2025 Q1 SENSOR REPORT
COMMERCE CITY NORTH DENVER
COMMUNITY AIR MONITORING NETWORK
COMMERCE CITY, COLORADO

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Executive Summary

In response to community feedback, Suncor Energy (U.S.A.) Inc. (Suncor) voluntarily developed an air monitoring program to gain insight into air quality for neighborhoods in the vicinity of Suncor's operations in Commerce City, Colorado, in 2021. On December 31, 2024, Suncor became required to conduct community monitoring pursuant to CRS § 25-7-146(3)(a). Suncor, however, voluntarily engaged a third-party consultant to perform health risk assessments and publish reports of its monitoring results online. Onterris - Air Quality Services, LLC operates the air monitoring network in the Commerce City and North Denver (CCND) neighborhoods, and health scientists from Onterris Response and Recovery, LLC perform a screening-level human health risk assessment. A screening-level assessment compares exposure concentrations (ECs) to reference levels (RLs) set by state and/or federal guidance that represent exposure levels that protect public health and the environment.

Air monitoring under the program is continuous and near real-time, and uses three separate technical approaches:

1. Continuous, near real-time air monitoring for the following compounds using sensor technology: carbon monoxide (CO), sulfur dioxide (SO_2), hydrogen sulfide (H_2S), nitrogen dioxide (NO_2), particulate matter ($PM_{2.5}$), total volatile organic compounds (tVOCs), benzene, toluene, ethylbenzene, and xylenes;

2. Periodic (planned and triggered) air sample collection and laboratory analysis for the presence of 59 VOCs from evacuated canisters (colloquially referred to as "Summa" canisters); and

3. Periodic real-time air monitoring throughout six neighborhoods using a mobile monitoring van to detect the presence of 65 chemicals that are evaluated as 18 individual chemicals with the remaining 47 chemicals being combined into 12 chemical groups known as isomer groups.

This report details the first approach, which uses continuous air monitoring sensors operating at 10 locations across the CCND neighborhoods. Preliminary air monitoring data is made available in near real-time at ccnd-air.com, and this report analyzes the final data collected between January 1 – March 31, 2025. In this report, the data are processed and averaged to match the same time intervals for the applicable reference levels. These data are then compared to reference levels established by U.S. Environmental Protection Agency (USEPA) for evaluating concentration trends over time. These data are not used in a human health risk assessment.

The results of the air monitoring data conducted in Q1 of 2025 indicate the following:

- For all compounds except $PM_{2.5}$, H_2S (24-hour rolling average), and SO_2, the rolling or block averages fell below their respective RLs.

- The 24-hour block average concentrations of $PM_{2.5}$ exceeded the 24-hour NAAQS concentration (35 µg/m3) on February 15, 2025 and February 18, 2025 (35.35 – 40.42 µg/m3); however, these concentrations returned to below the 24-hour NAAQS within a day. All locations (see Figures 7 and 8) showed similar trends in $PM_{2.5}$, indicating that $PM_{2.5}$ concentrations during this quarter were likely a reflection of regional air quality and cannot be attributed to a single point source. Notably, this report does not formally calculate the analytes' ambient air concentrations as required by USEPA for direct comparison against the NAAQS. Therefore, these $PM_{2.5}$ results are not intended to reflect compliance with NAAQS.
- The 24-hour rolling average concentrations of H_2S exceeded the ATSDR acute MRL (70 ppb) between March 2, 2025 and March 3, 2025 (70.05 – 113.36 ppb); these concentrations returned to below the acute MRL by March 4, 2025. For the 1-hour rolling average concentrations of H_2S, there were no exceedances above the 1-hour AEGL-1 (510 ppb).
- A single 1-hour rolling average concentration of SO_2 exceeded the NAAQS (75 ppb) on February 19, 2025 (76.38 ppb). The remaining 1-hour rolling averages for SO_2 did not exceed the NAAQS or the 1-hour AEGL-1 (200 ppb) at any point during this quarter.
- During a total of three periods the TVOC 1-minute data exceeded the 1 ppm threshold and triggered the collection of canister samples. The results of the canisters analysis will be available in the https://www.ccnd-air.com/.

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1.0 INTRODUCTION

In response to community feedback received by Suncor Energy (U.S.A.) Inc. (Suncor) during community engagement that was conducted in the fall of 2020, Suncor voluntarily developed a continuous, near real-time air monitoring program to gain insight into the air quality for neighborhoods in the vicinity of Suncor's operations in Commerce City, Colorado, in 2021. On December 31, 2024, Suncor became required to conduct community monitoring pursuant to CRS § 25-7-146(3)(a). Suncor, however, voluntarily engaged a third-party consultant to perform health risk assessments and publish reports of its air monitoring results online. Onterris - Air Quality Services, LLC was contracted by Suncor to deploy, operate, and maintain the network in the Commerce City and North Denver (CCND) neighborhoods, perform screening-level health risk assessments, and publish reports on the air monitoring results online.

Air monitoring was accomplished through three separate technical approaches:

1. Continuous, near real-time air monitoring for the following compounds using sensor technology: carbon monoxide (CO), sulfur dioxide (SO_2), hydrogen sulfide (H_2S), nitrogen dioxide (NO_2), particulate matter ($PM_{2.5}$), total volatile organic compounds (tVOCs), benzene, toluene, ethylbenzene, and xylenes;

2. Periodic (planned and triggered) air sample collection and laboratory analysis for the presence of 59 VOCs from Summa canisters; and

3. Periodic real-time air monitoring throughout six neighborhoods using a mobile monitoring van to detect the presence of 65 chemicals that are evaluated as 18 individual chemicals with the remaining 47 chemicals being combined into 12 chemical groups known as isomer groups.

This report details the first approach: the continuous, near real-time air monitoring conducted between January 1 – March 31, 2025. The measured concentrations from the continuous, near real-time air monitoring stations were averaged and compared to established health-based reference levels to evaluate trends over time. Air monitoring, sampling, and analysis for this approach were conducted in accordance with the Quality Assurance Project Plan (QAPP) that can be found online at https://www.ccnd-air.com/Documents/.

2.0 METHODS

2.1 Air Monitoring Site Description

Continuous air monitoring sensors were installed at ten locations across CCND neighborhoods within a three-mile radius of Suncor operations. Eight of the sensors were installed in July 2021 (CM1-CM8) and two additional sensors were installed in December 2021 (CM9) and March 2022 (CM10), respectively. The monitor locations are shown in Figure 1 and described in Table 1; and were selected based on the following criteria:

- Historical wind pattern data
- Proximity to Suncor operations and other stationary sources not operated by Suncor
- Existing infrastructure, as well as site access and safety
- Community feedback

FIGURE 1 MAP OF TEN CCND MONITOR

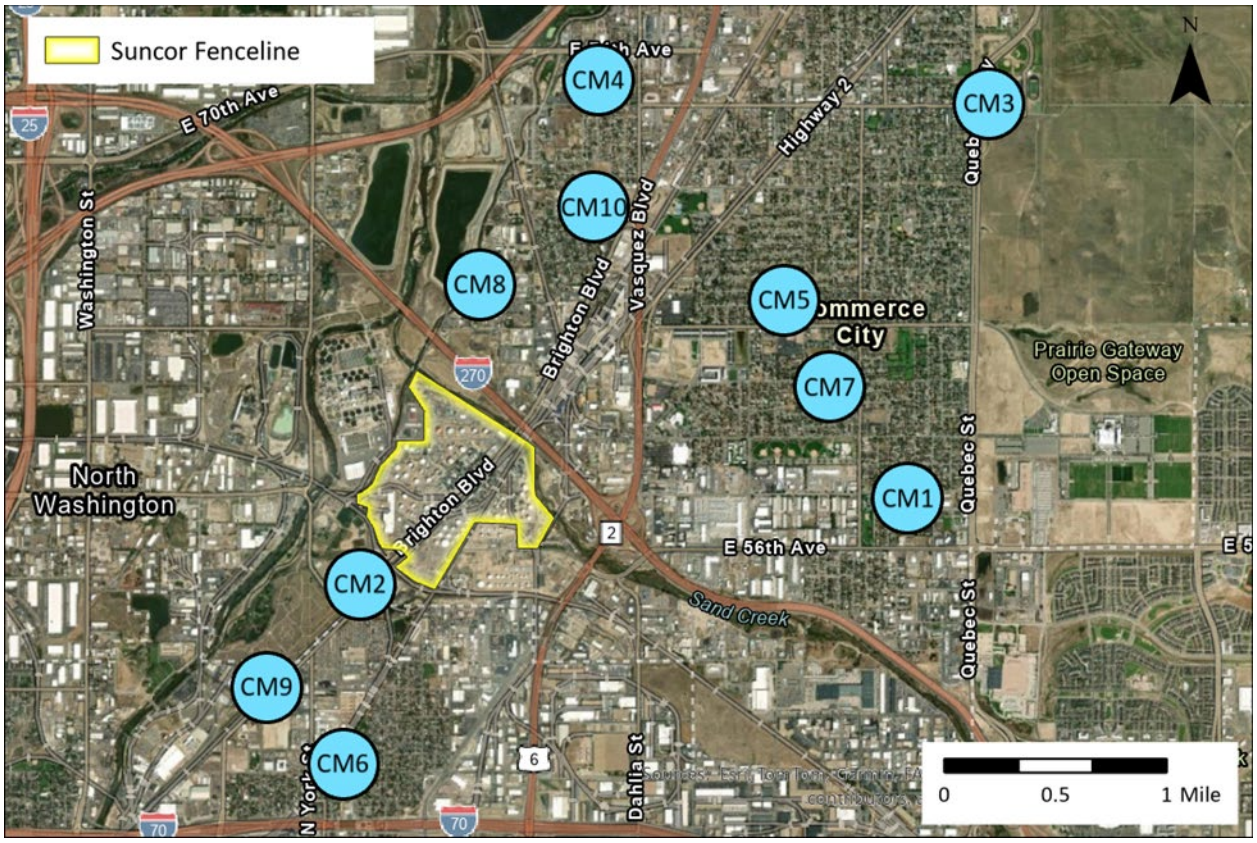


TABLE 1 CCND MONITORS AND SUMMA CANISTER SAMPLING LOCATIONS

Location ID	Secondary ID	GPS Coordinates	Distance from the Center of Suncor Operations (miles)	Cross Streets
CM1	Rose Hill Elementary School	39.80164, -104.90882	2.0	E. 58th Ave. & Oneida St., Commerce City
CM2	Suncor Business Center	39.79630, -104.95727	0.70	Brighton Blvd. & York St., Commerce City
CM3	Adams City High School	39.82736, -104.90193	2.9	E. 72nd Ave. & Quebec Pkwy, Commerce City
CM4	Adams City Middle School	39.82893, -104.93499	1.9	Birch St. & E. 72nd Ave., Commerce City
CM5	Central Elementary School	39.81365, -104.92191	1.7	Holly St. & E. 64th Ave., Commerce City
CM6	Focus Points Family Resource Center	39.78436, -104.95663	1.4	Columbine St. & 48th Ave., Denver
CM7	Kearney Middle School	39.80888, -104.91545	1.7	E 62nd Ave. & Kearney St., Commerce City
CM8	Monroe	39.81560, -104.94503	0.85	Monroe St. & E 64th Ave., Denver
CM9[1]	Riverside Cemetery	39.78936, -104.96308	1.7	N Brighton Blvd. & Brighton Blvd., Commerce City
CM10	Alsup Elementary School	39.820268, -104.936616	1.2	East 68th Ave. & Birch St., Commerce City

2.2 Continuous Monitoring

There were ten compounds that were continuously monitored during Q1 of 2025. Six of these compounds (SO_2, NO_2, H_2S, CO, tVOCs, and $PM_{2.5}$) were initially measured using a network of sensors that were installed at 10 locations across the CCND neighborhood in 2021 and utilized the Sensit RAMP sensors (manufactured in Indiana, USA) to assess the air concentrations of these compounds as well as meteorological conditions. Sensit RAMP sensors are continuous monitoring instruments that provide near real-time air quality information in the CCND area. Starting on January 1, 2025, Onterris installed the Ambilabs DETECT system with FEM research-grade (Federal

[1] On March 13, 2025 the CM9 monitoring station was moved from the 48th and Race location (39.78455, -104.96264) to the Riverside Cemetery (39.78936, -104.96308). CM9 was relocated after the new owner of the Monroe facility—where the sensor had been installed on the building roof—raised safety and security concerns. The new site, Riverside Cemetery, is located relatively close to the original location, has no known local interference sources, and is easily accessible to the Onterris field team.

Equivalent Method 'FEM' equivalent) instruments at CM1, CM2, CM6, CM7, and CM10 to comply with new Colorado legislation (HB 24-1338) and Suncor's Title V permit requirements. The FEM grade sensors have lower limits of detection, providing increased accuracy in the reporting of lower values for four of the compounds (H_2S, NO_2, SO_2, and $PM_{2.5}$). Details about the DETECT system instruments are described below. Each sensor is solar powered and transmits data to the data platform via Long Term Evolution (LTE) cell technology. The ranges of detection, measurements collected, and measurement frequencies are found in Table 2.

As of January 1, 2025, the Ambilabs DETECT system is also able to measure the concentration of four additional compounds: benzene, toluene, ethylbenzene, and toluene (BTEX compounds) as required by the House Bill 24-1338 and Suncor's Title V permit requirements. A summary of the CCND air monitoring technology, including the ranges of detection, is provided in Table 2.

TABLE 2 CCND AIR MONITORING TECHNOLOGY

Parameter [a]	**CAS Number**	**Sensit RAMP Range of Detection**	**Ambilabs DETECT Range of Detection**	**Detection Interval**
Chemical Parameters				
SO_2	7446-09-5	50 – 1,000 ppb	0.4 – 20,000 ppb	1 minute (Sensit) or 1 minute for 10 minutes intervals (DETECT)
H_2S	7783-06-4	10 – 1,000 ppb	0.4 – 10,000 ppb	1 minute (Sensit) or 1 minute for 10 minutes intervals (DETECT)
Benzene	71-43-2	ND	2 – 80 ppb	10 minutes
Toluene	108-88-3	ND	2 – 80 ppb	10 minutes
Ethylbenzene	100-41-4	ND	2 – 200 ppb	10 minutes
Xylene	1330-20-7	ND	2 – 1,000 ppb	10 minutes
NO_2	10102-44-0	20 – 250 ppb	1 – 10,000 ppb	1 minute
CO	630-08-0	0.05 – 20 ppm	ND	1 minute
Total VOC	--	0.010 – 3 ppm	ND	1 minute
$PM_{2.5}$	--	1 – 1,000 µg/m^3	0.1 – 10,000 µg/m^3	1 minute
Meteorological Parameters				
Wind Direction	--	NA	ND	1 minute
Wind Speed	--	NA	ND	1 minute
Relative Humidity	--	NA	ND	1 minute
Barometric Pressure	--	NA	ND	1 minute
Temperature	--	NA	ND	1 minute

[a] All analytes; NA: not assessed; ND: not detected

The principles of operation for these two sets of sensors are different: the Sensit RAMP instruments monitor the ambient air by allowing it to passively enter each sensor's exterior housing via small holes and pass over the surface of the sensor, while the FEM research grade instruments use a

DETECT system that monitors air by utilizing three instruments: an absorption measurement instrument, a UV analyzer, and a particulate matter measurement instrument.

The FEM research grade instruments use a DETECT system equipped with a 2BTech Model 405, a Teledyne T640, and a Teledyne T101. The Model 405 provides selective direct measurement of NO_2 by absorbance at 405 nm. The Model T101 analyzer uses the proven UV fluorescence principle to measure H_2S and SO_2 at levels commonly required for ambient air monitoring. The Model T101 is equipped with an internally mounted catalytic converter set at 315°C to convert H2S to SO2. The Model T101 operates in a switching mode in which it measures H_2S and SO_2 every 10 minutes. During each 10-minute cycle, the analyzer reports one minute data points for H_2S or SO_2, respectively. The Teledyne API Model T640 is a real-time, FEM, continuous particulate matter mass monitor that uses scattered light spectrometry for measurement of $PM_{2.5}$.

The BTEX compounds were monitored using the Pyxis GC by Pollution Analytical Equipment. The main components of the device are a pre-concentrator, a gas chromatography micro-electro-mechanical (GC MEMS) column and a photoionization (PID) detector. The GC MEMS column does not require a carrier gas cylinder to operate. The time resolution for the analysis of each sample is 10 minutes. During the 10-minute analysis cycle, the device analyzes the previously collected sample, while simultaneously collecting a new air sample. The analysis begins by collecting a composite air sample using a high-volume transport fan, where a small slipstream of air sample is collected for analysis; this sample is collected on the sample modulator or pre-concentrator for analysis. This sample is transferred to the GC column (GC) for separation. As the chemicals elute from the column, they are detected by a PID sensor.

The Sensit RAMP utilizes a PID to measure VOCs. In other words, it utilizes a lamp that produces photons that carry enough energy to break molecules into ions. The PID responds to molecules that have an ionization energy at or below the energy of the lamp; the PID used on this project employs a 10.6 electron-volt lamp. The produced ions then generate an electrical current that is measured as the output of the detector. PIDs can be susceptible to drift with ambient temperature and humidity variations. The PIDs used in this program mitigate the humidity issue by having a hydrophobic filter installed between the lamp and the ambient air. This deters water molecules from entering the ion-producing chamber and absorbing radiation. The PIDs are also heated slightly above ambient temperature to improve the stability of the detector. Meanwhile, the Sensit RAMP also uses electrochemical sensors to measure the concentration of CO. The oxidation and reduction reactions generate the positive or negative current flow through the external circuit. It is then quantified by amperometry. All of these components sit inside a sensor housing along with a liquid electrolyte that is specific to the compound of interest.

Meteorological conditions are also collected by the Sensit RAMP, including temperature and ambient relative humidity data.

While data is collected in 1-minute or 10-minute intervals depending on the sensor, background concentrations may interfere with the sensors and make it difficult to effectively quantify concentrations of specific compounds. To combat this, the raw data were exported as five-minute averages and then were aggregated to the 1-hour or 24-hour (H_2S and benzene only) level by

calculating rolling averages for all compounds except $PM_{2.5}$. For $PM_{2.5}$, block averages were calculated at 1-hour and 24-hour intervals. In addition, data recovery percentages were calculated. This is done by dividing the number of data points collected by the expected number of data points. For example, if a data point is expected every five minutes, 12 data points would be expected over a one-hour period. If only 11 data points were received, the data recovery for that hour would be 92%.

