# *Report on Quarterly Air Monitoring, Area IV, First Quarter 2025*

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

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

***Prepared by:***
**North Wind Portage, Inc.**

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

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# EXECUTIVE SUMMARY

This report summarizes the United States Department of Energy (DOE) air monitoring activities conducted during the first quarter of 2025 (Q1/2025), which is the twenty-eighth quarter (Q28) of the monitoring period (January 1, 2025, to March 31, 2025) at Area IV within the Santa Susana Field Laboratory (SSFL), located in Ventura County, California. The area specifically discussed within this report is the DOE portion, Area IV of SSFL, known as the Energy Technology Engineering Center (ETEC). The program is continuing for an eighth year, which consists of 2025, reporting periods Q28 through Q31.

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

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

The following air monitoring activities conducted during Q1/2025, by DOE within Area IV are summarized in this report:

- Collected meteorological data from one location (DOE-4);
- Collected $PM_{10}$ 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).

$PM_{10}$ data, meteorological data, and radionuclide data all met the data completeness goal of 80%, and VOC data met the completeness goal of 85% for Q1/2025. The Q2/2025 monitoring period of the Air Monitoring Program will begin April 1, 2025.

The following site activities were conducted during Q1/2025 by DOE within Area IV:

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

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# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| °C | degrees Celsius |
| °F | degrees Fahrenheit |
| µCi | microcurie(s) |
| µg/m$^3$ | microgram(s) per cubic meter |
| Boeing | The Boeing Company |
| CAAQS | California Ambient Air Quality Standards |
| CFR | Code of Federal Regulations |
| DASC | Data Assessment Statistical Calculator |
| DOE | U.S. Department of Energy |
| DTSC | State of California Department of Toxic Substances Control |
| EPA | U.S. Environmental Protection Agency |
| ETEC | Energy Technology Engineering Center |
| GC | gas chromatography |
| Hg | mercury |
| HHRA | Human Health Risk Assessment |
| m | meter(s) |
| m/sec | meter(s) per second |
| mb | millibar(s) |
| MDC | minimum detectable concentration |
| mL | milliliter(s) |
| mph | miles per hour |
| MS | mass spectrometry |
| MDL | method detection limit |
| NAAQS | National Ambient Air Quality Standards |
| NASA | National Aeronautics and Space Administration |
| NIST | National Institute of Standards and Technology |
| pCi | picocurie(s) |
| $PM_{10}$ | particulate matter less than 10 microns in aerodynamic diameter |
| Q28 | twenty-eighth quarter |
| QA | quality assurance |
| QC | quality control |
| RAWS | Remote Automatic Weather Stations |
| RPD | relative percent difference |
| RSL | regional screening level |
| SDG | sample delivery group |
| SSFL | Santa Susana Field Laboratory |
| VOC | volatile organic compound |

# 1. INTRODUCTION

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

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

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

The objective of the Air Monitoring Program is to evaluate project conditions and provide a basis for determining the magnitude of deviation from those baseline conditions that may result from onsite remediation activities at SSFL. Responsible parties are monitoring for particulate matter between 2.5 and 10 microns in aerodynamic diameter ($PM_{10}$), and volatile organic compounds (VOCs), at 14 locations at SSFL. Data was collected for four perimeter samplers (DOE-1 through DOE-4) and analyzed for gross alpha and gross beta. Individual radionuclide concentrations were determined by analysis at an offsite laboratory for these same four locations. Meteorological data are also collected as a part of the Air Monitoring Program.

Figure 1 shows the air monitoring locations for the Air Monitoring Program. These locations were selected based on the areas to be remediated, with consideration of winds in the area, topographic features, and accessibility. The air monitoring sites were also selected based on guidance obtained from the U.S. Environmental Protection Agency's (EPA's) *Quality Assurance Handbook for Air Pollution Measurement Systems*, Volume II, Ambient Air Monitoring Program (EPA 2017) and *Meteorological Monitoring Guidance for Regulatory Modeling Applications* (EPA 2000). Sites were evaluated per 40 Code of Federal Regulations (CFR) 58, Appendix C – Ambient Air Quality Monitoring Methodology. DOE is responsible for DOE-1, DOE-2, DOE-3, and DOE-4 of the 14 monitoring locations, represented in Figure 1. VOCs, $PM_{10}$, and radionuclides are monitored at the four DOE monitoring locations, and meteorological conditions are monitored at the DOE-4 location. The DOE monitoring locations DOE-1 through DOE-4 are shown in Figure 2.

This report summarizes the results and quality assurance (QA) activities performed during the first quarter of 2025 (Q1/2025), which was from January 1, 2025, through March 31, 2025.

## 1.1 Regional Climate and Wind Direction

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

During Q1/2025, the Simi Valley received approximately 8.29 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 Q1/2025 reporting period (January 1, 2025, through March 31, 2025).

Quality objectives and data completeness were met for all meteorological, $PM_{10}$, VOC, and radionuclide data for Q1/2025 of the Air Monitoring Program. Urban background data compared with air monitoring data indicate that the $PM_{10}$ concentrations measured at stations DOE-1, DOE-2, DOE-3, and DOE-4 during Q1/2025 are comparable to the $PM_{10}$ concentrations measured at stations characterizing urban background. Other sources that emit VOC characteristics are motor vehicle emissions, fossil fuel combustion, and wildfires. The results are reflected when considering SSFL site's urban background and relatively remote location from vehicle traffic. Two $PM_{10}$ concentrations exceeded the California Ambient Air Quality Standard (CAAQS; 50 micrograms per cubic meter [$\mu g/m^3$]), and none of these values were above the National Ambient Air Quality Standard (NAAQS; 150 $\mu g/m^3$).

During Q1/2025 no downtime was observed for the unit at DOE-1. The unit at DOE-2 was down on January 1, 2025, due to pump and flow sensor issues; the pump and flow sensor were replaced and the unit restarted on January 17, 2025. The unit at DOE-3 was down on January 1, 2025; the unit was sent in for repair, and once a backup unit was received back from repair the replacement unit was restarted on January 20, 2025. The unit at DOE-4 was down on February 1, 2025; the unit was sent in for repair, and once a backup unit was received back from repair the replacement unit was restarted on February 17, 2025.

During Q1/2025 five VOC analytes were detected above the EPA regional screening level (RSL) or the April 2025 DTSC Human Health Risk Assessment (HHRA) Note 3 Screening Levels. Benzene was detected at DOE-1, DOE-2, DOE-3, and DOE-4; ethyl acetate was detected at DOE-1, DOE-2, and DOE-4; acrolein was detected at DOE-1 and DOE-2; acrylonitrile was detected at DOE-4; and naphthalene was detected at DOE-3. Benzene is a chemical used in a variety of industries and applications, such as gasoline, plastic manufacturing, adhesives, cleaning products, paint thinners, dyes, pesticides, pharmaceuticals, and printing inks. Ethyl acetate is a solvent used in a variety of industries and applications, such as adhesives, paint and coating products, pharmaceuticals, and printing inks. Acrolein is a chemical used as a chemical intermediate in the synthesis of other chemicals as well as a byproduct of combustion and is found in tobacco smoke and vehicle exhaust. Acrylonitrile is a chemical used to produce plastics, synthetic rubbers, and acrylic fibers. Naphthalene is a chemical used in the production of various industrial and consumer products as well as a byproduct of combustion and is found in tobacco smoke, vehicle exhaust, and forest fires. By using the results from the baseline Air Monitoring Program, along with other site characterization information, analytes were selected for routine air monitoring during soil disturbances. Establishing sources for specific contaminants or performing source apportionment was not a requirement for identifying remedial air quality impacts, nor was it within the scope or data quality objectives of the Air Monitoring Program.

Data collected during Q1/2025 agree with data collected, analyzed, and reported by the State of California DTSC, Los Angeles County Emergency Response Organization, the DOE Emergency Response organization, or other Multi-Agency Task Forces. Air monitoring at Area IV of the SSFL is to be continued starting April 1, 2025, for Q2/2025 of the Air Monitoring Program.

Site activities during Q1/2025 included quarterly site-wide groundwater level monitoring, surveillance and maintenance, and groundwater sampling activities conducted by CDM Smith at the Former Sodium Disposal Facility as part of the groundwater interim measures.

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# 3. ANALYTICAL SAMPLING EVENTS

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

During Q1/2025, radionuclide samples were collected at four perimeter sampler locations, DOE-1 through DOE-4. These samples were collected on glass fiber (Type A/E) filters that are changed twice a week. After a minimum 120-hour holding time to allow the decay of short-lived radon and thoron daughter products, the samples are simultaneously counted for gross alpha and beta activity with a low-background, thin-window, gas-flow, proportional counting system continually purged with P-10 argon/methane counting gas over a preset time interval. There were 102 airborne radioactivity filter samples collected in Q1/2025 — 26 each at DOE-1 and DOE-3, and 25 each at DOE-2 and DOE-4. Following analysis for gross alpha and gross beta radiation, sample filters were combined to form one composite sample representative of each location. The four composite samples were then analyzed for individual radionuclides at an offsite laboratory.

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# 4. DATA

Sections 4.1 through 4.4 discuss Q1/2025 air monitoring data.

## 4.1 Meteorological Data

**General Summary**

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

Monitored meteorology parameters at the DOE-4 station included wind speed, wind direction, air temperature at 2 meters (m) and 10 m, relative humidity, precipitation, barometric pressure, and solar radiation. In addition, statistical parameters provided by the data logger included delta temperature (i.e., the 10-m temperature minus the 2-m temperature), maximum wind speed (i.e., wind gust), and standard deviation of wind direction. Observations were recorded at 15-minute intervals corresponding to minutes :00, :15, :30, and :45 each hour. There were 90 days in this reporting period (Q1/2025) from 01 Jan 2025 through 31 Mar 2025 with a total of 8,640 possible 15-minute observations. This is the first quarter of Year 8 of the baseline monitoring.

**Data Validation and Statistics**

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

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

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

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

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

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

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

**Wind Rose**

The final validated 15-minute meteorological dataset was used to develop the wind rose for Q1/2025 as presented in Figure 3. A wind rose is a graphical representation of wind speed and direction distribution (or wind climatology) for the period of interest. The frequency of winds blowing from specific directions are shown as petals on the wind rose, with the frequency of wind speeds depicted by color bands. Calm winds are identified as being less than 0.5 meters per second (m/sec).

During Q1/2025, data capture for wind speed and direction at DOE-4 was 100%. The average and maximum wind speeds were 5.0 m/sec and 26.4 m/sec, respectively. The maximum recorded wind gust was 35.5 m/sec. The predominant wind directions this quarter were from the east-southeast (ESE) and from the north-northeast (NNE).

Table 2. Data screening summary for monitored meteorological parameters.

| Meteorological Parameter | Screening Criteria [1] (for valid sensor responses) | Data Completeness Percent (%) [2] | | |
|---|---|---|---|---|
| | | Q1/2025 | Year 8 to Date | Project to Date |
| Wind Speed | between 0 and 25 m/sec | 100 | 100 | 96.33 |
| | > 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 | 96.90 |
| | > 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 | 96.90 |
| Temperature @ 10 m | ≤ local record high (monthly basis) | 100 | 100 | 96.90 |
| | ≥ local record low (monthly basis) | | | |
| | > 0.5°C variation over 12 hours | | | |
| Temperature @ 2 m | ≤ local record high (monthly basis) | 100 | 100 | 96.86 |
| | ≥ local record low (monthly basis) | | | |
| | > 0.5°C variation over 12 hours | | | |
| Delta Temperature | ≤ 0.1°C during daytime | 100 | 100 | 96.86 |
| | ≥ -0.1°C during nighttime | | | |
| | between -3.0 and 5.0°C | | | |
| Relative Humidity (and Dewpoint Temperature) | relative humidity between 0–100% | 100 | 100 | 89.79 |
| | 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 | 96.89 |
| | ≤ 4 inches in 24 hours | | | |
| | ≥ 2 inches in 3 months | | | |
| Barometric Pressure | between 871 and 982 mb (local) (i.e., between 940 and 1060 mb sea level) | 100 | 100 | 96.90 |
| | ≤ 6 mb variation over 3 hours | | | |
| Solar Radiation | > 0 at night | 100 | 100 | 96.87 |
| | ≤ maximum possible for date, time, lat/long | | | |

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

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

a. Missing or suspect observations count against data completeness statistics.

b. Year Two is an abbreviated data collection year spanning the period Apr 15–Dec 31, 2019 (i.e., Quarters 5, 6, and 7). This was done to synchronize future data collection years with calendar years.

c. Last column in this table represents the cumulative Completeness % for all completed quarterly reporting periods.

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

- Q01 = 8,736
- Q02 = 8,832
- Q03 = 8,832
- Q04 = 8,640 (only 3 quarters)
- Q05 = 8,736
- Q06 = 8,832
- Q07 = 7,488
- Q08 = 8,736
- Q09 = 8,736
- Q10 = 8,832
- Q11 = 8,832
- Q12 = 8,640
- Q13 = 8,736
- Q14 = 8,832
- Q15 = 8,832
- Q16 = 8,640
- Q17 = 8,736
- Q18 = 8,832
- Q19 = 8,832
- Q20 = 8,640
- Q21 = 8,736
- Q22 = 8,832
- Q23 = 8,832
- Q24 = 8,736
- Q25 = 8,736
- Q26 = 8,832
- Q27 = 8,832
- Q28 = 8,640

- Year One = 35,040
- Year Two = 25,056 (abbreviated)
- Year Three = 35,136
- Year Four = 35,040
- Year Five = 35,040
- Year Six = 35,040
- Year Seven = 35,136
- Year Eight = 8,640 (to date)
- Project = 244,128 (to-date)

## 4.2 $PM_{10}$ Data

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

$PM_{10}$ data are collected with Met One E-BAM monitors at four monitoring locations. The Met One E-BAM uses the principle of beta attenuation to provide a determination of mass concentration. Twenty-four-hour concentrations are calculated from the hourly concentrations. There were 90 days in this reporting period.

- DOE-1 had valid readings all 90 days.
- DOE-2 had valid readings 74 out of 90 days.
- DOE-3 had valid readings 71 out of 90 days.
- DOE-4 had valid readings 73 out of 90 days.

DOE-1 had data completeness of 100% for $PM_{10}$ in Q1/2025, and DOE-2, DOE-3, and DOE-4 had data completeness of 82%, 79%, and 81%, respectively, for a total data completeness of 85.5%, exceeding the project goal of 80% completeness for total samples collected during Q1/2025 (see Table 3). The cumulative total project data completeness has been calculated as 92% from April 2018 through March 2025. The complete table of daily averages for Q1/2025 is presented in Appendix A. During Q1/2025 no downtime was observed for the unit at DOE-1. The unit at DOE-2 was down on January 1, 2025, due to pump and flow sensor issues; the pump and flow sensor were replaced and the unit restarted on January 17, 2025. The unit at DOE-3 was down on January 1, 2025; the unit was sent in for repair, and once a backup unit was received back from repair the replacement unit was restarted on January 20, 2025. The unit at DOE-4 was down on February 1, 2025; the unit was sent in for repair, and once a backup unit was received back from repair the replacement unit was restarted on February 17, 2025. See the $PM_{10}$ daily average table in Appendix A for specific downtime dates.

The nearby State and Local Air Monitoring Stations (SLAMS), Simi Valley – Cochran Street – $PM_{10}$ Daily Averages, from 01/01/2024 to 07/31/2024 are presented in Appendix A (2025a). At the time of writing this report, the data posted are the most current available. Please note, per the EPA website, the EPA data are updated twice per year: once in June to capture the complete data for the prior year, and once in December to capture the data for the summer (ozone season).

Table 3. $PM_{10}$ data completeness for January 1, 2025, to March 31, 2025.

| Location | Valid Readings (Days) | Possible Readings (Days) | Data Completeness (Percent) |
|---|---|---|---|
| DOE-1 | 90 | 90 | 100% |
| DOE-2 | 74 | 90 | 82% |
| DOE-3 | 71 | 90 | 79% |
| DOE-4 | 73 | 90 | 81% |
| | | Average Total Data Completeness | 85.5% |

The five highest $PM_{10}$ results identified for the reporting period are listed in Table 4 along with the CAAQS for $PM_{10}$. $PM_{10}$ concentrations were consistent with levels typically found in urban air. Of these top five

results, three were recorded at DOE-1, and two at DOE-4. In total for Q1/2025, two values were above the CAAQS of 50 µg/m$^3$ and none of the values were above the NAAQS of 150 µg/m$^3$. Over these dates, elevated winds and nearby wildfires may have contributed to the elevated readings since on those days the elevated readings correlated very closely with wind direction from the Palisades Fire. Historically, a direct correlation between wildfires, high wind speeds, and higher $PM_{10}$ readings has been noticeable.

Table 4. Top five PM10 24-hour average concentration days for Q1/2025.

| Date | Location | $PM_{10}$ Value (µg/m$^3$) | CAAQS (µg/m$^3$) |
|---|---|---|---|
| 1/8/2025 | DOE-4 | **59.775** | 50 |
| 1/7/2025 | DOE-1 | **55.833** | 50 |
| 1/7/2025 | DOE-4 | 43.045 | 50 |
| 1/8/2025 | DOE-1 | 38.166 | 50 |
| 3/25/2025 | DOE-1 | 28.818 | 50 |

Note: Bold numbers and gray shading indicate values that exceeded CAAQS.

## 4.3 Volatile Organic Compound Data

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

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

Table 5. Ambient air VOC data completeness.

| Location | Valid Readings (Days) | Possible Readings (Days) | Data Completeness (Percent) |
|---|---|---|---|
| DOE-1 | 7 | 7 | 100% |
| DOE-2 | 7 | 7 | 100% |
| DOE-3 | 7 | 7 | 100% |
| DOE-4 | 7 | 7 | 100% |
| | | Average Total Data Completeness | 100% |

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

- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m$^3$ during the January 8, 2025, sampling at all four locations at concentrations of 0.40 J;J µg/m$^3$, 0.31 J;J µg/m$^3$, 0.28 J;J µg/m$^3$, and 0.33 J;J µg/m$^3$. In addition, ethyl acetate was detected above the EPA RSL limit of 73 µg/m$^3$ during the January 8, 2025, sampling at three locations at concentrations of 870;D; µg/m$^3$, 75; µg/m$^3$, and 79; µg/m$^3$.
- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m$^3$ during the January 14, 2025, sampling at all four locations at concentrations of 0.28 J;J µg/m$^3$, 0.26 J;J µg/m$^3$, 0.25 J;J µg/m$^3$, and 0.25 J;J µg/m$^3$.

- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m$^3$ during the January 29, 2025, sampling at all four locations at concentrations of 0.55 J; µg/m$^3$, 0.49 J; µg/m$^3$, 0.50 J; µg/m$^3$, and 0.51 J; µg/m$^3$. In addition, acrolein was detected above the EPA RSL limit of 0.021 µg/m$^3$ during the January 29, 2025, sampling at one location at a concentration of 1.3 J; µg/m$^3$.
- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m$^3$ during the February 13, 2025, sampling at all four locations at concentrations of 0.34 J; µg/m$^3$, 0.61 J; µg/m$^3$, 0.34 J; µg/m$^3$, and 0.35 J; µg/m$^3$. In addition, acrolein was detected above the EPA RSL limit of 0.021 µg/m$^3$ during the February 12, 2025, sampling at one location at a concentration of 0.71 J; µg/m$^3$.
- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m$^3$ during the February 26, 2025, sampling at all four locations at concentrations of 0.24 J; µg/m$^3$, 0.21 J; µg/m$^3$, 0.23 J; µg/m$^3$, and 0.21 J; µg/m$^3$. In addition, acrylonitrile was detected above the EPA RSL limit of 0.041 µg/m$^3$ during the February 26, 2025, sampling at one location at a concentration of 5.4; µg/m$^3$.
- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m$^3$ during the March 13, 2025, sampling at all four locations at concentrations of 0.38 J; µg/m$^3$, 0.33 J; µg/m$^3$, 1.2; µg/m$^3$, and 0.35 J; µg/m$^3$. In addition, naphthalene was detected above the EPA RSL limit of 0.083 µg/m$^3$ during the March 13, 2025, sampling at one location at a concentration of 0.22 J; µg/m$^3$.
- Benzene was detected above the DTSC HHRA Note 3 level limit of 0.097 µg/m$^3$ during the March 28, 2025, sampling at all four locations at concentrations of 0.19 J; µg/m$^3$, 0.19 J; µg/m$^3$, 0.16 J; µg/m$^3$, and 0.18 J; µg/m$^3$.

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

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

## 4.4 Radionuclide Data

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

There were 102 airborne radioactivity filter samples collected in Q1/2025 — 26 each for DOE-1 and DOE-3, and 25 each for DOE-2 and DOE-4. Each sample was collected on a glass-fiber filter (as discussed in Section 3) and was analyzed using a “low background” Protean radiation counter system onsite. These

samples included background radioactive materials and the potential of Area IV–specific radioactive materials.

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

While approximately 1% of the gross alpha results and approximately 76% of the gross beta-gamma results are above the MDC, none of these results are significant and all were well below the effluent limits specified in California regulations. This is because the "background" value is computed with a clean filter, not a filter exposed to background airborne concentrations. While a proportion of the beta results were detectable, the average results remained low. The elevated (but still low) results may be due to more airborne dust or smoke. Historically, there has been a noticeable direct correlation between high wind speeds and higher beta results.

Following collection and onsite analysis, the air filters were composited and analyzed for specific radionuclides by an offsite laboratory. The data are shown in Table C-2 (Appendix C). The laboratory analysis determined that most radioactive material present was natural in origin, consisting of beryllium-7, polonium-210, potassium-40, combined radium-226 and radium-228, thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235/236, and uranium-238.

While artificial radionuclides (e.g., cesium-137, strontium-90, plutonium-239) were present in very small amounts, none of the results were above the MDC in Q1/2025. The presence of these radionuclides is considered a part of the normal variation of global fallout and resuspension activities.

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

Table 6. Gross alpha and beta-gamma average results for Q1/2025.

| Location | Average alpha result (µCi/mL) | Average alpha MDC (µCi/mL) | Average beta result (µCi/mL) | Average beta MDC (µCi/mL) |
|---|---|---|---|---|
| DOE-1 | 7.31E-16 | 6.02E-15 | 4.99E-14 | 2.44E-14 |
| DOE-2 | 8.61E-16 | 6.09E-15 | 4.80E-14 | 2.47E-14 |
| DOE-3 | 3.99E-16 | 6.02E-15 | 4.74E-14 | 2.45E-14 |
| DOE-4 | 1.68E-16 | 6.18E-15 | 5.27E-14 | 2.51E-14 |
| Average | 5.40E-16 | 6.08E-15 | 4.95E-14 | 2.47E-14 |

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# 5. QA/QC ACTIVITIES

The following QA/QC activities were conducted for the $PM_{10}$, VOC, radionuclide, and meteorological data collection and analysis.

## 5.1 Field QA/QC

### 5.1.1 $PM_{10}$

The 24-hour daily averages for Q1/2025 are presented in Appendix A along with the monthly minimum, maximum, and 95$^{th}$ percentile for each station location. In addition, the nearby SLAMS, Simi Valley – Cochran Street – $PM_{10}$ Daily Averages, from 01/01/2024 to 07/31/2024 along with the monthly average minimum, maximum, and 95$^{th}$ percentile for the Simi Valley – Cochran Street location, are presented in Appendix A (2025a). Please note, only the Simi Valley $PM_{10}$ 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 $PM_{10}$ data, not $PM_{2.5}$ data. In addition, per the EPA website, the EPA data are updated twice per year: once in June to capture the complete data for the prior year, and once in December to capture the data for the summer (ozone season). At the time of writing this report, the data posted are the most current available.

#### Flow Verifications

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

E-BAM units are occasionally swapped out for maintenance. When this occurs during a quarter, the reported quarterly bias percentage for the affected DOE site is based on the combined monthly audit results for the E-BAM units that operated at the site during that quarter. During Q1/2025, the monitors at DOE-2 and DOE-3 were down to start the year and were restarted in mid-January once repaired monitors were received back; the monitor at DOE-4 stopped functioning in February and was replaced and restarted in mid-February. The Q1/2025 quarterly flow rate bias percentages at the four E-BAM sites ranged from -2.67 to -1.00%. These results were within the flow rate measurement quality objective of +/- 4%.

Complete audit reports and flow verification results for Q1/2025 are presented in Appendix D of this document. The flow rate verifications were based on 40 CFR 58, Appendix A, 3.3.1 and 4.2.2 through 4.2.3, along with the *Guideline on the Meaning and the Use of Precision and Bias Data Required by 40 CFR Part 58 Appendix A* (EPA 2007). The *Data Assessment Statistical Calculator* (DASC) tool, which is an EPA Excel-based software application, was used to perform the necessary statistical calculations based on the flowrate data collected during the monthly audits. Sections 2 and 2.5 of this EPA guidance document (EPA 2007) provide additional information and instruction for using the DASC tool.

### 5.1.2 VOCs

All data underwent at least two levels of QC review at the laboratory prior to transmission to North Wind. A minimum of 20% of the transmitted VOC results undergo Level IV data validation, annually. During this quarter, two of the seven SDGs, P2500084 and P2500124, underwent Level IV data validation. The data

validation ensures that the required analytical measurement quality objectives are met to ensure the data are of sufficient quality for their intended purpose.

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

### 5.1.3 Field Duplicates

Seven field duplicates were collected during this reporting period. Seven sampling events were conducted for the Q1/2025 effort. Forty-four sample and duplicate analyte detections were within the quality objective of +/- 15% relative percent difference (RPD). Forty-six sample and duplicate analyte detections exceeded the quality objective of +/- 15% RPD; however, these warrant no qualification since the parent and field duplicate results were either non-detect or <MDL. There were no other detections associated with the samples and associated duplicates collected during this reporting period. The following analytes in the field duplicate pairs exceeded the quality objective of +/- 15% RPD:

- Ethyl acetate in P2500084, P2500707, P2500922, and P2501109.
- Dichlorodifluoromethane (CFC 12), trichlorofluoromethane (CFC 11), 2-propanol (isopropyl alcohol), methylene chloride, ethyl acetate, and toluene in P2500124.
- 2-Propanol (isopropyl alcohol), carbon disulfide, ethyl acetate, and toluene in P2500316.
- Dichlorodifluoromethane (CFC 12), carbon disulfide, 2-butanone (MEK), ethyl acetate, and toluene in P2500558.

### 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 -3.5 inches mercury (Hg) to -1.0 inches Hg during this reporting period.

### 5.1.5 Radiological

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

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

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

### 5.1.6 Meteorological

During the reporting period, a weekly data validation screening and review was performed on the monitored meteorological parameters based on the EPA guidance document *Meteorological Monitoring*

*Guidance for Regulatory Modeling Applications* (EPA 2000), Table 8-4 – Suggested Data Screening Criteria, as outlined in Section 4.1. The data validation procedure provided the basis for evaluating data completeness and for determining sensor performance and/or maintenance status.

### 5.1.7 Maintenance

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

### 5.1.8 Corrective Action

Issues and corrective actions regarding the $PM_{10}$ monitors and the meteorological station are noted in Sections 5.1.8.1 and 5.1.8.2, respectively. Issues and corrective actions regarding the E-BAM monitors are noted in Section 4.2. No issues or corrective actions were noted regarding the remaining monitoring equipment or sampling events during this reporting period.

#### *5.1.8.1 $PM_{10}$ Monitors*

E-BAM units are occasionally swapped out for maintenance or repair. Refer to Section 4.2 for a detailed description of $PM_{10}$ air monitoring equipment issues.

#### *5.1.8.2 Meteorological Station*

This section covers data quality issues and associated corrective actions that occurred during the current monitoring quarter. The data percent completion goal of ≥ 80% was met during Q1/2025 for all parameters. 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) implementation of the recommended sensor maintenance schedule (shown in Table 7 for reference).

**(1) Delta Temperature Calculation**

- Data Quality Issue:
    - For meteorological monitoring, delta temperature should be defined as T at the higher level minus T at the lower level. However, the datalogger was improperly programmed to calculate the inverse of delta temperature when the station was replaced after the Woolsey Wildfire in 2018. Consequently, delta temperature observations continue to be 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" multiplication factor, delta temperature values in the validated project dataset accurately present delta temperature as:

*Delta Temperature = [Temperature @ 10 m] minus [Temperature @ 2 m]*

**(2) Recommended Maintenance Schedule:**

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

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

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

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

## 5.2 Laboratory QA/QC

This report covers 35 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 seven SDGs by the laboratory. All seven SDG analyses were performed by ALS in Simi Valley, CA. For each SDG, the laboratory ran continuing calibration verification, a method blank, and laboratory control samples, and verified surrogate recoveries for each sample.

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

## 5.3 Audit Results

The $PM_{10}$ instruments were calibrated at the manufacturer and were functioning properly upon installation. The $PM_{10}$ instruments were audited monthly with a secondary NIST traceable flow meter. Although audits occur only monthly, the instruments were checked several times a week to ensure that they were functioning. Table 8 lists the dates for audits conducted in January through March 2025. No flow rate comparisons exceeded the project's acceptance criterion of +/- 4. The sample nozzles and support vanes were cleaned as needed. Complete audit reports are presented in Appendix D.

Table 8. $PM_{10}$ audit completeness.

| Location | Met One E-BAM Serial Number | Parameter | Date |
|---|---|---|---|
| DOE-1 | W23314 | $PM_{10}$ | 01/17/2025 |
| DOE-2 | Y12096 | $PM_{10}$ | 01/17/2025 |
| DOE-3 | W23313 | $PM_{10}$ | 01/20/2025* |
| DOE-4 | B18932 | $PM_{10}$ | 01/17/2025 |
| DOE-1 | W23314 | $PM_{10}$ | 02/22/2025 |
| DOE-2 | Y12096 | $PM_{10}$ | 02/22/2025 |
| DOE-3 | W23313 | $PM_{10}$ | 02/22/2025 |
| DOE-4 | X16067 | $PM_{10}$ | 02/22/2025 |
| DOE-1 | W23314 | $PM_{10}$ | 03/21/2025 |
| DOE-2 | Y12096 | $PM_{10}$ | 03/21/2025 |
| DOE-3 | W23313 | $PM_{10}$ | 03/21/2025 |
| DOE-4 | X16067 | $PM_{10}$ | 03/21/2025 |

Note:

* = There was no January 17, 2025, audit for B20070. This is the initial audit for W23313, which replaced B20070.

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# 6. 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.

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California Environmental Protection Agency, DTSC. 2025. Human and Ecological Risk Office Human Health Risk Assessment Note Number 3, DTSC-modified Screening Levels. April. Available online at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2025/04/HHRA-Note-3-Revised-April-2025.pdf.

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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://19january2017snapshot.epa.gov/sites/production/files/2015-07/documents/epa-to-15_0.pdf

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U.S. Environmental Protection Agency (EPA). 2024b. Regional Screening Levels – Generic Tables. https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables. November.

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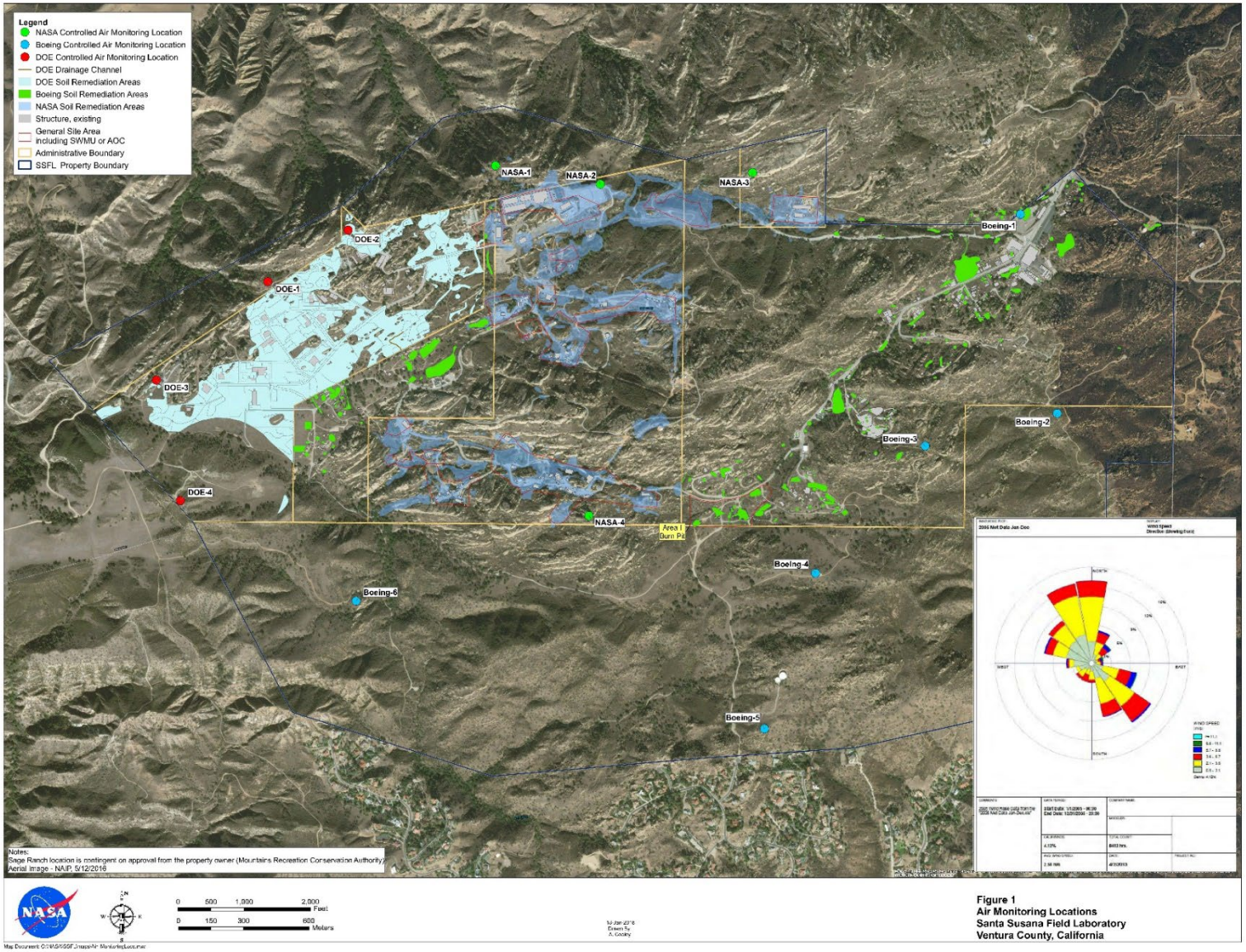
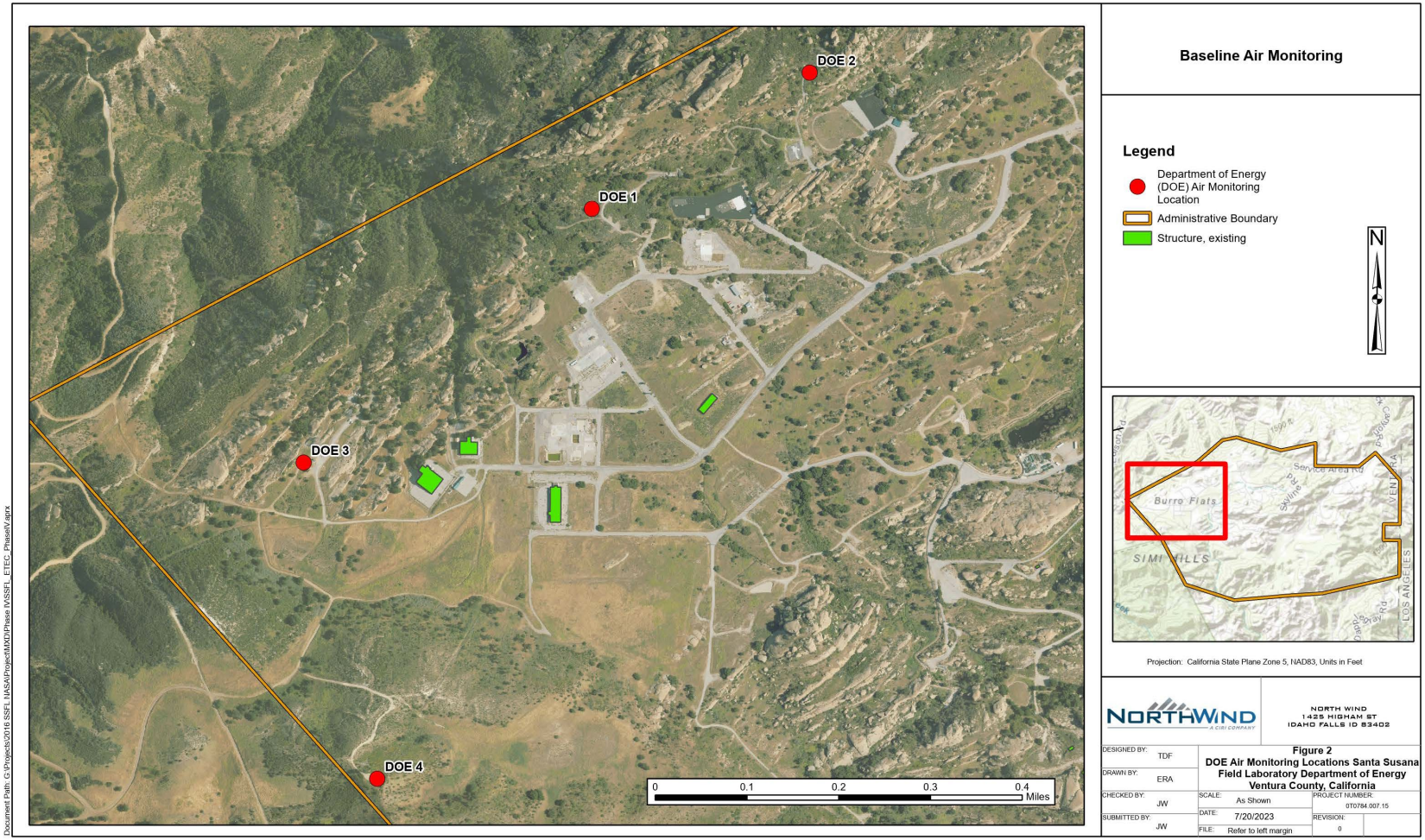
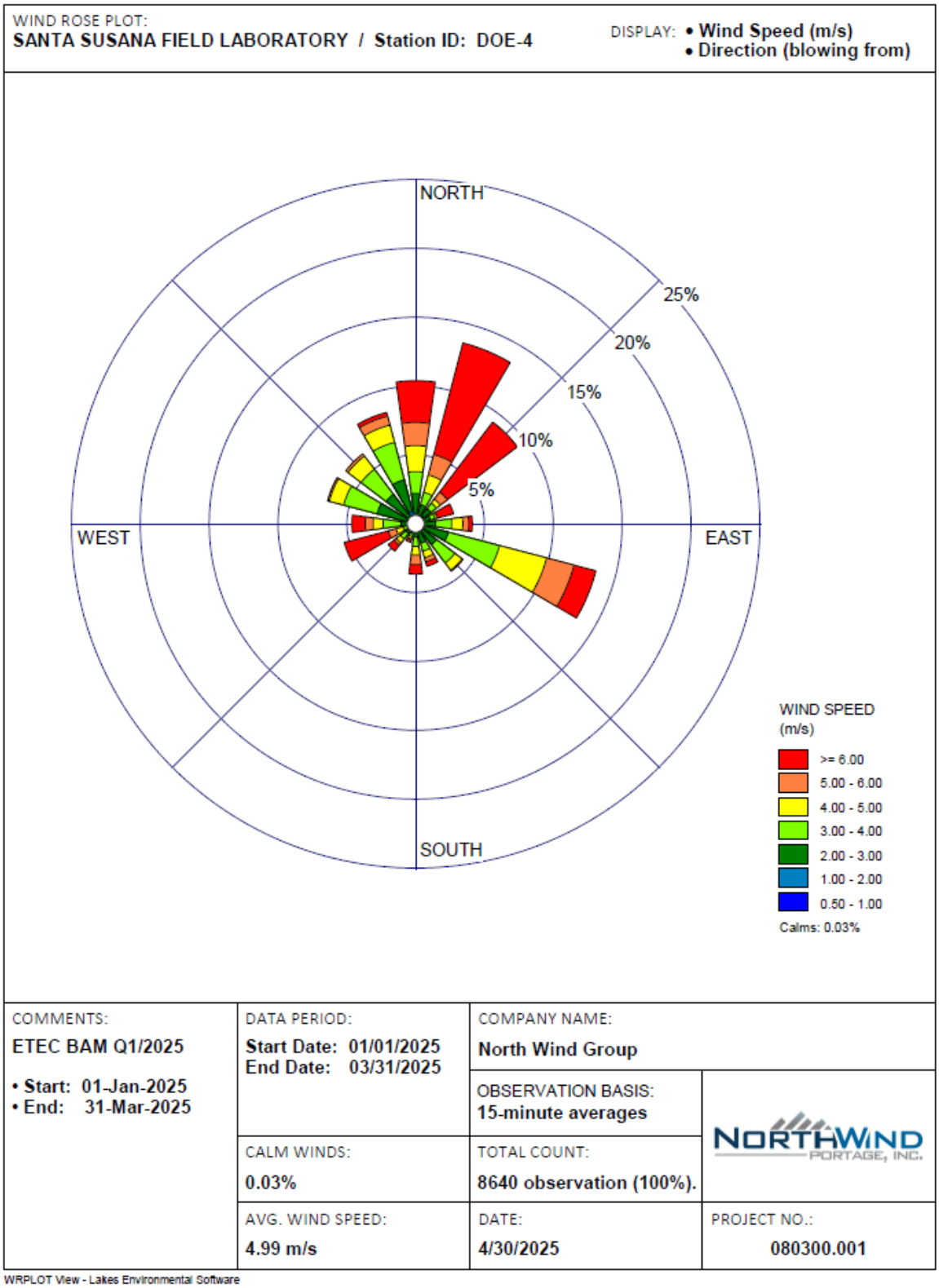
# Figure 1 – SSFL Air Monitoring Locations



