

NTC Regional Air Monitoring Program

POA 582-22-30598-001 | FY22/FY23-06 | Final Report

I. SUMMARY

Under the *Direct Award Grant 582-22-30144* (DAG) and its amendments, the Texas Commission on Environmental Quality (TCEQ) authorized NTC to implement a regional air monitoring program in TCEQ Regions 3 and 4, as set forth by SB 527 (82R). On September 1, 2021, NTC commenced work on *Plan of Activities 582-22-30598-001-FY22/FY23-06 for TCEQ Project Number 582-22-30598-001*, operating and reporting data from the network's 21 air quality monitoring stations. Total cost to implement the POA was \$5,473,455.06. Annually, the network measures over 4,000,000 individual VOC concentrations. No validated samples exceeded either short-term or long-term associated levels of concern. After the conclusion of POA 582-22-30598-001-FY22/FY23-06 on August 31, 2023. NTC will continue implementation of the regional air monitoring program under POA 582-22-30598-001 FY23/FY24-06A.

II. BACKGROUND

During the 82nd Session of the Texas Legislature (2011), the Legislature passed SB 527 to establish a regional air quality monitoring program in TCEQ Regions 3 and 4, a 49-county area encompassing the DFW Metroplex, Abilene, and Wichita Falls. The bill amended state law regarding the allocation Texas Emissions Reduction Plan (TERP) funds described in Sec. 386.051(b)(6) and Sec. 386.252(a)(5) of the Health and Safety Code to read as follows:

[...] (5) not more than \$7 million shall be allocated in 2012 and 2013 and not more than \$3 million shall be allocated in 2014 and in subsequent years to fund a regional air monitoring program in commission Regions 3 and 4 to be implemented under the commission's oversight, including direction regarding the type, number, location, and operation of, and data validation practices for, monitors funded by the program through a regional nonprofit entity located in North Texas having representation from counties, municipalities, higher education institutions, and private sector interests across the area [...]

Following passage of the law and investigation by the Texas Commission on Environmental Quality (TCEQ), the North Texas Commission (NTC) was selected as the only entity eligible to implement the program work according to the stipulations set forth in the law.

In 2012, NTC entered into a series of agreements with the TCEQ to fulfill the implementation of the Regional Air Monitoring Program, culminating with *Direct Award Grant 582-12-23420* (DAG). Executed on August 31, 2012, DAG (and its various amendments) authorize NTC to

implement a regional air monitoring program in TCEQ Regions 3 and 4, as set forth by SB 527. DAG authorized the NTC to conduct four types of work:

- 1) Review and evaluate current monitoring network in TCEQ Regions 3 and 4
- 2) Deploy, operate, and report data from new air monitoring sites
- 3) Data evaluation and communication
- 4) Other activities related to the Regional Air Monitoring Program

As set forth by DAG, in August 2012 NTC initiated a RFP process to select a vendor to implement the Regional Air Monitoring Program. After evaluating the three submitted proposals, on September 24, 2012 NTC's Selection Committee found URS Corp.'s proposal to be the most qualified and most cost-effective, and URS was unanimously selected to be awarded the contract.¹

As required by DAG, before conducting any work related to Regional Air Monitoring Program, NTC creates a Plan of Activities (POA) which describes all aspects of the project, including: project manager and key personnel, timeline for implementation, budget, technical approach/method, models and software to be used, grant activities, schedule of progress reports, and miscellaneous information. Upon approval by TCEQ, NTC may then commence work on activities described within the POA.

Since commencement of DAG in 2012, NTC has conducted work under six POAs:

- **POA 582-12-23420-FY13-01**
Timeframe: October 26, 2012 – January 31, 2014
Major activities: Constructed and operated 17 air monitors.
Findings: No exceedances of either short-term or long-term AMCVs.
Total cost of implementation: \$3,489,444.94
- **POA 582-12-23420-FY14-02:**
Timeframe: February 1, 2014 – August 31, 2015
Major activities: Continued operation of 17 original monitors; took over operation of 4 existing monitors, bringing total number of monitors in NTC's network to 21.
Findings: No exceedances of either short-term or long-term AMCVs.
Total cost of implementation: \$4,175,667.92
- **POA 582-16-56277-03-FY16/FY17-03:**
Timeframe: September 1, 2015 – September 30, 2017
Major activities: Continued operation of 21 air monitors.

¹ On October 20, 2014, URS Corp. merged with AECOM, and changed its official name to "AECOM." For the remainder of this document, we will refer to URS Corp. as "AECOM."

Findings: No exceedances of either short-term or long-term AMCVs.
Total cost of implementation: \$5,694,224.30

- **POA 582-18-80730-01-FY18/FY19-04:**

Timeframe: October 1, 2017 – August 31, 2019

Major activities: Continued operation of 21 air monitors.

Findings: No exceedances of either short-term or long-term AMCVs.

Total cost of implementation: \$4,853,711.99

- **POA 582-18-80730-01-FY20/FY21-05:**

Timeframe: September 1, 2019 – August 31, 2021

Major activities: Continued operation of 21 air monitors.

Findings: No exceedances of either short-term or long-term AMCVs.

Total cost of implementation: \$5,996,259.11

- **POA 582-22-30598-001-FY22/FY23-06:**

Timeframe: September 1, 2021 – August 31, 2023

Major activities: Continued operation of 21 air monitors.

Findings: No exceedances of either short-term or long-term AMCVs.

Total cost of implementation: \$5,473,455.06

For each POA, NTC has prepared a “Final Report” which summarizes all activities performed under the respective POA.

III. SUMMARY OF WORK

On August 26, 2021, TCEQ issued “Approval to Prepare Plan of Activities” (APPOA) for the Continued Implementation of SB527 Monitoring Program in FY22/FY23, with a maximum possible funding amount of \$6,000,000.00. Upon receipt of the APPOA, NTC commenced work preparing a Plan of Activities (POA) and submitted the POA for approval on August 30, 2021. TCEQ issued “Approval to Commence Grant Activities” on August 31, 2021. The initial period of authorized work under the POA was from September 1, 2021 through August 31, 2023, with a total budget of 5,870,842.88. In June 2023 a budget surplus of \$397,299.69 was deducted from the FY22/23 approved budget which brought the new total budget to \$5,473,543.19.

On September 1, 2021, NTC commenced work on *Plan of Activities 582-22-30598-001-FY22/23-06*. Under this POA, TCEQ authorized NTC to conduct four tasks:

- Task 1** Operate, report data, and maintain TCEQ approved air monitors throughout Regions 3 and 4
- Task 2** Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4
- Task 3** Respond to Monitoring Issues
- Task 4** Reporting/Availability for Questions

Monitor Locations

NTC maintained a network of 21 air monitoring stations located in TCEQ Regions 3 and 4.

Table III-1: List of Monitoring Stations

Site Name	Equipment			Date Active	Site ID	County	TCEQ Region
	AutoGC	VOC Canister	Met.				
<i>Abilene 1939 Industrial Blvd.</i>		X	X	12/18/2013	484411509	Taylor	3
<i>Arlington UT Campus</i>	X		X	9/20/2012	484391018	Tarrant	4
<i>Bowie Patterson Street</i>		X	X	10/01/2013	483371507	Montague	3
<i>Dallas Elm Fork</i>	X		X	11/18/2013	481131505	Dallas	4
<i>Decatur Thompson</i>	X		X	6/5/2013	484970088	Wise	4
<i>DISH Airfield</i>	X		X	5/8/2013	481211013	Wise	4
<i>Eagle Mountain Lake</i>	X			4/8/2013	484390075	Tarrant	4
<i>Everman Johnson Park</i>	X		X	5/8/2013	484391009	Tarrant	4
<i>Flower Mound Shiloh</i>	X		X	5/8/2013	481211007	Denton	4
<i>Ft. Worth Benbrook Lake</i>	X		X	10/1/2013	484391503	Tarrant	4
<i>Gainesville Doss St.</i>		X	X	10/1/2013	480971504	Cooke	4
<i>Godley FM 2331</i>		X	X	7/13/2013	482511501	Johnson	4
<i>Joe B Rushing Rd.</i>	X		X	4/1/2014	484391065	Tarrant	4
<i>Keller</i>		X		7/14/2013	484392003	Tarrant	4
<i>Kennedale Treepoint Dr.</i>	X		X	4/1/2014	484391062	Tarrant	4
<i>Lancaster Cedardale</i>	X		X	9/1/2013	481131500	Dallas	4
<i>Mansfield Flying L Ln.</i>	X		X	4/1/2014	482511063	Johnson	4
<i>Mineral Wells 23rd Street</i>		X	X	8/21/2013	483631502	Palo Pinto	4
<i>Rhome Seven Hills Rd.</i>	X		X	4/1/2014	484971064	Wise	4
<i>Weatherford Tin Top Road</i>		X	X	10/13/2013	483671506	Parker	4
<i>Wichita Falls MWSU</i>		X	X	12/19/2013	484851508	Wichita	3

Implementation of Work

[NOTE: Complete details of NTC's work on the POA FY22/FY23-06 is available in the Monthly Progress Reports, included in Exhibit B to this report.]

Following receipt of the Approval to Commence Grant Activities, NTC and its vendor AECOM continued work on the Regional Air Monitoring Program. Below is a summary of activities in each of the four tasks described above:

Task 1 – Operate, report data, and maintain TCEQ approved air monitors throughout Regions 3 and 4

Throughout the period of authorized work, NTC continued to successfully operate, report data, and maintain the Regional Air Monitor Program. Day-to-day activities included:

- *Monitoring equipment and procedures:* The Regional Air Monitoring Program utilizes two types of monitors; VOC canisters and automated gas chromatographs (“AutoGCs”). Canister stations measure 85 different types of VOCs and sample the air for one 24-hour period every six days. The samples are collected by a technician once every two weeks for off-site laboratory analysis. AutoGC units measure 49 different types of VOCs and take one 5-minute sample every hour, 7-days a week, 365 days a year. The samples are automatically analyzed onsite. Both types of monitors take standard meteorological measurements including wind speed, direction, and humidity, utilizing a 30-ft met tower. After analysis and verification, the data generated by the monitors is made publicly available on the TCEQ’s website. AECOM uses two primary vendors to support its monitoring activities; Orsat LLC manages all AutoGCs stations, and GD Air provides analysis for samples from canister sites.

During the period of authorized work between September 1, 2021 and August 31, 2023, TCEQ, NTC, and AECOM and subcontractors Orsat and GD Air, annually reviewed the QAPP for the program. No changes were required since Revision 5 of December 2021.

- *Oversight of contract management and execution:* As noted elsewhere in this report, NTC contracted with AECOM to undertake the operation and maintenance of the Regional Air Monitoring Program. Specific contract management and execution tasks included:

- Conference calls with AECOM and its subcontractors every two weeks, as well as direct communication with key personnel from AECOM and its subcontractors on an as-needed basis.
- Issuance of Work Orders, Notices to Proceed, and Amendments, including consideration for out-of-scope work (such as installation of new driveways), repairs to non-monitoring equipment (such as fences), and purchase of new replacement equipment (such as meteorological gear).
- Site inspections of individual monitoring stations.
- Review and approval of QAPP.
- Liaising with community stakeholders about project and its findings. Specific activities included:
 - Throughout the period of authorized work, NTC has provided information about the project and its findings with various groups to include the, NTC Finance & Audit Committee, NTC Executive Committee, NTC Board of Directors, and others.
- Managing billing, invoices, and other accounting needs. Specific activities included:
 - In December 2021 and December 2022, NTC underwent annual financial audits, conducted by Weaver . Both reports found that the NTC complied in all material aspects with the types of compliance requirements described in the Uniform Grant Management Standards issued by the Governor’s Office of Budget and Planning.
 - Updating equipment inventory logs.
- Facilitate communication between NTC, AECOM, and TCEQ. Specific activities included:
 - Every two weeks conference call with all parties to discuss program.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4

NTC decommissioned and relocated air monitors during the period of authorized work.

- Many of the initial site access agreements’ terms concluded during the POA’s period of authorized work. NTC and TCEQ renewed the following site access agreements:
 - Godley FM 2331 – Auto Renewed on May 6, 2023, authorizing access until May 6, 2028.
 - Gainesville Doss St.– Auto renewed on April 25, 2022, authorizing access until April 25, 2027.

- Lancaster Cedardale– Auto renewed on May 7, 2023, authorizing access until May 7, 2028.
- Bowie Patterson– Auto renewed on July 23, 2023, authorizing access until July 23, 2028.
- Miner Wells 23rd St.– Auto renewed on May 13, 2023, authorizing access until May 13, 2028.
- Dish Airfield– Auto renewed on August 29, 2023, authorizing access until August 29, 2028.
- Wichita Falls MWSU-Auto renewed on August 16, 2023, authorizing access until August 16, 2028
- Rhome-Auto renewed on August 27, 2022, authorizing access until August 27, 2027
- Kennedale Treepoint-Renewed on January 21, 2022, authorizing access until January 21, 2027
- Arlington UTA-Renewed on November 15, 2022, authorizing access until November 15, 2027
- Fort Worth Joe B. Rushing Rd.-Auto renewed on April 15, 2023 authorizing access until April 15, 2028
- Dallas Elm Fork.-Renewed on July 30, 2023 authorizing access until July 30, 2024

Task 3 – Respond to Monitoring Issues

On infrequent occasion, certain critical issues relating to the monitoring network arise, such as high readings, extreme weather events, or unscheduled maintenance. All AutoGC monitors within the system are equipped with an alert system that notifies operators of “trigger” readings above certain thresholds via email. Results from VOC canisters are reviewed monthly.

- All of the monitors have undergone routine and preventative maintenance.

Task 4 – Reporting/Availability for Questions

Throughout POA FY22/FY23-06, NTC has submitted monthly progress reports detailing all work conducted (available in full as “Exhibit B: Monthly Progress Reports”) and has been available for questions from TCEQ.

Table III-2: Timeline of Events for POA 582-22-30598-001-FY22/FY23-06

Date	Description
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Aug. 26, 2021	TCEQ issues <i>Approval to Prepare Plan of Activities</i> to NTC
Aug 26, 2021	NTC issues <i>Work Authorization No. 5</i> to AECOM, requesting AECOM to prepare a Work Plan
Aug 27, 2021	AECOM submits <i>Plan of Activities – Implementation of SB527 Monitoring Program</i> to NTC for approval
Aug 30, 2021	NTC submits POA FY22/FY23-06 for approval to TCEQ
August 31, 2021	TCEQ issues <i>Approval to Commence Grant Activities</i> to NTC for Project No. 582-22-30598-001 for POA FY22/FY23-06
Sept. 1, 2021	NTC issues <i>Notice to Proceed</i> to AECOM
Sept. 1, 2021	NTC commences work on POA FY22/FY23-06 for NTC on Project No. 582-22-30598-001
1/21/2022	New Lease of Kennedale Treepoint
2/18/2022	New Lease of Dallas Elm Fork
8/21/2022	NTC issues <i>Addendum Notice to Proceed</i> to AECOM (<i>Replace 1 Auto GC system, site repair and replacement parts in the NTC Network</i>)
11/15/2022	New Lease of Arlington UTA
6/12/2023	NTC issues Release of Claims for \$397,299.69 to be returned to TERP
6/27/2023	NTC submits Budget Revision Request Form
7/30/2023	New Lease of Dallas Elm Fork
9/6/2023	NTC issues Release of Claims for \$88.13 to be returned to TCEQ
10/09/2023	NTC issues Draft Final Report
12/11/2023	NTC issues Final Report

POA FY20/FY21-05 Budget Evaluation

The maximum possible amount of funds available for implementation of *POA FY22/FY23-05* was \$6,000,000.00. NTC originally budgeted \$5,870,842.88 in June 2023 a budget surplus of \$397,299.69 was deducted from the FY22/23 approved budget and returned to the TERP program which brought the new total budget to \$5,473,543.19.

IV. KEY FINDINGS

AECOM has provided a “Summary of Results” report of the NTC Regional Air Monitoring Program for September 2021 through August 2023. In general, they find the network to be high-functioning, and capable of yielding high-quality data:

Throughout the NTC network (canister and AutoGC) the two sampling methods exhibited good correlation. Furthermore, compound concentrations across the network were generally homogenous. (AECOM, pp. ES-1)

Slight seasonal trends are apparent as the winter months have relatively higher concentrations, which is likely due to the more stable atmospheric conditions during

winter months that minimize the transportation or dispersion of VOCs (AECOM, pp. ES-1).

Furthermore, they find “short-term and long-term compound concentrations across the network were well below the associated levels of concern” and conclude that “the measured concentrations are acceptable throughout the NTC network and not a threat to human health” (AECOM, pp. ES-1). Below are two summary tables of compound concentrations measured against short-term and long-term AMCVs for seven key compounds studied by the network:

Table IV-1: Summary of Compound Concentrations vs. Short-Term AMCVs

Compound	Highest AutoGC 1-hr Concentration (ppbV)	Highest Canister 24-hr Concentration (ppbV)¹	Short-term AMCV (ppbV)
<i>Ethane</i>	1661	348	--
<i>Propane</i>	1158	50.4	--
<i>Pentane</i>	50.9	4.1	68,000
<i>Benzene</i>	11.7	0.6	180
<i>Toluene</i>	47.1	3.2	4,000
<i>Ethylbenzene</i>	6.1	0.2	20,000
<i>M&p-xylene</i>	20.7	0.5	1,700

¹ Short-term data but not directly comparable to the 1-hr AMCVs

Table IV-2: Summary of Compound Concentrations vs. Long-Term AMCVs

Compound	Average Canister 24-hr Concentration (ppbV)	Long-term AMCV (ppbV)
<i>Ethane</i>	11.8	--
<i>Propane</i>	6.8	--
<i>Pentane</i>	0.9	8,100
<i>Benzene</i>	0.3	1.4
<i>Toluene</i>	0.3	1,100
<i>Ethylbenzene</i>	0.0	440

<i>M&p-xylene</i>	0.1	140
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Please see the full AECOM “Summary of Results” report for complete findings, including monthly summary reports for September 2021 through August 2023 (latest available validated data).

V. CONCLUSION

As detailed above, the North Texas Commission successfully implemented all aspects of the Regional Air Monitoring Program, as specified in POA FY22/FY23-06. We look forward to continuing implementation of the project under POA FY24/FY25-06A.

EXHIBIT A:
SUMMARY OF AIR QUALITY DATA



Final Report

North Texas Commission
Ambient Air and Meteorological Monitoring Network
Summary of Results

September 2021 – August 2023

Prepared for:

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October 2023

STATEMENT OF LIMITATIONS: This report is intended for the sole use of the North Texas Commission. The scope of services performed for this work may not be appropriate to satisfy the needs of other users, and any use or re-use of this document or of the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

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EXECUTIVE SUMMARY

The North Texas Commission (NTC) Air Monitoring Network consists of twenty-one monitoring sites: eight canister sampling sites and thirteen automated gas chromatography (AutoGC) sites. Meteorological parameters are measured at nineteen of these sites. This report follows the reports dated December 2021, December 2019, October 2017, and August 2015.

The purpose of the network is to measure concentrations of volatile organic hydrocarbon compounds (VOCs) that may negatively affect local air quality. The Texas Emissions Reduction Plan (TERP) was created in 2001 with the goal of assuring that the air in Texas is safe to breathe and meets the federal Clean Air Act's standards. The NTC network helps progress towards this goal by establishing an air monitoring network that provides data about the quality of the air in Texas Commission on Environmental Quality (TCEQ) Regions 3 and 4. Monitoring began in 2013.

Network monitoring includes both continuous monitoring using on-site instruments and periodic sample collection for analysis in an off-site analytical laboratory. The thirteen AutoGC monitors operate on a continuous 24-hour schedule to determine hourly ambient concentrations of 48 VOCs, including both aliphatic and aromatic petroleum hydrocarbons. Canister samples are collected every sixth day from midnight to midnight following the current United States Environmental Protection Agency (U.S. EPA) sampling schedule. Canister sampling provides a 24-hour averaged concentration for 84 target compounds. These target compounds include many of the same petroleum hydrocarbons as the AutoGC monitors, but additionally include various chlorinated hydrocarbons and chlorofluorocarbons. Meteorological parameters measured include wind speed, wind direction, and ambient temperature.

Throughout the NTC network (canister and AutoGC), the two sampling methods exhibit good correlation. Furthermore, compound concentrations across the network are generally homogenous. Slight seasonal trends are apparent as the winter months have relatively higher concentrations, which is likely due to the more stable atmospheric conditions during winter months that minimize the transportation or dispersion of VOCs.

The TCEQ has air monitoring comparison values (AMCVs) for a range of VOCs. AMCVs are screening levels used for evaluating measured levels of common air toxics and are chemical-specific air concentrations set to protect human health and welfare. When compared to the TCEQ AMCVs, short-term and long-term concentrations across the network are well below the

associated levels of concern. It can be concluded that the measured concentrations are acceptable throughout the NTC network and are not a threat to human health.

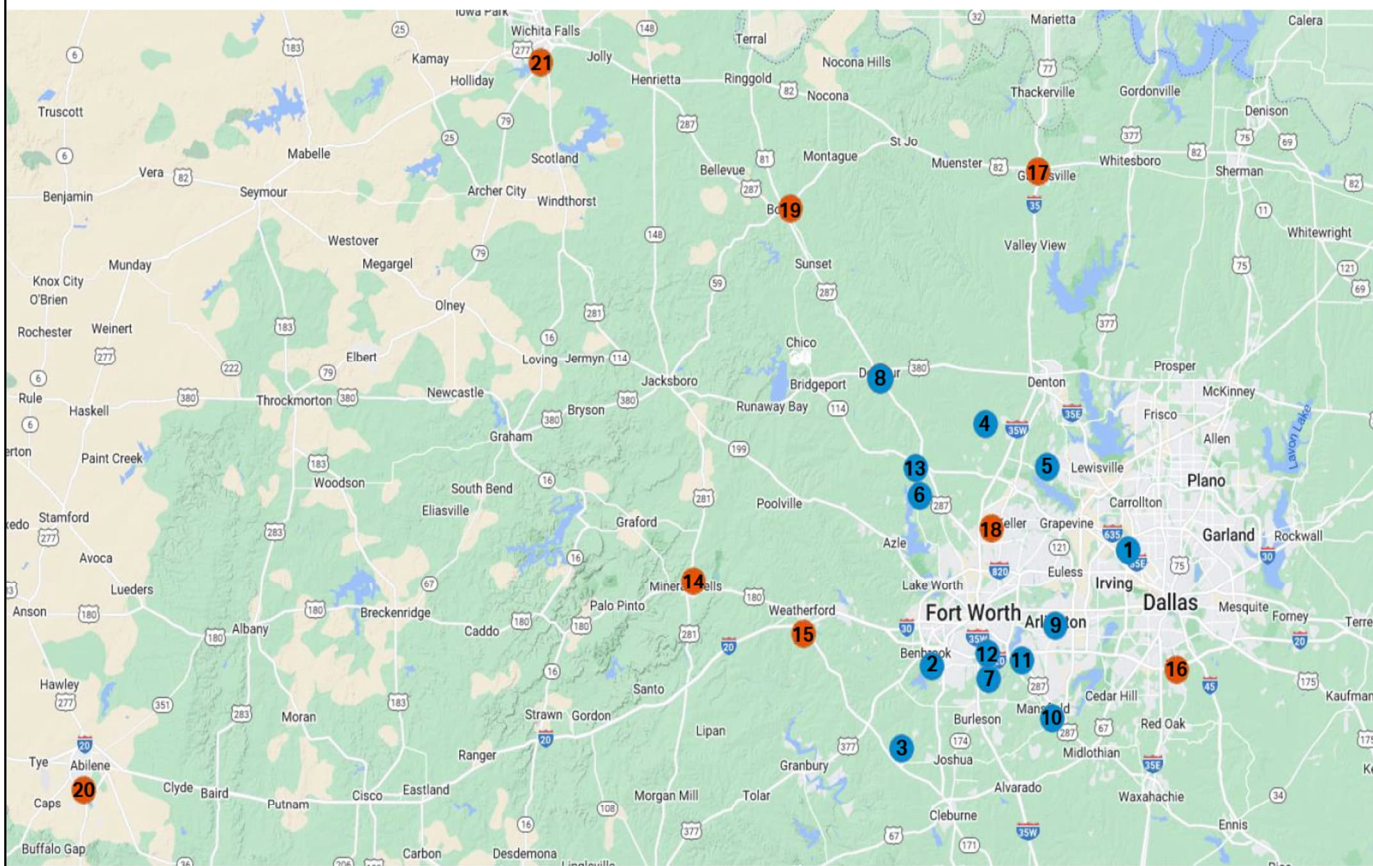
1.0 BACKGROUND

The North Texas Commission (NTC) Air Monitoring Network consists of twenty-one monitoring sites: eight canister sampling sites and thirteen automated gas chromatography (AutoGC) sites. Meteorological parameters are measured at nineteen of these sites. The monitoring locations are shown in Figure 1-1 and listed in Table 1-1. The purpose of the network is to measure concentrations of volatile organic hydrocarbon compounds (VOCs) that may negatively affect local air quality.

There has been an increase in natural gas production in the Barnett Shale region over the last decade. This activity has led to an increase in jobs, property tax revenue, and energy diversity, but the increased activity has triggered scrutiny by the state to ensure that its citizens are breathing clean air. The Texas Emissions Reduction Plan (TERP) was created in 2001 with the goal of assuring that the air in Texas is safe to breathe and meets the federal Clean Air Act's standards. The NTC network helps progress towards this goal by establishing an air monitoring network that provides data about the quality of the air in Texas Commission on Environmental Quality (TCEQ) Regions 3 and 4. Monitoring began in 2013 and was essentially fully operational by the end of that year.

This report covers the time period from September 1, 2021 to August 31, 2023. It follows a report dated December 2021 that covered the time period of September 1, 2019 to August 31, 2021; a report dated December 2019 that covered the time period of July 1, 2017 to August 31, 2019; a report dated October 2017 that covered the time period of June 1, 2015 to June 30, 2017; and a report dated August 2015 that covered the time period of January 1, 2014 to May 31, 2015.

NTC Monitoring Network



- Auto-GC Sites
- Canister Sites

Site Name

1. Dallas Elm Fork
2. Fort Worth Benbrook Lake
3. Godley FM2331
4. DISH Airfield
5. Flower Mound Shiloh
6. Eagle Mountain Lake
7. Everman Johnson Park
8. Decatur Thompson
9. Arlington UTA Campus
10. Mansfield Flying L Lane
11. Kennedale Treepoint Dr
12. Fort Worth Joe B Rushing
13. Rhome Seven Hills Rd
14. Mineral Wells 23rd St
15. Weatherford Tin Top Rd
16. Lancaster Cedardale
17. Gainesville Doss St
18. Keller
19. Bowie Patterson Rd
20. Abilene Industrial Blvd
21. Wichita Falls MWSU

Figure 1-1. Map for the NTC Air Monitoring Network Sites

Table 1-1. Description of NTC Air Monitoring Network Sites

Site Name	Monitoring Equipment			Date Active
	AutoGC	Canister	Met.	
Abilene		X	X	12/18/2013
Benbrook Lake	X		X	10/1/2013
Bowie Patterson		X	X	10/31/2013
Dallas Elm Fork	X		X	11/18/2013
Decatur Thompson	X		X	6/5/2013
DISH Airfield	X		X	5/8/2013
Eagle Mountain Lake	X			4/8/2013
Everman Johnson Park	X		X	5/8/2013
Flower Mound Shiloh	X		X	5/8/2013
Gainesville Doss		X	X	10/1/2013
Godley	X		X	7/13/2013
Joe B. Rushing Road	X		X	4/1/2014
Keller		X		7/14/2013
Kennedale	X		X	4/1/2014
Lancaster Cedardale		X	X	9/1/2013
Mansfield Flying L. Road	X		X	4/1/2014
Mineral Wells		X	X	8/21/2013
Rhome Seven Hills Road	X		X	4/1/2014
UT-Arlington Campus	X		X	9/20/2012
Weatherford		X	X	10/13/2013
Wichita Falls		X	X	12/19/2013

2.0 MONITORING APPROACH

Monitoring includes both continuous monitoring using on-site instruments and periodic sample collection for analysis in an off-site analytical laboratory. The thirteen AutoGC monitors operate on a continuous 24-hour schedule to determine hourly ambient concentrations of 48 VOCs. A full list of the 48 target compounds is given in Appendix A, which includes both aliphatic and aromatic petroleum hydrocarbons. Canister samples are collected every sixth day from midnight to midnight following the current United States Environmental Protection Agency (U.S. EPA) sampling schedule.¹ Canister sampling provides a 24-hour averaged concentration for the target compounds listed in Appendix B. The compounds analyzed for the canister samples include many of the same petroleum hydrocarbons as the AutoGC monitors and includes various chlorinated hydrocarbons and chlorofluorocarbon. Meteorological data for wind speed, wind direction, and ambient temperature are collected at nineteen of the sites.

VOC analysis of ambient air using the AutoGC systems followed the procedures established in the U.S. EPA *Technical Assistance Document for Sampling and Analysis of Ozone Precursors*. During each clock hour, the AutoGC system collects ambient air continuously for 40 minutes onto a trap; a sample is considered representative and valid only if the sample collection time includes a minimum of 30 minutes during a single clock hour. This is followed by thermal desorption onto two chromatographic columns for determination of the target VOCs over a 48-minute analytical run. This results in 24 discrete analytical sets per day, two of which are QC samples (calibration verification standard and blank). Additional QC samples (retention time standard, calibration verification duplicates, and second-source standards) are run on a weekly basis.

For the Auto GC systems, the method detection limit (MDL) objective is 0.1 ppbv for benzene, 0.3 ppbv for acetylene, ethane, and ethylene, and 0.2 ppbv for propane and all other target compounds. The lighter, more volatile fraction of the air sample is separated on a Porous Layer Open Tubular (PLOT) column. The heavier, less volatile fraction is separated on a dimethyl siloxane (BP1) column. A flame ionization detector (FID) measures the absorbance of each target compound as it is eluted to generate a chromatogram for each column. Each chromatography column separates the components of the air sample based on the distribution equilibrium between the mobile and stationary phases. The separated VOCs are eluted from the column onto the detector, where a signal based on carbon-hydrogen bond response is produced that is proportional to the concentration of the separated compounds. Retention time for each eluted compound is the primary basis for the identification of each compound.

¹ <https://www.epa.gov/amtic/sampling-schedule-calendar>

The Nutech 2600-4T Auto Canister Samplers are used to collect samples of ambient air in 6-liter, evacuated stainless-steel canisters at a controlled flow rate over a 24-hour period. The VOC sampler must operate so that a measured, consistent amount of air sample is drawn into the sample canister over the 24-hour sampling period. Canister samples are considered valid if sample collection occurs for at least 18 hours of the 24-hour sampling period.

Canister samples are sent to GD Air Testing in Richardson, TX for laboratory analysis by Gas Chromatography Mass Spectrophotometry (GC/MS) adhering to the guidance provided in EPA Method TO-15 (sub-atmospheric sampling). The TO-15 GC/MS analysis is run in full-scan mode and results are reported down to the Reporting Limit, which is approximately 1.5 times the lowest calibration standard, or roughly 0.5 ppbv for all target compounds, except ethane and ethylene, which use a low calibration standard of 10 ppbv.

Nineteen of the AutoGC and canister sampling sites include a 10-meter meteorological tower with wind speed, wind direction, and temperature sensors. Data are collected continuously and reported as 5-minute and hourly averages. A wind vane (direction) and an anemometer (speed) are mounted on a crossarm at a height of 10 meters. Ambient temperature is measured with a thermistor probe located in a fan-driven aspirator housing at a height of 2 meters.

3.0 RESULTS

The NTC Network was originally completed in December 2013, with four additional AutoGC sites incorporated in April 2014. Data presented in this report cover the time period from September 1, 2021 to August 31, 2023, unless otherwise noted. The results are summarized below, followed by discussions of spatial and temporal variability and other topics of interest.

3.1 Summary of Key Results

Table 3-1 shows the percent detection, minimum and maximum concentrations, and average concentrations of the compounds analyzed from the samples collected from all eight canister sites. Low molecular-weight compounds generally had the highest frequencies of detection and the highest maximum concentrations.

Table 3-1. Canister Sample Compound Percent Detection, Minimum and Maximum Concentrations, and Average Concentrations

Compound Name ¹	% Det ²	Minimum (ppbv)	Maximum (ppbv)	Average ³ (ppbv)
n-Butane	100	0.16	27.99	2.59
Propane	100	0.71	85.39	6.75
Dichlorodifluoromethane	100	0.2	0.83	0.47
Benzene	100	0.07	4.71	0.34
Chloromethane	100	0.25	1.36	0.61
Toluene	99.9	ND	4.49	0.26
Trichlorofluoromethane	99.8	ND	0.39	0.22
Carbon Tetrachloride	99.4	ND	0.17	0.09
n-Pentane	99.4	ND	6.28	0.87
Isobutane	99.3	ND	17.78	0.98
p-Xylene + m-Xylene	99.2	ND	1.83	0.09
Propylene	98.9	ND	12.81	0.31
n-Hexane	98.8	ND	2.31	0.28
Ethane	98.6	ND	165.5	11.79
Isopentane	97	ND	5.75	0.96
Methylene Chloride	95.7	ND	0.55	0.1
Ethylbenzene	93.8	ND	0.48	0.03
o-Xylene	93.1	ND	0.51	0.04
Acetylene	85.2	ND	1.24	0.24
1-Butene	76.9	ND	1.7	0.27
Chloroform	69.6	ND	0.08	0.02

Table 3-1. (continued) Canister Sample Compound Percent Detection, Minimum and Maximum Concentrations, and Average Concentrations

Compound Name ¹	%Det ²	Minimum (ppbv)	Maximum (ppbv)	Average ³ (ppbv)
Methylcyclohexane	69	ND	0.65	0.07
Styrene	68.4	ND	0.54	0.03
n-Heptane	65.2	ND	0.89	0.11
Isohexane	65.1	ND	1.51	0.2
3-Methylpentane	64.7	ND	0.99	0.16
1,2,4-Trimethylbenzene	60.5	ND	0.33	0.02
Methylcyclopentane	59.8	ND	1.05	0.13
2,2,4-Trimethylpentane	57.6	ND	0.47	0.05
Cyclohexane	56.7	ND	0.61	0.08
3-Methylhexane	54.5	ND	0.8	0.14
Isoprene	50.2	ND	2.8	0.24
n-Octane	49.3	ND	0.23	0.03
Cyclopentane	40.6	ND	1.88	0.2
Ethylene	34.5	ND	7.32	0.33
m-Ethyltoluene	31.9	ND	0.11	0.01
n-Nonane	23.4	ND	4.86	0.02
p-Ethyltoluene	21.4	ND	0.13	0
n-Decane	18	ND	13.89	0.03
o-Ethyltoluene	15	ND	0.09	0
1,2,3-Trimethylbenzene	13.3	ND	0.13	0
Isoheptane	12.4	ND	0.99	0.03
n-Propylbenzene	11.9	ND	0.07	0
1-Pentene	11.4	ND	0.24	0.01
2,3-Dimethylbutane	9.1	ND	0.41	0.01
c-2-Hexene	7.4	ND	0.67	0.02
2,3,4-Trimethylpentane	7.4	ND	0.19	0.01
1,3,5-Trimethylbenzene	7.4	ND	0.15	0
Tetrachloroethylene	7	ND	0.12	0
n-Undecane	6.7	ND	1.71	0.01
2-Methyl-2-Butene	6.1	ND	0.39	0.01
c-2-Pentene	4.6	ND	0.31	0
1,2-Dichloroethane	4.5	ND	0.07	0
Neohexane	4.2	ND	0.16	0
2-Methylheptane	4.2	ND	0.21	0

Table 3-1. (continued) Canister Sample Compound Percent Detection, Minimum and Maximum Concentrations, and Average Concentrations

Compound Name ¹	%Det ²	Minimum (ppbv)	Maximum (ppbv)	Average ³ (ppbv)
t-2-Pentene	4.1	ND	0.37	0.05
Cumene	3.9	ND	0.07	0.05
2,3-Dimethylpentane	3.8	ND	1.76	0.06
3-Methylheptane	3.8	ND	0.12	0.05
2,4-Dimethylpentane	3.4	ND	0.19	0.05
1,2-Dibromoethane	3.3	ND	0.07	0.05
Chlorobenzene	3.2	ND	0.82	0.05
p-Diethylbenzene	2.4	ND	0.16	0.05
Trichloroethylene	2.4	ND	0.07	0.05
m-Diethylbenzene	2.1	ND	0.1	0.05
2-Chloropentane	1.3	ND	0.18	0.05
t-2-Butene	1.1	ND	0.34	0.05
c-2-Butene	1	ND	0.19	0.05
2-Methyl-1-pentene & 1-Hexene	0.4	ND	0.54	0.05
4-Methyl-1-Pentene	0.3	ND	0.1	0.05
3-Methyl-1-Butene	0.3	ND	0.04	0.05
Cyclopentene	0.3	ND	0.03	0.05
1,3-Butadiene	0.2	ND	0.11	0.05
1,1,2,2-Tetrachloroethane	0.2	ND	0.06	0.05
Bromomethane	0.1	ND	0.02	0.05
t-2-Hexene	0.1	ND	0.06	0.05
1,1,2-Trichloroethane	0.1	ND	0.02	0.05
1,1,1-Trichloroethane	0.1	ND	0.01	0.05
t-1,3-Dichloropropene	0	ND	ND	NC
c-1,3-Dichloropropene	0	ND	ND	NC
1,2-Dichloropropane	0	ND	ND	NC
1,1-Dichloroethylene	0	ND	ND	NC
1,1-Dichloroethane	0	ND	ND	NC
Vinyl Chloride	0	ND	ND	NC

ND = Not detected

NC = Not calculated

¹ Sites included in statistics: Keller, Mineral Wells, Lancaster Cedardale, Gainesville Doss, Weatherford, Bowie Patterson, Abilene, and Wichita Falls.