The data presented here are intended to be used for informational purposes only and are not intended to be used for official NAAQS compliance determinations given that the calculations for NAAQS as required by the USEPA are not performed in this report. The sensors' detection limits and accuracy can be found in Table 2. State regulatory compliance data can be found on the CDPHE air quality website at https://www.colorado.gov/airquality. All sampling and quality assurance procedures were performed by Onterris.

2.3 Assessment of Real-Time Air Monitoring Trends

This report does not include a formal risk assessment or calculation of exposure metrics. Rather, 1-hour and 24-hour averages are plotted over time to review trends in air concentrations of various compounds in the CCND communities. To understand how these values generally compare to established reference levels, health scientists from Onterris Response and Recovery, LLC, provided the United States Environmental Protection Agency (USEPA) Acute Exposure Guideline Levels (AEGLs), USEPA National Ambient Air Quality Standards (NAAQS), and the Agency for Toxic Substances and Disease Registry (ATSDR) acute minimum risk levels (MRLs) for comparison purposes only.

The available 1-hour AEGL values are utilized as the data are presented as 1-hour average concentrations. AEGL values are levels at which different acute adverse health effects may be anticipated to occur. However, a concentration above an AEGL-1 value does not necessarily mean that health effects will occur. According to USEPA, "AEGL-1 represents exposure levels that could produce mild and progressively increasing but transient and non-disabling odor, taste, and sensory irritation or certain asymptomatic, non-sensory effects. With increasing airborne concentration above each AEGL, there is a progressive increase in the likelihood of occurrence and the severity of effects described for each corresponding AEGL [i.e., AEGL-2 or AEGL-3]."[2] The AEGL-1 60-minute (i.e., 1-hour) value, if available for the applicable chemical, was used for comparison purposes because it is more precautionary (than AEGL-2 or AEGL-3) as the AEGL-1 level reflects protecting against acute health effects that are reversible upon cessation of exposure. For CO, the 1-hour AEGL-2 value was the only available comparison value and thus, was used. AEGLs are typically used in emergency situations for single exposure events; however, the presented data are compared against the AEGL values to evaluate trends in air monitoring data and are not intended to represent a risk assessment.

[2] https://www.epa.gov/aegl/about-acute-exposure-guideline-levels-aegls

Four of the compounds (CO, NO_2, SO_2, and $PM_{2.5}$) are criteria air pollutants that are regulated under the USEPA NAAQS. To determine NAAQS compliance, specific calculations must be performed according to a defined set of equations.[3] The values in this report are not formal calculations of concentration comparisons for NAAQS as required by USEPA; therefore, 1-hour values above the relevant NAAQS are not intended to represent NAAQS compliance or risk for adverse health effects. The purpose of these values, as presented here, is to demonstrate trends in criteria pollutant levels in the CCND communities, and NAAQS values are used to help contextualize those trends.

Finally, the ATSDR acute health-based reference levels (i.e., acute MRLs, which represent one day to two weeks of continuous exposure) were also used. The ATSDR MRLs are levels below which continuous exposure is likely to be without risk of developing adverse health effects, even in sensitive sub-populations[4] . However, a concentration above an MRL does not necessarily mean that adverse health effects will occur.

For general comparison purposes only, these reference levels are shown against the 1-hour and 24-hour analyte concentration averages, with the comparable averaging interval presented (Table 3).

3.0 RESULTS

3.1 Results Summary

Continuous air monitoring sensors were operating at ten locations across the CCND neighborhoods from January 1, 2025, through March 31, 2025[5]. The data from this reporting period were aggregated into 1-hour and 24-hour block averages for $PM_{2.5}$, and 1-hour or 24-hour rolling averages for all other compounds. The results from the continuous air monitoring program are found below in Table 3 and in Figures 2 – 14. While the target percent raw data recovery (%RDR) or data completeness is 95% per the QAPP, the real-time air monitoring network-wide %RDR was >96%. Instrument malfunction, communication issues, downtime while performing quality assurance procedures, and theft are all possible explanations for a %RDR below 100%. In addition, extreme humidity, temperature, and adverse weather conditions can impact the ability of the sensors to effectively detect compounds. The results of the air monitoring conducted in Q1 of 2025 indicate the following:

- For all compounds except $PM_{2.5}$, H_2S (24-hour rolling average), and SO_2, the rolling or block averages fell below their respective RLs.
- The 24-hour block average concentrations of $PM_{2.5}$ exceeded the 24-hour NAAQS concentration (35 µg/m3) on February 15, 2025 and February 18, 2025 (35.35 – 40.42 µg/m3); however, these

[3] https://www.epa.gov/criteria-air-pollutants/naaqs-table
[4] https://wwwn.cdc.gov/tsp/mrls/mrlslisting.aspx
[5] CM2 DETECT BTEX monitor was demobilized on March 16, 2025 to be serviced; thus, BTEX compounds were not measured after this date. CM8 DETECT BTEX monitor was not online in Q1 of 2025.

concentrations returned to below the 24-hour NAAQS within a day. All locations (see Figures 7 and 8) showed similar trends in $PM_{2.5}$, indicating that $PM_{2.5}$ concentrations during this quarter were likely a reflection of regional air quality and cannot be attributed to a single point source. Notably, this report does not formally calculate the analytes' ambient air concentrations as required by USEPA for direct comparison against the NAAQS. Therefore, these $PM_{2.5}$ results are not intended to reflect compliance with NAAQS.

- The 24-hour rolling average concentrations of H_2S exceeded the ATSDR acute MRL (70 ppb) between March 2, 2025 and March 3, 2025 (70.05 – 113.36 ppb); these concentrations returned to below the acute MRL by March 4, 2025. For the 1-hour rolling average concentrations of H_2S, there were no exceedances above the 1-hour AEGL-1 (510 ppb).
- A single 1-hour rolling average concentration of SO_2 exceeded the NAAQS (75 ppb) on February 19, 2025 (76.38 ppb). The remaining 1-hour rolling averages for SO_2 did not exceed the NAAQS or the 1-hour AEGL-1 (200 ppb) at any point during this quarter.
- During a total of three periods the TVOC 1-minute data exceeded the 1 ppm threshold and triggered the collection of canister samples. The results of the canisters analysis will be available in the https://www.ccnd-air.com/.

TABLE 3 CCND MONITORS RESULTS SUMMARY

Compound	Range of 5-min Data Recovery	Averaging Type	Rolling/Block Average Range[a]	NAAQS	Health-Based Reference Level (Source)
FEM Sensors (CM1, CM2, CM6, CM7, and CM10)					
Benzene	80.2 – 97.2%	1-hour rolling	<2 – 5.3 ppb	NA	52,000 ppb [e] (USEPA 1-hour AEGL-1)
		24-hour rolling	<2 – 5.3 ppb	NA	9 ppb (ATSDR Acute MRL)
Ethylbenzene	80.2 – 97.2%	1-hour rolling	<2 – 7.0 ppb	NA	33,000 ppb [e] (USEPA 1-hour AEGL-1)
Toluene	80.2 – 97.2%	1-hour rolling	<2 – 8.5 ppb	NA	67,000 ppb [e] (USEPA 1-hour AEGL-1)
Xylenes	80.2 – 97.2%	1-hour rolling	<2 – 14.0 ppb	NA	130,000 ppb [e] (USEPA 1-hour AEGL-1)
All Sites (CM1 – CM10)					
CO	93.4 – 99.5%	1-hour rolling	<0.05 – 3.1 ppm	35 ppm [f]	83 ppm (USEPA 1-hour AEGL-2)
tVOC	93.4 – 99.5%	1-hour rolling	<0.01 – 1.0 ppm	NA	NA
H_2S	96.5 – 99.1%	1-hour rolling	<10 – 276.8 ppb	NA	510 ppb (USEPA 1-hour AEGL-1)
		24-hour rolling	<10 – 113.4 ppb	NA	70 ppb (ATSDR Acute MRL)
NO_2	94.5 – 99.1%	1-hour rolling	<20 – 97.7 ppb	100 ppb [b]	500 ppb (USEPA 1-hour AEGL-1)
$PM_{2.5}$[g]	96.6 – 99.2%	1-hour block	<1 – 73.8 µg/m^3	NA	NA
		24-hour block	<1 – 40.4 µg/m^3	35 µg/m^3 [c]	NA
SO_2	96.4 – 99.1%	1-hour rolling	<50 – 76.3 ppb	75 ppb [d]	200 ppb (USEPA 1-hour AEGL-1)

[a] "<" indicates a value was below the instrument's limit of detection; [b] Annual 98th percentile of 1-hour daily maximum concentrations, averaged over 3 years; [c] Annual 98th percentile of 24-hour daily average concentrations, averaged over 3 years; [d] Annual 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years; [e] The upper detection limits for the real-time instruments monitoring the CCND area are 80 ppb for benzene and toluene, 200 ppb for ethylbenzene, and 1,000 ppb for xylene; therefore, the 1-hour AEGL-1 values are not used as a comparison for these compounds; [f] 1-hour; not to be exceeded more than once per year. [g]Data recovery rate for $PM_{2.5}$ was calculated based on the number of valid 1-hour block averages. NA = Not available