# Figure 2 – DOE Air Monitoring Locations



# Figure 3 – DOE Quarterly Wind Rose



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# APPENDIX A

# $PM_{10}$ Daily Averages and Monthly Statistics

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# $PM_{10}$ Daily Averages

| Site ID | DOE-1 | DOE-2 | DOE-3 | DOE-4 |
|---|---|---|---|---|
| Sample Date | $PM_{10}$ (µg/m$^3$) (CAAQS 50 µg/m$^3$) | $PM_{10}$ (µg/m$^3$) (CAAQS 50 µg/m$^3$) | $PM_{10}$ (µg/m$^3$) (CAAQS 50 µg/m$^3$) | $PM_{10}$ (µg/m$^3$) (CAAQS 50 µg/m$^3$) |
| 01/01/2025 | 3.750 | – | – | 2.883 |
| 01/02/2025 | 4.916 | – | – | 3.541 |
| 01/03/2025 | 21.541 | – | – | 12.412 |
| 01/04/2025 | 8.583 | – | – | 2.962 |
| 01/05/2025 | 3.208 | – | – | 2.712 |
| 01/06/2025 | 3.000 | – | – | 2.691 |
| 01/07/2025 | **55.833** | – | – | 43.045 |
| 01/08/2025 | 38.166 | – | – | **59.775** |
| 01/09/2025 | 8.625 | – | – | 5.183 |
| 01/10/2025 | 7.500 | – | – | 5.441 |
| 01/11/2025 | 12.833 | – | – | 9.312 |
| 01/12/2025 | 2.416 | – | – | 2.125 |
| 01/13/2025 | 4.083 | – | – | 2.883 |
| 01/14/2025 | 2.916 | – | – | 2.237 |
| 01/15/2025 | 5.208 | – | – | 4.400 |
| 01/16/2025 | 6.666 | – | – | 4.029 |
| 01/17/2025 | 22.791 | 19.300 | – | 6.991 |
| 01/18/2025 | 14.083 | 10.541 | – | 7.737 |
| 01/19/2025 | 25.416 | 17.375 | – | 11.866 |
| 01/20/2025 | 19.833 | 24.250 | 19.555 | 10.891 |
| 01/21/2025 | 4.625 | 4.833 | 5.041 | 3.550 |
| 01/22/2025 | 6.083 | 9.541 | 6.625 | 4.345 |
| 01/23/2025 | 8.500 | 18.541 | 10.250 | 6.512 |
| 01/24/2025 | 5.375 | 5.041 | 5.875 | 3.650 |
| 01/25/2025 | 16.000 | 14.375 | 25.458 | 10.075 |
| 01/26/2025 | 4.083 | 3.875 | 5.916 | 2.145 |
| 01/27/2025 | 4.416 | 3.583 | 2.791 | 0.862 |
| 01/28/2025 | 5.666 | 5.291 | 4.750 | 4.741 |
| 01/29/2025 | 21.500 | 10.375 | 11.500 | 6.647 |
| 01/30/2025 | 12.958 | 11.291 | 15.083 | 4.850 |
| 01/31/2025 | 14.541 | 11.958 | 11.416 | 6.609 |
| 02/01/2025 | 9.541 | 7.958 | 7.500 | – |
| 02/02/2025 | 12.541 | 14.083 | 13.708 | – |
| 02/03/2025 | 20.583 | 14.500 | 18.416 | – |
| 02/04/2025 | 6.041 | 6.833 | 5.333 | – |
| 02/05/2025 | 0.916 | -0.041 | 0.333 | – |

| **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$^3$) |
| 02/06/2025 | 0.958 | 0.541 | -0.625 | – |
| 02/07/2025 | 3.625 | 2.583 | 4.750 | – |
| 02/08/2025 | 3.833 | 3.791 | 1.958 | – |
| 02/09/2025 | 4.625 | 5.500 | 4.000 | – |
| 02/10/2025 | 15.416 | 11.541 | 12.666 | – |
| 02/11/2025 | 16.208 | 12.541 | 10.625 | – |
| 02/12/2025 | 7.833 | 3.291 | 6.045 | – |
| 02/13/2025 | 0.375 | -0.083 | -0.291 | – |
| 02/14/2025 | 8.083 | 10.291 | 8.416 | – |
| 02/15/2025 | 3.333 | 2.750 | 2.416 | – |
| 02/16/2025 | 2.625 | 3.041 | 1.958 | – |
| 02/17/2025 | 13.416 | 6.916 | 7.041 | – |
| 02/18/2025 | 6.125 | 5.958 | 4.875 | 8.000 |
| 02/19/2025 | 3.958 | 3.583 | 3.208 | 3.416 |
| 02/20/2025 | 9.750 | 7.041 | 6.869 | 6.666 |
| 02/21/2025 | 2.791 | 2.625 | 2.458 | 2.125 |
| 02/22/2025 | 2.375 | 1.833 | 1.583 | 1.750 |
| 02/23/2025 | 3.583 | 3.375 | 2.833 | 3.083 |
| 02/24/2025 | 8.041 | 7.208 | 6.541 | 6.958 |
| 02/25/2025 | 6.375 | 6.125 | 5.833 | 6.625 |
| 02/26/2025 | 2.458 | 2.208 | 2.541 | 1.958 |
| 02/27/2025 | 4.250 | 4.375 | 4.625 | 4.541 |
| 02/28/2025 | 14.166 | 9.083 | 9.833 | 10.500 |
| 03/01/2025 | 14.750 | 11.791 | 11.958 | 13.583 |
| 03/02/2025 | 12.125 | 9.791 | 9.208 | 8.333 |
| 03/03/2025 | 6.416 | 6.708 | 5.875 | 7.333 |
| 03/04/2025 | 17.208 | 15.041 | 15.416 | 12.125 |
| 03/05/2025 | 9.583 | 6.000 | 11.708 | 6.208 |
| 03/06/2025 | 3.541 | 3.125 | 4.916 | 2.416 |
| 03/07/2025 | 2.416 | 2.000 | 2.416 | 2.375 |
| 03/08/2025 | 6.125 | 6.250 | 5.291 | 5.125 |
| 03/09/2025 | 7.250 | 8.333 | 7.541 | 6.750 |
| 03/10/2025 | 5.458 | 4.625 | 4.000 | 3.625 |
| 03/11/2025 | 4.666 | 5.125 | 5.541 | 4.750 |
| 03/12/2025 | 1.708 | 1.166 | 1.541 | 0.083 |
| 03/13/2025 | 3.291 | 3.416 | 3.333 | 3.125 |

| **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$^3$) |
| 03/14/2025 | 2.375 | 1.791 | 2.375 | 1.333 |
| 03/15/2025 | 7.750 | 7.166 | 7.375 | 6.875 |
| 03/16/2025 | 17.791 | 14.500 | 18.458 | 14.416 |
| 03/17/2025 | 12.708 | 11.291 | 15.083 | 9.833 |
| 03/18/2025 | 2.958 | 3.166 | 2.833 | 3.375 |
| 03/19/2025 | 3.208 | 3.458 | 3.208 | 2.916 |
| 03/20/2025 | 5.166 | 6.083 | 5.333 | 4.625 |
| 03/21/2025 | 7.761 | 6.086 | 6.956 | 5.045 |
| 03/22/2025 | 10.458 | 8.958 | 8.208 | 8.500 |
| 03/23/2025 | 26.250 | 12.750 | 12.500 | 11.250 |
| 03/24/2025 | 7.583 | 7.291 | 7.000 | 4.875 |
| 03/25/2025 | 28.818 | 9.500 | 13.708 | 10.000 |
| 03/26/2025 | 9.666 | 4.916 | 6.416 | 3.875 |
| 03/27/2025 | 6.125 | 4.250 | 4.000 | 3.958 |
| 03/28/2025 | 22.333 | 10.416 | 14.708 | 8.125 |
| 03/29/2025 | 23.291 | 10.833 | 12.750 | 10.291 |
| 03/30/2025 | 5.958 | 2.875 | 2.833 | 4.125 |
| 03/31/2025 | 10.916 | 2.375 | 3.375 | 2.708 |

Notes:

"—" indicates a filter sensor pressure failure with no value.

Negative values mean the background exceeded the particulate count.

Gray-shaded boxes with bold numbers indicate value exceeded CAAQS but is below the NAAQS of 150 µg/m$^3$.

**EPA – Simi Valley – Cochran Street – $PM_{10}$ Daily Averages, 01/01/2024–07/31/2024**

| Simi Valley $PM_{10}$ Sample Date | Simi Valley AQS # 061112002<br>$PM_{10}$ (µg/m³)<br>(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 |
| 02/07/24 | 5 |
| 02/08/24 | 4 |
| 02/09/24 | 4 |

| Simi Valley $PM_{10}$ Sample Date | Simi Valley AQS # 061112002<br>$PM_{10}$ (µg/m$^3$)<br>(CAAQS 50 µg/m$^3$) |
|---|---|
| 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 |
| 03/12/24 | 11 |
| 03/13/24 | 12 |
| 03/14/24 | 47 |
| 03/15/24 | 11 |
| 03/16/24 | 12 |
| 03/17/24 | 12 |

| Simi Valley $PM_{10}$ Sample Date | Simi Valley AQS # 061112002<br>$PM_{10}$ (µg/m$^3$)<br>(CAAQS 50 µg/m$^3$) |
|---|---|
| 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 |
| 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 |

| Simi Valley $PM_{10}$ Sample Date | Simi Valley AQS # 061112002<br>$PM_{10}$ (µg/m$^3$)<br>(CAAQS 50 µg/m$^3$) |
|---|---|
| 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 |
| 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 |

| Simi Valley $PM_{10}$ Sample Date | Simi Valley AQS # 061112002<br>$PM_{10}$ (µg/m$^3$)<br>(CAAQS 50 µg/m$^3$) |
|---|---|
| 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 |
| 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 |

| Simi Valley $PM_{10}$ Sample Date | Simi Valley AQS # 061112002<br>$PM_{10}$ (µg/m³)<br>(CAAQS 50 µg/m³) |
|---|---|
| 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 |
| 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#Meta (2025a) Only the Simi Valley $PM_{10}$ 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 $PM_{10}$ data, not $PM_{2.5}$ data. This webpage page contains pre-generated files of data available for download. The files are updated twice per year: once in June to capture the complete data for the prior year, and once in December to capture the data for the summer (ozone season). At the time of writing this report, the data posted are the most current available.

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

**$PM_{10}$ Monthly Statistics**

| Location ID | January 2025 | | | February 2025 | | | March 2025 | | |
|---|---|---|---|---|---|---|---|---|---|
| | $PM_{10}$ | | | $PM_{10}$ | | | $PM_{10}$ | | |
| | High | Low | 95th PCTL | High | Low | 95th PCTL | High | Low | 95th PCTL |
| DOE-1 | 55.833 | 2.416 | 31.791 | 20.583 | 0.375 | 15.931 | 28.818 | 1.708 | 24.77 |
| DOE-2 | 24.25 | 3.583 | 20.785 | 14.5 | -0.083 | 13.543 | 15.041 | 1.166 | 13.625 |
| DOE-3 | 25.458 | 2.791 | 22.211 | 18.416 | -0.625 | 13.343 | 18.458 | 1.541 | 15.25 |
| DOE-4 | 59.775 | 0.862 | 27.729 | 10.5 | 1.75 | 9.25 | 14.416 | 0.083 | 12.854 |

PCTL = percentile

**EPA – Simi Valley – Cochran Street – $PM_{10}$ Monthly Statistics, 01/01/2024–07/31/2024**

| Location ID | January 2024 | | | February 2024 | | | March 2024 | | |
|---|---|---|---|---|---|---|---|---|---|
| | PM 2.5 / PM 10 | | | PM 2.5 / PM 10 | | | PM 2.5 / PM 10 | | |
| | High | Low | 95th Pctl | High | Low | 95th Pctl | High | Low | $95^{th}$ 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:

Data supplied from https://aqs.epa.gov/aqsweb/airdata/download_files.html#Meta (2025a). Only the Simi Valley $PM_{10}$ 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 $PM_{10}$ data, not $PM_{2.5}$ data. This webpage page contains pre-generated files of data available for download. The files are updated twice per year: once in June to capture the complete data for the prior year, and once in December to capture the data for the summer (ozone season).

# APPENDIX B

# Analytical Results for Ambient Air VOCs

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

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-1 | 1/8/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.63 | µg/m$^3$ | **0.59 J; J** |
| DOE-1 | 1/8/2025 | 2-butanone | - | 5200[1] | 0.34 | 1.4 | µg/m$^3$ | **0.57 J; J** |
| DOE-1 | 1/8/2025 | Benzene | 0.097 | - | 0.11 | 0.71 | µg/m$^3$ | **0.40 J; J** |
| DOE-1 | 1/8/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.73 | µg/m$^3$ | **0.41 J; J** |
| DOE-1 | 1/8/2025 | Chloromethane | - | 94[1] | 0.12 | 0.76 | µg/m$^3$ | **0.40 J; J** |
| DOE-1 | 1/8/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.73 | µg/m$^3$ | **2.5 ;** |
| DOE-1 | 1/8/2025 | Ethyl acetate | - | 73[1] | 11 | 28 | µg/m$^3$ | **870 D;** |
| DOE-1 | 1/8/2025 | Isopropanol | - | 210[1] | 0.31 | 1.4 | µg/m$^3$ | **2.5 ;** |
| DOE-1 | 1/8/2025 | Methylene chloride | 1 | - | 0.21 | 0.64 | µg/m$^3$ | **0.40 J; J** |
| DOE-1 | 1/8/2025 | Tetrahydrofuran | - | 2100 | 0.29 | 1.4 | µg/m$^3$ | **0.32 J; J** |
| DOE-1 | 1/8/2025 | Toluene | 440[1] | - | 0.091 | 0.76 | µg/m$^3$ | **0.99 ;** |
| DOE-1 | 1/8/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.71 | µg/m$^3$ | **1.2 ;** |
| DOE-1 | 1/8/2025 | Vinyl acetate | - | 210[1] | 1.7 | 7.5 | µg/m$^3$ | **4.6 J; J** |
| DOE-2 | 1/8/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.53 J; J** |
| DOE-2 | 1/8/2025 | Benzene | 0.097 | - | 0.11 | 0.73 | µg/m$^3$ | **0.31 J; J** |
| DOE-2 | 1/8/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.75 | µg/m$^3$ | **0.42 J; J** |
| DOE-2 | 1/8/2025 | Chloromethane | - | 94[1] | 0.12 | 0.78 | µg/m$^3$ | **0.56 J; J** |
| DOE-2 | 1/8/2025 | Dichlorodifluoromethane | - | 100[1] | 0.13 | 0.75 | µg/m$^3$ | **2.3 ;** |
| DOE-2 | 1/8/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.9 | µg/m$^3$ | **75 ;** |
| DOE-2 | 1/8/2025 | Isopropanol | - | 210[1] | 0.32 | 1.4 | µg/m$^3$ | **0.45 J; J** |
| DOE-2 | 1/8/2025 | Methylene chloride | 1 | - | 0.22 | 0.66 | µg/m$^3$ | **0.48 J; J** |
| DOE-2 | 1/8/2025 | Toluene | 440[1] | - | 0.094 | 0.78 | µg/m$^3$ | **0.45 J; J** |
| DOE-2 | 1/8/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.73 | µg/m$^3$ | **1.1 ;** |
| DOE-3 | 1/8/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.63 | µg/m$^3$ | **0.54 J; J** |
| DOE-3 | 1/8/2025 | Benzene | 0.097 | - | 0.11 | 0.71 | µg/m$^3$ | **0.28 J; J** |
| DOE-3 | 1/8/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.72 | µg/m$^3$ | **0.39 J; J** |
| DOE-3 | 1/8/2025 | Chloromethane | - | 94[1] | 0.12 | 0.75 | µg/m$^3$ | **0.40 J; J** |
| DOE-3 | 1/8/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.72 | µg/m$^3$ | **2.3 ;** |
| DOE-3 | 1/8/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **58 ; J** |
| DOE-3 | 1/8/2025 | Isopropanol | - | 210[1] | 0.31 | 1.4 | µg/m$^3$ | **0.56 J; J** |
| DOE-3 | 1/8/2025 | Methylene chloride | 1 | - | 0.21 | 0.64 | µg/m$^3$ | **0.52 J; J** |
| DOE-3 | 1/8/2025 | Toluene | 440[1] | - | 0.090 | 0.75 | µg/m$^3$ | **0.37 J; J** |
| DOE-3 | 1/8/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.71 | µg/m$^3$ | **1.1 ;** |
| DOE-4 | 1/8/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.10 | 0.61 | µg/m$^3$ | **0.53 J; J** |
| DOE-4 | 1/8/2025 | Benzene | 0.097 | - | 0.10 | 0.69 | µg/m$^3$ | **0.33 J; J** |
| DOE-4 | 1/8/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.71 | µg/m$^3$ | **0.40 J; J** |
| DOE-4 | 1/8/2025 | Chloromethane | - | 94[1] | 0.12 | 0.73 | µg/m$^3$ | **0.37 J; J** |
| DOE-4 | 1/8/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.71 | µg/m$^3$ | **2.3 ;** |
| DOE-4 | 1/8/2025 | Ethyl acetate | - | 73[1] | 1.0 | 2.7 | µg/m$^3$ | **79 ;** |
| DOE-4 | 1/8/2025 | Methylene chloride | 1 | - | 0.20 | 0.63 | µg/m$^3$ | **0.33 J; J** |
| DOE-4 | 1/8/2025 | Toluene | 440[1] | - | 0.088 | 0.73 | µg/m$^3$ | **0.49 J; J** |

