trichlorofluoromethane	1300		0.12	0.74	µg/m ³	1.2
DOE-3	3/12/2024	Carbon disulfide		730	0.20	1.3	µg/m ³	3.6
DOE-3	3/12/2024	Chloromethane		94	0.11	0.67	µg/m ³	1.4
DOE-3	3/12/2024	Dichlorodifluoromethane		100	0.11	0.64	µg/m ³	2.3
DOE-3	3/12/2024	Ethyl acetate		73	0.94	2.5	µg/m ³	96
DOE-3	3/12/2024	Methylene chloride	1		0.19	0.57	µg/m ³	0.80
DOE-3	3/12/2024	Trichlorofluoromethane	1300		0.10	0.63	µg/m ³	1.2
DOE-4	3/12/2024	Chloromethane		94	0.12	0.76	µg/m ³	1.4
DOE-4	3/12/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.3
DOE-4	3/12/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	84
DOE-4	3/12/2024	Isopropanol		210	0.31	1.4	µg/m ³	1.5
DOE-4	3/12/2024	Methylene chloride	1		0.21	0.64	µg/m ³	0.70
DOE-4	3/12/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.2
DOE-1	3/27/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.3

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	3/27/2024	Ethyl acetate		73	1.1	3	µg/m ³	83
DOE-1	3/27/2024	Toluene	310		0.098	0.81	µg/m ³	0.97
DOE-1	3/27/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.2
DOE-2	3/27/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.4
DOE-2	3/27/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	23
DOE-2	3/27/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.1
DOE-3	3/27/2024	2-butanone		5200	0.34	1.5	µg/m ³	2.8 ;J
DOE-3	3/27/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.3
DOE-3	3/27/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	19 ;J
DOE-3	3/27/2024	Toluene	310		0.093	0.77	µg/m ³	1.4 ;J
DOE-3	3/27/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.2
DOE-4	3/27/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	2.3
DOE-4	3/27/2024	Ethyl acetate		73	1.1	3	µg/m ³	36
DOE-4	3/27/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.1
DOE-1	4/11/2024	Benzene	0.097		0.12	0.81	µg/m ³	0.85
DOE-1	4/11/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.9
DOE-1	4/11/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	200 ;J+
DOE-1	4/11/2024	Toluene	310		0.1	0.85	µg/m ³	0.91
DOE-1	4/11/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.4
DOE-2	4/11/2024	Benzene	0.097		0.11	0.76	µg/m ³	5.7
DOE-2	4/11/2024	Carbon disulfide		730	0.24	1.5	µg/m ³	1.8
DOE-2	4/11/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	3.1
DOE-2	4/11/2024	Ethyl acetate		73	23	60	µg/m ³	2800 D;J+
DOE-2	4/11/2024	Isopropanol		210	0.33	1.5	µg/m ³	1.9
DOE-2	4/11/2024	Toluene	310		0.097	0.8	µg/m ³	6.5
DOE-2	4/11/2024	Trichlorofluoromethane	1300		0.12	0.76	µg/m ³	1.5
DOE-3	4/11/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	2.9
DOE-3	4/11/2024	Ethyl acetate		73	1.1	3	µg/m ³	31 ;J+
DOE-3	4/11/2024	Trichlorofluoromethane	1300		0.12	0.76	µg/m ³	1.4
DOE-4	4/11/2024	Dichlorodifluoromethane		100	0.13	0.81	µg/m ³	2.9
DOE-4	4/11/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	240 ;J+

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-4	4/11/2024	Toluene	310		0.1	0.84	µg/m ³	0.87
DOE-4	4/11/2024	Trichlorofluoromethane	1300		0.13	0.79	µg/m ³	1.4
DOE-1	4/26/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.8
DOE-1	4/26/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	25
DOE-1	4/26/2024	Trichlorofluoromethane	1300		0.11	0.72	µg/m ³	1.3
DOE-2	4/26/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.9
DOE-2	4/26/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	10
DOE-2	4/26/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.3
DOE-3	4/26/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.8
DOE-3	4/26/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	11
DOE-3	4/26/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.3
DOE-4	4/26/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.9
DOE-4	4/26/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	20
DOE-4	4/26/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.3
DOE-1	5/9/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	63
DOE-1	5/9/2024	Isopropanol		210	0.31	1.4	µg/m ³	1.8
DOE-1	5/9/2024	Toluene	310		0.092	0.76	µg/m ³	1.1
DOE-1	5/9/2024	Trichlorofluoromethane	1300		0.11	0.72	µg/m ³	1.3
DOE-2	5/9/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.3
DOE-2	5/9/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	17
DOE-2	5/9/2024	Trichlorofluoromethane	1300		0.11	0.72	µg/m ³	1.3
DOE-2	5/9/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	540 D;
DOE-3	5/9/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.3
DOE-3	5/9/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	40
DOE-3	5/9/2024	Toluene	310		0.092	0.76	µg/m ³	0.83
DOE-3	5/9/2024	Trichlorofluoromethane	1300		0.11	0.72	µg/m ³	1.2
DOE-4	5/9/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.3
DOE-4	5/9/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	70
DOE-4	5/9/2024	Toluene	310		0.10	0.83	µg/m ³	0.90
DOE-4	5/9/2024	Trichlorofluoromethane	1300		0.12	0.79	µg/m ³	1.2
DOE-1	5/22/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.6
DOE-1	5/22/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	26

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	5/22/2024	Toluene	310		0.092	0.77	µg/m ³	0.83
DOE-1	5/22/2024	Trichlorofluoromethane	1300		0.12	0.72	µg/m ³	1.2
DOE-2	5/22/2024	Dichlorodifluoromethane		100	0.12	0.73	µg/m ³	2.6
DOE-2	5/22/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	14
DOE-2	5/22/2024	Trichlorofluoromethane	1300		0.11	0.72	µg/m ³	1.3
DOE-3	5/22/2024	Dichlorodifluoromethane		100	0.13	0.75	µg/m ³	2.6
DOE-3	5/22/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	13
DOE-3	5/22/2024	Isopropanol		210	0.32	1.4	µg/m ³	1.6
DOE-3	5/22/2024	Trichlorofluoromethane	1300		0.12	0.74	µg/m ³	1.3
DOE-4	5/22/2024	2-butanone		5200	0.34	1.5	µg/m ³	1.5
DOE-4	5/22/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.6
DOE-4	5/22/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	4.5
DOE-4	5/22/2024	Isopropanol		210	0.31	1.4	µg/m ³	1.6
DOE-4	5/22/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.2
DOE-1	6/4/2024	Dichlorodifluoromethane		100	0.13	0.75	µg/m ³	2.2
DOE-1	6/4/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	5.1
DOE-1	6/4/2024	Isopropanol		210	0.32	1.4	µg/m ³	1.5
DOE-1	6/4/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.2
DOE-2	6/4/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.3
DOE-2	6/4/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	30
DOE-2	6/4/2024	Isopropanol		210	0.32	1.5	µg/m ³	1.5
DOE-2	6/4/2024	Toluene	310		0.096	0.79	µg/m ³	0.92
DOE-2	6/4/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.2
DOE-3	6/4/2024	Carbon disulfide		730	0.23	1.5	µg/m ³	2.0
DOE-3	6/4/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.2
DOE-3	6/4/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	4.5
DOE-3	6/4/2024	Toluene	310		0.092	0.77	µg/m ³	1.2
DOE-3	6/4/2024	Trichlorofluoromethane	1300		0.12	0.72	µg/m ³	1.1
DOE-4	6/4/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.4
DOE-4	6/4/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	8.2
DOE-4	6/4/2024	Isopropanol		210	0.35	1.6	µg/m ³	1.7
DOE-4	6/4/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.1

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	6/18/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.4
DOE-1	6/18/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	83
DOE-1	6/18/2024	Toluene	310		0.099	0.83	µg/m ³	1.5
DOE-1	6/18/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.1
DOE-2	6/18/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.4
DOE-2	6/18/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	74
DOE-2	6/18/2024	Toluene	310		0.096	0.79	µg/m ³	1.2
DOE-2	6/18/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.1
DOE-3	6/18/2024	Dichlorodifluoromethane		100	0.12	0.72	µg/m ³	2.4
DOE-3	6/18/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	63
DOE-3	6/18/2024	Toluene	310		0.090	0.75	µg/m ³	1.1
DOE-3	6/18/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.1
DOE-4	6/18/2024	Carbon disulfide		730	0.23	1.5	µg/m ³	7.4
DOE-4	6/18/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.4
DOE-4	6/18/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	52
DOE-4	6/18/2024	Toluene	310		0.095	0.79	µg/m ³	1.0
DOE-4	6/18/2024	Trichlorofluoromethane	1300		0.12	0.74	µg/m ³	1.1
DOE-1	7/3/2024	Dichlorodifluoromethane		100	0.14	0.81	µg/m ³	2.1
DOE-1	7/3/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	33
DOE-1	7/3/2024	Toluene	310		0.1	0.84	µg/m ³	0.93
DOE-1	7/3/2024	Trichlorofluoromethane	1300		0.13	0.8	µg/m ³	0.97
DOE-2	7/3/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2
DOE-2	7/3/2024	Ethyl acetate		73	1.1	3	µg/m ³	23 ;J
DOE-2	7/3/2024	m-xylene & p-xylene		100	0.21	1.6	µg/m ³	2.2 ;J
DOE-2	7/3/2024	Styrene	940		0.13	0.8	µg/m ³	1.4 ;J
DOE-2	7/3/2024	Toluene	310		0.098	0.81	µg/m ³	5.2 ;J
DOE-2	7/3/2024	Trichloroethene		0.48	0.11	0.78	µg/m ³	1.4 ;J
DOE-2	7/3/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	0.97
DOE-2	7/3/2024	Xylenes, total		100	0.21	1.6	µg/m ³	2.2
DOE-3	7/3/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.1
DOE-3	7/3/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	17
DOE-3	7/3/2024	Trichlorofluoromethane	1300		0.12	0.72	µg/m ³	1

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-4	7/3/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2
DOE-4	7/3/2024	Ethyl acetate		73	1.1	3	µg/m ³	18
DOE-4	7/3/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	0.96
DOE-1	7/18/2024	Dichlorodifluoromethane		100	0.15	0.88	µg/m ³	2.7
DOE-1	7/18/2024	Ethyl acetate		73	1.3	3.4	µg/m ³	58
DOE-1	7/18/2024	Trichlorofluoromethane	1300		0.14	0.87	µg/m ³	1.2
DOE-3	7/18/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	2.5
DOE-3	7/18/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	26
DOE-3	7/18/2024	Methylene chloride	1		0.22	0.68	µg/m ³	0.69
DOE-3	7/18/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.1
DOE-2	7/18/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.6
DOE-2	7/18/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	20
DOE-2	7/18/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.2
DOE-4	7/18/2024	Dichlorodifluoromethane		100	0.13	0.81	µg/m ³	2.6
DOE-4	7/18/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	38
DOE-4	7/18/2024	Trichlorofluoromethane	1300		0.13	0.79	µg/m ³	1.2
DOE-1	8/2/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.3
DOE-1	8/2/2024	Ethyl acetate		73	1.2	3	µg/m ³	23
DOE-1	8/2/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.1
DOE-2	8/2/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	2.3
DOE-2	8/2/2024	Ethyl acetate		73	1.1	3	µg/m ³	30
DOE-2	8/2/2024	Trichlorofluoromethane	1300		0.12	0.76	µg/m ³	1.1
DOE-3	8/2/2024	Dichlorodifluoromethane		100	0.13	0.81	µg/m ³	2.3
DOE-3	8/2/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	20
DOE-3	8/2/2024	Trichlorofluoromethane	1300		0.13	0.79	µg/m ³	1.1
DOE-4	8/2/2024	Dichlorodifluoromethane		100	0.14	0.83	µg/m ³	2.3
DOE-4	8/2/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	15 J;
DOE-4	8/2/2024	Trichlorofluoromethane	1300		0.13	0.82	µg/m ³	1.1
DOE-1	8/15/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.4
DOE-1	8/15/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	25
DOE-1	8/15/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.2
DOE-2	8/15/2024	Dichlorodifluoromethane		100	0.15	0.88	µg/m ³	2.5

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-2	8/15/2024	Ethyl acetate		73	1.3	3.4	µg/m ³	17
DOE-2	8/15/2024	Trichlorofluoromethane	1300		0.14	0.86	µg/m ³	1.2
DOE-3	8/15/2024	Carbon disulfide		730	0.25	1.6	µg/m ³	1.8
DOE-3	8/15/2024	Dichlorodifluoromethane		100	0.13	0.81	µg/m ³	2.4
DOE-3	8/15/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	24
DOE-3	8/15/2024	Trichlorofluoromethane	1300		0.13	0.79	µg/m ³	1.2
DOE-4	8/15/2024	1,2,4-trimethylbenzene		63	0.11	0.80	µg/m ³	0.84
DOE-4	8/15/2024	4-isopropyltoluene			0.12	0.79	µg/m ³	2.9
DOE-4	8/15/2024	Benzene	0.097		0.12	0.79	µg/m ³	1.4
DOE-4	8/15/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.3
DOE-4	8/15/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	49
DOE-4	8/15/2024	Ethylbenzene		1.1	0.12	0.85	µg/m ³	2.3
DOE-4	8/15/2024	m-xylene & p-xylene		100	0.22	1.6	µg/m ³	3.4
DOE-4	8/15/2024	N-heptane		420	0.13	0.82	µg/m ³	0.99
DOE-4	8/15/2024	o-Xylene (1,2-dimethylbenzene)		100	0.12	0.83	µg/m ³	1.1
DOE-4	8/15/2024	Toluene	310		0.10	0.83	µg/m ³	8.5
DOE-4	8/15/2024	Trichlorofluoromethane	1300		0.12	0.79	µg/m ³	1.2
DOE-4	8/15/2024	Xylenes, total		100	0.22	1.6	µg/m ³	4.4
DOE-1	8/28/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	1.9
DOE-1	8/28/2024	Ethyl acetate		73	1.1	3	µg/m ³	19
DOE-1	8/28/2024	Trichlorofluoromethane	1300		0.12	0.76	µg/m ³	1.1
DOE-2	8/28/2024	Acrylonitrile		0.041	0.39	1.6	µg/m ³	2.5 ;J
DOE-2	8/28/2024	Dichlorodifluoromethane		100	0.13	0.81	µg/m ³	2
DOE-2	8/28/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	46 ;J
DOE-2	8/28/2024	Trichlorofluoromethane	1300		0.13	0.79	µg/m ³	1.1
DOE-3	8/28/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	2
DOE-3	8/28/2024	Ethyl acetate		73	1.1	3	µg/m ³	16
DOE-3	8/28/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.1
DOE-4	8/28/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2
DOE-4	8/28/2024	Ethyl acetate		73	1.2	3	µg/m ³	24
DOE-4	8/28/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.2

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	9/10/2024	Chloroform		0.12	0.12	0.87	µg/m ³	2.8 B;
DOE-1	9/10/2024	Dichlorodifluoromethane		100	0.14	0.84	µg/m ³	2.5
DOE-1	9/10/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	20
DOE-1	9/10/2024	Trichlorofluoromethane	1300		0.13	0.83	µg/m ³	1.7
DOE-2	9/10/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.4
DOE-2	9/10/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.3
DOE-3	9/10/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.4
DOE-3	9/10/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	11
DOE-3	9/10/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.3
DOE-4	9/10/2024	Chloroform		0.12	0.11	0.87	µg/m ³	2.0 B;
DOE-4	9/10/2024	Dichlorodifluoromethane		100	0.14	0.84	µg/m ³	2.4
DOE-4	9/10/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	11
DOE-4	9/10/2024	Trichlorofluoromethane	1300		0.13	0.82	µg/m ³	1.3
DOE-1	9/25/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.2
DOE-1	9/25/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	15
DOE-1	9/25/2024	Toluene	310		0.10	0.85	µg/m ³	0.93
DOE-1	9/25/2024	Trichlorofluoromethane	1300		0.13	0.80	µg/m ³	1.0
DOE-2	9/25/2024	Dichlorodifluoromethane		100	0.14	0.83	µg/m ³	2.9
DOE-2	9/25/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	7.0
DOE-2	9/25/2024	Isopropanol		210	0.35	1.6	µg/m ³	1.7
DOE-2	9/25/2024	Methylene chloride	1		0.24	0.73	µg/m ³	1.2
DOE-2	9/25/2024	Toluene	310		0.10	0.86	µg/m ³	0.93
DOE-2	9/25/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.3
DOE-3	9/25/2024	Dichlorodifluoromethane		100	0.13	0.77	µg/m ³	1.9
DOE-3	9/25/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	7.0
DOE-3	9/25/2024	Trichlorofluoromethane	1300		0.12	0.76	µg/m ³	0.94
DOE-4	9/25/2024	Acrylonitrile		0.041	0.39	1.6	µg/m ³	2.1
DOE-4	9/25/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.1
DOE-4	9/25/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	16
DOE-4	9/25/2024	Trichlorofluoromethane	1300		0.13	0.80	µg/m ³	1.0
DOE-1	10/9/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.4
DOE-1	10/9/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	24

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-1	10/9/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.1
DOE-2	10/9/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.3
DOE-2	10/9/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	20
DOE-2	10/9/2024	Trichlorofluoromethane	1300		0.13	0.80	µg/m ³	1.2
DOE-3	10/9/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.3
DOE-3	10/9/2024	Ethyl acetate		73	1.2	3.0	µg/m ³	13
DOE-3	10/9/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.1
DOE-4	10/9/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.3
DOE-4	10/9/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	17
DOE-4	10/9/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.1
DOE-1	10/24/2024	Dichlorodifluoromethane		100	0.13	0.79	µg/m ³	2.0
DOE-1	10/24/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.1
DOE-2	10/24/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.0
DOE-2	10/24/2024	Toluene	310		0.10	0.83	µg/m ³	0.95
DOE-2	10/24/2024	Trichlorofluoromethane	1300		0.12	0.79	µg/m ³	1.1
DOE-3	10/24/2024	Dichlorodifluoromethane		100	0.12	0.71	µg/m ³	2.0
DOE-3	10/24/2024	Trichlorofluoromethane	1300		0.11	0.69	µg/m ³	1.1
DOE-4	10/24/2024	Dichlorodifluoromethane		100	0.14	0.82	µg/m ³	2.0
DOE-4	10/24/2024	Ethyl acetate		73	1.2	3.2	µg/m ³	3.4
DOE-4	10/24/2024	Trichlorofluoromethane	1300		0.13	0.81	µg/m ³	1.1
DOE-1	11/8/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.0
DOE-1	11/8/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	11
DOE-1	11/8/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.0
DOE-2	11/8/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.0
DOE-2	11/8/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	13
DOE-2	11/8/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.0
DOE-3	11/8/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.0
DOE-3	11/8/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	12 ;J
DOE-3	11/8/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.0
DOE-4	11/8/2024	Chloromethane		94	0.13	0.79	µg/m ³	0.80
DOE-4	11/8/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.0
DOE-4	11/8/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	24

Location ID	Sample Date	Analyte	DTSC HHRA NOTE 3	US EPA RSL	MDL	MRL	Unit	Result
DOE-4	11/8/2024	Trichlorofluoromethane	1300		0.12	0.74	µg/m ³	0.99
DOE-1	11/21/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	6.9
DOE-1	11/21/2024	Isopropanol		210	0.33	1.5	µg/m ³	2.6
DOE-1	11/21/2024	Trichlorofluoromethane	1300		0.12	0.75	µg/m ³	1.1
DOE-2	11/21/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.3
DOE-2	11/21/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	5.7
DOE-2	11/21/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.2
DOE-3	11/21/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.3
DOE-3	11/21/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	4.7
DOE-3	11/21/2024	Trichlorofluoromethane	1300		0.12	0.72	µg/m ³	1.2
DOE-4	11/21/2024	Dichlorodifluoromethane		100	0.14	0.81	µg/m ³	2.4
DOE-4	11/21/2024	Ethyl acetate		73	1.2	3.1	µg/m ³	13
DOE-4	11/21/2024	Trichlorofluoromethane	1300		0.13	0.80	µg/m ³	1.2
DOE-1	12/3/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.2
DOE-1	12/3/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.1
DOE-2	12/3/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.2
DOE-2	12/3/2024	Trichlorofluoromethane	1300		0.12	0.79	µg/m ³	1.2
DOE-3	12/3/2024	Dichlorodifluoromethane		100	0.13	0.80	µg/m ³	2.3
DOE-3	12/3/2024	Trichlorofluoromethane	1300		0.12	0.78	µg/m ³	1.1
DOE-4	12/3/2024	Dichlorodifluoromethane		100	0.14	0.84	µg/m ³	2.3
DOE-4	12/3/2024	Trichlorofluoromethane	1300		0.13	0.83	µg/m ³	1.2
DOE-1	12/13/2024	Dichlorodifluoromethane		100	0.12	0.72	µg/m ³	2.2
DOE-1	12/13/2024	Ethyl acetate		73	1.1	2.8	µg/m ³	7.2
DOE-1	12/13/2024	Trichlorofluoromethane	1300		0.11	0.71	µg/m ³	1.1
DOE-2	12/13/2024	Dichlorodifluoromethane		100	0.13	0.78	µg/m ³	2.2
DOE-2	12/13/2024	Ethyl acetate		73	1.1	3.0	µg/m ³	4.0
DOE-2	12/13/2024	Trichlorofluoromethane	1300		0.12	0.77	µg/m ³	1.1
DOE-3	12/13/2024	Dichlorodifluoromethane		100	0.12	0.74	µg/m ³	2.1
DOE-3	12/13/2024	Ethyl acetate		73	1.1	2.9	µg/m ³	3.3
DOE-3	12/13/2024	Trichlorofluoromethane	1300		0.12	0.73	µg/m ³	1.1
DOE-4	12/13/2024	Dichlorodifluoromethane		100	0.13	0.76	µg/m ³	2.1
DOE-4	12/13/2024	Trichlorofluoromethane	1300		0.12	0.74	µg/m ³	1.1

Notes:

Bold text indicates that the result is above method reporting limit.