FIGURE 2 CCND COMMUNITY MONITORING CARBON MONOXIDE (CO) 1-HOUR ROLLING AVERAGE DATA

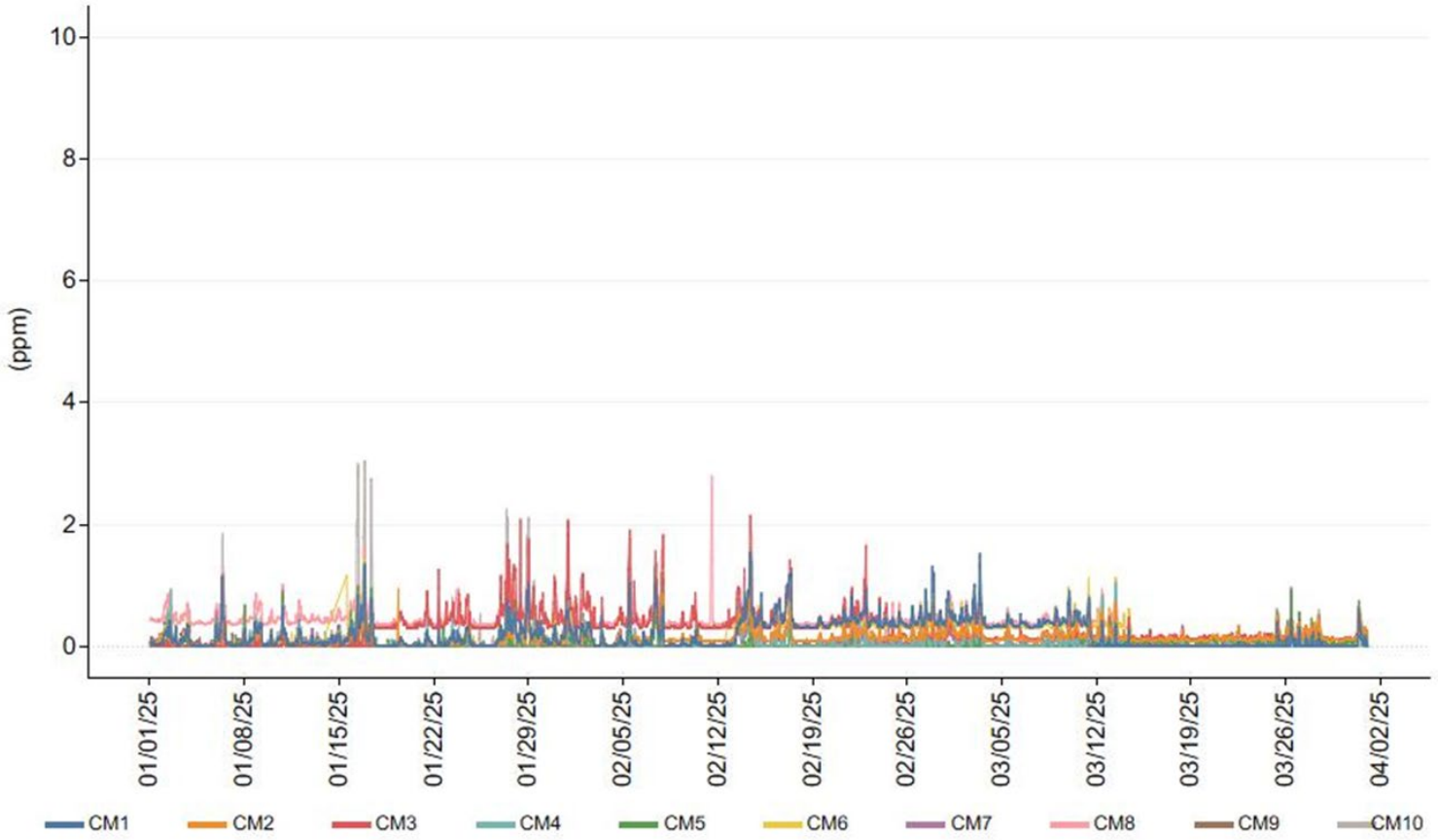


FIGURE 3 CCND COMMUNITY MONITORING NITROGEN DIOXIDE (NO_2) 1-HOUR ROLLING AVERAGE DATA

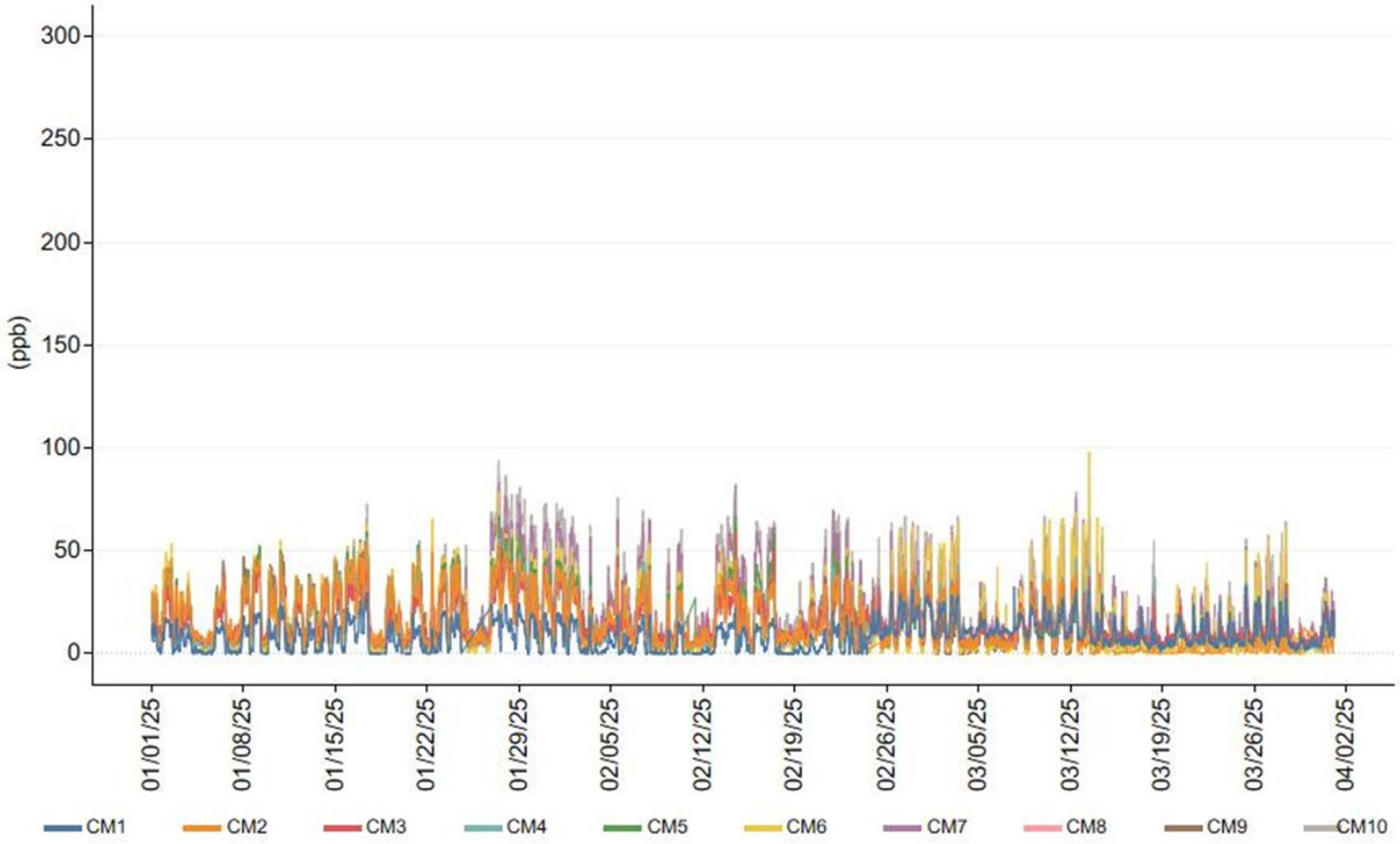


FIGURE 4 CCND COMMUNITY MONITORING SULFUR DIOXIDE (SO_2) 1-HOUR ROLLING AVERAGE DATA

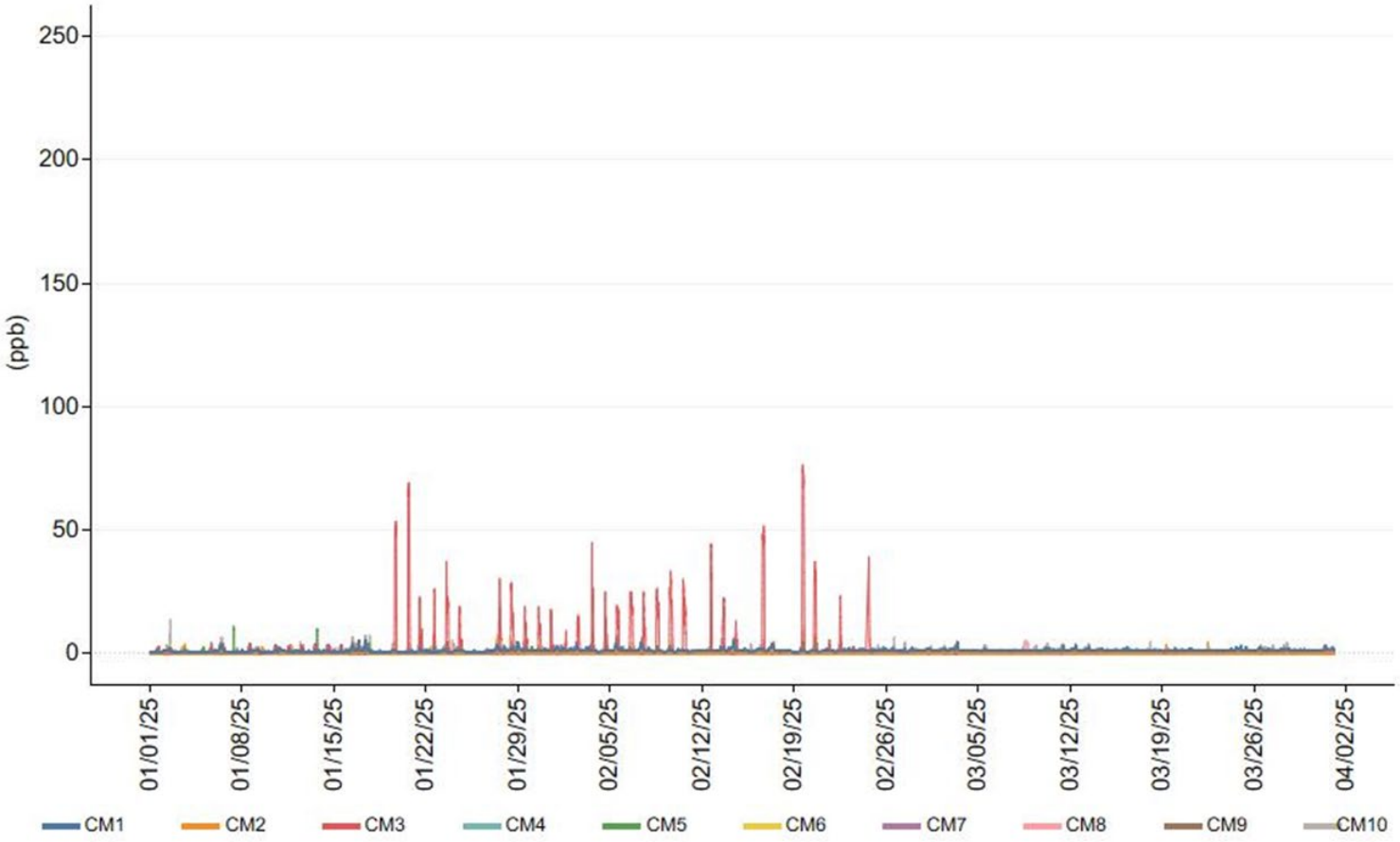


FIGURE 5 CCND COMMUNITY MONITORING HYDROGEN SULFIDE (H_2S) 1-HOUR ROLLING AVERAGE DATA

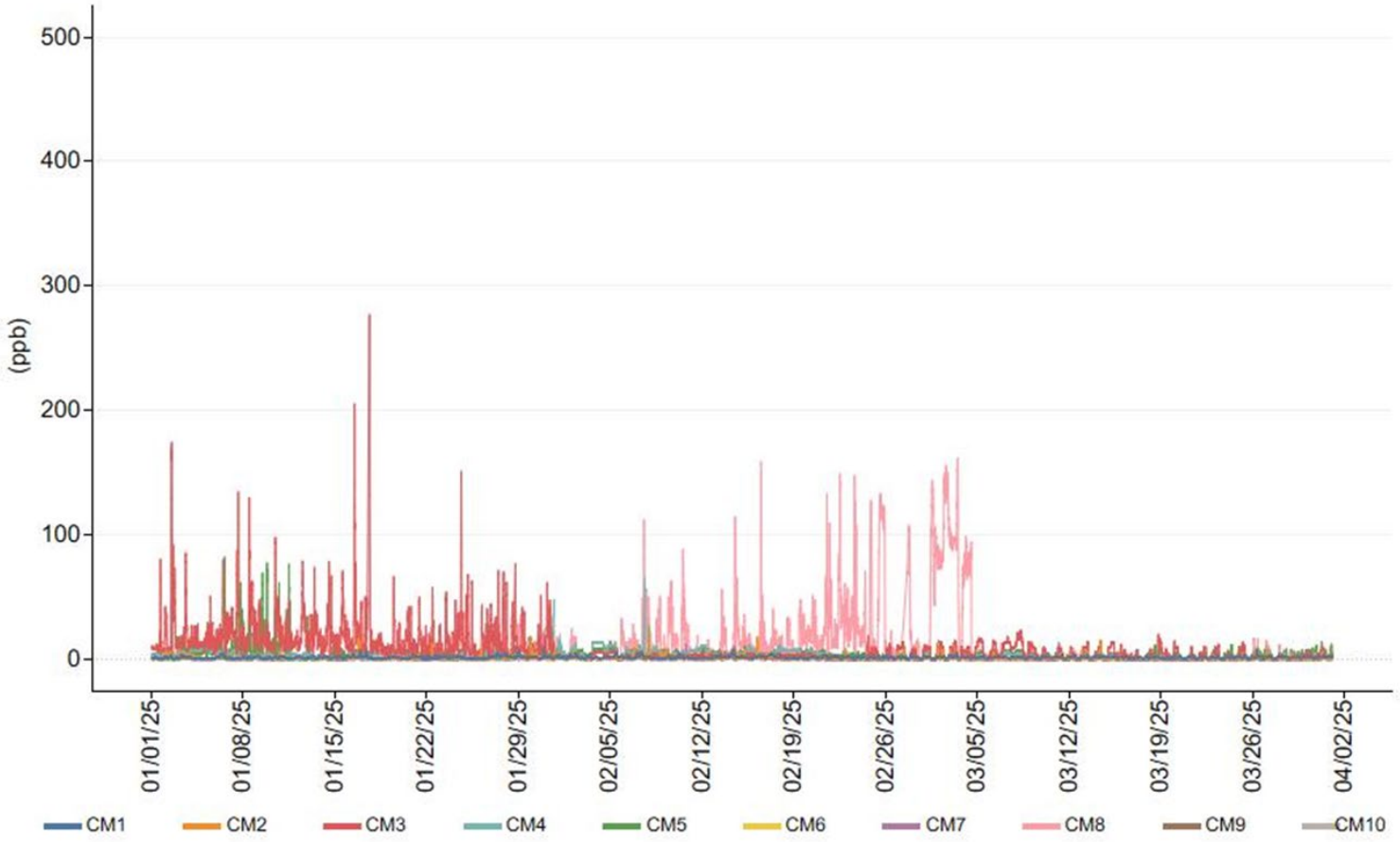


FIGURE 6 CCND COMMUNITY MONITORING HYDROGEN SULFIDE (H_2S) 24-HOUR ROLLING AVERAGE DATA

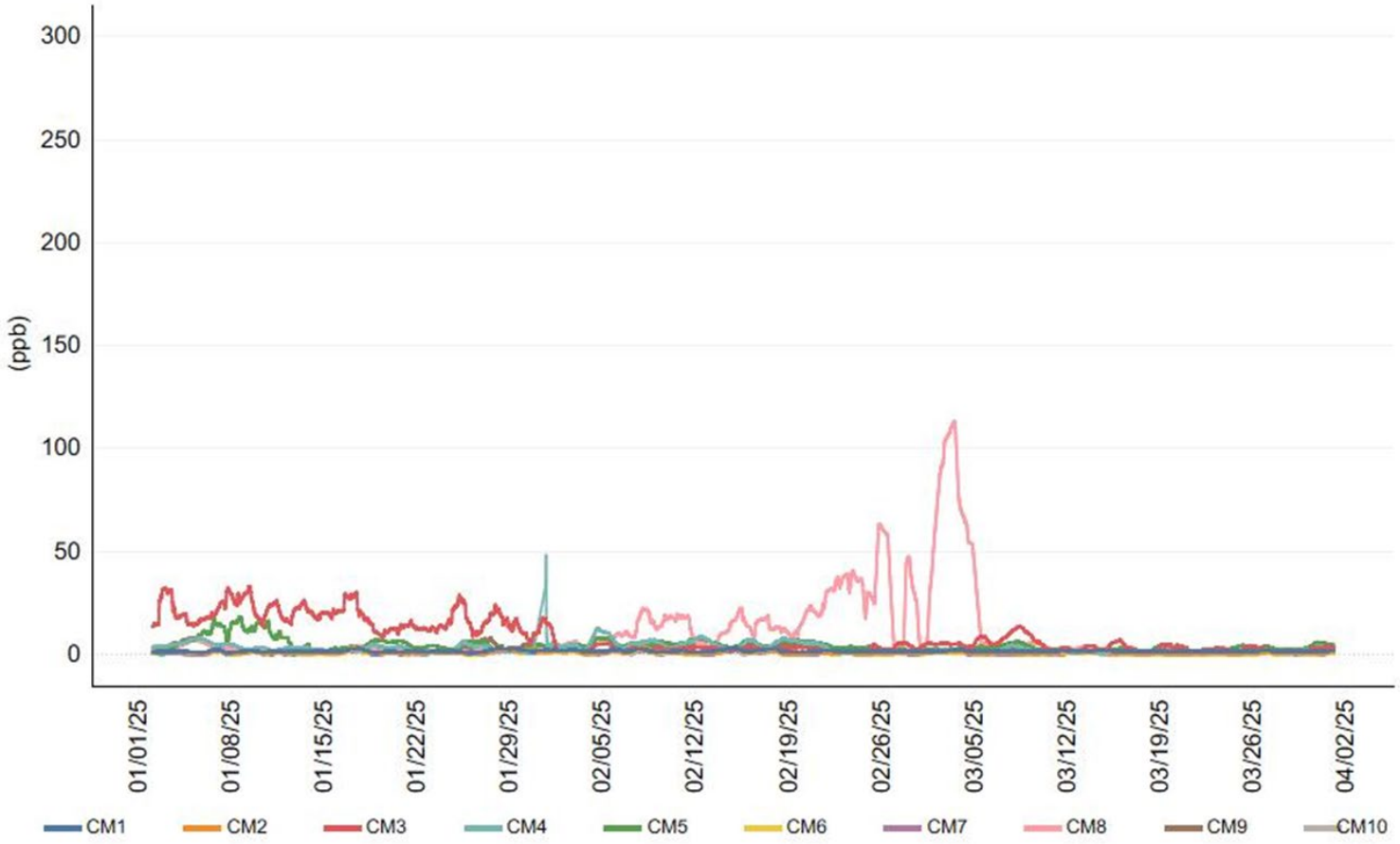


FIGURE 7 CCND COMMUNITY MONITORING $PM_{2.5}$ 1-HOUR ROLLING AVERAGE DATA

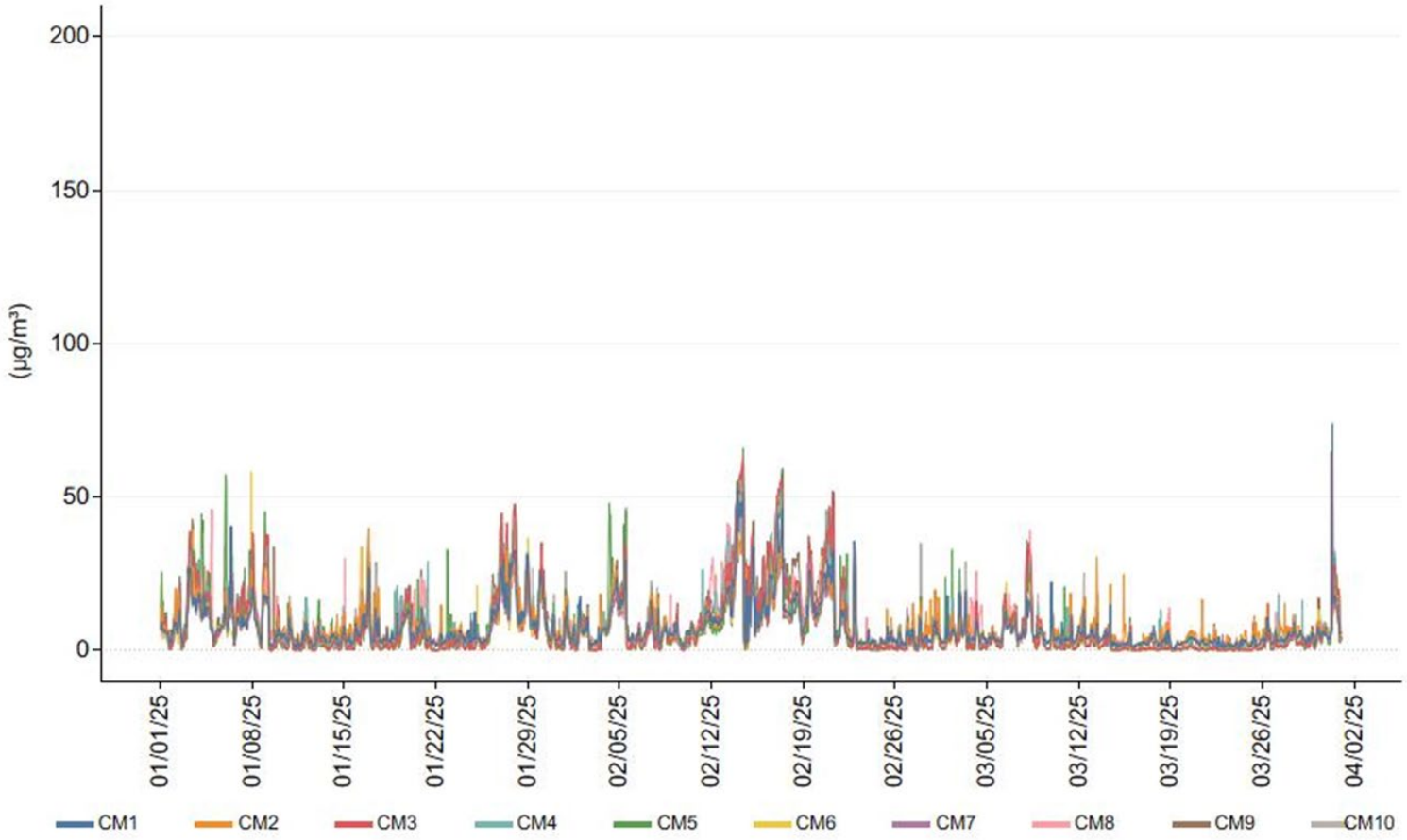


FIGURE 8 CCND COMMUNITY MONITORING $PM_{2.5}$ 24-HOUR ROLLING AVERAGE DATA