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-4 | 1/8/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.69 | µg/m$^3$ | **1.1 ;** |
| DOE-1 | 1/14/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.63 | µg/m$^3$ | **0.50 J; J** |
| DOE-1 | 1/14/2025 | Benzene | 0.097 | - | 0.11 | 0.72 | µg/m$^3$ | **0.28 J; J** |
| DOE-1 | 1/14/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.73 | µg/m$^3$ | **0.39 J; J** |
| DOE-1 | 1/14/2025 | Chloromethane | - | 94[1] | 0.12 | 0.76 | µg/m$^3$ | **0.43 J; J** |
| DOE-1 | 1/14/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.73 | µg/m$^3$ | **2.3 ;** |
| DOE-1 | 1/14/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **19 ;** |
| DOE-1 | 1/14/2025 | Isopropanol | - | 210[1] | 0.31 | 1.4 | µg/m$^3$ | **0.31 J; J** |
| DOE-1 | 1/14/2025 | Methylene chloride | 1 | - | 0.21 | 0.65 | µg/m$^3$ | **0.43 J; J** |
| DOE-1 | 1/14/2025 | Toluene | 440[1] | - | 0.092 | 0.76 | µg/m$^3$ | **0.20 J; J** |
| DOE-1 | 1/14/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.72 | µg/m$^3$ | **1.1 ;** |
| DOE-2 | 1/14/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.10 | 0.62 | µg/m$^3$ | **0.53 J; J** |
| DOE-2 | 1/14/2025 | Benzene | 0.097 | - | 0.11 | 0.70 | µg/m$^3$ | **0.26 J; J** |
| DOE-2 | 1/14/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.72 | µg/m$^3$ | **0.39 J; J** |
| DOE-2 | 1/14/2025 | Chloromethane | - | 94[1] | 0.12 | 0.75 | µg/m$^3$ | **0.40 J; J** |
| DOE-2 | 1/14/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.72 | µg/m$^3$ | **2.3 ;** |
| DOE-2 | 1/14/2025 | Ethyl acetate | - | 73[1] | 1.0 | 2.8 | µg/m$^3$ | **13 ;** |
| DOE-2 | 1/14/2025 | Methylene chloride | 1 | - | 0.21 | 0.63 | µg/m$^3$ | **0.41 J; J** |
| DOE-2 | 1/14/2025 | Toluene | 440[1] | - | 0.090 | 0.75 | µg/m$^3$ | **0.12 J; J** |
| DOE-2 | 1/14/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.70 | µg/m$^3$ | **1.1 ;** |
| DOE-3 | 1/14/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.48 J; J** |
| DOE-3 | 1/14/2025 | Benzene | 0.097 | - | 0.11 | 0.73 | µg/m$^3$ | **0.25 J; J** |
| DOE-3 | 1/14/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.75 | µg/m$^3$ | **0.39 J; J** |
| DOE-3 | 1/14/2025 | Chloromethane | - | 94[1] | 0.12 | 0.78 | µg/m$^3$ | **0.42 J; J** |
| DOE-3 | 1/14/2025 | Dichlorodifluoromethane | - | 100[1] | 0.13 | 0.75 | µg/m$^3$ | **2.3 ;** |
| DOE-3 | 1/14/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.9 | µg/m$^3$ | **5.3 ;** |
| DOE-3 | 1/14/2025 | Methylene chloride | 1 | - | 0.22 | 0.66 | µg/m$^3$ | **0.40 J; J** |
| DOE-3 | 1/14/2025 | Toluene | 440[1] | - | 0.094 | 0.78 | µg/m$^3$ | **0.11 J; J** |
| DOE-3 | 1/14/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.73 | µg/m$^3$ | **1.1 ;** |
| DOE-4 | 1/14/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.48 J; J** |
| DOE-4 | 1/14/2025 | Benzene | 0.097 | - | 0.11 | 0.73 | µg/m$^3$ | **0.25 J; J** |
| DOE-4 | 1/14/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.75 | µg/m$^3$ | **0.37 J; J** |
| DOE-4 | 1/14/2025 | Chloromethane | - | 94[1] | 0.12 | 0.78 | µg/m$^3$ | **0.42 J; J** |
| DOE-4 | 1/14/2025 | Dichlorodifluoromethane | - | 100[1] | 0.13 | 0.75 | µg/m$^3$ | **2.3 ; J** |
| DOE-4 | 1/14/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.9 | µg/m$^3$ | **2.4 J; J** |
| DOE-4 | 1/14/2025 | Methylene chloride | 1 | - | 0.22 | 0.66 | µg/m$^3$ | **0.44 J; J** |
| DOE-4 | 1/14/2025 | Toluene | 440[1] | - | 0.094 | 0.78 | µg/m$^3$ | **0.099 J; J** |
| DOE-4 | 1/14/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.73 | µg/m$^3$ | **1.1 ; J** |
| DOE-1 | 1/29/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.51 J;** |
| DOE-1 | 1/29/2025 | 2-butanone | - | 5200[1] | 0.34 | 1.4 | µg/m$^3$ | **1.1 J;** |
| DOE-1 | 1/29/2025 | 4-isopropyltoluene | - | - | 0.11 | 0.73 | µg/m$^3$ | **0.16 J;** |

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-1 | 1/29/2025 | Acrolein | - | 0.021 | 0.44 | 1.5 | µg/m$^3$ | **1.3 J;** |
| DOE-1 | 1/29/2025 | Benzene | 0.097 | - | 0.11 | 0.72 | µg/m$^3$ | **0.55 J;** |
| DOE-1 | 1/29/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.72 | µg/m$^3$ | **0.42 J;** |
| DOE-1 | 1/29/2025 | Chloromethane | - | 94[1] | 0.12 | 0.75 | µg/m$^3$ | **0.36 J;** |
| DOE-1 | 1/29/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.71 | µg/m$^3$ | **2.4 ;** |
| DOE-1 | 1/29/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.7 | µg/m$^3$ | **35 ;** |
| DOE-1 | 1/29/2025 | Hexane, n- | - | 730 | 0.16 | 0.73 | µg/m$^3$ | **0.29 J;** |
| DOE-1 | 1/29/2025 | Isopropanol | - | 210[1] | 0.31 | 1.5 | µg/m$^3$ | **1.6 ;** |
| DOE-1 | 1/29/2025 | Methylene chloride | 1 | - | 0.21 | 0.64 | µg/m$^3$ | **0.54 J;** |
| DOE-1 | 1/29/2025 | m-xylene & p-xylene | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.25 J;** |
| DOE-1 | 1/29/2025 | N-heptane | - | 420 | 0.12 | 0.73 | µg/m$^3$ | **0.17 J;** |
| DOE-1 | 1/29/2025 | Toluene | 440[1] | - | 0.092 | 0.77 | µg/m$^3$ | **0.86 ;** |
| DOE-1 | 1/29/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.71 | µg/m$^3$ | **1.2 ;** |
| DOE-1 | 1/29/2025 | Xylenes, total | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.25 J;** |
| DOE-2 | 1/29/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.50 J;** |
| DOE-2 | 1/29/2025 | 2-butanone | - | 5200[1] | 0.34 | 1.4 | µg/m$^3$ | **0.65 J;** |
| DOE-2 | 1/29/2025 | 4-isopropyltoluene | - | - | 0.12 | 0.74 | µg/m$^3$ | **0.13 J;** |
| DOE-2 | 1/29/2025 | Benzene | 0.097 | - | 0.11 | 0.72 | µg/m$^3$ | **0.49 J;** |
| DOE-2 | 1/29/2025 | Carbon disulfide | - | 730 | 0.23 | 1.5 | µg/m$^3$ | **0.79 J;** |
| DOE-2 | 1/29/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.72 | µg/m$^3$ | **0.42 J;** |
| DOE-2 | 1/29/2025 | Chloromethane | - | 94[1] | 0.12 | 0.75 | µg/m$^3$ | **0.38 J;** |
| DOE-2 | 1/29/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.72 | µg/m$^3$ | **2.5 ;** |
| DOE-2 | 1/29/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **20 ;** |
| DOE-2 | 1/29/2025 | Hexane, n- | - | 730 | 0.16 | 0.74 | µg/m$^3$ | **0.26 J;** |
| DOE-2 | 1/29/2025 | Isopropanol | - | 210[1] | 0.31 | 1.5 | µg/m$^3$ | **1.1 J;** |
| DOE-2 | 1/29/2025 | Methylene chloride | 1 | - | 0.21 | 0.65 | µg/m$^3$ | **0.42 J;** |
| DOE-2 | 1/29/2025 | m-xylene & p-xylene | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.23 J;** |
| DOE-2 | 1/29/2025 | N-heptane | - | 420 | 0.12 | 0.74 | µg/m$^3$ | **0.17 J;** |
| DOE-2 | 1/29/2025 | Toluene | 440[1] | - | 0.092 | 0.77 | µg/m$^3$ | **0.73 J;** |
| DOE-2 | 1/29/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.72 | µg/m$^3$ | **1.2 ;** |
| DOE-2 | 1/29/2025 | Xylenes, total | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.23 J;** |
| DOE-3 | 1/29/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.49 J;** |
| DOE-3 | 1/29/2025 | 2-butanone | - | 5200[1] | 0.34 | 1.4 | µg/m$^3$ | **0.71 J;** |
| DOE-3 | 1/29/2025 | 4-isopropyltoluene | - | - | 0.12 | 0.74 | µg/m$^3$ | **0.12 J;** |
| DOE-3 | 1/29/2025 | Benzene | 0.097 | - | 0.11 | 0.72 | µg/m$^3$ | **0.50 J;** |
| DOE-3 | 1/29/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.72 | µg/m$^3$ | **0.41 J;** |
| DOE-3 | 1/29/2025 | Chloromethane | - | 94[1] | 0.12 | 0.75 | µg/m$^3$ | **0.33 J;** |
| DOE-3 | 1/29/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.72 | µg/m$^3$ | **2.4 ;** |
| DOE-3 | 1/29/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **61 ;** |
| DOE-3 | 1/29/2025 | Hexane, n- | - | 730 | 0.16 | 0.74 | µg/m$^3$ | **0.26 J;** |
| DOE-3 | 1/29/2025 | Isopropanol | - | 210[1] | 0.31 | 1.5 | µg/m$^3$ | **1.3 J;** |
| DOE-3 | 1/29/2025 | Methylene chloride | 1 | - | 0.21 | 0.65 | µg/m$^3$ | **0.42 J;** |
| DOE-3 | 1/29/2025 | m-xylene & p-xylene | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.23 J;** |
| DOE-3 | 1/29/2025 | N-heptane | - | 420 | 0.12 | 0.74 | µg/m$^3$ | **0.13 J;** |

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-3 | 1/29/2025 | Toluene | 440[1] | - | 0.092 | 0.77 | µg/m$^3$ | **0.79 ;** |
| DOE-3 | 1/29/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.72 | µg/m$^3$ | **1.2 ;** |
| DOE-3 | 1/29/2025 | Xylenes, total | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.23 J;** |
| DOE-4 | 1/29/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.51 J;** |
| DOE-4 | 1/29/2025 | 2-butanone | - | 5200[1] | 0.34 | 1.4 | µg/m$^3$ | **0.67 J;** |
| DOE-4 | 1/29/2025 | Benzene | 0.097 | - | 0.11 | 0.72 | µg/m$^3$ | **0.51 J;** |
| DOE-4 | 1/29/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.72 | µg/m$^3$ | **0.41 J;** |
| DOE-4 | 1/29/2025 | Chloromethane | - | 94[1] | 0.12 | 0.75 | µg/m$^3$ | **0.37 J;** |
| DOE-4 | 1/29/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.72 | µg/m$^3$ | **2.4 ;** |
| DOE-4 | 1/29/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **49 ;** |
| DOE-4 | 1/29/2025 | Hexane, n- | - | 730 | 0.16 | 0.74 | µg/m$^3$ | **0.27 J;** |
| DOE-4 | 1/29/2025 | Isopropanol | - | 210[1] | 0.31 | 1.5 | µg/m$^3$ | **1.2 J;** |
| DOE-4 | 1/29/2025 | Methylene chloride | 1 | - | 0.21 | 0.65 | µg/m$^3$ | **0.42 J;** |
| DOE-4 | 1/29/2025 | m-xylene & p-xylene | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.22 J;** |
| DOE-4 | 1/29/2025 | N-heptane | - | 420 | 0.12 | 0.74 | µg/m$^3$ | **0.14 J;** |
| DOE-4 | 1/29/2025 | Toluene | 440[1] | - | 0.092 | 0.77 | µg/m$^3$ | **0.88 ;** |
| DOE-4 | 1/29/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.72 | µg/m$^3$ | **1.2 ;** |
| DOE-4 | 1/29/2025 | Xylenes, total | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.22 J;** |
| DOE-1 | 2/13/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.099 | 0.60 | µg/m$^3$ | **0.50 J;** |
| DOE-1 | 2/13/2025 | 2-butanone | - | 5200[1] | 0.31 | 1.3 | µg/m$^3$ | **0.41 J;** |
| DOE-1 | 2/13/2025 | Benzene | 0.097 | - | 0.10 | 0.66 | µg/m$^3$ | **0.34 J;** |
| DOE-1 | 2/13/2025 | Carbon disulfide | - | 730 | 0.21 | 1.3 | µg/m$^3$ | **0.36 J;** |
| DOE-1 | 2/13/2025 | Carbon tetrachloride | - | 0.47 | 0.096 | 0.66 | µg/m$^3$ | **0.40 J;** |
| DOE-1 | 2/13/2025 | Chloroform | - | 0.12 | 0.092 | 0.69 | µg/m$^3$ | **0.095 J;** |
| DOE-1 | 2/13/2025 | Chloromethane | - | 94 | 0.11 | 0.69 | µg/m$^3$ | **0.33 J;** |
| DOE-1 | 2/13/2025 | Dichlorodifluoromethane | - | 100[1] | 0.11 | 0.66 | µg/m$^3$ | **2.4 ;** |
| DOE-1 | 2/13/2025 | Ethyl acetate | - | 73[1] | 0.99 | 2.5 | µg/m$^3$ | **8.9 ;** |
| DOE-1 | 2/13/2025 | Hexane, n- | - | 730 | 0.14 | 0.68 | µg/m$^3$ | **0.18 J;** |
| DOE-1 | 2/13/2025 | Isopropanol | - | 210[1] | 0.29 | 1.3 | µg/m$^3$ | **0.81 J;** |
| DOE-1 | 2/13/2025 | Methylene chloride | 1 | - | 0.20 | 0.59 | µg/m$^3$ | **0.43 J;** |
| DOE-1 | 2/13/2025 | m-xylene & p-xylene | - | 100 | 0.18 | 1.4 | µg/m$^3$ | **0.21 J;** |
| DOE-1 | 2/13/2025 | Tetrahydrofuran | - | 2100 | 0.27 | 1.2 | µg/m$^3$ | **0.38 J;** |
| DOE-1 | 2/13/2025 | Toluene | 440[1] | - | 0.085 | 0.71 | µg/m$^3$ | **0.41 J;** |
| DOE-1 | 2/13/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.66 | µg/m$^3$ | **1.1 ;** |
| DOE-1 | 2/13/2025 | Xylenes, total | - | 100 | 0.18 | 1.4 | µg/m$^3$ | **0.21 J;** |
| DOE-2 | 2/13/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.10 | 0.62 | µg/m$^3$ | **0.47 J;** |
| DOE-2 | 2/13/2025 | 1,2,4-trimethylbenzene | - | 63 | 0.099 | 0.70 | µg/m$^3$ | **0.13 J;** |
| DOE-2 | 2/13/2025 | 2-butanone | - | 5200[1] | 0.32 | 1.4 | µg/m$^3$ | **1.7 ;** |
| DOE-2 | 2/13/2025 | 4-isopropyltoluene | - | - | 0.11 | 0.70 | µg/m$^3$ | **0.22 J;** |
| DOE-2 | 2/13/2025 | Acrolein | - | 0.021 | 0.42 | 1.5 | µg/m$^3$ | **0.71 J;** |
| DOE-2 | 2/13/2025 | Benzene | 0.097 | - | 0.10 | 0.68 | µg/m$^3$ | **0.61 J;** |
| DOE-2 | 2/13/2025 | Carbon disulfide | - | 730 | 0.21 | 1.4 | µg/m$^3$ | **24 ;** |
| DOE-2 | 2/13/2025 | Carbon tetrachloride | - | 0.47 | 0.099 | 0.68 | µg/m$^3$ | **0.39 J;** |