² 971 valid samples out of a total of 976 collected samples, for a data capture of 99.5%.

³ Averages calculated with 0 substituted for NDs.

Figure 3-1 shows the benzene concentration correlation between canister and AutoGC sites. Canister benzene concentrations trended marginally higher than AutoGC benzene concentrations over several months, but generally benzene concentrations correlated well between the two sampling methods. Average monthly benzene concentrations for all AutoGC and canister sites can be seen in the Monthly Summary Reports in Appendix C.

Meteorological wind roses show wind profiles, or the distributions, of resultant wind direction and wind speeds over a given time period. Figure 3-2 shows a map of the NTC network overlain with representative wind roses for data from September 2021 through August 2023 for five of the sites: Abilene, Wichita Falls, Decatur Thompson, Godley, and UT-Arlington Campus. Throughout the network, winds were most commonly from the south.

Canister and GC Benzene Concentration Correlation

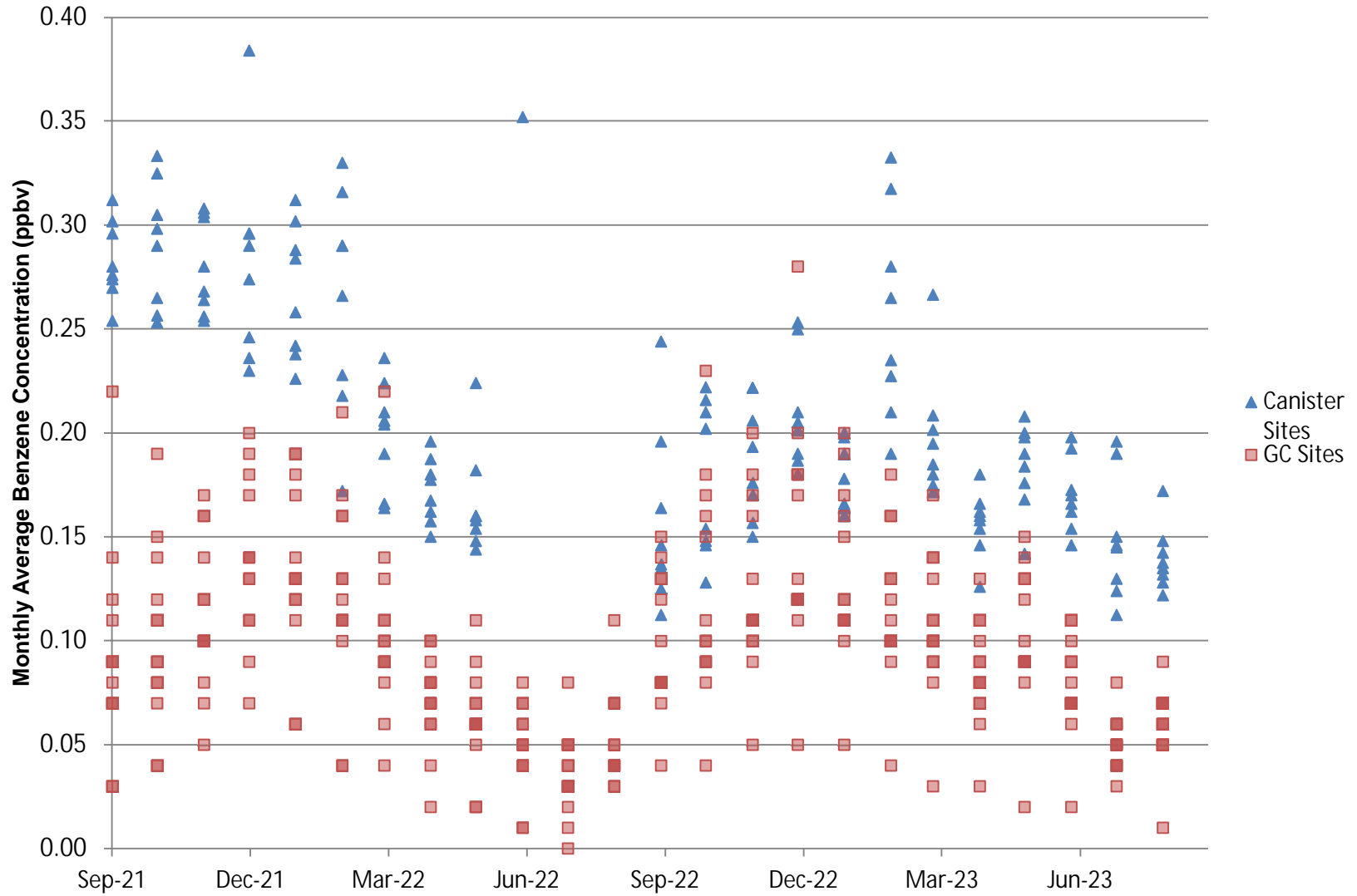
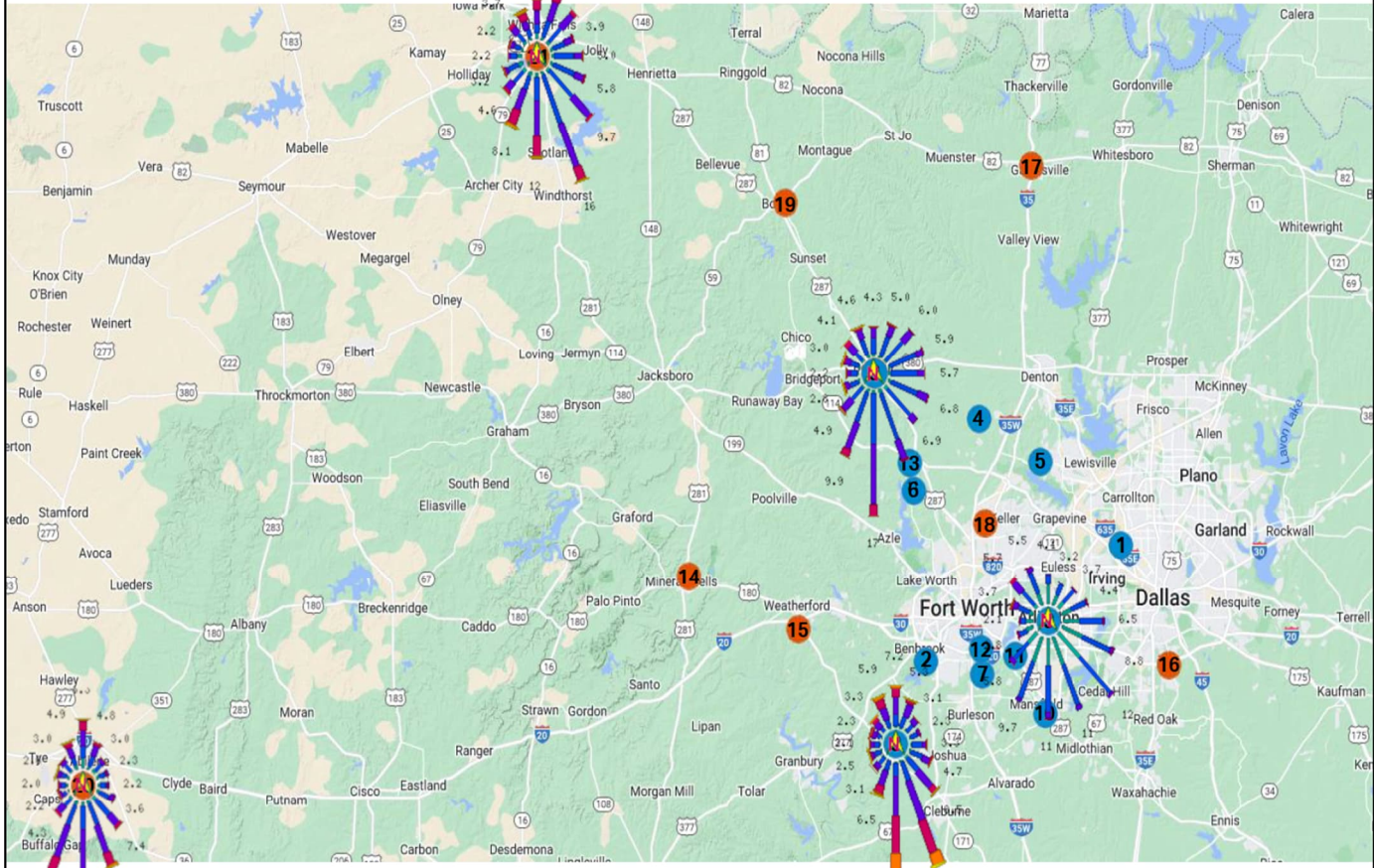


Figure 3-1. Canister and AutoGC Benzene Concentrations

NTC Monitoring Network



● Auto-GC Sites
● Canister Sites

Site Name

1. Dallas Elm Fork
2. Fort Worth Benbrook Lake
3. Godley FM2331
4. DISH Airfield
5. Flower Mound Shiloh
6. Eagle Mountain Lake
7. Everman Johnson Park
8. Decatur Thompson
9. Arlington UTA Campus
10. Mansfield Flying L Lane
11. Kennedale Treepoint Dr
12. Fort Worth Joe B Rushing
13. Rhome Seven Hills Rd
14. Mineral Wells 23rd St
15. Weatherford Tin Top Rd
16. Lancaster Cedardale
17. Gainesville Doss St
18. Keller
19. Bowie Patterson Rd
20. Abilene Industrial Blvd
21. Wichita Falls MWSU

Figure 3-2. Map of NTC Network with September 2021 through August 2023 Wind Roses for Five Sites (2 Canister, 3 AutoGC)

3.2 Spatial Variability

The NTC network spans a large area, and although a small degree of spatial variability is apparent in the measured concentrations, concentrations throughout the network are relatively homogenous overall. Figure 3-3 shows concentrations of benzene, toluene, ethylbenzene, and m&p-xylene versus time for all eight canister sites. Benzene concentrations are consistent throughout the network, except for the time period of July 2022 through September 2022. Benzene data during this time were quality-flagged due to failing laboratory blanks indicating potentially positively-biased data. Toluene concentrations are fairly homogenous throughout the network, though Mineral Wells tends to report higher toluene concentrations than the rest of the canister sites. Both ethylbenzene and m&p-xylene concentrations are comparable at all canister sites.

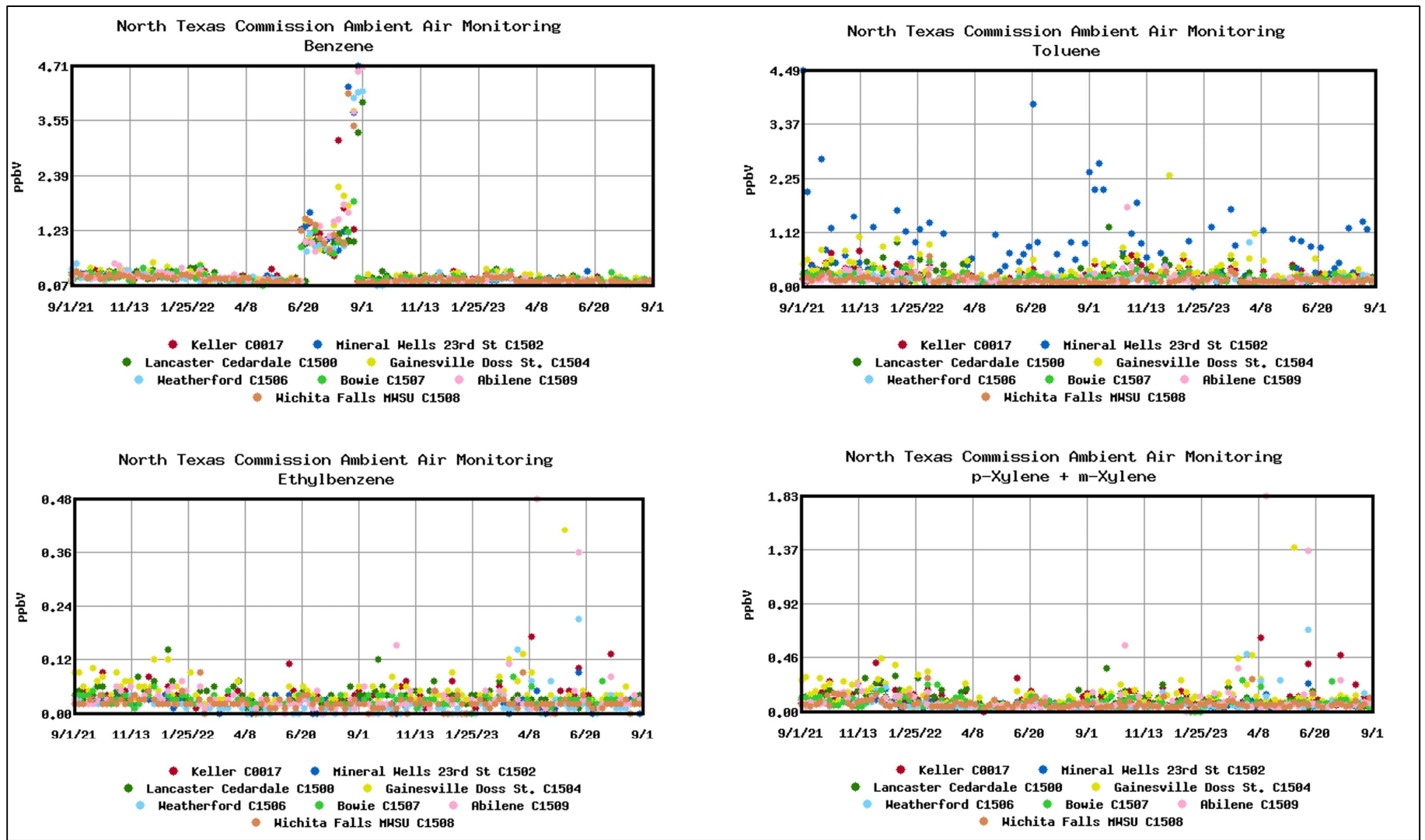


Figure 3-3. Benzene, Toluene, Ethylbenzene, and M&P-xylene Concentrations vs. Time for All Eight Canister Sites

3.3 Temporal Variability

Table 3-2 shows monthly meteorological data for UT-Arlington Campus from September 2021 to August 2023, a site that is generally representative of all the NTC sites. Figure 3-4 shows a breakdown of wind roses for UT-Arlington Campus by meteorological winter (December through February) and meteorological summer (June through August). There is not a large seasonal variation in wind direction; however, there is an apparent stronger southerly wind component in summer, while winds are more evenly distributed in winter.

Seasonal trends within the data were evaluated with a focus on the compounds that were frequently detected at relatively high concentrations (i.e., low molecular weight hydrocarbons such as ethane, propane, and pentane). Figure 3-5 shows propane concentrations as a function of time for four of the canister sites: Weatherford, Bowie Patterson, Abilene, and Wichita Falls. Higher concentrations of propane are generally seen during the winter months at all four sites. A time series of toluene concentrations can be seen in Figure 3-6 for canister sites Lancaster Cedardale, Mineral Wells, Keller, and Gainesville Doss, and higher concentrations are generally seen during the winter for this compound as well. This is believed to be a function of more stable atmospheric conditions during winter months, such as those that occur during temperature inversions or overcast conditions. The stable meteorological conditions in the winter months minimize the transportation or dispersion of VOCs and results in higher VOC concentrations at ground level.

Additional insight into temporal variability can be gleaned from examining the highest detected concentrations of certain compounds throughout the network. Tables 3-3 through 3-6 show the ten highest hourly ethane, pentane, benzene, and toluene concentrations, respectively, measured across all thirteen AutoGC sites. Ethane and pentane are compounds of interest as they are potential indicators of oil and gas activity. Benzene and toluene are of interest due to their presence in gasoline and subsequent widespread existence in ambient air.

Relatively high ethane concentrations were measured across the network with the highest hourly ethane concentration being measured at DISH Airfield. The highest hourly pentane concentrations were observed predominantly at Decatur Thompson. The highest hourly benzene concentration was measured at Dallas Elm Fork. The ten highest hourly toluene concentrations were all measured at Everman Johnson Park.

Table 3-2. Monthly Meteorological Data from UT-Arlington Campus (September 2021 through August 2023)

Month	Wind Speed (mph)			Wind Gust (mph)	Temperature (°F)		
	Min	Max	Average	Max	Min	Max	Average
Sep-21	0.3	8.9	3.6	30.4	56.3	105.4	82.9
Oct-21	0.1	18.1	4.3	44.5	44.4	94.5	73.5
Nov-21	0.2	10.4	3.9	34.2	35.3	83.6	58.2
Dec-21	0.3	14.6	4.5	36.9	30.5	83.4	61.2
Jan-22	0.0	16.3	4.9	41.6	19.7	75.6	46.1
Feb-22	0.0	14.8	5.1	35.7	20.0	82.9	46.2
Mar-22	0.0	17.3	5.8	39.8	24.7	93.3	58.9
Apr-22	0.0	17.2	6.3	42.1	42.2	94.1	69.9
May-22	0.3	13.0	5.6	34.2	54.4	96.7	78.2
Jun-22	0.5	10.7	4.8	41.0	66.9	104.6	87.3
Jul-22	0.7	9.9	4.8	28.9	75.7	110.1	92.8
Aug-22	0.0	9.0	4.3	25.7	72.9	104.5	87.1
Sep-22	0.1	9.7	3.5	34.0	58.2	98.0	80.3
Oct-22	0.0	15.5	3.9	35.2	39.7	96.4	68.7
Nov-22	0.0	16.4	3.8	37.1	30.0	81.8	55.0
Dec-22	0.0	15.4	4.3	35.7	12.1	80.8	50.8
Jan-23	0.0	14.6	5.2	34.4	26.6	83.8	52.5
Feb-23	0.0	16.0	5.3	42.3	28.6	87.8	53.0
Mar-23	0.0	17.5	5.3	44.4	36.0	87.7	60.9
Apr-23	0.0	13.2	5.1	29.4	46.3	91.2	65.5
May-23	0.0	12.6	3.8	34.0	54.7	94.6	75.3
Jun-23	0.1	11.8	4.4	35.5	67.6	103.0	84.2
Jul-23	0.6	9.4	4.5	27.5	70.9	109.3	90.6
Aug-23	0.1	9.5	4.3	42.1	70.9	111.0	94.2

Min = minimum
 Max = maximum
 Mph = Miles per hour
 °F = Degrees Fahrenheit

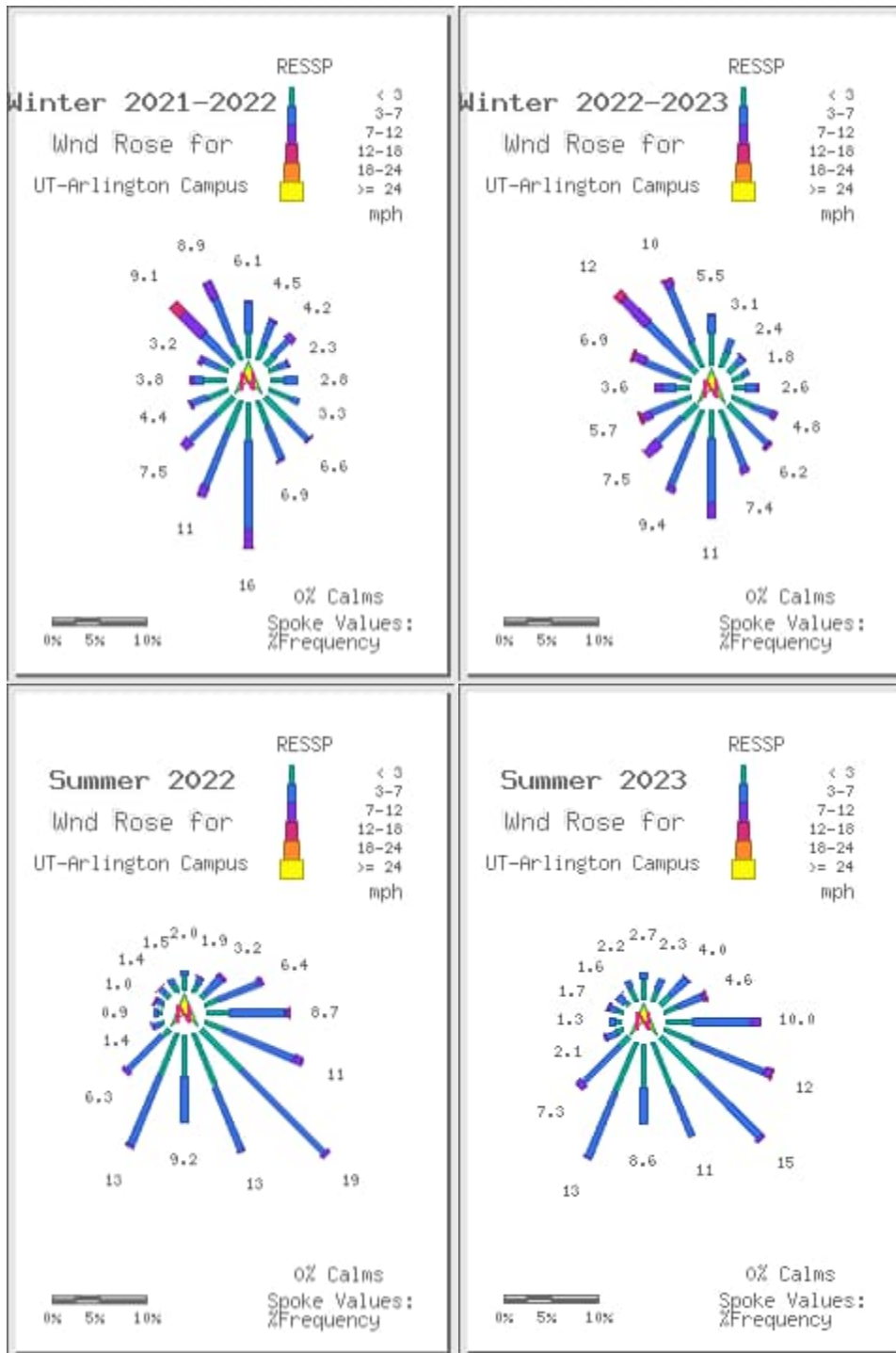


Figure 3-4. Wind Roses for UT-Arlington Campus for Meteorological Winter (top) and Meteorological Summer (bottom)

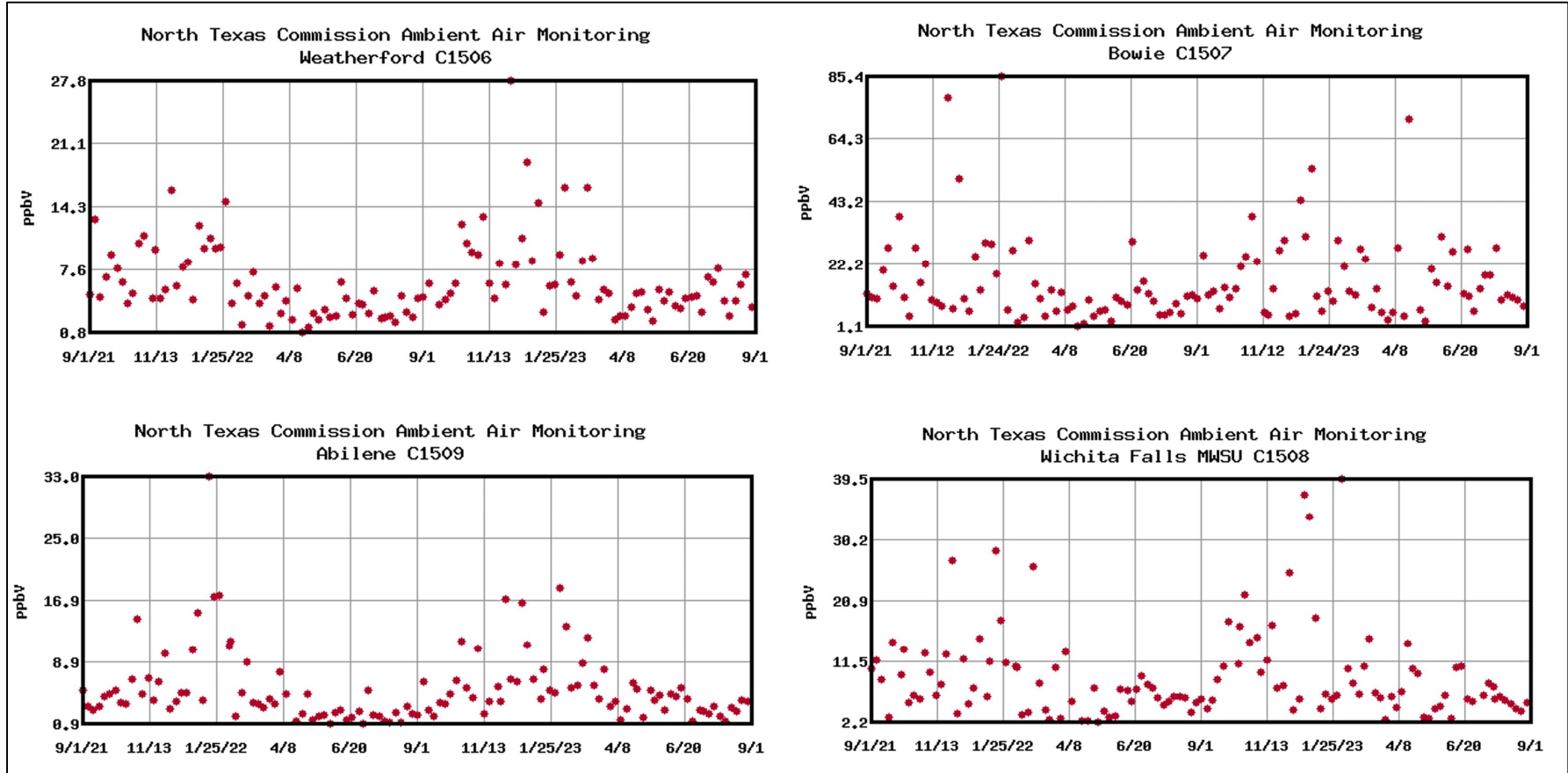


Figure 3-5. Propane Concentrations vs. Time for Weatherford, Bowie Patterson, Abilene, and Wichita Falls

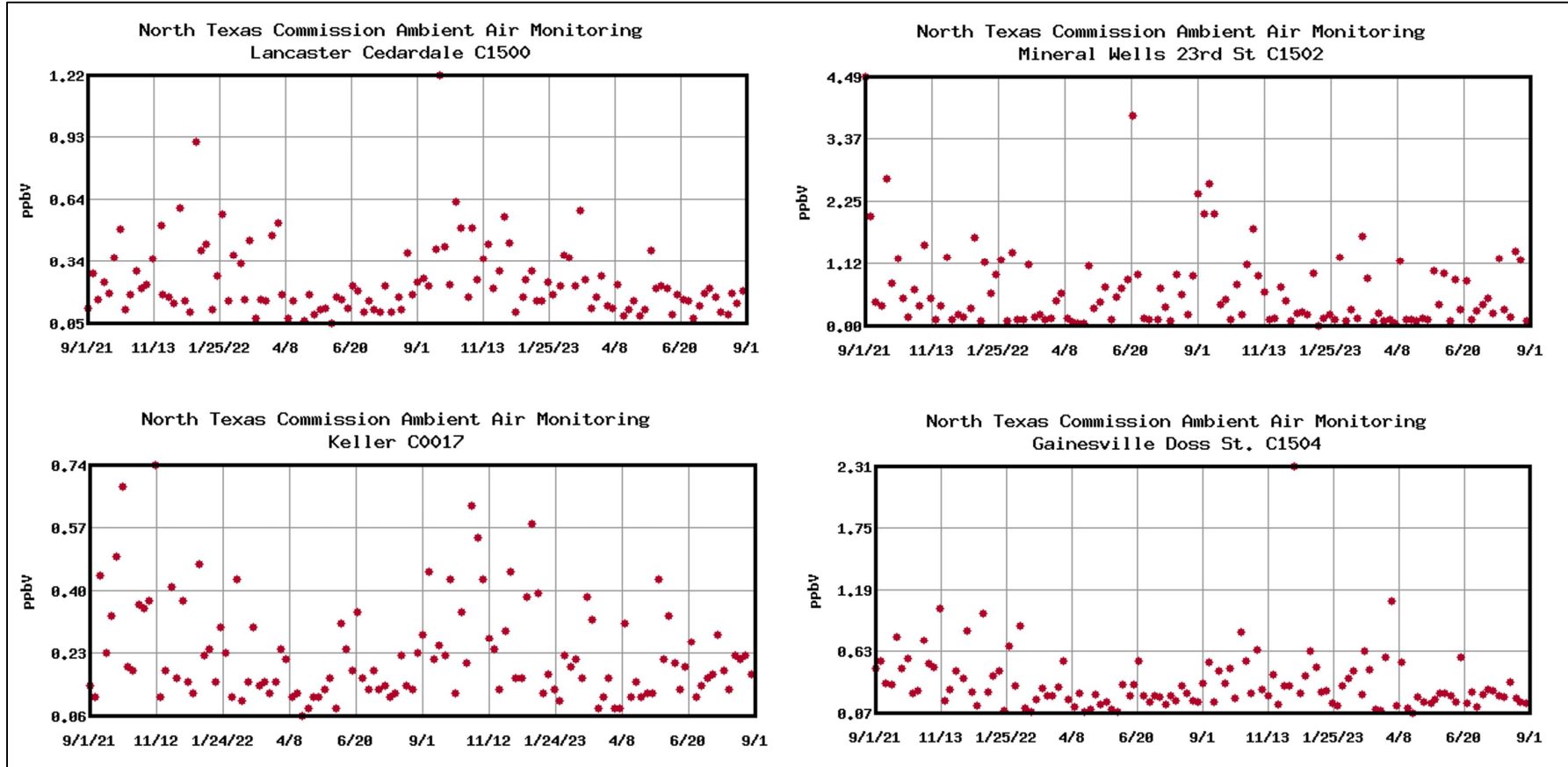


Figure 3-6. Toluene Concentrations vs. Time for Lancaster Cedardale, Mineral Wells, Keller, and Gainesville Doss

Table 3-3. Ten Highest Hourly Ethane Concentrations at GC Sites

Site	Date, Hour	Concentration (ppbv)
DISH Airfield	2/19/2022 19:00	2342.5
Decatur Thompson	10/4/2022 07:00	1839.6
Godley, FM2331	12/12/2021 06:00	1708.5
DISH Airfield	6/23/2023 21:00	1690.5
Godley, FM2331	1/29/2022 00:00	1580.4
DISH Airfield	10/14/2022 06:00	1475.5
DISH Airfield	8/3/2023 19:00	1328.2
Arlington UT Campus	4/9/2023 21:00	1289.3
DISH Airfield	6/24/2023 04:00	1287.0
DISH Airfield	8/16/2022 18:00	1278.1

Table 3-4. Ten Highest Hourly Pentane Concentrations at GC Sites

Site	Date, Hour	Concentration (ppbv)
Decatur Thompson C0088	10/4/2022 07:00	175.3
DISH Airfield C1013	2/19/2022 19:00	32.0
Decatur Thompson C0088	7/16/2022 16:00	31.8
Decatur Thompson C0088	7/11/2022 04:00	31.7
Godley, FM2331 C1501	3/12/2022 02:00	28.9
Decatur Thompson C0088	4/4/2022 14:00	24.3
Decatur Thompson C0088	4/27/2023 21:00	23.5
Decatur Thompson C0088	7/11/2022 05:00	22.3
Decatur Thompson C0088	8/26/2022 21:00	22.1
Decatur Thompson C0088	8/26/2022 20:00	21.2

Table 3-5. Ten Highest Hourly Benzene Concentrations at GC Sites

Site	Date, Hour	Concentration (ppbv)
Dallas Elm Fork	12/20/2022 16:00	7.7
Dallas Elm Fork	12/20/2022 19:00	7.4
Dallas Elm Fork	9/14/2021 06:00	7.0
Dallas Elm Fork	3/25/2022 02:00	6.3
Dallas Elm Fork	3/25/2022 03:00	5.4
Dallas Elm Fork	12/20/2022 17:00	5.2
Arlington UT Campus	11/27/2021 20:00	4.4
Decatur Thompson	10/4/2022 07:00	4.0
Dallas Elm Fork	9/23/2021 07:00	4.0
Dallas Elm Fork	9/15/2021 03:00	4.0

Table 3-6. Ten Highest Hourly Toluene Concentrations at GC Sites

Site	Date, Hour	Concentration (ppbv)
Everman Johnson Park	7/17/2023 18:00	313.8
Everman Johnson Park	7/17/2023 19:00	194.9
Everman Johnson Park	7/17/2023 20:00	158.6
Everman Johnson Park	7/25/2023 15:00	97.3
Everman Johnson Park	6/24/2023 12:00	85.3
Everman Johnson Park	6/24/2023 11:00	69.5
Everman Johnson Park	6/19/2023 13:00	67.2
Everman Johnson Park	6/19/2023 14:00	63.5
Everman Johnson Park	8/1/2023 07:00	55.5
Everman Johnson Park	8/1/2023 08:00	43.2

3.4 Additional Data Evaluation

In addition to the spatial and temporal variability discussed above, certain other topics of interest were identified during the data evaluation. Benzene is of interest in VOC networks because of its ubiquity in ambient air and its potential adverse health effects. Toluene to benzene ratios can be used to help identify sources of benzene. Dallas Elm Fork saw eight out of ten of the highest benzene concentrations during the study period, but they were spaced over the two-year period and within magnitude of other sites. Everman Johnson Park saw the highest concentrations of toluene across the network, with the highest results ten times higher than any other site. All ten of the ten highest hourly concentrations of toluene for the study period were measured at Everman Johnson Park from June to August of 2023.

Figure 3-7 shows the benzene to toluene concentrations for UT-Arlington Campus for June to August 2023. UT-Arlington Campus is generally representative of all the GC sites and from the graph it is evident that the toluene to benzene ratio at UT-Arlington Campus is approximately 5:1. This ratio is within the expected range if gasoline and other petroleum fuels are the primary source of the benzene and toluene. As shown in Tables 3-5 and 3-6, Everman Johnson Park had the ten highest hourly toluene concentrations across the network but none of the highest hourly benzene concentrations. The Everman Johnson Park benzene to toluene concentrations graph is anomalous, as seen in Figure 3-8.

Using the hourly AutoGC data coupled with meteorological data from the site, a pollution rose was created for toluene concentrations at Everman Johnson Park for the months of June to August 2023 which can be seen in Figure 3-9. The highest toluene values all occurred with winds from the south-southeast, with a wind direction range of 164-180° for the highest eight values. When the pollution rose is overlain on a map of the site and surrounding areas as shown in Figure 3-11, potential sources of the high toluene concentrations can be identified. The three highest toluene results occurred on July 17. When the pollution rose of just the highest three toluene results and their respective surrounding 48 hours (Figure 3-10) is overlain on a map of the site and surrounding areas as shown in Figure 3-12, potential sources of the high toluene concentrations may be even more closely pinpointed. Looking at the map it appears that the high toluene concentrations seen at Everman Johnson Park are not from an industrial source.

Similar findings from previous reports were noted in the August 2015 report (all occurring in May 2015) and the August 2017 report (most occurring in the fall of 2017). Review of the 2018 through 2022 datasets did not identify any similar or analogous results as last identified in the fall of 2017. In addition, several other compounds were significantly elevated

during the same specific times listed for toluene in Figure 3-6, including 2-methylhexane, 2,3-dimethylpentane, 3-methylhexane, and n-heptane. There was no significantly elevated benzene, ethylbenzene, or xylenes during the same timeframes.

Throughout the NTC network, canister and AutoGC concentrations correlated well with slight seasonal trends. Nonetheless, AutoGCs have the additional benefit of time resolution. AutoGC measurements are taken every hour, whereas canister samples are only collected every six days and thus result in a smaller sample size. Furthermore, the canister data are a 24-hour average and cannot be used to determine if the concentration varied within that 24-hour sampling period. The time resolution of the AutoGCs allows for the creation of pollution roses which can potentially help identify the source of short-term events.