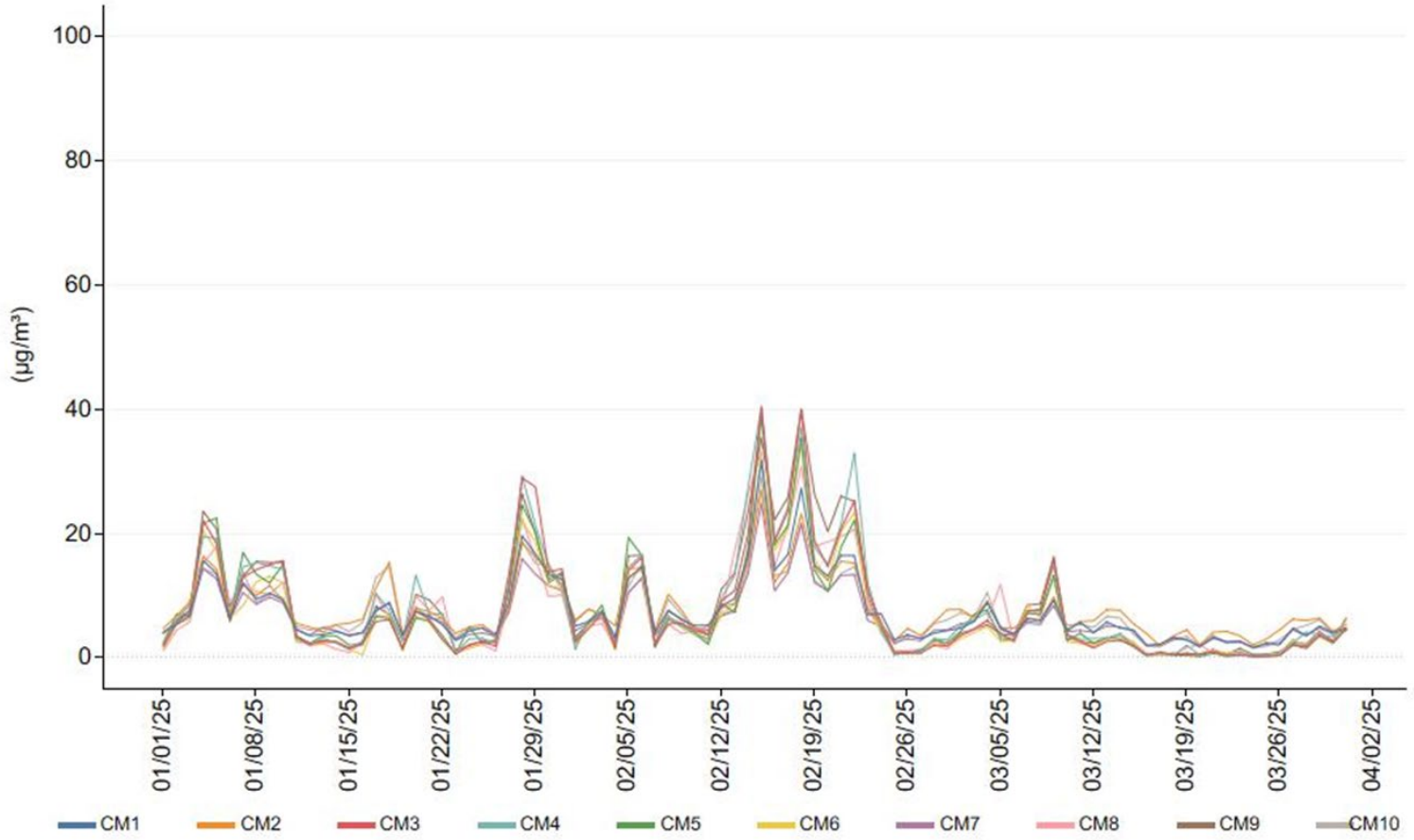


FIGURE 9 CCND COMMUNITY MONITORING tVOC 1-HOUR ROLLING AVERAGE DATA

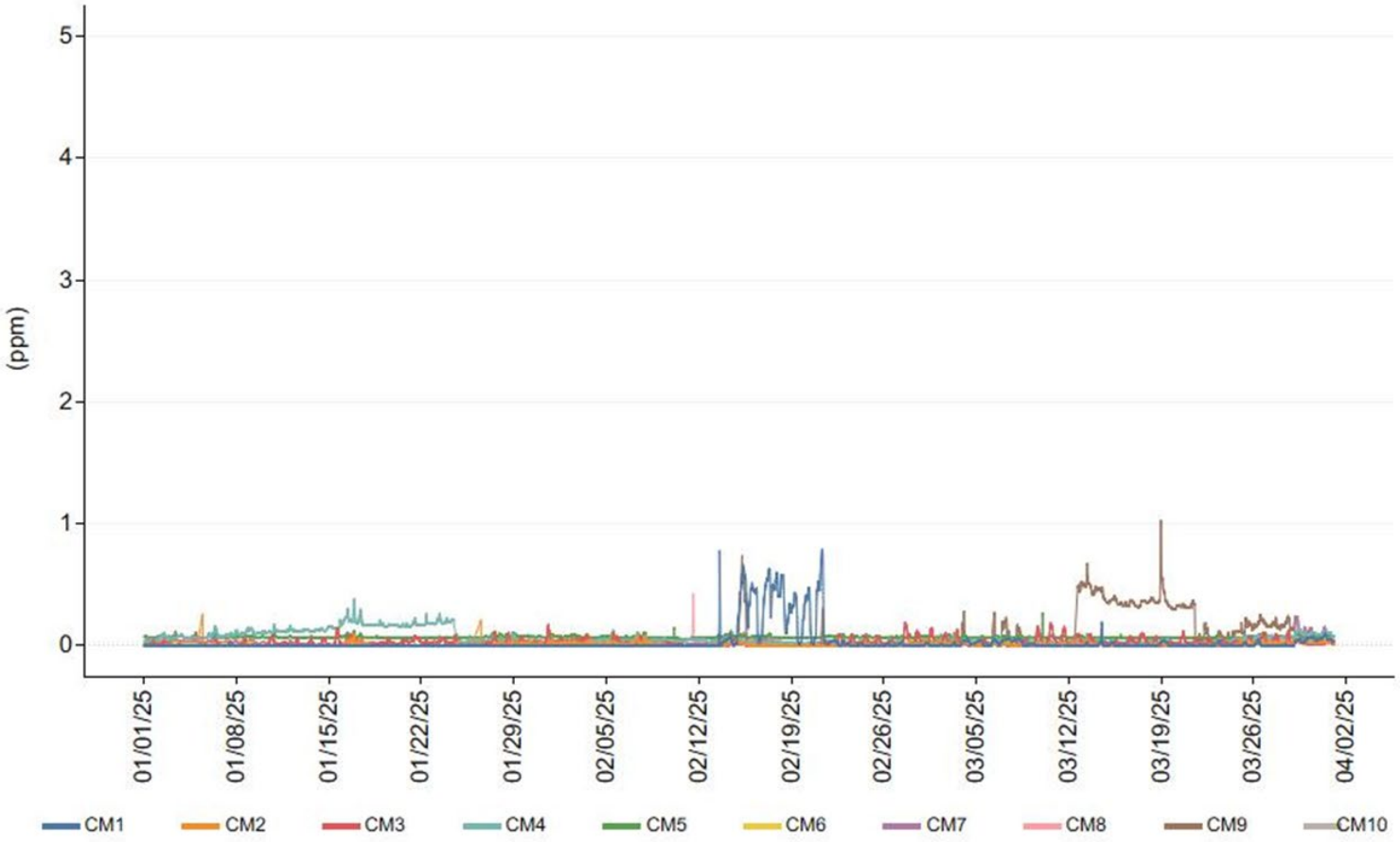
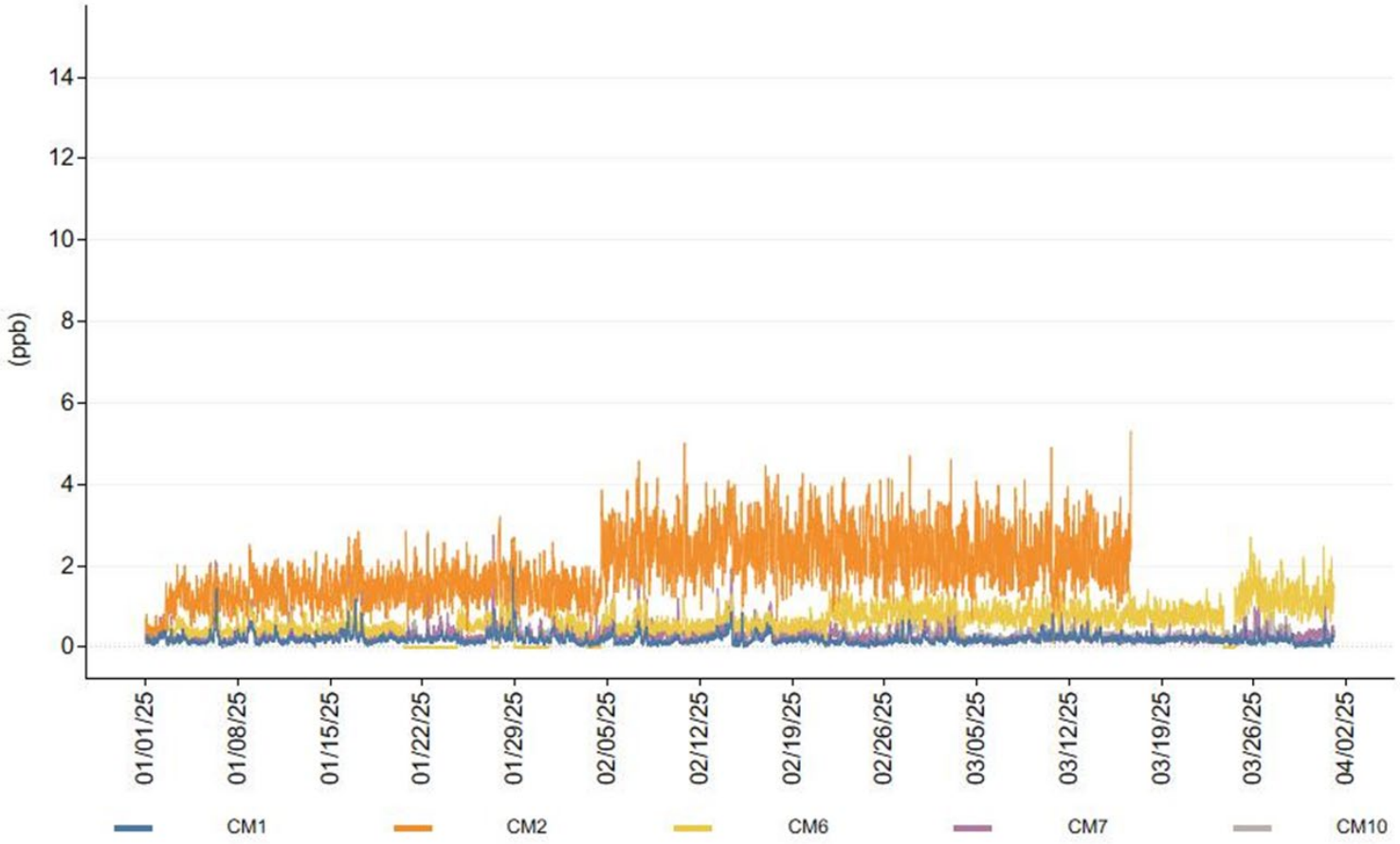
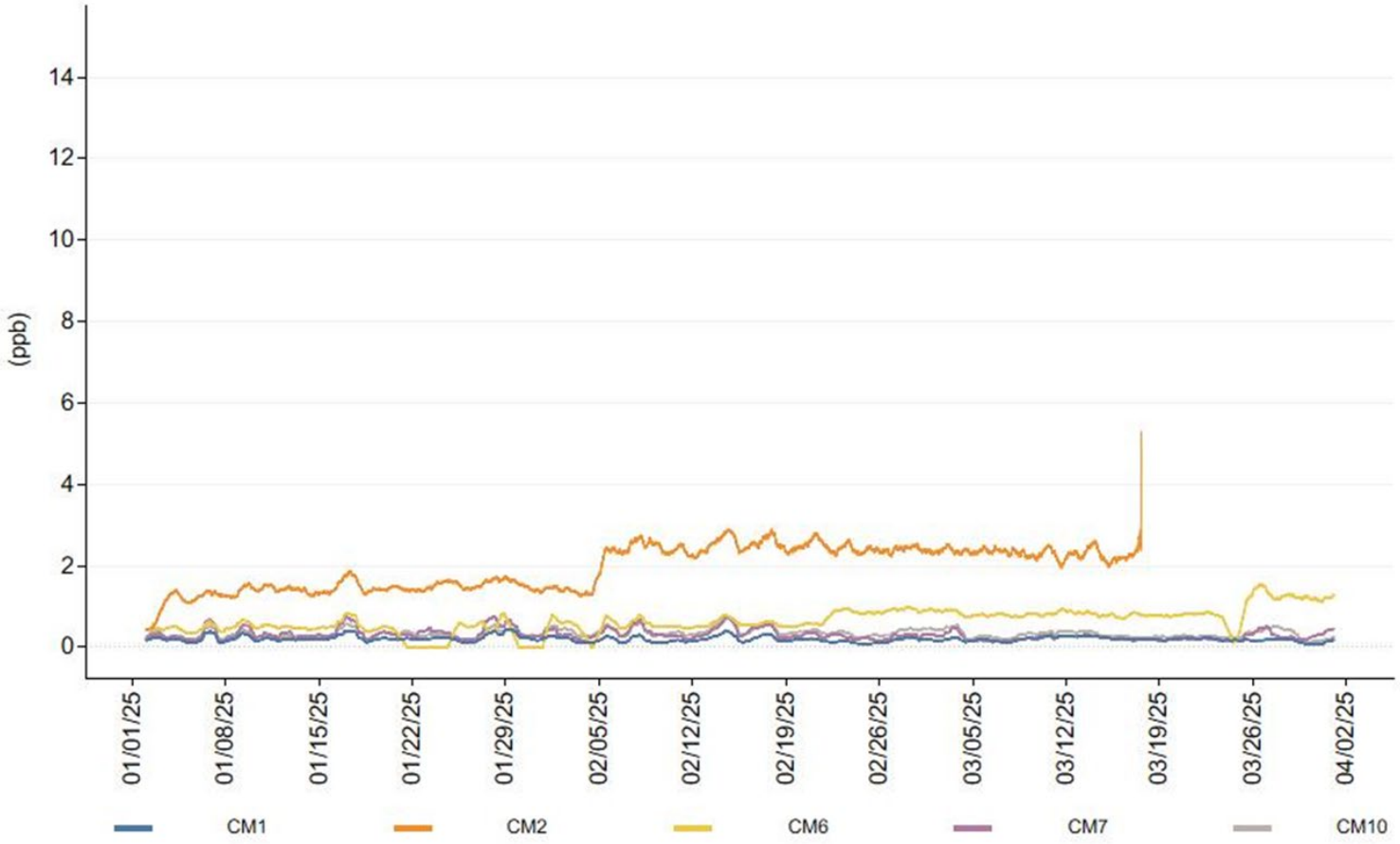


FIGURE 10 CCND COMMUNITY MONITORING BENZENE 1-HOUR ROLLING AVERAGE DATA[6, 7]



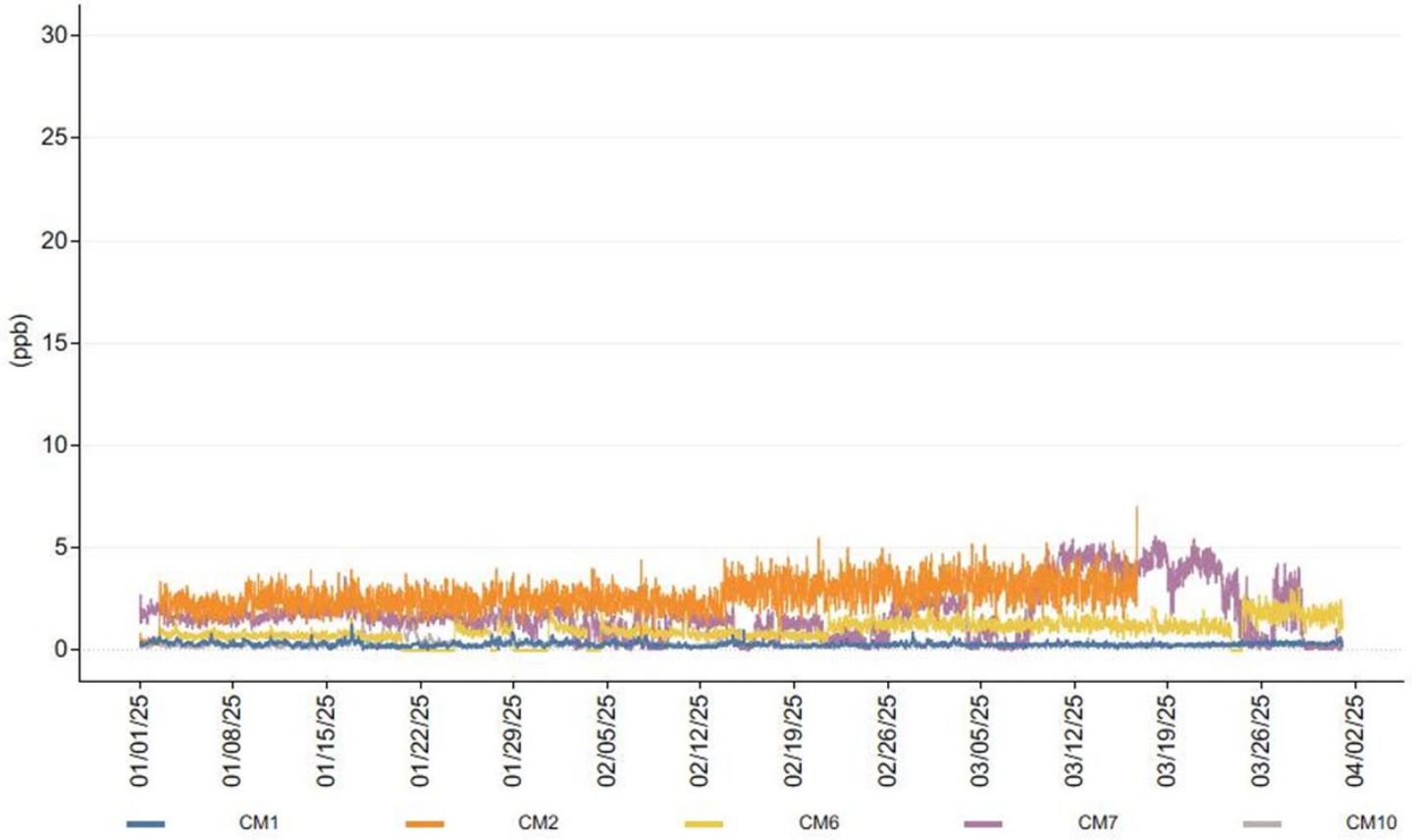
[6] CM2 DETECT BTEX monitor was demobilized on March 16, 2025 to be serviced; thus, BTEX compounds were not measured after this date.
[7] CM8 DETECT BTEX monitor was not online in Q1 of 2025.

FIGURE 11 CCND COMMUNITY MONITORING BENZENE 24-HOUR ROLLING AVERAGE DATA[8, 9]



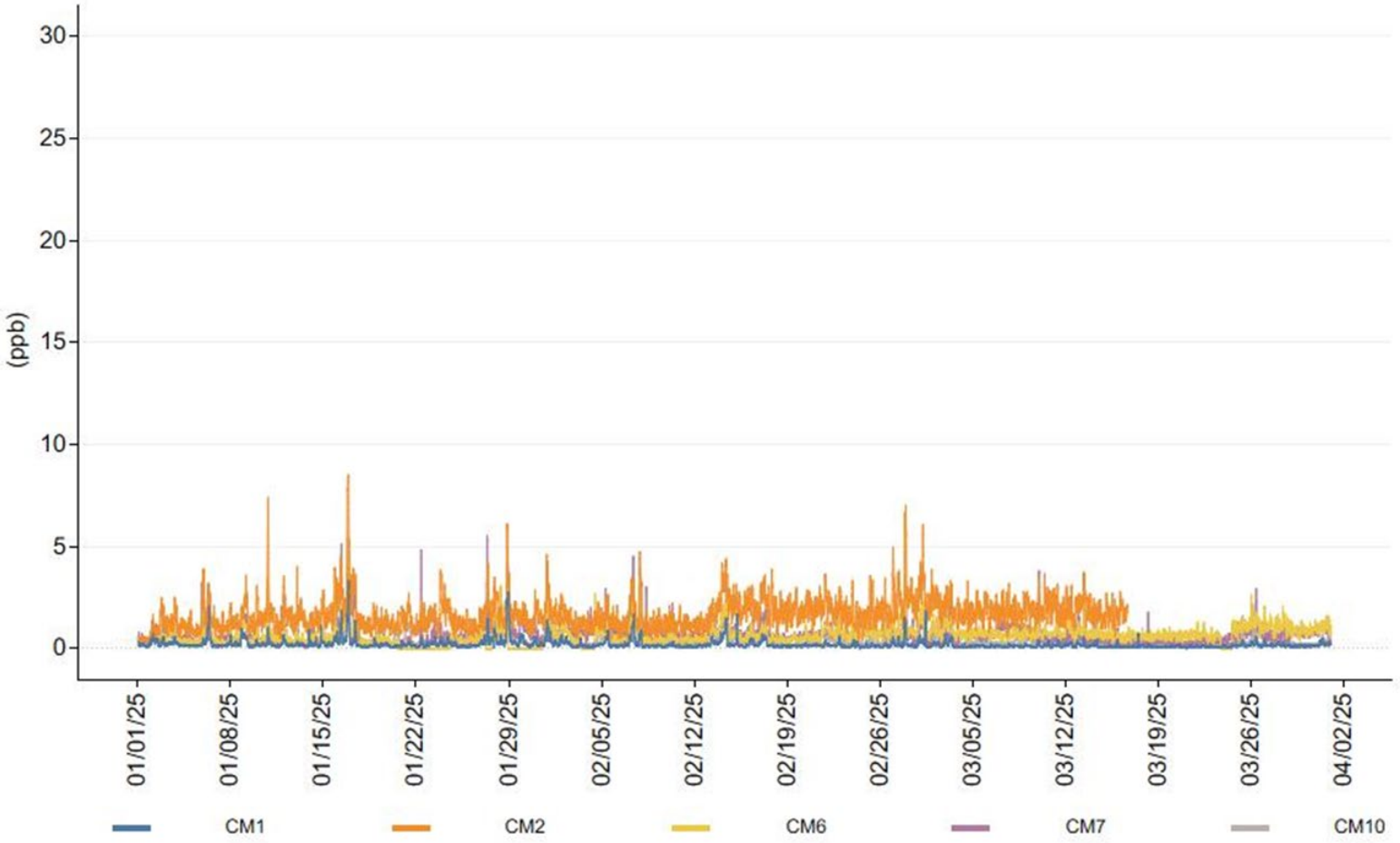
[8] CM2 DETECT BTEX monitor was demobilized on March 16, 2025 to be serviced; thus, BTEX compounds were not measured after this date.
[9] CM8 DETECT BTEX monitor was not online in Q1 of 2025.

FIGURE 12 CCND COMMUNITY MONITORING ETHYLBENZENE 1-HOUR ROLLING AVERAGE DATA[10, 11]



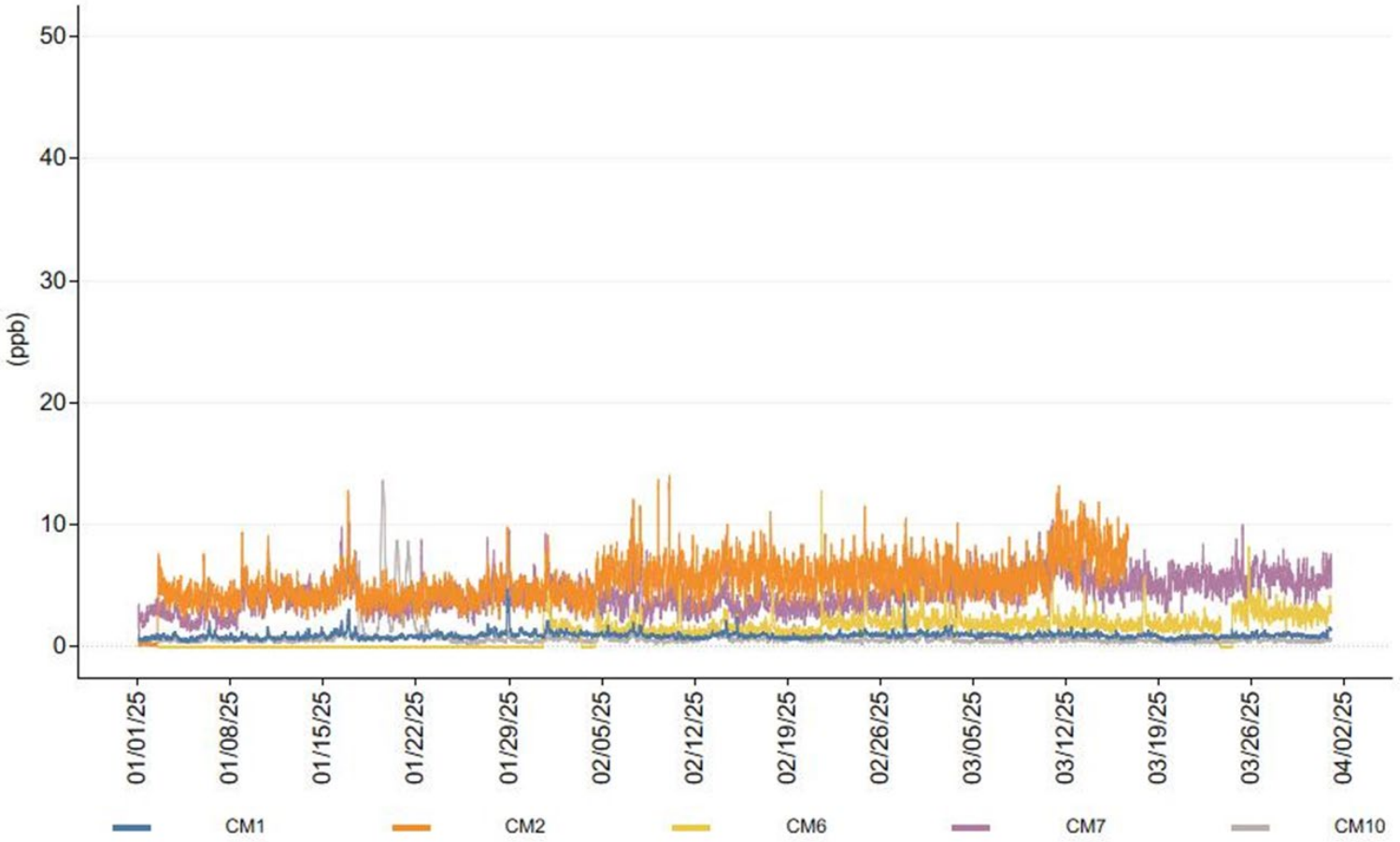
[10] CM2 DETECT BTEX monitor was demobilized on March 16, 2025 to be serviced; thus, BTEX compounds were not measured after this date.
[11] CM8 DETECT BTEX monitor was not online in Q1 of 2025.

FIGURE 13 CCND COMMUNITY MONITORING 1-HOUR ROLLING AVERAGE TOLUENE DATA[13,14]



[13] CM2 DETECT BTEX monitor was demobilized on March 16, 2025 to be serviced; thus, BTEX compounds were not measured after this date.
[14] CM8 DETECT BTEX monitor was not online in Q1 of 2025.

FIGURE 14 CCND COMMUNITY MONITORING 1-HOUR ROLLING AVERAGE XYLENE DATA[15,16]



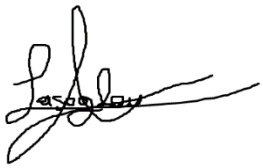
[15] CM2 DETECT BTEX monitor was demobilized on March 16, 2025 to be serviced; thus, BTEX compounds were not measured after this date.
[16] CM8 DETECT BTEX monitor was not online in Q1 of 2025.

4.0 PROGRAM CHANGES

On December 20, 2024, the gas sensors (H_2S, SO_2, NO_2, CO) of the ten Sensit RAMP systems were replaced, as they were reaching their expiration date. The new sensors were allowed to equilibrate in ambient conditions and then they were calibrated. Prior to their deployment in the CCND network, the sensors were evaluated by being collocated with a Federal Equivalent Measurement (FEM) monitor and a near-FEM monitor. The Sensit RAMPs with the new sensors were installed in the CCND network on December 30, 2024.

Five new monitoring systems were added in the CCND network starting on January 2025. The systems were installed at CM1, CM2, CM6, CM7, CM10. The new systems provide NO_2 and $PM_{2.5}$ and SO_2 FEM measurements, as well as measurements of H2S and BTEX as required by the House Bill 24-1338 and Suncor's Title V permit requirements. On March 13, 2025 the CM9 monitoring station was moved from the 48th and Race location (39.78455, -104.96264) to the Riverside Cemetery (39.78936, -104.96308). CM9 was moved as the new owner of the Monroe building raised safety and security concerns. The new location, Riverside Cemetery, is relatively close to the original location, has no known local emission sources, and is easily accessible by the Onterris field team.

Prepared by:



Antonios Tasoglou, PhD, PMP

Emergency Technology Manager

APPENDIX A CALIBRATION AND QA/QC DATA

Rose Hill Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM1	1/16/2025	18.70%	3.00%	4.80%	N/A	N/A	N/A	N/A	N/A	N/A	8.75%	5.00%	1.25%	4.00%
CM1	2/13/2025	34.30%	77.00%	0.10%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.00%
CM1	3/11/2025	17.40%	50.00%	4.80%	20.00%	22.00%	5.50%	N/A	N/A	N/A	N/A	N/A	N/A	11.00%

RBC Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM2	1/24/2025	15.20%	26.00%	4.70%	N/A	N/A	N/A	N/A	N/A	N/A	15.00%	4.00%	0.00%	13.00%
CM2	2/5/2025	25.20%	37.00%	0.10%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	22.00%
CM2	3/11/2025	0.30%	17.00%	4.10%	19.00%	19.00%	12.50%	N/A	N/A	N/A	N/A	N/A	N/A	16.00%

Adams High Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM3	1/17/2025	23.40%	47.00%	2.30%	4.00%	1.00%	4.50%	94.00%	93.00%	0.00%	79.75%	207.00%	0.00%	50.00%
CM3	2/24/2025	100.80%	87.00%	3.00%	9.00%	5.00%	6.00%	1080.00%	1230.00%	0.00%	82.25%	78.00%	2.00%	2.00%
CM3	3/25/2025	4.20%	3.00%	0.00%	7.50%	2.00%	5.50%	2.25%	1.00%	0.00%	201.00%	239.00%	0.75%	14.00%

Adams Middle Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM4	1/24/2025	35.60%	25.60%	0.30%	12.50%	4.00%	7.00%	35.00%	72.00%	0.00%	39.25%	48.00%	0.75%	140.00%
CM4	2/21/2025	0.40%	100.00%	0.00%	0.50%	4.00%	5.50%	4.50%	80.00%	0.00%	58.50%	83.00%	2.75%	15.00%
CM4	3/24/2025	22.80%	60.00%	0.00%	5.00%	4.00%	2.00%	3.75%	37.00%	10.00%	9.75%	2.00%	0.00%	11.00%

Central Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM5	1/13/2025	19.80%	12.00%	0.38%	0.50%	9.00%	9.50%	43.00%	43.00%	0.00%	9.00%	0.00%	0.75%	24.00%
CM5	2/10/2025	7.50%	91.00%	1.21%	4.50%	10.00%	5.50%	4.00%	2.00%	0.00%	2.25%	7.00%	2.75%	26.00%
CM5	3/10/2025	4.50%	62.00%	0.00%	6.00%	3.00%	9.00%	39.00%	27.00%	0.00%	9.25%	4.00%	2.75%	27.00%

Focus Point Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM6	1/15/2025	8.10%	11.00%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.00%

CM6	2/12/2025	32.00%	74.00%	0.70%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00%
CM6	3/14/2025	19.70%	75.00%	3.10%	N/A	N/A	N/A	N/A	N/A	N/A	14.25%	3.00%	2.00%	27.00%

Kearney Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM7	1/14/2025	28.30%	24.00%	1.60%	N/A	N/A	N/A	N/A	N/A	N/A	16.25%	4.00%	1.75%	13.00%
CM7	2/12/2025	36.00%	100.00%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.00%
CM7	3/14/2025	4.40%	67.00%	2.90%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.00%

Monroe Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM8	1/23/2025	8.60%	10.00%	4.40%	11.00%	4.00%	8.50%	6.50%	25.00%	0.00%	42.25%	32.00%	0.75%	8.00%
CM8	2/11/2025	9.20%	26.00%	7.00%	7.00%	7.00%	6.00%	1.50%	15.00%	0.00%	59.50%	77.00%	7.00%	6.00%
CM8	3/13/2025	13.50%	41.00%	3.60%	12.00%	8.00%	6.50%	4.50%	15.00%	0.00%	N/A	N/A	N/A	14.00%

48th and Race Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM9	1/31/2025	14.20%	12.00%	2.64%	1.50%	1.00%	5.00%	18.50%	64.00%	0.00%	20.25%	85.00%	2.00%	11.00%
CM9	2/27/2025	2.80%	75.00%	0.40%	1.00%	1.00%	5.50%	30.50%	78.00%	7.50%	5.50%	6.00%	2.00%	14.00%
CM9	3/12/2025	7.60%	2.00%	6.90%	21.00%	26.00%	0.00%	21.25%	84.00%	10.00%	6.75%	2.00%	0.75%	87.00%

Alsup Sensit RAMP

		Validation Results Table												
		CO Error			NO2 Error			SO2 Error			H2S Error			VOC Error
Community Monitor Location	Validation Date	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Span (<30%)	Precision (<30%)	Zero (<10%)	Precision (<30%)
CM10	1/15/2025	63.40%	6.00%	6.30%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18.00%
CM10	2/5/2025	20.80%	21.00%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31.00%
CM10	3/28/2025	18.50%	6.00%	1.20%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.00%

Rosehill DETECT

Date	Location	Parameter	Precision	Span
1/6/2025	CM1	H2S	3.30%	4.30%
1/6/2025	CM1	NO	0.40%	0.00%
1/6/2025	CM1	SO2	4.80%	7.30%
1/6/2025	CM1	Benzene	-	9.30%
1/6/2025	CM1	Toluene	-	5.70%
1/6/2025	CM1	Ethylbenzene	-	3.20%
1/6/2025	CM1	Xylenes	-	1.40%
1/13/2025	CM1	H2S	1.90%	3.40%
1/13/2025	CM1	NO	0.40%	3.00%
1/13/2025	CM1	SO2	4.40%	5.80%
1/13/2025	CM1	Benzene	-	11.30%
1/13/2025	CM1	Toluene	-	6.80%
1/13/2025	CM1	Ethylbenzene	-	7.00%
1/13/2025	CM1	Xylenes	-	3.00%
1/20/2025	CM1	H2S	3.50%	8.20%
1/20/2025	CM1	NO	0.00%	1.80%
1/20/2025	CM1	NO2	107.70%	101.20%
1/20/2025	CM1	SO2	5.60%	5.80%
1/20/2025	CM1	Benzene	-	16.30%
1/20/2025	CM1	Toluene	-	9.30%
1/20/2025	CM1	Ethylbenzene	-	10.50%
1/20/2025	CM1	Xylenes	-	7.20%
1/27/2025	CM1	H2S	4.50%	7.20%
1/27/2025	CM1	NO	1.30%	0.70%
1/27/2025	CM1	NO2	112.00%	102.60%
1/27/2025	CM1	SO2	6.80%	7.10%
1/27/2025	CM1	Benzene	-	18.30%
1/27/2025	CM1	Toluene	-	12.50%
1/27/2025	CM1	Ethylbenzene	-	11.80%
1/27/2025	CM1	Xylenes	-	10.00%
2/3/2025	CM1	H2S	6.30%	5.00%
2/3/2025	CM1	NO	0.80%	0.80%
2/3/2025	CM1	NO2	78.50%	78.50%
2/3/2025	CM1	SO2	5.70%	7.30%
2/3/2025	CM1	Benzene	-	24.50%
2/3/2025	CM1	Toluene	-	18.30%
2/3/2025	CM1	Ethylbenzene	-	15.80%
2/3/2025	CM1	Xylenes	-	14.10%
2/10/2025	CM1	H2S	5.50%	6.60%
2/10/2025	CM1	NO	1.90%	5.50%
2/10/2025	CM1	NO2	85.50%	71.20%
2/10/2025	CM1	SO2	7.30%	8.50%
2/10/2025	CM1	Benzene	-	26.80%

2/10/2025	CM1	Toluene	-	14.50%
2/10/2025	CM1	Ethylbenzene	-	10.80%
2/10/2025	CM1	Xylenes	-	5.10%
2/17/2025	CM1	H2S	6.90%	9.70%
2/17/2025	CM1	NO	2.30%	1.10%
2/17/2025	CM1	NO2	80.40%	69.20%
2/17/2025	CM1	SO2	7.90%	8.90%
2/17/2025	CM1	Benzene	-	30.00%
2/17/2025	CM1	Toluene	-	21.30%
2/17/2025	CM1	Ethylbenzene	-	19.50%
2/17/2025	CM1	Xylenes	-	15.30%
2/24/2025	CM1	H2S	7.60%	6.90%
2/24/2025	CM1	NO	0.50%	0.10%
2/24/2025	CM1	NO2	68.50%	66.40%
2/24/2025	CM1	SO2	7.30%	8.20%
2/24/2025	CM1	Benzene	-	33.50%
2/24/2025	CM1	Toluene	-	24.50%
2/24/2025	CM1	Ethylbenzene	-	19.80%
2/24/2025	CM1	Xylenes	-	16.10%
3/3/2025	CM1	H2S	5.30%	5.00%
3/3/2025	CM1	NO	21.60%	20.30%
3/3/2025	CM1	NO2	62.90%	69.20%
3/3/2025	CM1	SO2	6.80%	9.20%
3/3/2025	CM1	Benzene	-	6.00%
3/3/2025	CM1	Toluene	-	27.50%
3/3/2025	CM1	Ethylbenzene	-	22.30%
3/3/2025	CM1	Xylenes	-	16.50%
3/10/2025	CM1	H2S	4.90%	6.10%
3/10/2025	CM1	NO	24.70%	27.10%
3/10/2025	CM1	NO2	66.50%	65.00%
3/10/2025	CM1	SO2	7.60%	9.20%
3/10/2025	CM1	Benzene	-	11.50%
3/10/2025	CM1	Toluene	-	25.30%
3/10/2025	CM1	Ethylbenzene	-	18.30%
3/10/2025	CM1	Xylenes	-	10.10%
3/17/2025	CM1	H2S	5.50%	8.10%
3/17/2025	CM1	NO	-	-
3/17/2025	CM1	NO2	-	-
3/17/2025	CM1	SO2	8.80%	11.10%
3/17/2025	CM1	Benzene	-	21.00%
3/17/2025	CM1	Toluene	-	30.80%
3/17/2025	CM1	Ethylbenzene	-	24.50%
3/17/2025	CM1	Xylenes	-	15.40%
3/24/2025	CM1	H2S	8.50%	7.60%
3/24/2025	CM1	NO	-	-
3/24/2025	CM1	NO2	-	-
3/24/2025	CM1	SO2	6.40%	3.00%

3/24/2025	CM1	Benzene	-	61.50%
3/24/2025	CM1	Toluene	-	54.00%
3/24/2025	CM1	Ethylbenzene	-	50.30%
3/24/2025	CM1	Xylenes	-	38.90%
3/31/2025	CM1	H2S	7.70%	6.50%
3/31/2025	CM1	NO	-	-
3/31/2025	CM1	NO2	-	-
3/31/2025	CM1	SO2	7.60%	5.30%
3/31/2025	CM1	Benzene	-	4.30%
3/31/2025	CM1	Toluene	-	0.70%
3/31/2025	CM1	Ethylbenzene	-	2.50%
3/31/2025	CM1	Xylenes	-	9.00%

RBC DETECT

Date	Location	Parameter	Precision	Span
1/6/2025	CM2	H2S	0.80%	2.80%
1/6/2025	CM2	NO	0.30%	4.30%
1/6/2025	CM2	SO2	0.70%	6.30%
1/6/2025	CM2	Benzene	-	96.00%
1/6/2025	CM2	Toluene	-	94.80%
1/6/2025	CM2	Ethylbenzene	-	92.80%
1/6/2025	CM2	Xylenes	-	97.10%
1/13/2025	CM2	H2S	1.90%	2.30%
1/13/2025	CM2	NO	9.10%	16.00%
1/13/2025	CM2	SO2	1.70%	5.00%
1/13/2025	CM2	Benzene	-	10.00%
1/13/2025	CM2	Toluene	-	4.80%
1/13/2025	CM2	Ethylbenzene	-	4.30%
1/13/2025	CM2	Xylenes	-	9.20%
1/20/2025	CM2	H2S	2.40%	1.60%
1/20/2025	CM2	NO	16.80%	19.90%
1/20/2025	CM2	NO2	99.50%	100.20%
1/20/2025	CM2	SO2	0.70%	3.80%
1/20/2025	CM2	Benzene	-	19.50%
1/20/2025	CM2	Toluene	-	14.00%
1/20/2025	CM2	Ethylbenzene	-	16.50%
1/20/2025	CM2	Xylenes	-	16.40%
1/27/2025	CM2	H2S	3.30%	1.00%
1/27/2025	CM2	NO	1.30%	1.30%
1/27/2025	CM2	NO2	98.30%	98.30%
1/27/2025	CM2	SO2	0.80%	2.80%
1/27/2025	CM2	Benzene	-	28.80%
1/27/2025	CM2	Toluene	-	22.50%
1/27/2025	CM2	Ethylbenzene	-	19.80%