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-2 | 2/13/2025 | Chloroform | - | 0.12 | 0.095 | 0.71 | µg/m$^3$ | **0.096 J;** |
| DOE-2 | 2/13/2025 | Chloromethane | - | 94 | 0.12 | 0.71 | µg/m$^3$ | **0.15 J;** |
| DOE-2 | 2/13/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.68 | µg/m$^3$ | **2.0 ;** |
| DOE-2 | 2/13/2025 | Ethyl acetate | - | 73[1] | 1.0 | 2.6 | µg/m$^3$ | **11 ;** |
| DOE-2 | 2/13/2025 | Ethylbenzene | - | 1.1 | 0.10 | 0.73 | µg/m$^3$ | **0.12 J;** |
| DOE-2 | 2/13/2025 | Hexane, n- | - | 730 | 0.15 | 0.70 | µg/m$^3$ | **0.39 J;** |
| DOE-2 | 2/13/2025 | Isopropanol | - | 210[1] | 0.29 | 1.4 | µg/m$^3$ | **1.2 J;** |
| DOE-2 | 2/13/2025 | Methylene chloride | 1 | - | 0.20 | 0.61 | µg/m$^3$ | **0.44 J;** |
| DOE-2 | 2/13/2025 | m-xylene & p-xylene | - | 100 | 0.19 | 1.4 | µg/m$^3$ | **0.49 J;** |
| DOE-2 | 2/13/2025 | N-heptane | - | 420 | 0.11 | 0.70 | µg/m$^3$ | **0.22 J;** |
| DOE-2 | 2/13/2025 | o-Xylene (1,2-dimethyl-benzene) | - | 100 | 0.10 | 0.72 | µg/m$^3$ | **0.15 J;** |
| DOE-2 | 2/13/2025 | Styrene | 940 | - | 0.12 | 0.71 | µg/m$^3$ | **0.23 J;** |
| DOE-2 | 2/13/2025 | Toluene | 440[1] | - | 0.087 | 0.73 | µg/m$^3$ | **1.2 ;** |
| DOE-2 | 2/13/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.68 | µg/m$^3$ | **1.1 ;** |
| DOE-2 | 2/13/2025 | Xylenes, total | - | 100 | 0.19 | 1.4 | µg/m$^3$ | **0.64 J;** |
| DOE-3 | 2/13/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.49 J;** |
| DOE-3 | 2/13/2025 | 2-butanone | - | 5200[1] | 0.34 | 1.4 | µg/m$^3$ | **0.45 J;** |
| DOE-3 | 2/13/2025 | Benzene | 0.097 | - | 0.11 | 0.72 | µg/m$^3$ | **0.34 J;** |
| DOE-3 | 2/13/2025 | Carbon disulfide | - | 730 | 0.23 | 1.5 | µg/m$^3$ | **0.31 J;** |
| DOE-3 | 2/13/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.72 | µg/m$^3$ | **0.39 J;** |
| DOE-3 | 2/13/2025 | Chloromethane | - | 94 | 0.12 | 0.75 | µg/m$^3$ | **0.32 J;** |
| DOE-3 | 2/13/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.71 | µg/m$^3$ | **2.3 ;** |
| DOE-3 | 2/13/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.7 | µg/m$^3$ | **5.9 ;** |
| DOE-3 | 2/13/2025 | Hexane, n- | - | 730 | 0.16 | 0.73 | µg/m$^3$ | **0.16 J;** |
| DOE-3 | 2/13/2025 | Isopropanol | - | 210 | 0.31 | 1.5 | µg/m$^3$ | **0.95 J;** |
| DOE-3 | 2/13/2025 | Methylene chloride | 1 | - | 0.21 | 0.64 | µg/m$^3$ | **0.43 J;** |
| DOE-3 | 2/13/2025 | Toluene | 440[1] | - | 0.092 | 0.77 | µg/m$^3$ | **0.38 J;** |
| DOE-3 | 2/13/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.71 | µg/m$^3$ | **1.1 ;** |
| DOE-4 | 2/13/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.67 | µg/m$^3$ | **0.48 J;** |
| DOE-4 | 2/13/2025 | Benzene | 0.097 | - | 0.11 | 0.74 | µg/m$^3$ | **0.35 J;** |
| DOE-4 | 2/13/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.74 | µg/m$^3$ | **0.38 J;** |
| DOE-4 | 2/13/2025 | Chloromethane | - | 94 | 0.13 | 0.77 | µg/m$^3$ | **0.29 J;** |
| DOE-4 | 2/13/2025 | Dichlorodifluoromethane | - | 100[1] | 0.13 | 0.74 | µg/m$^3$ | **2.3 ;** |
| DOE-4 | 2/13/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **3.5 ;** |
| DOE-4 | 2/13/2025 | Isopropanol | - | 210 | 0.32 | 1.5 | µg/m$^3$ | **0.57 J;** |
| DOE-4 | 2/13/2025 | Methylene chloride | 1 | - | 0.22 | 0.66 | µg/m$^3$ | **0.42 J;** |
| DOE-4 | 2/13/2025 | Toluene | 440[1] | - | 0.095 | 0.80 | µg/m$^3$ | **0.42 J;** |
| DOE-4 | 2/13/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.74 | µg/m$^3$ | **1.1 ;** |
| DOE-1 | 2/26/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.12 | 0.72 | µg/m$^3$ | **0.45 J;** |
| DOE-1 | 2/26/2025 | 2-butanone | - | 5200[1] | 0.37 | 1.6 | µg/m$^3$ | **0.48 J;** |
| DOE-1 | 2/26/2025 | Benzene | 0.097 | - | 0.12 | 0.80 | µg/m$^3$ | **0.24 J;** |
| DOE-1 | 2/26/2025 | Carbon tetrachloride | - | 0.47 | 0.12 | 0.80 | µg/m$^3$ | **0.38 J;** |

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-1 | 2/26/2025 | Chloromethane | - | 94 | 0.13 | 0.83 | µg/m$^3$ | **0.33 J;** |
| DOE-1 | 2/26/2025 | Dichlorodifluoromethane | - | 100[1] | 0.14 | 0.79 | µg/m$^3$ | **2.0 ;** |
| DOE-1 | 2/26/2025 | Ethyl acetate | - | 73[1] | 1.2 | 3.0 | µg/m$^3$ | **19 ;** |
| DOE-1 | 2/26/2025 | Isopropanol | - | 210 | 0.34 | 1.6 | µg/m$^3$ | **0.52 J;** |
| DOE-1 | 2/26/2025 | Methylene chloride | 1 | - | 0.23 | 0.71 | µg/m$^3$ | **0.42 J;** |
| DOE-1 | 2/26/2025 | Toluene | 440[1] | - | 0.10 | 0.85 | µg/m$^3$ | **0.26 J;** |
| DOE-1 | 2/26/2025 | Trichlorofluoromethane | 1300[1] | - | 0.13 | 0.79 | µg/m$^3$ | **1.0 ;** |
| DOE-2 | 2/26/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.67 | µg/m$^3$ | **0.47 J;** |
| DOE-2 | 2/26/2025 | 2-butanone | - | 5200[1] | 0.35 | 1.5 | µg/m$^3$ | **0.38 J;** |
| DOE-2 | 2/26/2025 | Benzene | 0.097 | - | 0.11 | 0.74 | µg/m$^3$ | **0.21 J;** |
| DOE-2 | 2/26/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.74 | µg/m$^3$ | **0.40 J;** |
| DOE-2 | 2/26/2025 | Chloromethane | - | 94 | 0.12 | 0.77 | µg/m$^3$ | **0.31 J;** |
| DOE-2 | 2/26/2025 | Dichlorodifluoromethane | - | 100[1] | 0.13 | 0.73 | µg/m$^3$ | **2.1 ;** |
| DOE-2 | 2/26/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **9.1 ;** |
| DOE-2 | 2/26/2025 | Methylene chloride | 1 | - | 0.22 | 0.66 | µg/m$^3$ | **0.34 J;** |
| DOE-2 | 2/26/2025 | Tetrachloroethene | 0.46 | - | 0.10 | 0.78 | µg/m$^3$ | **0.19 J;** |
| DOE-2 | 2/26/2025 | Toluene | 440[1] | - | 0.094 | 0.79 | µg/m$^3$ | **0.20 J;** |
| DOE-2 | 2/26/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.73 | µg/m$^3$ | **1.1 ;** |
| DOE-3 | 2/26/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.12 | 0.70 | µg/m$^3$ | **0.49 J;** |
| DOE-3 | 2/26/2025 | 2-butanone | - | 5200[1] | 0.37 | 1.6 | µg/m$^3$ | **0.65 J;** |
| DOE-3 | 2/26/2025 | Benzene | 0.097 | - | 0.12 | 0.78 | µg/m$^3$ | **0.23 J;** |
| DOE-3 | 2/26/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.78 | µg/m$^3$ | **0.41 J;** |
| DOE-3 | 2/26/2025 | Chloromethane | - | 94 | 0.13 | 0.81 | µg/m$^3$ | **0.35 J;** |
| DOE-3 | 2/26/2025 | Dichlorodifluoromethane | - | 100[1] | 0.13 | 0.77 | µg/m$^3$ | **2.2 ;** |
| DOE-3 | 2/26/2025 | Ethyl acetate | - | 73[1] | 1.2 | 3.0 | µg/m$^3$ | **9.9 ;** |
| DOE-3 | 2/26/2025 | Methylene chloride | 1 | - | 0.23 | 0.70 | µg/m$^3$ | **0.37 J;** |
| DOE-3 | 2/26/2025 | Toluene | 440[1] | - | 0.099 | 0.83 | µg/m$^3$ | **0.19 J;** |
| DOE-3 | 2/26/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.77 | µg/m$^3$ | **1.1 ;** |
| DOE-4 | 2/26/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.12 | 0.70 | µg/m$^3$ | **0.47 J;** |
| DOE-4 | 2/26/2025 | 2-butanone | - | 5200[1] | 0.36 | 1.6 | µg/m$^3$ | **0.40 J;** |
| DOE-4 | 2/26/2025 | Acrylonitrile | - | 0.041 | 0.38 | 1.6 | µg/m$^3$ | **5.4 ;** |
| DOE-4 | 2/26/2025 | Benzene | 0.097 | - | 0.12 | 0.78 | µg/m$^3$ | **0.21 J;** |
| DOE-4 | 2/26/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.78 | µg/m$^3$ | **0.40 J;** |
| DOE-4 | 2/26/2025 | Chloromethane | - | 94 | 0.13 | 0.81 | µg/m$^3$ | **0.34 J;** |
| DOE-4 | 2/26/2025 | Dichlorodifluoromethane | - | 100[1] | 0.13 | 0.77 | µg/m$^3$ | **2.1 ;** |
| DOE-4 | 2/26/2025 | Ethyl acetate | - | 73[1] | 1.2 | 3.0 | µg/m$^3$ | **6.8 ;** |
| DOE-4 | 2/26/2025 | Methylene chloride | 1 | - | 0.23 | 0.69 | µg/m$^3$ | **0.34 J;** |
| DOE-4 | 2/26/2025 | Toluene | 440[1] | - | 0.099 | 0.83 | µg/m$^3$ | **0.18 J;** |
| DOE-4 | 2/26/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.77 | µg/m$^3$ | **1.1 ;** |
| DOE-1 | 3/13/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.10 | 0.62 | µg/m$^3$ | **0.51 J;** |
| DOE-1 | 3/13/2025 | 1,2-Dichloroethane | - | 0.11 | 0.080 | 0.68 | µg/m$^3$ | **0.084 J;** |
| DOE-1 | 3/13/2025 | Benzene | 0.097 | - | 0.10 | 0.69 | µg/m$^3$ | **0.38 J;** |

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-1 | 3/13/2025 | Carbon disulfide | - | 730 | 0.22 | 1.4 | µg/m$^3$ | **0.22 J;** |
| DOE-1 | 3/13/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.69 | µg/m$^3$ | **0.40 J;** |
| DOE-1 | 3/13/2025 | Chloromethane | - | 94 | 0.12 | 0.72 | µg/m$^3$ | **0.39 J;** |
| DOE-1 | 3/13/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.68 | µg/m$^3$ | **2.1 ;** |
| DOE-1 | 3/13/2025 | Ethyl acetate | - | 73[1] | 1.0 | 2.6 | µg/m$^3$ | **39 ;** |
| DOE-1 | 3/13/2025 | Methylene chloride | 1 | - | 0.20 | 0.61 | µg/m$^3$ | **0.40 J;** |
| DOE-1 | 3/13/2025 | Tetrahydrofuran | - | 2100 | 0.28 | 1.3 | µg/m$^3$ | **1.2 J;** |
| DOE-1 | 3/13/2025 | Toluene | 440[1] | - | 0.088 | 0.74 | µg/m$^3$ | **0.61 J;** |
| DOE-1 | 3/13/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.68 | µg/m$^3$ | **1.2 ;** |
| DOE-2 | 3/13/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.65 | µg/m$^3$ | **0.53 J;** |
| DOE-2 | 3/13/2025 | 1,2,4-trimethylbenzene | - | 63 | 0.11 | 0.75 | µg/m$^3$ | **1.5 ;** |
| DOE-2 | 3/13/2025 | 1,3,5-trimethylbenzene | - | 63 | 0.11 | 0.77 | µg/m$^3$ | **0.24 J;** |
| DOE-2 | 3/13/2025 | 2-butanone | - | 5200[1] | 0.34 | 1.4 | µg/m$^3$ | **0.87 J;** |
| DOE-2 | 3/13/2025 | 4-ethyltoluene | - | | 0.12 | 0.74 | µg/m$^3$ | **0.52 J;** |
| DOE-2 | 3/13/2025 | 4-methyl-2-pentanone | - | 3100 | 0.27 | 1.5 | µg/m$^3$ | **3.3 ;** |
| DOE-2 | 3/13/2025 | Benzene | 0.097 | - | 0.11 | 0.72 | µg/m$^3$ | **0.33 J;** |
| DOE-2 | 3/13/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.72 | µg/m$^3$ | **0.39 J;** |
| DOE-2 | 3/13/2025 | Chloromethane | - | 94 | 0.12 | 0.75 | µg/m$^3$ | **0.38 J;** |
| DOE-2 | 3/13/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.72 | µg/m$^3$ | **2.1 ;** |
| DOE-2 | 3/13/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **12 ;** |
| DOE-2 | 3/13/2025 | Ethylbenzene | - | 1.1 | 0.11 | 0.77 | µg/m$^3$ | **0.12 J;** |
| DOE-2 | 3/13/2025 | Isopropanol | - | 210 | 0.31 | 1.5 | µg/m$^3$ | **0.33 J;** |
| DOE-2 | 3/13/2025 | Isopropylbenzene | - | 420 | 0.11 | 0.75 | µg/m$^3$ | **0.42 J;** |
| DOE-2 | 3/13/2025 | Methylene chloride | 1 | - | 0.21 | 0.65 | µg/m$^3$ | **0.51 J;** |
| DOE-2 | 3/13/2025 | m-xylene & p-xylene | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **0.60 J;** |
| DOE-2 | 3/13/2025 | N-propylbenzene | - | 1000 | 0.11 | 0.74 | µg/m$^3$ | **0.29 J;** |
| DOE-2 | 3/13/2025 | o-Xylene (1,2-dimethyl-benzene) | - | 100 | 0.11 | 0.77 | µg/m$^3$ | **0.43 J;** |
| DOE-2 | 3/13/2025 | Toluene | 440[1] | - | 0.092 | 0.77 | µg/m$^3$ | **0.78 ;** |
| DOE-2 | 3/13/2025 | Trichloroethene | - | 0.48 | 0.10 | 0.75 | µg/m$^3$ | **0.14 J;** |
| DOE-2 | 3/13/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.72 | µg/m$^3$ | **1.3 ;** |
| DOE-2 | 3/13/2025 | Xylenes, total | - | 100 | 0.20 | 1.5 | µg/m$^3$ | **1.0 J;** |
| DOE-3 | 3/13/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.098 | 0.59 | µg/m$^3$ | **0.53 J;** |
| DOE-3 | 3/13/2025 | 1,2,4-trimethylbenzene | - | 63 | 0.095 | 0.68 | µg/m$^3$ | **0.21 J;** |
| DOE-3 | 3/13/2025 | 1,2-Dichloroethane | - | 0.11 | 0.076 | 0.65 | µg/m$^3$ | **0.081 J;** |
| DOE-3 | 3/13/2025 | 2-butanone | - | 5200[1] | 0.31 | 1.3 | µg/m$^3$ | **0.36 J;** |
| DOE-3 | 3/13/2025 | Benzene | 0.097 | - | 0.099 | 0.66 | µg/m$^3$ | **1.2 ;** |
| DOE-3 | 3/13/2025 | Carbon tetrachloride | - | 0.47 | 0.095 | 0.66 | µg/m$^3$ | **0.42 J;** |
| DOE-3 | 3/13/2025 | Chloromethane | - | 94 | 0.11 | 0.68 | µg/m$^3$ | **0.42 J;** |
| DOE-3 | 3/13/2025 | Dichlorodifluoromethane | - | 100[1] | 0.11 | 0.65 | µg/m$^3$ | **2.1 ;** |
| DOE-3 | 3/13/2025 | Ethyl acetate | - | 73[1] | 0.98 | 2.5 | µg/m$^3$ | **8.7 ;** |
| DOE-3 | 3/13/2025 | Isopropylbenzene | - | 420 | 0.099 | 0.68 | µg/m$^3$ | **0.17 J;** |
| DOE-3 | 3/13/2025 | Methylene chloride | 1 | - | 0.19 | 0.59 | µg/m$^3$ | **0.43 J;** |
| DOE-3 | 3/13/2025 | Naphthalene | - | 0.083 | 0.17 | 1.4 | µg/m$^3$ | **0.22 J;** |