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

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

MDL = method detection limit

MRL = method reporting limit

$\mu\text{g}/\text{m}^3$ = micrograms per meter cubed

B = blank contamination

D = dilution

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

J+ = The result is an estimated quantity, but the result may be biased high.

APPENDIX C
Radiological Results

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Table C-1. Gross alpha and gross beta air sample results for air samplers, Q4/2024.

Quarter	Air Station ID	Sample Collection Date	Gross Alpha (μCi/mL)	Gross Alpha MDC (μCi/mL)	Gross Beta (μCi/mL)	Gross Beta MDC (μCi/mL)
Sample Location – DOE-1						
24Q4	DOE-1	10/4/2024	5.68E-15	5.47E-15	1.41E-13	2.09E-14
24Q4	DOE-1	10/7/2024	9.43E-15	7.16E-15	1.46E-13	2.74E-14
24Q4	DOE-1	10/10/2024	3.15E-15	7.20E-15	1.60E-13	2.75E-14
24Q4	DOE-1	10/14/2024	3.10E-15	5.36E-15	1.22E-13	2.05E-14
24Q4	DOE-1	10/18/2024	-8.93E-16	5.49E-15	6.56E-14	2.10E-14
24Q4	DOE-1	10/21/2024	-3.46E-15	7.12E-15	4.89E-14	2.73E-14
24Q4	DOE-1	10/25/2024	3.63E-15	5.43E-15	9.86E-14	2.08E-14
24Q4	DOE-1	10/28/2024	4.93E-16	7.20E-15	9.95E-14	2.76E-14
24Q4	DOE-1	11/1/2024	-2.19E-15	5.56E-15	5.15E-14	2.05E-14
24Q4	DOE-1	11/4/2024	-2.82E-15	7.17E-15	4.43E-14	2.64E-14
24Q4	DOE-1	11/8/2024	-9.11E-16	5.60E-15	3.43E-14	2.06E-14
24Q4	DOE-1	11/11/2024	-1.78E-16	7.40E-15	8.65E-14	2.73E-14
24Q4	DOE-1	11/15/2024	-6.41E-16	5.50E-15	4.18E-14	2.03E-14
24Q4	DOE-1	11/18/2024	-2.24E-15	7.43E-15	3.71E-14	2.74E-14
24Q4	DOE-1	11/22/2024	1.11E-15	5.34E-15	7.82E-14	1.97E-14
24Q4	DOE-1	11/25/2024	-2.70E-15	7.76E-15	2.58E-14	2.86E-14
24Q4	DOE-1	11/27/2024	2.32E-16	1.04E-14	5.66E-14	3.85E-14
24Q4	DOE-1	12/2/2024	3.47E-15	4.32E-15	9.55E-14	1.75E-14
24Q4	DOE-1	12/6/2024	6.71E-15	5.24E-15	1.53E-13	2.12E-14
24Q4	DOE-1	12/9/2024	3.56E-15	6.91E-15	1.27E-13	2.80E-14
24Q4	DOE-1	12/13/2024	4.44E-16	5.26E-15	3.97E-14	2.09E-14
24Q4	DOE-1	12/16/2024	-1.09E-15	7.02E-15	3.03E-14	2.79E-14
24Q4	DOE-1	12/20/2024	-1.58E-15	5.28E-15	3.77E-14	2.10E-14
24Q4	DOE-1	12/23/2024	4.24E-15	6.94E-15	6.74E-14	2.76E-14
24Q4	DOE-1	12/27/2024	9.55E-16	5.30E-15	3.82E-14	2.11E-14
24Q4	DOE-1	12/31/2024	-1.06E-15	5.22E-15	5.43E-14	2.07E-14
Sample Location – DOE-2						
24Q4	DOE-2	10/4/2024	5.17E-15	5.46E-15	1.44E-13	2.09E-14
24Q4	DOE-2	10/7/2024	7.12E-15	7.17E-15	1.46E-13	2.75E-14
24Q4	DOE-2	10/10/2024	2.49E-15	7.19E-15	1.19E-13	2.75E-14
24Q4	DOE-2	10/14/2024	1.61E-15	5.36E-15	1.04E-13	2.05E-14
24Q4	DOE-2	10/18/2024	-1.38E-15	5.42E-15	8.03E-14	2.08E-14
24Q4	DOE-2	10/21/2024	-3.15E-15	7.16E-15	7.42E-14	2.74E-14
24Q4	DOE-2	10/25/2024	1.63E-15	5.43E-15	1.08E-13	2.08E-14
24Q4	DOE-2	10/28/2024	-8.39E-16	7.20E-15	1.07E-13	2.76E-14

Quarter	Air Station ID	Sample Collection Date	Gross Alpha (μCi/mL)	Gross Alpha MDC (μCi/mL)	Gross Beta (μCi/mL)	Gross Beta MDC (μCi/mL)
24Q4	DOE-2	11/1/2024	1.15E-15	5.56E-15	4.62E-14	2.05E-14
24Q4	DOE-2	11/4/2024	-1.50E-15	7.17E-15	5.39E-14	2.64E-14
24Q4	DOE-2	11/8/2024	8.98E-16	5.58E-15	4.70E-14	2.06E-14
24Q4	DOE-2	11/11/2024	-1.79E-16	7.42E-15	1.26E-13	2.74E-14
24Q4	DOE-2	11/15/2024	-3.85E-16	5.48E-15	4.64E-14	2.02E-14
24Q4	DOE-2	11/18/2024	-5.23E-16	7.45E-15	6.09E-14	2.75E-14
24Q4	DOE-2	11/22/2024	-8.69E-16	5.34E-15	5.03E-14	1.97E-14
24Q4	DOE-2	11/25/2024	-2.34E-15	7.76E-15	3.72E-14	2.86E-14
24Q4	DOE-2	11/27/2024	-1.70E-15	1.04E-14	1.04E-14	3.85E-14
24Q4	DOE-2	12/2/2025	4.74E-15	4.35E-15	5.08E-14	1.73E-14
24Q4	DOE-2	12/6/2024	6.26E-15	5.28E-15	1.52E-13	2.10E-14
24Q4	DOE-2	12/9/2024	1.29E-14	6.95E-15	9.37E-14	2.76E-14
24Q4	DOE-2	12/13/2024	2.73E-15	5.30E-15	5.28E-14	2.11E-14
24Q4	DOE-2	12/16/2024	-1.41E-15	6.94E-15	6.99E-14	2.76E-14
24Q4	DOE-2	12/20/2024	9.51E-16	5.28E-15	5.90E-14	2.10E-14
24Q4	DOE-2	12/23/2024	3.57E-15	6.94E-15	8.59E-14	2.76E-14
24Q4	DOE-2	12/27/2024	2.73E-15	5.30E-15	4.37E-14	2.11E-14
24Q4	DOE-2	12/31/2024	6.90E-16	5.22E-15	2.60E-14	2.08E-14
Sample Location – DOE-3						
24Q4	DOE-3	10/4/2024	6.93E-15	5.45E-15	1.07E-13	2.09E-14
24Q4	DOE-3	10/7/2024	6.47E-15	7.18E-15	1.31E-13	2.75E-14
24Q4	DOE-3	10/10/2024	2.82E-15	7.20E-15	1.49E-13	2.76E-14
24Q4	DOE-3	10/14/2024	3.09E-15	5.36E-15	1.03E-13	2.05E-14
24Q4	DOE-3	10/18/2024	1.87E-15	5.42E-15	8.64E-14	2.07E-14
24Q4	DOE-3	10/21/2024	-1.16E-15	7.15E-15	4.56E-14	2.74E-14
24Q4	DOE-3	10/25/2024	3.88E-15	5.43E-15	7.37E-14	2.08E-14
24Q4	DOE-3	10/28/2024	-2.17E-15	7.21E-15	1.06E-13	2.76E-14
24Q4	DOE-3	11/1/2024	6.37E-16	5.56E-15	3.59E-14	2.05E-14
24Q4	DOE-3	11/4/2024	-1.17E-15	7.17E-15	5.56E-14	2.64E-14
24Q4	DOE-3	11/8/2024	1.67E-15	5.58E-15	4.11E-14	2.06E-14
24Q4	DOE-3	11/11/2024	1.20E-15	7.43E-15	8.97E-14	2.74E-14
24Q4	DOE-3	11/15/2024	3.75E-16	5.48E-15	4.33E-14	2.02E-14
24Q4	DOE-3	11/18/2024	-1.90E-15	7.45E-15	7.11E-14	2.74E-14
24Q4	DOE-3	11/22/2024	1.11E-15	5.34E-15	6.04E-14	1.97E-14
24Q4	DOE-3	11/25/2024	-1.62E-15	7.75E-15	3.28E-14	2.86E-14
24Q4	DOE-3	11/27/2024	-1.22E-15	1.04E-14	1.29E-14	3.85E-14
24Q4	DOE-3	12/2/2024	3.90E-15	4.35E-15	5.73E-14	1.73E-14

Quarter	Air Station ID	Sample Collection Date	Gross Alpha (μCi/mL)	Gross Alpha MDC (μCi/mL)	Gross Beta (μCi/mL)	Gross Beta MDC (μCi/mL)
24Q4	DOE-3	12/6/2024	1.38E-14	5.28E-15	1.45E-13	2.10E-14
24Q4	DOE-3	12/9/2024	5.90E-15	6.94E-15	1.51E-13	2.76E-14
24Q4	DOE-3	12/13/2024	1.96E-15	5.26E-15	4.56E-14	2.09E-14
24Q4	DOE-3	12/16/2024	2.56E-16	7.03E-15	1.87E-14	2.80E-14
24Q4	DOE-3	12/20/2024	4.46E-16	5.29E-15	4.74E-14	2.10E-14
24Q4	DOE-3	12/23/2024	-4.11E-16	6.93E-15	8.86E-14	2.76E-14
24Q4	DOE-3	12/27/2024	-2.35E-15	5.30E-15	3.07E-14	2.11E-14
24Q4	DOE-3	12/31/2024	-1.06E-15	5.22E-15	2.57E-14	2.08E-14
Sample Location – DOE-4						
24Q4	DOE-4	10/4/24	7.43E-15	5.45E-15	1.17E-13	2.09E-14
24Q4	DOE-4	10/7/24	8.81E-15	7.20E-15	1.32E-13	2.76E-14
24Q4	DOE-4	10/10/24	8.49E-15	7.20E-15	1.40E-13	2.76E-14
24Q4	DOE-4	10/14/24	1.11E-15	5.35E-15	1.22E-13	2.05E-14
24Q4	DOE-4	10/18/24	3.13E-15	5.42E-15	6.31E-14	2.07E-14
24Q4	DOE-4	10/21/24	-1.72E-16	7.16E-15	6.15E-14	2.74E-14
24Q4	DOE-4	10/25/24	-1.30E-16	5.42E-15	1.14E-13	2.08E-14
24Q4	DOE-4	10/28/24	-1.73E-16	7.21E-15	1.31E-13	2.76E-14
24Q4	DOE-4	11/1/24	2.18E-15	5.56E-15	6.34E-14	2.05E-14
24Q4	DOE-4	11/4/24	1.49E-15	7.17E-15	2.15E-14	2.64E-14
24Q4	DOE-4	11/8/24	-9.08E-16	5.58E-15	3.32E-14	2.06E-14
24Q4	DOE-4	11/11/24	1.65E-16	7.43E-15	8.16E-14	2.74E-14
24Q4	DOE-4	11/15/24	-3.85E-16	5.48E-15	6.65E-14	2.02E-14
24Q4	DOE-4	11/18/24	-3.62E-15	7.44E-15	6.65E-14	2.74E-14
24Q4	DOE-4	11/22/24	1.85E-15	5.34E-15	6.12E-14	1.97E-14
24Q4	DOE-4	11/25/24	1.25E-15	7.75E-15	3.79E-14	2.86E-14
24Q4	DOE-4	11/27/24	-2.67E-15	1.05E-14	2.14E-14	3.85E-14
24Q4	DOE-4	12/6/24	1.25E-14	5.47E-15	1.54E-13	2.17E-14
24Q4	DOE-4	12/9/24	7.54E-15	6.92E-15	1.17E-13	2.75E-14
24Q4	DOE-4	12/13/24	1.71E-15	5.29E-15	3.54E-14	2.11E-14
24Q4	DOE-4	12/16/24	9.25E-16	7.00E-15	3.20E-14	2.78E-14
24Q4	DOE-4	12/20/24	2.98E-15	5.29E-15	5.41E-14	2.11E-14
24Q4	DOE-4	12/23/24	4.89E-15	6.92E-15	1.16E-13	2.75E-14
24Q4	DOE-4	12/27/24	9.55E-16	5.30E-15	2.88E-14	2.11E-14
24Q4	DOE-4	12/31/24	4.40E-16	5.22E-15	2.76E-14	2.08E-14

Note: Results less than the MDC are noted in the table as negative numbers.

Table C-2. Gross alpha and gross beta air sample results for air samplers, Q1/2024–Q4/2024.