1/27/2025	CM2	Xylenes	-	22.50%
2/3/2025	CM2	H2S	4.30%	0.10%
2/3/2025	CM2	NO	17.10%	16.40%
2/3/2025	CM2	NO2	52.10%	42.90%
2/3/2025	CM2	SO2	1.70%	3.00%
2/3/2025	CM2	Benzene	-	40.50%
2/3/2025	CM2	Toluene	-	28.50%
2/3/2025	CM2	Ethylbenzene	-	28.00%
2/3/2025	CM2	Xylenes	-	31.30%
2/10/2025	CM2	H2S	4.80%	0.20%
2/10/2025	CM2	NO	13.50%	5.20%
2/10/2025	CM2	NO2	50.50%	44.80%
2/10/2025	CM2	SO2	2.00%	2.60%
2/10/2025	CM2	Benzene	-	5.70%
2/10/2025	CM2	Toluene	-	38.00%
2/10/2025	CM2	Ethylbenzene	-	32.80%
2/10/2025	CM2	Xylenes	-	0.20%
2/17/2025	CM2	H2S	5.10%	1.00%
2/17/2025	CM2	NO	4.30%	7.10%
2/17/2025	CM2	NO2	43.20%	41.20%
2/17/2025	CM2	SO2	1.30%	0.80%
2/17/2025	CM2	Benzene	-	11.30%
2/17/2025	CM2	Toluene	-	21.50%
2/17/2025	CM2	Ethylbenzene	-	17.30%
2/17/2025	CM2	Xylenes	-	19.70%
2/24/2025	CM2	H2S	3.90%	1.20%
2/24/2025	CM2	NO	-	-
2/24/2025	CM2	NO2	-	-
2/24/2025	CM2	SO2	0.70%	0.70%
2/24/2025	CM2	Benzene	-	29.00%
2/24/2025	CM2	Toluene	-	19.30%
2/24/2025	CM2	Ethylbenzene	-	18.00%
2/24/2025	CM2	Xylenes	-	17.30%
3/3/2025	CM2	H2S	3.60%	3.00%
3/3/2025	CM2	NO	91.20%	17.00%
3/3/2025	CM2	NO2	72.10%	80.70%
3/3/2025	CM2	SO2	20.40%	0.30%
3/3/2025	CM2	Benzene	-	25.30%
3/3/2025	CM2	Toluene	-	29.00%
3/3/2025	CM2	Ethylbenzene	-	26.80%
3/3/2025	CM2	Xylenes	-	31.20%
3/10/2025	CM2	H2S	5.50%	0.10%
3/10/2025	CM2	NO	6.70%	2.10%
3/10/2025	CM2	NO2	49.20%	47.30%
3/10/2025	CM2	SO2	1.60%	1.60%
3/10/2025	CM2	Benzene	-	34.50%
3/10/2025	CM2	Toluene	-	35.30%

3/10/2025	CM2	Ethylbenzene	-	34.00%
3/10/2025	CM2	Xylenes	-	9.00%
3/17/2025	CM2	H2S	5.70%	3.80%
3/17/2025	CM2	NO	-	-
3/17/2025	CM2	NO2	-	-
3/17/2025	CM2	SO2	4.90%	1.50%
3/17/2025	CM2	Benzene	-	54.30%
3/17/2025	CM2	Toluene	-	52.80%
3/17/2025	CM2	Ethylbenzene	-	56.00%
3/17/2025	CM2	Xylenes	-	62.30%
3/24/2025	CM2	H2S	5.90%	1.50%
3/24/2025	CM2	NO	-	-
3/24/2025	CM2	NO2	-	-
3/24/2025	CM2	SO2	12.90%	4.80%
3/24/2025	CM2	Benzene	-	0.30%
3/24/2025	CM2	Toluene	-	13.80%
3/24/2025	CM2	Ethylbenzene	-	27.00%
3/24/2025	CM2	Xylenes	-	37.10%
3/31/2025	CM2	H2S	5.20%	0.30%
3/31/2025	CM2	NO	-	-
3/31/2025	CM2	NO2	-	-
3/31/2025	CM2	SO2	9.10%	8.80%
3/31/2025	CM2	Benzene	-	47.50%
3/31/2025	CM2	Toluene	-	30.80%
3/31/2025	CM2	Ethylbenzene	-	47.50%
3/31/2025	CM2	Xylenes	-	7.60%

Focus DETECT

Date	Location	Parameter	Precision	Span
1/6/2025	CM6	H2S	1.10%	0.40%
1/6/2025	CM6	NO	3.30%	2.50%
1/6/2025	CM6	SO2	0.70%	3.10%
1/6/2025	CM6	Benzene	-	19.50%
1/6/2025	CM6	Toluene	-	26.80%
1/6/2025	CM6	Ethylbenzene	-	41.30%
1/6/2025	CM6	Xylenes	-	-
1/13/2025	CM6	H2S	1.50%	1.50%
1/13/2025	CM6	NO	10.30%	4.20%
1/13/2025	CM6	SO2	2.00%	5.30%
1/13/2025	CM6	Benzene	-	15.00%
1/13/2025	CM6	Toluene	-	21.50%
1/13/2025	CM6	Ethylbenzene	-	41.00%
1/13/2025	CM6	Xylenes	-	-
1/20/2025	CM6	H2S	2.30%	1.30%

1/20/2025	CM6	NO	1.60%	1.80%
1/20/2025	CM6	NO2	106.40%	100.80%
1/20/2025	CM6	SO2	0.50%	4.00%
1/20/2025	CM6	Benzene	-	-
1/20/2025	CM6	Toluene	-	-
1/20/2025	CM6	Ethylbenzene	-	-
1/20/2025	CM6	Xylenes	-	-
1/27/2025	CM6	H2S	1.70%	1.80%
1/27/2025	CM6	NO	5.10%	9.50%
1/27/2025	CM6	NO2	-	-
1/27/2025	CM6	SO2	0.50%	0.00%
1/27/2025	CM6	Benzene	-	7.80%
1/27/2025	CM6	Toluene	-	6.00%
1/27/2025	CM6	Ethylbenzene	-	12.40%
1/27/2025	CM6	Xylenes	-	13.00%
2/3/2025	CM6	H2S	1.30%	1.70%
2/3/2025	CM6	NO	5.60%	7.00%
2/3/2025	CM6	NO2	40.30%	22.80%
2/3/2025	CM6	SO2	0.70%	0.50%
2/3/2025	CM6	Benzene	-	16.30%
2/3/2025	CM6	Toluene	-	16.70%
2/3/2025	CM6	Ethylbenzene	-	27.20%
2/3/2025	CM6	Xylenes	-	30.00%
2/10/2025	CM6	H2S	2.40%	0.20%
2/10/2025	CM6	NO	2.00%	1.60%
2/10/2025	CM6	NO2	32.30%	18.00%
2/10/2025	CM6	SO2	1.60%	0.80%
2/10/2025	CM6	Benzene	-	23.50%
2/10/2025	CM6	Toluene	-	21.80%
2/10/2025	CM6	Ethylbenzene	-	25.50%
2/10/2025	CM6	Xylenes	-	23.90%
2/17/2025	CM6	H2S	2.40%	0.70%
2/17/2025	CM6	NO	5.60%	6.60%
2/17/2025	CM6	NO2	28.70%	14.50%
2/17/2025	CM6	SO2	1.30%	0.10%
2/17/2025	CM6	Benzene	-	38.00%
2/17/2025	CM6	Toluene	-	35.80%
2/17/2025	CM6	Ethylbenzene	-	37.80%
2/17/2025	CM6	Xylenes	-	37.00%
2/24/2025	CM6	H2S	3.90%	0.10%
2/24/2025	CM6	NO	1.50%	4.20%
2/24/2025	CM6	NO2	15.90%	2.10%
2/24/2025	CM6	SO2	3.10%	0.70%
2/24/2025	CM6	Benzene	-	8.50%
2/24/2025	CM6	Toluene	-	0.00%
2/24/2025	CM6	Ethylbenzene	-	3.50%
2/24/2025	CM6	Xylenes	-	5.20%

3/3/2025	CM6	H2S	2.80%	0.60%
3/3/2025	CM6	NO	32.00%	21.60%
3/3/2025	CM6	NO2	15.50%	13.80%
3/3/2025	CM6	SO2	2.00%	2.60%
3/3/2025	CM6	Benzene	-	23.30%
3/3/2025	CM6	Toluene	-	17.00%
3/3/2025	CM6	Ethylbenzene	-	20.00%
3/3/2025	CM6	Xylenes	-	25.00%
3/10/2025	CM6	H2S	4.50%	0.70%
3/10/2025	CM6	NO	30.50%	39.60%
3/10/2025	CM6	NO2	3.20%	18.70%
3/10/2025	CM6	SO2	3.60%	3.70%
3/10/2025	CM6	Benzene	-	30.00%
3/10/2025	CM6	Toluene	-	23.50%
3/10/2025	CM6	Ethylbenzene	-	22.80%
3/10/2025	CM6	Xylenes	-	25.30%
3/17/2025	CM6	H2S	3.10%	1.30%
3/17/2025	CM6	NO	26.40%	29.00%
3/17/2025	CM6	NO2	16.30%	4.30%
3/17/2025	CM6	SO2	5.50%	3.00%
3/17/2025	CM6	Benzene	-	39.50%
3/17/2025	CM6	Toluene	-	33.50%
3/17/2025	CM6	Ethylbenzene	-	36.00%
3/17/2025	CM6	Xylenes	-	37.40%
3/24/2025	CM6	H2S	5.90%	1.80%
3/24/2025	CM6	NO	1.50%	0.80%
3/24/2025	CM6	NO2	6.90%	6.40%
3/24/2025	CM6	SO2	5.90%	3.20%
3/24/2025	CM6	Benzene	-	22.30%
3/24/2025	CM6	Toluene	-	13.30%
3/24/2025	CM6	Ethylbenzene	-	20.50%
3/24/2025	CM6	Xylenes	-	17.40%
3/31/2025	CM6	H2S	4.50%	0.50%
3/31/2025	CM6	NO	-	11.00%
3/31/2025	CM6	NO2	-	9.00%
3/31/2025	CM6	SO2	6.70%	3.50%
3/31/2025	CM6	Benzene	-	39.30%
3/31/2025	CM6	Toluene	-	32.80%
3/31/2025	CM6	Ethylbenzene	-	27.50%
3/31/2025	CM6	Xylenes	-	27.70%

Kearney DETECT

Date	Location	Parameter	Precision	Span
1/6/2025	CM7	H2S	4.10%	8.00%

1/6/2025	CM7	NO	2.40%	2.30%
1/6/2025	CM7	SO2	1.50%	0.50%
1/6/2025	CM7	Benzene	-	12.30%
1/6/2025	CM7	Toluene	-	18.50%
1/6/2025	CM7	Ethylbenzene	-	18.80%
1/6/2025	CM7	Xylenes	-	35.10%
1/13/2025	CM7	H2S	3.70%	3.10%
1/13/2025	CM7	NO	0.00%	5.30%
1/13/2025	CM7	SO2	1.20%	0.50%
1/13/2025	CM7	Benzene	-	10.00%
1/13/2025	CM7	Toluene	-	9.30%
1/13/2025	CM7	Ethylbenzene	-	5.00%
1/13/2025	CM7	Xylenes	-	7.00%
1/20/2025	CM7	H2S	2.90%	4.70%
1/20/2025	CM7	NO	2.00%	1.60%
1/20/2025	CM7	NO2	97.20%	99.40%
1/20/2025	CM7	SO2	2.40%	0.50%
1/20/2025	CM7	Benzene	-	1.00%
1/20/2025	CM7	Toluene	-	6.80%
1/20/2025	CM7	Ethylbenzene	-	19.80%
1/20/2025	CM7	Xylenes	-	21.30%
1/27/2025	CM7	H2S	2.40%	6.10%
1/27/2025	CM7	NO	2.30%	0.60%
1/27/2025	CM7	NO2	95.70%	99.20%
1/27/2025	CM7	SO2	4.70%	3.60%
1/27/2025	CM7	Benzene	-	17.60%
1/27/2025	CM7	Toluene	-	23.50%
1/27/2025	CM7	Ethylbenzene	-	27.60%
1/27/2025	CM7	Xylenes	-	27.10%
2/3/2025	CM7	H2S	4.10%	7.00%
2/3/2025	CM7	NO	1.70%	0.70%
2/3/2025	CM7	NO2	0.80%	8.80%
2/3/2025	CM7	SO2	3.90%	2.80%
2/3/2025	CM7	Benzene	-	4.80%
2/3/2025	CM7	Toluene	-	7.80%
2/3/2025	CM7	Ethylbenzene	-	2.30%
2/3/2025	CM7	Xylenes	-	0.30%
2/10/2025	CM7	H2S	5.10%	2.20%
2/10/2025	CM7	NO	0.80%	4.00%
2/10/2025	CM7	NO2	5.10%	1.40%
2/10/2025	CM7	SO2	4.40%	3.00%
2/10/2025	CM7	Benzene	-	4.00%
2/10/2025	CM7	Toluene	-	6.30%
2/10/2025	CM7	Ethylbenzene	-	1.50%
2/10/2025	CM7	Xylenes	-	1.70%
2/17/2025	CM7	H2S	3.20%	6.10%
2/17/2025	CM7	NO	1.60%	0.50%

2/17/2025	CM7	NO2	0.90%	11.60%
2/17/2025	CM7	SO2	3.30%	3.20%
2/17/2025	CM7	Benzene	-	6.00%
2/17/2025	CM7	Toluene	-	9.50%
2/17/2025	CM7	Ethylbenzene	-	22.50%
2/17/2025	CM7	Xylenes	-	26.10%
2/24/2025	CM7	H2S	2.40%	3.80%
2/24/2025	CM7	NO	60.50%	81.50%
2/24/2025	CM7	NO2	10.40%	2.20%
2/24/2025	CM7	SO2	3.90%	2.30%
2/24/2025	CM7	Benzene	-	17.80%
2/24/2025	CM7	Toluene	-	20.00%
2/24/2025	CM7	Ethylbenzene	-	26.00%
2/24/2025	CM7	Xylenes	-	30.10%
3/3/2025	CM7	H2S	3.60%	3.60%
3/3/2025	CM7	NO	8.50%	18.00%
3/3/2025	CM7	NO2	14.90%	10.40%
3/3/2025	CM7	SO2	3.20%	2.00%
3/3/2025	CM7	Benzene	-	25.90%
3/3/2025	CM7	Toluene	-	31.20%
3/3/2025	CM7	Ethylbenzene	-	38.20%
3/3/2025	CM7	Xylenes	-	15.10%
3/10/2025	CM7	H2S	1.60%	3.70%
3/10/2025	CM7	NO	22.10%	24.40%
3/10/2025	CM7	NO2	4.30%	16.60%
3/10/2025	CM7	SO2	4.10%	3.70%
3/10/2025	CM7	Benzene	-	29.30%
3/10/2025	CM7	Toluene	-	1.80%
3/10/2025	CM7	Ethylbenzene	-	3.50%
3/10/2025	CM7	Xylenes	-	9.60%
3/17/2025	CM7	H2S	2.70%	6.00%
3/17/2025	CM7	NO	0.30%	12.70%
3/17/2025	CM7	NO2	11.20%	1.10%
3/17/2025	CM7	SO2	4.80%	4.50%
3/17/2025	CM7	Benzene	-	34.30%
3/17/2025	CM7	Toluene	-	9.50%
3/17/2025	CM7	Ethylbenzene	-	1.80%
3/17/2025	CM7	Xylenes	-	19.70%
3/24/2025	CM7	H2S	2.30%	6.20%
3/24/2025	CM7	NO	10.40%	4.60%
3/24/2025	CM7	NO2	14.40%	1.50%
3/24/2025	CM7	SO2	5.60%	4.50%
3/24/2025	CM7	Benzene	-	8.50%
3/24/2025	CM7	Toluene	-	20.00%
3/24/2025	CM7	Ethylbenzene	-	10.50%
3/24/2025	CM7	Xylenes	-	22.80%
3/31/2025	CM7	H2S	3.30%	4.10%

3/31/2025	CM7	NO	9.50%	9.30%
3/31/2025	CM7	NO2	10.30%	0.30%
3/31/2025	CM7	SO2	4.70%	3.40%
3/31/2025	CM7	Benzene	-	13.50%
3/31/2025	CM7	Toluene	-	27.30%
3/31/2025	CM7	Ethylbenzene	-	12.30%
3/31/2025	CM7	Xylenes	-	23.80%

Alsup DETECT

Date	Location	Parameter	Precision	Span
1/6/2025	CM10	H2S	0.00%	2.60%
1/6/2025	CM10	NO	0.80%	3.60%
1/6/2025	CM10	SO2	10.00%	9.10%
1/6/2025	CM10	Benzene	-	19.50%
1/6/2025	CM10	Toluene	-	10.80%
1/6/2025	CM10	Ethylbenzene	-	7.50%
1/6/2025	CM10	Xylenes	-	8.20%
1/13/2025	CM10	H2S	2.10%	3.90%
1/13/2025	CM10	NO	0.40%	15.00%
1/13/2025	CM10	SO2	10.10%	6.50%
1/13/2025	CM10	Benzene	-	27.50%
1/13/2025	CM10	Toluene	-	15.50%
1/13/2025	CM10	Ethylbenzene	-	5.00%
1/13/2025	CM10	Xylenes	-	0.70%
1/20/2025	CM10	H2S	0.90%	3.60%
1/20/2025	CM10	NO	15.90%	15.90%
1/20/2025	CM10	NO2	103.70%	103.70%
1/20/2025	CM10	SO2	7.10%	6.80%
1/20/2025	CM10	Benzene	-	28.50%
1/20/2025	CM10	Toluene	-	7.80%
1/20/2025	CM10	Ethylbenzene	-	19.00%
1/20/2025	CM10	Xylenes	-	39.60%
1/27/2025	CM10	H2S	2.80%	2.10%
1/27/2025	CM10	NO	1.30%	0.90%
1/27/2025	CM10	NO2	101.90%	100.90%
1/27/2025	CM10	SO2	5.20%	4.40%
1/27/2025	CM10	Benzene	-	40.30%
1/27/2025	CM10	Toluene	-	28.00%
1/27/2025	CM10	Ethylbenzene	-	15.50%
1/27/2025	CM10	Xylenes	-	35.20%
2/3/2025	CM10	H2S	1.50%	3.70%
2/3/2025	CM10	NO	1.20%	1.20%
2/3/2025	CM10	NO2	4.10%	4.10%
2/3/2025	CM10	SO2	6.70%	5.70%