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-3 | 3/13/2025 | Toluene | 440[1] | - | 0.084 | 0.70 | µg/m$^3$ | **0.20 J;** |
| DOE-3 | 3/13/2025 | Trichloroethene | - | 0.48 | 0.093 | 0.68 | µg/m$^3$ | **0.11 J;** |
| DOE-3 | 3/13/2025 | Trichlorofluoromethane | 1300[1] | - | 0.10 | 0.65 | µg/m$^3$ | **1.3 ;** |
| DOE-4 | 3/13/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.10 | 0.63 | µg/m$^3$ | **0.51 J;** |
| DOE-4 | 3/13/2025 | Benzene | 0.097 | - | 0.11 | 0.70 | µg/m$^3$ | **0.35 J;** |
| DOE-4 | 3/13/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.70 | µg/m$^3$ | **0.42 J;** |
| DOE-4 | 3/13/2025 | Chloromethane | - | 94 | 0.12 | 0.73 | µg/m$^3$ | **0.44 J;** |
| DOE-4 | 3/13/2025 | Dichlorodifluoromethane | - | 100[1] | 0.12 | 0.69 | µg/m$^3$ | **2.2 ;** |
| DOE-4 | 3/13/2025 | Ethyl acetate | - | 73[1] | 1.0 | 2.7 | µg/m$^3$ | **11 ;** |
| DOE-4 | 3/13/2025 | Isopropanol | - | 210 | 0.30 | 1.4 | µg/m$^3$ | **0.32 J;** |
| DOE-4 | 3/13/2025 | Methylene chloride | 1 | - | 0.21 | 0.62 | µg/m$^3$ | **0.42 J;** |
| DOE-4 | 3/13/2025 | Toluene | 440[1] | - | 0.089 | 0.75 | µg/m$^3$ | **0.20 J;** |
| DOE-4 | 3/13/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.69 | µg/m$^3$ | **1.3 ;** |
| DOE-1 | 3/28/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.67 | µg/m$^3$ | **0.49 J;** |
| DOE-1 | 3/28/2025 | 2-butanone | - | 5200[1] | 0.35 | 1.5 | µg/m$^3$ | **0.98 J;** |
| DOE-1 | 3/28/2025 | Benzene | 0.097 | - | 0.11 | 0.74 | µg/m$^3$ | **0.19 J;** |
| DOE-1 | 3/28/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.74 | µg/m$^3$ | **0.37 J;** |
| DOE-1 | 3/28/2025 | Chloromethane | - | 94 | 0.12 | 0.77 | µg/m$^3$ | **0.28 J;** |
| DOE-1 | 3/28/2025 | Dichlorodifluoromethane | - | 100 | 0.13 | 0.73 | µg/m$^3$ | **2.3 ;** |
| DOE-1 | 3/28/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.8 | µg/m$^3$ | **8.6 ;** |
| DOE-1 | 3/28/2025 | Isopropanol | - | 210 | 0.32 | 1.5 | µg/m$^3$ | **1.1 J;** |
| DOE-1 | 3/28/2025 | Methylene chloride | 1 | - | 0.22 | 0.66 | µg/m$^3$ | **0.44 J;** |
| DOE-1 | 3/28/2025 | Toluene | 440[1] | - | 0.094 | 0.79 | µg/m$^3$ | **0.29 J;** |
| DOE-1 | 3/28/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.73 | µg/m$^3$ | **1.2 ;** |
| DOE-2 | 3/28/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.10 | 0.63 | µg/m$^3$ | **0.46 J;** |
| DOE-2 | 3/28/2025 | Benzene | 0.097 | - | 0.10 | 0.69 | µg/m$^3$ | **0.19 J;** |
| DOE-2 | 3/28/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.69 | µg/m$^3$ | **0.37 J;** |
| DOE-2 | 3/28/2025 | Chloromethane | - | 94 | 0.12 | 0.72 | µg/m$^3$ | **0.27 J;** |
| DOE-2 | 3/28/2025 | Dichlorodifluoromethane | - | 100 | 0.12 | 0.69 | µg/m$^3$ | **2.1 ;** |
| DOE-2 | 3/28/2025 | Ethyl acetate | - | 73[1] | 1.0 | 2.7 | µg/m$^3$ | **6.9 ;** |
| DOE-2 | 3/28/2025 | Isopropanol | - | 210 | 0.30 | 1.4 | µg/m$^3$ | **0.95 J;** |
| DOE-2 | 3/28/2025 | Methylene chloride | 1 | - | 0.20 | 0.62 | µg/m$^3$ | **1.0 ;** |
| DOE-2 | 3/28/2025 | Toluene | 440[1] | - | 0.088 | 0.74 | µg/m$^3$ | **0.20 J;** |
| DOE-2 | 3/28/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.69 | µg/m$^3$ | **1.1 ;** |
| DOE-3 | 3/28/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.64 | µg/m$^3$ | **0.49 J;** |
| DOE-3 | 3/28/2025 | Benzene | 0.097 | - | 0.11 | 0.71 | µg/m$^3$ | **0.16 J;** |
| DOE-3 | 3/28/2025 | Carbon tetrachloride | - | 0.47 | 0.10 | 0.71 | µg/m$^3$ | **0.40 J;** |
| DOE-3 | 3/28/2025 | Chloromethane | - | 94 | 0.12 | 0.74 | µg/m$^3$ | **0.27 J;** |
| DOE-3 | 3/28/2025 | Dichlorodifluoromethane | - | 100 | 0.12 | 0.71 | µg/m$^3$ | **2.3 ;** |
| DOE-3 | 3/28/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.7 | µg/m$^3$ | **5.8 ;** |
| DOE-3 | 3/28/2025 | Isopropanol | - | 210 | 0.31 | 1.4 | µg/m$^3$ | **0.96 J;** |
| DOE-3 | 3/28/2025 | Methylene chloride | 1 | - | 0.21 | 0.64 | µg/m$^3$ | **0.42 J;** |

| ID | Sample Date | Analyte | DTSC HHRA NOTE 3 | US EPA RSL | MDL | MRL | Unit | Result |
|---|---|---|---|---|---|---|---|---|
| DOE-3 | 3/28/2025 | Toluene | 440[1] | - | 0.091 | 0.76 | µg/m$^3$ | **0.17 J;** |
| DOE-3 | 3/28/2025 | Trichlorofluoromethane | 1300[1] | - | 0.11 | 0.71 | µg/m$^3$ | **1.2 ;** |
| DOE-4 | 3/28/2025 | 1,1,2-trichloro-1,2,2-trifluoroethane | - | 5200[1] | 0.11 | 0.68 | µg/m$^3$ | **0.51 J;** |
| DOE-4 | 3/28/2025 | Benzene | 0.097 | - | 0.11 | 0.75 | µg/m$^3$ | **0.18 J;** |
| DOE-4 | 3/28/2025 | Carbon tetrachloride | - | 0.47 | 0.11 | 0.75 | µg/m$^3$ | **0.41 J;** |
| DOE-4 | 3/28/2025 | Chloromethane | - | 94 | 0.13 | 0.78 | µg/m$^3$ | **0.30 J;** |
| DOE-4 | 3/28/2025 | Dichlorodifluoromethane | - | 100 | 0.13 | 0.74 | µg/m$^3$ | **2.3 ;** |
| DOE-4 | 3/28/2025 | Ethyl acetate | - | 73[1] | 1.1 | 2.9 | µg/m$^3$ | **5.6 ;** |
| DOE-4 | 3/28/2025 | Isopropanol | - | 210 | 0.32 | 1.5 | µg/m$^3$ | **0.83 J;** |
| DOE-4 | 3/28/2025 | Methylene chloride | 1 | - | 0.22 | 0.67 | µg/m$^3$ | **0.44 J;** |
| DOE-4 | 3/28/2025 | Tetrahydrofuran | - | 2100 | 0.31 | 1.4 | µg/m$^3$ | **1.3 J;** |
| DOE-4 | 3/28/2025 | Toluene | 440[1] | - | 0.096 | 0.80 | µg/m$^3$ | **0.18 J;** |
| DOE-4 | 3/28/2025 | Trichlorofluoromethane | 1300[1] | - | 0.12 | 0.74 | µg/m$^3$ | **1.2 ;** |

Notes:

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

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

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

**Bold** text indicates result above MDL.

"—" indicates no value.

MDL = Method Detection Limit

MRL = Method Reporting Limit

D = Dilution

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

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

µg/m$^3$ = micrograms per meter cubed

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# APPENDIX C

# Radionuclide Results

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

| Sample Collection Date / Time | Result Alpha (μCi/mL) | MDC – Alpha (μCi/mL) | Result Beta (μCi/mL) | MDC – Beta (μCi/mL) |
|---|---|---|---|---|
| **Sample location DOE-1** | | | | |
| 1/3/25 8:41 | 4.42E-15 | 6.73E-15 | 9.02E-14 | 2.81E-14 |
| 1/6/25 8:38 | 4.70E-15 | 6.64E-15 | 3.15E-14 | 2.78E-14 |
| 1/10/25 9:29 | 2.00E-15 | 4.93E-15 | 2.21E-14 | 2.06E-14 |
| 1/13/25 8:53 | -3.38E-16 | 6.69E-15 | 3.03E-14 | 2.80E-14 |
| 1/17/25 9:21 | 2.25E-15 | 4.95E-15 | 4.28E-14 | 2.07E-14 |
| 1/20/25 9:34 | 5.02E-15 | 6.61E-15 | 1.39E-13 | 2.77E-14 |
| 1/24/25 9:06 | 2.53E-16 | 5.00E-15 | 4.40E-14 | 2.09E-14 |
| 1/28/25 9:30 | 3.01E-15 | 4.95E-15 | 2.93E-14 | 2.07E-14 |
| 1/31/25 9:58 | 3.00E-15 | 6.59E-15 | 1.13E-13 | 2.76E-14 |
| 2/3/25 8:51 | 1.88E-15 | 6.79E-15 | 1.36E-13 | 2.83E-14 |
| 2/7/25 9:36 | 2.62E-15 | 4.97E-15 | 1.97E-14 | 2.07E-14 |
| 2/10/25 8:59 | -8.39E-16 | 6.74E-15 | 4.26E-14 | 2.81E-14 |
| 2/14/25 9:32 | 6.30E-16 | 4.98E-15 | 2.93E-14 | 2.08E-14 |
| 2/17/25 8:20 | 5.19E-16 | 6.80E-15 | 2.26E-14 | 2.84E-14 |
| 2/21/25 8:46 | 2.38E-15 | 4.99E-15 | 4.99E-14 | 2.08E-14 |
| 2/24/25 9:10 | -1.83E-15 | 6.65E-15 | 6.08E-14 | 2.77E-14 |
| 2/28/25 9:19 | -1.88E-15 | 5.01E-15 | 4.90E-14 | 2.09E-14 |
| 3/3/25 8:58 | -1.59E-15 | 7.08E-15 | 6.26E-14 | 2.73E-14 |
| 3/7/25 9:03 | -2.93E-15 | 5.27E-15 | 1.82E-14 | 2.03E-14 |
| 3/10/25 8:55 | -9.24E-16 | 7.15E-15 | 4.11E-14 | 2.76E-14 |
| 3/14/25 9:51 | 2.06E-15 | 5.23E-15 | 1.78E-14 | 2.02E-14 |
| 3/17/25 8:46 | 1.45E-15 | 7.14E-15 | 2.43E-14 | 2.75E-14 |
| 3/21/25 9:22 | -9.27E-16 | 5.24E-15 | 4.27E-14 | 2.02E-14 |
| 3/24/25 9:16 | -1.58E-15 | 7.05E-15 | 6.34E-14 | 2.72E-14 |
| 3/28/25 9:10 | -2.44E-15 | 5.29E-15 | 3.46E-14 | 2.04E-14 |
| 3/31/25 9:14 | -1.91E-15 | 7.03E-15 | 3.94E-14 | 2.71E-14 |

| Sample Collection Date / Time | Result Alpha (µCi/mL) | MDC – Alpha (µCi/mL) | Result Beta (µCi/mL) | MDC – Beta (µCi/mL) |
|---|---|---|---|---|
| **Sample location DOE-2** | | | | |
| 1/3/25 9:03 | 6.45E-15 | 6.71E-15 | 6.05E-14 | 2.80E-14 |
| 1/6/25 8:47 | 0.00E+00 | 6.66E-15 | 4.98E-14 | 2.78E-14 |
| 1/10/25 9:38 | 2.49E-16 | 4.93E-15 | 2.58E-14 | 2.06E-14 |
| 1/13/25 9:03 | 2.71E-15 | 6.69E-15 | 6.61E-14 | 2.80E-14 |
| 1/17/25 9:30 | 3.76E-15 | 4.95E-15 | 6.61E-14 | 2.07E-14 |
| 1/20/25 9:44 | 6.20E-15 | 6.81E-15 | 1.34E-13 | 2.85E-14 |
| 1/24/25 9:16 | 3.04E-15 | 5.00E-15 | 4.33E-14 | 2.09E-14 |
| 1/31/25 10:06 | 3.97E-15 | 7.14E-15 | 8.50E-14 | 2.98E-14 |
| 2/3/25 9:01 | 3.58E-15 | 6.79E-15 | 1.11E-13 | 2.83E-14 |
| 2/7/25 9:55 | -1.36E-15 | 4.97E-15 | 1.89E-14 | 2.07E-14 |
| 2/10/25 9:10 | 3.90E-15 | 6.75E-15 | 2.57E-14 | 2.82E-14 |
| 2/14/25 9:50 | 3.79E-16 | 4.98E-15 | 2.69E-14 | 2.08E-14 |
| 2/17/25 8:30 | -8.48E-16 | 6.81E-15 | 4.27E-14 | 2.84E-14 |
| 2/21/25 8:57 | -6.20E-16 | 4.99E-15 | 4.56E-14 | 2.08E-14 |
| 2/24/25 9:21 | 8.40E-16 | 6.65E-15 | 6.93E-14 | 2.77E-14 |
| 2/28/25 9:27 | 8.84E-16 | 5.01E-15 | 2.87E-14 | 2.09E-14 |
| 3/3/25 9:12 | -4.27E-15 | 7.06E-15 | 4.37E-14 | 2.72E-14 |
| 3/7/25 9:21 | -1.68E-15 | 5.27E-15 | 1.76E-14 | 2.03E-14 |
| 3/10/25 9:15 | -3.98E-15 | 7.14E-15 | 3.18E-14 | 2.75E-14 |
| 3/14/25 10:11 | -1.17E-15 | 5.22E-15 | 3.26E-14 | 2.01E-14 |
| 3/17/25 8:58 | -1.27E-15 | 7.16E-15 | 3.54E-14 | 2.76E-14 |
| 3/21/25 9:31 | 6.98E-17 | 5.24E-15 | 4.40E-14 | 2.02E-14 |
| 3/24/25 9:31 | 2.79E-15 | 7.09E-15 | 4.57E-14 | 2.73E-14 |
| 3/28/25 9:20 | 8.24E-16 | 5.29E-15 | 3.51E-14 | 2.04E-14 |
| 3/31/25 9:25 | -2.91E-15 | 7.03E-15 | 1.48E-14 | 2.71E-14 |

| Sample Collection Date / Time | Result Alpha (µCi/mL) | MDC – Alpha (µCi/mL) | Result Beta (µCi/mL) | MDC – Beta (µCi/mL) |
|---|---|---|---|---|
| **Sample location DOE-3** | | | | |
| 1/3/25 9:13 | 1.70E-15 | 6.71E-15 | 4.76E-14 | 2.80E-14 |
| 1/6/25 8:56 | 2.36E-15 | 6.66E-15 | 4.34E-14 | 2.79E-14 |
| 1/10/25 9:57 | -7.47E-16 | 4.92E-15 | 6.55E-14 | 2.06E-14 |
| 1/13/25 9:15 | 1.02E-15 | 6.70E-15 | 3.72E-14 | 2.80E-14 |
| 1/17/25 9:42 | 1.00E-15 | 4.95E-15 | 4.81E-14 | 2.07E-14 |
| 1/20/25 10:05 | 9.01E-15 | 6.60E-15 | 1.04E-13 | 2.76E-14 |
| 1/24/25 9:26 | 5.07E-16 | 5.01E-15 | 4.01E-14 | 2.09E-14 |
| 1/28/25 9:58 | 1.25E-15 | 4.95E-15 | 4.07E-14 | 2.07E-14 |
| 1/31/25 10:15 | 2.67E-15 | 6.61E-15 | 1.08E-13 | 2.76E-14 |
| 2/3/25 9:10 | -1.87E-15 | 6.79E-15 | 9.00E-14 | 2.83E-14 |
| 2/7/25 10:06 | -1.86E-15 | 4.96E-15 | 2.15E-14 | 2.07E-14 |
| 2/10/25 9:22 | 3.23E-15 | 6.75E-15 | 1.67E-14 | 2.82E-14 |
| 2/14/25 10:38 | 8.74E-16 | 4.95E-15 | 5.00E-14 | 2.06E-14 |
| 2/17/25 8:40 | -1.20E-15 | 6.88E-15 | 4.41E-14 | 2.87E-14 |
| 2/21/25 9:08 | 3.80E-16 | 4.99E-15 | 4.67E-14 | 2.08E-14 |
| 2/24/25 9:34 | 1.51E-15 | 6.65E-15 | 5.54E-14 | 2.77E-14 |
| 2/28/25 9:35 | 3.82E-16 | 5.01E-15 | 6.94E-14 | 2.09E-14 |
| 3/3/25 9:19 | -1.58E-15 | 7.06E-15 | 1.80E-14 | 2.72E-14 |
| 3/7/25 9:31 | -3.93E-15 | 5.27E-15 | 3.61E-14 | 2.03E-14 |
| 3/10/25 9:27 | 2.47E-15 | 7.14E-15 | 5.68E-14 | 2.75E-14 |
| 3/14/25 10:35 | -1.42E-15 | 5.22E-15 | 1.20E-14 | 2.01E-14 |
| 3/17/25 9:06 | -1.61E-15 | 7.18E-15 | 3.45E-14 | 2.77E-14 |
| 3/21/25 9:39 | -4.29E-16 | 5.25E-15 | 3.41E-14 | 2.02E-14 |
| 3/24/25 9:39 | 1.10E-15 | 7.07E-15 | 5.76E-14 | 2.73E-14 |
| 3/28/25 9:30 | -1.19E-15 | 5.29E-15 | 2.59E-14 | 2.04E-14 |
| 3/31/25 9:46 | -3.24E-15 | 7.01E-15 | 2.98E-14 | 2.70E-14 |

| Sample Collection Date / Time | Result Alpha (µCi/mL) | MDC – Alpha (µCi/mL) | Result Beta (µCi/mL) | MDC – Beta (µCi/mL) |
|---|---|---|---|---|
| **Sample location DOE-4** | | | | |
| 1/3/25 9:24 | 2.04E-15 | 6.70E-15 | 6.02E-14 | 2.80E-14 |
| 1/6/25 9:04 | 3.37E-15 | 6.66E-15 | 6.16E-14 | 2.79E-14 |
| 1/10/25 10:09 | 1.24E-15 | 4.92E-15 | 2.94E-14 | 2.06E-14 |
| 1/13/25 9:36 | -6.76E-16 | 6.68E-15 | 3.92E-14 | 2.79E-14 |
| 1/17/25 9:36 | -1.25E-15 | 4.96E-15 | 5.51E-14 | 2.07E-14 |
| 1/20/25 10:15 | 6.01E-15 | 6.60E-15 | 1.04E-13 | 2.76E-14 |
| 1/24/25 9:35 | 7.61E-16 | 5.01E-15 | 4.15E-14 | 2.10E-14 |
| 1/28/25 10:08 | -2.25E-15 | 4.95E-15 | 6.08E-14 | 2.07E-14 |
| 1/31/25 10:25 | 4.01E-15 | 6.61E-15 | 1.06E-13 | 2.76E-14 |
| 2/3/25 9:17 | 1.88E-15 | 6.79E-15 | 1.06E-13 | 2.83E-14 |
| 2/7/25 10:27 | -1.36E-15 | 4.95E-15 | 1.30E-14 | 2.07E-14 |
| 2/10/25 9:33 | 5.16E-16 | 6.77E-15 | 4.02E-14 | 2.82E-14 |
| 2/12/25 10:27 | 7.51E-16 | 9.84E-15 | 1.01E-13 | 4.11E-14 |
| 2/21/25 9:22 | -8.70E-16 | 4.99E-15 | 4.05E-14 | 2.08E-14 |
| 2/24/25 9:43 | -4.94E-16 | 6.65E-15 | 4.41E-14 | 2.78E-14 |
| 2/28/25 9:50 | -8.74E-16 | 5.01E-15 | 5.27E-14 | 2.09E-14 |
| 3/3/25 9:27 | -3.60E-15 | 7.08E-15 | 6.51E-14 | 2.73E-14 |
| 3/7/25 9:48 | -1.80E-16 | 5.26E-15 | 1.37E-14 | 2.03E-14 |
| 3/10/25 9:41 | 1.11E-15 | 7.15E-15 | 4.65E-14 | 2.76E-14 |
| 3/14/25 8:53 | 5.76E-16 | 5.32E-15 | 5.74E-14 | 2.05E-14 |
| 3/17/25 9:14 | 7.59E-16 | 7.00E-15 | 2.76E-14 | 2.70E-14 |
| 3/21/25 9:49 | 8.18E-16 | 5.24E-15 | 3.88E-14 | 2.02E-14 |
| 3/24/25 9:51 | -2.25E-15 | 7.03E-15 | 6.78E-14 | 2.71E-14 |
| 3/28/25 9:39 | 7.04E-17 | 5.29E-15 | 1.67E-14 | 2.04E-14 |
| 3/31/25 10:00 | -5.90E-15 | 7.00E-15 | 2.91E-14 | 2.70E-14 |