Quarter	Air Station ID	Sample Collection Date	Result Alpha (µCi/mL)	MDC – Alpha (µCi/mL)	Result Beta (µCi/mL)	MDC – Beta (µCi/mL)
Sample location DOE-1						
24Q1	DOE-1	1/5/2024	-2.48E-15	7.24E-15	6.37E-15	2.98E-14
24Q1	DOE-1	1/8/2024	1.53E-15	7.17E-15	1.96E-14	2.95E-14
24Q1	DOE-1	1/12/2024	-1.09E-15	5.34E-15	-1.07E-16	2.20E-14
24Q1	DOE-1	1/16/2024	-1.86E-15	5.42E-15	2.94E-14	2.23E-14
24Q1	DOE-1	1/19/2024	8.65E-16	7.18E-15	3.00E-14	2.95E-14
24Q1	DOE-1	1/23/2024	1.49E-16	5.37E-15	-5.21E-15	2.21E-14
24Q1	DOE-1	1/26/2024	-4.17E-15	7.27E-15	-2.38E-14	2.99E-14
24Q1	DOE-1	1/29/2024	-4.66E-16	7.19E-15	9.92E-15	2.96E-14
24Q1	DOE-1	1/31/2024	-4.68E-15	1.08E-14	6.49E-14	4.42E-14
24Q1	DOE-1	2/2/2024	-6.11E-15	9.92E-15	6.79E-14	4.29E-14
24Q1	DOE-1	2/9/2024	-3.70E-15	1.02E-14	-8.41E-15	4.40E-14
24Q1	DOE-1	2/12/2024	1.24E-15	6.53E-15	1.60E-14	2.83E-14
24Q1	DOE-1	2/16/2024	2.81E-15	5.18E-15	4.54E-14	2.24E-14
24Q1	DOE-1	2/20/2024	2.70E-15	4.98E-15	4.58E-15	2.16E-14
24Q1	DOE-1	2/26/2024	-5.01E-17	4.14E-15	2.11E-14	1.79E-14
24Q1	DOE-1	3/1/2024	3.35E-15	4.62E-15	3.73E-14	2.17E-14
24Q1	DOE-1	3/4/2024	2.51E-15	6.19E-15	-1.89E-14	2.90E-14
24Q1	DOE-1	3/8/2024	1.61E-16	4.72E-15	8.99E-15	2.22E-14
24Q1	DOE-1	3/11/2024	-1.17E-16	6.11E-15	1.86E-14	2.87E-14
24Q1	DOE-1	3/15/2024	-3.47E-16	4.80E-15	9.69E-15	2.25E-14
24Q1	DOE-1	3/18/2024	-1.15E-16	6.01E-15	1.87E-14	2.82E-14
24Q1	DOE-1	3/22/2024	2.20E-15	4.78E-15	6.56E-14	2.24E-14
24Q1	DOE-1	3/25/2024	-1.19E-16	6.19E-15	2.03E-14	2.91E-14
24Q1	DOE-1	3/28/2024	2.56E-15	6.30E-15	2.86E-14	2.96E-14
24Q2	DOE-1	4/1/2024	-1.56E-15	5.53E-15	3.13E-14	2.20E-14
24Q2	DOE-1	4/5/2024	2.61E-16	5.30E-15	3.03E-14	2.11E-14
24Q2	DOE-1	4/8/2024	-1.98E-15	7.02E-15	9.73E-16	2.80E-14
24Q2	DOE-1	4/12/2024	1.54E-15	5.38E-15	5.00E-14	2.14E-14
24Q2	DOE-1	4/15/2024	3.46E-16	7.02E-15	2.36E-14	2.80E-14
24Q2	DOE-1	4/19/2024	1.78E-15	5.34E-15	2.27E-14	2.13E-14
24Q2	DOE-1	4/22/2024	-3.20E-16	7.04E-15	5.66E-14	2.81E-14
24Q2	DOE-1	4/26/2024	-1.25E-15	5.32E-15	1.70E-14	2.12E-14
24Q2	DOE-1	4/29/2024	-2.66E-15	7.05E-15	1.94E-14	2.81E-14
24Q2	DOE-1	5/3/2024	3.56E-15	5.72E-15	6.90E-14	2.06E-14
24Q2	DOE-1	5/6/2024	2.03E-15	7.62E-15	1.25E-14	2.74E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (µCi/mL)	MDC – Alpha (µCi/mL)	Result Beta (µCi/mL)	MDC – Beta (µCi/mL)
24Q2	DOE-1	5/10/2024	-1.53E-15	5.67E-15	2.13E-14	2.04E-14
24Q2	DOE-1	5/13/2024	3.22E-16	7.52E-15	4.12E-14	2.71E-14
24Q2	DOE-1	5/17/2024	3.04E-15	5.70E-15	3.35E-14	2.05E-14
24Q2	DOE-1	5/20/2024	-3.76E-15	7.63E-15	3.93E-14	2.75E-14
24Q2	DOE-1	5/24/2024	-7.77E-16	5.73E-15	3.08E-14	2.06E-14
24Q2	DOE-1	5/28/2024	-1.53E-15	5.69E-15	2.20E-14	2.05E-14
24Q2	DOE-1	5/31/2024	1.66E-15	7.51E-15	4.25E-14	2.70E-14
24Q2	DOE-1	6/3/2024	-3.47E-16	7.48E-15	5.75E-14	2.69E-14
24Q2	DOE-1	6/7/2024	-1.82E-15	5.81E-15	3.63E-14	2.09E-14
24Q2	DOE-1	6/10/2024	2.67E-15	7.52E-15	1.41E-14	2.71E-14
24Q2	DOE-1	6/14/2024	-4.63E-15	5.75E-15	1.85E-14	2.07E-14
24Q2	DOE-1	6/17/2024	-1.36E-17	7.60E-15	5.39E-14	2.73E-14
24Q2	DOE-1	6/21/2024	-1.01E-17	5.65E-15	2.54E-14	2.03E-14
24Q2	DOE-1	6/24/2024	-1.39E-15	7.69E-15	2.89E-14	2.77E-14
24Q2	DOE-1	6/28/2024	1.00E-15	5.66E-15	3.83E-14	2.04E-14
24Q3	DOE-1	7/1/2024	9.88E-16	7.16E-15	5.41E-14	2.82E-14
24Q3	DOE-1	7/5/2024	4.21E-15	5.27E-15	3.59E-14	2.08E-14
24Q3	DOE-1	7/8/2024	6.52E-16	7.18E-15	2.72E-14	2.83E-14
24Q3	DOE-1	7/12/2024	3.54E-15	5.38E-15	5.04E-14	2.12E-14
24Q3	DOE-1	7/15/2024	2.64E-15	7.05E-15	3.38E-14	2.78E-14
24Q3	DOE-1	7/19/2024	2.28E-15	5.41E-15	4.12E-14	2.13E-14
24Q3	DOE-1	7/22/2024	-1.36E-15	7.06E-15	5.91E-14	2.78E-14
24Q3	DOE-1	7/26/2024	-5.30E-16	5.40E-15	5.03E-14	2.13E-14
24Q3	DOE-1	7/29/2024	3.08E-16	7.08E-15	5.64E-14	2.79E-14
24Q3	DOE-1	8/2/2024	4.02E-15	5.34E-15	5.89E-14	2.07E-14
24Q3	DOE-1	8/5/2024	4.66E-15	7.08E-15	9.43E-14	2.74E-14
24Q3	DOE-1	8/9/2024	-2.72E-16	5.33E-15	7.16E-14	2.06E-14
24Q3	DOE-1	8/12/2024	2.34E-15	7.15E-15	8.09E-14	2.76E-14
24Q3	DOE-1	8/16/2024	4.01E-15	5.33E-15	6.38E-14	2.06E-14
24Q3	DOE-1	8/19/2024	-2.03E-15	7.05E-15	4.87E-14	2.72E-14
24Q3	DOE-1	8/23/2024	-1.29E-15	5.38E-15	4.17E-14	2.08E-14
24Q3	DOE-1	8/26/2024	-3.03E-15	7.06E-15	4.70E-14	2.73E-14
24Q3	DOE-1	8/30/2024	4.85E-16	5.35E-15	6.89E-14	2.07E-14
24Q3	DOE-1	9/3/2024	4.01E-15	5.81E-15	8.65E-14	2.07E-14
24Q3	DOE-1	9/6/2024	4.02E-15	7.74E-15	1.01E-13	2.75E-14
24Q3	DOE-1	9/9/2024	3.65E-16	7.87E-15	1.17E-13	2.80E-14
24Q3	DOE-1	9/13/2024	-1.74E-15	5.86E-15	4.02E-14	2.08E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q3	DOE-1	9/16/2024	-6.29E-15	7.74E-15	3.19E-14	2.75E-14
24Q3	DOE-1	9/20/2024	-3.49E-15	5.84E-15	3.26E-14	2.08E-14
24Q3	DOE-1	9/23/2024	-6.41E-16	7.78E-15	6.58E-14	2.77E-14
24Q3	DOE-1	9/27/2024	2.02E-17	5.87E-15	8.28E-14	2.09E-14
24Q3	DOE-1	9/30/2024	3.62E-16	7.80E-15	1.02E-13	2.78E-14
24Q4	DOE-1	10/4/2024	5.68E-15	5.47E-15	1.41E-13	2.09E-14
24Q4	DOE-1	10/7/2024	9.43E-15	7.16E-15	1.46E-13	2.74E-14
24Q4	DOE-1	10/10/2024	3.15E-15	7.20E-15	1.60E-13	2.75E-14
24Q4	DOE-1	10/14/2024	3.10E-15	5.36E-15	1.22E-13	2.05E-14
24Q4	DOE-1	10/18/2024	-8.93E-16	5.49E-15	6.56E-14	2.10E-14
24Q4	DOE-1	10/21/2024	-3.46E-15	7.12E-15	4.89E-14	2.73E-14
24Q4	DOE-1	10/25/2024	3.63E-15	5.43E-15	9.86E-14	2.08E-14
24Q4	DOE-1	10/28/2024	4.93E-16	7.20E-15	9.95E-14	2.76E-14
24Q4	DOE-1	11/1/2024	-2.19E-15	5.56E-15	5.15E-14	2.05E-14
24Q4	DOE-1	11/4/2024	-2.82E-15	7.17E-15	4.43E-14	2.64E-14
24Q4	DOE-1	11/8/2024	-9.11E-16	5.60E-15	3.43E-14	2.06E-14
24Q4	DOE-1	11/11/2024	-1.78E-16	7.40E-15	8.65E-14	2.73E-14
24Q4	DOE-1	11/15/2024	-6.41E-16	5.50E-15	4.18E-14	2.03E-14
24Q4	DOE-1	11/18/2024	-2.24E-15	7.43E-15	3.71E-14	2.74E-14
24Q4	DOE-1	11/22/2024	1.11E-15	5.34E-15	7.82E-14	1.97E-14
24Q4	DOE-1	11/25/2024	-2.70E-15	7.76E-15	2.58E-14	2.86E-14
24Q4	DOE-1	11/27/2024	2.32E-16	1.04E-14	5.66E-14	3.85E-14
24Q4	DOE-1	12/2/2024	3.47E-15	4.32E-15	9.55E-14	1.75E-14
24Q4	DOE-1	12/6/2024	6.71E-15	5.24E-15	1.53E-13	2.12E-14
24Q4	DOE-1	12/9/2024	3.56E-15	6.91E-15	1.27E-13	2.80E-14
24Q4	DOE-1	12/13/2024	4.44E-16	5.26E-15	3.97E-14	2.09E-14
24Q4	DOE-1	12/16/2024	-1.09E-15	7.02E-15	3.03E-14	2.79E-14
24Q4	DOE-1	12/20/2024	-1.58E-15	5.28E-15	3.77E-14	2.10E-14
24Q4	DOE-1	12/23/2024	4.24E-15	6.94E-15	6.74E-14	2.76E-14
24Q4	DOE-1	12/27/2024	9.55E-16	5.30E-15	3.82E-14	2.11E-14
24Q4	DOE-1	12/31/2024	-1.06E-15	5.22E-15	5.43E-14	2.07E-14
Sample location DOE-2						
24Q1	DOE-2	1/2/2024	-5.83E-15	7.24E-15	-1.75E-14	2.98E-14
24Q1	DOE-2	1/5/2024	-4.45E-15	7.17E-15	9.54E-15	2.95E-14
24Q1	DOE-2	1/8/2024	3.96E-16	5.34E-15	1.38E-14	2.20E-14
24Q1	DOE-2	1/12/2024	6.53E-16	5.42E-15	4.76E-14	2.23E-14
24Q1	DOE-2	1/16/2024	8.65E-16	7.19E-15	4.37E-14	2.95E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q1	DOE-2	1/19/2024	-2.59E-15	5.37E-15	2.94E-14	2.21E-14
24Q1	DOE-2	1/23/2024	-2.83E-15	7.27E-15	2.60E-14	2.99E-14
24Q1	DOE-2	1/26/2024	2.87E-15	7.19E-15	5.61E-15	2.96E-14
24Q1	DOE-2	1/29/2024	-1.69E-15	1.07E-14	4.22E-14	4.41E-14
24Q1	DOE-2	1/31/2024	-1.62E-15	9.93E-15	1.24E-15	4.30E-14
24Q1	DOE-2	2/7/2024	-1.23E-16	1.02E-14	-8.95E-15	4.40E-14
24Q1	DOE-2	2/9/2024	3.54E-15	6.53E-15	4.96E-14	2.83E-14
24Q1	DOE-2	2/12/2024	7.20E-16	5.18E-15	4.97E-14	2.24E-14
24Q1	DOE-2	2/16/2024	1.19E-15	4.97E-15	7.20E-15	2.15E-14
24Q1	DOE-2	2/21/2024	9.92E-16	4.14E-15	2.55E-14	1.79E-14
24Q1	DOE-2	2/26/2024	2.12E-15	4.62E-15	3.07E-14	2.17E-14
24Q1	DOE-2	3/1/2024	5.39E-16	6.18E-15	-1.26E-14	2.90E-14
24Q1	DOE-2	3/4/2024	1.45E-15	4.83E-15	9.61E-15	2.23E-14
24Q1	DOE-2	3/8/2024	4.54E-15	6.26E-15	5.79E-14	2.90E-14
24Q1	DOE-2	3/11/2024	1.21E-15	4.91E-15	3.22E-14	2.27E-14
24Q1	DOE-2	3/15/2024	4.46E-15	6.15E-15	5.52E-14	2.85E-14
24Q1	DOE-2	3/18/2024	3.55E-15	4.89E-15	1.25E-13	2.26E-14
24Q1	DOE-2	3/22/2024	1.90E-15	6.34E-15	1.80E-14	2.93E-14
24Q1	DOE-2	3/25/2024	2.28E-15	6.45E-15	4.49E-15	2.99E-14
24Q2	DOE-2	4/1/2024	-1.56E-15	5.53E-15	1.19E-14	2.20E-14
24Q2	DOE-2	4/5/2024	7.64E-16	5.30E-15	2.93E-14	2.11E-14
24Q2	DOE-2	4/8/2024	-3.19E-16	7.02E-15	2.92E-14	2.80E-14
24Q2	DOE-2	4/12/2024	1.27E-15	5.33E-15	7.76E-14	2.12E-14
24Q2	DOE-2	4/15/2024	-1.65E-15	7.02E-15	6.73E-14	2.79E-14
24Q2	DOE-2	4/19/2024	-2.43E-16	5.34E-15	3.96E-14	2.13E-14
24Q2	DOE-2	4/22/2024	-1.99E-15	7.04E-15	7.85E-14	2.80E-14
24Q2	DOE-2	4/26/2024	-7.44E-16	5.31E-15	2.95E-14	2.11E-14
24Q2	DOE-2	4/29/2024	-1.99E-15	7.06E-15	1.16E-14	2.81E-14
24Q2	DOE-2	5/3/2024	5.00E-16	5.72E-15	3.31E-14	2.06E-14
24Q2	DOE-2	5/6/2024	1.69E-15	7.62E-15	1.64E-14	2.74E-14
24Q2	DOE-2	5/10/2024	-2.62E-16	5.64E-15	2.96E-14	2.03E-14
24Q2	DOE-2	5/13/2024	-1.36E-15	7.56E-15	9.30E-14	2.72E-14
24Q2	DOE-2	5/17/2024	2.78E-15	5.69E-15	7.50E-14	2.05E-14
24Q2	DOE-2	5/20/2024	-3.08E-15	7.63E-15	5.55E-14	2.74E-14
24Q2	DOE-2	5/24/2024	-2.66E-16	5.73E-15	4.99E-14	2.06E-14
24Q2	DOE-2	5/28/2024	-2.80E-15	5.69E-15	9.61E-15	2.05E-14
24Q2	DOE-2	5/31/2024	-2.04E-15	7.57E-15	4.60E-14	2.73E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q2	DOE-2	6/3/2024	-2.00E-15	7.43E-15	4.48E-14	2.67E-14
24Q2	DOE-2	6/7/2024	2.49E-16	5.80E-15	3.10E-14	2.09E-14
24Q2	DOE-2	6/10/2024	-2.70E-15	7.53E-15	2.07E-14	2.71E-14
24Q2	DOE-2	6/14/2024	-1.81E-15	5.75E-15	2.33E-14	2.07E-14
24Q2	DOE-2	6/17/2024	-2.39E-15	7.60E-15	7.38E-14	2.73E-14
24Q2	DOE-2	6/21/2024	-1.78E-15	5.67E-15	5.30E-14	2.04E-14
24Q2	DOE-2	6/24/2024	-2.39E-15	7.63E-15	7.38E-14	2.74E-14
24Q2	DOE-2	6/28/2024	-3.29E-15	5.66E-15	4.95E-14	2.04E-14
24Q3	DOE-2	7/1/2024	-3.75E-15	7.16E-15	4.66E-14	2.82E-14
24Q3	DOE-2	7/5/2024	2.72E-15	5.27E-15	5.09E-14	2.08E-14
24Q3	DOE-2	7/8/2024	2.35E-15	7.19E-15	7.10E-14	2.83E-14
24Q3	DOE-2	7/12/2024	5.06E-15	5.38E-15	9.96E-14	2.12E-14
24Q3	DOE-2	7/15/2024	3.31E-15	7.05E-15	6.36E-14	2.78E-14
24Q3	DOE-2	7/19/2024	7.46E-16	5.41E-15	6.18E-14	2.13E-14
24Q3	DOE-2	7/22/2024	1.98E-15	7.07E-15	4.74E-14	2.79E-14
24Q3	DOE-2	7/26/2024	1.76E-15	5.39E-15	5.10E-14	2.12E-14
24Q3	DOE-2	7/29/2024	-4.38E-15	7.09E-15	4.75E-14	2.80E-14
24Q3	DOE-2	8/2/2024	4.27E-15	5.34E-15	5.70E-14	2.07E-14
24Q3	DOE-2	8/5/2024	3.66E-15	7.08E-15	9.33E-14	2.74E-14
24Q3	DOE-2	8/9/2024	2.50E-15	5.32E-15	5.73E-14	2.06E-14
24Q3	DOE-2	8/12/2024	3.11E-16	7.15E-15	1.11E-13	2.76E-14
24Q3	DOE-2	8/16/2024	4.84E-16	5.33E-15	8.28E-14	2.06E-14
24Q3	DOE-2	8/19/2024	-1.03E-15	7.05E-15	7.28E-14	2.73E-14
24Q3	DOE-2	8/23/2024	-7.82E-16	5.37E-15	5.57E-14	2.08E-14
24Q3	DOE-2	8/26/2024	-4.37E-15	7.06E-15	4.46E-14	2.73E-14
24Q3	DOE-2	8/30/2024	-2.02E-17	5.35E-15	5.31E-14	2.07E-14
24Q3	DOE-2	9/3/2024	3.51E-15	5.81E-15	8.91E-14	2.07E-14
24Q3	DOE-2	9/6/2024	2.65E-17	7.72E-15	8.88E-14	2.74E-14
24Q3	DOE-2	9/9/2024	4.43E-15	7.88E-15	8.93E-14	2.80E-14
24Q3	DOE-2	9/13/2024	1.53E-15	5.86E-15	7.29E-14	2.09E-14
24Q3	DOE-2	9/16/2024	-4.96E-15	7.74E-15	6.55E-14	2.75E-14
24Q3	DOE-2	9/20/2024	-2.24E-15	5.84E-15	5.40E-14	2.08E-14
24Q3	DOE-2	9/23/2024	-3.31E-15	7.77E-15	7.85E-14	2.77E-14
24Q3	DOE-2	9/27/2024	-1.49E-15	5.87E-15	7.51E-14	2.09E-14
24Q3	DOE-2	9/30/2024	-3.32E-15	7.80E-15	5.82E-14	2.78E-14
24Q4	DOE-2	10/4/2024	5.17E-15	5.46E-15	1.44E-13	2.09E-14
24Q4	DOE-2	10/7/2024	7.12E-15	7.17E-15	1.46E-13	2.75E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q4	DOE-2	10/10/2024	2.49E-15	7.19E-15	1.19E-13	2.75E-14
24Q4	DOE-2	10/14/2024	1.61E-15	5.36E-15	1.04E-13	2.05E-14
24Q4	DOE-2	10/18/2024	-1.38E-15	5.42E-15	8.03E-14	2.08E-14
24Q4	DOE-2	10/21/2024	-3.15E-15	7.16E-15	7.42E-14	2.74E-14
24Q4	DOE-2	10/25/2024	1.63E-15	5.43E-15	1.08E-13	2.08E-14
24Q4	DOE-2	10/28/2024	-8.39E-16	7.20E-15	1.07E-13	2.76E-14
24Q4	DOE-2	11/1/2024	1.15E-15	5.56E-15	4.62E-14	2.05E-14
24Q4	DOE-2	11/4/2024	-1.50E-15	7.17E-15	5.39E-14	2.64E-14
24Q4	DOE-2	11/8/2024	8.98E-16	5.58E-15	4.70E-14	2.06E-14
24Q4	DOE-2	11/11/2024	-1.79E-16	7.42E-15	1.26E-13	2.74E-14
24Q4	DOE-2	11/15/2024	-3.85E-16	5.48E-15	4.64E-14	2.02E-14
24Q4	DOE-2	11/18/2024	-5.23E-16	7.45E-15	6.09E-14	2.75E-14
24Q4	DOE-2	11/22/2024	-8.69E-16	5.34E-15	5.03E-14	1.97E-14
24Q4	DOE-2	11/25/2024	-2.34E-15	7.76E-15	3.72E-14	2.86E-14
24Q4	DOE-2	11/27/2024	-1.70E-15	1.04E-14	1.04E-14	3.85E-14
24Q4	DOE-2	12/2/2025	4.74E-15	4.35E-15	5.08E-14	1.73E-14
24Q4	DOE-2	12/6/2024	6.26E-15	5.28E-15	1.52E-13	2.10E-14
24Q4	DOE-2	12/9/2024	1.29E-14	6.95E-15	9.37E-14	2.76E-14
24Q4	DOE-2	12/13/2024	2.73E-15	5.30E-15	5.28E-14	2.11E-14
24Q4	DOE-2	12/16/2024	-1.41E-15	6.94E-15	6.99E-14	2.76E-14
24Q4	DOE-2	12/20/2024	9.51E-16	5.28E-15	5.90E-14	2.10E-14
24Q4	DOE-2	12/23/2024	3.57E-15	6.94E-15	8.59E-14	2.76E-14
24Q4	DOE-2	12/27/2024	2.73E-15	5.30E-15	4.37E-14	2.11E-14
24Q4	DOE-2	12/31/2024	6.90E-16	5.22E-15	2.60E-14	2.08E-14
Sample location DOE-3						
24Q1	DOE-3	1/5/2024	-1.34E-16	7.24E-15	-1.32E-14	2.98E-14
24Q1	DOE-3	1/8/2024	8.64E-16	7.17E-15	-5.02E-16	2.95E-14
24Q1	DOE-3	1/12/2024	-3.46E-16	5.34E-15	1.32E-14	2.19E-14
24Q1	DOE-3	1/16/2024	-1.00E-16	5.42E-15	4.41E-14	2.23E-14
24Q1	DOE-3	1/19/2024	-4.66E-16	7.19E-15	7.28E-14	2.95E-14
24Q1	DOE-3	1/23/2024	-2.96E-15	7.60E-15	-2.81E-15	3.12E-14
24Q1	DOE-3	1/26/2024	-2.16E-15	7.28E-15	1.99E-14	2.99E-14
24Q1	DOE-3	1/29/2024	-1.13E-15	7.19E-15	4.62E-14	2.95E-14
24Q1	DOE-3	1/31/2024	7.96E-16	1.07E-14	4.28E-14	4.42E-14
24Q1	DOE-3	2/2/2024	-1.12E-15	9.94E-15	8.02E-14	4.30E-14
24Q1	DOE-3	2/9/2024	-3.86E-15	1.23E-14	2.95E-14	5.32E-14
24Q1	DOE-3	2/12/2024	2.50E-16	6.53E-15	3.51E-14	2.83E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q1	DOE-3	2/16/2024	1.98E-16	5.18E-15	6.40E-14	2.24E-14
24Q1	DOE-3	2/20/2024	9.80E-16	5.17E-15	6.40E-15	2.24E-14
24Q1	DOE-3	2/26/2024	2.65E-15	4.13E-15	2.54E-14	1.79E-14
24Q1	DOE-3	3/1/2024	-3.43E-16	4.74E-15	1.77E-14	2.19E-14
24Q1	DOE-3	3/4/2024	-1.65E-15	9.26E-15	9.05E-15	4.29E-14
24Q1	DOE-3	3/8/2024	-1.05E-15	5.90E-15	9.42E-15	2.73E-14
24Q1	DOE-3	3/11/2024	1.55E-15	6.26E-15	7.13E-14	2.90E-14
24Q1	DOE-3	3/15/2024	-1.92E-15	4.91E-15	3.13E-14	2.27E-14
24Q1	DOE-3	3/18/2024	5.37E-16	6.15E-15	3.89E-14	2.85E-14
24Q1	DOE-3	3/22/2024	5.89E-15	4.89E-15	1.09E-13	2.26E-14
24Q1	DOE-3	3/25/2024	2.04E-15	6.81E-15	4.08E-14	3.15E-14
24Q2	DOE-3	4/1/2024	6.07E-16	6.29E-15	8.14E-15	2.50E-14
24Q2	DOE-3	4/5/2024	7.65E-16	5.32E-15	4.03E-14	2.12E-14
24Q2	DOE-3	4/8/2024	-3.15E-16	6.94E-15	2.97E-14	2.81E-14
24Q2	DOE-3	4/12/2024	1.51E-15	5.27E-15	5.79E-14	2.13E-14
24Q2	DOE-3	4/15/2024	-6.24E-15	7.77E-15	4.24E-14	3.15E-14
24Q2	DOE-3	4/19/2024	-4.90E-16	5.28E-15	3.51E-14	2.14E-14
24Q2	DOE-3	4/22/2024	2.98E-15	6.96E-15	5.72E-14	2.82E-14
24Q2	DOE-3	4/26/2024	-1.98E-15	5.25E-15	4.18E-14	2.13E-14
24Q2	DOE-3	4/29/2024	-3.17E-16	6.98E-15	-1.51E-14	2.83E-14
24Q2	DOE-3	5/3/2024	2.79E-15	5.71E-15	3.18E-14	2.06E-14
24Q2	DOE-3	5/6/2024	-2.05E-15	7.62E-15	2.98E-14	2.74E-14
24Q2	DOE-3	5/10/2024	9.96E-16	5.64E-15	1.97E-14	2.03E-14
24Q2	DOE-3	5/13/2024	3.25E-16	7.58E-15	7.92E-14	2.73E-14
24Q2	DOE-3	5/17/2024	-1.02E-17	5.69E-15	6.90E-14	2.05E-14
24Q2	DOE-3	5/20/2024	-2.40E-15	7.63E-15	-8.45E-16	2.75E-14
24Q2	DOE-3	5/24/2024	-2.57E-15	5.74E-15	1.50E-14	2.07E-14
24Q2	DOE-3	5/28/2024	-1.02E-17	5.69E-15	3.06E-14	2.05E-14
24Q2	DOE-3	5/31/2024	3.28E-16	7.66E-15	9.75E-15	2.76E-14
24Q2	DOE-3	6/3/2024	1.63E-15	7.36E-15	2.53E-14	2.65E-14
24Q2	DOE-3	6/7/2024	-5.28E-16	5.80E-15	3.58E-14	2.09E-14
24Q2	DOE-3	6/10/2024	-4.71E-15	7.52E-15	1.13E-14	2.71E-14
24Q2	DOE-3	6/14/2024	-1.55E-15	5.76E-15	4.69E-14	2.07E-14
24Q2	DOE-3	6/17/2024	-1.03E-15	7.60E-15	7.94E-14	2.73E-14
24Q2	DOE-3	6/21/2024	2.03E-15	5.73E-15	2.58E-14	2.06E-14
24Q2	DOE-3	6/24/2024	-6.86E-16	7.53E-15	3.78E-14	2.71E-14
24Q2	DOE-3	6/28/2024	-2.63E-16	5.66E-15	7.44E-14	2.04E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q3	DOE-3	7/1/2024	-2.70E-17	7.15E-15	2.35E-14	2.82E-14
24Q3	DOE-3	7/8/2024	9.92E-16	7.19E-15	1.12E-13	2.83E-14
24Q3	DOE-3	7/12/2024	7.35E-15	5.38E-15	7.74E-14	2.12E-14
24Q3	DOE-3	7/15/2024	-2.36E-15	7.07E-15	3.04E-14	2.79E-14
24Q3	DOE-3	7/19/2024	2.02E-15	5.41E-15	5.15E-14	2.13E-14
24Q3	DOE-3	7/22/2024	6.43E-16	7.09E-15	8.14E-14	2.79E-14
24Q3	DOE-3	7/26/2024	3.03E-15	5.39E-15	4.67E-14	2.12E-14
24Q3	DOE-3	7/29/2024	1.31E-15	7.09E-15	5.29E-14	2.79E-14
24Q3	DOE-3	8/2/2024	1.24E-15	5.34E-15	4.60E-14	2.07E-14
24Q3	DOE-3	8/5/2024	5.33E-15	7.09E-15	9.55E-14	2.74E-14
24Q3	DOE-3	8/9/2024	3.75E-15	5.32E-15	8.05E-14	2.06E-14
24Q3	DOE-3	8/12/2024	3.11E-16	7.16E-15	5.70E-14	2.77E-14
24Q3	DOE-3	8/16/2024	3.25E-15	5.32E-15	6.47E-14	2.06E-14
24Q3	DOE-3	8/19/2024	3.07E-16	7.07E-15	8.14E-14	2.73E-14
24Q3	DOE-3	8/23/2024	-2.74E-16	5.38E-15	5.68E-14	2.08E-14
24Q3	DOE-3	8/26/2024	-3.61E-16	7.06E-15	4.28E-14	2.73E-14
24Q3	DOE-3	8/30/2024	-2.30E-15	5.35E-15	6.08E-14	2.07E-14
24Q3	DOE-3	9/3/2024	1.52E-15	5.81E-15	8.12E-14	2.07E-14
24Q3	DOE-3	9/6/2024	-9.66E-16	7.70E-15	1.13E-13	2.74E-14
24Q3	DOE-3	9/9/2024	3.08E-15	7.90E-15	1.34E-13	2.81E-14
24Q3	DOE-3	9/13/2024	2.79E-15	5.87E-15	4.61E-14	2.09E-14
24Q3	DOE-3	9/16/2024	-4.96E-15	7.74E-15	5.06E-14	2.75E-14
24Q3	DOE-3	9/20/2024	-3.24E-15	5.84E-15	5.26E-14	2.08E-14
24Q3	DOE-3	9/23/2024	-3.65E-15	7.78E-15	6.44E-14	2.77E-14
24Q3	DOE-3	9/27/2024	-4.84E-16	5.87E-15	9.35E-14	2.09E-14
24Q3	DOE-3	9/30/2024	-1.98E-15	7.80E-15	6.74E-14	2.78E-14
24Q4	DOE-3	10/4/2024	6.93E-15	5.45E-15	1.07E-13	2.09E-14
24Q4	DOE-3	10/7/2024	6.47E-15	7.18E-15	1.31E-13	2.75E-14
24Q4	DOE-3	10/10/2024	2.82E-15	7.20E-15	1.49E-13	2.76E-14
24Q4	DOE-3	10/14/2024	3.09E-15	5.36E-15	1.03E-13	2.05E-14
24Q4	DOE-3	10/18/2024	1.87E-15	5.42E-15	8.64E-14	2.07E-14
24Q4	DOE-3	10/21/2024	-1.16E-15	7.15E-15	4.56E-14	2.74E-14
24Q4	DOE-3	10/25/2024	3.88E-15	5.43E-15	7.37E-14	2.08E-14
24Q4	DOE-3	10/28/2024	-2.17E-15	7.21E-15	1.06E-13	2.76E-14
24Q4	DOE-3	11/1/2024	6.37E-16	5.56E-15	3.59E-14	2.05E-14
24Q4	DOE-3	11/4/2024	-1.17E-15	7.17E-15	5.56E-14	2.64E-14
24Q4	DOE-3	11/8/2024	1.67E-15	5.58E-15	4.11E-14	2.06E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (µCi/mL)	MDC – Alpha (µCi/mL)	Result Beta (µCi/mL)	MDC – Beta (µCi/mL)
24Q4	DOE-3	11/11/2024	1.20E-15	7.43E-15	8.97E-14	2.74E-14
24Q4	DOE-3	11/15/2024	3.75E-16	5.48E-15	4.33E-14	2.02E-14
24Q4	DOE-3	11/18/2024	-1.90E-15	7.45E-15	7.11E-14	2.74E-14
24Q4	DOE-3	11/22/2024	1.11E-15	5.34E-15	6.04E-14	1.97E-14
24Q4	DOE-3	11/25/2024	-1.62E-15	7.75E-15	3.28E-14	2.86E-14
24Q4	DOE-3	11/27/2024	-1.22E-15	1.04E-14	1.29E-14	3.85E-14
24Q4	DOE-3	12/2/2024	3.90E-15	4.35E-15	5.73E-14	1.73E-14
24Q4	DOE-3	12/6/2024	1.38E-14	5.28E-15	1.45E-13	2.10E-14
24Q4	DOE-3	12/9/2024	5.90E-15	6.94E-15	1.51E-13	2.76E-14
24Q4	DOE-3	12/13/2024	1.96E-15	5.26E-15	4.56E-14	2.09E-14
24Q4	DOE-3	12/16/2024	2.56E-16	7.03E-15	1.87E-14	2.80E-14
24Q4	DOE-3	12/20/2024	4.46E-16	5.29E-15	4.74E-14	2.10E-14
24Q4	DOE-3	12/23/2024	-4.11E-16	6.93E-15	8.86E-14	2.76E-14
24Q4	DOE-3	12/27/2024	-2.35E-15	5.30E-15	3.07E-14	2.11E-14
24Q4	DOE-3	12/31/2024	-1.06E-15	5.22E-15	2.57E-14	2.08E-14
Sample location DOE-4						
24Q1	DOE-4	1/5/2024	-4.69E-16	7.24E-15	1.22E-14	2.98E-14
24Q1	DOE-4	1/8/2024	-4.36E-16	6.73E-15	1.13E-14	2.77E-14
24Q1	DOE-4	1/12/2024	-8.41E-16	5.34E-15	-5.98E-15	2.19E-14
24Q1	DOE-4	1/16/2024	1.16E-15	5.42E-15	3.95E-14	2.23E-14
24Q1	DOE-4	1/19/2024	-1.46E-15	7.19E-15	4.62E-14	2.95E-14
24Q1	DOE-4	1/23/2024	-4.31E-15	5.34E-15	6.57E-15	2.20E-14
24Q1	DOE-4	1/26/2024	1.90E-15	7.32E-15	2.55E-14	3.01E-14
24Q1	DOE-4	1/29/2024	-1.80E-15	7.20E-15	3.44E-14	2.96E-14
24Q1	DOE-4	1/31/2024	1.29E-15	1.07E-14	5.72E-14	4.42E-14
24Q1	DOE-4	2/2/2024	-1.19E-16	9.88E-15	-9.75E-15	4.28E-14
24Q1	DOE-4	2/9/2024	-3.21E-15	1.02E-14	-2.25E-14	4.42E-14
24Q1	DOE-4	2/12/2024	1.91E-15	6.57E-15	9.17E-15	2.85E-14
24Q1	DOE-4	2/16/2024	1.76E-15	5.18E-15	5.63E-14	2.24E-14
24Q1	DOE-4	2/20/2024	-3.05E-15	4.94E-15	2.18E-14	2.14E-14
24Q1	DOE-4	2/26/2024	1.19E-15	4.98E-15	6.96E-15	2.16E-14
24Q1	DOE-4	3/1/2024	2.18E-15	4.74E-15	2.73E-14	2.19E-14
24Q1	DOE-4	3/4/2024	3.23E-15	6.30E-15	-2.71E-15	2.92E-14
24Q1	DOE-4	3/11/2024	1.48E-15	6.00E-15	6.40E-14	2.78E-14
24Q1	DOE-4	3/15/2024	2.75E-15	4.86E-15	9.12E-15	2.25E-14
24Q1	DOE-4	3/18/2024	1.52E-15	6.16E-15	3.34E-14	2.85E-14
24Q1	DOE-4	3/22/2024	5.63E-15	4.89E-15	1.16E-13	2.27E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q1	DOE-4	3/26/2024	6.72E-16	4.79E-15	3.97E-14	2.22E-14
24Q2	DOE-4	4/1/2024	-2.84E-15	-2.84E-15	4.92E-16	2.22E-14
24Q2	DOE-4	4/5/2024	9.97E-18	9.97E-18	5.25E-14	2.13E-14
24Q2	DOE-4	4/8/2024	-6.44E-16	-6.44E-16	1.09E-14	2.82E-14
24Q2	DOE-4	4/12/2024	-9.87E-16	-9.87E-16	6.40E-14	2.13E-14
24Q2	DOE-4	4/15/2024	-1.62E-15	-1.62E-15	2.04E-14	2.80E-14
24Q2	DOE-4	4/19/2024	-7.41E-16	-7.41E-16	2.32E-14	2.15E-14
24Q2	DOE-4	4/22/2024	-6.46E-16	-6.46E-16	8.22E-14	2.82E-14
24Q2	DOE-4	4/26/2024	1.25E-15	1.25E-15	6.08E-14	2.12E-14
24Q2	DOE-4	4/29/2024	-2.63E-15	-2.63E-15	1.74E-14	2.83E-14
24Q2	DOE-4	5/3/2024	4.32E-15	4.32E-15	4.97E-14	2.06E-14
24Q2	DOE-4	5/6/2024	-6.94E-16	-6.94E-16	3.12E-14	2.74E-14
24Q2	DOE-4	5/10/2024	-1.00E-17	-1.00E-17	1.63E-14	2.03E-14
24Q2	DOE-4	5/13/2024	5.05E-15	5.05E-15	4.84E-14	2.72E-14
24Q2	DOE-4	5/17/2024	3.03E-15	3.03E-15	2.69E-14	2.05E-14
24Q2	DOE-4	5/20/2024	-2.74E-15	-2.74E-15	3.23E-14	2.75E-14
24Q2	DOE-4	5/24/2024	-7.79E-16	-7.79E-16	5.43E-14	2.07E-14
24Q2	DOE-4	5/28/2024	1.77E-15	1.77E-15	3.43E-14	2.05E-14
24Q2	DOE-4	5/31/2024	6.68E-16	6.68E-16	3.76E-14	2.75E-14
24Q2	DOE-4	6/3/2024	-2.64E-15	-2.64E-15	2.30E-14	2.65E-14
24Q2	DOE-4	6/7/2024	-5.28E-16	-5.28E-16	3.31E-14	2.09E-14
24Q2	DOE-4	6/10/2024	-3.03E-15	-3.03E-15	1.03E-14	2.71E-14
24Q2	DOE-4	6/14/2024	-1.30E-15	-1.30E-15	3.76E-14	2.07E-14
24Q2	DOE-4	6/17/2024	-3.06E-15	-3.06E-15	3.28E-14	2.73E-14
24Q2	DOE-4	6/21/2024	-2.65E-16	-2.65E-16	2.95E-14	2.06E-14
24Q2	DOE-4	6/24/2024	-5.72E-15	-5.72E-15	7.52E-14	2.71E-14
24Q2	DOE-4	6/28/2024	-1.02E-15	-1.02E-15	6.84E-14	2.04E-14
24Q3	DOE-4	7/1/2024	4.37E-15	7.15E-15	4.33E-14	2.82E-14
24Q3	DOE-4	7/5/2024	3.47E-15	5.27E-15	7.30E-14	2.08E-14
24Q3	DOE-4	7/8/2024	4.39E-15	7.19E-15	5.69E-14	2.84E-14
24Q3	DOE-4	7/12/2024	2.01E-15	5.36E-15	4.62E-14	2.12E-14
24Q3	DOE-4	7/15/2024	-2.70E-15	7.08E-15	6.95E-14	2.79E-14
24Q3	DOE-4	7/19/2024	1.51E-15	5.39E-15	7.28E-14	2.13E-14
24Q3	DOE-4	7/22/2024	-3.62E-16	7.10E-15	9.26E-14	2.80E-14
24Q3	DOE-4	7/26/2024	-7.84E-16	5.39E-15	4.97E-14	2.12E-14
24Q3	DOE-4	7/29/2024	1.98E-15	7.08E-15	4.14E-14	2.79E-14
24Q3	DOE-4	8/2/2024	2.75E-15	5.34E-15	7.59E-14	2.06E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q3	DOE-4	8/5/2024	2.32E-15	7.10E-15	8.43E-14	2.75E-14
24Q3	DOE-4	8/9/2024	2.24E-15	5.31E-15	6.25E-14	2.05E-14
24Q3	DOE-4	8/12/2024	3.69E-15	7.15E-15	8.45E-14	2.76E-14
24Q3	DOE-4	8/16/2024	1.49E-15	5.32E-15	9.52E-14	2.06E-14
24Q3	DOE-4	8/19/2024	9.76E-16	7.07E-15	6.98E-14	2.73E-14
24Q3	DOE-4	8/23/2024	1.50E-15	5.38E-15	4.17E-14	2.08E-14
24Q3	DOE-4	8/26/2024	-1.70E-15	7.06E-15	4.42E-14	2.73E-14
24Q3	DOE-4	8/30/2024	1.75E-15	5.35E-15	6.16E-14	2.07E-14
24Q3	DOE-4	9/3/2024	-2.29E-16	5.80E-15	8.13E-14	2.06E-14
24Q3	DOE-4	9/6/2024	6.89E-16	7.71E-15	7.30E-14	2.74E-14
24Q3	DOE-4	9/9/2024	-3.13E-16	7.92E-15	1.03E-13	2.82E-14
24Q3	DOE-4	9/13/2024	2.54E-15	5.86E-15	4.13E-14	2.09E-14
24Q3	DOE-4	9/16/2024	-6.62E-15	7.74E-15	7.82E-14	2.75E-14
24Q3	DOE-4	9/20/2024	-2.48E-15	5.83E-15	4.61E-14	2.07E-14
24Q3	DOE-4	9/23/2024	-3.99E-15	7.79E-15	7.80E-14	2.77E-14
24Q3	DOE-4	9/27/2024	-7.36E-16	5.87E-15	8.42E-14	2.09E-14
24Q3	DOE-4	9/30/2024	1.03E-15	7.79E-15	5.99E-14	2.77E-14
24Q4	DOE-4	10/4/24	7.43E-15	5.45E-15	1.17E-13	2.09E-14
24Q4	DOE-4	10/7/24	8.81E-15	7.20E-15	1.32E-13	2.76E-14
24Q4	DOE-4	10/10/24	8.49E-15	7.20E-15	1.40E-13	2.76E-14
24Q4	DOE-4	10/14/24	1.11E-15	5.35E-15	1.22E-13	2.05E-14
24Q4	DOE-4	10/18/24	3.13E-15	5.42E-15	6.31E-14	2.07E-14
24Q4	DOE-4	10/21/24	-1.72E-16	7.16E-15	6.15E-14	2.74E-14
24Q4	DOE-4	10/25/24	-1.30E-16	5.42E-15	1.14E-13	2.08E-14
24Q4	DOE-4	10/28/24	-1.73E-16	7.21E-15	1.31E-13	2.76E-14
24Q4	DOE-4	11/1/24	2.18E-15	5.56E-15	6.34E-14	2.05E-14
24Q4	DOE-4	11/4/24	1.49E-15	7.17E-15	2.15E-14	2.64E-14
24Q4	DOE-4	11/8/24	-9.08E-16	5.58E-15	3.32E-14	2.06E-14
24Q4	DOE-4	11/11/24	1.65E-16	7.43E-15	8.16E-14	2.74E-14
24Q4	DOE-4	11/15/24	-3.85E-16	5.48E-15	6.65E-14	2.02E-14
24Q4	DOE-4	11/18/24	-3.62E-15	7.44E-15	6.65E-14	2.74E-14
24Q4	DOE-4	11/22/24	1.85E-15	5.34E-15	6.12E-14	1.97E-14
24Q4	DOE-4	11/25/24	1.25E-15	7.75E-15	3.79E-14	2.86E-14
24Q4	DOE-4	11/27/24	-2.67E-15	1.05E-14	2.14E-14	3.85E-14
24Q4	DOE-4	12/6/24	1.25E-14	5.47E-15	1.54E-13	2.17E-14
24Q4	DOE-4	12/9/24	7.54E-15	6.92E-15	1.17E-13	2.75E-14
24Q4	DOE-4	12/13/24	1.71E-15	5.29E-15	3.54E-14	2.11E-14

Quarter	Air Station ID	Sample Collection Date	Result Alpha (μCi/mL)	MDC – Alpha (μCi/mL)	Result Beta (μCi/mL)	MDC – Beta (μCi/mL)
24Q4	DOE-4	12/16/24	9.25E-16	7.00E-15	3.20E-14	2.78E-14
24Q4	DOE-4	12/20/24	2.98E-15	5.29E-15	5.41E-14	2.11E-14
24Q4	DOE-4	12/23/24	4.89E-15	6.92E-15	1.16E-13	2.75E-14
24Q4	DOE-4	12/27/24	9.55E-16	5.30E-15	2.88E-14	2.11E-14
24Q4	DOE-4	12/31/24	4.40E-16	5.22E-15	2.76E-14	2.08E-14

Note: Results less than the MDC are noted in the table as negative numbers.

Table C-3. Individual radionuclide analysis for composite filter samples, Q1/2024.

Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μCi/mL)
Location DOE-1 – Air volume/sample = 9.95E+08				
Strontium-90	-1.23	2.48	U U	-1.236E-15
Radium-226, -228 combined	2.60	0.622		2.613E-15
Ra-228	2.89	4.32	U UJ	2.905E-15
Polonium-210	14.2	0.257		1.427E-14
Americium-241	0.0400	0.253	U U	4.020E-17
Thorium-230	0.632	0.947	U U	6.352E-16
Thorium-228	0.0799	0.803	U U	8.030E-17
Thorium-232	0.361	0.365	U U	3.628E-16
Uranium-238	0.874	0.383		8.784E-16
Uranium-233/234	0.758	0.527		7.618E-16
Uranium-235/236	0.181	0.398	U U	1.819E-16
Plutonium-238	0.0610	0.291	U U	6.131E-17
Plutonium-239	0.00190	0.314	U U	1.910E-18
Plutonium-241	-1.49	40.3	U U	-1.497E-15
Cesium-137	0.793	7.12	U U	7.970E-16
Cobalt-60	2.11	10.2	U U	2.121E-15
Potassium-40	76.2	86.0	U U	7.658E-14
Beryllium-7	162	70.5		1.628E-13
Actinium-228	-7.52	33.0	U U	-7.558E-15
Location DOE-2 – Air volume/sample = 9.96E+08				
Strontium-90	-1.17	2.48	U U	-1.175E-15
Radium-226, -228 combined	2.80	0.836		2.811E-15
Ra-228	1.17	6.15	U UJ	1.175E-15
Polonium-210	12.8	0.239		1.285E-14
Americium-241	0.181	0.397	U U	1.817E-16
Thorium-230	0.563	0.751	U U	5.653E-16
Thorium-228	0.0285	0.704	U U	2.861E-17
Thorium-232	-0.0500	0.501	U U	-5.020E-17
Uranium-238	0.793	0.420		7.962E-16
Uranium-233/234	0.897	0.511		9.006E-16
Uranium-235/236	0.0173	0.378	U U	1.737E-17
Plutonium-238	0.0722	0.345	U U	7.249E-17
Plutonium-239	0.0609	0.455	U U	6.114E-17
Plutonium-241	-12.1	43.1	U U	-1.215E-14
Cesium-137	-0.783	7.99	U U	-7.861E-16
Cobalt-60	-0.566	7.55	U U	-5.683E-16
Potassium-40	111	47.5		1.114E-13
Beryllium-7	78.0	84.1	U U	7.831E-14
Actinium-228	7.11	39.1	U U	7.139E-15

Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (µCi/mL)
Location DOE-3 – Air volume/sample = 9.95E+08				
Strontium-90	0.159	2.02	U U	1.598E-16
Radium-226, -228 combined	2.24	0.736		2.251E-15
Ra-228	-0.142	6.46	U UJ	-1.427E-16
Polonium-210	13.8	0.212		1.387E-14
Americium-241	-0.0378	0.635	U U	-3.799E-17
Thorium-230	0.0926	0.824	U U	9.307E-17
Thorium-228	-0.114	0.662	U U	-1.146E-16
Thorium-232	0.355	0.360	U U	3.568E-16
Uranium-238	1.07	0.425		1.075E-15
Uranium-233/234	0.631	0.457		6.342E-16
Uranium-235/236	-0.0853	0.499	U U	-8.573E-17
Plutonium-238	-0.0122	0.243	U U	-1.226E-17
Plutonium-239	0.0770	0.281	U U	7.739E-17
Plutonium-241	-1.08	44.5	U U	-1.085E-15
Cesium-137	3.18	9.31	U U	3.196E-15
Cobalt-60	2.92	11.4	U U	2.935E-15
Potassium-40	99.0	87.0		9.950E-14
Beryllium-7	43.6	93.5	U U	4.382E-14
Actinium-228	20.3	42.5	U U	2.040E-14
Location DOE-4 – Air volume/sample = 9.24E+08*				
Strontium-90	-0.775	2.29	U U	-8.227E-16
Radium-226, -228 combined	1.84	0.584		1.953E-15
Ra-228	6.81	4.33	J	7.229E-15
Polonium-210	13.5	0.276		1.433E-14
Americium-241	0.0161	0.351	U U	1.709E-17
Thorium-230	0.296	0.903	U U	3.142E-16
Thorium-228	0.158	1.12	U U	1.677E-16
Thorium-232	0.401	0.544	U U	4.257E-16
Uranium-238	0.626	0.294		6.645E-16
Uranium-233/234	0.744	0.368		7.898E-16
Uranium-235/236	0.0287	0.305	U U	3.047E-17
Plutonium-238	0.0284	0.303	U U	3.015E-17
Plutonium-239	-0.0131	0.262	U U	-1.391E-17
Plutonium-241	3.55	44.7	U U	3.769E-15
Cesium-137	3.28	8.41	U U	3.482E-15
Cobalt-60	5.06	10.9	U U	5.372E-15
Potassium-40	30.3	117	U U	3.217E-14
Beryllium-7	122	134	U U	1.295E-13
Actinium-228	16.0	46.0	U U	1.699E-14

*Unit was down from 11/27/24-12/2/24

¹The first data qualifier was applied by the laboratory, and the second qualifier applied due to validation.

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.

Table C-4. Individual radionuclide analysis for composite filter samples, Q1/2024–Q4/2024.

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μCi/mL)
Q1/2024					
Location DOE-1 – Air volume/sample = 8.64E+08					
24Q1	Cesium-137	-0.98	6.91	U U	-1.134E-15
24Q1	Strontium-90	-0.805	2.85	U U	-9.317E-16
24Q1	Cobalt-60	2.64	8.09	U U	3.056E-15
24Q1	Potassium-40	109	75.4		1.262E-13
24Q1	Beryllium-7	48.4	97.4	U U	5.602E-14
24Q1	Plutonium-238	0.0288	0.307	U U	3.333E-17
24Q1	Polonium-210	5.06	0.655		5.856E-15
24Q1	Plutonium-241	18.6	41.8	U U	2.153E-14
24Q1	Thorium-230	1.07	0.631	UJ	1.238E-15
24Q1	Thorium-228	0.994	0.799		1.150E-15
24Q1	Actinium-228	1.38	32.4	U U	1.597E-15
24Q1	Americium-241	0.0729	0.219	U U	8.438E-17
24Q1	Plutonium-239	0.111	0.166	U U	1.285E-16
24Q1	Ra-228 - total	2.38	3.61	U U	2.755E-15
24Q1	Radium-226, -228 combined	-1.23	14.3	U U	-1.424E-15
24Q1	Thorium-232	0.712	0.487		8.241E-16
24Q1	Uranium-238	0.744	0.219	UJ	8.611E-16
24Q1	Uranium-233/234	0.995	0.268	UJ	1.152E-15
24Q1	Uranium-235/236	0.192	0.115		2.222E-16
Location DOE-2 – Air volume/sample = 8.64E+08					
24Q1	Cesium-137	1.4	6.57	U U	1.620E-15
24Q1	Strontium-90	-0.733	2.8	U U	-8.484E-16
24Q1	Cobalt-60	0.0527	7.19	U U	6.100E-17
24Q1	Potassium-40	55.3	56.5	U U	6.400E-14
24Q1	Beryllium-7	34.3	86.6	U U	3.970E-14
24Q1	Plutonium-238	0	0.183	U U	0.000E+0
24Q1	Polonium-210	6.63	1.13		7.674E-15
24Q1	Plutonium-241	17.3	45.5	U U	2.002E-14
24Q1	Thorium-230	0.449	0.768	U U	5.197E-16
24Q1	Thorium-228	0.55	0.911	U U	6.366E-16
24Q1	Actinium-228	-10.3	26.4	U U	-1.192E-14
24Q1	Americium-241	-0.118	0.546	U U	-1.366E-16
24Q1	Plutonium-239	0.0926	0.337	U U	1.072E-16
24Q1	Ra-228 - total	0.51	3.37	U U	5.903E-16

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (µCi/mL)
24Q1	Radium-226, -228 combined	12.7	14.6	U U	1.470E-14
24Q1	Thorium-232	0.774	0.582		8.958E-16
24Q1	Uranium-238	1.02	0.0986	UJ	1.181E-15
24Q1	Uranium-233/234	0.744	0.304	UJ	8.611E-16
24Q1	Uranium-235/236	0.0812	0.122	U U	9.398E-17
Location DOE-3 – Air volume/sample = 7.93E+08					
24Q1	Cesium-137	-2.76	7.58	U U	-3.480E-15
24Q1	Strontium-90	0.613	2.68	U U	7.730E-16
24Q1	Cobalt-60	1.91	11.5	U U	2.409E-15
24Q1	Potassium-40	55.6	71.3	U U	7.011E-14
24Q1	Beryllium-7	73.7	114	U U	9.294E-14
24Q1	Plutonium-238	0.0641	0.192	U U	8.083E-17
24Q1	Polonium-210	7.85	0.626		9.899E-15
24Q1	Plutonium-241	11.3	52.6	U U	1.425E-14
24Q1	Thorium-230	1.04	0.956	UJ	1.311E-15
24Q1	Thorium-228	0.162	1.43	U U	2.043E-16
24Q1	Actinium-228	18.7	54.9	U U	2.358E-14
24Q1	Americium-241	0.103	0.376	U U	1.299E-16
24Q1	Plutonium-239	0.0333	0.355	U U	4.199E-17
24Q1	Ra-228 - total	6.21	4.21		7.831E-15
24Q1	Radium-226, -228 combined	-0.536	11.2	U U	-6.759E-16
24Q1	Thorium-232	0.535	0.517		6.747E-16
24Q1	Uranium-238	0.937	0.208	UJ	1.182E-15
24Q1	Uranium-233/234	0.753	0.298	UJ	9.496E-16
24Q1	Uranium-235/236	0.153	0.257	U U	1.929E-16
Location DOE-4 – Air volume/sample = 7.95E+08					
24Q1	Cesium-137	-2.04	6.76	U U	-2.566E-15
24Q1	Strontium-90	0.21	2.81	U U	2.642E-16
24Q1	Cobalt-60	-0.163	7.34	U U	-2.050E-16
24Q1	Potassium-40	104	69.2	UI UJ	1.308E-13
24Q1	Beryllium-7	40.9	92.8	U U	5.145E-14
24Q1	Plutonium-238	-0.0132	0.263	U U	-1.660E-17
24Q1	Polonium-210	5.41	0.355		6.805E-15
24Q1	Plutonium-241	2.91	44.4	U U	3.660E-15
24Q1	Thorium-230	1.46	0.837	UJ	1.836E-15
24Q1	Thorium-228	0.687	0.751	U U	8.642E-16
24Q1	Actinium-228	-11.9	33.2	U U	-1.497E-14

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μCi/mL)
24Q1	Americium-241	0.121	0.329	U U	1.522E-16
24Q1	Plutonium-239	0.0416	0.263	U U	5.233E-17
24Q1	Ra-228 - total	1.64	4.67	U U	2.063E-15
24Q1	Radium-226, -228 combined	-6.46	12.5	U U	-8.126E-15
24Q1	Thorium-232	0.982	0.426		1.235E-15
24Q1	Uranium-238	0.968	0.0937	UJ	1.218E-15
24Q1	Uranium-233/234	0.768	0.29	UJ	9.660E-16
24Q1	Uranium-235/236	0.309	0.116		3.887E-16
Q2/2024					
Location DOE-1 – Air volume/sample = 4.16E+07					
24Q2	Cesium-137	-8.61	13.5	U U	-2.070E-13
24Q2	Strontium-90	-0.119	1.21	U U	-2.861E-15
24Q2	Cobalt-60	3.22	15.6	U U	7.740E-14
24Q2	Potassium-40	102	151	U U	2.452E-12
24Q2	Beryllium-7	190	176		4.567E-12
24Q2	Plutonium-238	0.0634	0.402	U U	1.524E-15
24Q2	Polonium-210	6.59	0.363		1.584E-13
24Q2	Plutonium-241	5.94	35.5	U U	1.428E-13
24Q2	Thorium-230	0.903	0.716	UJ	2.171E-14
24Q2	Thorium-228	1.12	0.652		2.692E-14
24Q2	Actinium-228	0.182	64.5	U U	4.375E-15
24Q2	Americium-241	0.0882	0.421	U UJ	2.120E-15
24Q2	Plutonium-239	0.0634	0.401	U U	1.524E-15
24Q2	Ra-228 - total	1.99	5.67	U U	4.784E-14
24Q2	Radium-226, -228 combined	0.793	2.84	U U	1.906E-14
24Q2	Thorium-232	0.66	0.505	UJ	1.587E-14
24Q2	Uranium-238	1.58	0.504	J	3.798E-14
24Q2	Uranium-233/234	0.839	0.603	UJ	2.017E-14
24Q2	Uranium-235/236	-0.0193	0.386	U U	-4.639E-16
Location DOE-2 – Air volume/sample = 4.16E+07					
24Q2	Cesium-137	-2.61	10.8	U U	-6.274E-14
24Q2	Strontium-90	-0.817	1.96	U U	-1.964E-14
24Q2	Cobalt-60	-2.24	12.1	U U	-5.385E-14
24Q2	Potassium-40	12.8	198	U U	3.077E-13
24Q2	Beryllium-7	49.2	148	U U	1.183E-12
24Q2	Plutonium-238	-0.139	0.586	U U	-3.341E-15
24Q2	Polonium-210	6	0.746		1.442E-13

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (µCi/mL)
24Q2	Plutonium-241	-8.62	41.3	U U	-2.072E-13
24Q2	Thorium-230	0.416	0.771	U U	1.000E-14
24Q2	Thorium-228	0.92	1.01	U U	2.212E-14
24Q2	Actinium-228	-2.16	45.2	U U	-5.192E-14
24Q2	Americium-241	0.172	0.46	U U	4.135E-15
24Q2	Plutonium-239	0.183	0.402	U U	4.399E-15
24Q2	Ra-228 - total	4.29	3.81	UJ	1.031E-13
24Q2	Radium-226, -228 combined	1.91	1.79	UJ	4.591E-14
24Q2	Thorium-232	1.27	0.611	UJ	3.053E-14
24Q2	Uranium-238	1.16	0.166	UJ	2.788E-14
24Q2	Uranium-233/234	0.55	0.507	UJ	1.322E-14
24Q2	Uranium-235/236	0.0356	0.379	U U	8.558E-16
Location DOE-3 – Air volume/sample = 4.16E+07					
24Q2	Cesium-137	2.14	12.7	U U	5.144E-14
24Q2	Strontium-90	1.11	1.73	U U	2.668E-14
24Q2	Cobalt-60	-1.47	9.31	U U	-3.534E-14
24Q2	Potassium-40	72.7	158	U U	1.748E-12
24Q2	Beryllium-7	176	110	UI UJ	4.231E-12
24Q2	Plutonium-238	0.0973	0.464	U U	2.339E-15
24Q2	Polonium-210	6.2	0.548		1.490E-13
24Q2	Plutonium-241	-9.44	42.1	U U	-2.269E-13
24Q2	Thorium-230	0.0252	1.17	U U	6.058E-16
24Q2	Thorium-228	0.104	1.25	U U	2.500E-15
24Q2	Actinium-228	-7.82	36.6	U U	-1.880E-13
24Q2	Americium-241	0.0339	0.361	U U	8.149E-16
24Q2	Plutonium-239	-0.0729	0.5	U U	-1.752E-15
24Q2	Ra-228 - total	0.324	3.63	U U	7.788E-15
24Q2	Radium-226, -228 combined	4.58	1.87	UJ	1.101E-13
24Q2	Thorium-232	1.06	0.878	UJ	2.548E-14
24Q2	Uranium-238	1.04	0.381	UJ	2.500E-14
24Q2	Uranium-233/234	0.84	0.493	UJ	2.019E-14
24Q2	Uranium-235/236	-0.0343	0.396	U U	-8.245E-16
Location DOE-4 – Air volume/sample = 4.16E+07					
24Q2	Cesium-137	0.986	12.7	U U	2.370E-14
24Q2	Strontium-90	-0.609	1.32	U U	-1.464E-14
24Q2	Cobalt-60	-3.56	11.1	U U	-8.558E-14
24Q2	Potassium-40	-7.66	156	U U	-1.841E-13

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (µCi/mL)
24Q2	Beryllium-7	-34.2	112	U U	-8.221E-13
24Q2	Plutonium-238	0.121	0.405	U U	2.909E-15
24Q2	Polonium-210	23	0.551		5.529E-13
24Q2	Plutonium-241	-2.44	48.8	U U	-5.865E-14
24Q2	Thorium-230	0.826	0.658	UJ	1.986E-14
24Q2	Thorium-228	1.07	0.752		2.572E-14
24Q2	Actinium-228	-7.64	48.3	U U	-1.837E-13
24Q2	Americium-241	0.165	0.442	U U	3.966E-15
24Q2	Plutonium-239	-0.025	0.289	U U	-6.010E-16
24Q2	Ra-228 - total	3.31	4.39	U U	7.957E-14
24Q2	Radium-226, -228 combined	3.42	1.69	UJ	8.221E-14
24Q2	Thorium-232	0.777	0.526	UJ	1.868E-14
24Q2	Uranium-238	0.737	0.326	UJ	1.772E-14
24Q2	Uranium-233/234	0.836	0.447	UJ	2.010E-14
24Q2	Uranium-235/236	0.256	0.403	U U	6.154E-15
Q3/2024					
Location DOE-1 – Air volume/sample = 1.02+09					
24Q3	Strontium-90	-1.22	2.83	U U	-1.196E-15
24Q3	Radium-226, -228 combined	2.42	3.29	U U	2.373E-15
24Q3	Ra-228 - total	1.63	4.27	U U	1.598E-15
24Q3	Polonium-210	14	4.78		1.373E-14
24Q3	Americium-241	0.0698	0.374	U U	6.843E-17
24Q3	Thorium-230	1.68	1.04	UJ	1.647E-15
24Q3	Thorium-228	0.326	1.2	U U	3.196E-16
24Q3	Thorium-232	0.438	1.01	U U	4.294E-16
24Q3	Uranium-238	0.873	0.308	UJ	8.559E-16
24Q3	Uranium-233/234	1	0.484	UJ	9.804E-16
24Q3	Uranium-235/236	-0.0545	0.381	U U	-5.343E-17
24Q3	Plutonium-238	0.044	0.278	U U	4.314E-17
24Q3	Plutonium-239	0.0903	0.428	U U	8.853E-17
24Q3	Plutonium-241	21.1	44.2	U U	2.069E-14
24Q3	Cesium-137	-0.98	5.42	U U	-9.608E-16
24Q3	Cobalt-60	5.11	8.2	U U	5.010E-15
24Q3	Potassium-40	50.6	138	U U	4.961E-14
24Q3	Beryllium-7	172	76.4		1.686E-13
24Q3	Actinium-228	15.8	31.9	U U	1.549E-14

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μ Ci/mL)
Location DOE-2 – Air volume/sample = 1.02+09					
24Q3	Strontium-90	-0.265	2.96	U U	-2.598E-16
24Q3	Radium-226, -228 combined	2.91	3.24	U U	2.853E-15
24Q3	Ra-228 - total	0.968	3.71	U U	9.490E-16
24Q3	Polonium-210	14.5	1.44		1.422E-14
24Q3	Americium-241	0.0704	0.276	U U	6.902E-17
24Q3	Thorium-230	2.06	0.845	UJ	2.020E-15
24Q3	Thorium-228	0.752	0.94	U U	7.373E-16
24Q3	Thorium-232	1.2	0.467	UJ	1.176E-15
24Q3	Uranium-238	0.955	0.348	UJ	9.363E-16
24Q3	Uranium-233/234	0.725	0.566	UJ	7.108E-16
24Q3	Uranium-235/236	0.0736	0.289	U U	7.216E-17
24Q3	Plutonium-238	0.145	0.253	U U	1.422E-16
24Q3	Plutonium-239	0.0274	0.291	U U	2.686E-17
24Q3	Plutonium-241	2.34	37.9	U U	2.294E-15
24Q3	Cesium-137	-6.21	11.4	U U	-6.088E-15
24Q3	Cobalt-60	-5.62	14.2	U U	-5.510E-15
24Q3	Potassium-40	112	196	U U	1.098E-13
24Q3	Beryllium-7	91.6	150	U U	8.980E-14
24Q3	Actinium-228	-14.2	57	U U	-1.392E-14
Location DOE-3 – Air volume/sample = 9.72+08					
24Q3	Strontium-90	1.03	2.89	U U	1.060E-15
24Q3	Radium-226, -228 combined	-1	4.26	U U	-1.029E-15
24Q3	Ra-228 - total	0.262	3.73	U U	2.695E-16
24Q3	Polonium-210	17.7	4.23		1.821E-14
24Q3	Americium-241	0.132	0.387	U U	1.358E-16
24Q3	Thorium-230	1.4	1.17	UJ	1.440E-15
24Q3	Thorium-228	0.662	1	U U	6.811E-16
24Q3	Thorium-232	0.12	0.822	U U	1.235E-16
24Q3	Uranium-238	0.671	0.473	UJ	6.903E-16
24Q3	Uranium-233/234	0.662	0.607	UJ	6.811E-16
24Q3	Uranium-235/236	-0.127	0.474	U U	-1.307E-16
24Q3	Plutonium-238	0.0373	0.492	U U	3.837E-17
24Q3	Plutonium-239	0.0559	0.558	U U	5.751E-17
24Q3	Plutonium-241	11.3	45.9	U U	1.163E-14
24Q3	Cesium-137	-0.134	6.08	U U	-1.379E-16
24Q3	Cobalt-60	-0.211	8.08	U U	-2.171E-16

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μ Ci/mL)
24Q3	Potassium-40	92.1	60.1	UI UJ	9.475E-14
24Q3	Beryllium-7	146	74.5		1.502E-13
24Q3	Actinium-228	3.93	30.7	U U	4.043E-15
Location DOE-4 – Air volume/sample = 1.02+09					
24Q3	Strontium-90	-1.3	2.86	U U	-1.275E-15
24Q3	Radium-226, -228 combined	2.49	1.6	UJ	2.441E-15
24Q3	Ra-228 - total	0.132	3.76	U U	1.294E-16
24Q3	Polonium-210	17.1	4.46		1.676E-14
24Q3	Americium-241	0.145	1.03	U U	1.422E-16
24Q3	Thorium-230	1.22	1.2	UJ	1.196E-15
24Q3	Thorium-228	0.832	1.1	U U	8.157E-16
24Q3	Thorium-232	1.01	0.702	UJ	9.902E-16
24Q3	Uranium-238	1.28	0.326	UJ	1.255E-15
24Q3	Uranium-233/234	0.873	0.537	UJ	8.559E-16
24Q3	Uranium-235/236	0.0639	0.403	U U	6.265E-17
24Q3	Plutonium-238	0.12	0.323	U U	1.176E-16
24Q3	Plutonium-239	-0.076	0.39	U U	-7.451E-17
24Q3	Plutonium-241	6.83	39.5	U U	6.696E-15
24Q3	Cesium-137	1.28	8.64	U U	1.255E-15
24Q3	Cobalt-60	0.616	8.28	U U	6.039E-16
24Q3	Potassium-40	-18.6	140	U U	-1.824E-14
24Q3	Beryllium-7	59.6	103	U U	5.843E-14
24Q3	Actinium-228	6.86	33.4	U U	6.725E-15
Q4/2024					
Location DOE-1 – Air volume/sample = 9.95E+08					
24Q4	Strontium-90	-1.23	2.48	U U	-1.236E-15
24Q4	Radium-226, -228 combined	2.60	0.622		2.613E-15
24Q4	Ra-228	2.89	4.32	U UJ	2.905E-15
24Q4	Polonium-210	14.2	0.257		1.427E-14
24Q4	Americium-241	0.0400	0.253	U U	4.020E-17
24Q4	Thorium-230	0.632	0.947	U U	6.352E-16
24Q4	Thorium-228	0.0799	0.803	U U	8.030E-17
24Q4	Thorium-232	0.361	0.365	U U	3.628E-16
24Q4	Uranium-238	0.874	0.383		8.784E-16
24Q4	Uranium-233/234	0.758	0.527		7.618E-16
24Q4	Uranium-235/236	0.181	0.398	U U	1.819E-16
24Q4	Plutonium-238	0.0610	0.291	U U	6.131E-17

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μ Ci/mL)
24Q4	Plutonium-239	0.00190	0.314	U U	1.910E-18
24Q4	Plutonium-241	-1.49	40.3	U U	-1.497E-15
24Q4	Cesium-137	0.793	7.12	U U	7.970E-16
24Q4	Cobalt-60	2.11	10.2	U U	2.121E-15
24Q4	Potassium-40	76.2	86.0	U U	7.658E-14
24Q4	Beryllium-7	162	70.5		1.628E-13
24Q4	Actinium-228	-7.52	33.0	U U	-7.558E-15
Location DOE-2 – Air volume/sample = 9.96E+08					
24Q4	Strontium-90	-1.17	2.48	U U	-1.175E-15
24Q4	Radium-226, -228 combined	2.80	0.836		2.811E-15
24Q4	Ra-228	1.17	6.15	U UJ	1.175E-15
24Q4	Polonium-210	12.8	0.239		1.285E-14
24Q4	Americium-241	0.181	0.397	U U	1.817E-16
24Q4	Thorium-230	0.563	0.751	U U	5.653E-16
24Q4	Thorium-228	0.0285	0.704	U U	2.861E-17
24Q4	Thorium-232	-0.0500	0.501	U U	-5.020E-17
24Q4	Uranium-238	0.793	0.420		7.962E-16
24Q4	Uranium-233/234	0.897	0.511		9.006E-16
24Q4	Uranium-235/236	0.0173	0.378	U U	1.737E-17
24Q4	Plutonium-238	0.0722	0.345	U U	7.249E-17
24Q4	Plutonium-239	0.0609	0.455	U U	6.114E-17
24Q4	Plutonium-241	-12.1	43.1	U U	-1.215E-14
24Q4	Cesium-137	-0.783	7.99	U U	-7.861E-16
24Q4	Cobalt-60	-0.566	7.55	U U	-5.683E-16
24Q4	Potassium-40	111	47.5		1.114E-13
24Q4	Beryllium-7	78.0	84.1	U U	7.831E-14
24Q4	Actinium-228	7.11	39.1	U U	7.139E-15
Location DOE-3 – Air volume/sample = 9.95E+08					
24Q4	Strontium-90	0.159	2.02	U U	1.598E-16
24Q4	Radium-226, -228 combined	2.24	0.736		2.251E-15
24Q4	Ra-228	-0.142	6.46	U UJ	-1.427E-16
24Q4	Polonium-210	13.8	0.212		1.387E-14
24Q4	Americium-241	-0.0378	0.635	U U	-3.799E-17
24Q4	Thorium-230	0.0926	0.824	U U	9.307E-17
24Q4	Thorium-228	-0.114	0.662	U U	-1.146E-16
24Q4	Thorium-232	0.355	0.360	U U	3.568E-16
24Q4	Uranium-238	1.07	0.425		1.075E-15

Quarter	Radionuclide	Result (pCi/sample)	MDC (pCi/sample)	Data Qualifier ¹	Airborne Concentration (μCi/mL)
24Q4	Uranium-233/234	0.631	0.457		6.342E-16
24Q4	Uranium-235/236	-0.0853	0.499	U U	-8.573E-17
24Q4	Plutonium-238	-0.0122	0.243	U U	-1.226E-17
24Q4	Plutonium-239	0.0770	0.281	U U	7.739E-17
24Q4	Plutonium-241	-1.08	44.5	U U	-1.085E-15
24Q4	Cesium-137	3.18	9.31	U U	3.196E-15
24Q4	Cobalt-60	2.92	11.4	U U	2.935E-15
24Q4	Potassium-40	99.0	87.0		9.950E-14
24Q4	Beryllium-7	43.6	93.5	U U	4.382E-14
24Q4	Actinium-228	20.3	42.5	U U	2.040E-14
Location DOE-4 – Air volume/sample = 9.42E+08*					
24Q4	Strontium-90	-0.775	2.29	U U	-8.227E-16
24Q4	Radium-226, -228 combined	1.84	0.584		1.953E-15
24Q4	Ra-228	6.81	4.33	J	7.229E-15
24Q4	Polonium-210	13.5	0.276		1.433E-14
24Q4	Americium-241	0.0161	0.351	U U	1.709E-17
24Q4	Thorium-230	0.296	0.903	U U	3.142E-16
24Q4	Thorium-228	0.158	1.12	U U	1.677E-16
24Q4	Thorium-232	0.401	0.544	U U	4.257E-16
24Q4	Uranium-238	0.626	0.294		6.645E-16
24Q4	Uranium-233/234	0.744	0.368		7.898E-16
24Q4	Uranium-235/236	0.0287	0.305	U U	3.047E-17
24Q4	Plutonium-238	0.0284	0.303	U U	3.015E-17
24Q4	Plutonium-239	-0.0131	0.262	U U	-1.391E-17
24Q4	Plutonium-241	3.55	44.7	U U	3.769E-15
24Q4	Cesium-137	3.28	8.41	U U	3.482E-15
24Q4	Cobalt-60	5.06	10.9	U U	5.372E-15
24Q4	Potassium-40	30.3	117	U U	3.217E-14
24Q4	Beryllium-7	122	134	U U	1.295E-13
24Q4	Actinium-228	16.0	46.0	U U	1.699E-14

*Unit was down from 11/27/24–12/2/24.

¹The first data qualifier was applied by the laboratory, and the second qualifier applied due to validation.

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.

UI – Results are considered a false positive due to high peak-width.

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

Q4/2024 PM₁₀ Monthly Audit Reports and Flow Verification Results

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One-Point Flow Rate Bias Estimate

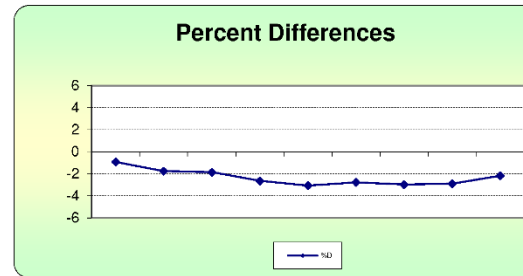
ETEC Site: DOE-1			Pollutant type: PM10				Bias (%)					
Quarter	E-BAM	Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	Percentile	d ²	d	d ²	n	Σ d	"AB" (Eqn 4)
Q4/2024 (Q27)	W23314	10/25/2024	14.00	14.13	-0.920		0.846	0.920	0.846	9	21.099	2.344
			16.70	17.00	-1.765	25th	3.114	1.765	3.114			
			17.50	17.83	-1.851	-2.907	3.426	1.851	3.426			
Q4/2024	W23314	11/22/2024	14.00	14.38	-2.643		6.983	2.643	6.983	8	53.630	0.722
			16.70	17.23	-3.076	75th	9.462	3.076	9.462			
			17.50	18.00	-2.778	-1.851	7.716	2.778	7.716			
Q4/2024	W23314	12/18/2024	14.00	14.43	-2.980		8.880	2.980	8.880			
			16.70	17.20	-2.907		8.451	2.907	8.451			
			17.50	17.89	-2.180		4.752	2.180	4.752			

n	Σ d	"AB" (Eqn 4)
9	21.099	2.344
n-1	Σ d ²	"AS" (Eqn 5)
8	53.630	0.722

Bias (%) (Eqn 3)	Both Signs Positive
2.79	FALSE
Signed Bias (%)	Both Signs Negative
-2.79	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/ttn/amtic/qareport.html>





One-Point Flow Rate Bias Estimate

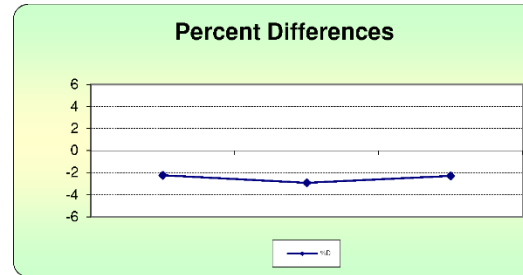
ETEC Site: DOE-2				Pollutant type: PM10				Bias (%)		
Quarter	E-BAM	Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	Percentile	d ²	d	d ²	
Q4/2024 (Q27)	Y12096	10/25/2024	14.00	14.32	-2.235	25th	4.994	2.235	4.994	
			16.70	17.20	-2.907		8.451	2.907	8.451	
			17.50	17.91	-2.289		-2.598	5.241	2.289	5.241
Q4/2024	Y12096	11/22/2024	14.00			75th				
			16.70							
			17.50							
Q4/2024	Y12096	12/18/2024	14.00							
			16.70							
			17.50							

n	Σ d	"AB" (Eqn 4)
9	7.431	2.477
n-1	Σ d ²	"AS" (Eqn 5)
8	18.685	1.252

Bias (%) (Eqn 3)	Both Signs Positive
3.25	FALSE
Signed Bias (%)	Both Signs Negative
-3.25	TRUE

Note: The E-BAM unit Y12096 at DOE-2 has been inoperative since 11/3/2024. The three extra E-BAM units are currently undergoing maintenance/repair and not available to replace Y12096.

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/ttn/amtic/qareport.html>





One-Point Flow Rate Bias Estimate

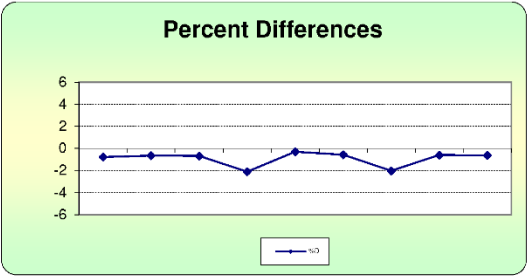
ETEC Site: DOE-3			Pollutant type: PM10				Bias (%)		
Quarter	E-BAM	Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	Percentile	d ²	d	d ²
Q4/2024 (Q27)	B20070	10/28/2024	14.00	14.11	-0.780		0.608	0.780	0.608
			16.70	16.81	-0.654	25th	0.428	0.654	0.428
			17.50	17.62	-0.681	-0.780	0.464	0.681	0.464
Q4/2024	B20070	11/22/2024	14.00	14.30	-2.098		4.401	2.098	4.401
			16.70	16.75	-0.299	75th	0.089	0.299	0.089
			17.50	17.60	-0.568	-0.595	0.323	0.568	0.323
Q4/2024	B20070	12/18/2024	14.00	14.29	-2.029		4.118	2.029	4.118
			16.70	16.80	-0.595		0.354	0.595	0.354
			17.50	17.61	-0.625		0.390	0.625	0.390

n	$\sum d $	"AB" (Eqn 4)
9	8.329	0.925
n-1	$\sum d ^2$	"AS" (Eqn 5)
8	11.176	0.658

Bias (%) (Eqn 3)	Both Signs Positive
1.33	FALSE
Signed Bias (%)	Both Signs Negative
-1.33	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/ttn/amtic/qareport.html>





One-Point Flow Rate Bias Estimate

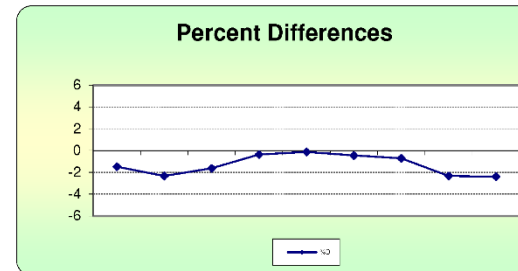
ETEC Site: DOE-4						Pollutant type: PM10				Bias (%)		
Quarter	E-BAM	Date	Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	Percentile	d ²	d	d ²	n	Σ d	"AB" (Eqn 4)
Q4/2024 (Q27)	B18932	10/25/2024	14.00	14.21	-1.478	25th	2.184	1.478	2.184	9	11.824	1.314
			16.70	17.10	-2.339		5.472	2.339	5.472			
			17.50	17.79	-1.630		2.657	1.630	2.657			
Q4/2024	B18932	11/22/2024	14.00	14.05	-0.356	75th	0.127	0.356	0.127	8	22.387	0.925
			16.70	16.72	-0.120		0.014	0.120	0.014			
			17.50	17.58	-0.455		-0.455	0.207	0.455			
Q4/2024	B18932	12/18/2024	14.00	14.10	-0.709		0.503	0.709	0.503			
			16.70	17.10	-2.339		5.472	2.339	5.472			
			17.50	17.93	-2.398		5.751	2.398	5.751			

n	Σ d	"AB" (Eqn 4)
9	11.824	1.314
n-1	Σ d ²	"AS" (Eqn 5)
8	22.387	0.925

Bias (%) (Eqn 3)	Both Signs Positive
1.89	FALSE
Signed Bias (%)	Both Signs Negative
-1.89	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/ttn/amtic/qareport.html>





Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-1 Serial # W23314
 Audit Date: 10/25/24 Audited By: B.W. Ford

Flow Audit						
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/5/2024	
Leak Check Value:	as found: <u>0.4</u>		as left: <u>0.4</u>			
Ambient Temperature:	as found: <u>25.3</u> °C	Ref. Std.:	<u>25.0</u> °C	as left: <u>25.3</u> °C	Ref. Std.:	<u>25.0</u> °C
Barometric Pressure:	as found: <u>710.2</u> mmHg		<u>711.9</u> mmHg	as left: <u>710.2</u> mmHg		<u>711.9</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm		<u>17.0</u> lpm	as left: <u>16.7</u> lpm		<u>17.0</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm		<u>14.13</u> lpm	as left: <u>14.0</u> lpm		<u>14.13</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm		<u>17.83</u> lpm	as left: <u>17.5</u> lpm		<u>17.83</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	Vacuum	Quality Category
Measured Span Mass (mg/cm2): <u>0.987</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm2): <u>0.003</u>	(lpm)	(Hg)	
% Difference / Pass or Fail: <u>0.30%</u>	<u>14.6</u>	<u>416.7</u>	<u>Marginal</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>0840</u>	<u>0840</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>At</u>
Location	<u>1</u>	<u>1</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>on</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log					
Error	Date	Time	Error	Date	Time
<u>1 No new messages</u>	<u>10/25/24</u>	<u>0846</u>	4		
2			5		
3			6		

Audit Notes:



Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-2 Serial # Y12096
 Audit Date: 10/25/24 Audited By: TSw:lliford

Flow Audit					
Flow Audit Device Model:	<u>BGI Delta Cal DC-1A</u>	Serial No:	<u>158047</u>	Calibration Date:	<u>2/5/2024</u>
Leak Check Value:	as found: <u>0.5</u>	as left:	<u>0.5</u>		
Ambient Temperature:	as found: <u>30.1</u> °C	Ref. Std.:	<u>29.2</u> °C	as left:	<u>30.1</u> °C
Barometric Pressure:	as found: <u>710.0</u> mmHg	Ref. Std.:	<u>711.3</u> mmHg	as left:	<u>710.0</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	Ref. Std.:	<u>17.20</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	Ref. Std.:	<u>14.32</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	Ref. Std.:	<u>17.91</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>0.869</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm2):	<u>0.022</u>	(lpm)	(Hg)	
% Difference (Pass or Fail):	<u>2.5%</u>	<u>14.3</u>	<u>414.8</u>	<u>Marginal</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>0931</u>	<u>0931</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>ACT</u>
Location	<u>2</u>	<u>2</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>on</u>	RH Connect	No	<u>No</u>
Analog FS	1.0 v	<u>1.0V</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new messages</u>	<u>10/25/24</u>	<u>0942</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-3 Serial # B20070
 Audit Date: 10/28/24 Audited By: T.S. Williford

Flow Audit
 Flow Audit Device Model: BGI Delta Cal DC-1A Serial No: 158047 Calibration Date: 2/5/2024
 Leak Check Value: as found: 0.4 as left: 0.4

	E-BAM	Ref. Std.	E-BAM	Ref. Std.
Ambient Temperature:	as found: <u>23.7</u> °C	<u>23.4</u> °C	as left: <u>23.7</u> °C	<u>23.4</u> °C
Barometric Pressure:	as found: <u>710.7</u> mmHg	<u>710.5</u> mmHg	as left: <u>710.7</u> mmHg	<u>710.5</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	<u>16.81</u> lpm	as left: <u>16.7</u> lpm	<u>16.81</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	<u>14.11</u> lpm	as left: <u>14.0</u> lpm	<u>14.11</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	<u>17.62</u> lpm	as left: <u>17.5</u> lpm	<u>17.62</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>0.850</u>	Flow Rate	Vacuum
Measured Span Mass (mg/cm2):	<u>0.850</u>	14.0 - 15.0 (lpm)	Value (Hg)
Difference (mg/cm2):	<u>0.000</u>		Quality Category
% Difference (Pass or Fail):	<u>0%</u>	<u>14.5</u>	<u>381.2</u>
			<u>Good</u>

Setup and Calibration Values

Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1432</u>	<u>1432</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>3</u>	<u>3</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>
Realtime Avg	60 mins	<u>60mins</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>on</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log

Error	Date	Time	Error	Date	Time
<u>1 No new messages</u>	<u>10/28/24</u>	<u>1448</u>			
<u>2</u>					
<u>3</u>					

Audit Notes:
* This is the initial for unit B20070. Unit W23310 went down on 10/23/24. Wasn't able to get new unit up and running till 10/28/24



Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-4 Serial # B18932
 Audit Date: 10/25/24 Audited By: TS Williford

Flow Audit			
Flow Audit Device Model:	<u>BGI Delta Cal DC-1A</u>	Serial No: <u>158047</u>	Calibration Date: <u>2/5/2024</u>
Leak Check Value:	as found: <u>0.25</u>	as left: <u>0.25</u>	

	E-BAM	Ref. Std.	E-BAM	Ref. Std.
Ambient Temperature:	as found: <u>25.3</u> °C	<u>25.0</u> °C	as left: <u>25.3</u> °C	<u>25.0</u> °C
Barometric Pressure:	as found: <u>706.3</u> mmHg	<u>706.0</u> mmHg	as left: <u>706.3</u> mmHg	<u>706.0</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	<u>17.10</u> lpm	as left: <u>16.7</u> lpm	<u>17.10</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	<u>14.21</u> lpm	as left: <u>14.0</u> lpm	<u>14.21</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	<u>17.79</u> lpm	as left: <u>17.5</u> lpm	<u>17.79</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>0.854</u>	Flow Rate	Vacuum	Quality Category
Measured Span Mass (mg/cm2):	<u>0.851</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm2):	<u>0.003</u>	(lpm)	(Hg)	
% Difference / Pass or Fail:	<u>0.35%</u>	<u>14.6</u>	<u>387.5</u>	<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1116</u>	<u>1116</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>4</u>	<u>4</u>	Baud Rate	9600	<u>115200</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>on</u>	RH Connect	No	<u>No</u>
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 pb new messages</u>	<u>10/25/24</u>	<u>1123</u>	4			
2			5			
3			6			

Audit Notes:



Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-1 Serial # W23314
 Audit Date: 11/22/24 Audited By: TS Williford

Flow Audit						
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/5/2024	
Leak Check Value:	as found: <u>0.4</u>	as left:	<u>0.4</u>			
Ambient Temperature:	as found: <u>18.4</u> °C	Ref. Std.:	<u>18.1</u> °C	as left: <u>18.4</u> °C	Ref. Std.:	<u>18.1</u> °C
Barometric Pressure:	as found: <u>711.0</u> mmHg	Ref. Std.:	<u>710.8</u> mmHg	as left: <u>711.0</u> mmHg	Ref. Std.:	<u>710.8</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	Ref. Std.:	<u>17.23</u> lpm	as left: <u>16.7</u> lpm	Ref. Std.:	<u>17.23</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	Ref. Std.:	<u>14.38</u> lpm	as left: <u>14.0</u> lpm	Ref. Std.:	<u>14.38</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	Ref. Std.:	<u>18.00</u> lpm	as left: <u>17.5</u> lpm	Ref. Std.:	<u>18.0</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/cm ²): <u>0.984</u>	Flow Rate	Vacuum	Quality Category
Measured Span Mass (mg/cm ²): <u>0.981</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm ²): <u>0.003</u>	(lpm)	(Hg)	
% Difference / Pass or Fail: <u>0.31%</u>	<u>14.8</u>	<u>423.6</u>	<u>Marginal</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>0842</u>	<u>0842</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Actual</u>
Location	<u>1</u>	<u>1</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>
Realtime Avg	60 mins	<u>60mins</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>on</u>	RH Connect	No	<u>No</u>
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new Messages</u>	<u>11/22/24</u>	<u>0859</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-2 Serial # NA
 Audit Date: 11/22/24 Audited By: JS Willis Ford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/5/2024
Leak Check Value:	as found: _____		as left: _____		
Ambient Temperature:	as found: _____ °C	Ref. Std. _____ °C	as left: _____ °C	Ref. Std. _____ °C	
Barometric Pressure:	as found: _____ mmHg	Ref. Std. _____ mmHg	as left: _____ mmHg	Ref. Std. _____ mmHg	
16.7 lpm Flow Rate	as found: _____ lpm	Ref. Std. _____ lpm	as left: _____ lpm	Ref. Std. _____ lpm	
14.0 lpm Flow Rate	as found: _____ lpm	Ref. Std. _____ lpm	as left: _____ lpm	Ref. Std. _____ lpm	
17.5 lpm Flow Rate	as found: _____ lpm	Ref. Std. _____ lpm	as left: _____ lpm	Ref. Std. _____ lpm	

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

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

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

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
1			4			
2			5			
3			6			

Audit Notes:
DOE-2 has been down since 11/3/2024. I don't have a replacement. All extra units are being repaired



Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-3 Serial # B20070
 Audit Date: 11/22/24 Audited By: T. Williams

Flow Audit						
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/5/2024	
Leak Check Value:	as found: <u>0.38</u>		as left: <u>0.38</u>			
Ambient Temperature:	as found: <u>22.4</u> °C	Ref. Std.:	<u>22.0</u> °C	as left: <u>22.4</u> °C	Ref. Std.:	<u>22.0</u> °C
Barometric Pressure:	as found: <u>716.2</u> mmHg	Ref. Std.:	<u>715.3</u> mmHg	as left: <u>716.2</u> mmHg	Ref. Std.:	<u>715.3</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	Ref. Std.:	<u>16.75</u> lpm	as left: <u>16.7</u> lpm	Ref. Std.:	<u>16.75</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	Ref. Std.:	<u>14.30</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	Ref. Std.:	<u>17.60</u> lpm	as left: <u>17.5</u> lpm	Ref. Std.:	<u>17.60</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/cm ²): <u>0.850</u>	Flow Rate	Vacuum	Quality Category
Measured Span Mass (mg/cm ²): <u>0.851</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm ²): <u>0.001</u>	(lpm)	(Hg)	
% Difference / (Pass or Fail): <u>0.12%</u>	<u>14.5</u>	<u>390.2</u>	<u>Good</u>

Setup and Calibration Values									
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found	
Clock	<u>1105</u>	<u>1105</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>	
Location	<u>3</u>	<u>3</u>	Baud Rate	9600	<u>19520</u>	Restart Voltage	12.5 v	<u>12.5V</u>	
Tape Advance	24 hrs	<u>24hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>	
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0V</u>	
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>on</u>	RH Connect	No	<u>No</u>	
Analog FS	1.0 v	<u>1.0V</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>Off</u>	

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new messages</u>	<u>11/22/24</u>	<u>1140</u>				
<u>2</u>						
<u>3</u>						

Audit Notes:



Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-4 Serial # B18932
 Audit Date: 11/22/24 Audited By: TS Willi Ford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/5/2024
Leak Check Value:	as found: <u>0.23</u>		as left: <u>0.23</u>		
Ambient Temperature:	as found:	<u>22.6</u> °C	Ref. Std.	<u>22.8</u> °C	as left:
Barometric Pressure:	as found:	<u>705.9</u> mmHg	Ref. Std.	<u>705.1</u> mmHg	as left:
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	Ref. Std.	<u>16.72</u> lpm	as left:
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	Ref. Std.	<u>14.05</u> lpm	as left:
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	Ref. Std.	<u>17.58</u> lpm	as left:

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/cm ²):	<u>0.854</u>	Flow Rate	Vacuum	Quality Category
Measured Span Mass (mg/cm ²):	<u>0.860</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm ²):	<u>0.006</u>	(lpm)	(Hg)	
% Difference / Pass or Fail:	<u>0.70%</u>	<u>14.2</u>	<u>390.3</u>	<u>Good</u>

Setup and Calibration Values									
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found	
Clock	<u>1428</u>	<u>1428</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>	
Location	<u>4</u>	<u>4</u>	Baud Rate	<u>9600</u>	<u>115200</u>	Restart Voltage	12.5 v	<u>12.5v</u>	
Tape Advance	24 hrs	<u>24 hrs</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>	
Realtime Avg	60 mins	<u>100 min</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0v</u>	
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>on</u>	RH Connect	No	<u>No</u>	
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>off</u>	

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new Message</u>	<u>11/22/24</u>	<u>1436</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: 12/18/24 Audited By: TSWilliford

Flow Audit						
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/5/2024	
Leak Check Value:	as found: <u>0.4</u>	as left:	<u>0.4</u>			
Ambient Temperature:	as found: <u>25.7</u> °C	Ref. Std.:	<u>25.3</u> °C	as left: <u>25.7</u> °C	Ref. Std.:	<u>25.3</u> °C
Barometric Pressure:	as found: <u>717.4</u> mmHg	Ref. Std.:	<u>718.3</u> mmHg	as left: <u>717.4</u> mmHg	Ref. Std.:	<u>718.3</u> mmHg
16.7 lpm Flow Rate	as found: <u>16.7</u> lpm	Ref. Std.:	<u>17.20</u> lpm	as left: <u>16.7</u> lpm	Ref. Std.:	<u>17.20</u> lpm
14.0 lpm Flow Rate	as found: <u>14.0</u> lpm	Ref. Std.:	<u>14.43</u> lpm	as left: <u>14.0</u> lpm	Ref. Std.:	<u>14.43</u> lpm
17.5 lpm Flow Rate	as found: <u>17.5</u> lpm	Ref. Std.:	<u>17.89</u> lpm	as left: <u>17.5</u> lpm	Ref. Std.:	<u>17.89</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	Vacuum Value	Quality Category
Measured Span Mass (mg/cm2):	<u>0.978</u>	14.0 - 15.0 (lpm)	(Hg)	Good / Marginal / Poor
Difference (mg/cm2):	<u>0.006</u>			
% Difference / Pass or Fail:	<u>0.61%</u>	<u>15.0</u>	<u>421.4</u>	<u>Marginal</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>0911</u>	<u>0911</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>1</u>	<u>1</u>	Baud Rate	9600	<u>9600</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24h</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>
Realtime Avg	60 mins	<u>60min</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>on</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>OFF</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new Messages</u>	<u>12/18/24</u>	<u>0941</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-2 Serial # NA
 Audit Date: 12/18/2024 Audited By: TS. W. H. Ford

Flow Audit					
Flow Audit Device Model:	<u>BGI Delta Cal DC-1A</u>	Serial No:	<u>158047</u>	Calibration Date:	<u>2/5/2024</u>
Leak Check Value:	as found: _____		as left: _____		
Ambient Temperature:	as found:	<u>E-BAM</u>	<u>Ref. Std.</u>	as left:	<u>E-BAM</u>
Barometric Pressure:	as found:	_____ °C	_____ °C	as left:	_____ °C
16.7 lpm Flow Rate	as found:	_____ mmHg	_____ mmHg	as left:	_____ mmHg
14.0 lpm Flow Rate	as found:	_____ lpm	_____ lpm	as left:	_____ lpm
17.5 lpm Flow Rate	as found:	_____ lpm	_____ lpm	as left:	_____ lpm

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

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

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

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
1			4			
2			5			
3			6			

Audit Notes:
DOE-2 has been down since 11/3/2024
I have no replacement. Waiting for 3 units to come
back from repair.



Baseline Air Monitoring Program - DOE
E-BAM Monthly Audit and Maintenance

Station # DOE-3 Serial # B20070
 Audit Date: 12/18/24 Audited By: TSWilliford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/5/2024
Leak Check Value:	as found: <u>0.37</u>		as left: <u>0.37</u>		
Ambient Temperature:	as found:	E-BAM	Ref. Std.	as left:	E-BAM
Barometric Pressure:	as found:	25.2 °C	25.2 °C	as left:	25.2 °C
16.7 lpm Flow Rate	as found:	716.7 mmHg	716.7 mmHg	as left:	716.7 mmHg
14.0 lpm Flow Rate	as found:	16.7 lpm	16.80 lpm	as left:	16.7 lpm
17.5 lpm Flow Rate	as found:	14.0 lpm	14.29 lpm	as left:	14.0 lpm
	as found:	17.5 lpm	17.61 lpm	as left:	17.5 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>0.850</u>	Flow Rate	Vacuum	Quality Category
Measured Span Mass (mg/cm2):	<u>0.853</u>	14.0 - 15.0	Value	Good / Marginal / Poor
Difference (mg/cm2):	<u>0.003</u>	(lpm)	(Hg)	
% Difference / Pass or Fail:	<u>0.35%</u>	<u>14.6</u>	<u>391.8</u>	<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1149</u>	<u>1149</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>3</u>	<u>3</u>	Baud Rate	9600	<u>115200</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24 hr</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>
Realtime Avg	60 mins	<u>60 min</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>On</u>	RH Connect	No	<u>NO</u>
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>off</u>

Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new Messages</u>	<u>12/18/24</u>	<u>12:10</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-4 Serial # B18932
 Audit Date: 12/18/24 Audited By: T.S. Willeford

Flow Audit					
Flow Audit Device Model:	BGI Delta Cal DC-1A	Serial No:	158047	Calibration Date:	2/5/2024
Leak Check Value:	as found: <u>0.31</u>		as left: <u>0.31</u>		
Ambient Temperature:	as found:	E-BAM	Ref. Std.	as left:	E-BAM
		<u>24.4</u> °C	<u>24.7</u> °C		<u>24.4</u> °C
Barometric Pressure:	as found:	<u>708.7</u> mmHg	<u>709.2</u> mmHg	as left:	<u>708.7</u> mmHg
16.7 lpm Flow Rate	as found:	<u>16.7</u> lpm	<u>17.10</u> lpm	as left:	<u>16.7</u> lpm
14.0 lpm Flow Rate	as found:	<u>14.0</u> lpm	<u>14.10</u> lpm	as left:	<u>14.0</u> lpm
17.5 lpm Flow Rate	as found:	<u>17.5</u> lpm	<u>17.93</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>0.854</u>	Flow Rate	Vacuum
Measured Span Mass (mg/cm2):	<u>0.864</u>	14.0 - 15.0	Value
Difference (mg/cm2):	<u>0.010</u>	(lpm)	(Hg)
% Difference / Pass or Fail:	<u>1.1%</u>	<u>15.0</u>	<u>398.1</u>
			<u>Good</u>

Setup and Calibration Values								
Parameter	Expected	Found	Parameter	Expected	Found	Parameter	Expected	Found
Clock	<u>1400</u>	<u>1400</u>	Analog Mode	Hourly	<u>Hourly</u>	Flow Type	Actual	<u>Act</u>
Location	<u>4</u>	<u>4</u>	Baud Rate	<u>9600</u>	<u>125200</u>	Restart Voltage	12.5 v	<u>12.5v</u>
Tape Advance	24 hrs	<u>24 hrs</u>	RH Setpoint	45%	<u>45%</u>	Std Cond Temp	25 C	<u>25C</u>
Realtime Avg	60 mins	<u>60 mins</u>	Delta T Setpoint	15 C	<u>15C</u>	DAC	8.0 v	<u>8.0v</u>
Machine Type	PM-10	<u>PM-10</u>	RH Control	On	<u>On</u>	RH Connect	No	<u>No</u>
Analog FS	1.0 v	<u>1.0v</u>	Flow Setpoint	16.7	<u>16.7</u>	Pump Protect	Off	<u>Off</u>

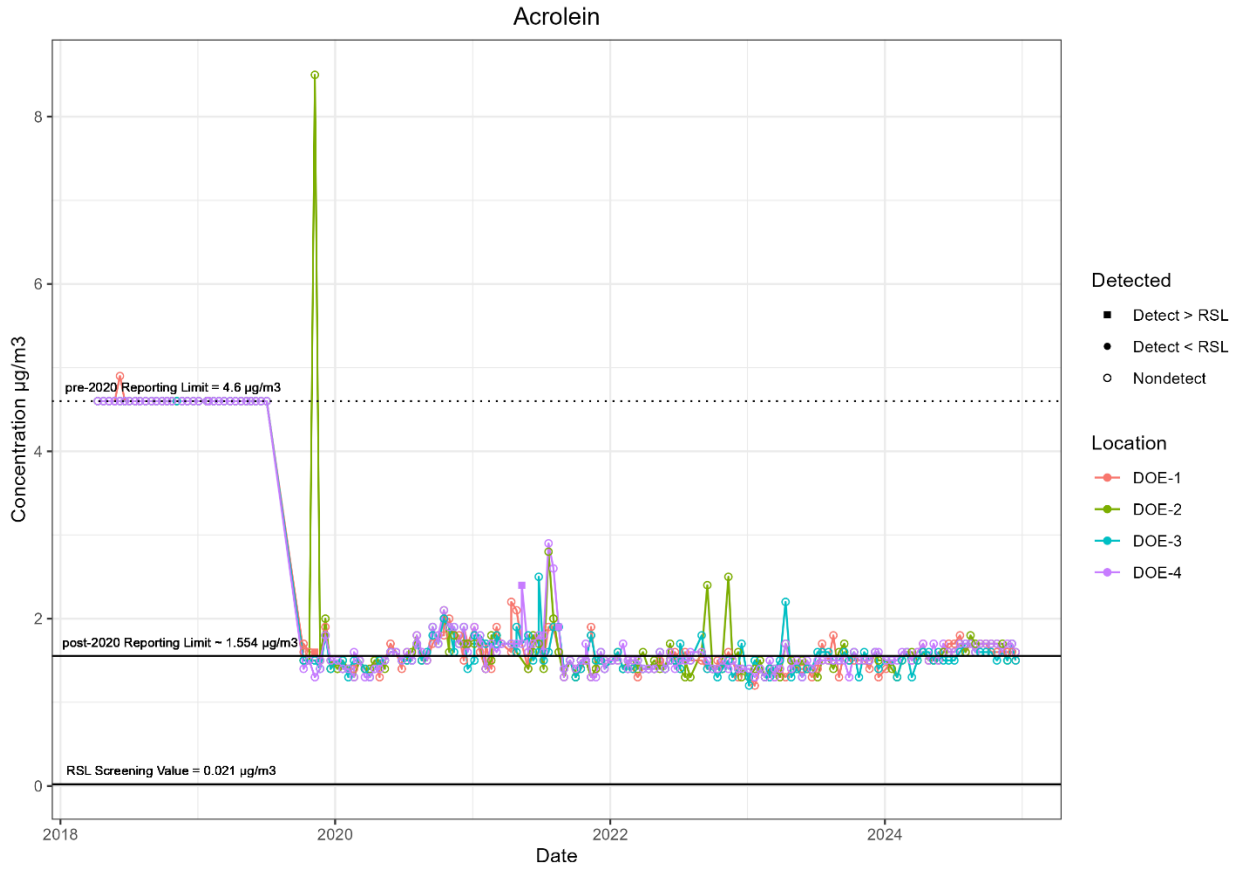
Last 6 Errors in E-BAM Error Log						
Error	Date	Time	Error	Date	Time	
<u>1 No new messages</u>	<u>12/18/24</u>	<u>1430</u>				
<u>2</u>						
<u>3</u>						

Audit Notes:

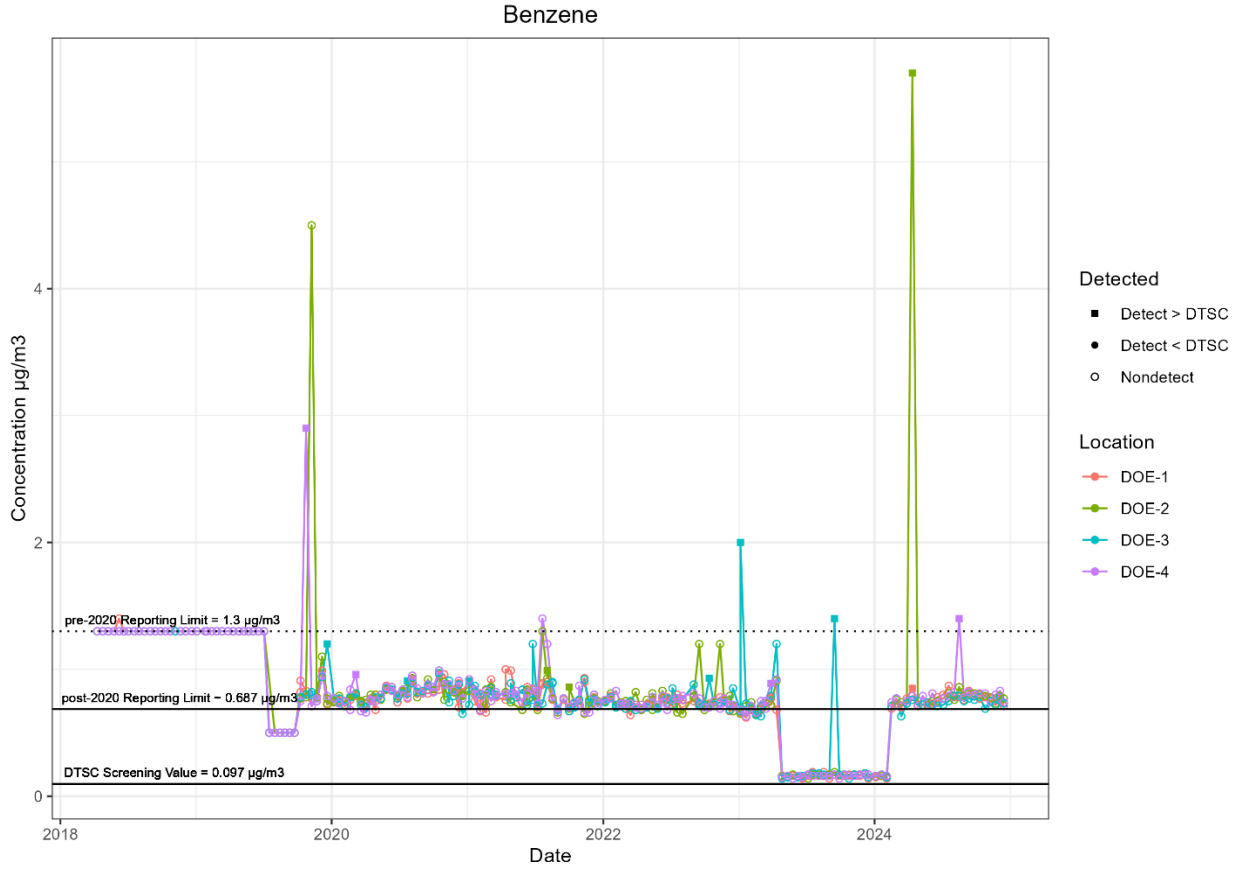
APPENDIX E

Select TO-15 VOC Time vs Concentration Plots 2018 through 2024

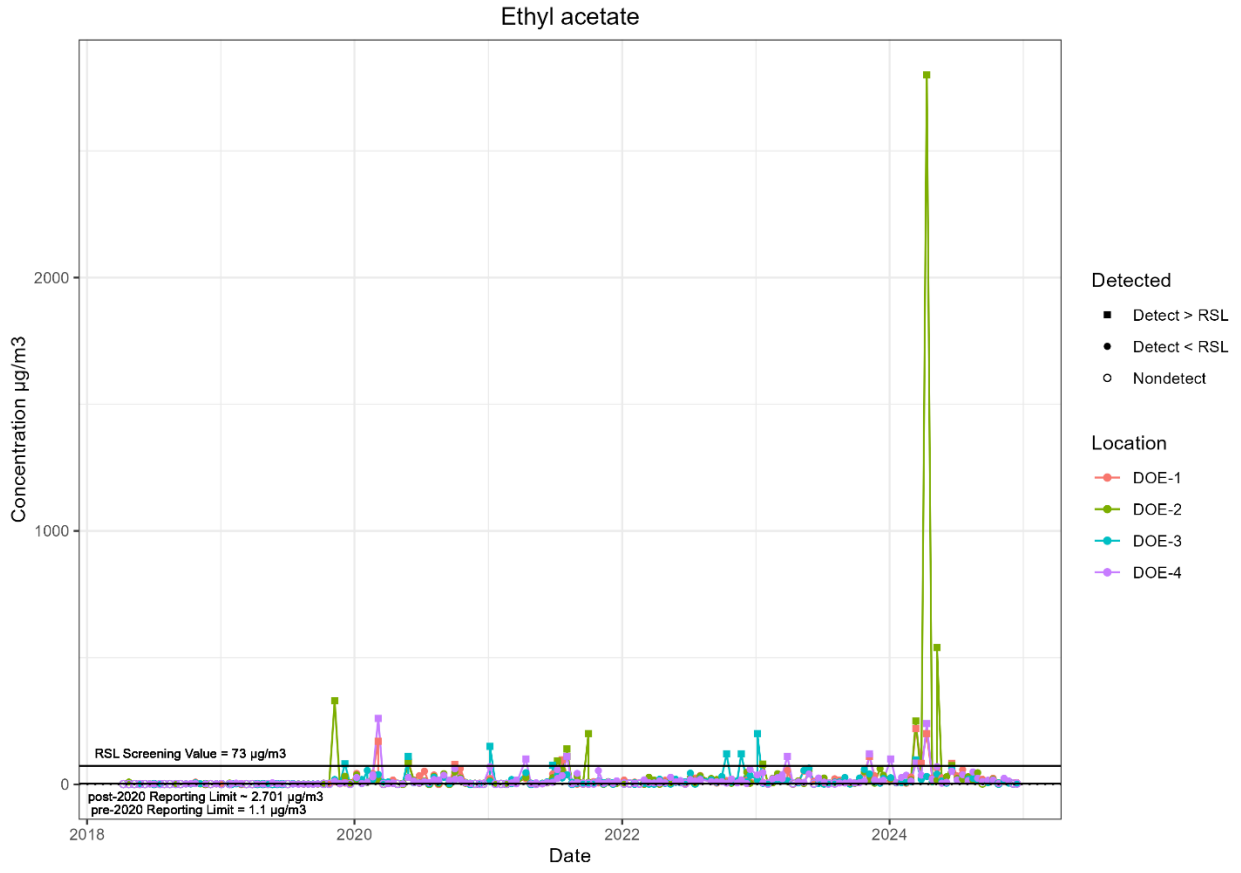
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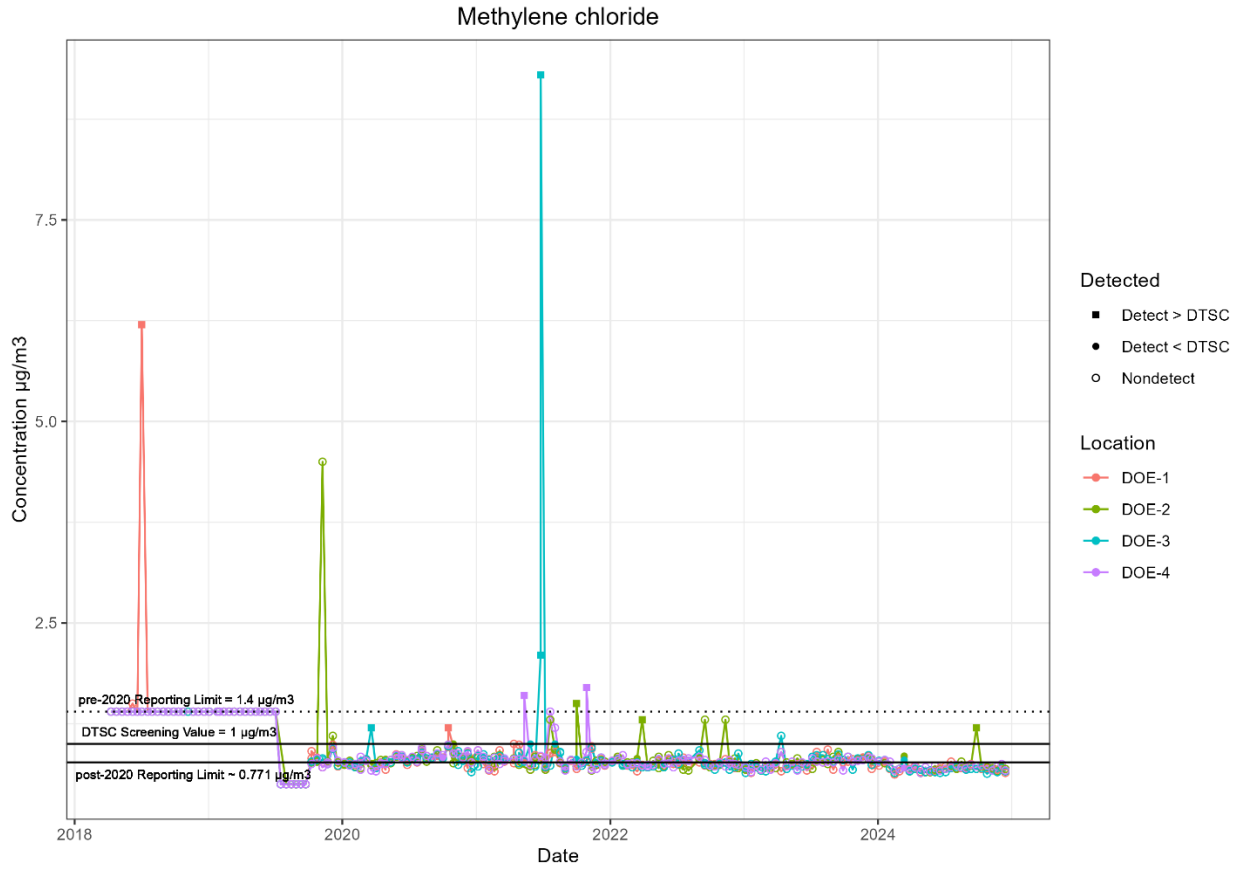
Data from 4/2018 - 12/2024 is presented.
Nondetects are presented at each result's associated reporting limit.



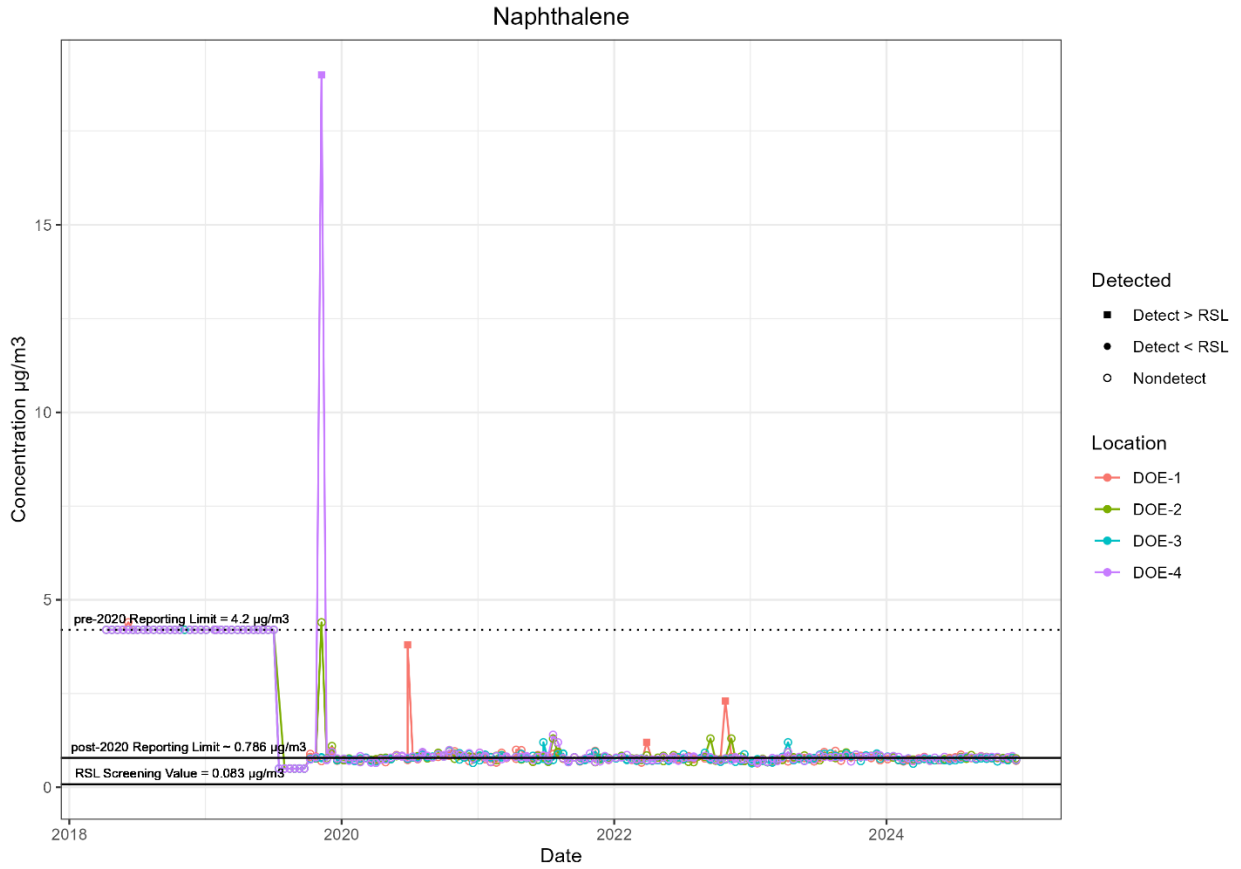
Data from 4/2018 - 12/2024 is presented.
 Nondetects are presented at each result's associated reporting limit.
 Note: Laboratory used lower reporting limit in mid-2023 through the beginning of 2024.



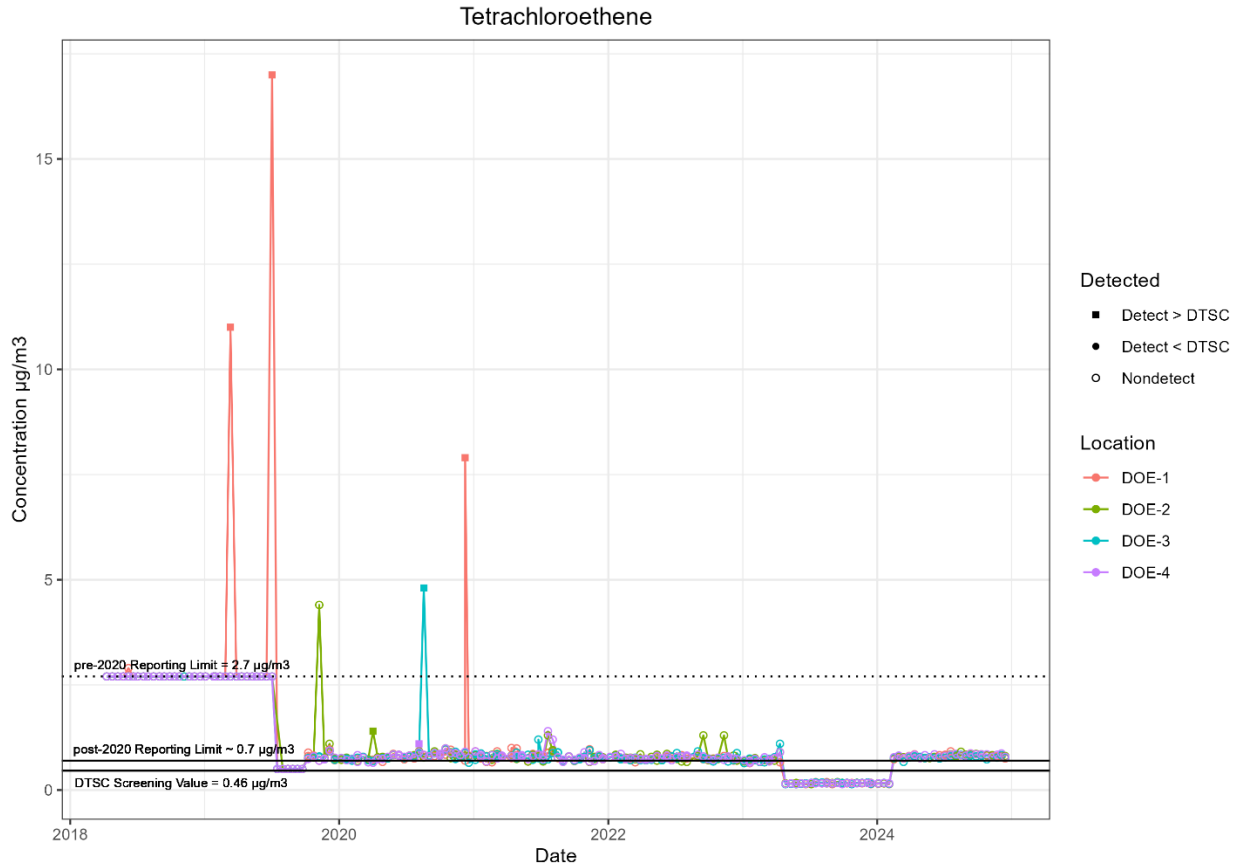
Data from 4/2018 - 12/2024 is presented.
Nondetects are presented at each result's associated reporting limit.



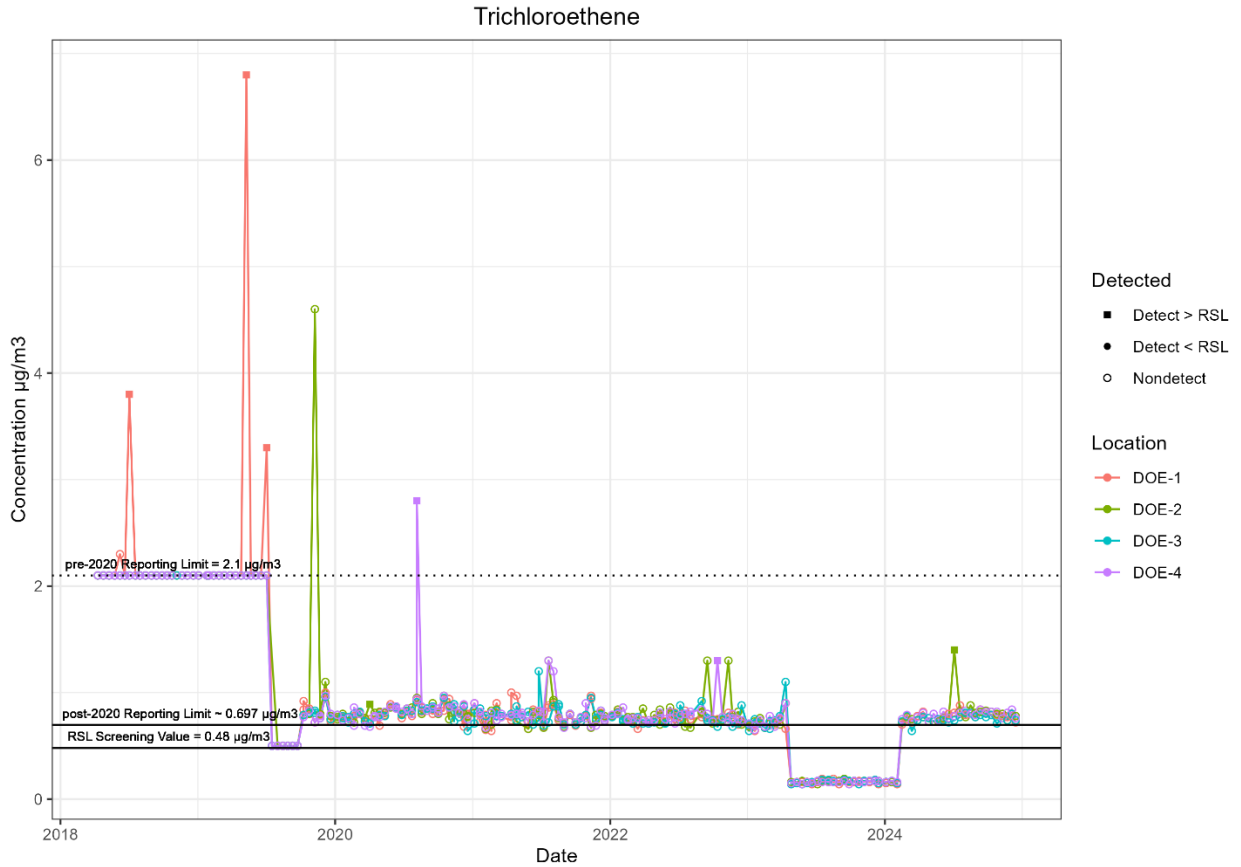
Data from 4/2018 - 12/2024 is presented.
Nondetects are presented at each result's associated reporting limit.



Data from 4/2018 - 12/2024 is presented.
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Data from 4/2018 - 12/2024 is presented.
 Nondetects are presented at each result's associated reporting limit.
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Data from 4/2018 - 12/2024 is presented.
Nondetects are presented at each result's associated reporting limit.
Note: Laboratory used lower reporting limit in mid-2023 through the beginning of 2024.

APPENDIX F

VOC Analytical Data Packages, Q1/2024 through Q4/2024

Appendix F is available via separate attachment.

APPENDIX G

Radiological Analytical Data Packages, Q1/2024 through Q4/2024

Appendix G is available via separate attachment.