2/3/2025	CM10	Benzene	-	9.50%
2/3/2025	CM10	Toluene	-	33.80%
2/3/2025	CM10	Ethylbenzene	-	24.80%
2/3/2025	CM10	Xylenes	-	17.90%
2/10/2025	CM10	H2S	0.90%	3.20%
2/10/2025	CM10	NO	1.50%	13.80%
2/10/2025	CM10	NO2	6.00%	1.30%
2/10/2025	CM10	SO2	4.30%	4.70%
2/10/2025	CM10	Benzene	-	11.30%
2/10/2025	CM10	Toluene	-	4.50%
2/10/2025	CM10	Ethylbenzene	-	18.30%
2/10/2025	CM10	Xylenes	-	7.80%
2/17/2025	CM10	H2S	1.10%	3.80%
2/17/2025	CM10	NO	19.30%	11.30%
2/17/2025	CM10	NO2	0.40%	18.70%
2/17/2025	CM10	SO2	5.90%	3.10%
2/17/2025	CM10	Benzene	-	13.00%
2/17/2025	CM10	Toluene	-	8.80%
2/17/2025	CM10	Ethylbenzene	-	5.50%
2/17/2025	CM10	Xylenes	-	6.40%
2/24/2025	CM10	H2S	0.10%	4.10%
2/24/2025	CM10	NO	3.10%	4.60%
2/24/2025	CM10	NO2	17.50%	3.90%
2/24/2025	CM10	SO2	6.00%	5.10%
2/24/2025	CM10	Benzene	-	19.00%
2/24/2025	CM10	Toluene	-	3.50%
2/24/2025	CM10	Ethylbenzene	-	18.30%
2/24/2025	CM10	Xylenes	-	7.70%
3/3/2025	CM10	H2S	3.90%	5.10%
3/3/2025	CM10	NO	-	2.30%
3/3/2025	CM10	NO2	-	5.70%
3/3/2025	CM10	SO2	4.30%	6.10%
3/3/2025	CM10	Benzene	-	24.80%
3/3/2025	CM10	Toluene	-	5.70%
3/3/2025	CM10	Ethylbenzene	-	22.00%
3/3/2025	CM10	Xylenes	-	13.10%
3/10/2025	CM10	H2S	1.10%	1.00%
3/10/2025	CM10	NO	6.00%	7.90%
3/10/2025	CM10	NO2	4.10%	9.50%
3/10/2025	CM10	SO2	5.30%	6.00%
3/10/2025	CM10	Benzene	-	25.50%
3/10/2025	CM10	Toluene	-	6.30%
3/10/2025	CM10	Ethylbenzene	-	23.00%
3/10/2025	CM10	Xylenes	-	14.50%
3/17/2025	CM10	H2S	0.50%	2.90%
3/17/2025	CM10	NO	0.40%	22.10%
3/17/2025	CM10	NO2	7.50%	7.10%

3/17/2025	CM10	SO2	4.80%	5.80%
3/17/2025	CM10	Benzene	-	30.50%
3/17/2025	CM10	Toluene	-	11.50%
3/17/2025	CM10	Ethylbenzene	-	24.80%
3/17/2025	CM10	Xylenes	-	15.90%
3/24/2025	CM10	H2S	1.50%	3.50%
3/24/2025	CM10	NO	19.70%	6.30%
3/24/2025	CM10	NO2	14.40%	1.60%
3/24/2025	CM10	SO2	3.30%	4.40%
3/24/2025	CM10	Benzene	-	4.50%
3/24/2025	CM10	Toluene	-	16.80%
3/24/2025	CM10	Ethylbenzene	-	30.80%
3/24/2025	CM10	Xylenes	-	23.40%
3/31/2025	CM10	H2S	0.50%	5.20%
3/31/2025	CM10	NO	26.00%	30.10%
3/31/2025	CM10	NO2	8.00%	8.20%
3/31/2025	CM10	SO2	4.30%	3.10%
3/31/2025	CM10	Benzene	-	15.80%
3/31/2025	CM10	Toluene	-	27.30%
3/31/2025	CM10	Ethylbenzene	-	3.00%
3/31/2025	CM10	Xylenes	-	34.10%

APPENDIX B FIELD DATA SHEETS

AQM Serial Number	829	830	831
Community Monitor Location	2	7	6
Date	12/12/2024	12/12/2024	12/12/2024
Operator	AT	AT	AT
Monthly Checks			
SO2 bottle (psi)	✓	✓	✓
H2S bottle (psi)	✓	✓	✓
Gas Validation Checks (weekly, reviewed Monthly)	✓	✓	✓
Quarterly Checks			
Gas Inlet			
Flow Rate	✓	✓	✓
Filter Change	✓	✓	✓
Field Calibration (CO, TVOC)	✓	✓	✓
Particulate Monitor			
Flow Rate	✓	✓	✓
Filter Change	✓	✓	✓
Check for Leaks	✓	✓	✓
Check Zero (+/- 3.0 ug/m^-3)	✓	✓	✓
Check laser and detector (17.6 mA)	✓	✓	✓
Clean Cyclone	✓	✓	✓

APPENDIX C CALIBRATION GAS CERTIFICATION SHEETS

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
525 North Industrial Loop Road
Tooele, UT 84074
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E03NI99E33A00K9	Reference Number:	153-403128093-1
Cylinder Number:	FF41970	Cylinder Volume:	31.6 CF
Laboratory:	124 - Tooele (SAP) - UT	Cylinder Pressure:	2217 PSIG
PGVP Number:	B72024	Valve Outlet:	660
Gas Code:	NO,NOX,SO2,BALN	Certification Date:	Sep 03, 2024

Expiration Date: Sep 03, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	40.00 PPM	39.62 PPM	G1	+/- 1.1% NIST Traceable	08/26/2024, 09/03/2024
SULFUR DIOXIDE	40.00 PPM	39.60 PPM	G1	+/- 0.8% NIST Traceable	08/26/2024, 09/03/2024
NITRIC OXIDE	40.00 PPM	39.58 PPM	G1	+/- 1.2% NIST Traceable	08/26/2024, 09/03/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	DCK01201202249	CC750448	49.13 PPM NITRIC OXIDE/NITROGEN	0.5%	May 03, 2026
PRM	12404	APEX1324257	50.04 PPM NITRIC OXIDE/NITROGEN	0.4%	Dec 22, 2023
GMIS	1531022022103	CC517868	4.914 PPM NITROGEN DIOXIDE/NITROGEN	1.6%	Feb 17, 2026
PRM	12409	D913660	15.01 PPM NITROGEN DIOXIDE/AIR	1.5%	Feb 17, 2023
GMIS	072120222A114	EB0141223	49.87 PPM SULFUR DIOXIDE/NITROGEN	0.7%	Dec 21, 2026
SRM	12431	FF25467	50.33 PPM SULFUR DIOXIDE/NITROGEN	0.6%	Jun 27, 2023

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet iS50 AUP2010228 NO LNO	FTIR	Aug 28, 2024
Nicolet iS50 AUP2010228 NO2 impurity	FTIR NO2 impurity	Aug 28, 2024
Nicolet iS50 AUP2010228 SO2 LSO2	FTIR	Aug 22, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33W0030	Reference Number:	54-403219688-1
Cylinder Number:	D526138	Cylinder Volume:	32.0 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2215 PSIG
PGVP Number:	B12025	Valve Outlet:	660
Gas Code:	NO2,BALN	Certification Date:	Jan 06, 2025

Expiration Date: Jan 06, 2028

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NITROGEN DIOXIDE	40.00 PPM	41.24 PPM	G1	+/- 2.1% NIST Traceable	12/27/2024, 01/06/2025
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	1534002024501	CC500127	59.33 PPM NITROGEN DIOXIDE/AIR	+/- 1.8%	Apr 04, 2027
PRM	12438	D153564	59.5 PPM NITROGEN DIOXIDE/AIR	+/- 1.7%	Nov 21, 2024

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
MKS FTIR NO2 017707558	FTIR	Jan 03, 2025

Triad Data Available Upon Request

PERMANENT NOTES:OXYGEN ADDED TO MAINTAIN STABILITY.

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
616 Miller Cut Off Road
La Porte, TX 77571
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Customer: MONTROSE AIR QUALITY SERVICES LLC - HENDERSON , CO
Part Number: X07NI99C33A0033
Cylinder Number: FF37325
Laboratory: 124 - La Porte Mix - TX
Analysis Date: Oct 09, 2024
Lot Number: 126-403147050-1

Reference Number: 126-403147050-1
Cylinder Volume: 308.0 CF
Cylinder Pressure: 2216 PSIG
Valve Outlet: 350

Expiration Date: Oct 09, 2027

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
BENZENE	20.00 PPM	19.00 PPM	+/-5%
ETHYL BENZENE	20.00 PPM	19.69 PPM	+/-5%
TOLUENE	20.00 PPM	19.50 PPM	+/-5%
M XYLENE	20.00 PPM	19.89 PPM	+/-5%
O XYLENE	20.00 PPM	19.86 PPM	+/-5%
P XYLENE	20.00 PPM	19.89 PPM	+/-5%
NITROGEN	Balance		

Notes:MONTROSE AIR QUALITY SERVICES LLC
PO#: 62293

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33A00Q0	Reference Number:	160-403128091-1
Cylinder Number:	FF44588	Cylinder Volume:	31.6 CF
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	2217 PSIG
PGVP Number:	A12024	Valve Outlet:	330
Gas Code:	H2S,BALN	Certification Date:	Sep 04, 2024

Expiration Date: Sep 04, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
HYDROGEN SULFIDE	40.00 PPM	40.48 PPM	G1	+/- 2.0% NIST Traceable	08/27/2024, 09/04/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	122401193440108	CC440120	49.49 PPM HYDROGEN SULFIDE/NITROGEN	+/-1.6%	Sep 28, 2026
PRM	2023050013-1	D133048	50 PPM HYDROGEN SULFIDE/NITROGEN	+/-0.80%	Jul 17, 2028

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
AAI-OMA406-AA210275	NDUV	Aug 15, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33W0030	Reference Number:	54-403219688-1
Cylinder Number:	D049939	Cylinder Volume:	32.0 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2215 PSIG
PGVP Number:	B12025	Valve Outlet:	660
Gas Code:	NO2,BALN	Certification Date:	Jan 06, 2025

Expiration Date: Jan 06, 2028

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results re'ate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NITROGEN DIOXIDE	40.00 PPM	41.43 PPM	G1	+/- 2.1% NIST Traceable	12/27/2024, 01/06/2025
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	1534002024501	CC500127	59.33 PPM NITROGEN DIOXIDE/AIR	+/- 1.8%	Apr 04, 2027
PRM	12438	D153564	59.5 PPM NITROGEN DIOXIDE/AIR	+/- 1.7%	Nov 21, 2024

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
MKS FTIR NO2 017707558	FTIR	Jan 03, 2025

Triad Data Available Upon Request

PERMANENT NOTES:OXYGEN ADDED TO MAINTAIN STABILITY.

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
616 Miller Cut Off Road
La Porte, TX 77571
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Customer: MONTROSE AIR QUALITY SERVICES LLC - C264
HENDERSON, CO
Part Number: X07NI99C33A0037
Cylinder Number: EX0015548
Laboratory: 124 - La Porte Mix - TX
Analysis Date: Jun 12, 2025
Lot Number: 126-403339419-1

Reference Number: 126-403339419-1
Cylinder Volume: 31.6 CF
Cylinder Pressure: 2217 PSIG
Valve Outlet: 350SS

Expiration Date: Jun 12, 2028

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
BENZENE	2.000 PPM	2.005 PPM	± 5%
ETHYL BENZENE	2.000 PPM	1.956 PPM	± 5%
M XYLENE	2.000 PPM	1.910 PPM	± 5%
O XYLENE	2.000 PPM	1.915 PPM	± 5%
P XYLENE	2.000 PPM	1.952 PPM	± 5%
TOLUENE	2.000 PPM	1.968 PPM	± 5%
NITROGEN	Balance		

Notes:.
PO NUMBER: 078165

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
525 North Industrial Loop Road
Tooele, UT 84074
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E03NI99E33A00K9	Reference Number:	153-403128093-1
Cylinder Number:	FF49738	Cylinder Volume:	31.6 CF
Laboratory:	124 - Tooele (SAP) - UT	Cylinder Pressure:	2217 PSIG
PGVP Number:	B72024	Valve Outlet:	660
Gas Code:	NO,NOX,SO2,BALN	Certification Date:	Sep 03, 2024

Expiration Date: Sep 03, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	40.00 PPM	39.59 PPM	G1	+/- 1.1% NIST Traceable	08/26/2024, 09/03/2024
SULFUR DIOXIDE	40.00 PPM	39.62 PPM	G1	+/- 0.8% NIST Traceable	08/26/2024, 09/03/2024
NITRIC OXIDE	40.00 PPM	39.59 PPM	G1	+/- 1.1% NIST Traceable	08/26/2024, 09/03/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	DCK01201202249	CC750448	49.13 PPM NITRIC OXIDE/NITROGEN	0.5%	May 03, 2026
PRM	12404	APEX1324257	50.04 PPM NITRIC OXIDE/NITROGEN	0.4%	Dec 22, 2023
GMIS	1531022022103	CC517868	4.914 PPM NITROGEN DIOXIDE/NITROGEN	1.6%	Feb 17, 2026
PRM	12409	D913660	15.01 PPM NITROGEN DIOXIDE/AIR	1.5%	Feb 17, 2023
GMIS	072120222A114	EB0141223	49.87 PPM SULFUR DIOXIDE/NITROGEN	0.7%	Dec 21, 2026
SRM	12431	FF25467	50.33 PPM SULFUR DIOXIDE/NITROGEN	0.6%	Jun 27, 2023

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet iS50 AUP2010228 NO LNO	FTIR	Aug 28, 2024
Nicolet iS50 AUP2010228 NO2 impurity	FTIR NO2 impurity	Aug 28, 2024
Nicolet iS50 AUP2010228 SO2 LSO2	FTIR	Aug 22, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33A00Q0	Reference Number:	160-403128091-1
Cylinder Number:	FF56086	Cylinder Volume:	31.6 CF
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	2217 PSIG
PGVP Number:	A12024	Valve Outlet:	330
Gas Code:	H2S,BALN	Certification Date:	Sep 04, 2024

Expiration Date: Sep 04, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
HYDROGEN SULFIDE	40.00 PPM	41.00 PPM	G1	+/- 1.7% NIST Traceable	08/27/2024, 09/04/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	122401193440108	CC440120	49.49 PPM HYDROGEN SULFIDE/NITROGEN	+/-1.6%	Sep 28, 2026
PRM	2023050013-1	D133048	50 PPM HYDROGEN SULFIDE/NITROGEN	+/-0.80%	Jul 17, 2028

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
AAI-OMA406-AA210275	NDUV	Aug 15, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
616 Miller Cut Off Road
La Porte, TX 77571
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Customer: MONTROSE AIR QUALITY SERVICES LLC - HENDERSON , CO
Part Number: X07NI99C33A0033
Cylinder Number: FF39589
Laboratory: 124 - La Porte Mix - TX
Analysis Date: Oct 09, 2024
Lot Number: 126-403147050-1

Reference Number: 126-403147050-1
Cylinder Volume: 308.0 CF
Cylinder Pressure: 2216 PSIG
Valve Outlet: 350

Expiration Date: Oct 09, 2027

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
BENZENE	20.00 PPM	18.54 PPM	+/-5%
ETHYL BENZENE	20.00 PPM	19.25 PPM	+/-5%
TOLUENE	20.00 PPM	19.40 PPM	+/-5%
M XYLENE	20.00 PPM	19.25 PPM	+/-5%
O XYLENE	20.00 PPM	18.90 PPM	+/-5%
P XYLENE	20.00 PPM	19.17 PPM	+/-5%
NITROGEN	Balance		

Notes:MONTROSE AIR QUALITY SERVICES LLC
PO#: 62293

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
525 North Industrial Loop Road
Tooele, UT 84074
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E03NI99E33A00K9	Reference Number:	153-403128093-1
Cylinder Number:	EA0037467	Cylinder Volume:	31.6 CF
Laboratory:	124 - Tooele (SAP) - UT	Cylinder Pressure:	2217 PSIG
PGVP Number:	B72024	Valve Outlet:	660
Gas Code:	NO,NOX,SO2,BALN	Certification Date:	Sep 03, 2024

Expiration Date: Sep 03, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	40.00 PPM	39.48 PPM	G1	+/- 0.6% NIST Traceable	08/26/2024, 09/03/2024
SULFUR DIOXIDE	40.00 PPM	39.56 PPM	G1	+/- 0.8% NIST Traceable	08/26/2024, 09/03/2024
NITRIC OXIDE	40.00 PPM	39.38 PPM	G1	+/- 0.7% NIST Traceable	08/26/2024, 09/03/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	DCK01201202249	CC750448	49.13 PPM NITRIC OXIDE/NITROGEN	0.5%	May 03, 2026
PRM	12404	APEX1324257	50.04 PPM NITRIC OXIDE/NITROGEN	0.4%	Dec 22, 2023
GMIS	1531022022103	CC517868	4.914 PPM NITROGEN DIOXIDE/NITROGEN	1.6%	Feb 17, 2026
PRM	12409	D913660	15.01 PPM NITROGEN DIOXIDE/AIR	1.5%	Feb 17, 2023
GMIS	072120222A114	EB0141223	49.87 PPM SULFUR DIOXIDE/NITROGEN	0.7%	Dec 21, 2026
SRM	12431	FF25467	50.33 PPM SULFUR DIOXIDE/NITROGEN	0.6%	Jun 27, 2023

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet iS50 AUP2010228 NO LNO	FTIR	Aug 28, 2024
Nicolet iS50 AUP2010228 NO2 impurity	FTIR NO2 impurity	Aug 28, 2024
Nicolet iS50 AUP2010228 SO2 LSO2	FTIR	Aug 22, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33A00Q0	Reference Number:	160-403128091-1
Cylinder Number:	FF43945	Cylinder Volume:	31.6 CF
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	2217 PSIG
PGVP Number:	A12024	Valve Outlet:	330
Gas Code:	H2S,BALN	Certification Date:	Sep 04, 2024

Expiration Date: Sep 04, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
HYDROGEN SULFIDE	40.00 PPM	40.67 PPM	G1	+/- 2.0% NIST Traceable	08/27/2024, 09/04/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	122401193440108	CC440120	49.49 PPM HYDROGEN SULFIDE/NITROGEN	+/-1.6%	Sep 28, 2026
PRM	2023050013-1	D133048	50 PPM HYDROGEN SULFIDE/NITROGEN	+/-0.80%	Jul 17, 2028

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
AAI-OMA406-AA210275	NDUV	Aug 15, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33W0030	Reference Number:	54-403219688-1
Cylinder Number:	D049920	Cylinder Volume:	32.0 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2215 PSIG
PGVP Number:	B12025	Valve Outlet:	660
Gas Code:	NO2,BALN	Certification Date:	Jan 06, 2025

Expiration Date: Jan 06, 2028

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NITROGEN DIOXIDE	40.00 PPM	41.68 PPM	G1	+/- 2.1% NIST Traceable	12/27/2024, 01/06/2025
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	1534002024501	CC500127	59.33 PPM NITROGEN DIOXIDE/AIR	+/- 1.8%	Apr 04, 2027
PRM	12438	D153564	59.5 PPM NITROGEN DIOXIDE/AIR	+/- 1.7%	Nov 21, 2024

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
MKS FTIR NO2 017707558	FTIR	Jan 03, 2025

Triad Data Available Upon Request

PERMANENT NOTES:OXYGEN ADDED TO MAINTAIN STABILITY.

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
525 North Industrial Loop Road
Tooele, UT 84074
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E03NI99E33A00K9	Reference Number:	153-403128093-1
Cylinder Number:	EA0037347	Cylinder Volume:	31.6 CF
Laboratory:	124 - Tooele (SAP) - UT	Cylinder Pressure:	2217 PSIG
PGVP Number:	B72024	Valve Outlet:	660
Gas Code:	NO,NOX,SO2,BALN	Certification Date:	Sep 03, 2024

Expiration Date: Sep 03, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	40.00 PPM	39.50 PPM	G1	+/- 1.3% NIST Traceable	08/26/2024, 09/03/2024
SULFUR DIOXIDE	40.00 PPM	39.51 PPM	G1	+/- 0.8% NIST Traceable	08/26/2024, 09/03/2024
NITRIC OXIDE	40.00 PPM	39.48 PPM	G1	+/- 1.3% NIST Traceable	08/26/2024, 09/03/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	DCK01201202249	CC750448	49.13 PPM NITRIC OXIDE/NITROGEN	0.5%	May 03, 2026
PRM	12404	APEX1324257	50.04 PPM NITRIC OXIDE/NITROGEN	0.4%	Dec 22, 2023
GMIS	1531022022103	CC517868	4.914 PPM NITROGEN DIOXIDE/NITROGEN	1.6%	Feb 17, 2026
PRM	12409	D913660	15.01 PPM NITROGEN DIOXIDE/AIR	1.5%	Feb 17, 2023
GMIS	072120222A114	EB0141223	49.87 PPM SULFUR DIOXIDE/NITROGEN	0.7%	Dec 21, 2026
SRM	12431	FF25467	50.33 PPM SULFUR DIOXIDE/NITROGEN	0.6%	Jun 27, 2023

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet iS50 AUP2010228 NO LNO	FTIR	Aug 28, 2024
Nicolet iS50 AUP2010228 NO2 impurity	FTIR NO2 impurity	Aug 28, 2024
Nicolet iS50 AUP2010228 SO2 LSO2	FTIR	Aug 22, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33W0030	Reference Number:	54-403219688-1
Cylinder Number:	D233089	Cylinder Volume:	32.0 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2215 PSIG
PGVP Number:	B12025	Valve Outlet:	660
Gas Code:	NO2,BALN	Certification Date:	Jan 06, 2025

Expiration Date: Jan 06, 2028

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NITROGEN DIOXIDE	40.00 PPM	41.78 PPM	G1	+/- 2.1% NIST Traceable	12/27/2024, 01/06/2025
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	1534002024501	CC500127	59.33 PPM NITROGEN DIOXIDE/AIR	+/- 1.8%	Apr 04, 2027
PRM	12438	D153564	59.5 PPM NITROGEN DIOXIDE/AIR	+/- 1.7%	Nov 21, 2024

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
MKS FTIR NO2 017707558	FTIR	Jan 03, 2025

Triad Data Available Upon Request

PERMANENT NOTES:OXYGEN ADDED TO MAINTAIN STABILITY.

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33A00Q0	Reference Number:	160-403128091-1
Cylinder Number:	FF37758	Cylinder Volume:	31.6 CF
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	2217 PSIG
PGVP Number:	A12024	Valve Outlet:	330
Gas Code:	H2S,BALN	Certification Date:	Sep 04, 2024

Expiration Date: Sep 04, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
HYDROGEN SULFIDE	40.00 PPM	40.52 PPM	G1	+/- 1.6% NIST Traceable	08/27/2024, 09/04/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	122401193440108	CC440120	49.49 PPM HYDROGEN SULFIDE/NITROGEN	+/-1.6%	Sep 28, 2026
PRM	2023050013-1	D133048	50 PPM HYDROGEN SULFIDE/NITROGEN	+/-0.80%	Jul 17, 2028

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
AAI-OMA406-AA210275	NDUV	Aug 15, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
616 Miller Cut Off Road
La Porte, TX 77571
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Customer: MONTROSE AIR QUALITY SERVICES LLC - HENDERSON , CO
Part Number: X07NI99C33A0037
Cylinder Number: FF660201
Laboratory: 124 - La Porte Mix - TX
Analysis Date: Nov 18, 2024
Lot Number: 126-403172475-1

Reference Number: 126-403172475-1
Cylinder Volume: 31.6 CF
Cylinder Pressure: 2217 PSIG
Valve Outlet: 350SS

Expiration Date: Nov 18, 2027

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
BENZENE	2.000 PPM	1.986 PPM	+/- 5%
ETHYL BENZENE	2.000 PPM	1.997 PPM	+/- 5%
M XYLENE	2.000 PPM	1.996 PPM	+/- 5%
O XYLENE	2.000 PPM	1.995 PPM	+/- 5%
P XYLENE	2.000 PPM	2.004 PPM	+/- 5%
TOLUENE	2.000 PPM	1.998 PPM	+/- 5%
NITROGEN	Balance		

Notes:MONTROSE AIR QUALITY SERVICES LLC
PO#: 62293

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
616 Miller Cut Off Road
La Porte, TX 77571
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Customer: MONTROSE AIR QUALITY SERVICES LLC - C264
HENDERSON, CO

Part Number: X07NI99C33A0033

Reference Number: 126-403178702-1

Cylinder Number: EX0015934

Cylinder Volume: 30.8 CF

Laboratory: 124 - La Porte Mix - TX

Cylinder Pressure: 2216 PSIG

Analysis Date: Nov 13, 2024

Valve Outlet: 350

Lot Number: 126-403178702-1

Expiration Date: Nov 13, 2027

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
BENZENE	20.00 PPM	20.14 PPM	± 5%
ETHYL BENZENE	20.00 PPM	20.16 PPM	± 5%
TOLUENE	20.00 PPM	20.14 PPM	± 5%
M XYLENE	20.00 PPM	20.13 PPM	± 5%
O XYLENE	20.00 PPM	20.13 PPM	± 5%
P XYLENE	20.00 PPM	20.13 PPM	± 5%
NITROGEN	Balance		

Notes:.
PO NUMBER: 62293

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33A00Q0	Reference Number:	160-403128091-1
Cylinder Number:	FF56060	Cylinder Volume:	31.6 CF
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	2217 PSIG
PGVP Number:	A12024	Valve Outlet:	330
Gas Code:	H2S,BALN	Certification Date:	Sep 04, 2024

Expiration Date: Sep 04, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
HYDROGEN SULFIDE	40.00 PPM	39.75 PPM	G1	+/- 2.0% NIST Traceable	08/27/2024, 09/04/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	122401193440108	CC440120	49.49 PPM HYDROGEN SULFIDE/NITROGEN	+/-1.6%	Sep 28, 2026
PRM	2023050013-1	D133048	50 PPM HYDROGEN SULFIDE/NITROGEN	+/-0.80%	Jul 17, 2028

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
AAI-OMA406-AA210275	NDUV	Aug 15, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
525 North Industrial Loop Road
Tooele, UT 84074
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E03NI99E33A00K9	Reference Number:	153-403128093-1
Cylinder Number:	EA0026117	Cylinder Volume:	31.6 CF
Laboratory:	124 - Tooele (SAP) - UT	Cylinder Pressure:	2217 PSIG
PGVP Number:	B72024	Valve Outlet:	660
Gas Code:	NO,NOX,SO2,BALN	Certification Date:	Sep 03, 2024

Expiration Date: Sep 03, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	40.00 PPM	39.39 PPM	G1	+/- 0.8% NIST Traceable	08/26/2024, 09/03/2024
SULFUR DIOXIDE	40.00 PPM	39.05 PPM	G1	+/- 1.4% NIST Traceable	08/26/2024, 09/03/2024
NITRIC OXIDE	40.00 PPM	39.26 PPM	G1	+/- 0.9% NIST Traceable	08/26/2024, 09/03/2024
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	DCK01201202249	CC750448	49.13 PPM NITRIC OXIDE/NITROGEN	0.5%	May 03, 2026
PRM	12404	APEX1324257	50.04 PPM NITRIC OXIDE/NITROGEN	0.4%	Dec 22, 2023
GMIS	1531022022103	CC517868	4.914 PPM NITROGEN DIOXIDE/NITROGEN	1.6%	Feb 17, 2026
PRM	12409	D913660	15.01 PPM NITROGEN DIOXIDE/AIR	1.5%	Feb 17, 2023
GMIS	072120222A114	EB0141223	49.87 PPM SULFUR DIOXIDE/NITROGEN	0.7%	Dec 21, 2026
SRM	12431	FF25467	50.33 PPM SULFUR DIOXIDE/NITROGEN	0.6%	Jun 27, 2023

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet iS50 AUP2010228 NO LNO	FTIR	Aug 28, 2024
Nicolet iS50 AUP2010228 NO2 impurity	FTIR NO2 impurity	Aug 28, 2024
Nicolet iS50 AUP2010228 SO2 LSO2	FTIR	Aug 22, 2024

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E33W0030	Reference Number:	54-403219688-1
Cylinder Number:	D202977	Cylinder Volume:	32.0 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2215 PSIG
PGVP Number:	B12025	Valve Outlet:	660
Gas Code:	NO2,BALN	Certification Date:	Jan 06, 2025

Expiration Date: Jan 06, 2028

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NITROGEN DIOXIDE	40.00 PPM	41.86 PPM	G1	+/- 2.1% NIST Traceable	12/27/2024, 01/06/2025
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	1534002024501	CC500127	59.33 PPM NITROGEN DIOXIDE/AIR	+/- 1.8%	Apr 04, 2027
PRM	12438	D153564	59.5 PPM NITROGEN DIOXIDE/AIR	+/- 1.7%	Nov 21, 2024

The SRM, NTRM, PRM, or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
MKS FTIR NO2 017707558	FTIR	Jan 03, 2025

Triad Data Available Upon Request

PERMANENT NOTES:OXYGEN ADDED TO MAINTAIN STABILITY.

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
525 North Industrial Loop Road
Tooele, UT 84074
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E02NI99E15A3168	Reference Number:	153-402623607-1
Cylinder Number:	CC69278	Cylinder Volume:	144.0 CF
Laboratory:	124 - Tooele (SAP) - UT	Cylinder Pressure:	2015 PSIG
PGVP Number:	B72023	Valve Outlet:	350
Gas Code:	CO,BALN	Certification Date:	Jan 04, 2023

Expiration Date: Jan 04, 2031

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
CARBON MONOXIDE	500.0 PPM	502.7 PPM	G1	+/- 0.8% NIST Traceable	01/04/2023
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	15060543	CC453965	491.9 PPM CARBON MONOXIDE/NITROGEN	0.6	Mar 05, 2027

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet iS50 AUP2110269 CO MCO	FTIR	Dec 22, 2022

Triad Data Available Upon Request

Signature on file
Approved for Release

GASCO AFFILIATES, LLC.
320 Scarlet Blvd.
Oldsmar, FL 34677
(800) 910-0051
www.gasco-gas.com

CERTIFICATE OF ANALYSIS

Date: 05/15/2025
Order Number: 24113589
Lot Number: 304-403347151-1

Customer: CAL GAS DIRECT INC
Part Number: X02NI99CP585871
Use Before: 05/15/2029

Components	Concentration (mole %)	Relative Tolerance
CARBON MONOXIDE (CO)	500 PPM	±2%
NITROGEN (N2)	BALANCE	

Pressure: 500 PSIG @ 70° F

Valve: 5/8"-18UNF (C10)

Cylinder Contents, Cylinder Size: 2.05 Cu. Ft., 58L

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst: Omar Reyes

GASCO AFFILIATES, LLC.
320 Scarlet Blvd.
Oldsmar, FL 34677
(800) 910-0051
www.gasco-gas.com

CERTIFICATE OF ANALYSIS

Date: 05/15/2025
Order Number: 24113589
Lot Number: 304-403347152-1

Customer: CAL GAS DIRECT INC
Part Number: X02AI99CP584438
Use Before: 05/15/2027

Components	Concentration (mole %)	Relative Tolerance
HYDROGEN SULFIDE (H2S)	20 PPM	±10%
AIR (20.9% Oxygen in Nitrogen)	BALANCE	

Pressure: 500 PSIG @ 70° F

Valve: 5/8"-18UNF (C10)

Cylinder Contents, Cylinder Size: 2.05 Cu. Ft., 58L

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst: Omar Reyes

Omar Reyes

GASCO AFFILIATES, LLC.
320 Scarlet Blvd.
Oldsmar, FL 34677
(800) 910-0051
www.gasco-gas.com

CERTIFICATE OF ANALYSIS

Date: 05/15/2025
Order Number: 24113589
Lot Number: 304-403347153-1

Customer: CAL GAS DIRECT INC
Part Number: X02AI99CP5851A5
Use Before: 05/15/2027

Components	Concentration (mole %)	Relative Tolerance
SULFUR DIOXIDE (SO2)	20 PPM	±10%
AIR (20.9% Oxygen in Nitrogen)	BALANCE	

Pressure: 500 PSIG @ 70° F

Valve: 5/8"-18UNF (C10)

Cylinder Contents, Cylinder Size: 2.05 Cu. Ft., 58L

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst: Omar Reyes

Omar Reyes

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CERTIFICATE OF ANALYSIS

Date: April 23, 2026
Order Number: 22065913
Lot Number: 304-402577436-1

Customer: Cal Gas Direct Inc.

Use Before: 10/28/2026

Component	Requested Concentration	Analytical Result (+/- 2%)
Isobutylene	200 PPM	206.1 PPM
Nitrogen	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

Glenn Velez

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CERTIFICATE OF ANALYSIS

Date: April 23, 2026
Order Number: 22070686
Lot Number: 304-402651362-1

Customer: Cal Gas Direct Inc.

Use Before: 02/01/2025

Component	Requested Concentration	Analytical Result (+/- 2%)
Hydrogen Sulfide	20 PPM	20 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

Glenn Velez

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CERTIFICATE OF ANALYSIS

Date: February 6, 2024
Order Number: 24090699
Lot Number: 304-402960511-1

Customer: Cal Gas Direct Inc.

Use Before: 02/06/2026

Component	Requested Concentration	Analytical Result (+/- 2%)
Sulfur Dioxide	20 PPM	21.6 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

Kendall Gaspard

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CERTIFICATE OF ANALYSIS

Date: February 6, 2024
Order Number: 24090699
Lot Number: 304-402960512-1

Customer: Cal Gas Direct Inc.

Use Before: 02/06/2028

Component	Requested Concentration	Analytical Result (+/- 2%)
Carbon Monoxide	500 PPM	492 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

Kendall Gaspard

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CERTIFICATE OF ANALYSIS

Date: April 23, 2026
Order Number: 24093799
Lot Number: 304-403009405-1

Customer: Cal Gas Direct Inc.

Use Before: 04/02/2028

Component	Requested Concentration	Analytical Result (+/- 2%)
Isobutylene	200 PPM	207.4 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

Matthew Creighton
MATTHEW CREIGHTON

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CERTIFICATE OF ANALYSIS

Date: April 23, 2026 **Customer:** Cal Gas Direct Inc.
Order Number: 24102390
Lot Number: 304-403151303-1 **Use Before:** 09/20/2026

Component	Requested Concentration	Analytical Result (+/- 5%)
Sulfur Dioxide	20 PPM	18.5 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8” -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

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CERTIFICATE OF ANALYSIS

Date: April 23, 2026 **Customer:** Cal Gas Direct Inc.
Order Number: 24102390
Lot Number: 304-403151305-1 **Use Before:** 09/20/2026

Component	Requested Concentration	Analytical Result (+/- 5%)
Hydrogen Sulfide	20 PPM	21 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

Glenn Velez

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CERTIFICATE OF ANALYSIS

Date: April 23, 2026
Order Number: 24111624
Lot Number: 304-403296511-1

Customer: Cal Gas Direct Inc.

Use Before: 03/17/2027

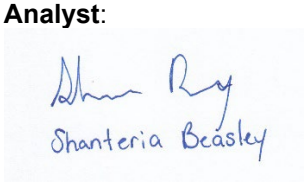
Component	Requested Concentration	Analytical Result (+/- 5%)
Sulfur Dioxide	20 PPM	19.1 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:



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CERTIFICATE OF ANALYSIS

Date: April 23, 2026
Order Number: 24111624
Lot Number: 304-403296512-1

Customer: Cal Gas Direct Inc.

Use Before: 03/17/2027

Component	Requested Concentration	Analytical Result (+/- 5%)
Hydrogen Sulfide	20 PPM	21 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8” -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

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CERTIFICATE OF ANALYSIS

Date: April 23, 2026
Order Number: 24111624
Lot Number: 304-403296513-1

Customer: Cal Gas Direct Inc.

Use Before: 03/17/2029

Component	Requested Concentration	Analytical Result (+/- 2%)
Carbon Monoxide	500 PPM	515 PPM
Nitrogen	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

Shanteria Beasley

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CERTIFICATE OF ANALYSIS

Date: April 23, 2026
Order Number: 24111632
Lot Number: 304-403297204-1

Customer: Cal Gas Direct Inc.

Use Before: 03/16/2029

Component	Requested Concentration	Analytical Result (+/- 2%)
Isobutylene	200 PPM	206 PPM
Air	Balance	Balance

Cylinder Size: 2.0 Cu. Ft.
Contents: 58 Liter

Valve: 5/8" -18UNF
Pressure: 500 psig

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/ or N.I.S.T. Gas Mixture reference materials.

Analyst:

Edzaira Colon