**Note: Some values are negative after background subtraction.**

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

| Radionuclide | MDC (pCi/sample) | Result (pCi/sample) | Data Qualifier | Airborne Concentration (µCi/mL) |
|---|---|---|---|---|
| **Q1/2025 Location DOE-1 – Air volume/sample = 9.72E+08** | | | | |
| Strontium-90 | 2.78 | 0.945 | U ; U | 9.72E-16 |
| Radium-226, -228 combined | 3.92 | 14.8 | ; UJ | 1.52E-14 |
| Ra-228 | 4.93 | -1.57 | U ; U | -1.62E-15 |
| Polonium-210 | 0.409 | **6.93** | **;** | **7.13E-15** |
| Americium-241 | 0.303 | 0.128 | U ; U | 1.32E-16 |
| Thorium-228 | 0.659 | 0.501 | U ; U | 5.15E-16 |
| Thorium-230 | 0.599 | 1.09 | ; UJ | 1.12E-15 |
| Thorium-232 | 0.499 | 0.510 | ; UJ | 5.25E-16 |
| Uranium-233/234 | 0.625 | 1.37 | ; UJ | 1.41E-15 |
| Uranium-235/236 | 0.518 | -0.0611 | U ; U | -6.29E-17 |
| Uranium-238 | 0.380 | 0.860 | ; UJ | 8.85E-16 |
| Plutonium-238 | 0.548 | 0.165 | U ; U | 1.70E-16 |
| Plutonium-239 | 0.646 | 0.0192 | U ; U | 1.98E-17 |
| Plutonium-241 | 60.7 | 4.61 | U ; U | 4.74E-15 |
| Actinium-228 | 41.4 | 7.57 | U ; U | 7.79E-15 |
| Beryllium-7 | 89.8 | 65.4 | U ; U | 6.73E-14 |
| Cesium-137 | 9.53 | -1.82 | U ; U | -1.87E-15 |
| Cobalt-60 | 6.87 | -1.96 | U ; U | -2.02E-15 |
| Potassium-40 | 81.7 | 121 | UI ; UJ | 1.24E-13 |
| **Q1/2025 Location DOE-2 – Air volume/sample = 9.25E+08** | | | | |
| Strontium-90 | 2.82 | -0.682 | U ; U | -7.37E-16 |
| Radium-226, -228 combined | 4.98 | 2.08 | U ; U | 2.25E-15 |
| Ra-228 | 4.97 | 2.63 | U ; U | 2.84E-15 |
| Polonium-210 | 0.424 | **4.27** | **;** | **4.62E-15** |
| Americium-241 | 0.441 | -0.0892 | U ; U | -9.64E-17 |
| Thorium-228 | 0.762 | 0.919 | ; UJ | 9.94E-16 |
| Thorium-230 | 0.813 | 1.04 | ; UJ | 1.12E-15 |
| Thorium-232 | 0.463 | 0.755 | ; UJ | 8.16E-16 |
| Uranium-233/234 | 0.710 | 0.442 | U ; U | 4.78E-16 |
| Uranium-235/236 | 0.549 | 0.170 | U ; U | 1.84E-16 |
| Uranium-238 | 0.473 | 0.863 | ; UJ | 9.33E-16 |
| Plutonium-238 | 0.427 | 0.160 | U ; U | 1.73E-16 |
| Plutonium-239 | 0.427 | 0.0196 | U ; U | 2.12E-17 |
| Plutonium-241 | 86.3 | 8.05 | U ; UJ | 8.70E-15 |
| Actinium-228 | 43.4 | 1.56 | U ; U | 1.69E-15 |
| Beryllium-7 | 100 | 75.0 | U ; U | 8.11E-14 |
| Cesium-137 | 9.77 | -1.88 | U ; U | -2.03E-15 |
| Cobalt-60 | 13.6 | 2.90 | U ; U | 3.14E-15 |
| Potassium-40 | 130 | 3.70 | U ; U | 4.00E-15 |
| **Q1/2025 Location DOE-3 – Air volume/sample = 9.72E+08** | | | | |
| Strontium-90 | 1.75 | -1.37 | U ; U | -1.41E-15 |
| Radium-226, -228 combined | 4.69 | 9.43 | ; UJ | 9.70E-15 |
| Ra-228 | 6.94 | 4.06 | U ; U | 4.18E-15 |
| Polonium-210 | 0.635 | 0.821 | ; UJ | 8.45E-16 |

| Radionuclide | MDC (pCi/sample) | Result (pCi/sample) | Data Qualifier | Airborne Concentration (µCi/mL) |
|---|---|---|---|---|
| Americium-241 | 0.310 | 0.0262 | U ; U | 2.70E-17 |
| Thorium-228 | 0.691 | 0.892 | ; UJ | 9.18E-16 |
| Thorium-230 | 0.817 | 1.36 | ; UJ | 1.40E-15 |
| Thorium-232 | 0.712 | 0.473 | U ; U | 4.87E-16 |
| Uranium-233/234 | 0.624 | 0.549 | U ; U | 5.65E-16 |
| Uranium-235/236 | 0.401 | 0.110 | U ; U | 1.13E-16 |
| Uranium-238 | 0.433 | 0.911 | ; UJ | 9.37E-16 |
| Plutonium-238 | 0.363 | 0.0997 | U ; U | 1.03E-16 |
| Plutonium-239 | 0.400 | -0.0472 | U ; U | -4.86E-17 |
| Plutonium-241 | 85.1 | -65.4 | U ; UJ | -6.73E-14 |
| Actinium-228 | 41.8 | 14.9 | U ; U | 1.53E-14 |
| Beryllium-7 | 105 | **226** | **;** | **2.33E-13** |
| Cesium-137 | 12.5 | 1.38 | U ; U | 1.42E-15 |
| Cobalt-60 | 10.0 | 0.371 | U ; U | 3.82E-16 |
| Potassium-40 | 113 | 145 | UI ; UJ | 1.49E-13 |
| **Q1/2025 Location DOE-4 – Air volume/sample = 9.19E+08** | | | | |
| Strontium-90 | 2.54 | 0.0552 | U ; U | 6.01E-17 |
| Radium-226, -228 combined | 5.01 | 8.54 | ; UJ | 9.29E-15 |
| Ra-228 | 4.74 | -0.667 | U ; U | -7.26E-16 |
| Polonium-210 | 0.457 | **6.28** | **;** | **6.83E-15** |
| Americium-241 | 0.408 | 0.0640 | U ; U | 6.96E-17 |
| Thorium-228 | 0.557 | 1.03 | ; UJ | 1.12E-15 |
| Thorium-230 | 0.537 | 0.487 | U ; U | 5.30E-16 |
| Thorium-232 | 0.441 | 0.0100 | U ; U | 1.09E-17 |
| Uranium-233/234 | 1.13 | 0.112 | U ; U | 1.22E-16 |
| Uranium-235/236 | 0.834 | -0.0983 | U ; U | -1.07E-16 |
| Uranium-238 | 0.674 | 0.473 | U ; U | 5.15E-16 |
| Plutonium-238 | 0.215 | 0.0718 | U ; U | 7.81E-17 |
| Plutonium-239 | 0.344 | -0.0172 | U ; U | -1.87E-17 |
| Plutonium-241 | 95.7 | -7.59 | U ; UJ | -8.26E-15 |
| Actinium-228 | 50.8 | 25.3 | U ; U | 2.75E-14 |
| Beryllium-7 | 123 | -12.2 | U ; U | -1.33E-14 |
| Cesium-137 | 13.8 | 6.72 | U ; U | 7.31E-15 |
| Cobalt-60 | 13.9 | 1.46 | U ; U | 1.59E-15 |
| Potassium-40 | 185 | 101 | U ; U | 1.10E-13 |

**NOTES AND ABBREVIATIONS**

MDC – minimum detectable concentration

Airborne concentration (µCi/mL) = (Result [pCi/sample]) / ([Air Volume (mL)/Sample]*1000000)

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

**Bold** text indicates detection.

pCi/sample – picocuries per sample

µCi/mL – microcuries per milliliter

Data Qualifier definitions:

**U** – Analyzed for but not detected.

**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.

# APPENDIX D

# $PM_{10}$ Monthly Audit Reports and Flow Verification Results

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NORTHWIND PORTAGE, INC.

# One-Point Flow Rate Bias Estimate

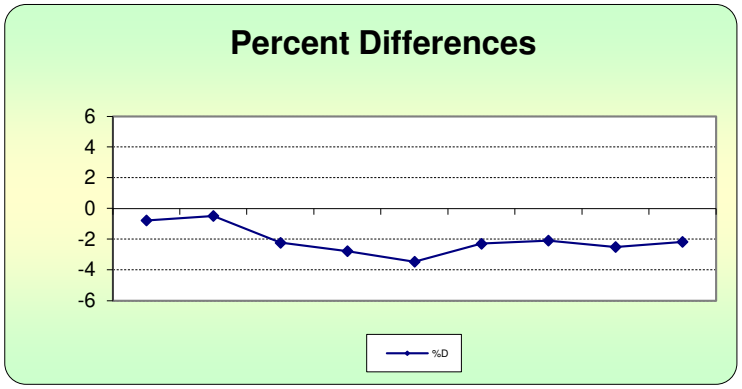
| ETEC Site: DOE-1 | Pollutant type: PM10 | Bias (%) |
|---|---|---|

| Quarter | E-BAM | Date | Meas Val (Y) | Audit Val (X) | d (Eqn. 1) | Percentile | $d^2$ | $\|d\|$ | $\|d\|^2$ |
|---|---|---|---|---|---|---|---|---|---|
| Q1/2025 (Q28) | W23314 | 1/17/2025 | 14.00 | 14.11 | -0.780 | | 0.608 | 0.780 | 0.608 |
| | | | 16.70 | 16.78 | -0.477 | **25th** | 0.227 | 0.477 | 0.227 |
| | | | 17.50 | 17.90 | -2.235 | -2.510 | 4.994 | 2.235 | 4.994 |
| Q1/2025 | W23314 | 2/22/2025 | 14.00 | 14.40 | -2.778 | | 7.716 | 2.778 | 7.716 |
| | | | 16.70 | 17.30 | -3.468 | **75th** | 12.028 | 3.468 | 12.028 |
| | | | 17.50 | 17.91 | -2.289 | -2.098 | 5.241 | 2.289 | 5.241 |
| Q1/2025 | W23314 | 3/21/2025 | 14.00 | 14.30 | -2.098 | | 4.401 | 2.098 | 4.401 |
| | | | 16.70 | 17.13 | -2.510 | | 6.301 | 2.510 | 6.301 |
| | | | 17.50 | 17.89 | -2.180 | | 4.752 | 2.180 | 4.752 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| n | $\sum\|d\|$ | "AB" (Eqn 4) |
|---|---|---|
| 9 | 18.814 | 2.090 |
| n-1 | $\sum\|d\|^2$ | "AS" (Eqn 5) |
| 8 | 46.268 | 0.931 |

| Bias (%) (Eqn 3) | Both Signs Positive |
|---|---|
| 2.67 | FALSE |
| **Signed Bias (%)** | Both Signs Negative |
| -2.67 | TRUE |

Note: No quality issues reported this quarter.




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

NORTHWIND PORTAGE, INC.

# One-Point Flow Rate Bias Estimate

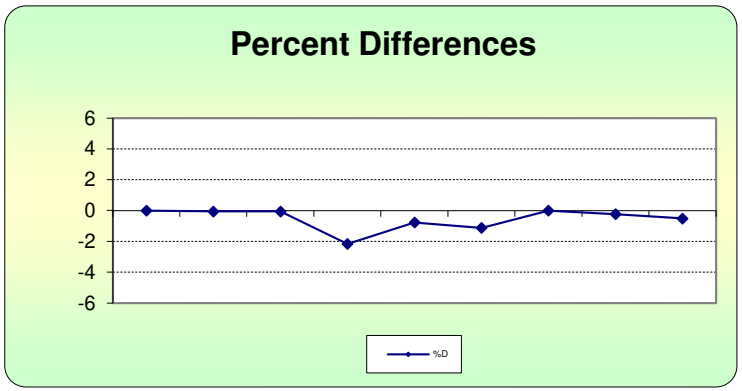
| ETEC Site: DOE-2 | Pollutant type: PM10 | Bias (%) |
|---|---|---|

| Quarter | E-BAM | Date | Meas Val (Y) | Audit Val (X) | d (Eqn. 1) | Percentile | $d^2$ | $\|d\|$ | $\|d\|^2$ |
|---|---|---|---|---|---|---|---|---|---|
| Q1/2025 (Q28) | Y12096 | 1/17/2025 | 14.00 | 14.00 | 0.000 | | 0.000 | 0.000 | 0.000 |
| | | | 16.70 | 16.71 | -0.060 | **25th** | 0.004 | 0.060 | 0.004 |
| | | | 17.50 | 17.51 | -0.057 | -0.772 | 0.003 | 0.057 | 0.003 |
| Q1/2025 | Y12096 | 2/22/2025 | 14.00 | 14.31 | -2.166 | | 4.693 | 2.166 | 4.693 |
| | | | 16.70 | 16.83 | -0.772 | **75th** | 0.597 | 0.772 | 0.597 |
| | | | 17.50 | 17.70 | -1.130 | -0.057 | 1.277 | 1.130 | 1.277 |
| Q1/2025 | Y12096 | 3/21/2025 | 14.00 | 14.00 | 0.000 | | 0.000 | 0.000 | 0.000 |
| | | | 16.70 | 16.74 | -0.239 | | 0.057 | 0.239 | 0.057 |
| | | | 17.50 | 17.59 | -0.512 | | 0.262 | 0.512 | 0.262 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| n | $\sum\|d\|$ | "AB" (Eqn 4) |
|---|---|---|
| 9 | 4.936 | 0.548 |
| n-1 | $\sum\|d\|^2$ | "AS" (Eqn 5) |
| 8 | 6.892 | 0.723 |

| Bias (%) (Eqn 3) | Both Signs Positive |
|---|---|
| 1 | FALSE |
| **Signed Bias (%)** | Both Signs Negative |
| -1.00 | TRUE |

Note: No quality issues reported this quarter.





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

NORTHWIND PORTAGE, INC.

# One-Point Flow Rate Bias Estimate

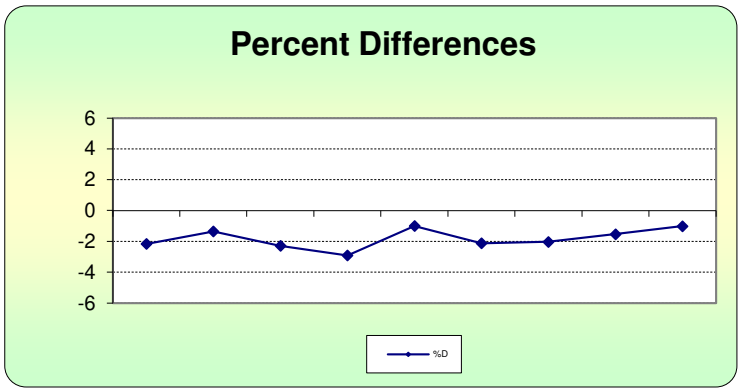
| ETEC Site: DOE-3 | Pollutant type: PM10 | Bias (%) |
|---|---|---|

| Quarter | E-BAM | Date | Meas Val (Y) | Audit Val (X) | d (Eqn. 1) | Percentile | $d^2$ | \|d\| | $\|d\|^2$ |
|---|---|---|---|---|---|---|---|---|---|
| Q1/2025 | W23313 | 1/20/2025 | 14.00 | 14.31 | -2.166 | | 4.693 | 2.166 | 4.693 |
| (Q28) | | | 16.70 | 16.93 | -1.359 | **25th** | 1.846 | 1.359 | 1.846 |
| | | | 17.50 | 17.91 | -2.289 | -2.166 | 5.241 | 2.289 | 5.241 |
| Q1/2025 | W23313 | 2/22/2025 | 14.00 | 14.42 | -2.913 | | 8.483 | 2.913 | 8.483 |
| | | | 16.70 | 16.87 | -1.008 | **75th** | 1.015 | 1.008 | 1.015 |
| | | | 17.50 | 17.88 | -2.125 | -1.359 | 4.517 | 2.125 | 4.517 |
| Q1/2025 | W23313 | 3/21/2025 | 14.00 | 14.29 | -2.029 | | 4.118 | 2.029 | 4.118 |
| | | | 16.70 | 16.96 | -1.533 | | 2.350 | 1.533 | 2.350 |
| | | | 17.50 | 17.68 | -1.018 | | 1.037 | 1.018 | 1.037 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| n | $\sum\|d\|$ | "AB" (Eqn 4) |
|---|---|---|
| 9 | 16.440 | 1.827 |
| n-1 | $\sum\|d\|^2$ | "AS" (Eqn 5) |
| 8 | 33.300 | 0.639 |

| Bias (%) (Eqn 3) | Both Signs Positive |
|---|---|
| 2.22 | FALSE |
| **Signed Bias (%)** | Both Signs Negative |
| -2.22 | TRUE |

Note: No quality issues reported this quarter.




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

NORTHWIND PORTAGE, INC.

# One-Point Flow Rate Bias Estimate

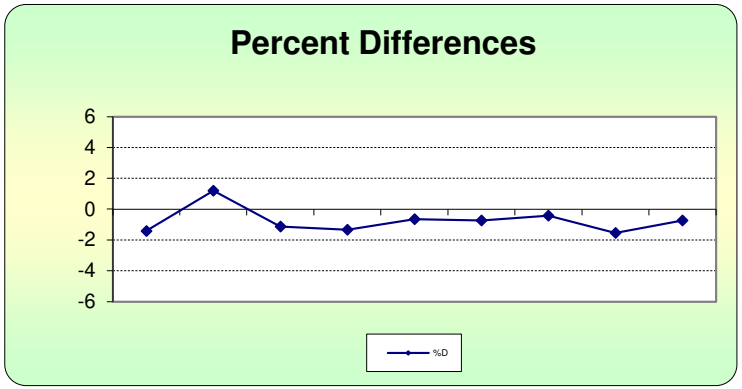
| ETEC Site: DOE-4 | Pollutant type: PM10 | Bias (%) |
|---|---|---|

| Quarter | E-BAM | Date | Meas Val (Y) | Audit Val (X) | d (Eqn. 1) | Percentile | $d^2$ | \|d\| | $\|d\|^2$ |
|---|---|---|---|---|---|---|---|---|---|
| Q1/2025 | B18932 | 1/17/2025 | 14.00 | 14.20 | -1.408 | | 1.984 | 1.408 | 1.984 |
| (Q28) | | | 16.70 | 16.50 | 1.212 | **25th** | 1.469 | 1.212 | 1.469 |
| | | | 17.50 | 17.70 | -1.130 | -1.339 | 1.277 | 1.130 | 1.277 |
| Q1/2025 | X16067 | 2/22/2025 | 14.00 | 14.19 | -1.339 | | 1.793 | 1.339 | 1.793 |
| | | | 16.70 | 16.81 | -0.654 | **75th** | 0.428 | 0.654 | 0.428 |
| | | | 17.50 | 17.63 | -0.737 | -0.654 | 0.544 | 0.737 | 0.544 |
| Q1/2025 | X16067 | 3/21/2025 | 14.00 | 14.06 | -0.427 | | 0.182 | 0.427 | 0.182 |
| | | | 16.70 | 16.96 | -1.533 | | 2.350 | 1.533 | 2.350 |
| | | | 17.50 | 17.63 | -0.737 | | 0.544 | 0.737 | 0.544 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| n | $\sum\|d\|$ | "AB" (Eqn 4) |
|---|---|---|
| 9 | 9.178 | 1.020 |
| n-1 | $\sum\|d\|^2$ | "AS" (Eqn 5) |
| 8 | 10.571 | 0.389 |

| Bias (%) (Eqn 3) | Both Signs Positive |
|---|---|
| 1.26 | FALSE |
| **Signed Bias (%)** | Both Signs Negative |
| -1.26 | TRUE |

Note: E-BAM unit B18932 malfunctioned on 2/12/2025 and was replaced with unit X16067.