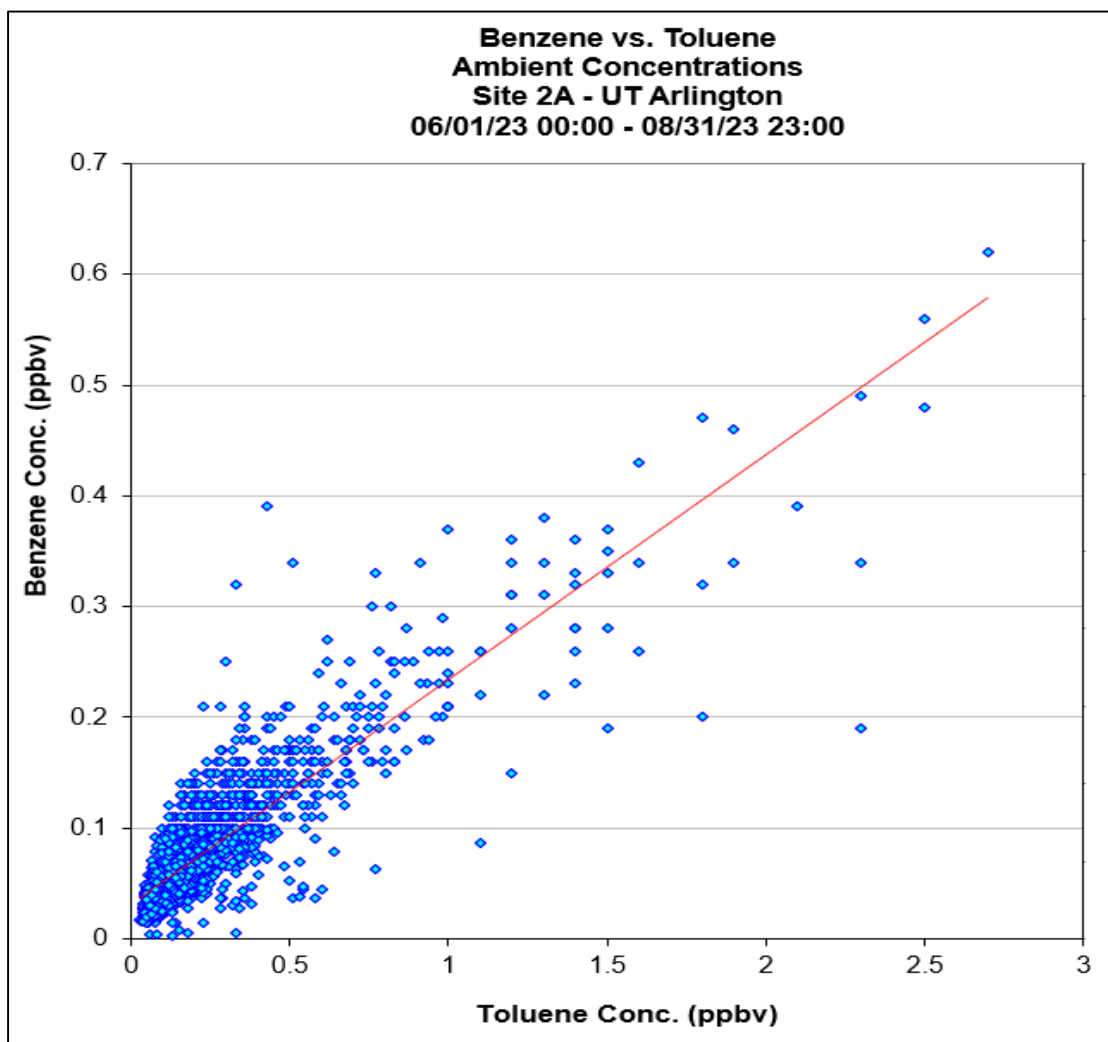


Figure 3-7. Benzene vs. Toluene Comparisons (ppbv) at UT-Arlington Campus for June 2023 – August 2023

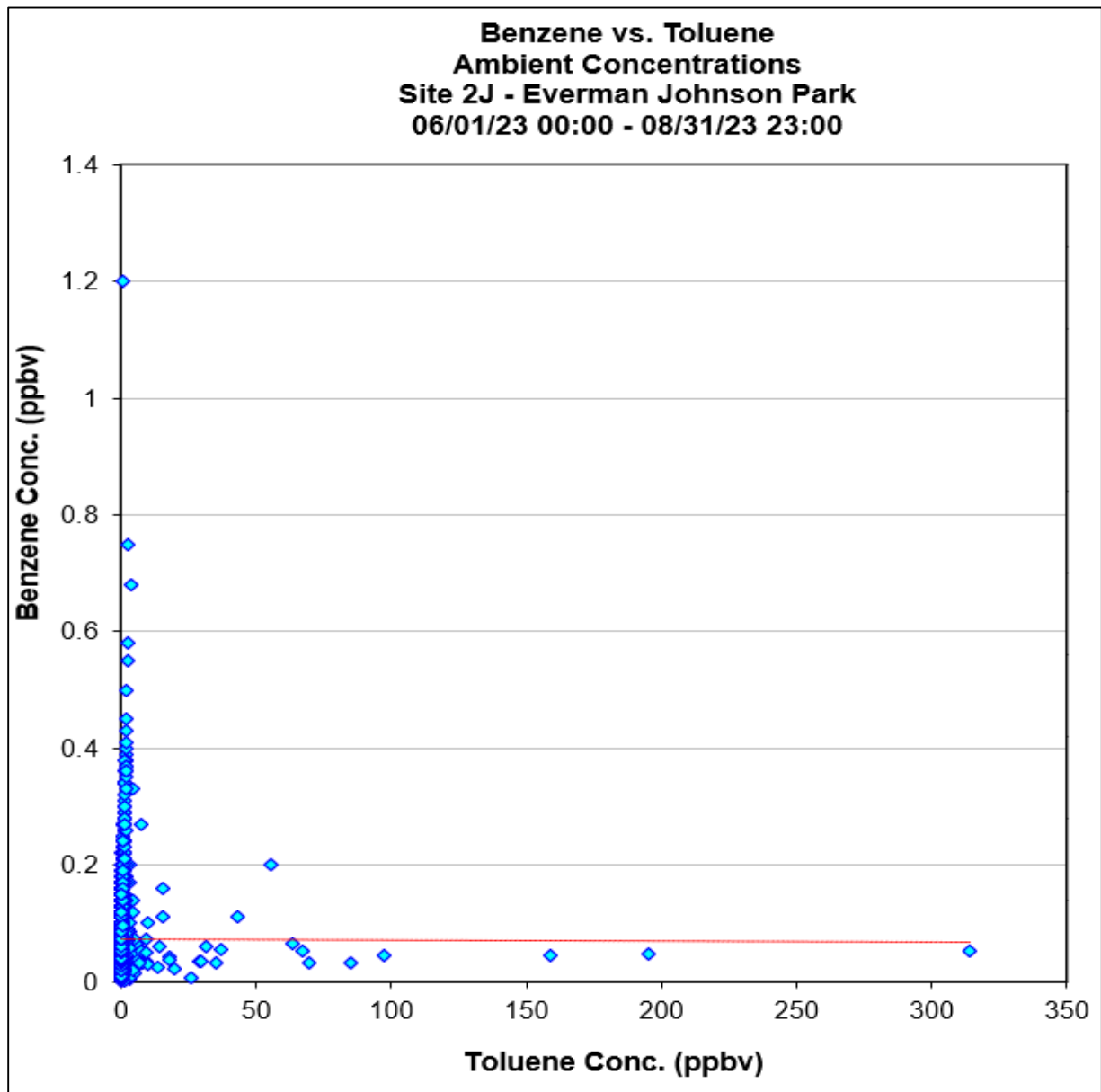


Figure 3-8. Benzene vs. Toluene Comparisons (ppbv) at Everman Johnson Park for June 2023 – August 2023

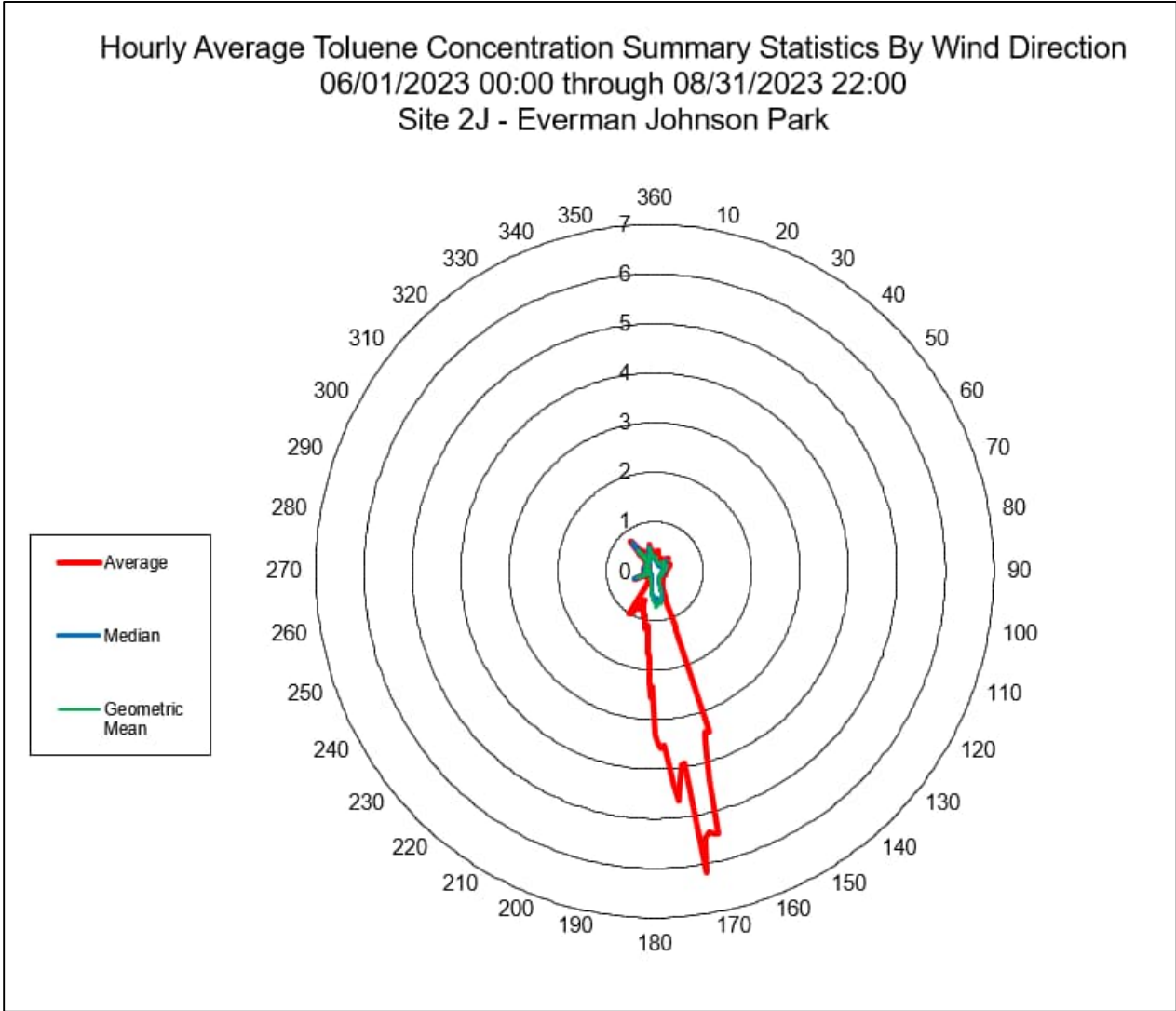


Figure 3-9. Pollution Roses for Toluene Concentrations (ppbv) at Everman Johnson Park June 2023 – August 2023

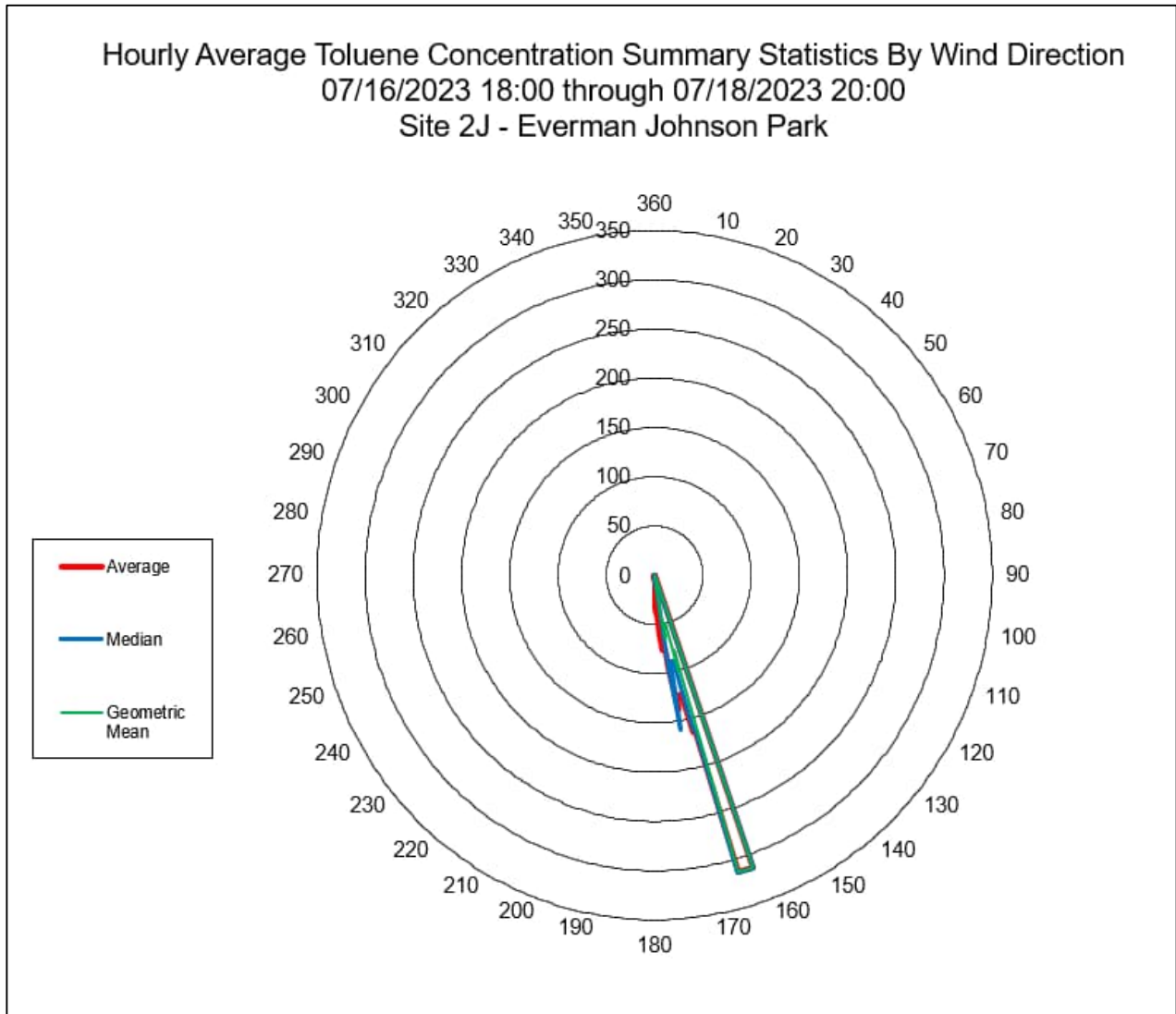


Figure 3-10. Pollution Roses for Toluene Concentrations (ppbv) at Everman Johnson Park July 16 - 18, 2023



Figure 3-11. Everman Johnson Park Toluene Pollution Rose (ppbv)
for June 2023 – August 2023 Overlain on Map of Site Area



Figure 3-12. Everman Johnson Park Toluene Pollution Rose (ppbv)
for July 16 - 18, 2023 Overlain on Map of Site Area

4.0 AIR QUALITY IMPACTS

The TCEQ's air monitoring comparison values (AMCVs) are screening levels used for evaluating measured levels of common air toxics. They are not air quality standards but are chemical-specific air concentrations set to protect human health and welfare and are used for air toxics assessments. The short-term AMCV is based on acute exposure health and welfare data and is intended to be compared to measured concentrations for time periods up to one hour. The long-term AMCV is based on chronic health and welfare data and is used to evaluate annual-averaged monitored concentrations or annual concentrations averaged over multiple years.

The short- and long-term AMCVs for pentane, benzene, toluene, ethylbenzene, and m&p-xylene can be seen in Tables 4-1 and 4-2. There is no short-term or long-term AMCV for ethane or propane. Tables 3-3 through 3-6 compare the ten highest hourly concentrations measured at the AutoGC sites for pentane, benzene, and toluene to the short-term AMCVs. All high hourly concentrations measured at the NTC network are well below the associated AMCVs. Similarly, the average concentrations of pentane, benzene, toluene, ethylbenzene, and m&p-xylene measured at the canister sites as shown in Table 4-2 are well below the long-term AMCVs. Thus, it can be concluded that measured compound concentrations are acceptable and not a threat to human health.

Table 4-1. Summary of Compound Concentrations vs. Short-Term AMCVs
(September 2021 through August 2023)

Compound	Highest AutoGC 1-hr Concentration (ppbv)	Highest Canister 24-hr Concentration (ppbv) ¹	Short Term AMCV (ppbv)	Exceedance (Yes/No)
Ethane	1661	348	--	N/A
Propane	1158	50.4	--	N/A
Pentane	50.9	4.1	68,000	No
Benzene	11.7	0.6	180	No
Toluene	47.1	3.2	4,000	No
Ethylbenzene	6.1	0.2	20,000	No
M&P-xylene	20.7	0.5	1,700	No

N/A = Not Applicable

¹ Short-term data but not directly comparable to the 1-hr AMCVs

Table 4-2. Summary of Compound Concentrations vs. Long-Term AMCVs¹
 (September 2021 through August 2023)

Compound	Average Canister 24-hr Concentration (ppbv) ²	Long Term AMCV (ppbv)	Exceedance (Yes/No)
Ethane	11.8	--	N/A
Propane	6.8	--	N/A
Pentane	0.9	8,100	No
Benzene	0.3	1.4	No
Toluene	0.3	1,100	No
Ethylbenzene	0.0	440	No
M&P-xylene	0.1	140	No

N/A = Not Applicable

¹ Sites included in statistics: Keller, Mineral Wells, Lancaster Cedardale, Gainesville Doss, Weatherford, Bowie Patterson, Abilene, and Wichita Falls.

² Averages calculated with zero substituted for NDs.

5.0 QUALITY ASSURANCE

Various quality assurance or quality control (QA/QC) checks are conducted to help demonstrate that the monitoring data collected are of sufficient quality. The AutoGC systems have automated quality control checks that are used both as feedback for field staff to identify problems or changes in system performance and as indicators of data quality for data validators. These include:

- Multipoint calibration;
- Calibration verification standard;
- Laboratory calibration standard;
- Method blank analyses;
- Duplicate CVS analyses; and
- Retention time standard analyses.

Verification of AutoGC system calibration is checked daily using a Calibration Verification Standard (CVS). A second-source Laboratory Calibration Standard (LCS) is analyzed weekly to verify the reliability of the daily CVS. Precision checks are also conducted weekly to ensure data quality. A summary of the AutoGC quality control checks can be seen in Table 5-1. Field operators review QC checks daily and take corrective actions as necessary to maintain system control, optimize performance, and minimize data loss. Monitoring data that do not meet certain QA/QC criteria (e.g., calibration check criteria, precision check criteria, etc.) are invalidated, as necessary.

For canister sampling QC, canister sampling rates, durations, and pressures are continuously measured to ensure a valid sample, and chain-of-custody documentation is maintained to further ensure sample integrity. Duplicate (collocated) samples are collected at or above a 10% frequency across the NTC network. These duplicate sample results provide a measure of precision for the canister data. Furthermore, the laboratory that analyzes the canister samples follows the quality control specifications defined in EPA Organic Compendium Method TO-15. Quality control for these analyses includes the following procedures:

- Five-point initial calibration;
- Continuing calibration verification;
- Laboratory blank analyses;
- Blank spike/blank spike duplicate;
- Surrogate spikes; and
- Duplicate sample analyses.

Table 5-1. AutoGC QA/QC Checks

QA/QC Checks	Purpose	Minimum Frequency	Objective
Retention Time Check	Confirm retention time windows	Weekly	100% of compounds are identified correctly in the RTS
Calibration Check (Calibration Verification Standard)	Assess instrument drift and verify instrument calibration	Daily	1) Propane and benzene percent recoveries are within 75-125% and all other compounds are within 55-145% 2) Data must be bracketed by valid calibration checks
Blank Check	Assess system contribution/bias	Daily	1) All target compounds <2 ppbc 2) TNMOC <20 ppbc 3) Data must be bracketed by valid blanks
Precision Check	Assess analytical precision	Weekly	Propane and benzene relative percent difference (RPD) <20% in two consecutive calibration checks
Accuracy Check /2nd Source Standard (Laboratory Calibration Standard)	Assess calibration accuracy	Weekly	Propane and benzene percent recoveries within 70-130%
Method Detection Limit Check	Verify instrument level of detection	Annually	All target compounds <0.4 ppbc

Meteorological data collected as a part of this monitoring program are reviewed each workday to identify any issues with instrument performance in a timely manner. On site, technicians inspect the equipment periodically for signs of deterioration or damage. Inspections include visually observing that the wind speed cups are intact and turning, the wind direction vane is intact, and the temperature sensor's aspirator motor is on and the cables appear to be in good shape.

Furthermore, semi-annual field audits of the NTC network are conducted by AECOM's Ambient Air Monitoring (AAM) Quality Assurance team. The audits evaluate overall system effectiveness for both the AutoGC and canister sampling systems, and independently test the measurement equipment to ensure that it is functioning properly. Full audit reports prepared by the AECOM AAM Quality Assurance team and submitted under separate cover can be viewed in Appendix D.

Appendix A

AutoGC Target VOC Compounds

Number	AQS Parameter Code	Compound/Parameter	CAS
1	43202	ethane	74-84-0
2	43203	ethylene	74-85-1
3	43204	propane	74-98-6
4	43205	propylene	115-07-1
5	43214	isobutane	75-28-5
6	43212	n-butane	106-97-8
7	43206	acetylene	74-86-2
8	43216	trans-2-butene	624-64-6
9	43280	1-butene	106-98-9
10	43217	cis-2-butene	590-18-1
11	43242	cyclopentane	287-92-3
12	43221	isopentane	78-78-4
13	43220	n-pentane	109-66-0
14	43218	1,3-butadiene	106-99-0
15	43226	trans-2-pentene	624-64-6
16#	43228	2-methyl-2-butene	513-35-9
17	43224	1-pentene	109-67-1
18	43227	cis-2-pentene	627-20-3
19	43244	2,2-dimethylbutane	75-83-2
20*	43285	2-methylpentane	107-83-5
21	43243	isoprene	78-79-5
22	43231	n-hexane	110-54-3
23	43262	methylcyclopentane	96-37-7
24	43247	2,4-dimethylpentane	108-08-7
25	45201	benzene	71-43-2
26	43248	cyclohexane	110-82-7
27	43263	2-methylhexane	591-76-4
28	43291	2,3-dimethylpentane	565-59-3
29	43249	3-methylhexane	589-34-4
30	43250	2,2,4-trimethylpentane	540-84-1
31	43232	n-heptane	142-82-5
32	43261	methylcyclohexane	108-87-2
33	43252	2,3,4-trimethylpentane	565-75-3
34	45202	toluene	108-88-3
35	43960	2-methylheptane	592-27-8
36	43253	3-methylheptane	589-81-1
37	43233	n-octane	111-65-9
38	45203	ethylbenzene	100-41-4
39	45109	m&p-xylene	1330-20-7
40	45220	styrene	100-42-5

41	45204	o-xylene	95-47-6
42	43235	n-nonane	111-84-2
43	45210	isopropylbenzene (cumene)	98-82-8
44	45209	n-propylbenzene	103-65-1
45	45207	1,3,5-trimethylbenzene	108-67-8
46	45208	1,2,4-trimethylbenzene	95-63-6
47	43238	n-decane	124-18-5
48	45225	1,2,3-trimethylbenzene	526-73-8
49#	43954	n-undecane	1120-21-4
50**	43000	PAMHC	NA
51**	43102	TNMOC	NA

Compound not reported by TCEQ AutoGC's

* This compound is a calibrant not reported in ambient air data; however it is reported to TCEQ LEADS for QC purposes.

** Sum totals, not a chemical compound.

Appendix B

Canister Target Compounds

Number	AIRS Code	Parameter Name	CAS	LOD (ppbv)	LOQ (ppbv)	SQL (ppbv)
1	43814	1,1,1-trichloroethane*	71-55-6	0.1	0.5	0.8
2	43818	1,1,2,2-tetrachloroethane*	79-34-5	0.1	0.5	0.8
3	43820	1,1,2-trichloroethane*	79-00-5	0.1	0.5	0.8
4	43813	1,1-dichloroethane*	75-34-3	0.1	0.5	0.8
5	43826	1,1-dichloroethylene*	75-35-4	0.1	0.5	0.8
6	45225	1,2,3-trimethylbenzene*	526-73-8	0.1	0.5	0.8
7	45208	1,2,4-trimethylbenzene*	95-63-6	0.1	0.5	0.8
8	43843	1,2-dibromoethane*	106-93-4	0.1	0.5	0.8
9	43815	1,2-dichloroethane*	107-06-2	0.1	0.5	0.8
10	43829	1,2-dichloropropane*	78-87-5	0.1	0.5	0.8
11	45207	1,3,5-trimethylbenzene*	108-67-8	0.1	0.5	0.8
12	43218	1,3-butadiene*	106-99-0	0.1	0.5	0.8
13	43280	1-butene*	106-98-9	0.1	0.5	0.8
14	43224	1-pentene*	109-67-1	0.1	0.5	0.8
15	43250	2,2,4-trimethylpentane (isooctane)*	540-84-1	0.1	0.5	0.8
16	43244	2,2-dimethylbutane*	75-83-2	0.1	0.5	0.8
17	43252	2,3,4-trimethylpentane*	565-75-3	0.1	0.5	0.8
18	43284	2,3-dimethylbutane*	79-29-8	0.1	0.5	0.8
19	43291	2,3-dimethylpentane*	565-59-3	0.1	0.5	0.8
20	43247	2,4-dimethylpentane*	108-08-7	0.1	0.5	0.8
21	43331	2-chloropentane	625-29-6	0.1	0.5	0.8
22	43173	2-methyl-1-pentene + 1-hexene	763-29-1 and 592-41-6	0.2	0.5	0.8
23	43228	2-methyl-2-butene*	513-35-9	0.1	0.5	0.8
24	43960	2-methylheptane*	592-27-8	0.1	0.5	0.8
25	43263	2-methylhexane*	591-76-4	0.1	0.5	0.8
26	43285	2-methylpentane*	107-83-5	0.3	0.5	0.8
27	43282	3-methyl-1-butene*	563-45-1	0.1	0.5	0.8
28	43253	3-methylheptane*	589-81-1	0.1	0.5	0.8
29	43249	3-methylhexane*	589-34-4	0.1	0.5	0.8
30	43230	3-methylpentane*	96-14-0	0.1	0.5	0.8
31	43234	4-methyl-1-pentene*	691-37-2	0.2	0.5	0.8
32	43206	acetylene*	74-86-2	0.1	0.5	0.8
33	45201	benzene*	71-43-2	0.1	0.5	0.8
34	43819	bromomethane*	74-83-9	0.1	0.5	0.8
35	43831	c-1,3-dichloropropylene*	10061-01-5	0.1	0.5	0.8
36	43217	c-2-butene*	590-18-1	0.1	0.5	0.8
37	43290	c-2-hexene*	7688-21-3	0.1	0.5	0.8
38	43227	c-2-pentene*	627-20-3	0.1	0.5	0.8
39	43804	carbon tetrachloride*	56-23-5	0.1	0.5	0.8
40	45801	chlorobenzene*	108-90-7	0.1	0.5	0.8
41	43803	chloroform*	67-66-3	0.1	0.5	0.8
42	43248	cyclohexane*	110-82-7	0.1	0.5	0.8
43	43242	cyclopentane*	287-92-3	0.1	0.5	0.8
44	43283	cyclopentene*	142-29-0	0.1	0.5	0.8
45	43823	dichlorodifluoromethane*	75-71-8	0.1	0.5	0.8
46	43202	ethane*	74-84-0	0.3	10	15
47	45203	ethylbenzene*	100-41-4	0.1	0.5	0.8
48	43203	ethylene (ethene)	74-85-1	0.1	10	15
49	43214	isobutane*	75-28-5	0.1	0.5	0.8

50	43221	isopentane*	78-78-4	0.1	0.5	0.8
51	43243	isoprene (2-methyl-1,3-butadiene)*	78-79-5	0.1	0.5	0.8
52	45210	isopropylbenzene (cumene)*	98-82-8	0.1	0.5	0.8
53	45218	m-diethylbenzene*	141-93-5	0.1	0.5	0.8
54	43801	methyl chloride*	74-87-3	0.1	0.5	0.8
55	43261	Methylcyclohexane*	108-87-2	0.1	0.5	0.8
56	43262	methylcyclopentane*	96-37-7	0.1	0.5	0.8
57	43802	methylene chloride (dichloromethane)*	75-09-2	0.1	0.5	0.8
58	45212	m-ethyltoluene (3-ethyltoluene)*	620-14-4	0.1	0.5	0.8
59	43212	n-butane*	106-97-8	0.1	0.5	0.8
60	43238	n-decane*	124-18-5	0.1	0.5	0.8
61	43232	n-heptane*	142-82-5	0.1	0.5	0.8
62	43231	n-hexane*	110-54-3	0.1	0.5	0.8
63	43235	n-nonane*	111-84-2	0.1	0.5	0.8
64	43233	n-octane*	111-65-9	0.1	0.5	0.8
65	43220	n-pentane*	109-66-0	0.1	0.5	0.8
66	45209	n-propylbenzene*	103-65-1	0.1	0.5	0.8
67	43954	n-undecane*	1120-21-4	0.1	0.5	0.8
68	45211	o-ethyltoluene (2-ethyltoluene)*	611-14-3	0.1	0.5	0.8
69	45204	o-xylene*	95-47-6	0.1	0.5	0.8
70	45219	p-diethylbenzene*	105-05-5	0.1	0.5	0.8
71	45213	p-ethyltoluene (4-ethyltoluene)*	622-96-8	0.1	0.5	0.8
72	43204	propane*	74-98-6	0.1	0.5	0.8
73	43205	propylene (propene)	115-07-1	0.1	0.5	0.8
74	45109	p-xylene, m-xylene*	106-42-3 and 108-38-3	0.2	0.5	0.8
75	45220	styrene*	100-42-5	0.1	0.5	0.8
76	43830	t-1,3-dichloropropylene*	10061-02-6	0.1	0.5	0.8
77	43216	t-2-butene*	624-64-6	0.1	0.5	0.8
78	43289	t-2-hexene*	4050-45-7	0.1	0.5	0.8
79	43226	t-2-pentene*	646-04-8	0.1	0.5	0.8
80	43817	tetrachloroethylene (perchloroethylene)*	127-18-4	0.1	0.5	0.8
81	45202	toluene*	108-88-3	0.1	0.5	0.8
82	43824	trichloroethylene*	79-01-6	0.1	0.5	0.8
83	43811	trichlorofluoromethane*	75-69-4	0.1	0.5	0.8
84	43860	vinyl chloride*	75-01-4	0.1	0.5	0.8

*TCEQ NELAP Accredited Compound

Appendix C

Monthly Summary Reports

Summary of Auto GC Data through September 2021

Site Name	Start Date	Last QA Audit	To Date					September				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	5/18/2021	96	99	0.14 ppbv	0.82 ppbc	No	100	100	0.09 ppbv	0.56 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	5/26/2021	96	98 ²	0.09 ppbv	0.57 ppbc	No	100	100 ²	0.07 ppbv	0.42 ppbc	No
Dish Airfield (2D)	5/8/2013	5/24/2021	97	99	0.11 ppbv	0.68 ppbc	No	100	100	0.11 ppbv	0.68 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	5/24/2021	97	99	0.09 ppbv	0.56 ppbc	No	100	100	0.08 ppbv	0.47 ppbc	No
Everman Johnson Park (2J)	5/8/2013	5/18/2021	96	99	0.08 ppbv	0.51 ppbc	No	97	100	0.09 ppbv	0.54 ppbc	No
Decatur Thompson (2T)	6/5/2013	5/25/2021	97	99	0.10 ppbv	0.59 ppbc	No	100	100	0.07 ppbv	0.42 ppbc	No
Godley FM 2331 (2G)	7/13/2013	5/17/2021	95	99	0.07 ppbv	0.42 ppbc	No	99	100	0.03 ppbv	0.19 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	5/18/2021	95	99	0.08 ppbv	0.46 ppbc	No	89	100	0.05 ppbv	0.33 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	5/24/2021	96	99	0.16 ppbv	0.94 ppbc	No	98	100	0.22 ppbv	1.31 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	5/18/2021	95	99	0.12 ppbv	0.72 ppbc	No	93	100	0.12 ppbv	0.73 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	5/19/2021	96	98	0.10 ppbv	0.59 ppbc	No	100	100	0.07 ppbv	0.43 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	5/26/2021	95	99	0.10 ppbv	0.62 ppbc	No	100	100	0.09 ppbv	0.51 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	5/18/2021	94	99	0.08 ppbv	0.50 ppbc	No	78 ³	100	0.14 ppbv	0.84 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ AutoGC data capture at Fort Worth Joe B. Rushing Road was below 80% due to a machine malfunction

Summary of Canister Data through September 2021

Site Name	Start Date	Last QA Audit	To Date					September				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	5/25/2021	500	492	98 ²	0.17 ppbv	99	5	5	100 ²	0.27 ppbv	100
Mineral Wells 23rd St.	8/21/2013	5/17/2021	494	490	98	0.15 ppbv	99	5	5	100	0.30 ppbv	100
Lancaster Cedardale	9/1/2013	5/19/2021	492	489	99	0.18 ppbv	99	5	5	100	0.28 ppbv	100
Gainesville Doss	10/1/2013	5/25/2021	485	477	98	0.19 ppbv	99	5	5	100	0.30 ppbv	100
Weatherford Highway 180	10/13/2013	5/17/2021	413	409	99	0.15 ppbv	99	5	5	100	0.31 ppbv	100
Bowie Patterson St.	10/31/2013	5/25/2021	485	476	99	0.17 ppbv	99	5	5	100	0.27 ppbv	100
Abilene N. 3rd St.	12/18/2013	5/17/2021	432	430	99	0.15 ppbv	99	5	5	100	0.25 ppbv	100
Wichita Falls MWSU	12/19/2013	5/25/2021	474	465	99	0.15 ppbv	99	5	5	100	0.28 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through October 2021

Site Name	Start Date	Last QA Audit	To Date					October				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	5/18/2021	96	99	0.14 ppbv	0.82 ppbc	No	100	100	0.12 ppbv	0.72 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	5/26/2021	96	98 ²	0.09 ppbv	0.57 ppbc	No	99	100 ²	0.08 ppbv	0.50 ppbc	No
Dish Airfield (2D)	5/8/2013	5/24/2021	97	99	0.11 ppbv	0.68 ppbc	No	99	100	0.11 ppbv	0.66 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	5/24/2021	97	99	0.09 ppbv	0.56 ppbc	No	99	100	0.08 ppbv	0.51 ppbc	No
Everman Johnson Park (2J)	5/8/2013	5/18/2021	96	99	0.08 ppbv	0.51 ppbc	No	91	100	0.11 ppbv	0.68 ppbc	No
Decatur Thompson (2T)	6/5/2013	5/25/2021	97	99	0.10 ppbv	0.59 ppbc	No	100	100	0.07 ppbv	0.43 ppbc	No
Godley FM 2331 (2G)	7/13/2013	5/17/2021	95	99	0.07 ppbv	0.42 ppbc	No	99	100	0.04 ppbv	0.25 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	5/18/2021	95	99	0.08 ppbv	0.45 ppbc	No	99	100	0.05 ppbv	0.30 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	5/24/2021	96	99	0.16 ppbv	0.95 ppbc	No	94	100	0.19 ppbv	1.11 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	5/18/2021	95	99	0.12 ppbv	0.73 ppbc	No	99	100	0.15 ppbv	0.91 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	5/19/2021	96	98	0.10 ppbv	0.58 ppbc	No	99	100	0.09 ppbv	0.51 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	5/26/2021	95	99	0.10 ppbv	0.62 ppbc	No	94	100	0.09 ppbv	0.54 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	5/18/2021	94	99	0.08 ppbv	0.51 ppbc	No	91 ³	100	0.14 ppbv	0.82 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through October 2021

Site Name	Start Date	Last QA Audit	To Date					October				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	5/25/2021	506	498	98 ²	0.17 ppbv	99	6	6	100 ²	0.33 ppbv	100
Mineral Wells 23rd St.	8/21/2013	5/17/2021	500	496	98	0.15 ppbv	99	6	6	100	0.29 ppbv	100
Lancaster Cedardale	9/1/2013	5/19/2021	498	495	99	0.18 ppbv	99	6	6	100	0.30 ppbv	100
Gainesville Doss	10/1/2013	5/25/2021	491	483	98	0.19 ppbv	99	6	6	100	0.31 ppbv	100
Weatherford Highway 180	10/13/2013	5/17/2021	419	415	99	0.15 ppbv	99	6	6	100	0.27 ppbv	100
Bowie Patterson St.	10/31/2013	5/25/2021	491	482	99	0.18 ppbv	99	6	6	100	0.26 ppbv	100
Abilene N. 3rd St.	12/18/2013	5/17/2021	438	436	99	0.15 ppbv	99	6	6	100	0.33 ppbv	100
Wichita Falls MWSU	12/19/2013	5/25/2021	480	471	99	0.15 ppbv	99	6	6	100	0.25 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through November 2021

Site Name	Start Date	Last QA Audit	To Date					November				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	11/9/2021	96	99	0.14 ppbv	0.82 ppbc	No	100	100	0.14 ppbv	0.85 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	11/10/2021	96	98 ²	0.09 ppbv	0.57 ppbc	No	99	100 ²	0.10 ppbv	0.58 ppbc	No
Dish Airfield (2D)	5/8/2013	11/11/2021	97	99	0.11 ppbv	0.68 ppbc	No	99	99	0.12 ppbv	0.71 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	11/10/2021	97	99	0.09 ppbv	0.56 ppbc	No	100	100	0.10 ppbv	0.61 ppbc	No
Everman Johnson Park (2J)	5/8/2013	11/8/2021	96	99	0.08 ppbv	0.51 ppbc	No	100	100	0.12 ppbv	0.74 ppbc	No
Decatur Thompson (2T)	6/5/2013	11/11/2021	97	99	0.10 ppbv	0.59 ppbc	No	100	100	0.08 ppbv	0.49 ppbc	No
Godley FM 2331 (2G)	7/13/2013	11/8/2021	95	99	0.07 ppbv	0.42 ppbc	No	100	100	0.05 ppbv	0.30 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	11/8/2021	95	99	0.08 ppbv	0.45 ppbc	No	99	99	0.04 ppbv	0.26 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	11/10/2021	96	99	0.16 ppbv	0.95 ppbc	No	100	100	0.16 ppbv	0.99 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	11/23/2021	95	99	0.12 ppbv	0.73 ppbc	No	91 ³	100	0.17 ppbv	1.02 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	11/9/2021	96	98	0.10 ppbv	0.59 ppbc	No	100	100	0.10 ppbv	0.61 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	11/10/2021	95	99	0.10 ppbv	0.62 ppbc	No	99	100	0.10 ppbv	0.61 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	11/9/2021	94	99	0.09 ppbv	0.51 ppbc	No	96	100	0.16 ppbv	0.94 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through November 2021

Site Name	Start Date	Last QA Audit	To Date					November				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/9/2021	511	503	98 ²	0.17 ppbv	99	5	5	100 ²	0.30 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/8/2021	505	501	98	0.16 ppbv	99	5	5	100	0.26 ppbv	100
Lancaster Cedardale	9/1/2013	11/9/2021	503	500	99	0.18 ppbv	99	5	5	100	0.28 ppbv	100
Gainesville Doss	10/1/2013	11/9/2021	496	488	98	0.19 ppbv	99	5	5	100	0.31 ppbv	100
Weatherford Highway 180	10/13/2013	11/8/2021	424	420	99	0.16 ppbv	99	5	5	99	0.31 ppbv	100
Bowie Patterson St.	10/31/2013	11/8/2021	496	487	99	0.18 ppbv	99	5	5	100	0.26 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/8/2021	443	441	99	0.15 ppbv	99	5	5	100	0.27 ppbv	100
Wichita Falls MWSU	12/19/2013	11/9/2021	485	476	99	0.15 ppbv	99	5	5	83 ³	0.25 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Wichita Falls MWSU was below 90% due to a sensor malfunction

Summary of Auto GC Data through December 2021

Site Name	Start Date	Last QA Audit	To Date					December				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	11/9/2021	96	99	0.14 ppbv	0.82 ppbc	No	94 ³	100	0.17 ppbv	1.01 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	11/10/2021	96	98 ²	0.09 ppbv	0.57 ppbc	No	99	100 ²	0.13 ppbv	0.78 ppbc	No
Dish Airfield (2D)	5/8/2013	11/11/2021	97	99	0.11 ppbv	0.69 ppbc	No	93	100	0.14 ppbv	0.85 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	11/10/2021	97	99	0.09 ppbv	0.56 ppbc	No	100	100	0.13 ppbv	0.76 ppbc	No
Everman Johnson Park (2J)	5/8/2013	11/8/2021	96	99	0.09 ppbv	0.52 ppbc	No	100	100	0.14 ppbv	0.87 ppbc	No
Decatur Thompson (2T)	6/5/2013	11/11/2021	97	99	0.10 ppbv	0.59 ppbc	No	100	100	0.11 ppbv	0.64 ppbc	No
Godley FM 2331 (2G)	7/13/2013	11/8/2021	95	99	0.07 ppbv	0.42 ppbc	No	92	100	0.07 ppbv	0.40 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	11/8/2021	95	99	0.08 ppbv	0.45 ppbc	No	99	100	0.06 ppbv	0.36 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	11/10/2021	96	99	0.16 ppbv	0.95 ppbc	No	100	100	0.20 ppbv	1.17 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	11/23/2021	95	99	0.12 ppbv	0.73 ppbc	No	99	98	0.18 ppbv	1.05 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	11/9/2021	96	98	0.10 ppbv	0.59 ppbc	No	100	100	0.11 ppbv	0.67 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	11/10/2021	95	99	0.10 ppbv	0.62 ppbc	No	92 ³	100	0.14 ppbv	0.82 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	11/9/2021	94	99	0.09 ppbv	0.52 ppbc	No	92	100	0.19 ppbv	1.13 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through December 2021

Site Name	Start Date	Last QA Audit	To Date					December				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/9/2021	516	508	98 ²	0.17 ppbv	99	5	5	100 ²	0.27 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/8/2021	510	506	98	0.16 ppbv	99	5	5	100	0.25 ppbv	100
Lancaster Cedardale	9/1/2013	11/9/2021	508	505	99	0.18 ppbv	99	5	5	100	0.30 ppbv	100
Gainesville Doss	10/1/2013	11/9/2021	501	493	98	0.19 ppbv	99	5	5	100	0.38 ppbv	100
Weatherford Highway 180	10/13/2013	11/8/2021	429	425	99	0.16 ppbv	99	5	5	100	0.24 ppbv	100
Bowie Patterson St.	10/31/2013	11/8/2021	501	492	99	0.18 ppbv	99	5	5	100	0.30 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/8/2021	448	446	99	0.16 ppbv	99	5	5	100	0.29 ppbv	100
Wichita Falls MWSU	12/19/2013	11/9/2021	490	481	99	0.15 ppbv	99	5	5	87 ³	0.23 ppbv	100

General Comments:

- To Date refers to start date through current month
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- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Wichita Falls MWSU was below 90% due to a sensor malfunction

Summary of Auto GC Data through January 2022

Site Name	Start Date	Last QA Audit	To Date					January				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	11/9/2021	96	99	0.14 ppbv	0.83 ppbc	No	96	100	0.17 ppbv	1.03 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	11/10/2021	96	98 ²	0.09 ppbv	0.57 ppbc	No	98	100 ²	0.13 ppbv	0.77 ppbc	No
Dish Airfield (2D)	5/8/2013	11/11/2021	97	99	0.11 ppbv	0.69 ppbc	No	100	100	0.13 ppbv	0.80 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	11/10/2021	97	99	0.09 ppbv	0.56 ppbc	No	96	100	0.12 ppbv	0.73 ppbc	No
Everman Johnson Park (2J)	5/8/2013	11/8/2021	96	99	0.09 ppbv	0.52 ppbc	No	99	100	0.14 ppbv	0.85 ppbc	No
Decatur Thompson (2T)	6/5/2013	11/11/2021	97	99	0.10 ppbv	0.59 ppbc	No	99	100	0.11 ppbv	0.63 ppbc	No
Godley FM 2331 (2G)	7/13/2013	11/8/2021	95	99	0.07 ppbv	0.42 ppbc	No	100	100	0.06 ppbv	0.35 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	11/8/2021	95	99	0.08 ppbv	0.45 ppbc	No	96	100	0.06 ppbv	0.36 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	11/10/2021	96	99	0.16 ppbv	0.95 ppbc	No	99	100	0.19 ppbv	1.15 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	11/23/2021	95	99	0.12 ppbv	0.74 ppbc	No	100	92	0.19 ppbv	1.16 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	11/9/2021	97	98	0.10 ppbv	0.59 ppbc	No	100	99	0.12 ppbv	0.75 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	11/10/2021	95	99	0.10 ppbv	0.63 ppbc	No	100	100	0.13 ppbv	0.75 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	11/9/2021	94	99	0.09 ppbv	0.52 ppbc	No	97	100	0.18 ppbv	1.05 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Canister Data through January 2022

Site Name	Start Date	Last QA Audit	To Date					January				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/9/2021	521	513	98 ²	0.17 ppbv	99	5	5	100 ²	0.26 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/8/2021	515	511	98	0.16 ppbv	99	5	5	100	0.24 ppbv	100
Lancaster Cedardale	9/1/2013	11/9/2021	513	510	99	0.18 ppbv	99	5	5	100	0.31 ppbv	100
Gainesville Doss	10/1/2013	11/9/2021	506	498	98	0.19 ppbv	99	5	5	100	0.28 ppbv	100
Weatherford Highway 180	10/13/2013	11/8/2021	434	430	99	0.16 ppbv	99	5	5	100	0.23 ppbv	100
Bowie Patterson St.	10/31/2013	11/8/2021	506	497	99	0.18 ppbv	99	5	5	100	0.29 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/8/2021	453	451	99	0.16 ppbv	99	5	5	100	0.30 ppbv	100
Wichita Falls MWSU	12/19/2013	11/9/2021	495	486	99	0.15 ppbv	99	5	5	100	0.24 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through February 2022

Site Name	Start Date	Last QA Audit	To Date					February				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	11/9/2021	96	99	0.14 ppbv	0.83 ppbc	No	97	100	0.16 ppbv	0.94 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	11/10/2021	96	98 ²	0.10 ppbv	0.57 ppbc	No	88 ³	91 ²	0.11 ppbv	0.67 ppbc	No
Dish Airfield (2D)	5/8/2013	11/11/2021	97	99	0.11 ppbv	0.69 ppbc	No	96	87 ⁴	0.13 ppbv	0.78 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	11/10/2021	97	99	0.09 ppbv	0.56 ppbc	No	99	100	0.11 ppbv	0.67 ppbc	No
Everman Johnson Park (2J)	5/8/2013	11/8/2021	96	99	0.09 ppbv	0.52 ppbc	No	99	100	0.11 ppbv	0.65 ppbc	No
Decatur Thompson (2T)	6/5/2013	11/11/2021	97	99	0.10 ppbv	0.59 ppbc	No	100	100	0.10 ppbv	0.59 ppbc	No
Godley FM 2331 (2G)	7/13/2013	11/8/2021	95	99	0.07 ppbv	0.42 ppbc	No	100	86 ⁴	0.04 ppbv	0.27 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	11/8/2021	95	99	0.07 ppbv	0.45 ppbc	No	100	100	0.05 ppbv	0.27 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	11/10/2021	96	99	0.16 ppbv	0.95 ppbc	No	98	100	0.21 ppbv	1.26 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	11/23/2021	95	99	0.12 ppbv	0.74 ppbc	No	99	100	0.17 ppbv	1.01 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	11/9/2021	96	98	0.10 ppbv	0.59 ppbc	No	92	89 ⁴	0.13 ppbv	0.76 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	11/10/2021	95	99	0.10 ppbv	0.63 ppbc	No	99	100	0.12 ppbv	0.69 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	11/9/2021	94	99	0.09 ppbv	0.53 ppbc	No	96	100	0.16 ppbv	0.95 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ; February 2022 data is not yet validated

³ PM conducted this month

⁴ Met data capture at Dish Airfield, Godley FM 2331, and Mansfield Flying L Lane were below 90% due to frozen wind sensors

Summary of Canister Data through February 2022

Site Name	Start Date	Last QA Audit	To Date					February				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/9/2021	526	518	98 ²	0.17 ppbv	99	5	5	86 ²	0.32 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/8/2021	520	516	98	0.16 ppbv	99	5	5	100	0.23 ppbv	100
Lancaster Cedardale	9/1/2013	11/9/2021	518	515	99	0.18 ppbv	99	5	5	90	0.33 ppbv	100
Gainesville Doss	10/1/2013	11/9/2021	511	503	98	0.19 ppbv	99	5	5	100	0.29 ppbv	100
Weatherford Highway 180	10/13/2013	11/8/2021	439	435	99	0.16 ppbv	99	5	5	100	0.17 ppbv	100
Bowie Patterson St.	10/31/2013	11/8/2021	511	502	99	0.18 ppbv	99	5	5	100	0.29 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/8/2021	458	456	99	0.16 ppbv	99	5	5	100	0.27 ppbv	100
Wichita Falls MWSU	12/19/2013	11/9/2021	500	491	99	0.15 ppbv	99	5	5	100	0.22 ppbv	100

General Comments:

- To Date refers to start date through current month
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- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ; February 2022 data is not yet validated

Summary of Auto GC Data through March 2022

Site Name	Start Date	Last QA Audit	To Date					March				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	11/9/2021	96	99	0.14 ppbv	0.83 ppbc	No	100	100	0.11 ppbv	0.64 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	11/10/2021	96	98 ²	0.10 ppbv	0.57 ppbc	No	89 ³	99 ²	0.09 ppbv	0.55 ppbc	No
Dish Airfield (2D)	5/8/2013	11/11/2021	96	99	0.11 ppbv	0.69 ppbc	No	89 ³	100	0.11 ppbv	0.68 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	11/10/2021	97	99	0.09 ppbv	0.56 ppbc	No	91	100	0.09 ppbv	0.57 ppbc	No
Everman Johnson Park (2J)	5/8/2013	11/8/2021	96	99	0.09 ppbv	0.52 ppbc	No	99	100	0.08 ppbv	0.48 ppbc	No
Decatur Thompson (2T)	6/5/2013	11/11/2021	97	99	0.10 ppbv	0.59 ppbc	No	100	100	0.09 ppbv	0.56 ppbc	No
Godley FM 2331 (2G)	7/13/2013	11/8/2021	95	99	0.07 ppbv	0.41 ppbc	No	100	100	0.04 ppbv	0.21 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	11/8/2021	95	99	0.07 ppbv	0.45 ppbc	No	99	100	0.03 ppbv	0.19 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	11/10/2021	96	99	0.16 ppbv	0.96 ppbc	No	100	100	0.22 ppbv	1.31 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	11/23/2021	95	99	0.12 ppbv	0.74 ppbc	No	97	100	0.13 ppbv	0.80 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	11/9/2021	96	98	0.10 ppbv	0.59 ppbc	No	100	88 ⁴	0.10 ppbv	0.60 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	11/10/2021	95	99	0.10 ppbv	0.63 ppbc	No	93	98	0.10 ppbv	0.59 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	11/9/2021	94	99	0.09 ppbv	0.53 ppbc	No	96	100	0.14 ppbv	0.83 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

⁴ Met data capture at Mansfield Flying L Lane below 90% due to a wind sensor malfunction

Summary of Canister Data through March 2022

Site Name	Start Date	Last QA Audit	To Date					March				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/9/2021	531	523	98 ²	0.17 ppbv	99	5	5	100 ²	0.21 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/8/2021	525	521	98	0.16 ppbv	99	5	5	100	0.17 ppbv	100
Lancaster Cedardale	9/1/2013	11/9/2021	523	520	99	0.18 ppbv	99	5	5	100	0.22 ppbv	100
Gainesville Doss	10/1/2013	11/9/2021	516	508	98	0.19 ppbv	99	5	5	100	0.21 ppbv	100
Weatherford Highway 180	10/13/2013	11/8/2021	444	440	99	0.16 ppbv	99	5	5	100	0.16 ppbv	100
Bowie Patterson St.	10/31/2013	11/8/2021	516	507	99	0.18 ppbv	99	5	5	100	0.20 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/8/2021	463	461	99	0.16 ppbv	99	5	5	100	0.24 ppbv	100
Wichita Falls MWSU	12/19/2013	11/9/2021	505	496	99	0.15 ppbv	99	5	5	100	0.19 ppbv	100

General Comments:

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- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through April 2022

Site Name	Start Date	Last QA Audit	To Date					April				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	4/26/2022	96	99	0.14 ppbv	0.82 ppbc	No	99	100	0.08 ppbv	0.45 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	4/27/2022	96	98 ²	0.09 ppbv	0.57 ppbc	No	94	99 ²	0.07 ppbv	0.39 ppbc	No
Dish Airfield (2D)	5/8/2013	4/26/2022	97	99	0.11 ppbv	0.69 ppbc	No	99	100	0.08 ppbv	0.47 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	4/26/2022	97	99	0.09 ppbv	0.56 ppbc	No	98	100	0.06 ppbv	0.36 ppbc	No
Everman Johnson Park (2J)	5/8/2013	4/25/2022	96	99	0.09 ppbv	0.52 ppbc	No	94	100	0.06 ppbv	0.36 ppbc	No
Decatur Thompson (2T)	6/5/2013	4/27/2022	97	99	0.10 ppbv	0.59 ppbc	No	100	100	0.07 ppbv	0.41 ppbc	No
Godley FM 2331 (2G)	7/13/2013	4/28/2022	95	99	0.07 ppbv	0.41 ppbc	No	98	100	0.02 ppbv	0.11 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	4/27/2022	95	99	0.07 ppbv	0.44 ppbc	No	65 ³	100	0.05 ppbv	0.28 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	4/26/2022	96	99	0.16 ppbv	0.95 ppbc	No	99	100	0.10 ppbv	0.59 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	4/25/2022	95	99	0.12 ppbv	0.74 ppbc	No	100	100	0.10 ppbv	0.59 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	4/25/2022	97	98	0.10 ppbv	0.59 ppbc	No	98	100	0.08 ppbv	0.45 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	4/27/2022	95	99	0.10 ppbv	0.62 ppbc	No	98	100	0.07 ppbv	0.44 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	4/25/2022	95	99	0.09 ppbv	0.53 ppbc	No	99	100	0.09 ppbv	0.56 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ; April 2022 data are unvalidated

³ AutoGC data capture at Fort Worth Benbrook Lake was below 80% due to multiple machine malfunctions

Summary of Canister Data through April 2022

Site Name	Start Date	Last QA Audit	To Date					April				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	4/26/2022	536	528	98 ²	0.17 ppbv	99	5	5	100 ²	0.20 ppbv	100
Mineral Wells 23rd St.	8/21/2013	4/25/2022	530	526	98	0.16 ppbv	99	5	5	100	0.15 ppbv	100
Lancaster Cedardale	9/1/2013	4/26/2022	528	524	99	0.18 ppbv	99	5	4 ³	100	0.19 ppbv	100
Gainesville Doss	10/1/2013	4/26/2022	521	513	98	0.19 ppbv	99	5	5	100	0.16 ppbv	100
Weatherford Highway 180	10/13/2013	4/25/2022	449	445	99	0.16 ppbv	99	5	5	100	0.16 ppbv	100
Bowie Patterson St.	10/31/2013	4/25/2022	521	512	99	0.18 ppbv	99	5	5	100	0.14 ppbv	100
Abilene N. 3rd St.	12/18/2013	4/25/2022	468	465	99	0.16 ppbv	99	5	4 ³	100	0.18 ppbv	100
Wichita Falls MWSU	12/19/2013	4/25/2022	510	500	99	0.15 ppbv	99	5	4 ³	100	0.17 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ; April 2022 data are unvalidated

³ Lancaster Cedardale, Abilene N. 3rd St, and Wichita Falls MWSU 4/17/22 canister samples were invalid due to lab analysis error

Summary of Auto GC Data through May 2022

Site Name	Start Date	Last QA Audit	To Date					May				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	4/26/2022	96	99	0.14 ppbv	0.82 ppbc	No	100	100	0.07 ppbv	0.40 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	4/27/2022	96	98 ²	0.09 ppbv	0.57 ppbc	No	100	70 ²	0.06 ppbv	0.33 ppbc	No
Dish Airfield (2D)	5/8/2013	4/26/2022	97	99	0.11 ppbv	0.68 ppbc	No	99	100	0.07 ppbv	0.42 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	4/26/2022	97	99	0.09 ppbv	0.56 ppbc	No	99	98	0.05 ppbv	0.28 ppbc	No
Everman Johnson Park (2J)	5/8/2013	4/25/2022	96	99	0.09 ppbv	0.52 ppbc	No	88 ³	100	0.06 ppbv	0.36 ppbc	No
Decatur Thompson (2T)	6/5/2013	4/27/2022	97	99	0.10 ppbv	0.58 ppbc	No	100	100	0.06 ppbv	0.35 ppbc	No
Godley FM 2331 (2G)	7/13/2013	4/28/2022	95	99	0.07 ppbv	0.41 ppbc	No	71 ⁴	100	0.02 ppbv	0.10 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	4/27/2022	95	99	0.07 ppbv	0.44 ppbc	No	89	100	0.07 ppbv	0.41 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	4/26/2022	96	99	0.16 ppbv	0.95 ppbc	No	93	100	0.11 ppbv	0.63 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	4/25/2022	95	99	0.12 ppbv	0.74 ppbc	No	100	100	0.09 ppbv	0.52 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	4/25/2022	97	98	0.10 ppbv	0.59 ppbc	No	100	100	0.06 ppbv	0.37 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	4/27/2022	95	99	0.10 ppbv	0.62 ppbc	No	86	100	0.06 ppbv	0.39 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	4/25/2022	95	99	0.09 ppbv	0.53 ppbc	No	100	100	0.08 ppbv	0.50 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

⁴ Auto-GC Data capture at Godley FM 2331 is below 80% due to various mechanical failures

Summary of Canister Data through May 2022

Site Name	Start Date	Last QA Audit	To Date					May				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	4/26/2022	541	533	98 ²	0.17 ppbv	99	5	5	100 ²	0.22 ppbv	100
Mineral Wells 23rd St.	8/21/2013	4/25/2022	535	531	98	0.16 ppbv	99	5	5	100	0.18 ppbv	100
Lancaster Cedardale	9/1/2013	4/26/2022	533	529	99	0.18 ppbv	99	5	5	100	0.16 ppbv	100
Gainesville Doss	10/1/2013	4/26/2022	526	518	98	0.19 ppbv	99	5	5	100	0.15 ppbv	100
Weatherford Highway 180	10/13/2013	4/25/2022	454	450	99	0.16 ppbv	99	5	5	100	0.16 ppbv	100
Bowie Patterson St.	10/31/2013	4/25/2022	526	517	99	0.18 ppbv	99	5	5	100	0.16 ppbv	100
Abilene N. 3rd St.	12/18/2013	4/25/2022	473	470	99	0.16 ppbv	99	5	5	100	0.15 ppbv	100
Wichita Falls MWSU	12/19/2013	4/25/2022	515	505	99	0.15 ppbv	99	5	5	100	0.14 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through June 2022

Site Name	Start Date	Last QA Audit	To Date					June				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	4/26/2022	96	99	0.14 ppbv	0.81 ppbc	No	98	100	0.05 ppbv	0.29 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	4/27/2022	96	98 ²	0.09 ppbv	0.57 ppbc	No	100	100 ²	0.04 ppbv	0.26 ppbc	No
Dish Airfield (2D)	5/8/2013	4/26/2022	97	99	0.11 ppbv	0.68 ppbc	No	95	100	0.07 ppbv	0.42 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	4/26/2022	97	99	0.09 ppbv	0.56 ppbc	No	100	100	0.04 ppbv	0.22 ppbc	No
Everman Johnson Park (2J)	5/8/2013	4/25/2022	96	99	0.09 ppbv	0.51 ppbc	No	100	100	0.04 ppbv	0.25 ppbc	No
Decatur Thompson (2T)	6/5/2013	4/27/2022	97	99	0.10 ppbv	0.58 ppbc	No	84 ³	100	0.06 ppbv	0.36 ppbc	No
Godley FM 2331 (2G)	7/13/2013	4/28/2022	95	99	0.07 ppbv	0.40 ppbc	No	97	100	0.01 ppbv	0.03 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	4/27/2022	95	99	0.07 ppbv	0.44 ppbc	No	99	100	0.01 ppbv	0.06 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	4/26/2022	96	99	0.16 ppbv	0.95 ppbc	No	90	100	0.08 ppbv	0.48 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	4/25/2022	95	99	0.12 ppbv	0.73 ppbc	No	99	100	0.07 ppbv	0.42 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	4/25/2022	97	98	0.10 ppbv	0.58 ppbc	No	100	100	0.05 ppbv	0.28 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	4/27/2022	95	99	0.10 ppbv	0.62 ppbc	No	100	100	0.05 ppbv	0.29 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	4/25/2022	95	99	0.09 ppbv	0.53 ppbc	No	99	100	0.06 ppbv	0.38 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through June 2022

Site Name	Start Date	Last QA Audit	To Date					June				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	4/26/2022	546	538	98 ²	0.18 ppbv	99	5	5	100 ²	0.58 ppbv	100
Mineral Wells 23rd St.	8/21/2013	4/25/2022	540	536	98	0.16 ppbv	99	5	5	100	0.91 ppbv	100
Lancaster Cedardale	9/1/2013	4/26/2022	538	534	99	0.18 ppbv	99	5	5	100	0.35 ppbv	100
Gainesville Doss	10/1/2013	4/26/2022	531	523	98	0.20 ppbv	99	5	5	88 ³	0.61 ppbv	100
Weatherford Highway 180	10/13/2013	4/25/2022	459	455	99	0.16 ppbv	99	5	5	100	0.47 ppbv	100
Bowie Patterson St.	10/31/2013	4/25/2022	531	522	99	0.18 ppbv	99	5	5	100	0.63 ppbv	100
Abilene N. 3rd St.	12/18/2013	4/25/2022	478	475	99	0.16 ppbv	99	5	5	100	0.47 ppbv	100
Wichita Falls MWSU	12/19/2013	4/25/2022	520	510	99	0.16 ppbv	99	5	5	100	0.89 ppbv	100

General Comments:

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- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Gainesville Doss was below 90% due to a machine malfunction

Summary of Auto GC Data through July 2022

Site Name	Start Date	Last QA Audit	To Date					July				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	4/26/2022	96	99	0.13 ppbv	0.81 ppbc	No	100	100	0.03 ppbv	0.20 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	4/27/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	100	100 ²	0.03 ppbv	0.19 ppbc	No
Dish Airfield (2D)	5/8/2013	4/26/2022	96	99	0.11 ppbv	0.68 ppbc	No	88	100	0.04 ppbv	0.24 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	4/26/2022	97	99	0.09 ppbv	0.55 ppbc	No	100	100	0.02 ppbv	0.14 ppbc	No
Everman Johnson Park (2J)	5/8/2013	4/25/2022	96	99	0.08 ppbv	0.51 ppbc	No	100	100	0.03 ppbv	0.17 ppbc	No
Decatur Thompson (2T)	6/5/2013	4/27/2022	97	99	0.10 ppbv	0.58 ppbc	No	99	100	0.05 ppbv	0.31 ppbc	No
Godley FM 2331 (2G)	7/13/2013	4/28/2022	95	99	0.07 ppbv	0.40 ppbc	No	99	100	0.00 ppbv	0.02 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	4/27/2022	95	99	0.07 ppbv	0.44 ppbc	No	79 ³	100	0.01 ppbv	0.04 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	4/26/2022	96	99	0.16 ppbv	0.94 ppbc	No	86	100	0.08 ppbv	0.50 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	4/25/2022	95	99	0.12 ppbv	0.73 ppbc	No	100	100	0.05 ppbv	0.33 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	4/25/2022	97	98	0.10 ppbv	0.58 ppbc	No	100	100	0.03 ppbv	0.17 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	4/27/2022	95	99	0.10 ppbv	0.61 ppbc	No	99	100	0.04 ppbv	0.23 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	4/25/2022	95	99	0.09 ppbv	0.53 ppbc	No	99	100	0.05 ppbv	0.31 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through July 2022

Site Name	Start Date	Last QA Audit	To Date					July				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	4/26/2022	551	543	98 ²	0.18 ppbv	99	5	5	100 ²	1.02 ppbv	100
Mineral Wells 23rd St.	8/21/2013	4/25/2022	545	541	99	0.17 ppbv	99	5	5	100	1.07 ppbv	100
Lancaster Cedardale	9/1/2013	4/26/2022	543	539	99	0.19 ppbv	99	5	5	100	0.91 ppbv	100
Gainesville Doss	10/1/2013	4/26/2022	536	528	98	0.20 ppbv	99	5	5	100	1.05 ppbv	100
Weatherford Highway 180	10/13/2013	4/25/2022	464	460	99	0.17 ppbv	99	5	5	100	0.84 ppbv	100
Bowie Patterson St.	10/31/2013	4/25/2022	536	527	99	0.19 ppbv	99	5	5	100	1.00 ppbv	100
Abilene N. 3rd St.	12/18/2013	4/25/2022	483	480	99	0.17 ppbv	99	5	5	100	1.12 ppbv	100
Wichita Falls MWSU	12/19/2013	4/25/2022	525	515	99	0.17 ppbv	99	5	5	100	1.05 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV
- Benzene was flagged in the majority of July 2022 canister samples due to elevated concentrations in the laboratory blanks

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through August 2022

Site Name	Start Date	Last QA Audit	To Date					August				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	4/26/2022	96	99	0.13 ppbv	0.81 ppbc	No	87	100	0.07 ppbv	0.40 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	4/27/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	97	100 ²	0.04 ppbv	0.25 ppbc	No
Dish Airfield (2D)	5/8/2013	4/26/2022	96	99	0.11 ppbv	0.67 ppbc	No	96	100	0.04 ppbv	0.26 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	4/26/2022	97	99	0.09 ppbv	0.55 ppbc	No	99	100	0.03 ppbv	0.20 ppbc	No
Everman Johnson Park (2J)	5/8/2013	4/25/2022	96	99	0.08 ppbv	0.51 ppbc	No	92	100	0.04 ppbv	0.24 ppbc	No
Decatur Thompson (2T)	6/5/2013	4/27/2022	97	99	0.10 ppbv	0.58 ppbc	No	100	100	0.05 ppbv	0.31 ppbc	No
Godley FM 2331 (2G)	7/13/2013	4/28/2022	95	99	0.07 ppbv	0.40 ppbc	No	69 ³	100	0.04 ppbv	0.23 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	4/27/2022	95	99	0.07 ppbv	0.43 ppbc	No	63 ³	100	0.05 ppbv	0.31 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	4/26/2022	96	99	0.16 ppbv	0.94 ppbc	No	89 ³	100	0.11 ppbv	0.64 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	4/25/2022	95	99	0.12 ppbv	0.73 ppbc	No	98	100	0.07 ppbv	0.42 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	4/25/2022	97	98	0.10 ppbv	0.58 ppbc	No	100	100	0.04 ppbv	0.27 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	4/27/2022	95	99	0.10 ppbv	0.61 ppbc	No	99	100	0.05 ppbv	0.27 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	4/25/2022	95	99	0.09 ppbv	0.53 ppbc	No	96	100	0.07 ppbv	0.41 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through August 2022

Site Name	Start Date	Last QA Audit	To Date					August				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	4/26/2022	556	548	98 ²	0.20 ppbv	99	5	5	100 ²	1.45 ppbv	100
Mineral Wells 23rd St.	8/21/2013	4/25/2022	550	546	99	0.20 ppbv	99	5	5	100	2.93 ppbv	100
Lancaster Cedardale	9/1/2013	4/26/2022	548	544	99	0.20 ppbv	99	5	5	92	1.53 ppbv	100
Gainesville Doss	10/1/2013	4/26/2022	541	533	98	0.22 ppbv	99	5	5	100	1.95 ppbv	100
Weatherford Highway 180	10/13/2013	4/25/2022	469	465	99	0.19 ppbv	99	5	5	100	2.25 ppbv	100
Bowie Patterson St.	10/31/2013	4/25/2022	541	532	99	0.20 ppbv	99	5	5	100	1.04 ppbv	100
Abilene N. 3rd St.	12/18/2013	4/25/2022	488	485	99	0.20 ppbv	99	5	5	100	2.63 ppbv	100
Wichita Falls MWSU	12/19/2013	4/25/2022	530	520	99	0.19 ppbv	99	5	5	100	1.93 ppbv	100

General Comments:

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- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV
- Benzene was flagged in most August 2022 canister samples due to elevated concentrations in the laboratory blanks

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through September 2022

Site Name	Start Date	Last QA Audit	To Date					September				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	4/26/2022	96	99	0.13 ppbv	0.81 ppbc	No	100	100	0.14 ppbv	0.83 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	4/27/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	100	100 ²	0.08 ppbv	0.50 ppbc	No
Dish Airfield (2D)	5/8/2013	4/26/2022	96	99	0.11 ppbv	0.67 ppbc	No	100	100	0.10 ppbv	0.60 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	4/26/2022	97	99	0.09 ppbv	0.55 ppbc	No	100	100	0.08 ppbv	0.46 ppbc	No
Everman Johnson Park (2J)	5/8/2013	4/25/2022	96	99	0.08 ppbv	0.51 ppbc	No	65 ³	100	0.12 ppbv	0.70 ppbc	No
Decatur Thompson (2T)	6/5/2013	4/27/2022	97	99	0.10 ppbv	0.58 ppbc	No	100	100	0.07 ppbv	0.44 ppbc	No
Godley FM 2331 (2G)	7/13/2013	4/28/2022	95	99	0.07 ppbv	0.40 ppbc	No	100	100	0.08 ppbv	0.48 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	4/27/2022	95	99	0.07 ppbv	0.43 ppbc	No	98	100	0.05 ppbv	0.30 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	4/26/2022	96	99	0.16 ppbv	0.94 ppbc	No	99	100	0.15 ppbv	0.93 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	4/25/2022	95	99	0.12 ppbv	0.73 ppbc	No	100	100	0.13 ppbv	0.76 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	4/25/2022	97	98	0.10 ppbv	0.57 ppbc	No	100	100	0.08 ppbv	0.50 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	4/27/2022	95	99	0.10 ppbv	0.61 ppbc	No	95	100	0.08 ppbv	0.51 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	4/25/2022	95	99	0.09 ppbv	0.53 ppbc	No	94	100	0.13 ppbv	0.78 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Auto-GC data capture below 80% at Everman Johnson Park due to a machine malfunction

Summary of Canister Data through September 2022

Site Name	Start Date	Last QA Audit	To Date					September				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	4/26/2022	561	553	98 ²	0.20 ppbv	99	5	5	100 ²	0.15 ppbv	100
Mineral Wells 23rd St.	8/21/2013	4/25/2022	555	551	99	0.20 ppbv	99	5	5	100	0.12 ppbv	100
Lancaster Cedardale	9/1/2013	4/26/2022	553	549	99	0.21 ppbv	99	5	5	100	0.98 ppbv	100
Gainesville Doss	10/1/2013	4/26/2022	546	538	98	0.22 ppbv	99	5	5	100	0.19 ppbv	100
Weatherford Highway 180	10/13/2013	4/25/2022	474	469	99	0.20 ppbv	99	5	4	100	1.12 ppbv	100
Bowie Patterson St.	10/31/2013	4/25/2022	546	537	99	0.20 ppbv	99	5	5	100	0.16 ppbv	100
Abilene N. 3rd St.	12/18/2013	4/25/2022	493	490	99	0.21 ppbv	99	5	5	100	1.02 ppbv	100
Wichita Falls MWSU	12/19/2013	4/25/2022	533	525	99	0.19 ppbv	99	5	5	100	0.11 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV
- Benzene was flagged in some September 2022 canister samples due to elevated concentrations in the laboratory blanks

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through October 2022

Site Name	Start Date	Last QA Audit	To Date					October				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	4/26/2022	96	99	0.13 ppbv	0.81 ppbc	No	91	100	0.18 ppbv	1.10 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	4/27/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	99	100 ²	0.10 ppbv	0.61 ppbc	No
Dish Airfield (2D)	5/8/2013	4/26/2022	97	99	0.11 ppbv	0.67 ppbc	No	100	100	0.11 ppbv	0.65 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	4/26/2022	97	99	0.09 ppbv	0.55 ppbc	No	94	100	0.09 ppbv	0.52 ppbc	No
Everman Johnson Park (2J)	5/8/2013	4/25/2022	96	99	0.09 ppbv	0.51 ppbc	No	98	100	0.15 ppbv	0.88 ppbc	No
Decatur Thompson (2T)	6/5/2013	4/27/2022	97	99	0.10 ppbv	0.57 ppbc	No	98	100	0.08 ppbv	0.50 ppbc	No
Godley FM 2331 (2G)	7/13/2013	4/28/2022	95	99	0.07 ppbv	0.40 ppbc	No	99	100	0.09 ppbv	0.54 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	4/27/2022	95	99	0.07 ppbv	0.43 ppbc	No	95	100	0.06 ppbv	0.38 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	4/26/2022	96	99	0.16 ppbv	0.94 ppbc	No	98	100	0.23 ppbv	1.39 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	4/25/2022	95	99	0.12 ppbv	0.73 ppbc	No	100	100	0.16 ppbv	0.98 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	4/25/2022	97	98	0.10 ppbv	0.58 ppbc	No	98	100	0.10 ppbv	0.59 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	4/27/2022	95	99	0.10 ppbv	0.61 ppbc	No	98	100	0.09 ppbv	0.57 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	4/25/2022	95	99	0.09 ppbv	0.53 ppbc	No	88 ³	100	0.17 ppbv	1.04 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through October 2022

Site Name	Start Date	Last QA Audit	To Date					October				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	4/26/2022	566	558	98 ²	0.20 ppbv	99	5	5	100 ²	0.21 ppbv	100
Mineral Wells 23rd St.	8/21/2013	4/25/2022	560	556	99	0.20 ppbv	99	5	5	100	0.15 ppbv	100
Lancaster Cedardale	9/1/2013	4/26/2022	558	554	99	0.21 ppbv	99	5	5	100	0.22 ppbv	100
Gainesville Doss	10/1/2013	4/26/2022	551	543	98	0.22 ppbv	99	5	5	100	0.22 ppbv	100
Weatherford Tin Top Road	10/13/2013	4/25/2022	479	474	99	0.20 ppbv	99	5	5	100	0.13 ppbv	100
Bowie Patterson St.	10/31/2013	4/25/2022	551	542	99	0.20 ppbv	99	5	5	100	0.20 ppbv	100
Abilene N. 3rd St.	12/18/2013	4/25/2022	498	495	99	0.21 ppbv	99	5	5	100	0.15 ppbv	100
Wichita Falls MWSU	12/19/2013	4/25/2022	540	530	99	0.19 ppbv	99	5	5	96	0.15 ppbv	100

General Comments:

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- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV
- Benzene was flagged in some October 2022 canister samples due to elevated concentrations in the laboratory blanks

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through November 2022

Site Name	Start Date	Last QA Audit	To Date					November				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	4/26/2022	96	99	0.13 ppbv	0.81 ppbc	No	99	100	0.17 ppbv	1.05 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	4/27/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	100 ²	100 ²	0.10 ppbv	0.62 ppbc	No
Dish Airfield (2D)	5/8/2013	4/26/2022	96	99	0.11 ppbv	0.67 ppbc	No	88	84 ⁴	0.11 ppbv	0.67 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	4/26/2022	97	99	0.09 ppbv	0.55 ppbc	No	96	100	0.11 ppbv	0.65 ppbc	No
Everman Johnson Park (2J)	5/8/2013	4/25/2022	96	99	0.09 ppbv	0.52 ppbc	No	100	100	0.13ppbv	0.80 ppbc	No
Decatur Thompson (2T)	6/5/2013	4/27/2022	97	99	0.10 ppbv	0.57 ppbc	No	92	100	0.09 ppbv	0.54 ppbc	No
Godley FM 2331 (2G)	7/13/2013	4/28/2022	95	99	0.07 ppbv	0.40 ppbc	No	99	100	0.11 ppbv	0.63 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	4/27/2022	95	99	0.07 ppbv	0.43 ppbc	No	98	100	0.05 ppbv	0.33 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	4/26/2022	96	99	0.16 ppbv	0.95 ppbc	No	100	100	0.20 ppbv	1.19 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	4/25/2022	95	99	0.12 ppbv	0.73 ppbc	No	91 ³	100	0.18 ppbv	1.09 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	4/25/2022	97	98	0.10 ppbv	0.58 ppbc	No	97	100	0.11 ppbv	0.66 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	4/27/2022	95	99	0.10 ppbv	0.61 ppbc	No	93	100	0.10 ppbv	0.60 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	4/25/2022	95	99	0.09 ppbv	0.54 ppbc	No	100	100	0.16 ppbv	0.96 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

⁴ Met data capture at Dish Airfield was below 90% due to a wind speed sensor error

Summary of Canister Data through November 2022

Site Name	Start Date	Last QA Audit	To Date					November				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/10/2022	571	563	98 ²	0.20 ppbv	99	5	5	99 ²	0.21 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/09/2022	565	561	99	0.20 ppbv	99	5	5	100	0.15 ppbv	100
Lancaster Cedardale	9/1/2013	11/09/2022	563	559	99	0.21 ppbv	99	5	5	100	0.22 ppbv	100
Gainesville Doss	10/1/2013	11/10/2022	556	548	98	0.22 ppbv	99	5	5	100	0.22 ppbv	100
Weatherford Tin Top Road	10/13/2013	11/09/2022	484	479	99	0.20 ppbv	99	5	5	100	0.16 ppbv	100
Bowie Patterson St.	10/31/2013	11/10/2022	556	547	99	0.20 ppbv	99	5	5	100	0.19 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/11/2022	503	500	99	0.21 ppbv	99	5	5	100	0.16 ppbv	100
Wichita Falls MWSU	12/19/2013	11/10/2022	545	535	99	0.19 ppbv	99	5	5	96	0.18 ppbv	100

General Comments:

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- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through December 2022

Site Name	Start Date	Last QA Audit	To Date					December				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	12/06/2022	96	99	0.14 ppbv	0.81 ppbc	No	99	100	0.20 ppbv	1.19 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	12/07/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	95	100 ²	0.12 ppbv	0.72 ppbc	No
Dish Airfield (2D)	5/8/2013	12/07/2022	96	99	0.11 ppbv	0.67 ppbc	No	97	100	0.12 ppbv	0.73 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	12/08/2022	97	99	0.09 ppbv	0.55 ppbc	No	98	100	0.12 ppbv	0.69 ppbc	No
Everman Johnson Park (2J)	5/8/2013	12/08/2022	96	99	0.09 ppbv	0.52 ppbc	No	99	100	0.17 ppbv	1.01 ppbc	No
Decatur Thompson (2T)	6/5/2013	12/09/2022	97	99	0.10 ppbv	0.58 ppbc	No	99	100	0.11 ppbv	0.64 ppbc	No
Godley FM 2331 (2G)	7/13/2013	12/08/2022	95	99	0.07 ppbv	0.41 ppbc	No	84	77 ⁴	0.12 ppbv	0.75 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	12/08/2022	95	99	0.07 ppbv	0.43 ppbc	No	100	100	0.06 ppbv	0.38 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	12/06/2022	96	99	0.16 ppbv	0.95 ppbc	No	92	98	0.28 ppbv	1.71 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	12/06/2022	95	99	0.12 ppbv	0.74 ppbc	No	97	99	0.18 ppbv	1.10 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	12/07/2022	97	98	0.10 ppbv	0.58 ppbc	No	100	100	0.13 ppbv	0.76 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	12/05/2022	95	99	0.10 ppbv	0.61 ppbc	No	84 ³	100	0.12 ppbv	0.70 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	12/07/2022	95	99	0.09 ppbv	0.54 ppbc	No	99	100	0.18 ppbv	1.06 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

⁴ Met data capture at Godley FM 2331 was below 90% due to a wind sensor malfunction

Summary of Canister Data through December 2022

Site Name	Start Date	Last QA Audit	To Date					December				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/10/2022	577	569	98 ²	0.20 ppbv	99	6	6	97 ²	0.25 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/09/2022	571	567	99	0.20 ppbv	99	6	6	100	0.19 ppbv	100
Lancaster Cedardale	9/1/2013	11/09/2022	569	565	99	0.21 ppbv	99	6	6	100	0.21 ppbv	100
Gainesville Doss	10/1/2013	11/10/2022	562	554	98	0.22 ppbv	99	6	6	100	0.25 ppbv	100
Weatherford Tin Top Road	10/13/2013	11/09/2022	490	485	99	0.20 ppbv	99	6	6	100	0.20 ppbv	100
Bowie Patterson St.	10/31/2013	11/10/2022	562	553	99	0.20 ppbv	99	6	6	100	0.21 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/11/2022	509	506	99	0.21 ppbv	99	6	6	100	0.18 ppbv	100
Wichita Falls MWSU	12/19/2013	11/10/2022	551	541	99	0.19 ppbv	99	6	6	100	0.19 ppbv	100

General Comments:

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- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through January 2023

Site Name	Start Date	Last QA Audit	To Date					January				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	12/06/2022	96	99	0.14 ppbv	0.82 ppbc	No	100	100	0.20 ppbv	1.20 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	12/07/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	99	100 ²	0.11 ppbv	0.65 ppbc	No
Dish Airfield (2D)	5/8/2013	12/07/2022	96	99	0.11 ppbv	0.67 ppbc	No	100	100	0.11 ppbv	0.67 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	12/08/2022	97	99	0.09 ppbv	0.55 ppbc	No	100	100	0.11 ppbv	0.64 ppbc	No
Everman Johnson Park (2J)	5/8/2013	12/08/2022	96	99	0.09 ppbv	0.52 ppbc	No	100	100	0.15 ppbv	0.91 ppbc	No
Decatur Thompson (2T)	6/5/2013	12/09/2022	97	99	0.10 ppbv	0.58 ppbc	No	94	100	0.10 ppbv	0.58 ppbc	No
Godley FM 2331 (2G)	7/13/2013	12/08/2022	95	99	0.07 ppbv	0.41 ppbc	No	99	98	0.12 ppbv	0.73 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	12/08/2022	95	99	0.07 ppbv	0.43 ppbc	No	100	91	0.06 ppbv	0.34 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	12/06/2022	96	99	0.16 ppbv	0.95 ppbc	No	93	100	0.19 ppbv	1.12 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	12/06/2022	95	99	0.12 ppbv	0.74 ppbc	No	82	100	0.17 ppbv	1.02 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	12/07/2022	97	98	0.10 ppbv	0.58 ppbc	No	100	98	0.12 ppbv	0.74 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	12/05/2022	95	99	0.10 ppbv	0.61 ppbc	No	100	100	0.11 ppbv	0.64 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	12/07/2022	95	99	0.09 ppbv	0.55 ppbc	No	100	100	0.16 ppbv	0.96 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Canister Data through January 2023

Site Name	Start Date	Last QA Audit	To Date					January				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/10/2022	582	574	98 ²	0.20 ppbv	99	5	5	82 ²	0.19 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/09/2022	576	572	99	0.20 ppbv	99	5	5	100	0.16 ppbv	100
Lancaster Cedardale	9/1/2013	11/09/2022	574	570	99	0.21 ppbv	99	5	5	98	0.20 ppbv	100
Gainesville Doss	10/1/2013	11/10/2022	567	559	98	0.22 ppbv	99	5	5	100	0.20 ppbv	100
Weatherford Tin Top Road	10/13/2013	11/09/2022	495	490	99	0.20 ppbv	99	5	5	100	0.16 ppbv	100
Bowie Patterson St.	10/31/2013	11/10/2022	567	558	99	0.20 ppbv	99	5	5	100	0.18 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/11/2022	514	511	99	0.20 ppbv	99	5	5	100	0.16 ppbv	100
Wichita Falls MWSU	12/19/2013	11/10/2022	556	546	99	0.19 ppbv	99	5	5	100	0.17 ppbv	100

General Comments:

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- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through February 2023

Site Name	Start Date	Last QA Audit	To Date					February				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	12/06/2022	96	99	0.14 ppbv	0.82 ppbc	No	99	100	0.16 ppbv	0.99 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	12/07/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	100	93 ²	0.10 ppbv	0.60 ppbc	No
Dish Airfield (2D)	5/8/2013	12/07/2022	96	99	0.11 ppbv	0.67 ppbc	No	100	95	0.10 ppbv	0.58 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	12/08/2022	97	99	0.09 ppbv	0.55 ppbc	No	99	82 ³	0.10 ppbv	0.62 ppbc	No
Everman Johnson Park (2J)	5/8/2013	12/08/2022	96	99	0.09 ppbv	0.53 ppbc	No	93	100	0.13 ppbv	0.79 ppbc	No
Decatur Thompson (2T)	6/5/2013	12/09/2022	97	99	0.10 ppbv	0.57 ppbc	No	100	100	0.09 ppbv	0.55 ppbc	No
Godley FM 2331 (2G)	7/13/2013	12/08/2022	95	99	0.07 ppbv	0.41 ppbc	No	100	91	0.11 ppbv	0.66 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	12/08/2022	95	99	0.07 ppbv	0.43 ppbc	No	94	98	0.06 ppbv	0.36 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	12/06/2022	96	99	0.16 ppbv	0.96 ppbc	No	100	100	0.18 ppbv	1.08 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	12/06/2022	95	99	0.12 ppbv	0.74 ppbc	No	95	100	0.16 ppbv	0.96 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	12/07/2022	97	98	0.10 ppbv	0.58 ppbc	No	82	92	0.12 ppbv	0.74 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	12/05/2022	95	99	0.10 ppbv	0.61 ppbc	No	99	100	0.10 ppbv	0.58 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	12/07/2022	95	99	0.09 ppbv	0.55 ppbc	No	99	100	0.13 ppbv	0.81 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Flower Mound Shiloh was below 90% due to a sensor malfunction.

Summary of Canister Data through February 2023

Site Name	Start Date	Last QA Audit	To Date					February				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/10/2022	586	578	97 ²	0.20 ppbv	99	4	4	31 ²	0.28 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/09/2022	580	576	99	0.20 ppbv	99	4	4	100	0.19 ppbv	100
Lancaster Cedardale	9/1/2013	11/09/2022	578	574	99	0.21 ppbv	99	4	4	84 ³	0.32 ppbv	100
Gainesville Doss	10/1/2013	11/10/2022	571	563	98	0.22 ppbv	99	4	4	100	0.33 ppbv	100
Weatherford Tin Top Road	10/13/2013	11/09/2022	499	494	99	0.20 ppbv	99	4	4	100	0.21 ppbv	100
Bowie Patterson St.	10/31/2013	11/10/2022	571	562	99	0.20 ppbv	99	4	4	100	0.27 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/11/2022	518	515	99	0.20 ppbv	99	4	4	100	0.23 ppbv	100
Wichita Falls MWSU	12/19/2013	11/10/2022	560	550	99	0.19 ppbv	99	4	4	100	0.24 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Lancaster Cedardale was below 90% due to a hardware malfunction.

Summary of Auto GC Data through March 2023

Site Name	Start Date	Last QA Audit	To Date					March				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	12/06/2022	96	99	0.14 ppbv	0.82 ppbc	No	100	100	0.14 ppbv	0.86 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	12/07/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	88 ³	82 ²	0.09 ppbv	0.55 ppbc	No
Dish Airfield (2D)	5/8/2013	12/07/2022	96	99	0.11 ppbv	0.67 ppbc	No	92 ³	100	0.09 ppbv	0.55 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	12/08/2022	97	99	0.09 ppbv	0.55 ppbc	No	90 ³	100	0.10 ppbv	0.59 ppbc	No
Everman Johnson Park (2J)	5/8/2013	12/08/2022	96	99	0.09 ppbv	0.53 ppbc	No	94	100	0.11 ppbv	0.64 ppbc	No
Decatur Thompson (2T)	6/5/2013	12/09/2022	97	99	0.10 ppbv	0.58 ppbc	No	100	100	0.10 ppbv	0.59 ppbc	No
Godley FM 2331 (2G)	7/13/2013	12/08/2022	95	99	0.07 ppbv	0.41 ppbc	No	100	100	0.10 ppbv	0.60 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	12/08/2022	95	99	0.07 ppbv	0.43 ppbc	No	100	100	0.07 ppbv	0.41 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	12/06/2022	96	99	0.16 ppbv	0.96 ppbc	No	100	100	0.17 ppbv	1.02 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	12/06/2022	95	99	0.12 ppbv	0.74 ppbc	No	100	100	0.14 ppbv	0.85 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	12/07/2022	97	98	0.10 ppbv	0.58 ppbc	No	95	100	0.11 ppbv	0.66 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	12/05/2022	95	99	0.10 ppbv	0.61 ppbc	No	92	100	0.08 ppbv	0.48 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	12/07/2022	95	99	0.09 ppbv	0.55 ppbc	No	100	100	0.13 ppbv	0.80 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through March 2023

Site Name	Start Date	Last QA Audit	To Date					March				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/10/2022	592	584	97 ²	0.20 ppbv	99	6	6	100 ²	0.20 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/09/2022	586	582	99	0.20 ppbv	99	6	6	100	0.17 ppbv	100
Lancaster Cedardale	9/1/2013	11/09/2022	584	580	99	0.21 ppbv	99	6	6	77 ³	0.21 ppbv	100
Gainesville Doss	10/1/2013	11/10/2022	577	569	98	0.22 ppbv	99	6	6	100	0.27 ppbv	100
Weatherford Tin Top Road	10/13/2013	11/09/2022	505	500	99	0.20 ppbv	99	6	6	100	0.18 ppbv	100
Bowie Patterson St.	10/31/2013	11/10/2022	577	568	99	0.20 ppbv	99	6	6	100	0.20 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/11/2022	524	521	99	0.20 ppbv	99	6	6	100	0.19 ppbv	100
Wichita Falls MWSU	12/19/2013	11/10/2022	566	556	99	0.19 ppbv	99	6	6	100	0.18 ppbv	100

General Comments:

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- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Lancaster Cedardale was below 90% due to a hardware malfunction

Summary of Auto GC Data through April 2023

Site Name	Start Date	Last QA Audit	To Date					April				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	12/06/2022	96	99	0.14 ppbv	0.82 ppbc	No	99	100	0.11 ppbv	0.66 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	12/07/2022	96	98 ²	0.09 ppbv	0.56 ppbc	No	100	92 ²	0.07 ppbv	0.42 ppbc	No
Dish Airfield (2D)	5/8/2013	12/07/2022	96	99	0.11 ppbv	0.67 ppbc	No	96	99	0.09 ppbv	0.53 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	12/08/2022	97	99	0.09 ppbv	0.55 ppbc	No	100	100	0.08 ppbv	0.50 ppbc	No
Everman Johnson Park (2J)	5/8/2013	12/08/2022	96	99	0.09 ppbv	0.53 ppbc	No	99	100	0.09 ppbv	0.52 ppbc	No
Decatur Thompson (2T)	6/5/2013	12/09/2022	97	99	0.10 ppbv	0.57 ppbc	No	94	100	0.08 ppbv	0.46 ppbc	No
Godley FM 2331 (2G)	7/13/2013	12/08/2022	95	99	0.07 ppbv	0.41 ppbc	No	100	100	0.07 ppbv	0.41 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	12/08/2022	95	99	0.07 ppbv	0.43 ppbc	No	93	100	0.05 ppbv	0.28 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	12/06/2022	96	99	0.16 ppbv	0.95 ppbc	No	95	99	0.13 ppbv	0.76 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	12/06/2022	95	99	0.12 ppbv	0.74 ppbc	No	100	100	0.10 ppbv	0.62 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	12/07/2022	97	98	0.10 ppbv	0.58 ppbc	No	100	100	0.08 ppbv	0.47 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	12/05/2022	95	99	0.10 ppbv	0.61 ppbc	No	100	100	0.06 ppbv	0.37 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	12/07/2022	95	99	0.09 ppbv	0.55 ppbc	No	92	100	0.11 ppbv	0.66 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Canister Data through April 2023

Site Name	Start Date	Last QA Audit	To Date					April				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	11/10/2022	597	589	97 ²	0.20 ppbv	99	5	5	100 ²	0.15 ppbv	100
Mineral Wells 23rd St.	8/21/2013	11/09/2022	591	587	99	0.20 ppbv	99	5	5	100	0.16 ppbv	100
Lancaster Cedardale	9/1/2013	11/09/2022	589	585	99	0.21 ppbv	99	5	5	100	0.16 ppbv	100
Gainesville Doss	10/1/2013	11/10/2022	582	574	98	0.22 ppbv	99	5	5	100	0.17 ppbv	100
Weatherford Tin Top Road	10/13/2013	11/09/2022	510	505	99	0.20 ppbv	99	5	5	100	0.15 ppbv	100
Bowie Patterson St.	10/31/2013	11/10/2022	582	572	99	0.20 ppbv	99	5	4	87 ³	0.18 ppbv	100
Abilene N. 3rd St.	12/18/2013	11/11/2022	529	526	99	0.20 ppbv	99	5	5	99	0.13 ppbv	100
Wichita Falls MWSU	12/19/2013	11/10/2022	571	561	99	0.19 ppbv	99	5	5	100	0.16 ppbv	100

General Comments:

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- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Bowie Patterson St. was below 90% due to a hardware malfunction

Summary of Auto GC Data through May 2023

Site Name	Start Date	Last QA Audit	To Date					May				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	05/24/2023	96	99	0.14 ppbv	0.82 ppbc	No	92 ³	100	0.15 ppbv	0.89 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	05/22/2023	96	98 ²	0.09 ppbv	0.56 ppbc	No	98	64 ²	0.09 ppbv	0.52 ppbc	No
Dish Airfield (2D)	5/8/2013	05/22/2023	96	99	0.11 ppbv	0.67 ppbc	No	98	100	0.10 ppbv	0.58 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	05/24/2023	97	99	0.09 ppbv	0.55 ppbc	No	99	100	0.09 ppbv	0.57 ppbc	No
Everman Johnson Park (2J)	5/8/2013	05/23/2023	96	99	0.09 ppbv	0.53 ppbc	No	90 ³	100	0.13 ppbv	0.75 ppbc	No
Decatur Thompson (2T)	6/5/2013	05/22/2023	97	99	0.10 ppbv	0.57 ppbc	No	100	100	0.06 ppbv	0.38 ppbc	No
Godley FM 2331 (2G)	7/13/2013	05/23/2023	95	99	0.07 ppbv	0.41 ppbc	No	89	100	0.09 ppbv	0.55 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	05/23/2023	95	99	0.07 ppbv	0.43 ppbc	No	100	100	0.09 ppbv	0.52 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	05/24/2023	96	99	0.16 ppbv	0.95 ppbc	No	97	100	0.14 ppbv	0.82 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	05/23/2023	95	99	0.12 ppbv	0.74 ppbc	No	100	100	0.12 ppbv	0.73 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	05/23/2023	97	98	0.10 ppbv	0.58 ppbc	No	88	99	0.09 ppbv	0.54 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	05/22/2023	95	99	0.10 ppbv	0.61 ppbc	No	99	100	0.08 ppbv	0.45 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	05/24/2023	95	99	0.09 ppbv	0.55 ppbc	No	96	100	0.13 ppbv	0.77 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through May 2023

Site Name	Start Date	Last QA Audit	To Date					May				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	05/23/2023	602	594	97 ²	0.20 ppbv	99	5	5	100 ²	0.21 ppbv	100
Mineral Wells 23rd St.	8/21/2013	05/23/2023	596	592	99	0.20 ppbv	99	5	5	100	0.19 ppbv	100
Lancaster Cedardale	9/1/2013	06/12/2023	594	590	99	0.21 ppbv	99	5	5	100	0.20 ppbv	100
Gainesville Doss	10/1/2013	05/22/2023	587	579	98	0.22 ppbv	99	5	5	79 ³	0.20 ppbv	100
Weatherford Tin Top Road	10/13/2013	05/23/2023	515	510	99	0.20 ppbv	99	5	5	100	0.18 ppbv	100
Bowie Patterson St.	10/31/2013	05/23/2023	587	577	99	0.20 ppbv	99	5	5	65 ⁴	0.18 ppbv	100
Abilene N. 3rd St.	12/18/2013	05/22/2023	534	531	99	0.20 ppbv	99	5	5	99	0.14 ppbv	100
Wichita Falls MWSU	12/19/2013	05/22/2023	576	566	99	0.19 ppbv	99	5	5	100	0.17 ppbv	100

General Comments:

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- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Gainesville Doss was below 90% due to a hardware malfunction

⁴ Met data capture at Bowie Patterson St. was below 90% due to a hardware malfunction

Summary of Auto GC Data through June 2023

Site Name	Start Date	Last QA Audit	To Date					June				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	05/24/2023	96	99	0.14 ppbv	0.82 ppbc	No	100	100	0.11 ppbv	0.63 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	05/22/2023	96	98 ²	0.09 ppbv	0.56 ppbc	No	100	62 ²	0.07 ppbv	0.39 ppbc	No
Dish Airfield (2D)	5/8/2013	05/22/2023	96	99	0.11 ppbv	0.67 ppbc	No	98	100	0.07 ppbv	0.44 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	05/24/2023	97	99	0.09 ppbv	0.55 ppbc	No	100	87 ³	0.07 ppbv	0.44 ppbc	No
Everman Johnson Park (2J)	5/8/2013	05/23/2023	96	99	0.09 ppbv	0.53 ppbc	No	100	100	0.09 ppbv	0.55 ppbc	No
Decatur Thompson (2T)	6/5/2013	05/22/2023	97	99	0.10 ppbv	0.57 ppbc	No	91	99	0.07 ppbv	0.40 ppbc	No
Godley FM 2331 (2G)	7/13/2013	05/23/2023	95	99	0.07 ppbv	0.41 ppbc	No	83	100	0.08 ppbv	0.48 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	05/23/2023	95	99	0.07 ppbv	0.43 ppbc	No	100	100	0.04 ppbv	0.27 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	05/24/2023	96	99	0.16 ppbv	0.95 ppbc	No	98	99	0.11 ppbv	0.65 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	05/23/2023	95	99	0.12 ppbv	0.74 ppbc	No	100	100	0.10 ppbv	0.59 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	05/23/2023	96	98	0.10 ppbv	0.58 ppbc	No	90	100	0.07 ppbv	0.43 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	05/22/2023	95	99	0.10 ppbv	0.60 ppbc	No	99	100	0.06 ppbv	0.34 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	05/24/2023	95	99	0.09 ppbv	0.55 ppbc	No	98	100	0.09 ppbv	0.55 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ Met data capture at Flower Mound Shiloh was below 90% due to a hardware malfunction

Summary of Canister Data through June 2023

Site Name	Start Date	Last QA Audit	To Date					June				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	05/23/2023	607	599	97 ²	0.20 ppbv	99	5	5	100 ²	0.17 ppbv	100
Mineral Wells 23rd St.	8/21/2013	05/23/2023	601	597	99	0.20 ppbv	99	5	5	100	0.20 ppbv	100
Lancaster Cedardale	9/1/2013	06/12/2023	599	595	99	0.21 ppbv	99	5	5	100	0.17 ppbv	100
Gainesville Doss	10/1/2013	05/22/2023	592	584	98	0.22 ppbv	99	5	5	100	0.16 ppbv	100
Weatherford Tin Top Road	10/13/2013	05/23/2023	520	515	99	0.20 ppbv	99	5	5	99	0.15 ppbv	100
Bowie Patterson St.	10/31/2013	05/23/2023	592	582	99	0.20 ppbv	99	5	5	100	0.17 ppbv	100
Abilene N. 3rd St.	12/18/2013	05/22/2023	539	536	99	0.20 ppbv	99	5	5	100	0.15 ppbv	100
Wichita Falls MWSU	12/19/2013	05/22/2023	581	571	99	0.18 ppbv	99	5	5	100	0.15 ppbv	100

General Comments:

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- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through July 2023

Site Name	Start Date	Last QA Audit	To Date					July				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	05/24/2023	96	99	0.14 ppbv	0.81 ppbc	No	94	100	0.06 ppbv	0.36 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	05/22/2023	96	98 ²	0.09 ppbv	0.56 ppbc	No	100	46 ²	0.04 ppbv	0.24 ppbc	No
Dish Airfield (2D)	5/8/2013	05/22/2023	96	99	0.11 ppbv	0.66 ppbc	No	88	100	0.05 ppbv	0.32 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	05/24/2023	97	99	0.09 ppbv	0.55 ppbc	No	100	100	0.05 ppbv	0.32 ppbc	No
Everman Johnson Park (2J)	5/8/2013	05/23/2023	96	99	0.09 ppbv	0.53 ppbc	No	89	100	0.05 ppbv	0.30 ppbc	No
Decatur Thompson (2T)	6/5/2013	05/22/2023	97	99	0.09 ppbv	0.57 ppbc	No	98	100	0.04 ppbv	0.25 ppbc	No
Godley FM 2331 (2G)	7/13/2013	05/23/2023	95	99	0.07 ppbv	0.41 ppbc	No	90	100	0.05 ppbv	0.27 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	05/23/2023	95	99	0.07 ppbv	0.42 ppbc	No	96	100	0.02 ppbv	0.11 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	05/24/2023	96	99	0.16 ppbv	0.95 ppbc	No	94	100	0.08 ppbv	0.50 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	05/23/2023	95	99	0.12 ppbv	0.74 ppbc	No	100	100	0.06 ppbv	0.34 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	05/23/2023	96	98	0.10 ppbv	0.58 ppbc	No	89	100	0.04 ppbv	0.27ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	05/22/2023	95	99	0.10 ppbv	0.60 ppbc	No	100	100	0.04 ppbv	0.21 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	05/24/2023	95	99	0.09 ppbv	0.55 ppbc	No	100	100	0.06 ppbv	0.36 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Canister Data through July 2023

Site Name	Start Date	Last QA Audit	To Date					July				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	05/23/2023	612	604	97 ²	0.20 ppbv	99	5	5	100 ²	0.15 ppbv	100
Mineral Wells 23rd St.	8/21/2013	05/23/2023	606	602	99	0.20 ppbv	99	5	5	100	0.12 ppbv	100
Lancaster Cedardale	9/1/2013	06/12/2023	604	600	99	0.21 ppbv	99	5	5	100	0.15 ppbv	100
Gainesville Doss	10/1/2013	05/22/2023	597	589	98	0.22 ppbv	99	5	5	100	0.19 ppbv	100
Weatherford Tin Top Road	10/13/2013	05/23/2023	525	520	99	0.20 ppbv	99	5	5	100	0.13 ppbv	100
Bowie Patterson St.	10/31/2013	05/23/2023	597	587	99	0.20 ppbv	99	5	5	100	0.20 ppbv	100
Abilene N. 3rd St.	12/18/2013	05/22/2023	544	541	99	0.20 ppbv	99	5	5	100	0.11 ppbv	100
Wichita Falls MWSU	12/19/2013	05/22/2023	586	576	99	0.18 ppbv	99	5	5	100	0.13 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Summary of Auto GC Data through August 2023

Site Name	Start Date	Last QA Audit	To Date					August				
			Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)	Auto GC Data Capture (%)	Met Data Capture (%) ¹	Average Benzene Concentration		Any Value > AMCV (Y/N)
Arlington UT Campus (2A)	9/20/2012	05/24/2023	96	99	0.13 ppbv	0.81 ppbc	No	94	100	0.07 ppbv	0.44 ppbc	No
Eagle Mountain Lake (2E)	4/8/2013	05/22/2023	96	98 ²	0.09 ppbv	0.56 ppbc	No	100	80 ²	0.06 ppbv	0.34 ppbc	No
Dish Airfield (2D)	5/8/2013	05/22/2023	96	99	0.11 ppbv	0.66 ppbc	No	100	100	0.07 ppbv	0.39 ppbc	No
Flower Mound Shiloh (2F)	5/8/2013	05/24/2023	97	99	0.09 ppbv	0.55 ppbc	No	100	100	0.07 ppbv	0.40 ppbc	No
Everman Johnson Park (2J)	5/8/2013	05/23/2023	96	99	0.09 ppbv	0.53 ppbc	No	98	100	0.07 ppbv	0.42 ppbc	No
Decatur Thompson (2T)	6/5/2013	05/22/2023	97	99	0.09 ppbv	0.57 ppbc	No	97	100	0.06 ppbv	0.34 ppbc	No
Godley FM 2331 (2G)	7/13/2013	05/23/2023	95	99	0.07 ppbv	0.41 ppbc	No	85	100	0.05 ppbv	0.29 ppbc	No
Fort Worth Benbrook Lake (2B)	10/1/2013	05/23/2023	95	99	0.07 ppbv	0.42 ppbc	No	80 ³	100	0.05 ppbv	0.30 ppbc	No
Dallas Elm Fork (2C)	11/18/2013	05/24/2023	96	99	0.16 ppbv	0.94 ppbc	No	71 ³	100	0.10 ppbv	0.60 ppbc	No
Kennedale Treepoint Drive (62)	4/1/2014	05/23/2023	95	99	0.12 ppbv	0.73 ppbc	No	100	100	0.07 ppbv	0.44 ppbc	No
Mansfield Flying L Lane (63)	4/1/2014	05/23/2023	96	98	0.10 ppbv	0.57 ppbc	No	100	100	0.06 ppbv	0.35 ppbc	No
Rhome Seven Hills Road (64)	4/1/2014	05/22/2023	95	99	0.10 ppbv	0.60 ppbc	No	100	100	0.05 ppbv	0.30 ppbc	No
Fort Worth Joe B. Rushing Road (65)	4/1/2014	05/24/2023	95	99	0.09 ppbv	0.55 ppbc	No	89	100	0.09 ppbv	0.51 ppbc	No

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

³ PM conducted this month

Summary of Canister Data through August 2023

Site Name	Start Date	Last QA Audit	To Date					August				
			# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)	# EPA Samples Scheduled	# Valid Samples	Met Data Capture (%) ¹	Average Measured Benzene Concentration	Benzene Detection Frequency (%)
Keller	7/14/2013	05/23/2023	617	609	97 ²	0.20 ppbv	99	5	5	100 ²	0.13 ppbv	100
Mineral Wells 23rd St.	8/21/2013	05/23/2023	611	607	99	0.19 ppbv	99	5	5	100	0.12 ppbv	100
Lancaster Cedardale	9/1/2013	06/12/2023	609	605	99	0.21 ppbv	99	5	5	100	0.13 ppbv	100
Gainesville Doss	10/1/2013	05/22/2023	602	594	98	0.22 ppbv	99	5	5	100	0.17 ppbv	100
Weatherford Tin Top Road	10/13/2013	05/23/2023	530	525	99	0.19 ppbv	99	5	5	100	0.13 ppbv	100
Bowie Patterson St.	10/31/2013	05/23/2023	601	592	99	0.20 ppbv	99	5	5	100	0.15 ppbv	100
Abilene N. 3rd St.	12/18/2013	05/22/2023	549	546	99	0.20 ppbv	99	5	5	100	0.12 ppbv	100
Wichita Falls MWSU	12/19/2013	05/22/2023	591	581	99	0.18 ppbv	99	5	5	100	0.13 ppbv	100

General Comments:

- To Date refers to start date through current month
- Benzene reported as compound of most interest from a health perspective
- Air monitoring comparison values (AMCVs) are defined by the TCEQ as chemical-specific air concentrations set to protect human health and welfare
- To Date Value > AMCV refers to if any target compound concentration found greater than AMCV

¹ Statistics for wind speed and wind direction data

² Met data validated by TCEQ

Appendix D
Audit Reports

QUALITY ASSURANCE AUDIT REPORT

North Texas Commission Ambient Air and Meteorological Monitoring

Prepared for:

North Texas Commission

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Prepared by:

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Conducted:

November 2021

EXECUTIVE SUMMARY

On November 8th-11th and November 23rd, an audit team from the AECOM ambient air group in Austin, Texas conducted performance and technical system audits of the North Texas Commission (NTC) ambient air monitoring network. The audits provide an independent assessment of the monitoring program.

The monitoring program at NTC consists of continuous gas chromatographs (GC), volatile organic compound (VOC) canister collection systems, and meteorological sensors including wind speed, wind direction, and temperature.

The performance audit results indicate acceptable responses for measurement systems with the exceptions summarized below.

The wind speed sensor at Wichita Falls was outside of audit parameters for starting threshold (<0.6 g/cm). The bearings were replaced on the sensor by the site operator following the audit. The data validation staff concluded no significant edits were needed for these findings.

The wind direction sensor at Wichita Falls was outside of audit guidance for linearity and maximum total error. The sensor had a maximum linearity error of 34.3° and an alignment error of -1.9° , resulting in a maximum total error of 19.6° .

Out of the 48 compounds being analyzed, eleven compounds (Ethylene, Acetylene, m/p-Xylene, Styrene, Isopropylbenzene, n-Propylbenzene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, n-Decane, 1,2,3-Trimethylbenzene, and n-Undecane) were found to be outside of the audit objective of 70% - 130% recovery at several sites. In addition, the Decatur, Elm Fork, Flower Mound, Mansfield, and UTA sites had the following GC compound recoveries outside of the audit specification:

Locations	Compounds
Decatur	Ethylbenzene o-Xylene n-Nonane
Elm Fork	Isoprene Ethylbenzene
Flower Mound	o-Xylene
Mansfield	Ethylbenzene o-Xylene n-Nonane
UTA	Ethane Ethylbenzene o-Xylene n-Nonane

These network GC audit results are comparable historically to other AECOM auto-GC audits. The GC audit results are contained in table ES-1. Technical systems audit results demonstrate satisfactory operational procedures for collecting valid data.

A performance evaluation (PE) sample is prepared by the AECOM QA group on a quarterly basis and submitted to the VOC laboratory for analysis. This performance evaluation sample contained known (spiked) concentrations of the target VOCs. A review of the sample recoveries for the spiked target VOCs shows that three out of the forty-four compounds were not within the range of expected values (70-130%).

- 1,2,4-Trimethylbenzene (59.1%)
- 1,3,5-Trimethylbenzene (66.1%)
- 4-Ethyltoluene (p-Ethyltoluene) (64.6%)

AECOM QA staff shared the performance evaluation results with the VOC laboratory, and no other corrective action was taken. We will continue to evaluate these compounds in our PE samples and work with the lab to resolve these discrepancies. GD Air's most recent performance evaluation canister results for the fourth quarter of 2021 are contained below in Table ES-2.

Table ES-1. Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Benbrook		Decatur		Dish		Eagle Mountain Lake	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.16	43.4	84.8%	39.8	77.7%	42.5	83.2%	42.4	82.9%
Ethylene	74-85-1	17.06	13.8	81.1%	9.9	58.2%	9.2	53.6%	11.4	66.5%
Propane	74-98-6	12.72	11.0	86.3%	10.3	81.0%	11.2	88.3%	10.4	81.4%
Propylene	115-07-1	12.48	9.5	76.1%	9.8	78.9%	10.2	81.7%	9.9	79.7%
Iso-Butane	75-28-5	16.48	17.6	107.1%	16.7	101.2%	16.5	99.8%	15.8	96.0%
N-Butane	106-97-8	16.80	18.2	108.1%	17.1	101.8%	17.1	101.7%	16.7	99.3%
Acetylene	74-86-2	8.48	5.5	65.1%	4.9	57.6%	5.3	62.4%	4.0	47.1%
Trans-2-Butene	624-64-6	16.64	17.3	104.0%	16.5	99.1%	16.5	98.9%	16.3	98.2%
1-Butene	106-98-9	16.32	17.3	106.1%	16.5	100.9%	16.5	101.2%	16.8	102.7%
Cis-2-Butene	590-18-1	17.44	18.1	103.8%	17.3	99.5%	17.4	99.8%	17.0	97.7%
Cyclopentane	287-92-3	20.80	21.9	105.5%	20.6	99.3%	20.6	99.0%	20.3	97.7%
Iso-Pentane	78-78-4	21.20	22.5	105.9%	21.6	101.9%	21.2	99.8%	21.1	99.5%
N-Pentane	109-66-0	21.20	22.7	106.9%	21.5	101.6%	21.4	101.1%	20.9	98.5%
1,3-Butadiene	106-99-0	16.16	16.7	103.1%	16.3	100.7%	15.9	98.2%	16.2	100.4%
Trans-2-Pentene	646-04-8	21.60	22.1	102.2%	21.0	97.1%	20.5	95.0%	20.9	97.0%
1-Pentene	109-67-1	21.40	21.2	98.9%	20.6	96.4%	19.1	89.3%	19.5	91.0%
Cis-2-Pentene	627-20-3	19.40	19.0	98.2%	18.4	94.8%	17.0	87.8%	17.9	92.1%
2,2-Dimethylbutane	75-83-2	25.20	25.6	101.7%	24.5	97.4%	24.2	96.2%	24.9	98.9%
2-Methylpentane	107-83-5	24.48	24.7	101.0%	24.0	97.9%	23.4	95.5%	24.2	98.9%
Isoprene	78-79-5	20.80	17.3	83.1%	17.0	81.9%	15.2	73.1%	15.6	75.2%
n-Hexane	110-54-3	25.44	22.8	89.6%	21.2	83.5%	22.9	90.0%	22.3	87.5%
Methylcyclopentane	108-87-2	25.20	22.6	89.8%	19.0	75.2%	22.1	87.7%	22.4	89.0%
2,4-Dimethylpentane	108-08-7	30.24	29.6	97.8%	27.7	91.6%	28.2	93.1%	30.2	99.9%
Benzene	71-43-2	25.68	20.8	81.1%	20.9	81.2%	20.9	81.5%	23.1	89.9%
Cyclohexane	110-82-7	25.68	24.1	93.7%	22.6	88.1%	23.0	89.6%	25.6	99.6%
2-Methylhexane	591-76-4	29.96	23.0	76.7%	21.6	72.0%	24.4	81.4%	24.8	82.8%
2,3-Dimethylpentane	565-59-3	29.12	29.6	101.5%	28.5	97.8%	28.2	96.7%	29.7	102.2%
3-Methylhexane	589-34-4	29.68	26.4	89.1%	27.1	91.2%	27.0	90.9%	27.8	93.7%
2,2,4-Trimethylpentane	540-84-1	33.92	33.0	97.2%	30.5	89.8%	33.0	97.4%	33.3	98.1%
n-Heptane	142-82-5	29.96	25.0	83.4%	24.1	80.5%	26.2	87.5%	26.3	87.8%
Methylcyclohexane	108-87-2	29.68	26.7	89.8%	24.8	83.5%	26.3	88.8%	26.7	89.8%
2,3,4-Trimethylpentane	565-75-3	34.24	30.2	88.1%	27.7	80.8%	30.2	88.2%	31.4	91.7%
Toluene	108-88-3	29.40	23.5	80.0%	22.9	77.8%	24.6	83.6%	24.5	83.3%
2-Methylheptane	592-27-8	33.60	27.72	82.5%	26.2	78.0%	28.6	85.2%	29.2	86.9%
3-Methylheptane	589-81-1	33.92	27.98	82.5%	27.9	82.1%	29.3	86.3%	29.6	87.3%
n-Octane	111-65-9	33.92	26.46	78.0%	25.6	75.4%	28.2	83.1%	28.7	84.7%
Ethylbenzene	100-41-4	33.92	23.87	70.4%	22.7	66.9%	24.2	71.4%	25.5	75.2%
M&P-Xylene	108-38-3	67.20	45.63	67.9%	43.9	65.3%	44.9	66.8%	47.9	71.3%
Styrene	100-42-5	32.32	17.61	54.5%	17.6	54.5%	20.8	64.2%	20.9	64.6%
O-Xylene	95-47-6	33.60	24.72	73.6%	22.6	67.2%	24.1	71.8%	25.8	76.9%
N-Nonane	111-84-2	37.08	27.03	72.9%	25.1	67.6%	27.7	74.7%	30.4	81.9%
Isopropylbenzene	98-82-8	36.72	26.40	71.9%	23.4	63.7%	25.7	69.9%	28.4	77.3%
n-Propylbenzene	103-65-1	35.64	23.40	65.6%	21.2	59.5%	24.2	67.8%	25.7	72.1%
1,3,5-Trimethylbenzene	108-67-8	37.80	22.73	60.1%	22.2	58.9%	24.8	65.5%	27.2	71.8%
1,2,4-Trimethylbenzene	95-63-6	38.52	22.73	59.0%	21.9	56.8%	25.5	66.2%	27.2	70.5%
n-Decane	124-18-5	41.60	24.79	59.6%	21.4	51.5%	24.4	58.5%	30.7	73.8%
1,2,3-Trimethylbenzene	526-73-8	38.88	19.92	51.2%	18.3	47.1%	22.8	58.6%	23.5	60.3%
n-Undecane	1120-21-4	45.76	18.92	41.3%	20.0	43.8%	25.6	55.9%	32.1	70.2%

^a Compound order based on elution time.

Table ES-1. (Continued) Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Elm Fork		Everman		Flower Mound		Godley	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.16	43.6	85.3%	44.0	86.0%	44.1	86.2%	44.2	86.3%
Ethylene	74-85-1	17.06	13.5	79.3%	11.4	66.8%	12.3	72.2%	11.7	68.7%
Propane	74-98-6	12.72	10.5	82.3%	11.2	88.0%	11.0	86.6%	11.0	86.4%
Propylene	115-07-1	12.48	9.8	78.5%	10.0	80.3%	10.3	82.3%	10.2	81.7%
Iso-Butane	75-28-5	16.48	16.0	96.9%	17.2	104.6%	16.6	100.9%	17.1	103.6%
N-Butane	106-97-8	16.80	16.7	99.7%	18.0	106.9%	16.9	100.5%	17.9	106.5%
Acetylene	74-86-2	8.48	5.4	63.2%	5.7	66.9%	5.7	67.5%	5.5	65.1%
Trans-2-Butene	624-64-6	16.64	16.2	97.3%	17.5	104.9%	16.4	98.8%	17.0	102.1%
1-Butene	106-98-9	16.32	15.9	97.7%	17.9	109.6%	16.6	101.9%	17.2	105.2%
Cis-2-Butene	590-18-1	17.44	17.1	97.9%	18.4	105.5%	17.2	98.7%	17.8	102.0%
Cyclopentane	287-92-3	20.80	20.3	97.4%	21.0	101.1%	20.6	98.9%	21.4	103.0%
Iso-Pentane	78-78-4	21.20	19.8	93.4%	22.8	107.4%	21.1	99.7%	22.3	105.0%
N-Pentane	109-66-0	21.20	20.9	98.8%	22.6	106.5%	21.0	99.3%	22.2	104.7%
1,3-Butadiene	106-99-0	16.16	14.5	89.9%	17.5	108.3%	16.0	99.2%	17.0	105.4%
Trans-2-Pentene	646-04-8	21.60	19.2	88.8%	22.4	103.9%	16.4	76.1%	21.5	99.5%
1-Pentene	109-67-1	21.40	18.1	84.5%	22.5	105.1%	19.2	89.7%	20.8	97.3%
Cis-2-Pentene	627-20-3	19.40	16.6	85.4%	20.2	104.1%	17.7	91.3%	19.2	98.7%
2,2-Dimethylbutane	75-83-2	25.20	24.1	95.7%	27.1	107.4%	24.9	98.8%	25.9	103.0%
2-Methylpentane	107-83-5	24.48	24.0	97.9%	26.1	106.6%	24.3	99.2%	24.6	100.6%
Isoprene	78-79-5	20.80	14.5	69.5%	19.4	93.2%	14.6	70.2%	18.0	86.7%
n-Hexane	110-54-3	25.44	20.6	81.0%	23.6	92.7%	23.0	90.2%	23.7	93.3%
Methylcyclopentane	108-87-2	25.20	19.2	76.1%	20.7	82.2%	19.9	79.0%	24.7	98.2%
2,4-Dimethylpentane	108-08-7	30.24	27.9	92.3%	32.0	106.0%	29.2	96.6%	31.3	103.4%
Benzene	71-43-2	25.68	20.5	79.9%	23.2	90.2%	21.0	81.6%	22.8	88.8%
Cyclohexane	110-82-7	25.68	21.6	84.3%	25.5	99.3%	22.8	88.7%	26.3	102.6%
2-Methylhexane	591-76-4	29.96	21.6	72.1%	23.2	77.5%	22.7	75.9%	25.5	85.0%
2,3-Dimethylpentane	565-59-3	29.12	26.9	92.4%	32.0	109.9%	28.5	97.7%	31.0	106.4%
3-Methylhexane	589-34-4	29.68	25.3	85.3%	28.2	95.1%	25.7	86.5%	28.3	95.3%
2,2,4-Trimethylpentane	540-84-1	33.92	30.7	90.5%	33.7	99.3%	32.3	95.2%	35.0	103.2%
n-Heptane	142-82-5	29.96	24.5	81.9%	27.4	91.3%	25.2	84.2%	27.2	90.6%
Methylcyclohexane	108-87-2	29.68	25.3	85.2%	27.7	93.2%	25.8	87.1%	28.5	96.0%
2,3,4-Trimethylpentane	565-75-3	34.24	28.8	84.0%	31.1	90.7%	29.8	87.1%	33.2	97.0%
Toluene	108-88-3	29.40	22.8	77.5%	26.0	88.4%	23.3	79.3%	25.6	87.1%
2-Methylheptane	592-27-8	33.60	26.9	79.9%	29.3	87.1%	28.0	83.2%	30.9	92.0%
3-Methylheptane	589-81-1	33.92	28.3	83.3%	29.9	88.1%	28.6	84.4%	31.0	91.3%
n-Octane	111-65-9	33.92	26.3	77.5%	29.0	85.6%	27.6	81.4%	29.8	87.8%
Ethylbenzene	100-41-4	33.92	23.6	69.4%	25.9	76.5%	23.9	70.5%	25.7	75.8%
M&P-Xylene	108-38-3	67.20	43.9	65.3%	48.5	72.1%	44.5	66.2%	48.0	71.4%
Styrene	100-42-5	32.32	19.3	59.7%	20.1	62.2%	18.3	56.5%	19.1	59.1%
O-Xylene	95-47-6	33.60	23.9	71.2%	26.2	77.9%	23.1	68.9%	26.4	78.5%
N-Nonane	111-84-2	37.08	27.0	72.8%	29.8	80.5%	26.9	72.4%	30.5	82.2%
Isopropylbenzene	98-82-8	36.72	25.5	69.3%	28.8	78.4%	25.3	69.0%	28.7	78.1%
n-Propylbenzene	103-65-1	35.64	22.9	64.3%	26.2	73.5%	23.5	66.0%	26.2	73.5%
1,3,5-Trimethylbenzene	108-67-8	37.80	22.4	59.4%	27.8	73.5%	23.7	62.7%	28.3	74.9%
1,2,4-Trimethylbenzene	95-63-6	38.52	22.4	58.1%	28.0	72.6%	23.6	61.2%	27.8	72.1%
n-Decane	124-18-5	41.60	23.5	56.5%	26.7	64.2%	25.2	60.6%	27.7	66.7%
1,2,3-Trimethylbenzene	526-73-8	38.88	19.2	49.5%	25.2	64.8%	21.7	55.8%	24.9	63.9%
n-Undecane	1120-21-4	45.76	19.5	42.5%	28.7	62.7%	24.9	54.4%	29.3	63.9%

^a Compound order based on elution time.

Table ES-1. (Continued) Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Kennedale		Mansfield		Rhome		Rushing		UTA	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.16	52.9	103.4%	39.0	76.2%	47.9	93.5%	47.6	93.1%	30.3	59.2%
Ethylene	74-85-1	17.06	17.7	103.7%	10.8	63.0%	14.1	82.9%	14.2	83.3%	8.4	49.3%
Propane	74-98-6	12.72	13.0	102.5%	10.3	80.9%	11.2	88.1%	11.4	89.9%	10.5	82.4%
Propylene	115-07-1	12.48	12.2	97.4%	9.3	74.4%	9.0	71.8%	9.7	77.4%	9.4	75.1%
Iso-Butane	75-28-5	16.48	18.9	114.7%	15.9	96.6%	15.9	96.6%	18.3	111.2%	16.5	100.0%
N-Butane	106-97-8	16.80	19.5	116.4%	16.8	100.0%	16.5	98.0%	18.7	111.5%	17.2	102.6%
Acetylene	74-86-2	8.48	7.4	86.7%	5.5	65.4%	6.0	71.2%	6.0	70.8%	5.2	60.8%
Trans-2-Butene	624-64-6	16.64	18.9	113.7%	16.0	95.9%	16.2	97.5%	17.9	107.8%	16.6	99.7%
1-Butene	106-98-9	16.32	18.7	114.7%	15.9	97.3%	15.8	97.0%	19.3	118.4%	16.4	100.3%
Cis-2-Butene	590-18-1	17.44	19.6	112.2%	16.6	95.5%	16.7	95.5%	18.6	106.5%	17.2	98.8%
Cyclopentane	287-92-3	20.80	23.4	112.6%	19.5	93.8%	19.9	95.7%	22.5	108.4%	20.6	99.0%
Iso-Pentane	78-78-4	21.20	24.2	114.1%	20.8	97.9%	20.1	95.0%	23.6	111.3%	21.7	102.5%
N-Pentane	109-66-0	21.20	23.8	112.3%	20.6	97.3%	20.7	97.7%	23.2	109.4%	21.6	102.1%
1,3-Butadiene	106-99-0	16.16	18.6	115.0%	15.8	97.5%	15.2	94.1%	18.1	112.3%	16.0	99.3%
Trans-2-Pentene	646-04-8	21.60	23.6	109.1%	20.1	92.9%	20.2	93.6%	22.8	105.4%	20.8	96.5%
1-Pentene	109-67-1	21.40	23.7	110.7%	19.8	92.6%	20.3	95.0%	23.1	108.0%	20.7	96.6%
Cis-2-Pentene	627-20-3	19.40	21.3	109.8%	18.0	92.8%	17.9	92.1%	20.5	105.6%	18.1	93.2%
2,2-Dimethylbutane	75-83-2	25.20	28.1	111.6%	24.5	97.1%	24.5	97.1%	27.4	108.7%	25.4	100.6%
2-Methylpentane	107-83-5	24.48	26.9	110.0%	23.1	94.5%	23.4	95.5%	26.3	107.6%	24.1	98.4%
Isoprene	78-79-5	20.80	20.1	96.5%	16.4	78.8%	16.9	81.2%	19.6	94.0%	16.6	79.6%
n-Hexane	110-54-3	25.44	25.1	98.7%	20.6	81.1%	26.4	103.6%	25.6	100.6%	22.5	88.4%
Methylcyclopentane	108-87-2	25.20	25.5	101.0%	20.5	81.2%	22.9	90.8%	23.6	93.7%	21.7	86.2%
2,4-Dimethylpentane	108-08-7	30.24	30.5	101.0%	24.4	80.7%	36.4	120.2%	30.4	100.5%	26.7	88.3%
Benzene	71-43-2	25.68	23.0	89.4%	19.1	74.4%	25.7	100.1%	22.1	86.1%	20.7	80.5%
Cyclohexane	110-82-7	25.68	26.1	101.6%	21.5	83.7%	27.7	107.9%	24.3	94.6%	22.3	86.9%
2-Methylhexane	591-76-4	29.96	27.7	92.4%	22.3	74.5%	25.8	86.1%	25.2	84.0%	22.4	74.7%
2,3-Dimethylpentane	565-59-3	29.12	29.5	101.2%	24.6	84.4%	36.1	123.8%	29.2	100.3%	27.0	92.7%
3-Methylhexane	589-34-4	29.68	29.2	98.4%	23.6	79.4%	32.3	109.0%	27.8	93.8%	24.8	83.5%
2,2,4-Trimethylpentane	540-84-1	33.92	35.5	104.5%	29.0	85.6%	39.4	116.1%	34.5	101.7%	31.0	91.4%
n-Heptane	142-82-5	29.96	29.0	96.8%	23.2	77.4%	30.4	101.6%	27.6	92.2%	24.3	81.2%
Methylcyclohexane	108-87-2	29.68	29.1	98.1%	23.3	78.7%	31.0	104.4%	27.8	93.7%	24.8	83.7%
2,3,4-Trimethylpentane	565-75-3	34.24	32.7	95.5%	26.4	77.1%	35.3	103.1%	31.2	91.1%	27.6	80.5%
Toluene	108-88-3	29.40	26.8	91.2%	21.0	71.3%	28.6	97.2%	26.1	88.8%	22.1	75.2%
2-Methylheptane	592-27-8	33.60	31.7	94.3%	24.8	73.9%	34.1	101.6%	30.1	89.6%	25.5	75.9%
3-Methylheptane	589-81-1	33.92	32.0	94.3%	25.3	74.5%	35.7	105.3%	30.3	89.4%	26.3	77.5%
n-Octane	111-65-9	33.92	31.1	91.6%	24.1	71.1%	34.9	102.8%	29.7	87.5%	25.3	74.5%
Ethylbenzene	100-41-4	33.92	28.6	84.5%	21.9	64.5%	29.4	86.6%	26.5	78.0%	21.3	62.9%
M&P-Xylene	108-38-3	67.20	54.7	81.4%	41.5	61.7%	57.0	84.9%	50.0	74.5%	39.7	59.0%
Styrene	100-42-5	32.32	24.2	74.9%	17.8	55.0%	24.6	76.2%	23.2	71.7%	16.1	49.7%
O-Xylene	95-47-6	33.60	27.7	82.3%	22.0	65.6%	31.1	92.5%	26.8	79.7%	21.4	63.7%
N-Nonane	111-84-2	37.08	32.3	87.2%	24.0	64.8%	36.5	98.3%	30.5	82.1%	24.6	66.5%
Isopropylbenzene	98-82-8	36.72	31.4	85.4%	24.7	67.1%	32.9	89.5%	29.4	80.0%	24.1	65.6%
n-Propylbenzene	103-65-1	35.64	28.9	81.0%	22.8	63.9%	30.4	85.3%	26.9	75.4%	21.6	60.7%
1,3,5-Trimethylbenzene	108-67-8	37.80	27.7	73.4%	23.9	63.2%	31.2	82.5%	27.7	73.2%	23.1	61.0%
1,2,4-Trimethylbenzene	95-63-6	38.52	29.5	76.5%	23.2	60.2%	32.6	84.7%	28.5	73.9%	22.6	58.6%
n-Decane	124-18-5	41.60	31.5	75.6%	24.0	57.7%	35.5	85.3%	28.8	69.2%	24.6	59.2%
1,2,3-Trimethylbenzene	526-73-8	38.88	26.3	67.6%	22.2	57.1%	25.3	65.1%	24.9	64.0%	21.4	55.1%
n-Undecane	1120-21-4	45.76	28.0	61.3%	24.9	54.3%	24.6	53.7%	28.4	62.0%	26.5	58.0%

^a Compound order based on elution time.

Table ES-2. Results of Performance Standard for Off-Site Analytical Lab

Compound Name	CAS Number	Input Concentration	Lab Results	Percent Recovery
1,1,1-Trichloroethane	71-55-6	3.5	3.3	94.9%
1,1,2,2-Tetrachloroethane	79-34-5	3.4	2.8	81.8%
1,1,2-Trichloroethane	79-00-5	3.6	3.1	87.2%
1,1-Dichloroethane	75-34-3	3.5	3.3	94.9%
1,1-Dichloroethene	75-35-4	3.5	3.2	91.7%
1,2,4-Trimethylbenzene	95-63-6	3.3	1.9	59.1%
1,2-Dibromoethane	106-93-4	3.5	3.2	93.5%
1,2-Dichloroethane	107-06-2	3.5	3.0	85.2%
1,2-Dichloropropane	78-87-5	3.5	3.2	91.1%
1,3,5-Trimethylbenzene	108-67-8	3.3	2.2	66.1%
1,3-Butadiene	106-99-0	7.0	7.9	112.4%
1-Butene	106-98-9	3.5	3.3	95.5%
1-Hexene	592-41-6	3.2	2.9	89.4%
1-Pentene	109-67-1	3.4	3.1	90.0%
2,2,4-Trimethylpentane	540-84-1	3.5	3.4	95.7%
4-Ethyltoluene (p-Ethyltoluene)	622-96-8	3.3	2.1	64.6%
Benzene	71-43-2	3.6	3.2	89.4%
Bromomethane	74-83-9	3.4	3.5	102.5%
c-1,3-Dichloropropene	10061-01-5	3.0	3.8	127.8%
Carbon tetrachloride	56-23-5	3.5	3.3	94.3%
Chlorobenzene	108-90-7	3.5	2.8	81.9%
Chloroform	67-66-3	3.4	3.2	92.9%
Chloromethane (Methyl Chloride)	74-87-3	3.6	3.3	90.3%
Cyclohexane	110-82-7	3.5	3.0	85.7%
Dichlorodifluoromethane (Freon-12)	75-71-8	3.5	3.5	99.8%
Ethane	74-84-0	21.1	20.1	95.5%
Ethene	74-85-1	7.0	5.2	74.4%
Ethylbenzene	100-41-4	3.5	2.7	76.4%
Ethylene Chloride (Dichloromethane)	75-09-2	3.5	2.9	82.6%
m-Xylene & p-Xylene	106-42-3+108-38-3	6.7	5.3	78.7%
n-Butane	106-97-8	3.5	3.5	101.1%
n-Heptane	142-82-5	3.5	3.1	89.7%
n-Hexane	110-54-3	10.5	9.8	93.0%
n-Pentane	109-66-0	3.4	3.4	98.4%
o-Xylene	95-47-6	3.4	2.6	77.6%
Propane	74-98-6	3.5	3.5	100.4%
Propylene	115-07-1	6.9	6.4	91.6%
Styrene	100-42-5	3.4	2.5	73.4%
t-1,3-Dichloropropene	10061-02-6	3.2	2.9	89.7%
Tetrachloroethene	127-18-4	3.6	3.0	83.6%
Toluene	108-88-3	3.6	2.6	82.7%
Trichloroethene	79-01-6	3.4	3.1	91.2%
Trichlorofluoromethane (Freon-11)	75-69-4	3.6	3.1	86.4%
Vinyl Chloride	75-01-4	3.5	3.2	92.3%

QUALITY ASSURANCE AUDIT REPORT

North Texas Commission Ambient Air and Meteorological Monitoring

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EXECUTIVE SUMMARY

On April 25th – 28th, an audit team from the AECOM ambient air group in Austin, Texas conducted performance and technical system audits of the North Texas Commission (NTC) ambient air monitoring network. The audits provide an independent assessment of the monitoring program.

The monitoring program at NTC consists of continuous gas chromatographs (GC), volatile organic compound (VOC) canister collection systems, and meteorological sensors including wind speed, wind direction, and temperature.

The performance audit results indicate acceptable responses for measurement systems with the exceptions summarized below.

The temperature sensor at Mineral Wells was outside of audit parameters for accuracy ($\pm 0.9^\circ$ F) with the site temperature probe reading an average of 1.4° F higher than the audit probe. The aspirator fan was also found not running during the audit. The temperature probe and aspirator fan were replaced by the site operator two days after the audit.

The wind speed sensor at Joe B. Rushing was outside of audit parameters for starting threshold (< 0.4 g/cm) with a starting threshold of 0.9 g/cm in the counterclockwise direction and 1.0 g/cm in the clockwise direction. The bearings were replaced on the sensor by the site operator two days after the audit.

The wind direction sensor at Godley was outside of audit guidance for linearity and maximum total error. The sensor had a maximum linearity error of -4.1° , resulting in a maximum total error of 5.6° . The wind direction sensor was replaced by the site operator the following week.

Out of the 48 compounds being analyzed, seventeen compounds (Ethane, Ethylene, Propylene, Acetylene, isoprene, 2-methylhexane, ethylbenzene, m/p-Xylene, Styrene, o-xylene, Isopropylbenzene, n-Propylbenzene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, n-Decane, 1,2,3-Trimethylbenzene, and n-Undecane) were found to be outside of the audit objective of 70% - 130% recovery at several sites. In addition, the Benbrook and Elm Fork sites had the following GC compound recoveries outside of the audit specification:

Locations	Compounds
Benbrook	Benzene Toluene n-Nonane
Elm Fork	Cis-2-pentene

These network GC audit results are comparable historically to other AECOM auto-GC audits. The GC audit results are contained in table ES-1. Technical systems audit results demonstrate satisfactory operational procedures for collecting valid data.

A performance evaluation (PE) sample is prepared by the AECOM QA group on a quarterly basis and submitted to the VOC laboratory for analysis. This performance evaluation sample contained known (spiked) concentrations of the target VOCs. A review of the sample recoveries for the spiked target VOCs shows that seven out of the forty-five compounds were not within the range of expected values (70-130%).

- 1,1,2,2-tetrachloroethane (63.2%)
- 1,2,4-Trimethylbenzene (50.3%)
- 1,3,5-Trimethylbenzene (55.6%)
- 4-Ethyltoluene (p-Ethyltoluene) (56.9%)
- Ethylbenzene (67.2%)
- o-Xylene (67.1%)
- Styrene (61.0%)

AECOM QA staff shared the performance evaluation results with the VOC laboratory, and no other corrective action was taken. We will continue to evaluate these compounds in our PE samples and work with the lab to resolve these discrepancies. GD Air's most recent performance evaluation canister results for the first quarter of 2022 are contained below in Table ES-2.

Table ES-1. Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Benbrook		Decatur		Dish		Eagle Mountain Lake	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.2	41.6	81.4%	41.5	81.2%	43.8	85.6%	46.8	91.5%
Ethylene	74-85-1	17.1	9.8	57.2%	11.5	67.1%	12.1	71.1%	12.7	74.2%
Propane	74-98-6	12.7	10.6	83.3%	11.6	91.4%	10.5	82.8%	11.0	86.7%
Propylene	115-07-1	12.5	10.1	81.3%	10.7	85.9%	9.5	76.3%	11.0	88.0%
Iso-Butane	75-28-5	16.5	16.1	98.0%	18.5	112.3%	16.1	97.7%	16.0	97.4%
N-Butane	106-97-8	16.8	16.4	97.7%	19.3	115.0%	16.7	99.4%	16.9	100.7%
Acetylene	74-86-2	8.5	2.9	34.7%	7.2	84.4%	5.5	64.8%	6.9	81.9%
Trans-2-Butene	624-64-6	16.6	15.3	92.1%	18.5	111.1%	16.3	98.2%	16.4	98.7%
1-Butene	106-98-9	16.3	15.7	96.2%	18.4	112.8%	16.3	100.2%	16.1	98.6%
Cis-2-Butene	590-18-1	17.4	16.1	92.3%	19.4	111.0%	17.1	97.9%	17.3	99.1%
Cyclopentane	287-92-3	20.8	18.9	90.7%	22.9	110.2%	20.3	97.7%	21.6	103.7%
Iso-Pentane	78-78-4	21.2	19.0	89.5%	23.7	112.0%	21.1	99.4%	21.5	101.3%
N-Pentane	109-66-0	21.2	19.0	89.5%	24.0	113.1%	21.2	99.8%	22.5	106.2%
1,3-Butadiene	106-99-0	16.2	14.0	86.7%	17.8	110.0%	16.1	99.6%	17.1	106.1%
Trans-2-Pentene	646-04-8	20.8	18.1	87.1%	23.2	111.4%	21.0	101.0%	21.7	104.5%
1-Pentene	109-67-1	21.4	17.1	80.1%	21.9	102.4%	20.5	95.7%	21.3	99.4%
Cis-2-Pentene	627-20-3	19.4	14.9	77.0%	20.1	103.6%	18.5	95.6%	19.0	97.9%
2,2-Dimethylbutane	75-83-2	25.2	21.7	85.9%	27.1	107.4%	24.0	95.2%	25.0	99.2%
2-Methylpentane	107-83-5	24.5	20.6	84.3%	26.6	108.5%	22.9	93.4%	24.1	98.6%
Isoprene	78-79-5	20.8	13.7	65.6%	18.5	88.9%	17.3	83.4%	18.2	87.5%
n-Hexane	110-54-3	25.4	18.4	72.3%	23.1	90.9%	24.2	94.9%	27.3	107.2%
Methylcyclopentane	108-87-2	25.2	19.5	77.4%	20.6	81.9%	19.6	77.8%	19.6	77.6%
2,4-Dimethylpentane	108-08-7	30.2	24.6	81.5%	29.7	98.1%	29.5	97.6%	28.6	94.7%
Benzene	71-43-2	25.7	17.4	67.9%	23.6	91.8%	20.6	80.2%	22.1	85.9%
Cyclohexane	110-82-7	25.7	21.4	83.2%	24.8	96.6%	22.4	87.4%	23.5	91.5%
2-Methylhexane	591-76-4	30.0	19.2	64.0%	23.7	79.2%	22.3	74.5%	21.9	73.0%
2,3-Dimethylpentane	565-59-3	29.1	24.7	84.8%	31.1	106.8%	28.5	97.8%	31.0	106.5%
3-Methylhexane	589-34-4	29.7	22.0	74.2%	30.0	101.0%	25.8	87.1%	27.8	93.5%
2,2,4-Trimethylpentane	540-84-1	33.9	25.9	76.3%	29.6	87.3%	29.6	87.4%	29.8	87.8%
n-Heptane	142-82-5	30.0	21.0	70.2%	26.5	88.6%	25.2	84.3%	25.5	85.0%
Methylcyclohexane	108-87-2	29.7	22.2	74.8%	27.3	92.0%	25.9	87.2%	25.9	87.4%
2,3,4-Trimethylpentane	565-75-3	34.2	25.5	74.4%	30.2	88.3%	29.7	86.7%	30.8	89.9%
Toluene	108-88-3	29.4	19.7	66.9%	27.1	92.3%	24.6	83.6%	26.9	91.4%
2-Methylheptane	592-27-8	33.6	23.87	71.0%	29.3	87.3%	29.0	86.3%	30.4	90.6%
3-Methylheptane	589-81-1	33.9	24.14	71.2%	31.7	93.6%	29.6	87.3%	32.8	96.8%
n-Octane	111-65-9	33.9	23.79	70.1%	28.7	84.5%	29.2	86.2%	29.9	88.0%
Ethylbenzene	100-41-4	33.9	21.71	64.0%	26.4	77.8%	27.8	82.0%	27.5	81.0%
M&P-Xylene	108-38-3	67.2	42.75	63.6%	48.9	72.7%	53.6	79.8%	53.8	80.1%
Styrene	100-42-5	32.3	14.69	45.5%	21.2	65.6%	23.6	72.9%	24.5	75.8%
O-Xylene	95-47-6	33.6	21.85	65.0%	26.5	78.9%	28.1	83.6%	28.6	85.2%
N-Nonane	111-84-2	37.1	24.61	66.4%	30.7	82.7%	31.5	85.0%	33.4	90.0%
Isopropylbenzene	98-82-8	36.7	24.26	66.1%	26.8	72.9%	29.9	81.5%	30.4	82.9%
n-Propylbenzene	103-65-1	35.6	22.22	62.4%	25.7	72.2%	28.9	81.0%	29.5	82.7%
1,3,5-Trimethylbenzene	108-67-8	37.8	23.91	63.3%	26.8	70.9%	27.8	73.6%	29.5	78.1%
1,2,4-Trimethylbenzene	95-63-6	38.5	21.16	54.9%	27.0	70.2%	28.9	75.0%	30.0	77.9%
n-Decane	124-18-5	41.6	22.99	55.3%	27.2	65.3%	31.7	76.1%	31.6	75.9%
1,2,3-Trimethylbenzene	526-73-8	38.9	20.35	52.3%	22.6	58.1%	25.1	64.5%	24.9	64.1%
n-Undecane	1120-21-4	45.8	22.43	49.0%	28.7	62.6%	27.2	59.5%	26.7	58.4%

^a Compound order based on elution time.

Table ES-1. (Continued) Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Elm Fork		Everman		Flower Mound		Godley	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.2	36.1	70.5%	33.4	65.2%	42.2	82.4%	40.6	79.4%
Ethylene	74-85-1	17.1	12.0	70.2%	8.0	47.0%	13.8	81.1%	11.0	64.3%
Propane	74-98-6	12.7	10.1	79.6%	9.9	77.7%	10.6	82.9%	10.6	83.4%
Propylene	115-07-1	12.5	8.3	66.3%	8.8	70.5%	10.0	80.4%	9.3	74.6%
Iso-Butane	75-28-5	16.5	16.0	97.1%	15.1	91.7%	15.4	93.6%	16.4	99.4%
N-Butane	106-97-8	16.8	16.6	98.6%	16.1	95.6%	15.7	93.7%	17.0	101.0%
Acetylene	74-86-2	8.5	5.9	69.3%	5.8	68.0%	6.5	77.2%	6.1	72.0%
Trans-2-Butene	624-64-6	16.6	15.6	94.0%	15.8	95.0%	15.4	92.3%	16.2	97.5%
1-Butene	106-98-9	16.3	15.6	95.4%	15.6	95.4%	15.4	94.1%	15.9	97.7%
Cis-2-Butene	590-18-1	17.4	16.2	93.1%	16.5	94.5%	16.0	91.8%	16.9	96.7%
Cyclopentane	287-92-3	20.8	20.2	97.3%	19.7	94.5%	19.2	92.4%	20.4	98.0%
Iso-Pentane	78-78-4	21.2	20.5	96.7%	20.3	95.7%	19.7	93.1%	21.1	99.5%
N-Pentane	109-66-0	21.2	21.1	99.4%	20.3	95.7%	20.0	94.5%	21.2	100.0%
1,3-Butadiene	106-99-0	16.2	13.0	80.3%	15.4	95.1%	15.2	94.3%	15.7	97.3%
Trans-2-Pentene	646-04-8	20.8	19.2	92.3%	20.2	96.9%	19.8	95.1%	20.4	98.2%
1-Pentene	109-67-1	21.4	19.2	89.6%	19.6	91.5%	19.4	90.8%	19.4	90.7%
Cis-2-Pentene	627-20-3	19.4	12.1	62.3%	17.5	90.0%	17.5	90.2%	17.9	92.3%
2,2-Dimethylbutane	75-83-2	25.2	24.1	95.7%	23.8	94.4%	23.2	92.2%	24.6	97.7%
2-Methylpentane	107-83-5	24.5	23.8	97.3%	23.1	94.4%	23.2	94.6%	23.4	95.7%
Isoprene	78-79-5	20.8	13.0	62.4%	15.4	74.0%	16.7	80.1%	16.0	77.1%
n-Hexane	110-54-3	25.4	21.7	85.2%	20.6	80.9%	22.9	89.9%	22.6	88.7%
Methylcyclopentane	108-87-2	25.2	19.3	76.6%	17.9	71.2%	18.8	74.6%	23.1	91.7%
2,4-Dimethylpentane	108-08-7	30.2	28.4	94.0%	28.0	92.6%	27.7	91.6%	29.5	97.7%
Benzene	71-43-2	25.7	21.6	84.1%	21.3	82.9%	20.0	78.0%	22.3	86.8%
Cyclohexane	110-82-7	25.7	22.5	87.4%	22.6	88.2%	21.4	83.2%	26.8	104.5%
2-Methylhexane	591-76-4	30.0	22.5	75.0%	20.5	68.4%	21.6	72.2%	24.4	81.3%
2,3-Dimethylpentane	565-59-3	29.1	28.0	96.2%	28.4	97.4%	27.1	93.2%	31.8	109.0%
3-Methylhexane	589-34-4	29.7	27.4	92.4%	25.2	85.0%	24.9	83.8%	28.7	96.8%
2,2,4-Trimethylpentane	540-84-1	33.9	28.9	85.2%	27.5	81.2%	28.5	83.9%	31.9	94.2%
n-Heptane	142-82-5	30.0	25.8	86.1%	24.5	81.9%	25.0	83.6%	25.8	86.1%
Methylcyclohexane	108-87-2	29.7	25.8	86.9%	24.0	80.7%	24.8	83.7%	27.9	93.9%
2,3,4-Trimethylpentane	565-75-3	34.2	28.7	83.8%	27.5	80.2%	29.0	84.8%	32.2	94.1%
Toluene	108-88-3	29.4	23.6	80.4%	25.4	86.3%	24.2	82.2%	25.4	86.5%
2-Methylheptane	592-27-8	33.6	27.2	80.9%	27.0	80.5%	28.0	83.2%	30.4	90.6%
3-Methylheptane	589-81-1	33.9	27.8	82.0%	27.3	80.4%	28.4	83.6%	30.8	90.7%
n-Octane	111-65-9	33.9	27.6	81.2%	27.1	79.8%	27.9	82.3%	30.1	88.9%
Ethylbenzene	100-41-4	33.9	25.1	74.0%	24.1	71.2%	26.5	78.1%	27.2	80.3%
M&P-Xylene	108-38-3	67.2	47.5	70.7%	46.4	69.0%	51.2	76.2%	51.6	76.8%
Styrene	100-42-5	32.3	19.8	61.3%	20.3	62.9%	21.6	66.9%	21.4	66.2%
O-Xylene	95-47-6	33.6	25.3	75.3%	25.0	74.5%	26.7	79.4%	28.8	85.6%
N-Nonane	111-84-2	37.1	29.3	79.0%	28.7	77.5%	30.1	81.3%	32.7	88.1%
Isopropylbenzene	98-82-8	36.7	26.5	72.1%	26.9	73.3%	28.8	78.3%	30.3	82.6%
n-Propylbenzene	103-65-1	35.6	25.3	71.1%	26.1	73.1%	27.5	77.2%	28.9	81.2%
1,3,5-Trimethylbenzene	108-67-8	37.8	23.6	62.5%	28.7	75.8%	26.7	70.6%	32.3	85.4%
1,2,4-Trimethylbenzene	95-63-6	38.5	22.9	59.3%	29.3	76.0%	26.4	68.6%	31.8	82.5%
n-Decane	124-18-5	41.6	25.1	60.2%	28.3	68.0%	29.6	71.2%	32.1	77.2%
1,2,3-Trimethylbenzene	526-73-8	38.9	20.3	52.3%	25.8	66.4%	23.7	60.9%	29.0	74.5%
n-Undecane	1120-21-4	45.8	26.2	57.4%	33.3	72.8%	25.6	55.9%	37.5	82.0%

^a Compound order based on elution time.

Table ES-1. (Continued) Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Kennedale		Mansfield		Rhome		Rushing		UTA	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.2	41.8	81.6%	41.2	80.5%	49.3	96.4%	51.7	101.0%	35.1	68.6%
Ethylene	74-85-1	17.1	11.6	68.3%	12.5	73.3%	16.0	93.6%	16.7	98.0%	11.5	67.7%
Propane	74-98-6	12.7	12.8	101.0%	10.6	83.5%	11.8	93.0%	12.5	98.4%	10.0	78.8%
Propylene	115-07-1	12.5	11.6	93.2%	9.8	78.2%	10.4	83.6%	11.0	87.9%	8.4	67.6%
Iso-Butane	75-28-5	16.5	18.5	112.5%	17.5	106.1%	17.1	103.8%	19.1	115.7%	16.7	101.4%
N-Butane	106-97-8	16.8	19.4	115.3%	18.0	107.1%	17.6	104.6%	19.6	116.5%	17.2	102.4%
Acetylene	74-86-2	8.5	8.5	100.5%	5.6	65.7%	7.1	84.2%	6.8	80.6%	6.2	73.3%
Trans-2-Butene	624-64-6	16.6	19.0	114.1%	17.1	102.5%	17.2	103.6%	18.9	113.7%	16.7	100.2%
1-Butene	106-98-9	16.3	18.5	113.1%	16.9	103.7%	17.2	105.2%	19.1	117.2%	16.5	100.9%
Cis-2-Butene	590-18-1	17.4	19.5	111.8%	17.8	102.3%	17.9	102.9%	19.6	112.2%	17.3	99.3%
Cyclopentane	287-92-3	20.8	23.2	111.7%	21.6	103.7%	21.6	104.0%	23.7	114.1%	20.5	98.7%
Iso-Pentane	78-78-4	21.2	24.0	113.3%	22.1	104.2%	22.7	106.9%	24.7	116.6%	21.2	100.0%
N-Pentane	109-66-0	21.2	24.0	113.2%	21.9	103.4%	22.6	106.5%	24.6	116.0%	21.2	99.8%
1,3-Butadiene	106-99-0	16.2	18.6	115.0%	16.9	104.4%	16.9	104.3%	18.7	115.8%	15.9	98.4%
Trans-2-Pentene	646-04-8	20.8	23.5	112.7%	21.8	105.0%	22.1	106.3%	23.8	114.6%	20.7	99.6%
1-Pentene	109-67-1	21.4	23.3	108.7%	21.2	99.2%	21.9	102.4%	25.4	118.7%	20.7	96.6%
Cis-2-Pentene	627-20-3	19.4	20.9	107.6%	19.5	100.6%	19.6	101.1%	20.7	106.8%	18.1	93.4%
2,2-Dimethylbutane	75-83-2	25.2	27.6	109.6%	25.9	102.8%	26.1	103.7%	28.4	112.8%	24.4	96.6%
2-Methylpentane	107-83-5	24.5	27.0	110.5%	25.2	102.8%	25.2	102.8%	27.2	111.2%	23.7	96.8%
Isoprene	78-79-5	20.8	18.1	87.2%	18.6	89.2%	18.6	89.3%	20.9	100.6%	16.9	81.2%
n-Hexane	110-54-3	25.4	25.9	101.8%	22.2	87.2%	24.4	95.9%	25.3	99.3%	21.1	82.9%
Methylcyclopentane	108-87-2	25.2	26.1	103.6%	21.7	85.9%	21.1	83.5%	24.0	95.3%	20.8	82.7%
2,4-Dimethylpentane	108-08-7	30.2	31.3	103.6%	26.2	86.5%	33.7	111.6%	32.9	108.9%	24.4	80.6%
Benzene	71-43-2	25.7	25.7	99.9%	20.8	81.1%	22.0	85.8%	26.1	101.5%	19.5	75.8%
Cyclohexane	110-82-7	25.7	27.0	105.1%	22.4	87.2%	24.6	95.8%	28.0	109.1%	21.1	82.3%
2-Methylhexane	591-76-4	30.0	28.5	95.0%	23.9	79.8%	24.4	81.3%	27.3	91.1%	22.0	73.6%
2,3-Dimethylpentane	565-59-3	29.1	30.1	103.2%	25.7	88.4%	32.0	110.0%	33.3	114.4%	24.2	83.1%
3-Methylhexane	589-34-4	29.7	30.0	101.0%	25.4	85.6%	28.7	96.6%	31.4	105.9%	23.7	79.8%
2,2,4-Trimethylpentane	540-84-1	33.9	33.1	97.7%	28.1	82.8%	33.3	98.1%	34.1	100.7%	26.1	77.1%
n-Heptane	142-82-5	30.0	30.2	100.7%	25.1	83.8%	29.5	98.6%	30.2	100.7%	23.3	77.9%
Methylcyclohexane	108-87-2	29.7	30.0	101.0%	25.1	84.6%	28.8	97.1%	30.0	101.1%	23.4	78.9%
2,3,4-Trimethylpentane	565-75-3	34.2	33.0	96.3%	28.0	81.7%	33.5	97.9%	34.7	101.3%	26.0	75.8%
Toluene	108-88-3	29.4	29.6	100.8%	23.8	81.0%	29.7	101.1%	29.6	100.5%	22.4	76.2%
2-Methylheptane	592-27-8	33.6	33.0	98.1%	27.0	80.3%	33.4	99.5%	33.6	100.1%	24.8	73.7%
3-Methylheptane	589-81-1	33.9	32.9	96.9%	27.5	81.0%	33.8	99.5%	34.1	100.4%	25.2	74.2%
n-Octane	111-65-9	33.9	31.9	94.1%	26.8	79.0%	33.9	99.8%	35.2	103.7%	24.7	72.8%
Ethylbenzene	100-41-4	33.9	30.8	90.8%	25.7	75.8%	30.7	90.5%	31.8	93.6%	22.9	67.4%
M&P-Xylene	108-38-3	67.2	60.3	89.8%	48.5	72.2%	60.3	89.8%	61.7	91.8%	42.8	63.8%
Styrene	100-42-5	32.3	28.3	87.5%	20.4	63.0%	25.7	79.7%	28.2	87.2%	17.9	55.4%
O-Xylene	95-47-6	33.6	31.9	94.9%	24.3	72.2%	32.1	95.5%	32.9	97.8%	22.5	67.1%
N-Nonane	111-84-2	37.1	36.7	98.9%	27.7	74.8%	37.5	101.2%	37.7	101.8%	26.0	70.1%
Isopropylbenzene	98-82-8	36.7	35.6	96.9%	27.0	73.6%	35.0	95.2%	35.0	95.3%	23.9	65.0%
n-Propylbenzene	103-65-1	35.6	35.0	98.3%	25.7	72.1%	33.5	94.0%	34.0	95.5%	22.6	63.5%
1,3,5-Trimethylbenzene	108-67-8	37.8	34.1	90.1%	23.8	63.0%	34.5	91.3%	34.5	91.2%	20.9	55.4%
1,2,4-Trimethylbenzene	95-63-6	38.5	38.5	100.0%	25.3	65.6%	35.8	93.1%	36.3	94.1%	22.0	57.0%
n-Decane	124-18-5	41.6	38.6	92.7%	26.3	63.2%	39.0	93.8%	37.9	91.0%	26.4	63.4%
1,2,3-Trimethylbenzene	526-73-8	38.9	34.8	89.5%	22.5	57.8%	29.4	75.6%	29.3	75.3%	19.4	49.9%
n-Undecane	1120-21-4	45.8	43.5	95.0%	24.5	53.5%	29.4	64.3%	31.9	69.6%	27.8	60.8%

^a Compound order based on elution time.

Table ES-2. Results of Performance Standard for Off-Site Analytical Lab

Compound Name	CAS Number	Input Concentration (ppb-v)	Lab Results (ppb-v)	% Recovery
1,1,1-Trichloroethane	71-55-6	2.9	2.58	88.5%
1,1,1,2-Tetrachloroethane	79-34-5	2.8	1.79	63.2%
1,1,2-Trichloroethane	79-00-5	3.0	2.41	81.1%
1,1-Dichloroethane	75-34-3	2.9	2.47	85.5%
1,1-Dichloroethene	75-35-4	2.9	2.29	79.3%
1,2,4-Trimethylbenzene	95-63-6	2.7	1.37	50.3%
1,2-Dibromoethane	106-93-4	2.9	2.31	80.0%
1,2-Dichloroethane	107-06-2	2.9	2.3	78.1%
1,2-Dichloropropane	78-87-5	2.9	2.36	80.2%
1,3,5-Trimethylbenzene	108-67-8	2.8	1.53	55.6%
1,3-Butadiene	106-99-0	5.8	6.08	104.2%
1-Butene	106-98-9	2.9	2.35	81.3%
1-Hexene	592-41-6	2.7	2.4	89.1%
1-Pentene	109-67-1	2.9	2.37	82.8%
2,2,4-Trimethylpentane	540-84-1	2.9	2.55	87.4%
4-Ethyltoluene (p-Ethyltoluene)	622-96-8	2.7	1.55	56.9%
Benzene	71-43-2	3.0	2.49	83.0%
Bromomethane	74-83-9	2.8	2.48	88.4%
c-1,3-Dichloropropene	10061-01-5	2.5	2.4	97.1%
Carbon tetrachloride	56-23-5	2.9	2.5	86.5%
Chlorobenzene	108-90-7	2.9	2.17	75.1%
Chloroethane	75-00-3	2.9	2.49	86.2%
Chloroform	67-66-3	2.9	2.44	85.3%
Chloromethane (Methyl Chloride)	74-87-3	3.0	2.75	91.7%
Cyclohexane	110-82-7	2.9	2.36	80.9%
Dichlorodifluoromethane (Freon-12)	75-71-8	2.9	2.41	83.4%
Ethane	74-84-0	17.6	16.51	94.0%
Ethene	74-85-1	5.8	5.84	100.1%
Ethylbenzene	100-41-4	2.9	1.94	67.2%
Methylene Chloride (Dichloromethane)	75-09-2	2.9	2.38	80.8%
m-Xylene & p-Xylene	106-42-3+108-38-3	5.6	3.94	70.2%
n-Butane	106-97-8	2.9	2.7	92.6%
n-Heptane	142-82-5	2.9	2.44	83.7%
n-Hexane	110-54-3	8.8	7.76	88.7%
n-Pentane	109-66-0	2.9	2.47	86.3%
o-Xylene	95-47-6	2.8	1.9	67.1%
Propane	74-98-6	2.9	2.8	96.9%
Propylene	115-07-1	5.8	4.83	83.6%
Styrene	100-42-5	2.8	1.71	61.0%
t-1,3-Dichloropropene	10061-02-6	2.7	2	74.2%
Tetrachloroethene	127-18-4	3.0	2.37	79.0%
Toluene	108-88-3	3.0	2.3	77.4%
Trichloroethene	79-01-6	2.9	2.5	87.4%
Trichlorofluoromethane (Freon-11)	75-69-4	3.0	2.5	83.3%
Vinyl Chloride	75-01-4	2.9	2.62	89.8%

QUALITY ASSURANCE AUDIT REPORT

North Texas Commission Ambient Air and Meteorological Monitoring

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EXECUTIVE SUMMARY

On November 9th – 11th and December 5th - 9th, an audit team from the AECOM ambient air group in Austin, Texas conducted performance and technical system audits of the North Texas Commission (NTC) ambient air monitoring network. The audits provide an independent assessment of the monitoring program.

The monitoring program at NTC consists of continuous gas chromatographs (GC), volatile organic compound (VOC) canister collection systems, and meteorological sensors including wind speed, wind direction, and temperature.

The performance audit results indicate acceptable responses for measurement systems with the exceptions summarized below.

The wind direction sensor at Decatur was outside of audit guidance for alignment and maximum total error. The sensor had an alignment error of 5.2°, resulting in a maximum total error of 6.6°. The wind direction sensor was realigned, resulting in an alignment error of 0.5° and a maximum total error of 6.6°.

The wind direction sensor at Rushing was outside of audit guidance for alignment and maximum total error. The sensor had an alignment error of -4.1°, resulting in a maximum total error of -5.2°. The wind direction sensor was realigned, resulting in an alignment error of -1.9° and a maximum total error of 3. °.

The wind direction sensor at Mansfield was outside of audit guidance for linearity. The sensor had a maximum linearity error of -4.1°, resulting in a maximum total error of 4.4°. The wind direction sensor was replaced by the site operator the following the audit.

The wind direction sensor at Godley was outside of audit parameters for linearity. The linearity error between 150 to 360° ranged from 7.1° to 23.8°. There were no values reported between 60-120°. Upon our arrival, it was noticed that the wind direction sensor's sleeve was slid down allowing moisture to enter the inside of the sensor. Moisture from the rain event on 12/07/22 likely damaged the sensor. The site operator replaced the sensor on 12/9/22. Alignment was not performed as the wind direction sensor's value could not be verified.

Out of the 48 compounds being analyzed, thirteen compounds (Ethane, Ethylene, Propylene, Acetylene, m/p-Xylene, Styrene, Isopropylbenzene, n-Propylbenzene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, n-Decane, 1,2,3-Trimethylbenzene, and n-Undecane) were found to be outside of the audit objective of 70% - 130% recovery at several sites. In addition, the Benbrook and Elm Fork sites had the following GC compound recoveries outside of the audit specification:

Locations	Compounds
Flower Mound	Isoprene
Decatur	2-Methylhexane ethylbenzene

These network GC audit results are comparable historically to other AECOM auto-GC audits. The GC audit results are contained in table ES-1. Technical systems audit results demonstrate satisfactory operational procedures for collecting valid data.

A performance evaluation (PE) sample is prepared by the AECOM QA group on a quarterly basis and submitted to the VOC laboratory for analysis. This performance evaluation sample contained known (spiked) concentrations of the target VOCs. A review of the sample recoveries for the spiked target VOCs shows that three out of the forty-five compounds were not within the range of expected values (70-130%).

- 1,2,4-Trimethylbenzene (69.4%)
- Ethane (24.4%)
- Ethene (0.0%)

AECOM QA staff shared the performance evaluation results with the VOC laboratory, and no other corrective action was taken. We will continue to evaluate these compounds in our PE samples and work with the lab to resolve these discrepancies. GD Air's most recent performance evaluation canister results for the fourth quarter of 2022 are contained below in Table ES-2.

Table ES-1. Audit Standard Results for all Network GCs

Compound Name	Audit Conc (ppbc)	Benbrook		Decatur		Dish		Eagle Mountain Lake		Elm Fork	
		Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	51.80	44.7	86.2%	35.3	68.1%	43.3	83.6%	41.7	80.5%	42.9	82.9%
Ethylene	17.37	9.0	51.9%	14.1	81.0%	13.9	80.0%	11.0	63.6%	12.0	69.2%
Propane	12.36	12.9	104.5%	11.2	90.9%	11.0	89.0%	11.0	88.9%	11.1	90.2%
Propylene	13.09	11.0	84.4%	9.4	72.1%	10.6	81.2%	9.7	74.3%	10.2	77.6%
Iso-Butane	16.97	20.2	119.3%	16.2	95.7%	16.1	95.0%	15.6	91.7%	16.9	99.6%
N-Butane	17.13	22.2	129.5%	18.5	107.7%	16.9	98.4%	16.6	96.9%	17.3	101.1%
Acetylene	8.73	5.5	62.5%	6.8	77.7%	5.6	64.1%	7.2	82.0%	6.2	71.6%
Trans-2-Butene	16.65	19.7	118.1%	17.9	107.3%	16.4	98.8%	15.6	93.8%	16.8	100.9%
1-Butene	16.65	19.6	117.5%	16.5	99.4%	16.6	99.8%	15.1	91.0%	16.4	98.6%
Cis-2-Butene	17.62	20.7	117.5%	18.4	104.4%	17.1	97.2%	16.3	92.2%	17.4	98.8%
Cyclopentane	21.21	25.0	117.7%	22.1	104.1%	20.3	95.9%	20.5	96.8%	21.1	99.5%
Iso-Pentane	21.62	26.1	120.7%	22.8	105.4%	21.2	98.1%	20.4	94.3%	21.7	100.2%
N-Pentane	21.62	26.3	121.6%	22.7	105.2%	21.1	97.7%	21.3	98.6%	21.7	100.4%
1,3-Butadiene	16.65	18.9	113.4%	17.2	103.4%	15.1	90.9%	15.3	91.7%	16.5	99.1%
Trans-2-Pentene	21.82	24.8	113.6%	21.3	97.8%	19.8	90.8%	19.5	89.6%	21.7	99.5%
1-Pentene	21.82	22.8	104.6%	20.3	93.1%	18.6	85.3%	17.9	81.9%	21.3	97.8%
Cis-2-Pentene	19.80	20.1	101.5%	18.0	91.1%	13.9	70.1%	15.5	78.5%	18.7	94.3%
2,2-Dimethylbutane	25.45	27.9	109.6%	25.3	99.5%	23.4	92.1%	22.7	89.2%	25.3	99.6%
2-Methylpentane	24.97	27.7	111.1%	23.5	94.3%	22.8	91.2%	22.3	89.2%	24.7	99.0%
Isoprene	21.01	18.0	85.7%	15.8	75.2%	15.2	72.3%	14.8	70.3%	16.5	78.4%
n-Hexane	26.18	27.9	106.6%	24.8	94.8%	22.7	86.8%	26.5	101.2%	23.2	88.5%
Methylcyclopentane	25.70	26.1	101.5%	22.4	87.0%	18.7	72.9%	20.3	78.8%	22.0	85.7%
2,4-Dimethylpentane	30.83	33.4	108.5%	25.9	83.9%	27.8	90.3%	30.1	97.7%	28.5	92.4%
Benzene	25.94	23.7	91.3%	23.6	91.1%	20.8	80.4%	23.6	91.0%	21.7	83.7%
Cyclohexane	26.18	28.7	109.6%	24.4	93.2%	22.8	87.2%	25.5	97.4%	23.3	88.8%
2-Methylhexane	30.55	26.6	87.2%	21.1	69.1%	21.8	71.3%	22.6	74.0%	24.1	78.8%
2,3-Dimethylpentane	29.70	34.5	116.3%	30.6	103.0%	28.8	96.9%	32.4	109.1%	28.6	96.3%
3-Methylhexane	30.55	30.9	101.0%	26.9	87.9%	26.2	85.7%	29.3	95.9%	26.9	88.1%
2,2,4-Trimethylpentane	35.23	34.1	96.7%	28.8	81.7%	28.4	80.7%	32.4	92.0%	30.5	86.5%
n-Heptane	30.55	29.9	98.0%	25.1	82.0%	24.7	80.7%	28.6	93.7%	26.8	87.9%
Methylcyclohexane	30.26	30.7	101.4%	24.8	81.8%	25.1	83.0%	26.6	87.8%	26.8	88.5%
2,3,4-Trimethylpentane	33.94	33.9	99.8%	28.4	83.6%	28.8	84.8%	31.6	93.1%	30.6	90.2%
Toluene	30.26	28.1	92.8%	26.1	86.1%	24.6	81.2%	27.6	91.2%	26.1	86.4%
2-Methylheptane	34.26	32.30	94.3%	28.3	82.6%	27.8	81.1%	31.8	92.9%	29.4	85.9%
3-Methylheptane	34.59	32.46	93.9%	29.9	86.4%	28.1	81.3%	33.7	97.5%	30.2	87.4%
n-Octane	34.26	32.03	93.5%	28.1	81.9%	28.0	81.8%	31.9	93.0%	29.8	86.8%
Ethylbenzene	34.26	29.59	86.4%	23.4	68.4%	27.0	78.7%	27.5	80.1%	27.8	81.1%
M&P-Xylene	67.88	55.66	82.0%	45.0	66.3%	52.3	77.1%	53.2	78.4%	52.9	77.9%
Styrene	32.00	21.60	67.5%	22.5	70.4%	22.7	70.8%	25.8	80.7%	21.8	68.3%
O-Xylene	33.62	30.84	91.8%	24.5	72.8%	27.7	82.5%	28.5	84.7%	27.9	83.1%
N-Nonane	37.09	32.66	88.1%	28.6	77.0%	31.0	83.7%	34.7	93.5%	31.3	84.4%
Isopropylbenzene	36.36	31.91	87.7%	22.7	62.3%	30.0	82.5%	28.7	78.8%	29.3	80.5%
n-Propylbenzene	34.91	29.17	83.6%	23.7	68.0%	28.3	81.1%	28.7	82.3%	27.8	79.6%
1,3,5-Trimethylbenzene	37.82	30.09	79.6%	23.2	61.2%	29.1	77.0%	29.2	77.1%	26.3	69.7%
1,2,4-Trimethylbenzene	38.55	28.59	74.2%	26.5	68.7%	29.2	75.6%	32.2	83.4%	26.5	68.7%
n-Decane	42.83	30.30	70.7%	24.9	58.2%	31.6	73.7%	34.5	80.4%	29.1	67.9%
1,2,3-Trimethylbenzene	39.64	26.00	65.6%	20.9	52.7%	27.2	68.6%	25.6	64.6%	23.3	58.7%
n-Undecane	46.22	28.17	60.9%	25.6	55.5%	28.6	61.9%	35.6	77.0%	26.6	57.5%

^a Compound order based on elution time.

Table ES-1. (Continued) Audit Standard Results for all Network GCs

Compound Name	Audit Conc (ppbc)	Everman		Flower Mound		Godley		Kennedale		Mansfield	
		Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	51.80	51.2	98.8%	41.6	80.2%	50.6	97.6%	49.3	95.1%	38.9	75.2%
Ethylene	17.37	16.7	96.0%	11.7	67.6%	16.5	95.2%	14.9	85.7%	9.9	57.0%
Propane	12.36	12.4	100.4%	10.4	84.5%	12.3	99.4%	12.6	101.6%	10.5	84.8%
Propylene	13.09	12.8	97.9%	9.1	69.8%	11.0	83.8%	10.2	77.6%	9.0	69.0%
Iso-Butane	16.97	17.8	105.0%	15.4	90.7%	17.4	102.6%	18.6	109.6%	16.8	98.8%
N-Butane	17.13	18.7	109.3%	16.0	93.4%	18.2	106.4%	19.2	111.9%	17.6	102.6%
Acetylene	8.73	7.8	89.4%	6.7	76.7%	7.7	87.7%	8.8	100.7%	5.5	63.6%
Trans-2-Butene	16.65	17.9	107.5%	15.6	93.6%	17.8	107.2%	18.6	111.5%	16.6	99.8%
1-Butene	16.65	18.3	110.1%	15.4	92.6%	17.6	105.6%	18.2	109.5%	16.4	98.5%
Cis-2-Butene	17.62	18.4	104.5%	16.4	92.9%	18.5	105.2%	19.3	109.3%	17.4	98.6%
Cyclopentane	21.21	22.4	105.5%	19.6	92.4%	22.0	103.8%	23.1	108.9%	21.1	99.3%
Iso-Pentane	21.62	23.6	109.3%	19.5	90.0%	22.8	105.6%	23.9	110.6%	21.5	99.3%
N-Pentane	21.62	23.7	109.5%	20.3	94.0%	22.9	105.7%	23.7	109.7%	21.8	100.9%
1,3-Butadiene	16.65	17.7	106.3%	14.4	86.4%	17.3	103.7%	18.1	108.5%	15.6	93.5%
Trans-2-Pentene	21.82	23.2	106.2%	19.5	89.4%	22.6	103.5%	23.5	107.7%	20.7	94.9%
1-Pentene	21.82	23.0	105.5%	17.7	81.0%	22.5	103.1%	23.6	108.2%	18.9	86.7%
Cis-2-Pentene	19.80	20.3	102.7%	16.2	82.1%	19.9	100.4%	21.2	107.1%	17.7	89.6%
2,2-Dimethylbutane	25.45	27.0	106.1%	23.0	90.5%	26.2	102.8%	27.8	109.2%	24.8	97.4%
2-Methylpentane	24.97	26.1	104.7%	22.9	91.9%	25.6	102.7%	23.4	93.7%	24.6	98.5%
Isoprene	21.01	19.6	93.2%	14.3	68.3%	17.9	85.3%	20.3	96.6%	16.4	77.9%
n-Hexane	26.18	31.2	119.0%	23.2	88.6%	26.0	99.1%	24.8	94.6%	21.7	82.8%
Methylcyclopentane	25.70	24.5	95.3%	19.4	75.6%	25.1	97.8%	24.9	97.0%	21.1	82.2%
2,4-Dimethylpentane	30.83	33.1	107.5%	28.9	93.8%	31.8	103.3%	29.2	94.9%	25.6	83.0%
Benzene	25.94	25.9	99.8%	20.9	80.5%	24.3	93.7%	25.6	98.6%	20.3	78.2%
Cyclohexane	26.18	27.8	106.2%	22.3	85.2%	25.5	97.3%	26.4	100.7%	22.0	83.9%
2-Methylhexane	30.55	27.0	88.3%	22.3	73.0%	27.5	90.0%	28.8	94.2%	23.5	76.8%
2,3-Dimethylpentane	29.70	33.5	112.9%	28.1	94.5%	31.4	105.7%	30.1	101.3%	24.9	83.8%
3-Methylhexane	30.55	30.7	100.6%	25.6	83.8%	30.2	99.0%	30.1	98.7%	24.7	80.8%
2,2,4-Trimethylpentane	35.23	34.7	98.4%	29.8	84.5%	33.9	96.2%	34.2	97.1%	27.4	77.6%
n-Heptane	30.55	30.8	100.8%	25.7	84.2%	30.2	98.7%	31.4	102.7%	24.6	80.5%
Methylcyclohexane	30.26	29.1	96.3%	25.5	84.3%	30.1	99.5%	31.0	102.5%	24.6	81.2%
2,3,4-Trimethylpentane	33.94	34.4	101.3%	29.9	88.2%	34.7	102.3%	35.2	103.6%	27.4	80.8%
Toluene	30.26	29.9	98.9%	24.9	82.3%	29.2	96.6%	30.3	100.0%	23.6	77.9%
2-Methylheptane	34.26	33.4	97.4%	28.7	83.8%	33.7	98.5%	35.3	103.0%	26.4	77.2%
3-Methylheptane	34.59	32.6	94.2%	29.3	84.6%	34.1	98.5%	35.4	102.4%	27.0	78.0%
n-Octane	34.26	34.9	101.9%	28.7	83.8%	34.7	101.3%	35.6	103.9%	26.4	77.1%
Ethylbenzene	34.26	31.9	93.0%	26.5	77.4%	31.7	92.6%	33.7	98.4%	24.9	72.7%
M&P-Xylene	67.88	62.6	92.2%	50.3	74.0%	60.7	89.4%	65.6	96.6%	47.1	69.4%
Styrene	32.00	26.8	83.8%	20.8	64.9%	27.3	85.3%	29.3	91.6%	20.6	64.5%
O-Xylene	33.62	33.5	99.7%	26.5	78.7%	33.0	98.0%	32.0	95.1%	24.3	72.4%
N-Nonane	37.09	38.5	103.9%	30.5	82.2%	37.8	102.0%	38.4	103.6%	27.2	73.3%
Isopropylbenzene	36.36	36.5	100.5%	27.6	76.0%	35.3	97.1%	36.3	99.7%	26.0	71.5%
n-Propylbenzene	34.91	34.6	99.3%	26.8	76.6%	34.2	97.8%	35.2	100.8%	24.8	71.1%
1,3,5-Trimethylbenzene	37.82	34.9	92.2%	25.0	66.1%	35.3	93.3%	33.4	88.3%	22.8	60.4%
1,2,4-Trimethylbenzene	38.55	35.3	91.6%	26.3	68.2%	35.7	92.6%	36.7	95.2%	24.5	63.6%
n-Decane	42.83	37.7	88.1%	28.5	66.5%	39.5	92.1%	38.6	90.0%	25.9	60.5%
1,2,3-Trimethylbenzene	39.64	32.5	82.0%	22.9	57.9%	30.4	76.8%	31.6	79.8%	22.1	55.6%
n-Undecane	46.22	35.6	77.1%	26.7	57.7%	32.6	70.5%	35.4	76.5%	25.5	55.2%

^a Compound order based on elution time.

Table ES-1. (Continued) Audit Standard Results for all Network GCs

Compound Name	Audit Conc (ppbc)	Rhome		Rushing		UTA		Decatur (Re-Audit)		Flower Mound (Re-Audit)	
		Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	51.80	50.9	98.3%	47.9	92.4%	49.4	95.3%	33.8	65.3%	42.4	81.9%
Ethylene	17.37	16.2	93.2%	11.4	65.5%	16.4	94.2%	13.2	75.9%	11.8	68.0%
Propane	12.36	12.0	97.4%	11.9	96.1%	12.0	97.3%	12.1	98.2%	10.8	87.2%
Propylene	13.09	10.8	82.3%	9.7	74.1%	10.5	80.1%	9.1	69.6%	9.2	70.6%
Iso-Butane	16.97	17.8	105.1%	19.0	111.7%	17.3	101.9%	16.8	99.2%	15.7	92.5%
N-Butane	17.13	18.2	106.4%	19.7	115.0%	17.8	104.0%	19.1	111.4%	16.7	97.7%
Acetylene	8.73	7.8	89.5%	6.0	68.9%	7.5	86.5%	6.6	75.8%	6.7	76.7%
Trans-2-Butene	16.65	17.8	107.0%	18.7	112.4%	17.0	101.9%	18.0	108.4%	16.3	97.8%
1-Butene	16.65	17.8	107.1%	18.8	112.7%	17.1	102.9%	17.4	104.6%	15.9	95.6%
Cis-2-Butene	17.62	18.3	103.9%	19.1	108.6%	17.6	99.9%	18.6	105.7%	17.0	96.4%
Cyclopentane	21.21	22.2	104.8%	23.4	110.4%	21.6	101.7%	21.9	103.1%	19.9	93.9%
Iso-Pentane	21.62	23.1	106.9%	24.3	112.5%	22.4	103.6%	22.9	105.9%	20.5	95.0%
N-Pentane	21.62	23.0	106.6%	24.0	111.2%	22.2	102.6%	23.2	107.2%	20.9	96.5%
1,3-Butadiene	16.65	16.8	100.8%	18.2	109.6%	16.4	98.4%	17.3	103.8%	14.9	89.3%
Trans-2-Pentene	21.82	21.3	97.6%	23.7	108.8%	21.0	96.2%	21.5	98.5%	20.3	93.0%
1-Pentene	21.82	21.1	96.8%	23.4	107.4%	19.6	89.6%	20.5	94.1%	18.7	85.7%
Cis-2-Pentene	19.80	14.6	73.7%	20.5	103.7%	17.4	87.6%	18.1	91.5%	17.3	87.3%
2,2-Dimethylbutane	25.45	26.7	104.7%	26.5	104.1%	24.3	95.3%	25.0	98.1%	23.9	93.7%
2-Methylpentane	24.97	26.0	104.3%	26.4	105.7%	24.4	97.9%	23.5	94.0%	23.1	92.7%
Isoprene	21.01	17.8	84.7%	23.8	113.4%	15.7	74.8%	16.2	76.9%	15.7	74.6%
n-Hexane	26.18	31.5	120.2%	26.5	101.2%	26.2	99.9%	25.6	97.6%	22.1	84.4%
Methylcyclopentane	25.70	21.6	84.1%	24.8	96.3%	24.0	93.4%	22.2	86.5%	20.1	78.2%
2,4-Dimethylpentane	30.83	33.6	109.1%	29.8	96.6%	33.0	107.1%	26.4	85.8%	29.3	94.9%
Benzene	25.94	25.9	99.8%	24.4	93.9%	24.6	95.0%	23.2	89.6%	21.8	84.0%
Cyclohexane	26.18	28.4	108.3%	26.3	100.3%	26.2	99.9%	24.3	92.8%	22.9	87.5%
2-Methylhexane	30.55	25.7	84.0%	25.7	84.0%	26.8	87.8%	23.0	75.4%	23.0	75.4%
2,3-Dimethylpentane	29.70	35.2	118.4%	30.1	101.3%	32.4	109.3%	29.5	99.3%	28.3	95.3%
3-Methylhexane	30.55	31.8	104.0%	28.3	92.6%	30.1	98.5%	27.4	89.8%	26.4	86.5%
2,2,4-Trimethylpentane	35.23	34.6	98.3%	32.0	90.8%	34.3	97.4%	30.0	85.2%	30.2	85.6%
n-Heptane	30.55	30.5	99.8%	28.7	93.9%	30.7	100.6%	27.1	88.6%	26.4	86.6%
Methylcyclohexane	30.26	29.9	98.7%	28.8	95.2%	30.4	100.4%	25.2	83.2%	26.2	86.6%
2,3,4-Trimethylpentane	33.94	34.6	101.9%	32.2	94.8%	34.5	101.6%	28.4	83.6%	30.7	90.5%
Toluene	30.26	30.9	102.0%	27.7	91.4%	29.4	97.2%	25.8	85.3%	26.0	86.1%
2-Methylheptane	34.26	34.5	100.7%	31.5	91.8%	34.0	99.4%	27.6	80.5%	29.3	85.6%
3-Methylheptane	34.59	35.3	102.0%	31.9	92.3%	34.8	100.5%	28.5	82.5%	29.9	86.4%
n-Octane	34.26	34.3	100.1%	32.4	94.6%	35.4	103.3%	28.6	83.4%	29.4	85.9%
Ethylbenzene	34.26	31.2	91.0%	29.7	86.7%	31.9	93.0%	24.7	72.2%	27.2	79.4%
M&P-Xylene	67.88	61.8	91.0%	58.0	85.5%	62.9	92.7%	47.5	69.9%	52.1	76.7%
Styrene	32.00	26.5	82.8%	25.9	80.8%	28.2	88.3%	22.7	70.8%	22.2	69.4%
O-Xylene	33.62	33.2	98.9%	30.7	91.3%	33.3	98.9%	25.4	75.7%	27.4	81.6%
N-Nonane	37.09	39.0	105.0%	35.0	94.5%	39.1	105.5%	29.9	80.5%	31.6	85.3%
Isopropylbenzene	36.36	35.4	97.3%	33.8	92.8%	35.6	98.0%	25.3	69.7%	29.5	81.1%
n-Propylbenzene	34.91	34.0	97.4%	31.9	91.3%	34.5	98.7%	25.4	72.8%	27.5	78.7%
1,3,5-Trimethylbenzene	37.82	37.0	97.7%	34.0	90.0%	35.4	93.6%	25.4	67.1%	26.0	68.8%
1,2,4-Trimethylbenzene	38.55	37.5	97.3%	35.0	90.9%	35.6	92.4%	36.6	94.9%	25.8	66.9%
n-Decane	42.83	38.7	90.4%	35.5	82.9%	39.8	92.9%	27.3	63.8%	29.4	68.7%
1,2,3-Trimethylbenzene	39.64	31.2	78.7%	31.2	78.6%	30.8	77.8%	22.5	56.8%	23.0	58.0%
n-Undecane	46.22	35.6	77.1%	37.2	80.5%	34.2	74.0%	29.3	63.3%	26.9	58.2%

^a Compound order based on elution time.

Table ES-2. Results of Performance Standard for Off-Site Analytical Lab

Compound Name	CAS Number	Input Concentration	Lab Results	Percent Recovery
1,1,1-Trichloroethane	71-55-6	3.6	3.1	86.4%
1,1,2,2-Tetrachloroethane	79-34-5	3.5	2.6	74.9%
1,1,2-Trichloroethane	79-00-5	3.6	3.4	95.9%
1,1-Dichloroethane	75-34-3	3.5	2.9	81.8%
1,1-Dichloroethene	75-35-4	3.5	2.9	82.0%
1,2,4-Trimethylbenzene	95-63-6	3.3	2.3	69.4%
1,2-Dibromoethane	106-93-4	3.5	3.4	97.5%
1,2-Dichloroethane	107-06-2	3.6	2.9	81.6%
1,2-Dichloropropane	78-87-5	3.6	3.1	85.0%
1,3,5-Trimethylbenzene	108-67-8	3.4	2.4	71.0%
1,3-Butadiene	106-99-0	7.0	6.1	86.0%
1-Butene	106-98-9	3.5	2.7	77.9%
1-Hexene	592-41-6	3.2	2.8	87.5%
1-Pentene	109-67-1	3.4	2.8	81.0%
2,2,4-Trimethylpentane	540-84-1	3.5	3.2	90.6%
4-Ethyltoluene (p-Ethyltoluene)	622-96-8	3.3	2.4	72.6%
Benzene	71-43-2	3.6	3.2	88.6%
Bromomethane	74-83-9	3.4	2.9	86.1%
c-1,3-Dichloropropene	10061-01-5	3.2	3.1	98.8%
Carbon tetrachloride	56-23-5	3.5	3.0	86.0%
Chlorobenzene	108-90-7	3.5	2.9	82.0%
Chloroform	67-66-3	3.5	3.0	87.1%
Chloromethane (Methyl Chloride)	74-87-3	3.6	2.7	75.4%
Cyclohexane	110-82-7	3.5	3.3	93.1%
Dichlorodifluoromethane (Freon-12)	75-71-8	3.5	2.8	78.9%
Ethane	74-84-0	21.2	5.2	24.4%
Ethene	74-85-1	7.0	0.0	0.0%
Ethylbenzene	100-41-4	3.5	2.7	77.1%
Methylene Chloride (Dichloromethane)	75-09-2	3.5	2.8	80.6%
m-Xylene & p-Xylene	106-42-3+108-38-3	6.9	5.4	78.2%
n-Butane	106-97-8	3.5	2.8	80.6%
n-Heptane	142-82-5	3.4	3.1	88.8%
n-Hexane	110-54-3	10.5	8.9	84.0%
n-Pentane	109-66-0	3.4	2.9	83.6%
o-Xylene	95-47-6	3.5	2.7	76.6%
Propane	74-98-6	3.4	2.6	76.6%
Propylene	115-07-1	6.9	5.0	72.4%
Styrene	100-42-5	3.4	2.5	74.4%
t-1,3-Dichloropropene	10061-02-6	3.3	2.6	79.9%
Tetrachloroethene	127-18-4	3.6	3.3	91.4%
Toluene	108-88-3	3.6	3.3	91.4%
Trichloroethene	79-01-6	3.4	3.3	96.1%
Trichlorofluoromethane (Freon-11)	75-69-4	3.6	2.9	80.5%
Vinyl Chloride	75-01-4	3.6	2.8	78.2%

QUALITY ASSURANCE AUDIT REPORT

North Texas Commission Ambient Air and Meteorological Monitoring

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EXECUTIVE SUMMARY

On May 22nd through 24th, 2023, an audit team from the AECOM ambient air group in Austin, Texas conducted performance and technical system audits of the North Texas Commission (NTC) ambient air monitoring network. The audits provide an independent assessment of the monitoring program.

The monitoring program at NTC consists of continuous gas chromatographs (GC), volatile organic compound (VOC) canister collection systems, and meteorological sensors including wind speed, wind direction, and temperature.

The performance audit results indicate acceptable responses for measurement systems with the exceptions summarized below.

The temperature aspirator fan at Everman is not functioning properly. The temperature aspirator fan is spinning slowly resulting in reduced air flow over the temperature sensor. The fan should be replaced to ensure proper flow.

The temperature probe at Mansfield was outside of audit specification with an average error of -1.0° F.

Out of the 48 compounds being analyzed, nine compounds (ethylene, acetylene, isoprene, styrene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, n-Decane, 1,2,3-trimethylbenzene, and n-undecane) were found to be outside of the audit objective of 70% - 130% recovery at several sites. In addition, the Benbrook, Decatur, Dish, Eagle Mountain Lake, and Mansfield sites had the following GC compound recoveries outside of the audit specification:

Locations	Compounds
Benbrook	Ethane Propylene
Decatur	Cis-2-Pentene
Dish	2-Methylhexane
Eagle Mountain Lake	Propylene
Mansfield	M&P-Xylene O-Xylene N-Nonane Isopropylbenzene n-Propylbenzene

These network GC audit results are comparable historically to other AECOM auto-GC audits. The GC audit results are contained in table ES-1. Technical systems audit results demonstrate satisfactory operational procedures for collecting valid data.

A performance evaluation (PE) sample is prepared by the AECOM QA group on a quarterly basis and submitted to the VOC laboratory for analysis. This performance evaluation sample contained known (spiked) concentrations of the target VOCs. A review of the sample recoveries for the spiked target VOCs shows that only one out of the forty-four compounds was not within the range of expected values (70-130%). Ethene had a recovery of 134.1%.

AECOM QA staff shared the performance evaluation results with the VOC laboratory, and no other corrective action was taken. We will continue to evaluate the compounds in our PE samples and work with the lab to resolve this discrepancy. GD Air's most recent performance evaluation canister results for the first quarter of 2023 are contained below in Table ES-2.

Table ES-2. Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Benbrook		Decatur		Dish		Eagle Mountain Lake	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.80	33.8	65.3%	41.6	80.3%	41.3	79.7%	40.8	78.8%
Ethylene	74-85-1	17.37	6.5	37.2%	11.6	66.8%	11.3	64.9%	10.2	58.7%
Propane	74-98-6	12.36	10.9	88.3%	10.3	83.3%	10.3	83.0%	9.4	76.2%
Propylene	115-07-1	13.09	9.0	68.7%	9.6	73.5%	9.6	73.7%	8.6	65.4%
Iso-Butane	75-28-5	16.97	18.2	107.5%	15.2	89.8%	15.9	93.7%	15.7	92.2%
N-Butane	106-97-8	17.13	19.1	111.3%	16.0	93.3%	16.5	96.1%	16.5	96.4%
Acetylene	74-86-2	8.73	5.3	60.7%	6.2	71.5%	6.0	69.1%	5.7	65.3%
Trans-2-Butene	624-64-6	16.65	18.2	109.4%	15.7	94.4%	16.2	97.4%	16.0	96.3%
1-Butene	106-98-9	16.65	18.1	108.5%	15.7	94.1%	16.2	97.5%	15.9	95.5%
Cis-2-Butene	590-18-1	17.62	19.2	109.1%	16.2	91.9%	17.0	96.3%	16.8	95.2%
Cyclopentane	287-92-3	21.21	23.0	108.3%	19.5	92.1%	20.1	94.6%	20.8	98.1%
Iso-Pentane	78-78-4	21.62	23.5	108.5%	20.1	93.2%	20.5	95.1%	20.8	96.2%
N-Pentane	109-66-0	21.62	23.9	110.4%	20.3	94.1%	20.8	96.1%	21.0	97.0%
1,3-Butadiene	106-99-0	16.65	16.4	98.4%	14.1	84.9%	16.3	97.7%	16.8	100.7%
Trans-2-Pentene	646-04-8	21.82	22.7	104.0%	19.3	88.7%	20.6	94.2%	21.1	96.8%
1-Pentene	109-67-1	21.82	20.1	92.2%	20.0	91.5%	20.4	93.3%	20.5	94.1%
Cis-2-Pentene	627-20-3	19.80	17.1	86.5%	13.6	68.7%	18.5	93.3%	18.8	94.8%
2,2-Dimethylbutane	75-83-2	25.45	26.8	105.3%	23.4	91.9%	23.5	92.3%	24.5	96.2%
2-Methylpentane	107-83-5	24.97	25.8	103.2%	21.9	87.5%	22.9	91.7%	23.8	95.2%
Isoprene	78-79-5	21.01	15.0	71.6%	14.1	67.3%	17.3	82.1%	17.7	84.1%
n-Hexane	110-54-3	26.18	26.2	99.9%	21.3	81.4%	21.8	83.3%	22.3	85.0%
Methylcyclopentane	108-87-2	25.70	24.2	94.2%	20.2	78.4%	19.0	74.0%	19.7	76.5%
2,4-Dimethylpentane	108-08-7	30.83	30.5	98.9%	27.4	88.9%	27.4	89.0%	30.0	97.2%
Benzene	71-43-2	25.94	23.1	88.9%	20.8	80.1%	21.6	83.1%	23.1	89.2%
Cyclohexane	110-82-7	26.18	27.3	104.5%	21.7	82.7%	22.9	87.3%	25.5	97.3%
2-Methylhexane	591-76-4	30.55	24.7	81.0%	22.4	73.2%	21.3	69.8%	22.1	72.5%
2,3-Dimethylpentane	565-59-3	29.70	32.4	109.1%	26.8	90.1%	27.5	92.6%	31.4	105.7%
3-Methylhexane	589-34-4	30.55	29.3	95.9%	25.0	81.9%	25.2	82.4%	27.8	91.0%
2,2,4-Trimethylpentane	540-84-1	35.23	31.5	89.4%	28.3	80.4%	27.0	76.8%	30.5	86.6%
n-Heptane	142-82-5	30.55	26.6	87.2%	25.3	82.9%	23.1	75.7%	27.0	88.5%
Methylcyclohexane	108-87-2	30.26	28.0	92.6%	25.0	82.7%	24.1	79.6%	26.0	86.0%
2,3,4-Trimethylpentane	565-75-3	33.94	31.4	92.4%	28.6	84.2%	27.9	82.1%	30.4	89.7%
Toluene	108-88-3	30.26	26.3	86.8%	24.5	81.1%	23.5	77.8%	26.2	86.5%
2-Methylheptane	592-27-8	34.26	29.90	87.3%	27.8	81.1%	26.6	77.5%	29.3	85.5%
3-Methylheptane	589-81-1	34.59	30.16	87.2%	28.2	81.6%	27.0	78.1%	29.4	85.1%
n-Octane	111-65-9	34.26	28.71	83.8%	28.7	83.7%	27.2	79.5%	29.4	85.8%
Ethylbenzene	100-41-4	34.26	26.40	77.1%	26.4	77.2%	26.3	76.8%	27.2	79.3%
M&P-Xylene	108-38-3	67.88	49.57	73.0%	50.9	75.0%	50.1	73.8%	52.8	77.7%
Styrene	100-42-5	32.00	19.21	60.0%	21.7	67.7%	22.9	71.7%	23.1	72.1%
O-Xylene	95-47-6	33.62	27.71	82.4%	26.8	79.6%	26.4	78.5%	28.6	84.9%
N-Nonane	111-84-2	37.09	30.50	82.2%	30.5	82.1%	29.8	80.2%	33.1	89.3%
Isopropylbenzene	98-82-8	36.36	37.37	102.8%	28.0	77.1%	27.7	76.2%	30.8	84.8%
n-Propylbenzene	103-65-1	34.91	25.60	73.3%	27.1	77.6%	26.5	75.9%	29.3	84.1%
1,3,5-Trimethylbenzene	108-67-8	37.82	25.77	68.1%	26.1	68.9%	26.7	70.7%	31.6	83.7%
1,2,4-Trimethylbenzene	95-63-6	38.55	25.58	66.4%	27.1	70.3%	28.3	73.3%	30.3	78.7%
n-Decane	124-18-5	42.83	26.96	62.9%	29.0	67.8%	29.2	68.2%	31.8	74.4%
1,2,3-Trimethylbenzene	526-73-8	39.64	22.20	56.0%	23.4	59.0%	24.9	62.7%	26.4	66.5%
n-Undecane	1120-21-4	46.22	25.42	55.0%	25.3	54.6%	27.1	58.6%	27.1	58.5%

^a Compound order based on elution time.

Table ES-1. (Continued) Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Elm Fork		Everman		Flower Mound		Godley	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.80	40.9	79.0%	50.2	96.8%	41.7	80.5%	47.5	91.7%
Ethylene	74-85-1	17.37	12.4	71.5%	17.2	99.1%	12.3	70.9%	16.3	94.0%
Propane	74-98-6	12.36	10.3	83.3%	12.3	99.4%	10.5	85.2%	11.8	95.1%
Propylene	115-07-1	13.09	9.9	75.7%	13.2	101.0%	10.4	79.8%	11.6	88.4%
Iso-Butane	75-28-5	16.97	14.9	88.0%	17.9	105.3%	15.7	92.3%	16.6	97.7%
N-Butane	106-97-8	17.13	15.7	91.4%	18.3	106.7%	15.8	92.0%	17.1	99.7%
Acetylene	74-86-2	8.73	6.3	72.2%	8.0	91.8%	6.8	77.4%	7.9	90.9%
Trans-2-Butene	624-64-6	16.65	14.9	89.4%	17.9	107.4%	15.6	93.7%	16.6	99.5%
1-Butene	106-98-9	16.65	13.5	81.4%	17.8	106.7%	15.5	93.0%	16.4	98.3%
Cis-2-Butene	590-18-1	17.62	14.9	84.5%	18.7	105.9%	16.3	92.4%	17.1	97.3%
Cyclopentane	287-92-3	21.21	19.4	91.4%	22.2	104.5%	19.5	92.1%	20.5	96.7%
Iso-Pentane	78-78-4	21.62	19.8	91.4%	22.8	105.5%	20.0	92.4%	21.3	98.4%
N-Pentane	109-66-0	21.62	19.6	90.7%	22.7	105.2%	20.4	94.3%	21.2	98.3%
1,3-Butadiene	106-99-0	16.65	12.7	76.3%	17.2	103.6%	15.6	93.6%	16.1	96.8%
Trans-2-Pentene	646-04-8	21.82	19.8	90.5%	22.6	103.7%	20.2	92.4%	21.1	96.8%
1-Pentene	109-67-1	21.82	19.7	90.4%	22.4	102.6%	19.5	89.3%	20.4	93.7%
Cis-2-Pentene	627-20-3	19.80	16.3	82.5%	20.2	102.0%	17.8	89.9%	18.2	91.8%
2,2-Dimethylbutane	75-83-2	25.45	23.5	92.3%	26.3	103.4%	22.8	89.6%	24.6	96.6%
2-Methylpentane	107-83-5	24.97	22.8	91.2%	25.1	100.5%	23.1	92.6%	24.0	96.0%
Isoprene	78-79-5	21.01	14.6	69.6%	19.6	93.1%	16.5	78.6%	15.9	75.9%
n-Hexane	110-54-3	26.18	25.2	96.1%	26.4	100.8%	21.9	83.6%	25.2	96.4%
Methylcyclopentane	108-87-2	25.70	20.6	80.3%	25.4	98.7%	21.1	82.2%	25.1	97.8%
2,4-Dimethylpentane	108-08-7	30.83	25.9	83.9%	30.4	98.4%	26.3	85.2%	31.7	102.8%
Benzene	71-43-2	25.94	20.0	77.2%	26.3	101.6%	21.3	82.2%	23.2	89.5%
Cyclohexane	110-82-7	26.18	21.8	83.2%	28.2	107.8%	21.5	82.2%	25.6	97.8%
2-Methylhexane	591-76-4	30.55	22.6	74.1%	29.3	95.8%	23.7	77.7%	27.8	91.2%
2,3-Dimethylpentane	565-59-3	29.70	27.1	91.3%	32.7	110.2%	26.0	87.4%	30.5	102.6%
3-Methylhexane	589-34-4	30.55	25.2	82.5%	31.5	103.1%	25.6	83.7%	30.0	98.1%
2,2,4-Trimethylpentane	540-84-1	35.23	28.4	80.7%	34.8	98.7%	28.7	81.6%	33.7	95.6%
n-Heptane	142-82-5	30.55	25.1	82.3%	31.2	102.1%	25.3	82.8%	30.2	98.9%
Methylcyclohexane	108-87-2	30.26	25.1	83.0%	30.6	101.1%	25.2	83.3%	29.8	98.4%
2,3,4-Trimethylpentane	565-75-3	33.94	28.7	84.5%	34.4	101.3%	29.4	86.5%	33.8	99.6%
Toluene	108-88-3	30.26	23.7	78.3%	28.6	94.7%	24.6	81.1%	29.5	97.5%
2-Methylheptane	592-27-8	34.26	27.9	81.4%	34.3	100.0%	28.1	82.1%	33.3	97.2%
3-Methylheptane	589-81-1	34.59	27.8	80.5%	34.6	99.9%	28.5	82.5%	33.7	97.6%
n-Octane	111-65-9	34.26	28.1	82.0%	34.6	101.0%	28.0	81.9%	33.7	98.3%
Ethylbenzene	100-41-4	34.26	26.4	77.2%	33.0	96.5%	26.6	77.7%	32.0	93.5%
M&P-Xylene	108-38-3	67.88	50.6	74.6%	64.0	94.2%	50.5	74.4%	63.0	92.8%
Styrene	100-42-5	32.00	19.0	59.5%	27.3	85.2%	21.1	65.9%	28.0	87.4%
O-Xylene	95-47-6	33.62	25.0	74.3%	33.9	101.0%	26.3	78.3%	33.2	98.9%
N-Nonane	111-84-2	37.09	29.5	79.4%	39.0	105.2%	29.8	80.4%	37.3	100.6%
Isopropylbenzene	98-82-8	36.36	28.1	77.2%	37.2	102.2%	28.2	77.6%	36.8	101.3%
n-Propylbenzene	103-65-1	34.91	26.8	76.7%	35.0	100.4%	26.8	76.7%	35.2	100.9%
1,3,5-Trimethylbenzene	108-67-8	37.82	26.0	68.7%	35.1	92.8%	25.0	66.2%	38.4	101.5%
1,2,4-Trimethylbenzene	95-63-6	38.55	26.5	68.8%	31.8	82.6%	25.7	66.7%	38.0	98.6%
n-Decane	124-18-5	42.83	28.8	67.1%	37.3	87.0%	27.6	64.4%	38.9	90.9%
1,2,3-Trimethylbenzene	526-73-8	39.64	23.6	59.6%	30.2	76.2%	23.1	58.2%	35.6	89.8%
n-Undecane	1120-21-4	46.22	26.9	58.3%	31.2	67.4%	25.6	55.5%	40.2	87.0%

^a Compound order based on elution time.

Table ES-1. (Continued) Audit Standard Results for all Network GCs

Compound Name	CAS Number	Audit Conc (ppbc)	Kennedale		Mansfield		Rhome		Rushing		UTA	
			Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery	Post Processed ppbc	Percent Recovery
Ethane	74-84-0	51.80	50.7	97.9%	38.7	74.8%	47.7	92.0%	46.8	90.3%	48.3	93.2%
Ethylene	74-85-1	17.37	11.5	66.3%	10.0	57.7%	15.5	89.0%	11.7	67.3%	14.7	84.9%
Propane	74-98-6	12.36	12.5	101.5%	10.0	81.2%	10.9	88.2%	11.2	90.9%	11.4	92.2%
Propylene	115-07-1	13.09	10.7	81.5%	9.5	72.4%	9.8	74.6%	9.6	73.2%	10.9	83.3%
Iso-Butane	75-28-5	16.97	17.9	105.7%	16.8	98.8%	16.2	95.7%	18.3	108.1%	16.7	98.4%
N-Butane	106-97-8	17.13	18.5	108.1%	17.3	101.0%	16.6	96.9%	19.1	111.8%	17.2	100.2%
Acetylene	74-86-2	8.73	8.2	94.1%	6.3	71.7%	7.5	85.4%	6.1	69.5%	7.5	86.2%
Trans-2-Butene	624-64-6	16.65	17.2	103.2%	16.6	99.6%	16.9	101.4%	18.4	110.7%	16.5	99.3%
1-Butene	106-98-9	16.65	18.2	109.1%	16.2	97.5%	16.4	98.5%	18.2	109.5%	16.6	99.8%
Cis-2-Butene	590-18-1	17.62	18.2	103.1%	17.0	96.5%	17.3	98.2%	18.8	106.8%	17.2	97.4%
Cyclopentane	287-92-3	21.21	22.3	105.1%	20.6	97.1%	20.7	97.7%	23.2	109.1%	20.9	98.7%
Iso-Pentane	78-78-4	21.62	23.0	106.3%	21.1	97.7%	21.8	100.9%	23.6	109.4%	21.6	99.9%
N-Pentane	109-66-0	21.62	22.9	106.0%	21.1	97.5%	21.7	100.4%	23.4	108.1%	21.5	99.5%
1,3-Butadiene	106-99-0	16.65	17.2	103.5%	16.0	96.2%	16.2	97.2%	17.3	103.7%	16.6	99.7%
Trans-2-Pentene	646-04-8	21.82	21.1	96.8%	20.6	94.5%	20.9	95.9%	21.6	99.0%	21.2	97.2%
1-Pentene	109-67-1	21.82	23.2	106.2%	20.3	92.9%	20.9	95.6%	21.0	96.1%	21.2	97.2%
Cis-2-Pentene	627-20-3	19.80	16.8	85.0%	18.3	92.3%	18.7	94.3%	14.9	75.2%	19.0	96.1%
2,2-Dimethylbutane	75-83-2	25.45	26.6	104.4%	24.4	96.0%	24.9	97.7%	26.2	102.9%	25.0	98.3%
2-Methylpentane	107-83-5	24.97	25.6	102.6%	24.2	97.0%	24.3	97.3%	25.8	103.1%	24.3	97.3%
Isoprene	78-79-5	21.01	17.0	81.1%	17.1	81.5%	18.4	87.7%	16.7	79.7%	18.2	86.5%
n-Hexane	110-54-3	26.18	24.9	95.2%	20.5	78.2%	26.2	99.9%	27.0	103.0%	25.7	98.0%
Methylcyclopentane	108-87-2	25.70	24.3	94.7%	20.3	79.0%	20.0	78.0%	24.4	95.0%	25.1	97.7%
2,4-Dimethylpentane	108-08-7	30.83	28.4	92.0%	24.6	79.9%	32.1	104.3%	29.0	94.2%	32.4	105.0%
Benzene	71-43-2	25.94	24.3	93.5%	20.3	78.3%	23.7	91.2%	24.3	93.8%	23.9	92.2%
Cyclohexane	110-82-7	26.18	25.8	98.7%	21.1	80.7%	25.2	96.1%	25.7	98.0%	26.5	101.1%
2-Methylhexane	591-76-4	30.55	27.8	91.0%	21.9	71.8%	24.3	79.4%	25.0	81.8%	27.6	90.2%
2,3-Dimethylpentane	565-59-3	29.70	29.7	99.9%	23.8	80.3%	32.3	108.6%	29.3	98.8%	31.3	105.2%
3-Methylhexane	589-34-4	30.55	29.1	95.3%	23.8	77.8%	29.3	96.0%	27.6	90.3%	30.2	98.9%
2,2,4-Trimethylpentane	540-84-1	35.23	32.7	92.9%	26.8	76.1%	32.1	91.2%	31.4	89.2%	34.0	96.5%
n-Heptane	142-82-5	30.55	29.3	95.9%	23.3	76.1%	28.3	92.5%	27.7	90.8%	30.2	98.9%
Methylcyclohexane	108-87-2	30.26	29.2	96.4%	23.8	78.5%	27.5	90.8%	28.2	93.1%	29.7	98.2%
2,3,4-Trimethylpentane	565-75-3	33.94	33.1	97.4%	27.0	79.6%	32.1	94.7%	31.1	91.6%	34.7	102.2%
Toluene	108-88-3	30.26	28.9	95.6%	22.3	73.6%	28.5	94.1%	26.7	88.4%	29.1	96.3%
2-Methylheptane	592-27-8	34.26	32.6	95.2%	25.6	74.6%	31.9	93.2%	30.0	87.5%	33.7	98.3%
3-Methylheptane	589-81-1	34.59	33.1	95.6%	26.0	75.1%	32.3	93.3%	29.8	86.2%	34.0	98.4%
n-Octane	111-65-9	34.26	33.7	98.5%	25.7	75.1%	32.2	93.9%	30.6	89.3%	34.6	100.9%
Ethylbenzene	100-41-4	34.26	30.6	89.4%	24.2	70.5%	29.1	84.8%	28.4	82.9%	31.9	93.1%
M&P-Xylene	108-38-3	67.88	60.0	88.4%	45.2	66.6%	57.2	84.3%	55.2	81.3%	62.6	92.3%
Styrene	100-42-5	32.00	26.4	82.5%	18.9	59.1%	26.4	82.4%	24.5	76.5%	27.1	84.7%
O-Xylene	95-47-6	33.62	31.3	93.2%	23.4	69.6%	30.4	90.5%	29.2	87.0%	33.0	98.0%
N-Nonane	111-84-2	37.09	36.2	97.6%	26.0	70.0%	36.2	97.5%	33.4	90.2%	39.2	105.8%
Isopropylbenzene	98-82-8	36.36	32.4	89.1%	25.0	68.9%	31.9	87.7%	31.3	86.0%	35.9	98.6%
n-Propylbenzene	103-65-1	34.91	32.0	91.6%	23.7	68.0%	31.5	90.1%	29.8	85.2%	34.7	99.4%
1,3,5-Trimethylbenzene	108-67-8	37.82	30.0	79.2%	22.8	60.3%	32.0	84.7%	29.1	77.0%	37.0	97.8%
1,2,4-Trimethylbenzene	95-63-6	38.55	31.8	82.5%	23.0	59.7%	34.4	89.3%	31.7	82.3%	35.4	91.9%
n-Decane	124-18-5	42.83	34.3	80.1%	23.8	55.6%	35.8	83.5%	32.6	76.2%	38.0	88.8%
1,2,3-Trimethylbenzene	526-73-8	39.64	27.5	69.5%	20.6	51.9%	28.5	72.0%	27.2	68.6%	31.9	80.4%
n-Undecane	1120-21-4	46.22	30.8	66.7%	23.8	51.6%	34.1	73.9%	31.2	67.4%	33.0	71.4%

^a Compound order based on elution time.

Table ES-2. Results of Performance Standard for Off-Site Analytical Lab

Compound Name	CAS Number	Input Concentration	Lab Results	Percent Recovery
1,1,1-Trichloroethane	71-55-6	3.6	3.3	92.2%
1,1,2,2-Tetrachloroethane	79-34-5	3.5	3.5	98.9%
1,1,2-Trichloroethane	79-00-5	3.6	3.7	103.2%
1,1-Dichloroethane	75-34-3	3.5	3.2	89.4%
1,1-Dichloroethene	75-35-4	3.5	3.3	93.7%
1,2,4-Trimethylbenzene	95-63-6	3.3	2.6	79.7%
1,2-Dibromoethane	106-93-4	3.5	3.5	102.1%
1,2-Dichloroethane	107-06-2	3.6	3.4	95.6%
1,2-Dichloropropane	78-87-5	3.6	3.5	98.3%
1,3,5-Trimethylbenzene	108-67-8	3.4	2.7	79.6%
1,3-Butadiene	106-99-0	7.0	7.2	102.5%
1-Butene	106-98-9	3.5	3.1	90.0%
1-Hexene	592-41-6	3.2	3.3	102.4%
1-Pentene	109-67-1	3.4	3.3	97.3%
2,2,4-Trimethylpentane	540-84-1	3.5	3.6	103.1%
4-Ethyltoluene (p-Ethyltoluene)	622-96-8	3.3	2.7	80.7%
Benzene	71-43-2	3.6	3.5	96.7%
Bromomethane	74-83-9	3.4	3.0	89.4%
c-1,3-Dichloropropene	10061-01-5	3.2	3.6	114.6%
Carbon tetrachloride	56-23-5	3.5	3.2	91.7%
Chlorobenzene	108-90-7	3.5	3.5	100.0%
Chloroform	67-66-3	3.5	3.3	95.5%
Chloromethane (Methyl Chloride)	74-87-3	3.6	3.3	89.4%
Cyclohexane	110-82-7	3.5	3.5	98.8%
Dichlorodifluoromethane (Freon-12)	75-71-8	3.5	3.1	87.7%
Ethane	74-84-0	21.2	19.2	90.6%
Ethene	74-85-1	7.0	9.4	134.1%
Ethylbenzene	100-41-4	3.5	3.4	98.0%
Methylene Chloride (Dichloromethane)	75-09-2	3.5	3.3	94.9%
m-Xylene & p-Xylene	106-42-3+108-38-3	6.9	6.7	97.7%
n-Butane	106-97-8	3.5	3.4	96.3%
n-Heptane	142-82-5	3.4	3.5	101.9%
n-Hexane	110-54-3	10.5	10.2	97.0%
n-Pentane	109-66-0	3.4	3.4	99.9%
o-Xylene	95-47-6	3.5	3.4	96.9%
Propane	74-98-6	3.4	3.4	97.6%
Propylene	115-07-1	6.9	5.8	83.5%
Styrene	100-42-5	3.4	3.1	90.9%
t-1,3-Dichloropropene	10061-02-6	3.3	2.9	89.1%
Tetrachloroethene	127-18-4	3.6	3.2	87.5%
Toluene	108-88-3	3.6	3.5	97.6%
Trichloroethene	79-01-6	3.4	3.5	100.8%
Trichlorofluoromethane (Freon-11)	75-69-4	3.6	3.1	86.9%
Vinyl Chloride	75-01-4	3.6	3.2	90.6%

EXHIBIT B:
MONTHLY PROGRESS REPORTS

PROGRESS REPORT, #1

September 2021

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on August 30, 2021, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
 - NTC has approved a new Plan of Activities from AECOM for continued operation of the Regional Air Monitoring Program.
 - TCEQ has issued NTC an “Approval to Commence Grant Activities” for POA 6.
 -
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the September 2021 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*

- NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of September.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #2

October 2021

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on October 12, 2021, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the October 2021 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of October.
-

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of September.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #3

November 2021

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on November 4, 2021, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
 - Reviewing of Quality Assurance Project Plan and updating as needed.
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - NTC has reviewed and approved the November 2021 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of November.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report June (revised), July and August 2021
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of October.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #4

December 2021

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on December 10, 2021, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
 - Reviewing of Quality Assurance Project Plan and updating as needed.
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the December 2021 invoice from AECOM.
 - ⊖ NTC underwent its annual financial audit. Results will be available in the February, 2022 progress report.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of December.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of November.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #5

January 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on January 11, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
 - Reviewing of Quality Assurance Project Plan and updating as needed.
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - NTC has reviewed and approved the January 2021 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of January.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report for September
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of December.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #6

February 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on February 5, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the February 2022 invoice from AECOM.
 - ⊖ In December 2021, NTC underwent its annual financial audit. The final report to the board of directors did not identify “any deficiencies in internal control,” “material weaknesses,” or “instances of noncompliance” with *Government Auditing Standards*.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of February.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of January.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #7

March 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on March 8, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the March 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of March.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report for October
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of February.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #8

April 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on April 7, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the April 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of April.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Reports for November and December
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of March.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #9

May 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on May 12, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the May 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of May.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of April.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #10

June 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on June 13, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the June 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of June.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Reports for January and February.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of May.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #11

July 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on July 8, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors

throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the July 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of July.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report for March.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of June.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #12

August 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on August 6, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the August 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of August.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report for April.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of July.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #13

September 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on September 10, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors

throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the September 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of September.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report for May.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of August.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #14

October 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on October 10, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the October 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

- At the end of FY21 three AutoGC systems were ordered to replace aging monitoring equipment that is approaching ten years of use at Arlington UT Campus (established by NTC on 9/20/12), Everman Johnson Park (est. by NTC 5/8/13), Godley FM 2331 (est. by NTC on 7/13/13). In FY22 these three systems were

received and installed at these three sites. At the end of FY22 one additional AutoGC system was purchased to replace another aging system when received and is expected during FY23. At the end of FY23 additional AutoGC systems will be ordered based on available funding to replace the aging network of 13 AutoGCs.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of October.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report for June.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of September.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #15

November 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on November 14, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the November 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of November.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report for July.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of October.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #16

December 2022

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on December 5, 2022, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors

throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the December 2022 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of December.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of November.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #17

January 2023

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on January 10, 2023, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors

throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the January 2023 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of January.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Report for August.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of December.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #18

February 2023

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on February 3, 2023, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors

throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the February 2023 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of February.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of January.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #19

March 2023

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on March 7, 2023, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the March 2023 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of March.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of February.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #20

April 2023

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on April 10, 2023, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
 - Continued Implementation of SB527 has been signed for FY 24/25.
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - NTC has reviewed and approved the April 2023 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of April.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of March.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #21

May 2023

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on May 10, 2023, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
 - TCEQ has issued NTC an “Approval to Prepare Plan of Activities” for POA 6A
 - TCEQ has issued NTC an “Approval to Commence Grant Activities” for POA 6A.
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the May 2023 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of May.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- NTC has reviewed the Network Summary Reports for September and October.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has created a progress report for the month of April.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #22

June 2023

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on June 8, 2023, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors

throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
 - Submitted a Budget Revision Request Form.
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the June 2023 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of June.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has reviewed the Network Summary Reports for November and December.
- NTC has created a progress report for the month of May.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #23

July 2023

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on July 10, 2023, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the July 2023 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of July.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has reviewed the Network Summary Reports for January and February.
- NTC has created a progress report for the month of June.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.

PROGRESS REPORT, #24

August 2023

Project Title: Continued Implementation of SB527 Monitoring Program in FY22/FY23

Project No.: 582-22-30598-001

POA No.: FY22/FY23-06

Summary of recent activity: Since submitting the previous progress report on August 11, 2023, the North Texas Commission has performed the following activities:

Task 1 – Operate, report data, and maintain TCEQ approved monitors throughout Regions 3 and 4: NTC and its vendor AECOM have continued to operate, report data, and maintain the 21 air monitors that compose the NTC Regional Air Monitoring Program. Work on this task has included:

- *Oversight of contract management and execution*
- *Liaising with community stakeholders about project and its findings*
 - NTC staff has represented the air monitoring project and its findings to community stakeholders.
- *Managing billing, invoices, and other accounting needs*
 - ⊖ NTC has reviewed and approved the August 2023 invoice from AECOM.
- *Facilitate communication between NTC, AECOM, and TCEQ*
 - NTC staff was in communication with AECOM and TCEQ via email and telephone.

Task 2 – Decommission or relocate TCEQ approved air monitors throughout Regions 3 and 4:

- NTC did not conduct any activities related to this task in the month of August.

Task 3 – Respond to Monitoring Issues:

- Various monitors have undergone routine maintenance.
- There were no other incidences to report.

Task 4– Reporting/Availability for Questions:

- NTC has been available for questions from TCEQ Project Manager.
- NTC has reviewed the Network Summary Report for March.
- NTC has created a progress report for the month of July.

Planned future activities: NTC Staff will continue work on all four tasks associated with this project. There are no other specific planned activities that deviate from normal project activities.