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

NORTHWIND INC.

# Baseline Air Monitoring Program - DOE

## E-BAM Monthly Audit and Maintenance

Station # DOE-1 Serial # W23314

Audit Date: 1/17/25 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: 0.4 as left: 0.4

| | | E-BAM | | Ref. Std. | | | E-BAM | | Ref. Std. | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 13.7 | °C | 13.2 | °C | as left: | 13.7 | °C | 13.2 | °C |
| Barometric Pressure: | as found: | 715.0 | mmHg | 716.3 | mmHg | as left: | 715.0 | mmHg | 716.3 | mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 | lpm | 16.78 | lpm | as left: | 16.7 | lpm | 16.78 | lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 | lpm | 14.11 | lpm | as left: | 14.0 | lpm | 14.11 | lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 | lpm | 17.9 | lpm | as left: | 17.5 | lpm | 17.9 | lpm |

### Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

### Manual Span Membrane Test

Expected Span Mass (mg/cm2) : 0.984

Measured Span Mass (mg/cm2) : 0.980

Difference (mg/cm2) : 0.004

% Difference / (Pass) or Fail: 0.41%

### Pump Test

| Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
|---|---|---|
| 14.4 | 4/10 | Marginal |

### Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 1015 | 1015 | Analog Mode | Hourly | Hourly | Flow Type | Actual | Act |
| Location | 1 | 1 | Baud Rate | 9600 | 9600 | Restart Voltage | 12.5 v | 12.5 |
| Tape Advance | 24 hrs | 24hr | RH Setpoint | 45% | 45% | Std Cond Temp | 25 C | 25C |
| Realtime Avg | 60 mins | 60min | Delta T Setpoint | 15 C | 15C | DAC | 8.0 v | 8.0V |
| Machine Type | PM-10 | PM-10 | RH Control | On | on | RH Connect | No | NO |
| Analog FS | 1.0 v | 1.0V | Flow Setpoint | 16.7 | 16.7 | Pump Protect | Off | off |

### Last 6 Errors in E-BAM Error Log

| Error | Date | Time | Error | Date | Time |
|---|---|---|---|---|---|
| 1 No new Messages | BH HH | | 4 | | |
| 2 | 1/17/25 | 1021 | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

NORTHWIND INC.

# Baseline Air Monitoring Program - DOE

## E-BAM Monthly Audit and Maintenance

Station # DOE-2 Serial # Y12096

Audit Date: 1/17/2025 Audited By : BWilliford

### 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: | 13.3 °C | 12.9 °C | as left: | 13.3 °C | 12.9 °C |
| Barometric Pressure: | as found: | 715.3 mmHg | 716.7 mmHg | as left: | 715.3 mmHg | 716.7 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.71 lpm | as left: | 16.7 lpm | 16.71 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.00 lpm | as left: | 14.0 lpm | 14.00 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.51 lpm | as left: | 17.5 lpm | 17.51 lpm |

### Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | Pump Test | | |
|---|---|---|---|
| Expected Span Mass (mg/cm2) : 0.891 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : 0.872 | | | |
| Difference (mg/cm2) : 0.019 | | | |
| % Difference / (Pass) or Fail: 2.16% | 14.8 | 396.5 | Good |

### Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 11:18 | 11:18 | Analog Mode | Hourly | Hourly | Flow Type | Actual | Act |
| Location | 2 | 2 | Baud Rate | 9600 | 9600 | Restart Voltage | 12.5 v | 12.5v |
| Tape Advance | 24 hrs | 24hr | RH Setpoint | 45% | 45% | Std Cond Temp | 25 C | 25C |
| Realtime Avg | 60 mins | 60 min | Delta T Setpoint | 15 C | 15C | DAC | 8.0 v | 8.0V |
| Machine Type | PM-10 | PM-10 | RH Control | On | on | RH Connect | No | No |
| Analog FS | 1.0 v | 1.0V | Flow Setpoint | 16.7 | 16.7 | Pump Protect | Off | off |

### Last 6 Errors in E-BAM Error Log

| Error | Date | Time | Error | Date | Time |
|---|---|---|---|---|---|
| 1 No New Messages | 1/17/25 | 1125 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

NORTHWIND INC.

# Baseline Air Monitoring Program - DOE

## E-BAM Monthly Audit and Maintenance

Station # DOE-3 Serial # W23313

Audit Date: 1/20/2025 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: 0.5 as left: 0.5

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 15.3 °C | 16.1 °C | as left: | 15.3 °C | 16.1 °C |
| Barometric Pressure: | as found: | 715.0 mmHg | 716.1 mmHg | as left: | 715.0 mmHg | 716.1 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.93 lpm | as left: | 16.7 lpm | 16.93 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.31 lpm | as left: | 14.0 lpm | 14.31 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.91 lpm | as left: | 17.5 lpm | 17.91 lpm |

### Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | | Pump Test | | |
|---|---|---|---|---|
| Expected Span Mass (mg/cm2) : | 0.885 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : | 0.886 | | | |
| Difference (mg/cm2) : | 0.001 | | | |
| % Difference / ~~Pass~~ or Fail: | 0.11% | 14.1 | 401.0 | Good |

### Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 1236 | 1236 | Analog Mode | Hourly | Hourly | Flow Type | Actual | Act |
| Location | 3 | 3 | Baud Rate | 9600 | 9600 | Restart Voltage | 12.5 v | 12.5✓ |
| Tape Advance | 24 hrs | 24hr | RH Setpoint | 45% | 45% | Std Cond Temp | 25 C | 25C |
| Realtime Avg | 60 mins | 60min | Delta T Setpoint | 15 C | 15C | DAC | 8.0 v | 8.0V |
| Machine Type | PM-10 | PM-10 | RH Control | On | on | RH Connect | No | No |
| Analog FS | 1.0 v | 1.0V | Flow Setpoint | 16.7 | 16.7 | Pump Protect | Off | off |

### Last 6 Errors in E-BAM Error Log

| Error | Date | Time | Error | Date | Time |
|---|---|---|---|---|---|
| 1 No new messages | 1/17/25 | 1256 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

* This is the initial Audit for W23313. B20070 has been down and I finally got W23313 back from the Shop.

NORTHWIND INC.

# Baseline Air Monitoring Program - DOE

## E-BAM Monthly Audit and Maintenance

Station # DOE-4 Serial # B18932

Audit Date: 1/17/25 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: 0.35 as left: 0.35

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 15.0 °C | 15.3 °C | as left: | 15.0 °C | 15.3 °C |
| Barometric Pressure: | as found: | 715.5 mmHg | 716.0 mmHg | as left: | 715.5 mmHg | 716.0 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.5 lpm | as left: | 16.7 lpm | 16.5 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.2 lpm | as left: | 14.0 lpm | 14.2 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.7 lpm | as left: | 17.5 lpm | 17.7 lpm |

### Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

### Manual Span Membrane Test

Expected Span Mass (mg/cm2): 0.854

Measured Span Mass (mg/cm2): 0.865

Difference (mg/cm2): 0.011

% Difference (Pass or Fail): 1.28% Pass

### Pump Test

| Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
|---|---|---|
| 14.6 | 403.2 | Good |

### Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 1346 | 1346 | Analog Mode | Hourly | Hourly | Flow Type | Actual | Act |
| Location | 4 | 4 | Baud Rate | 9600 | 115200 | Restart Voltage | 12.5 v | 12.5v |
| Tape Advance | 24 hrs | 24hr | RH Setpoint | 45% | 45% | Std Cond Temp | 25 C | 25C |
| Realtime Avg | 60 mins | 60min | Delta T Setpoint | 15 C | 15C | DAC | 8.0 v | 8.0V |
| Machine Type | PM-10 | PM-10 | RH Control | On | On | RH Connect | No | NO |
| Analog FS | 1.0 v | 1.0V | Flow Setpoint | 16.7 | 16.7 | Pump Protect | Off | Off |

### Last 6 Errors in E-BAM Error Log

| Error | Date | Time | Error | Date | Time |
|---|---|---|---|---|---|
| 1 No new Messages | 1/17/25 | 1355 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

NORTHWIND INC.

**Baseline Air Monitoring Program - DOE**

**E-BAM Monthly Audit and Maintenance**

Station # DOE-1 Serial # E W23314

Audit Date: 2/22/25 Audited By : TSWilliford

## Flow Audit

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

Leak Check Value: as found: 0.5 as left:

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 17.2 °C | 17.9 °C | as left: | 17.2 °C | 17.9 °C |
| Barometric Pressure: | as found: | 710.0 mmHg | 711.3 mmHg | as left: | 710.0 mmHg | 711.3 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 17.3 lpm | as left: | 16.7 lpm | 17.3 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.4 lpm | as left: | 14.0 lpm | 14.4 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.91 lpm | as left: | 17.5 lpm | 17.91 lpm |

## Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | Pump Test | | |
|---|---|---|---|
| Expected Span Mass (mg/cm2) : 0.984 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : 0.971 | | | |
| Difference (mg/cm2) : 0.013 | | | |
| % Difference / Pass or Fail: 1.33% | 14.7 | 422.1 | Marginal |

## Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 0915 | 0915 | Analog Mode | Hourly | ✓ | Flow Type | Actual | ✓ |
| Location | 1 | 1 | 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 No new messages | 2/22/25 | 0922 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

NORTHWIND INC.

**Baseline Air Monitoring Program - DOE**

**E-BAM Monthly Audit and Maintenance**

Station # DOE-2 Serial # Y12096

Audit Date: 2/22/25 Audited By: TS Williford

## Flow Audit

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

Leak Check Value: as found: 0.4 as left: 0.4

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 16.5 °C | 16.0 °C | as left: | 16.5 °C | 16.0 °C |
| Barometric Pressure: | as found: | 711.0 mmHg | 711.0 mmHg | as left: | 711.0 mmHg | 711.0 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.83 lpm | as left: | 16.7 lpm | 16.83 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.31 lpm | as left: | 14.0 lpm | 14.31 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.70 lpm | as left: | 17.5 lpm | 17.70 lpm |

## Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | Pump Test | | |
|---|---|---|---|
| Expected Span Mass (mg/cm2) : 0.891 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : 0.876 | | | |
| Difference (mg/cm2) : 0.015 | | | |
| % Difference / (Pass) or Fail: 1.69% | 14.2 | 403.1 | Good |

## Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 1042 | 1042 | Analog Mode | Hourly | ✓ | Flow Type | Actual | ✓ |
| Location | 2 | 2 | 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 No new Messages | 2/22/25 | 1051 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

NORTHWIND INC.

**Baseline Air Monitoring Program - DOE**

**E-BAM Monthly Audit and Maintenance**

Station # DOE-3 Serial # W23313

Audit Date: 2/22/25 Audited By: TSWilliford

## Flow Audit

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

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

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 16.4 °C | 17.1 °C | as left: | 16.4 °C | 17.1 °C |
| Barometric Pressure: | as found: | 710.5 mmHg | 711.4 mmHg | as left: | 710.5 mmHg | 711.4 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.87 lpm | as left: | 16.7 lpm | 16.87 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.42 lpm | as left: | 14.0 lpm | 14.42 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.88 lpm | as left: | 17.5 lpm | 17.88 lpm |

## Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | | Pump Test | | |
|---|---|---|---|---|
| Expected Span Mass (mg/cm2) : | 0.885 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : | 0.883 | | | |
| Difference (mg/cm2) : | 0.002 | | | |
| % Difference / Pass or Fail: | 0.23% | 14.5 | 412.6 | Marginal |

## Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 1156 | 1156 | Analog Mode | Hourly | ✓ | Flow Type | Actual | ✓ |
| Location | 3 | 3 | 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 | No new messages | 2/22/25 | 1209 | 4 | | | |
| 2 | | | | 5 | | | |
| 3 | | | | 6 | | | |

Audit Notes:

NORTHWIND INC.

**Baseline Air Monitoring Program - DOE**

**E-BAM Monthly Audit and Maintenance**

Station # DOE-4 Serial # X16067

Audit Date: 2/22/25 Audited By: TS. Williford

## Flow Audit

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

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

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 16.2 °C | 16.9 °C | as left: | 16.2 °C | 16.9 °C |
| Barometric Pressure: | as found: | 710.0 mmHg | 711.0 mmHg | as left: | 710.0 mmHg | 711.0 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.81 lpm | as left: | 16.7 lpm | 16.81 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.19 lpm | as left: | 14.0 lpm | 14.91 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.63 lpm | as left: | 17.5 lpm | 17.63 lpm |

## Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | | Pump Test | | |
|---|---|---|---|---|
| Expected Span Mass (mg/cm2) : ~~1349~~ 0.950 | | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : | 0.956 | | | |
| Difference (mg/cm2) : | 0.006 | | | |
| % Difference / (Pass) or Fail: | 0.63% | 14.7 | 408.3 | Good |

## Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 1349 | 1349 | Analog Mode | Hourly | ✓ | Flow Type | Actual | ✓ |
| Location | 4 | 4 | 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 No new messages | 2/22/25 | 1406 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

This is the initial audit for unit X16067. Unit B18932 went down on 2/12/2025.

NORTHWIND INC.

**Baseline Air Monitoring Program - DOE**

**E-BAM Monthly Audit and Maintenance**

Station # DOE-1 Serial # ~~BAM~~ W23314

Audit Date: 3/21/25 Audited By : TSwilliford

## Flow Audit

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

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

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 13.3 °C | 13.7 °C | as left: | 13.3 °C | 13.7 °C |
| Barometric Pressure: | as found: | 715.2 mmHg | 716.2 mmHg | as left: | 715.2 mmHg | 716.2 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 17.13 lpm | as left: | 16.7 lpm | 17.13 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.30 lpm | as left: | 14.0 lpm | 14.30 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.89 lpm | as left: | 17.5 lpm | 17.89 lpm |

## Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | Pump Test | | |
|---|---|---|---|
| Expected Span Mass (mg/cm2) : 0.984 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : 0.976 | | | |
| Difference (mg/cm2) : 0.008 | | | |
| % Difference / Pass or Fail: 0.82% | 14.7 | 406.0 | Good/Marginal |

## Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 0714 | 0714 | Analog Mode | Hourly | ✓ | Flow Type | Actual | ✓ |
| Location | 1 | 1 | 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 No new messages | 3/21/25 | 0720 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

NORTHWIND INC.

**Baseline Air Monitoring Program - DOE**

**E-BAM Monthly Audit and Maintenance**

Station # DOE-2 Serial # 412096

Audit Date: 3/21/25 Audited By : JS Williford

## Flow Audit

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

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

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 20.0 °C | 18.4 °C | as left: | 20.0 °C | 18.4 °C |
| Barometric Pressure: | as found: | 711.9 mmHg | 713.7 mmHg | as left: | 711.9 mmHg | 713.7 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.74 lpm | as left: | 16.7 lpm | 16.74 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.0 lpm | as left: | 14.0 lpm | 14.0 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.59 lpm | as left: | 17.5 lpm | 17.59 lpm |

## Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | Pump Test | | |
|---|---|---|---|
| Expected Span Mass (mg/cm2) : 0.891 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : 0.849 | | | |
| Difference (mg/cm2) : 0.012 | | | |
| % Difference / (Pass) or Fail: 1.36% | 14.1 | 383.0 | Good |

## Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 0947 | 0947 | Analog Mode | Hourly | ✓ | Flow Type | Actual | ✓ |
| Location | 2 | 2 | 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 No new messages | 3/21/25 | 0958 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

NORTHWIND INC.

**Baseline Air Monitoring Program - DOE**

**E-BAM Monthly Audit and Maintenance**

Station # DOE-3 Serial # W23313

Audit Date: 3/21/25 Audited By : TS Williford

## Flow Audit

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

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

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 22.9 °C | 22.2 °C | as left: | 22.9 °C | 22.2 °C |
| Barometric Pressure: | as found: | 715.5 mmHg | 715.2 mmHg | as left: | 715.5 mmHg | 715.2 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.96 lpm | as left: | 16.7 lpm | 16.96 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.29 lpm | as left: | 14.0 lpm | 14.29 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.68 lpm | as left: | 17.5 lpm | 17.68 lpm |

## Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | Pump Test | | |
|---|---|---|---|
| Expected Span Mass (mg/cm2) : 0.885 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : 0.888 | | | |
| Difference (mg/cm2) : 0.003 | | | |
| % Difference / (Pass) or Fail: 0.34% | 14.3 | 376.4 | Good |

## Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 1037 | 1037 | Analog Mode | Hourly | ✓ | Flow Type | Actual | ✓ |
| Location | 3 | 3 | 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 No new Messages | 3/21/25 | 1045 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes:

NORTHWIND INC.

**Baseline Air Monitoring Program - DOE**

**E-BAM Monthly Audit and Maintenance**

Station # DOE-4 Serial # X16067

Audit Date: 3/21/25 Audited By : TSWilliford

## Flow Audit

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

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

| | | E-BAM | Ref. Std. | | E-BAM | Ref. Std. |
|---|---|---|---|---|---|---|
| Ambient Temperature: | as found: | 26.6 °C | 23.6 °C | as left: | 26.6 °C | 23.6 °C |
| Barometric Pressure: | as found: | 707.2 mmHg | 707.2 mmHg | as left: | 707.2 mmHg | 707.2 mmHg |
| 16.7 lpm Flow Rate | as found: | 16.7 lpm | 16.96 lpm | as left: | 16.7 lpm | 16.96 lpm |
| 14.0 lpm Flow Rate | as found: | 14.0 lpm | 14.06 lpm | as left: | 14.0 lpm | 14.06 lpm |
| 17.5 lpm Flow Rate | as found: | 17.5 lpm | 17.63 lpm | as left: | 17.5 lpm | 17.63 lpm |

## Mechanical Audits ( Y = Yes N = No )

| | | | | |
|---|---|---|---|---|
| Sample nozzle clean: | as found | Y | as left | Y |
| Tape support vane clean: | as found | Y | as left | Y |
| Tape spool covers tight: | as found | Y | as left | Y |
| PM10 particle trap clean: | as found | Y | as left | Y |
| PM10 drip jar empty: | as found | Y | as left | Y |
| PM10 bug screen clear: | as found | Y | as left | Y |

| Manual Span Membrane Test | Pump Test | | |
|---|---|---|---|
| Expected Span Mass (mg/cm2) : 0.950 | Flow Rate 14.0 - 15.0 (lpm) | Vacuum Value (Hg) | Quality Category Good / Marginal / Poor |
| Measured Span Mass (mg/cm2) : 0.961 | | | |
| Difference (mg/cm2) : 0.011 | | | |
| % Difference / Pass or Fail: 1.15% | 14.7 | 397.5 | Good |

## Setup and Calibration Values

| Parameter | Expected | Found | Parameter | Expected | Found | Parameter | Expected | Found |
|---|---|---|---|---|---|---|---|---|
| Clock | 1127 | 1127 | Analog Mode | Hourly | ✓ | Flow Type | Actual | ✓ |
| Location | 4 | 4 | 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 No new messages | 3/21/25 | 1148 | 4 | | |
| 2 | | | 5 | | |
| 3 | | | 6 | | |

Audit Notes: