



# **Arizona Department of Transportation**

## **Environmental Planning**

# **Draft Air Quality Report**

**El Mirage Road  
SR303L – Jomax Road**

**Federal Project No. PEO-0(231)T  
ADOT Project No. 0000 MA PEO T0428 01D**

**August 12, 2025**

*The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated June 25, 2024, and executed by FHWA and ADOT.*

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Draft Air Quality Report  
FOR

EL MIRAGE ROAD  
SR303L – JOMAX ROAD

**Tracs Nos. 0000 MA PEO T0428 01D**  
**Federal Nos. PEO-0(231)T**

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August 12, 2025

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# EXECUTIVE SUMMARY

The City of Peoria and the Arizona Department of Transportation (ADOT), in cooperation with other local and state agencies, are preparing a Design Concept Report (DCR) and an Environmental Assessment (EA) to evaluate a potential new segment of El Mirage Road between State Route Loop 303 (SR303L) and Jomax Road. This new segment of roadway would accommodate current and projected traffic needs in response to increased development in areas along the State SR303L and near roadways and traffic interchange (TI) locations in the northwest Valley.

The National Environmental Policy Act (NEPA) of 1969 and the Clean Air Act (CAA) Amendments of 1990 require air quality impacts to be addressed in the preparation of environmental documents for federal projects. The level of effort utilized to evaluate these impacts varies from a qualitative description analysis to a quantitative modeling analysis. The project area is located in the Phoenix nonattainment area for particulate matter (PM<sub>10</sub>). Through the interagency consultation process, it was determined that this project required a PM<sub>10</sub> hot-spot analysis.

Section 176c of the CAA requires that transportation projects conform to the approved air quality State Implementation Plan (SIP) for meeting federal air quality standards. Conformity requirements were made substantially more rigorous in the CAA Amendments. The conformity determinations for federal actions related to transportation projects must meet the requirements of 40 CFR Parts 51 and 93. This project is not likely to cause or contribute to the severity or number of violations of the NAAQS. This project is included in the *Maricopa Association of Governments (MAG) MOMENTUM 2050* Regional Transportation Plan and the FY 2025-2030 Transportation Improvement Program as approved by MAG Regional Council on January 22, 2025.

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## LIST OF ACRONYMS

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ADEQ	- Arizona Department of Environmental Quality
ADOT	- Arizona Department of Transportation
CAA	- Clean Air Act
CEQ	- Council of Environmental Quality
CFR	- Code of Federal Regulations
CO	- carbon monoxide
EPA	- Environmental Protection Agency
FHWA	- Federal Highway Administration
GP	- general-purpose
I-17	- Interstate 17
LOS	- Level of Service
MAG	- Maricopa Association of Governments
MCAQD	- Maricopa County Air Quality Department
MOVES	- Motor Vehicle Emissions Simulator
MP	- milepost
mph	- miles per hour
MSATs	- Mobile Source Air Toxics
NAAQS	- National Ambient Air Quality Standards
NEPA	- National Environmental Policy Act
NO <sub>2</sub>	- nitrogen dioxide
O <sub>3</sub>	- ozone
PAH	- polycyclic aromatic hydrocarbon
PM <sub>10</sub>	- particulate matter
PM <sub>2.5</sub>	- fine particulate matter
POM	- polycyclic organic matter
ppm	- parts per million
RTP	- Regional Transportation Plan
SIP	- State Implementation Plan
SO <sub>2</sub>	- sulfur dioxide
SR	- State Route
STIP	- State Transportation Improvement Program
TI	- traffic interchange
VMT	- vehicle mile traveled

# 1.0 INTRODUCTION

The El Mirage Road project occurs between SR303L and Jomax Road within the City of Peoria, and unincorporated Maricopa County lands, in Maricopa County, Arizona. The project would occur within and adjacent to the existing Maricopa County and City of Peoria right-of-way (ROW) and easement. New ROW is anticipated for this project for portions occurring through private and Arizona State Trust lands.

The project scope of work will consist of:

- Constructing a new segment of El Mirage Road between SR303L and Jomax Road. The roadway configuration includes two vehicular lanes in each direction with a center median, bicycle lanes in each direction, and sidewalk in each direction.
- Constructing two proposed structural crossings, one over McMicken Outlet Channel Wash and one over the Beardsley Canal south of Jomax Road.
- Constructing curb and gutter, on site drainage improvements, and off-site drainage improvements.
- Installing traffic signals at Happy Valley Road
- Relocating utilities as needed
- Installing signage and lighting
- Installing a High Intensity Activated CrossWalk (HAWK) at a trail crossing between SR303L and Happy Valley Road
- Installing irrigation and landscaping
- Performing geotechnical structural crossing borings (two at each crossing)

The project is located in the Maricopa County (Phoenix) Nonattainment Area for particulates 10-microns in diameter or less (PM<sub>10</sub>) and eight-hour ozone. The project is included in the MAG 2025-2030 MAG Transportation Improvement Program (TIP) and MOMENTUM 2050 MAG Regional Transportation Plan, and regional conformity analysis.

Figure 1. Project Location Map

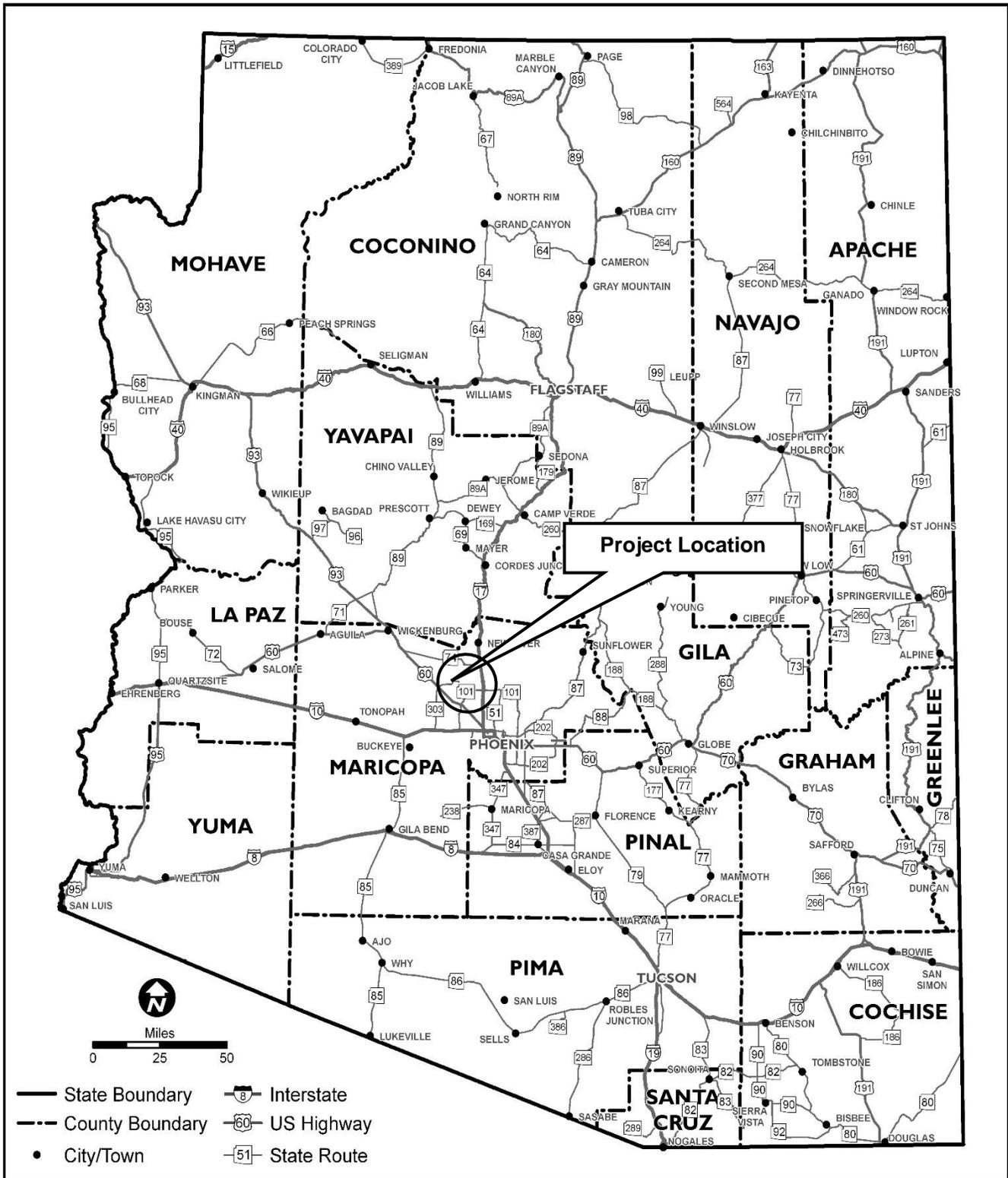
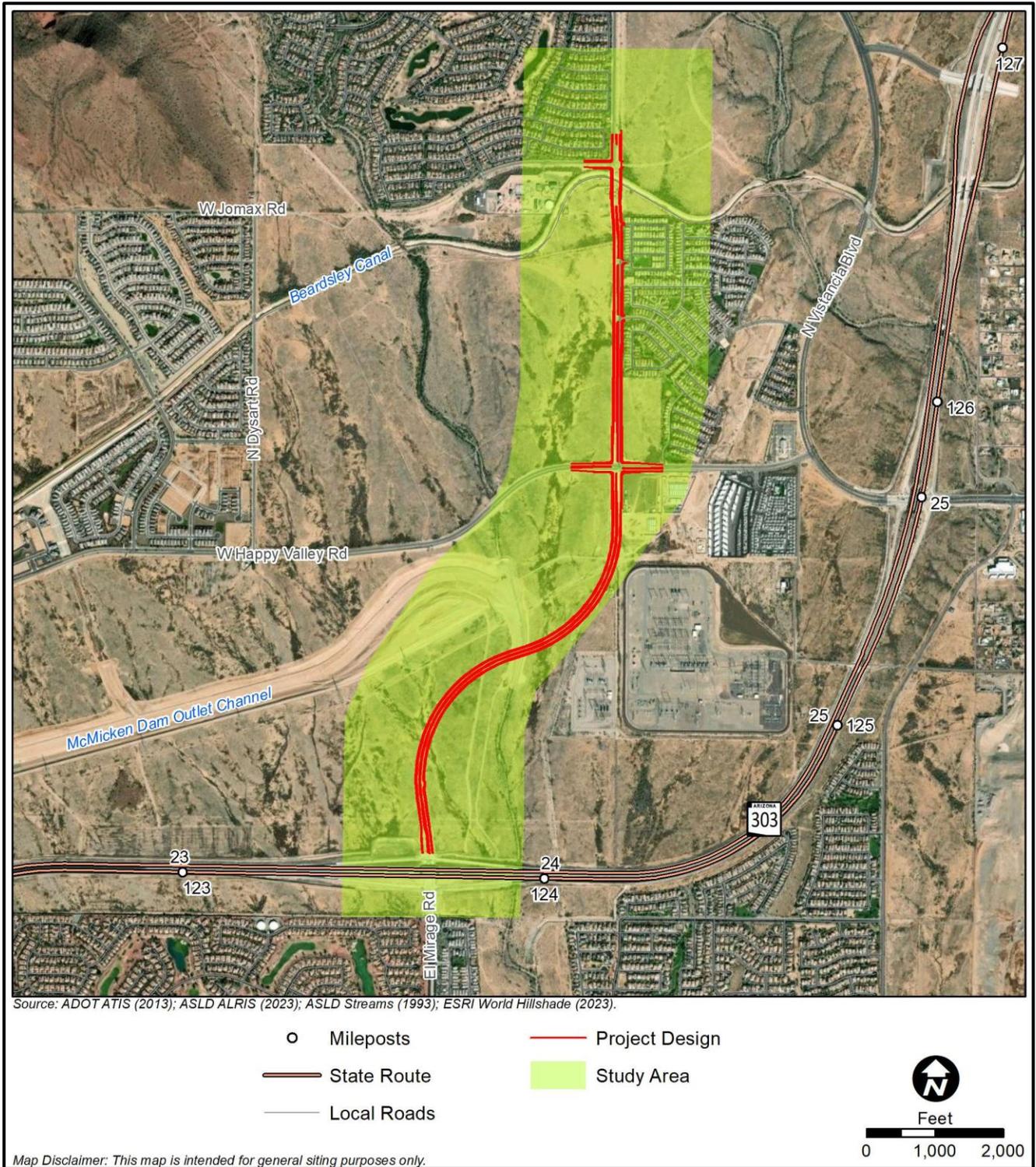


Figure 2. Project Vicinity Map



## 2.0 AFFECTED ENVIRONMENT

### 2.1 Regional Climatology

The study area elevation is approximately 1,200 feet above sea level. It lies in the Sonoran Desert, with a climate characterized by extremely hot summers, mild winters, and low precipitation. In the winter many days are over 70 degrees Fahrenheit (°F). The normal high temperature is over 90 °F from early May through late September, and over 100 °F from early June through late August. Annual precipitation averages just less than 7 inches and occurs in the form of rain associated with afternoon showers or thunderstorms during the late summer months and with eastward-moving Pacific storms during the winter months. Snowfall is rare. A summary of average monthly temperature and precipitation is presented in Table 1.

Month	Temperature (°F)			Precipitation (inches)
	Average	Avg. Maximum	Avg. Minimum	Average
January	56.9	68.0	45.8	0.72
February	59.7	71.1	48.4	0.75
March	66.5	78.6	54.5	0.68
April	74.1	86.8	61.4	0.17
May	82.6	95.3	69.8	0.09
June	92.5	105.5	79.6	0.05
July	96.3	107.2	85.3	0.82
August	94.4	105.2	83.6	0.92
September	89.7	101.0	78.4	0.53
October	77.5	89.3	65.7	0.58
November	65.6	77.2	54.1	0.44
December	56.1	66.7	45.5	0.71
Annual	76.0	87.6	64.3	6.47

Source: National Weather Service, 2024

### 2.2 Air Quality Standards

The federal CAA of 1970 was the first comprehensive legislation aimed at reducing levels of air pollution throughout the United States. Published in 1970, the CAA required the U.S. Environmental Protection Agency (EPA) to establish the NAAQS, which set maximum allowable concentrations for six criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), PM<sub>10</sub>/fine particulate matter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead, as shown in Table 2 and briefly described below.

Pollutant	Average Time	Primary Standard	Secondary Standard
Carbon monoxide (CO)	1-hour	35 ppm	No standard
	8-hour	9 ppm	No standard
Nitrogen dioxide (NO <sub>2</sub> )	1-hour	0.100 ppm	No standard
	Annual	0.053 ppm	0.053 ppm
Ozone (O <sub>3</sub> ) <sup>a</sup>	8-hour	0.070 ppm <sup>b</sup>	0.070 ppm
Particulate matter (PM <sub>10</sub> )	24-hour	150 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
Fine particulate matter (PM <sub>2.5</sub> )	24-hour	35 µg/m <sup>3</sup>	35 µg/m <sup>3</sup>
	Annual	9 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>
Sulfur dioxide (SO <sub>2</sub> )	1-hour	0.075 ppm	No standard
	Annual	No standard	0.01 ppm
Lead	Rolling 3-month average	0.15 µg/m <sup>3</sup>	0.15 µg/m <sup>3</sup>

µg/m<sup>3</sup> – micrograms per cubic meter  
ppm – parts per million  
Notes:  
<sup>a</sup> 1-hour standard revoked June 15, 2005 in Arizona  
<sup>b</sup> based on a 3-year average of the 4th highest concentration  
Source: EPA, accessed in 2024

- CO is a colorless, odorless gas resulting from the incomplete combustion of carbon-based fuels, including petroleum products. In most areas, vehicle emissions are the primary source of CO. Mobile sources (on-road motor vehicle exhaust) are the primary source of CO in both Maricopa County and in the U.S. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Prolonged exposure to high levels of CO can cause headaches, drowsiness, loss of equilibrium, or heart disease. CO levels are generally highest in the colder months of the year when inversion conditions (where warmer air traps colder air near the ground) are more frequent.
- Ozone (O<sub>3</sub>) is a colorless toxic gas and is found in both the Earth's upper and lower atmospheric levels. In the upper atmosphere, O<sub>3</sub> is a naturally occurring gas that helps to prevent the sun's harmful ultraviolet rays from reaching the Earth. In the lower layer of the atmosphere, O<sub>3</sub> is human made. O<sub>3</sub> is produced through a complex chemical reaction in which precursor compounds, such as hydrocarbons and nitrogen oxides, are transformed by sunlight into ozone molecules, which consist of three oxygen atoms. The primary sources for O<sub>3</sub> precursors are vehicular and industrial emissions.

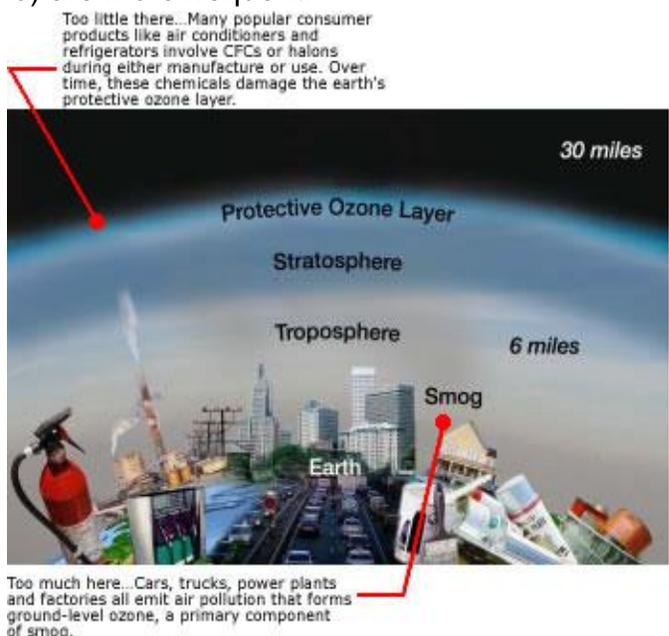
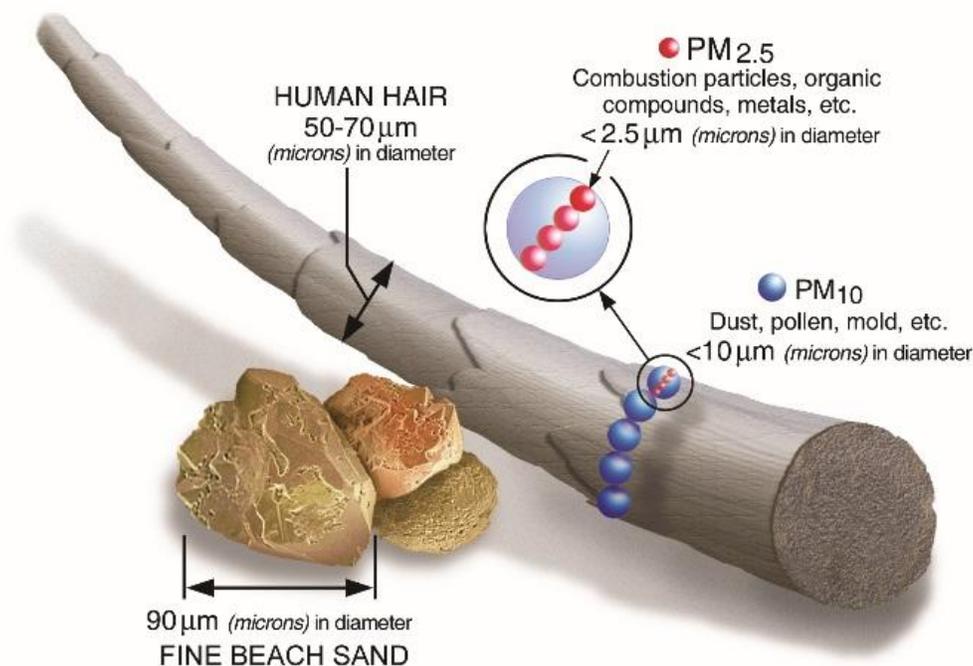


Figure 3. Ozone in the Atmosphere

- NO<sub>2</sub> is a yellowish-orange to reddish-brown gas resulting from high-temperature combustion. Diesel vehicles and power plants are major sources of NO<sub>2</sub>.
- PM<sub>10</sub> and PM<sub>2.5</sub> consist of suspended dust, fibers, combustion ash, and other fine particles. The major source is industrial emissions, but these pollutants also result from diesel vehicle emissions, unpaved roadways, agricultural activity, and dirt on paved roads kicked up by passing vehicles. PM<sub>10</sub> is inhalable particles, with diameters that are generally 10 micrometers and smaller; and PM<sub>2.5</sub> is fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller. Figure 4 shows the sizes of PM<sub>10</sub> and PM<sub>2.5</sub> relative to fine beach sand and human hair.

Figure 4. Size Comparisons for PM Particles



Source: EPA

- SO<sub>2</sub> is a colorless gas with a rotten egg odor that results from the combustion of fuels containing sulfur. Primary sources are coal-fired power plants, industrial plants, and metal smelters, with some emissions from diesel vehicles burning low-grade fuels.
- Lead in the atmosphere results primarily from the burning of leaded fuels. Lead pollution has been drastically reduced in the United States in recent years with the banning of leaded automobile fuels.

Amendments to the CAA were passed in 1977 and 1990. Among many other revisions included in the amendments are requirements for nonattainment areas and State Implementation Plans (SIPs) for areas that do not meet the standards.

For most of the six criteria pollutants, two standards have been established: a primary standard and a secondary standard. Although there is little difference between the two, the primary standard was established with the goal of protecting the public health, while the secondary standard is intended for the protection of the public welfare.

### **2.3 Mobile Source Air Toxics**

In addition to the NAAQS criteria air pollutants, EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), and stationary sources (e.g., factories or refineries).

Mobile Source Air Toxics (MSATs) are a subset of 21 of the 188 air toxics defined by the CAA. The MSATs are compounds that are emitted not only from stationary sources such as power plants, factories, oil refineries, dry cleaners and gas stations, but also from highway vehicles and nonroad equipment. Seven MSATs have been labeled a priority and considered as priority transportation toxics by the FHWA including: acrolein, benzene, 1,3 butadiene, diesel particulate matter plus diesel exhaust organic gases, formaldehyde, naphthalene, and polycyclic organic matter. These seven are currently considered the priority transportation toxics, but the list may be modified in the future.

Acrolein is a nearly clear to yellow liquid that burns easily, is easily volatilized, and has a disagreeable odor. Acrolein can be formed from the breakdown of certain pollutants found in outdoor air, tobacco burning, or burning gasoline. Exposure to acrolein causes upper respiratory tract irritation, and congestion in low concentrations, may cause death in high concentrations. Not enough information is available on acrolein to evaluate its carcinogenicity.

Benzene is a volatile, colorless, highly flammable liquid that dissolves easily in water and has sweet odor. Benzene is found in emissions from burning coal and oil, motor vehicle exhaust, evaporation from gasoline service stations, and in industrial solvents. Tobacco smoke contains benzene and accounts for nearly half the national exposure to benzene. Benzene exposure causes drowsiness, dizziness, headaches, unconsciousness, vomiting, convulsions, and irritation to the eyes, skin, and upper respiratory tract. Benzene is a known human carcinogen. Chronic exposure to benzene causes blood disorders and chromosomal aberrations.

1,3-butadiene is a colorless gas with a mild, gasoline-like odor. Sources of 1,3-butadiene in the air include motor vehicle exhaust, manufacturing and processing facilities, forest fires or other combustion sources, and cigarette smoke. Exposure to 1,3-butadiene causes irritation of the eyes, nasal passages, throat, and lungs in low concentrations and blurred vision, fatigue, headache, and vertigo in higher concentrations. 1,3-butadiene has recently been reclassified from a probable human carcinogen to a known human carcinogen.

Diesel particulate matter is a collection of various-sized particles emitted from diesel powered vehicles, including primarily elemental carbon, organic carbon, and sulfate particles, with trace amounts of nitrate, metals, and other particles. Diesel particulate matter of concern for MSAT analyses are those particles sized 10 microns or smaller. Although particulate matter may be derived from a number of sources, diesel particulate matter by definition is derived exclusively

from diesel vehicle exhaust. Exposure to diesel particulate matter results in irritation to the eyes, nose, throat, and lungs, and may exacerbate asthma. Diesel particulate matter is considered a probable human carcinogen.

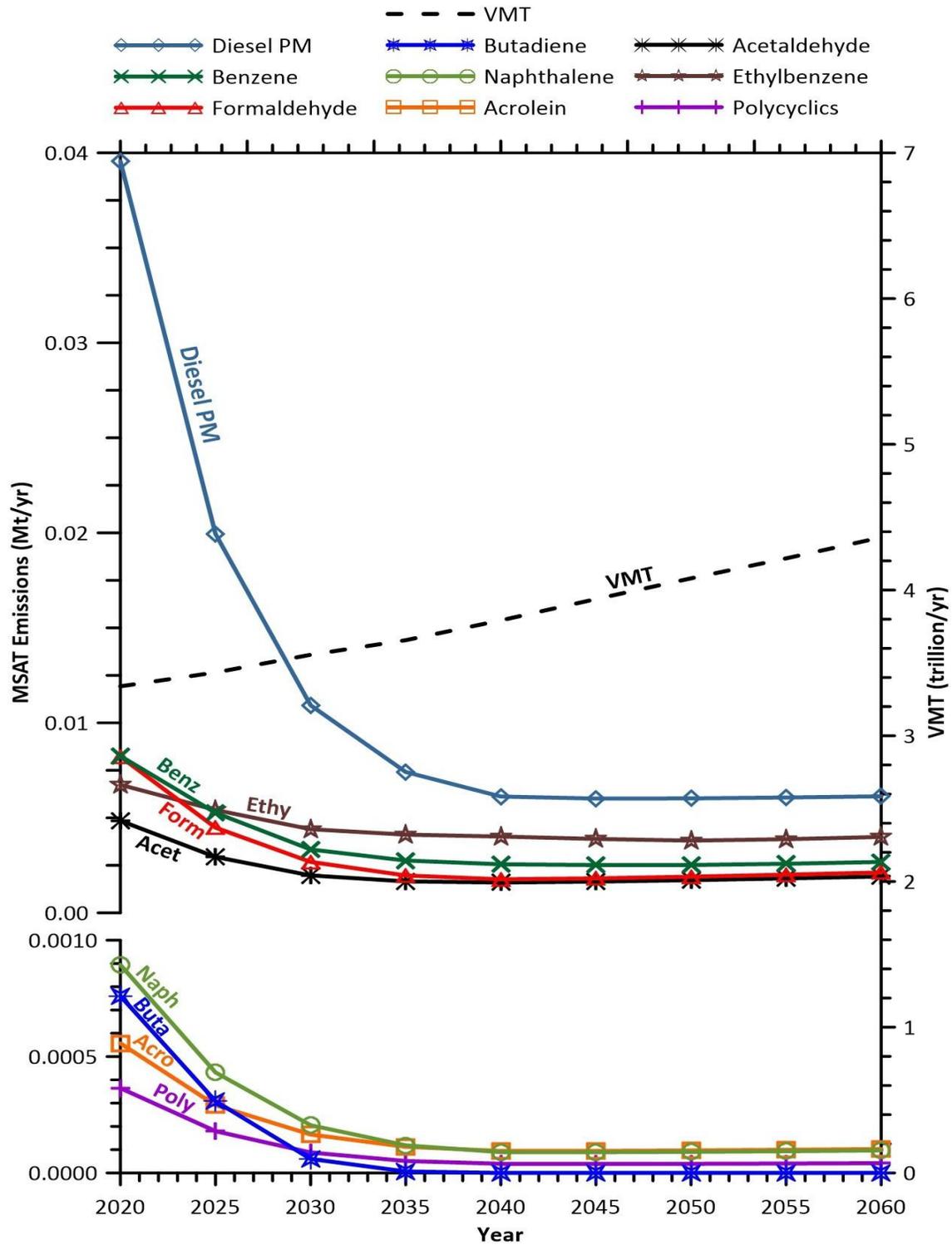
Formaldehyde is a colorless gas with a pungent, suffocating odor that is readily soluble in water. High levels of formaldehyde have been detected in indoor air, where it is released from various consumer products such as building materials and home furnishings. Major sources of outdoor concentrations of formaldehyde include power plants, manufacturing facilities, incinerators, and automobile exhaust emissions. Exposure to formaldehyde results in irritation to the eyes, nose, and throat; coughing; chest pains; and bronchitis. Formaldehyde is classified as a probable human carcinogen.

Polycyclic organic matter (POM) is a class of compounds that includes all organic structures having two or more fused aromatic rings, that have a boiling point greater than that of water, and that are extremely insoluble in water. There are eight major categories of POM, the most common being polycyclic aromatic hydrocarbon compounds (PAHs). POM compounds are formed primarily from combustion and are present in the atmosphere in particulate form. Major sources of POM include cigarette smoke, vehicle exhaust, and wood burning, among others. No information is available on the effects of short-term exposure to POM and PAHs. However, EPA has classified several PAHs as probable human carcinogens, and evidence suggests possible reproductive toxicity, chronic blood and liver effects, and chronic respiratory effects from POM.

Naphthalene is a white solid or powder that is insoluble in water and has a strong, mothball odor. Primary sources of naphthalene in the air include the burning of coal and oil, the use of mothballs, and from cigarette smoke. Exposure to naphthalene results in headache, nausea, vomiting, liver damage, cataracts, neurological damage in infants, and chronic inflammation of the lungs and nasal passages. Naphthalene is classified as a possible human carcinogen.

While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. According to the EPA's Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), controls are required to dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. Using EPA's MOVES3 model, as shown in Figure 5, FHWA estimates that even if VMT increases by 31 percent from 2020 to 2060 as forecast, a combined reduction of 76 percent in the total annual emissions for the priority MSAT is projected for the same time period.

Figure 5. FHWA Predicted National MSAT trends 2020-2060 for Vehicles Operating on Roadway Using EPA's MOVES3 Model



Source: EPA MOVES3 model runs conducted by FHWA in March 2021:  
[https://www.fhwa.dot.gov/environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/fhwa\\_nepa\\_msat\\_memorandum\\_2023.pdf](https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/fhwa_nepa_msat_memorandum_2023.pdf)

## 2.4 Nonattainment Areas

The CAA amendments of 1977 and 1990 authorized EPA to designate areas that have not met the NAAQS as nonattainment areas and to classify the areas level of non-attainment severity. Each nonattainment area requires a SIP that outlines actions to reduce air pollution to levels that comply with the NAAQS.

The project study area lies within the Phoenix nonattainment area for Ozone. In addition, the study area is located in the Phoenix nonattainment area for PM<sub>10</sub> (see Figure 6). The Phoenix Ozone nonattainment area consists of most of central and eastern Maricopa County, including the Phoenix metropolitan area and a portion of northern Pinal County, including Apache Junction. The Phoenix PM<sub>10</sub> nonattainment area is defined as an area within eastern Maricopa County, approximately 60 miles long by 48 miles wide, and an additional area within Pinal County, 6 miles by 6 miles in size. The PM<sub>10</sub> nonattainment area encompasses the Phoenix metropolitan area, including Apache Junction.

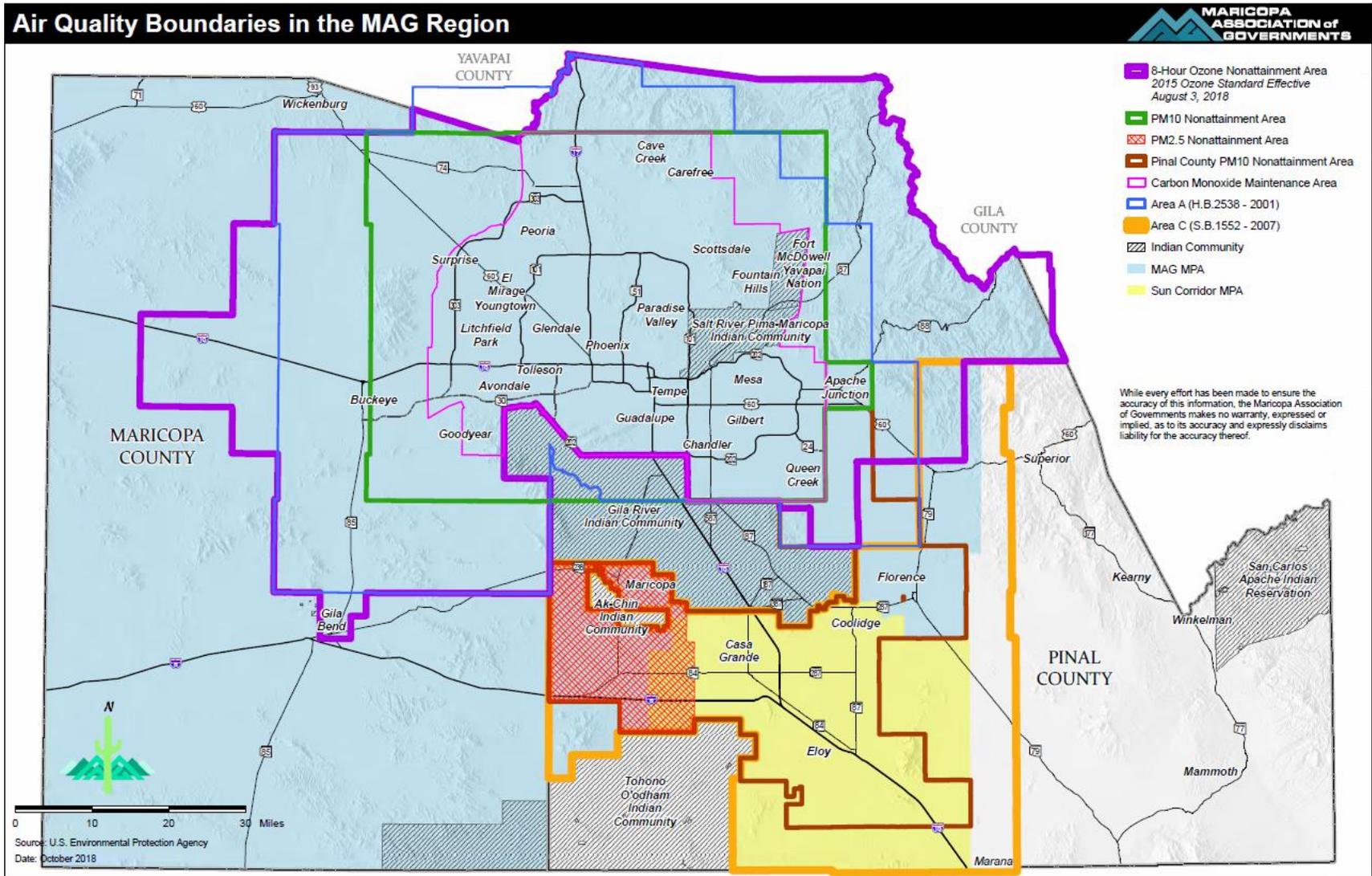
The Phoenix Ozone nonattainment area was originally designated a “moderate” nonattainment area in 1991 for not meeting the 1-hour O<sub>3</sub> NAAQS and was required to reach attainment by November 15, 1996. EPA reclassified the Phoenix area to “serious” nonattainment on February 13, 1998, for failing to attain the 1-hour O<sub>3</sub> standard. The State of Arizona requested attainment redesignation in December 2000, after 3 years had passed with no O<sub>3</sub> violations. On May 15, 2001, EPA determined that the Phoenix area had attained the 1-hour O<sub>3</sub> standard. A maintenance plan and a redesignation request were submitted on April 21, 2004, and the area was redesignated to attainment on June 14, 2005.

The 1-hour standard was revoked on June 15, 2005, and replaced with the 8-hour standard (called the 1997 standard because it was proposed in 1997, but implementation was delayed by litigation). Many of the control measures included in the 1-hour ozone maintenance plan were required to remain in place to ensure progress toward the 8-hour standard. In 2008, EPA revised the eight-hour ozone standard to 0.075 parts per million (from 0.08 ppm). On May 21, 2012, EPA published a final rule to designate the Maricopa nonattainment area as a “marginal” area.

In 2015, based on EPA’s review of the air quality criteria for O<sub>3</sub> and related photochemical oxidants and for O<sub>3</sub>, EPA revised the levels of both standards. EPA revised the primary and secondary O<sub>3</sub> standard levels to 0.070 parts per million (ppm), and retained their indicator (O<sub>3</sub>), forms (fourth-highest daily maximum, average across three consecutive years) and 8-hour averaging times. On May 4, 2016, EPA published a final rule to determine that the Maricopa Eight-Hour Ozone Nonattainment Area did not attain the 2008 standard and reclassified the area from “marginal” to “moderate.” MAG submitted a 2017 Eight-Hour Ozone Moderate Area Plan to comply with the 2008 ozone standards on January 1, 2017. On June 2, 2020, EPA published a final rule to approve the portions of the MAG 2017 Eight-Hour Ozone Plan addresses emissions inventories requirements, a demonstration of attainment by the applicable attainment date, reasonably available control measures, reasonable further progress, motor vehicle emission budgets for transportation conformity, vehicle inspection and maintenance programs, new source review rules, and offsets, effective July 2, 2020. The MAG 2020 Eight-Hour Ozone Plan – Submittal of Marginal Area Requirements for the Maricopa Nonattainment Area was

submitted to EPA on June 29, 2020. The MAG 2020 Eight-Hour Ozone Plan – Submittal of Marginal Area Requirements defined the 2015 eight-hour ozone standard of 0.070 parts per million. On October 7, 2022 EPA determined that the Phoenix nonattainment area did not obtain the standard by the marginal attainment date of August 3, 2021. As such, EPA reclassified the area to “moderate” nonattainment for the 2015 Ozone NAAQS effective November 7, 2022 (87 FR 60897). In response to this reclassification, a Moderate Area Plan was due to EPA on January 1, 2023, but has not been submitted.

Figure 6. Nonattainment and Maintenance Areas in Maricopa and Pinal Counties



The Phoenix CO maintenance area was originally classified as a “moderate” nonattainment area in November 1990 and attainment was required by December 1995. The Phoenix area did not attain the CO standard by that date, and the area was reclassified as a “serious” nonattainment area on June 10, 1996. The required SIP was submitted on July 8, 1999, with a revised submittal on April 18, 2001. On October 9, 2001, EPA determined that the plan was complete. On September 22, 2003, EPA found that the Phoenix area had attained the CO standard. In October 2004, EPA redesignated the Phoenix area to attainment with a maintenance plan. The maintenance plan requires many of the same restrictions as the SIP for the nonattainment designation and will remain in effect for a period of approximately 10 years to ensure that the NAAQS continue to be met. The MAG 2013 CO maintenance plan for the Maricopa County area was submitted to EPA in April 2013. On March 3, 2016, EPA approved the MAG 2013 CO maintenance plan, effective April 4, 2016.

Under 40 CFR 93.102(b)(4) of the EPA’s regulations, transportation conformity applies to maintenance areas through the 20-year maintenance planning period, unless the maintenance plan specifies that the transportation conformity requirements apply for a longer time period. Pursuant to CAA section 176(c)(5) and as explained in the preamble of the 1993 final rule, conformity applies to areas that are designated nonattainment or are subject to a maintenance plan approved under CAA section 175A.

The approved maintenance plans for CO area did not extend the maintenance plan period beyond 20 years from redesignation. Consequently, transportation conformity requirements for CO ceased to apply after April 8, 2025 (i.e., 20 years after the effective date of the EPA’s approval of the first 10-year maintenance plans and redesignation of the areas to attainment for the CO NAAQS).

The Phoenix PM<sub>10</sub> nonattainment area was originally classified in November 1990 as “moderate.” The area was reclassified in June 1996 to “serious,” requiring attainment by 2001. The State of Arizona submitted a revised plan to achieve attainment and requested a 5-year extension of the attainment deadline for the 24-hour and annual PM<sub>10</sub> standards for the Phoenix area. On January 10, 2002, EPA announced approval of the plan and granted the extension to December 2006. Despite the Most Stringent Measures and Best Available Control Measures adopted and implemented earlier, the Phoenix area failed to attain the PM<sub>10</sub> standard by the December 2006 deadline. The failure triggered a special requirement under Section 189(d) of the CAA SIP revisions provide for annual reductions of PM<sub>10</sub> and PM<sub>10</sub> precursors of not less than 5 percent of the most recent emissions inventory until the NAAQS is attained. The SIP revision was submitted to EPA in December 2007, demonstrating the necessary 5 percent annual reductions through revisions to county dust control regulations, new agriculture best management practices, and paving unpaved roads and shoulders, among other control measures. On September 9, 2010, EPA proposed to approve in part and disapprove in part the SIP revisions. However, on January 25, 2011, prior to EPA’s final action on the SIP revisions, the State of Arizona withdrew the submitted plan from EPA’s consideration to be able to make improvements on the plan. This withdrawal triggered EPA to find, on February 14, 2011, that Arizona failed to make the required submittal under Section 189(d) of the CAA. The failure triggered an 18-month clock for mandatory application of sanctions (including loss of federal highway funds in 24 months) and a 2-year clock for a federal implementation plan. These

sanctions clocks would stop when a new plan is submitted and EPA determines that the new plan is complete. The State of Arizona adopted and submitted the 2012 5% Plans on May 25, 2012, and submitted supplemental information June 22 and July 2, 2012. EPA found the plans complete on July 20, 2012, stopping sanctions clocks. EPA concurred with Exceptional Events flags in letters dated September 6, 2012 and July 1, 2013 and approved fugitive dust statutes for the plans on December 3, 2013. EPA published a Notice of Adequacy of the Motor Vehicle Emissions Budget on December 5, 2013. On June 10, 2014, EPA published the final rule approving the MAG 2012 5% Plan for PM<sub>10</sub>.

## **2.5 Ambient Pollutant Levels**

The Arizona Department of Environmental Quality (ADEQ) and the Maricopa County Air Quality Department (MCAQD) maintain a network of air monitoring sites throughout Maricopa county. Monitoring sites vary in terms of the number of pollutants monitored, with some sites monitoring one pollutant and others monitoring up to five pollutants. Some monitoring sites operate for the entire year, while others operate for the peak pollutant season only. Most of the monitoring sites are located in the Phoenix metropolitan area. There is one monitoring site adjacent to the study area, Zuni Hills, located south of Zuni Hills Elementary School, at the intersection of Zuni Hills and North 109<sup>th</sup> Avenue. The closest CO monitoring site is West Phoenix, located at 39<sup>th</sup> Avenue and Earll Drive in Phoenix.

The Zuni Hills site collects data on concentrations of PM<sub>10</sub>. The West Phoenix site collects data on concentrations of NO<sub>2</sub>, PM<sub>10</sub>, CO, PM<sub>2.5</sub>, and O<sub>3</sub>. The average time is eight hours for CO and O<sub>3</sub>, 24 hours for PM<sub>10</sub> and PM<sub>2.5</sub>, and 1 hour for NO<sub>2</sub>. Monitor dating from MCAQD's sites between 2021 and 2023 has recorded exceedances flagged due to exceptional event days, at both Zuni Hills and West Phoenix sites.

West Phoenix and Zuni Hills exceeded 24-hour average PM<sub>10</sub> NAAQS, each 1 day out of the 8 total exceedance days in recorded 2021. 11 exceedances of the 8-hour average O<sub>3</sub> NAAQS were recorded at West Phoenix in 2021. There were no exceedances or violations of the 1-hour or 8-hour average CO NAAQS, and NO<sub>2</sub> annual or 1-hour NAAQS. 3 days exceeded the 24-hour PM<sub>2.5</sub> NAAQS at multiple MCAQD sites and West Phoenix recorded a violation of 24-hour PM<sub>2.5</sub> NAAQS in 2021.

In 2022, no exceedances or violations of the 1-hour or 8-hour CO average or NO<sub>2</sub> annual or 1-hour NAAQS occurred at any MCAQD sites. 17 exceedances of the 8-hour average O<sub>3</sub> NAAQS were recorded at West Phoenix in 2022. In 2022, there were seven days that exceeded the 24-hour PM<sub>10</sub> NAAQS at MCAQD's sites, including 1 exceedance day recorded at Zuni Hills. In 2022, there were seven days that exceeded the 24-hour PM<sub>2.5</sub> NAAQS at one or more MCAQD sites, including West Phoenix.

In 2023, no exceedances or violations of the 1-hour or 8-hour CO average or NO<sub>2</sub> annual or 1-hour NAAQS occurred at any MCAQD sites. There were fifty days when at least one O<sub>3</sub> monitor exceeded the 2015 8-hour NAAQS of 70 ppb, including West Phoenix which noted 18 exceedances in 2023. In 2023, there were five days that exceeded the 24-hour PM<sub>10</sub> NAAQS at least one of MCAQD's sites, including West Phoenix. There were five days in 2023 that

exceeded the 24-hour PM<sub>2.5</sub> NAAQS of 35 µg/m<sup>3</sup> at one or more MCAQD sites, including West Phoenix.

40 CFR Part 51, Appendix W, section 8.3 and Hot Spot Guidance Section 8 provide recommendations for determining appropriate background concentration. 40 CFR Part. 51 (A 2019 clarification memo, "Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events" (available at <https://www.epa.gov/air-quality-analysis/clarification-memo-additional-methods-determinations-and-analyses-modify-air>) confirms the applicability of that CFR section to transportation conformity hot spot analyses.) Appendix W, Section 8.3.2 recommends that for many cases, the current design value at a nearby, representative monitoring station is the best starting point for background concentration. However, there may be cases where the current design value is not appropriate. Section 8.3.2.c.ii specifies there may be circumstances which would necessitate modifications to the background concentrations, stating that "[s]uch cases could include removal of data from specific days or hours when a monitor is being affected by activities that are not typical or not expected to occur again in the future (e.g., construction, roadway repairs, forest fires, or unusual agricultural activities). Such adjustments would make the monitored background concentrations more temporally and/or spatially representative of the area around the new or modifying source for the purposes of the regulatory assessment."

The data used to determine the background concentration includes 24-hour average pollutant levels and annual means, excluding atypical air quality events. If the chosen 3-year period for determining the project's background concentration encompasses atypical air quality such events, data affected by those events can be excluded from the analysis. This is done to mitigate the influence of outliers unrepresentative in air quality events on the determination of the background concentration of an area data stemming from uncontrollable air quality events, which could lead to NAAQS exceedances, which have been noted by MCAQD in their Annual Monitoring Network Plans for the years discussed in this report. Table 3 summarizes concentrations monitored at Zuni Hills and West Phoenix sites.

Monitoring Site	Pollutant	Averaging Time	2021		2022		2023	
			Concentration	No. of Exceedances	Concentration	No. of Exceedances	Concentration	No. of Exceedances
West Phoenix (WP)	CO	8-hour	3.5 ppm	0	2.7 ppm	0	3.2 ppm	0
	O <sub>3</sub>	8-hour	0.081 ppm	11	0.081 ppm*	17	0.087 ppm*	18
	PM <sub>2.5</sub>	24-hour	224 µg/m <sup>3</sup> *	3	110.3 µg/m <sup>3</sup> *	5	95.2 µg/m <sup>3</sup> *	4
	PM <sub>10</sub>	24-hour	250 µg/m <sup>3</sup> *	1	127 µg/m <sup>3</sup>	0	182 µg/m <sup>3</sup> *	1

	NO <sub>2</sub>	1-hour	55 ppb	0	51.0 ppb	0	60 ppb	0
Zuni Hills (ZH)	PM <sub>10</sub>	24-hour	248 µg/m <sup>3</sup> *	1	167 µg/m <sup>3</sup> *	1	146 µg/m <sup>3</sup>	0

Notes: µg/m<sup>3</sup> – micrograms per cubic meter; ppm – parts per million; ppb – parts per billion

\* - dates that have been identified as atypical events by ADOT/Maricopa

Source: MCAQD, 2021 - 2023 Air Monitoring Network Plan Drafts, EPA Air Data for West Phoenix Monitor, Annual Data 2021 – 2023, <https://www.epa.gov/outdoor-air-quality-data>

## 3.0 ENVIRONMENTAL CONSEQUENCES

Project-level air quality analyses for proposed roadways typically focus on vehicle emissions of CO, PM<sub>10</sub>, and MSATs. Although vehicle emissions include other pollutants, the concentrations of CO, PM<sub>10</sub>, and MSATs are the most easily assessed and provide a convenient measure of the local air quality impacts from a proposed roadway. Other pollutants, such as O<sub>3</sub>, nitrogen oxides, and hydrocarbons, are regional in nature, making a project-level evaluation not applicable. Project-level analyses can be completed using qualitative or quantitative methods, depending on the scale of the project, the level of design information available for the analysis, and the overall purpose of the analysis.

This section describes the methods, impact criteria, and results of air quality analyses for the proposed project. Guidelines and procedures used in the analysis follow applicable air quality analysis protocols from EPA and FHWA. The *Project Level Quantitative Matter (PM10) Consultation Document* and interagency consultation determined that this project is considered project of air quality concern and requires a PM<sub>10</sub> quantitative analysis. In addition, it is anticipated that this project would not have meaningful potential MSAT effects, and therefore, MSAT quantitative analysis is not necessary.

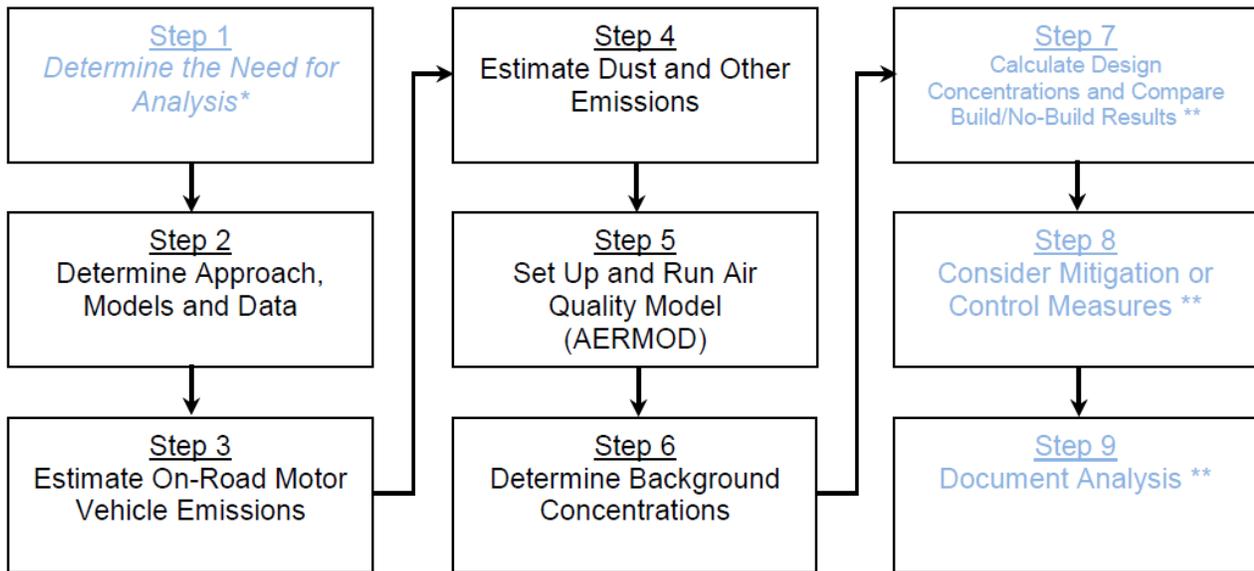
### 3.1 Project Level Hotspot PM<sub>10</sub> Analysis

The project study area is located in Maricopa County, Arizona, which is currently classified as a nonattainment area for the PM<sub>10</sub> 24-hour standard. The project was presented to the MAG consultation partners, which classified the project as one of air quality concerns. As such, a microscale 24-hour PM<sub>10</sub> hotspot analysis was conducted.

#### 3.2.1 Methodology

The EPA's nine-step process was used for hot-spot PM<sub>10</sub> analysis, see Figure 7. Each step is described below.

Figure 7. EPA's Nine-step Process for PM10 Analysis



#### Determine the Need for Analysis

Based on the ADOT PM<sub>10</sub> interagency consultation process, this project is classified as a project of air quality concern for PM<sub>10</sub> based on the high volumes of diesel traffic on SR303 and El Mirage Road projected for 2050. Therefore, a project level hot-spot PM<sub>10</sub> analysis is warranted.

#### Determine Approach, Models and Data

The PM<sub>10</sub> analysis methodology was presented to the interagency consultation partners and finalized in November 2024. Based on the EPA guidance, and in consultation with FHWA, EPA and other agencies, El Mirage Road and Jomax intersection, El Mirage Road and Happy Valley Road, and El Mirage Road and SR303L ramps intersections were selected for detailed hot-spot modeling to demonstrate project conformity with NAAQS based on the top intersections ranked by volume and by LOS and delay. These four selected intersections have the great potential concentrations of PM<sub>10</sub> due to congestion and traffic volumes in 2050.

The AERMOD dispersion model requires meteorological data to predict pollutant concentrations at receptors within the project area. Five years of meteorological data files were provided by ADEQ based on observed surface data from Phoenix Sky Harbor International Airport and upper air data from Tucson International Airport for the 5-year period from 2017 through 2021. This meteorological data was determined to be representative of the project area conditions because of its proximity to the project site (10 miles), similarity in land use and terrain, and the data meets the completeness requirements of Section 5.3.2 of EPA's Meteorological Monitoring Guidance for Regulatory Modeling Applications (EPA 2000).

All model inputs and assumptions are included in Appendix A – Consultation Document for Project of Air Quality Concern. Information from ADEQ that describes the processing steps and summarizes completeness determination is included in Attachment A of Appendix A.

### Estimate On-Road Motor Vehicle Emissions

On-road vehicle emissions were estimated using MOVES3.1. Age distribution and vehicle mix were provided by MAG consistent with the regional conformity analysis. Default fuel specifications data was used for the model's fuel data inputs. Temperature and relative humidity inputs were derived from the AERMET data provided by ADEQ to use in the dispersion model. Information from ADEQ that describes the preparation of AERMET data is included in Appendix A1. MOVES input relies on link-specific data. Traffic data included link volume, speed, average grade, and elevation. Vehicle mix was assumed to be consistent with the MAG regional vehicle mix. The PM<sub>10</sub> modeled links and receptors for SR303L ramp and El Mirage Road Intersections are shown in Figure 8. The PM<sub>10</sub> modeled links and receptors for El Mirage Road and Happy Valley Road Intersection are shown in Figure 9. The PM<sub>10</sub> modeled links and receptors for El Mirage Road and Jomax Road Intersection are shown in Figure 10.

Roadway segments were represented in AERMOD using VOLUME options. Unique inputs used for each run were based on each link's length (in miles), traffic volume (vehicle per hour), vehicle average speed (miles per hour), and road grade (percent). Receptors were placed on the El Mirage sidewalks under the SR303L mainline. For SR303L ramp and El Mirage Road Intersection, a total of 44 sources and 1154 discrete receptors were modeled. For El Mirage Road and Happy Valley Road Intersection, a total of 24 sources and 1086 discrete receptors were modeled. For El Mirage Road and Jomax Road Intersection, a total of 24 sources and 1080 discrete receptors were modeled.

PM<sub>10</sub> emissions vary by time of day and time of year. Volume and speed data for each link was obtained from the MAG travel demand model for A.M. peak, midday, P.M. peak, and overnight traffic conditions. For each analysis site, MOVES was run for each of the four time periods (A.M. peak, midday, P.M. peak, and overnight) for four seasons (January, April, July, and October) for a total of 16 MOVES runs per selected TI. For every link, a set of 16 emission factors in units of grams per mile were developed for the project's analysis year of 2050.

Figure 8. PM Receptors and Rodway Links (SR303L and El Mirage Road Intersections)

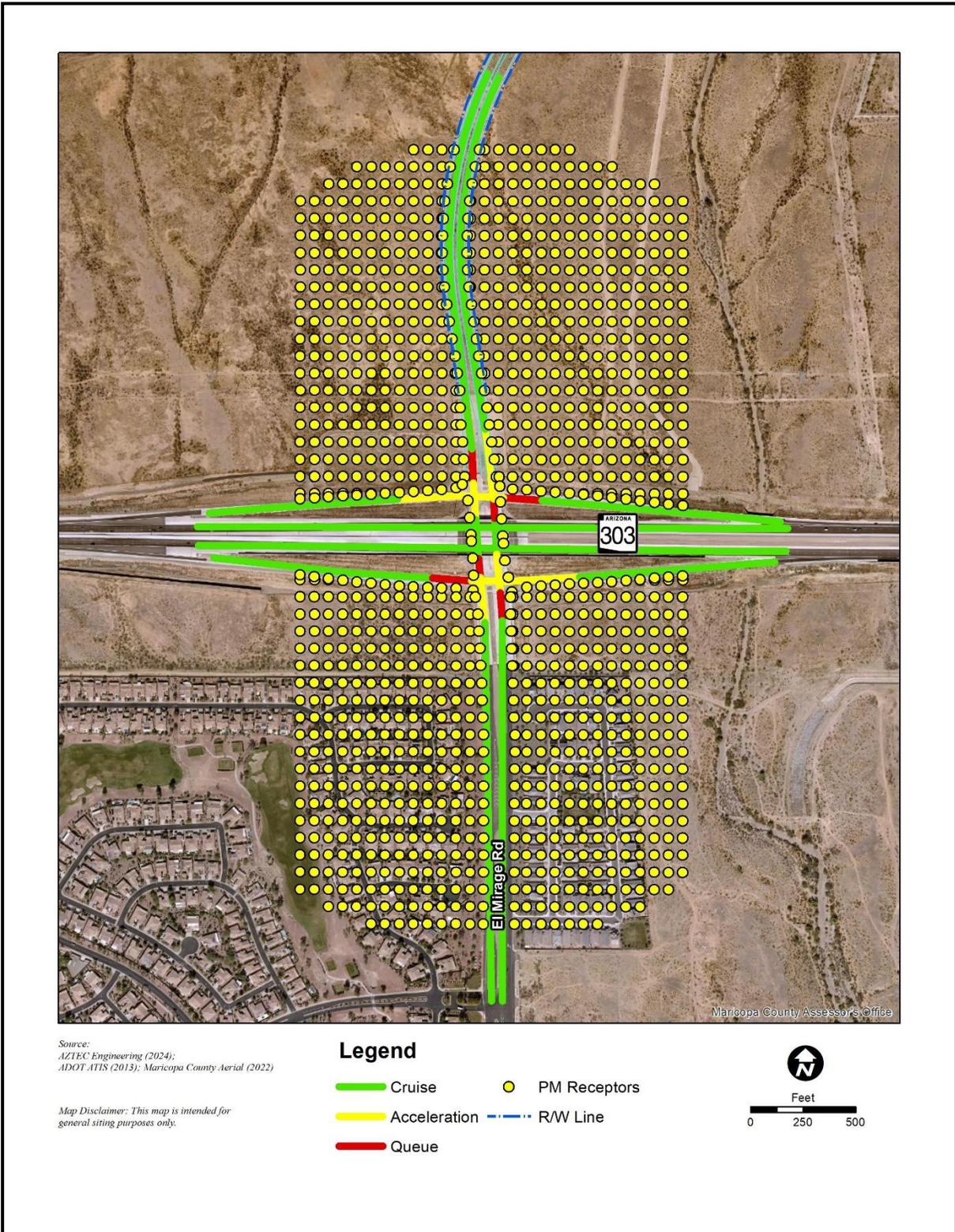


Figure 9. PM Receptors and Rodway Links (El Mirage Road and Happy Valley Road Intersection)

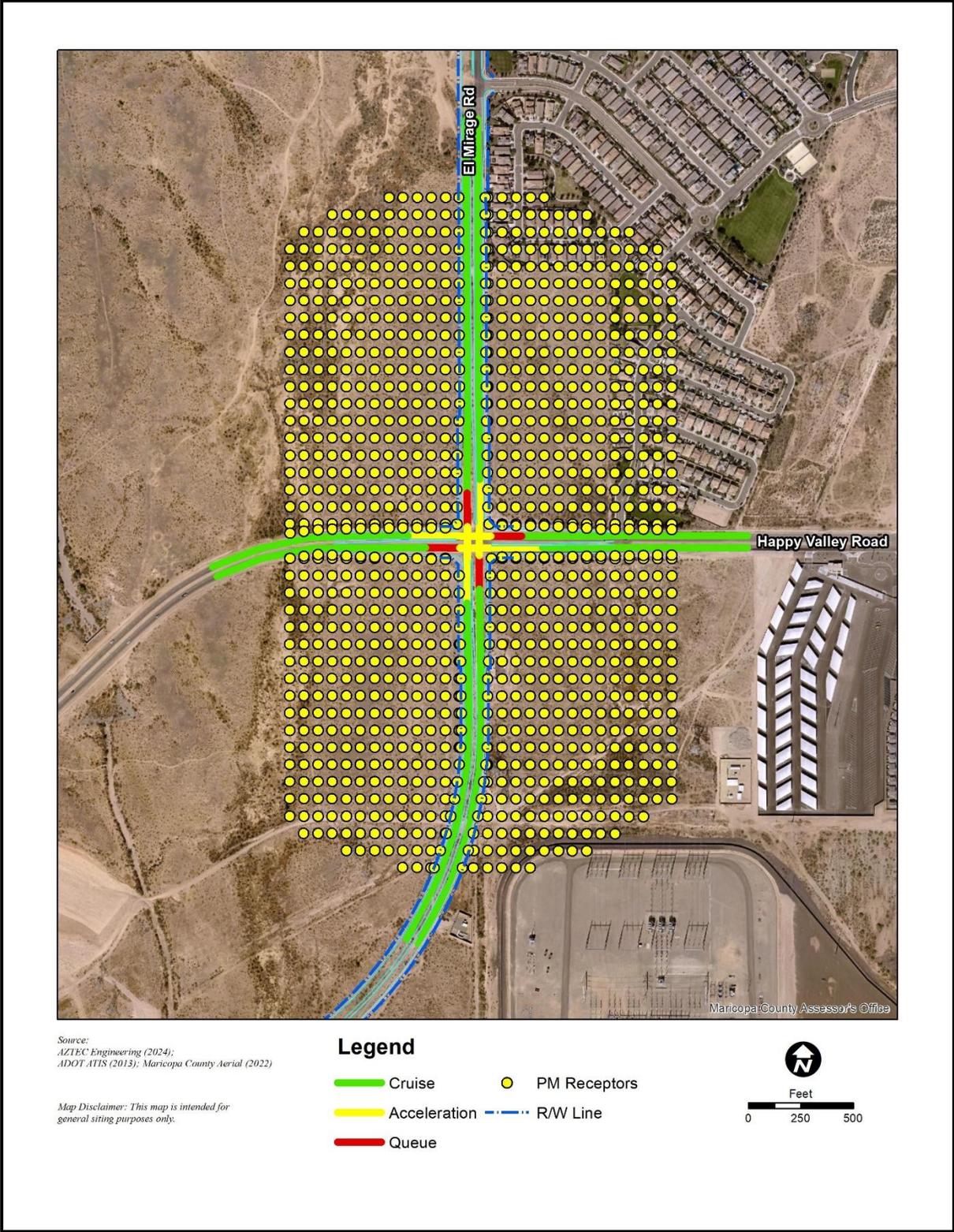
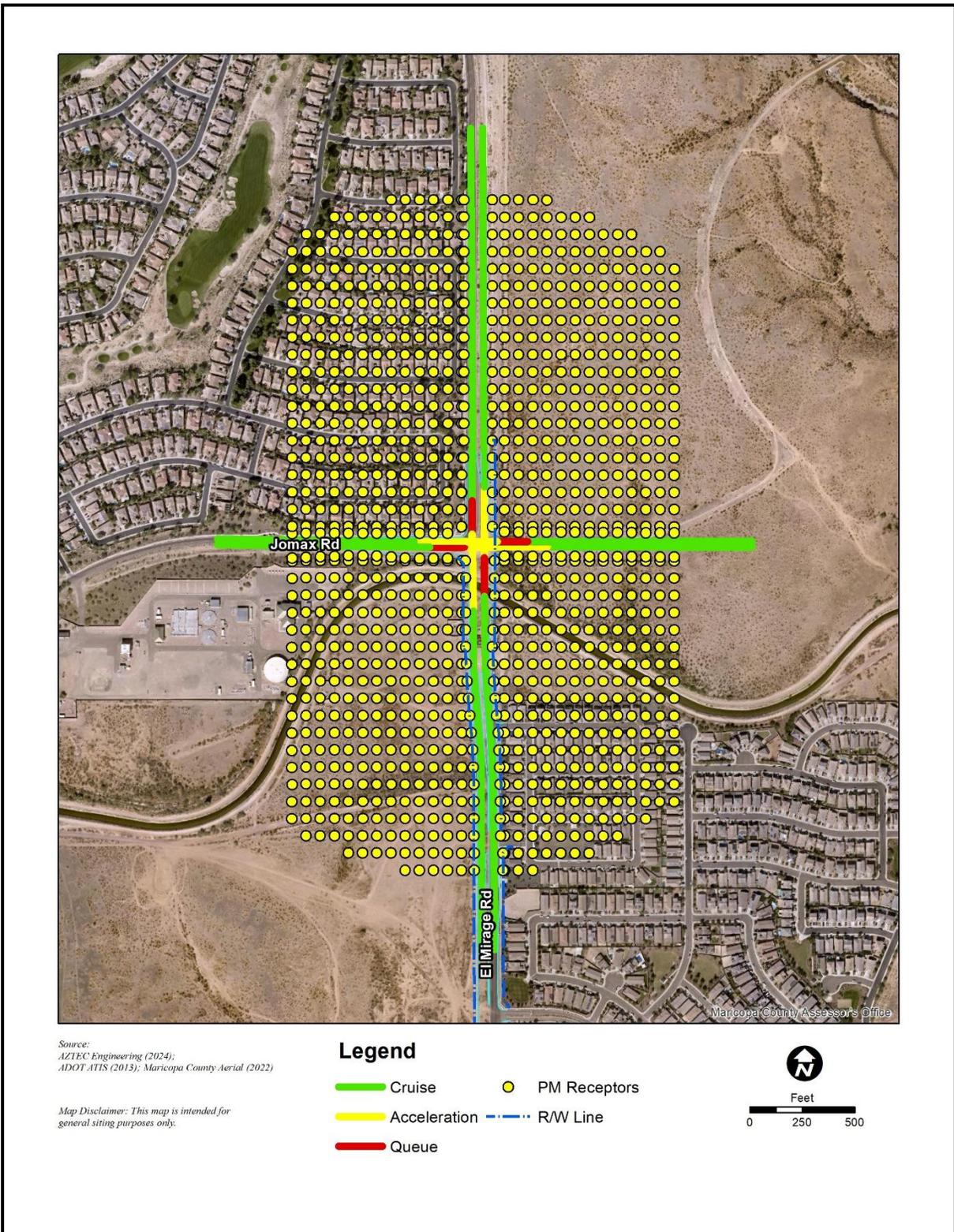


Figure 10. PM Receptors and Rodway Links (El Mirage Road and Jomax Road Intersection)



## Estimate Dust and Other Emissions

Re-entrained road dust must be included in all PM<sub>10</sub> hot-spot analyses. Section 13.2.1 of AP-42 provides a method for estimating emissions of re-entrained road dust using local values for precipitation, average vehicle weight, and silt loading.

The estimated road dust emission assumptions from the MAG Conformity Analysis for the analysis year 2050 were used for this PM hot-spot analysis, and the values are summarized in Table 9. Road dust emissions calculations were provided to EPA as part of the air quality conformity review process. The values in Table 4 came from MAG regional conformity data dated Spring, 2024.

Facility Type	W (tons)	sL (g/m <sup>2</sup> )	E (g/VMT)
Freeway	4.27	0.02	0.124224
High Arterial	2.65	0.067	0.229887

Source: MAG Regional Conformity Data (Spring, 2024).  
g/m<sup>2</sup> = grams per square meter, g/VMT = grams per vehicle mile traveled

Emission factors for road dust were added to the emission factors generated for each link by MOVES for use in the AERMOD dispersion model.

Construction emissions were not included because construction will not occur at any individual location for more than five years. EPA guidance requires nearby sources of PM<sub>10</sub> emissions to be included in air quality modeling when those sources are not appropriately reflected in the background data or would be affected by the project. No additional sources of PM<sub>10</sub> emissions were identified that would increase as a result of the project. It is assumed that PM<sub>10</sub> concentrations due to any other nearby emissions sources are included in the ambient monitor values used for background concentrations. In addition, this project is not expected to result in changes to emissions from nearby sources.

### Set Up and Run Air Quality Model (AERMOD)

The EPA's AERMOD air dispersion model was used to estimate project operation PM<sub>10</sub> concentrations. The model uses traffic, emission factor, and meteorological data to estimate ground-level concentrations of PM<sub>10</sub> at a series of receptors. For each modeled scenario, the model setup included a series of sources representing the roadway segments in the vicinity of the intersections being modeled.

VOLUME sources were inputted to represent roadway links. Link-specific inputs included source location, source length and width, emission rate, release height, and plume height. AERMOD was run for five years of meteorological data based on current ADEQ Phoenix AERMET files for a 5-year period from 2017 through 2021.

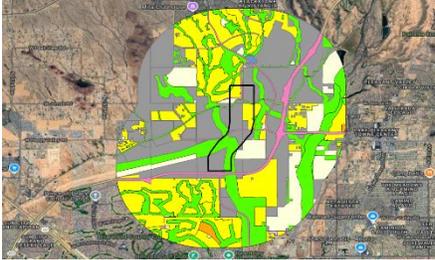
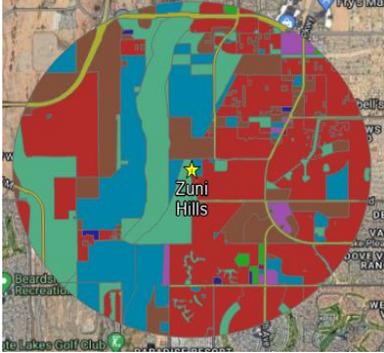
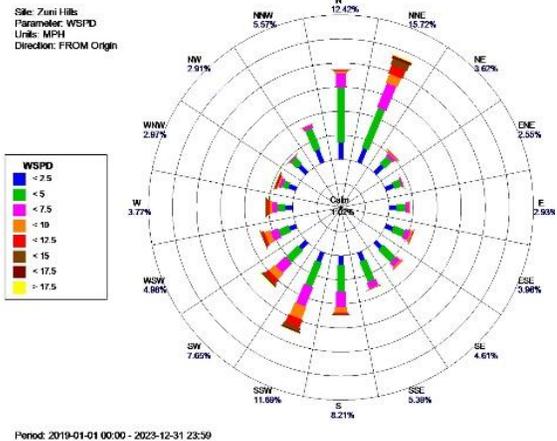
Receptors were placed in order to estimate the highest concentrations of PM<sub>10</sub>, to determine possible violations of the NAAQS. The highest PM<sub>10</sub> concentrations are expected to occur near

project's areas with the highest-volume roadways and near areas where vehicles are restarting and/or idling. Receptors were placed five meters from the roadways, at a height of 1.8 meters. Receptors were not placed in locations where the public does not have access, as described in the EPA guidance. Areas with no public access include medians, right-of-way access on highways and ramps, locations restricted by fencing, and locations with hazardous terrain. Aerial photos were used to determine locations unlikely to have pedestrian access due to fencing or hazardous terrain.

### Determine Background Concentrations

The Zuni Hills monitor is the closest to the project area. Monitoring station information including land use percentage and wind rose data is shown in Table 5 below. Because Zuni Hills monitor is the closest PM station to the project and the station's land use characteristics are similar to the project area's land use, it was selected as the PM background monitor. This selected monitor was approved during the interagency consultation process. The 4th highest PM<sub>10</sub> reading from 2021 through 2023 was identified for Zuni Hills, after removing it for atypical events days, and then used as the projects PM background concentration. The 4<sup>th</sup> highest monitor value over three years from 2021 to 2023 is 107 µg/m<sup>3</sup> for Zuni Hills monitor, after removing atypical events data. Monitor site details, including a figure showing the distance from the project area to each monitor, are included in the materials in Appendix A. An Atypical Events Report was prepared for the justification of the removal for the eight atypical event days for Zuni Hills during the proposed analysis time frame can be found in Appendix B.

Project Area Characteristics and Parameters		Zuni Hills (ZH) AQS ID: 04-013-4016 Address: 109th Ave & Deer Valley Rd, Phoenix 6 miles to project
Collection frequency, completeness, and background concentration	N/A	<p>Continuous monitoring overall PM data completeness is 96.8% in 2021</p> <p>Number of complete monitoring days in 2021 to 2023: 1086</p> <p>4th Highest 24-hour reading after removing atypical events: 107 µg/m<sup>3</sup>.</p>
Land use/terrain	<p>Density (developed area), emission sources (near the traffic interchange), land use (residential area [26%], vacant [34%] commercial [0.08%], office [0.01%], light industrial [0.05%], open space [21%]), terrain (relative flat).</p>	<p>Density (developed area), emission sources (near the traffic interchange), land use (residential area [27%] &amp; vacant and open space [30%] commercial and office space [2%], terrain (relative flat).</p> <p>The Zuni Hills monitor is located in a fringe area away from Central Phoenix, characteristics similar to the project area.</p>

		
Wind patterns	N/A	<p>ZH monitor shows significant upwind patterns to the project area.</p> 
Nearby sources:	N/A	No nearby sources other than roadways.

The approved PM<sub>10</sub> background value was added to the AERMOD modeled design values for comparison to the PM<sub>10</sub> NAAQS of 150 µg/m<sup>3</sup>. The background values are conservative, because it is expected that ambient PM<sub>10</sub> concentrations will be lower in future years because of updated SIP's and a general trend of declining vehicle emissions due to technological advances. No obvious nearby sources of emissions other than roadways exist for the project. It is assumed that emissions from other nearby sources, if any, are already included from the ambient monitoring data.

### Calculate Design Concentrations and Compare Build/No-Build Results

The model results were added to the PM<sub>10</sub> background concentrations for the Build alternative to calculate the PM<sub>10</sub> design values. To determine the 24-hour PM<sub>10</sub> design value, the following steps were used, as outlined in the guidance:

- From the air quality modeling results from the build scenario, identify the sixth-highest 24-hour concentration for each receptor.

- Identify the receptor with the highest sixth-highest 24-hour concentration.
- Identify the appropriate 24-hour background concentration from the three most recent years of air quality monitoring data. This value is 107  $\mu\text{g}/\text{m}^3$ , as described above.
- For the receptor identified in Step 2, add the sixth-highest 24-hour modeled concentration to the appropriate 24-hour background concentration (from Step 3).
- Round to the nearest 10  $\mu\text{g}/\text{m}^3$ . The result is the highest 24-hour  $\text{PM}_{10}$  design value in the build scenario. The final results are summarized in Table 11.

#### Consider Mitigation or Control Measures

If the total concentration of the highest 24-hour  $\text{PM}_{10}$  design value is greater than  $\text{PM}_{10}$  NAAQS, mitigation or control measures are needed to be considered to reduce emissions within the project area.

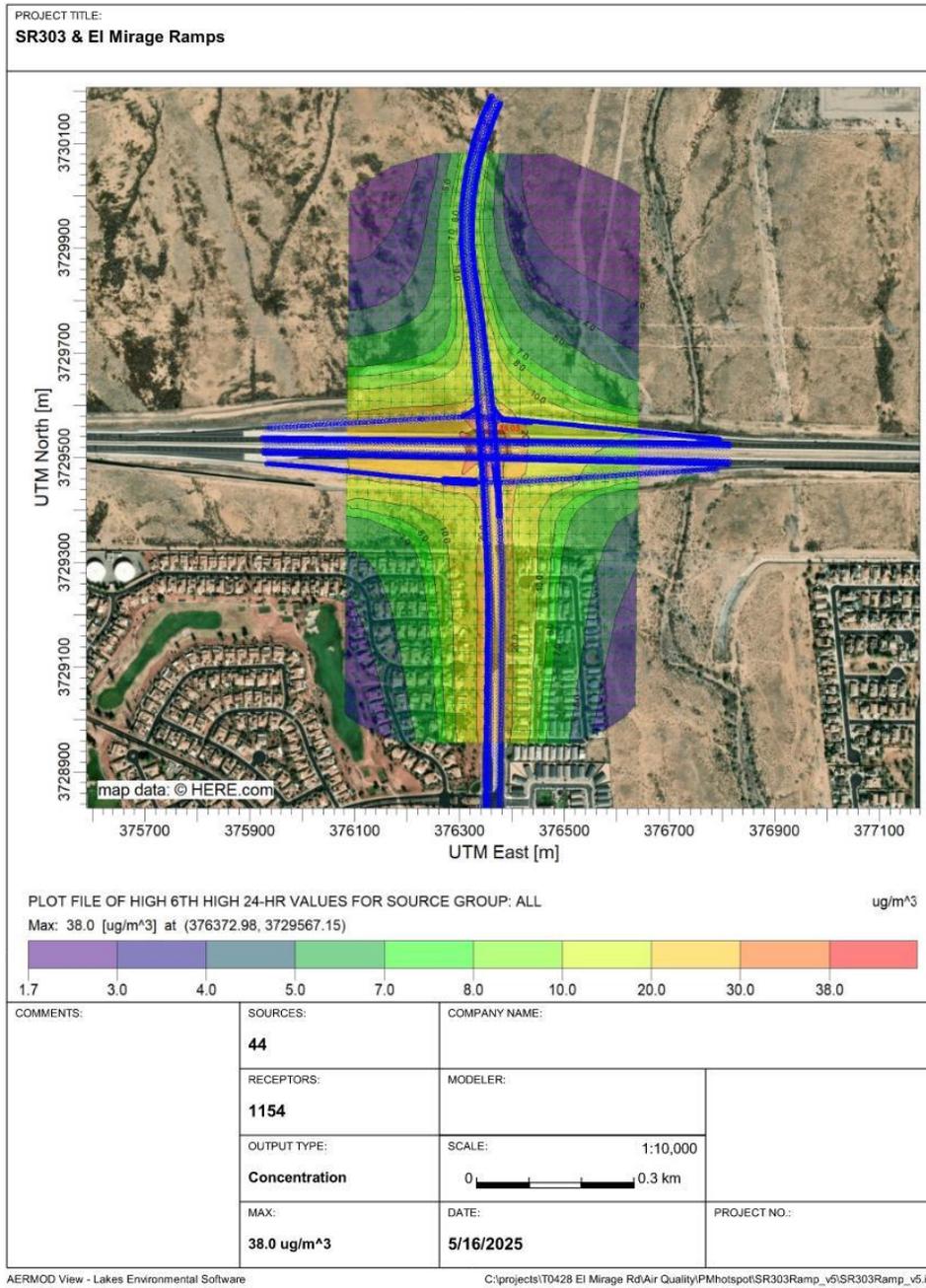
#### Document Analysis

This Air Quality Technical Report documents the PM hotspot results.

### 3.2.2 Results

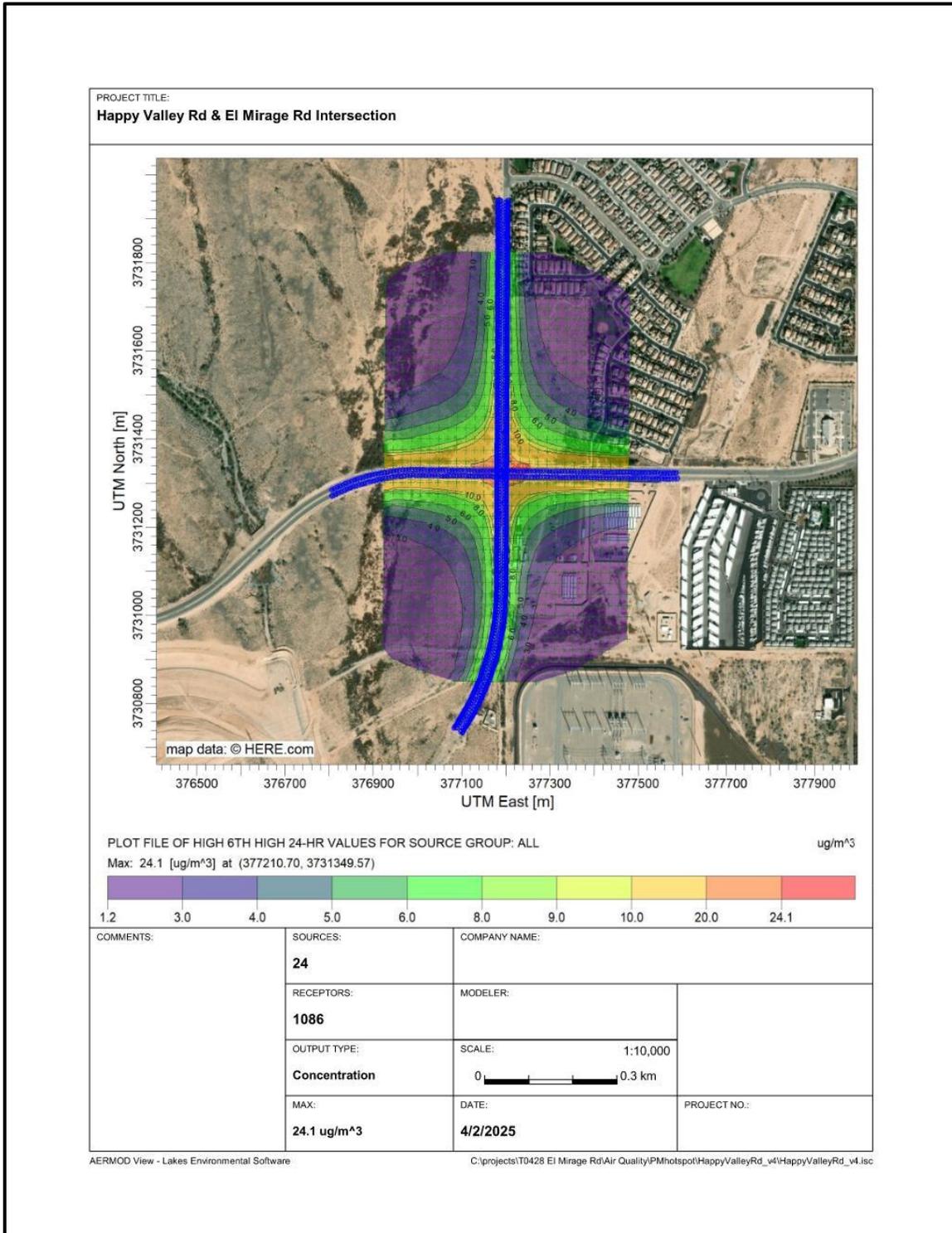
The modeled concentrations, including background concentrations, were compared to the applicable NAAQS. The receptor with the maximum 6th-highest concentration was located on the northwest or northeast quadrants of the freeway. Figures 11 through Figure 13 show the receptor concentrations near the center of the project area with the maximum value shown in red.

Figure 11. SR303L and El Mirage Road PM<sub>10</sub> Model Results



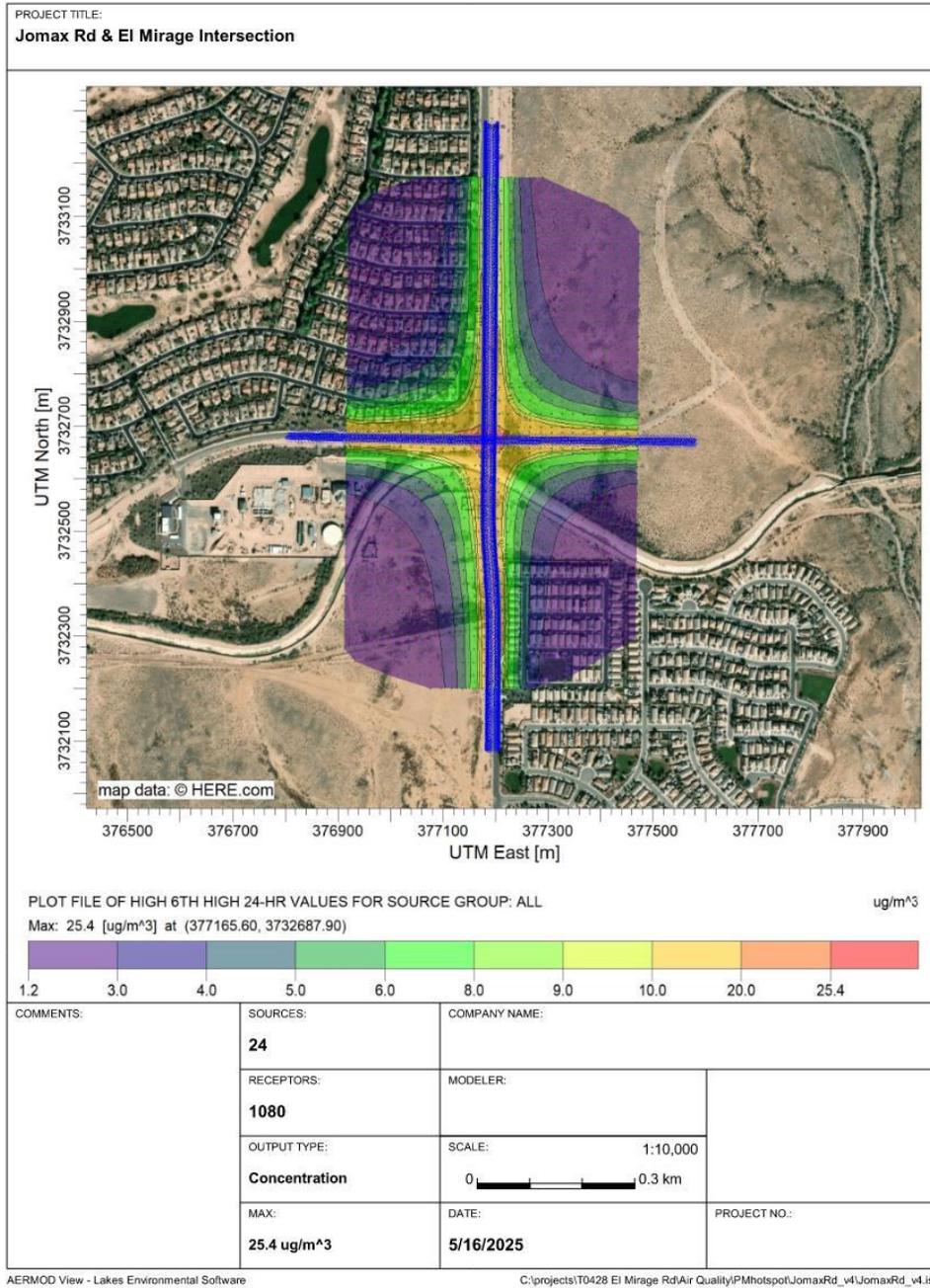
Note: Values shown are modeled 6th-high 24-hour concentrations of PM<sub>10</sub>, prior to the addition of background concentration. Maximum value shown in red.

Figure 12. El Mirage Road and Happy Valley Road PM<sub>10</sub> Model Results



Note: Values shown are modeled 6th-high 24-hour concentrations of PM<sub>10</sub>, prior to the addition of background concentration. Maximum value shown in red.

Figure 13. El Mirage Road and Jomax Road PM<sub>10</sub> Model Results



Note: Values shown are modeled 6th-high 24-hour concentrations of PM<sub>10</sub>, prior to the addition of background concentration. Maximum value shown in red.

The result is shown in Table 6 below. Output files exported from AERMOD for each model run indicated zero fatal errors.

Table 6 Predicted 24-Hour PM <sub>10</sub> Concentration (µg/m <sup>3</sup> )					
Location	6 <sup>th</sup> -Highest PM <sub>10</sub> Value	Background PM <sub>10</sub> Value	Total Concentration	Total Concentration Rounded to nearest 10 µg/m <sup>3</sup>	PM <sub>10</sub> NAAQS
SR303L ramps & El Mirage Road	38.0	107	145.0	150	150
El Mirage Road & Happy Valley Road	24.1	107	131.1	130	150
El Mirage Road & Jomax Road	25.4	107	132.4	130	150
µg/m <sup>3</sup> = micrograms per cubic meter					

As shown in Table 6, total PM<sub>10</sub> concentrations for the projects four selected TIs are below PM<sub>10</sub> NAAQS. Therefore, the project meets conformity requirements and no project emission reduction mitigation or control measures need to be considered by project sponsors.

Due to the large volume of input and output files created for this project’s PM hot spot analysis, data is available electronically upon request, as noted in Appendix D.

## 4.0 CONFORMITY

Section 176c of the CAA requires that transportation projects conform to the approved air quality State Implementation Plan for meeting federal air quality standards. Conformity requirements were made substantially more rigorous in the CAA Amendments. The conformity determinations for federal actions related to transportation projects must meet the requirements of 40 CFR Parts 51 and 93. This project is not likely to cause or contribute to the severity or number of violations of the NAAQS. The project is within the Phoenix PM<sub>10</sub> and Ozone nonattainment area. The proposed project is included in the *Maricopa Association of Governments (MAG) MOMENTUM 2050* Regional Transportation Plan and the FY 2025-2030 Transportation Improvement Program as approved by MAG Regional Council on January 22, 2025.

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## **Appendix A**

### **INTERAGENCY CONSULTATION DOCUMENTATION**



Arizona Department of Transportation  
Environmental Planning

# Project Level Particulate Matter (PM10) Consultation Document

El Mirage Road  
SR 303L – Jomax Road

FHWA Project No. PEO-0(231)T  
ADOT Project No. 0000 MA PEO T0428 01D

**April 14, 2025**

*The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated June 25, 2024, and executed by FHWA and ADOT.*

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## T0428 Project Level PM Quantitative Hot-Spot Analysis – Project of Air Quality Concern Questionnaire

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### Project Setting and Description

The City of Peoria and the Arizona Department of Transportation (ADOT), in cooperation with other local and state agencies, are preparing a Design Concept Report (DCR) and an Environmental Assessment (EA) to evaluate a potential new segment of El Mirage Road between State Route Loop 303 (SR303L) and Jomax Road (see study area map on page 2). This new segment of roadway would accommodate current and projected traffic needs in response to increased development in areas along the State SR303L and near roadways and traffic interchange (TI) locations in the northwest Valley.

The DCR and EA will evaluate roadway improvements such as lane configuration, pedestrian and bicycle use, drainage improvements, right of way impacts, traffic impacts, and other considerations. They will also evaluate the potential environmental effects that could result from future implementation of the new roadway segment, as well as potential impacts if no action is taken (that is, no changes are made to El Mirage Road in the study area). Environmental topics to be addressed include but are not limited to biological resources, cultural resources, water resources, hazardous materials, traffic noise, and air quality. The Draft DCR and EA are currently scheduled to be available for public review and comment in spring 2025 and be completed in summer 2025.

These projects are within the Phoenix PM10 nonattainment area. The proposed project is included in the *Maricopa Association of Governments (MAG) Regional Transportation Plan (RTP) MOMENTUM 2050*. In addition, the combined project is included in the *FY 2022-2025 MAG Transportation Improvement Program*.

Figure 1. Project Vicinity Map



## Project Assessment

The following questionnaire is used to compare the proposed project to a list of project types in 40 CFR 93.123(b) requiring a quantitative analysis of local particulate emissions (Hot-spots) in nonattainment or maintenance areas, which include:

- i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
- ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of an increase in traffic volumes from a significant number of diesel vehicles related to the project;
- iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM<sub>10</sub> or PM<sub>2.5</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

If the project matches one of the listed project types in 40 CFR 123(b)(1) above, it is considered a project of local air quality concern and the hot-spot demonstration must be based on quantitative analysis methods in accordance to 40 CFR 93.116(a) and the consultation requirements of 40 CFR 93.105(c)(1)(i). If the project does not require a PM hot-spot analysis, a qualitative assessment will be developed that demonstrates that the project will not contribute to any new localized violations, increase the frequency or severity of any existing violations, or delay the timely attainment of any NAAQS or any required emission reductions or milestones in any nonattainment or maintenance area.

On March 10, 2006, EPA published *PM<sub>2.5</sub> and PM<sub>10</sub> Hot-Spot Analyses in Project-Level Transportation Conformity Determinations for the New PM<sub>2.5</sub> and Existing PM<sub>10</sub> National Ambient Air Quality Standards; Final Rule* describing the types of projects that would be considered a project of air quality concern and that require a hot-spot analysis (71 FR 12468- 12511). Specifically on page 12491, EPA provides the following clarification: "Some examples of *projects of air quality concern* that would be covered by § 93.123(b)(1)(i) and (ii) are: A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic;" .." Expansion of an existing highway or other facility that affects a congested intersection (operated at Level-of-Service D, E, or F) that has a significant increase in the number of diesel trucks;" These examples will be used as the baseline for determining if the project is a project of air quality concern.

## New Highway Capacity

Is this a new highway project that has a significant number of diesel vehicles? *Example: total traffic volumes  $\geq$ 125,000 annual average daily traffic (AADT) and truck volumes  $\geq$ 10,000 diesel trucks per day (8% of total traffic).*

**YES** - This project is a new highway project that has a significant number of diesel vehicles. The ADT and truck percentage for the Build alternative were compared to the No Build alternative on roadway segments and intersections along the project corridor for El Mirage Road project, as summarized in Tables 1 and 2 below. As can be seen in Table 1, total truck ADT on El Mirage Road segments would be 3,080 to 14,030 in 2050 Build alternative, and truck ADT would increase 1,820 to 6,800 vehicles in 2050 Build alternative, compared to the No-Build alternative. As shown in Table 2, total truck ADT at intersections would be 3,350 to 12,310 vehicles in 2050 Build alternative, and truck ADT would increase 2,700 to 8,900 vehicles at 5 intersections. Only one intersection shows decreased truck ADT.

Table 1 - Roadway Average Daily Traffic and Truck Volumes

Segment	2023 Existing				2050 No-Build Alternative				2050 Build Alternative				Total Truck ADT Difference (Build - No-Build)
	ADT	Total Truck ADT	MT ADT	HT ADT	ADT	Total Truck ADT	MT ADT	HT ADT	ADT	Total Truck ADT	MT ADT	HT ADT	
Vistancia Boulevard to Blue Sky Drive	3,230	130	100	30	9,680	1,260	1,020	240	22,150	3,080	2,300	780	1,820
Blue Sky Drive to Jomax Road	3,170	120	90	30	9,620	1,250	1,010	240	23,400	3,080	2,300	780	1,830
Jomax Road to Happy Valley Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18,510	3,070	2,220	850	3,070
Happy Valley Road to SR 303L Westbound Ramp	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19,300	4,170	3,090	1,080	4,170
SR 303L Westbound Ramp to SR 303L Eastbound Ramp	12,000	1,720	1,320	400	28,800	4,120	2,950	2,070	40,400	10,920	7,210	3,710	6,800
South of SR 303L Eastbound Ramp	16,000	2,290	1,760	330	55,900	7,870	3,850	4,020	58,300	14,030	10,270	3,760	6,160

Notes: ADT - Average daily traffic  
 MT - Medium Trucks (vehicles with 2 axles & 6 wheels; gross vehicle weight - 10,000 to 26,400 pounds)  
 HT - Heavy Trucks (vehicles with 3 or more axles; gross vehicle weight greater than 26,400 pounds)

Source: Traffic data provided by Burgess & Niple, Inc. on December 6, 2024.

Table 2 - El Mirage Road Intersection ADT & Truck Volumes

Intersection	Veh Class	2050 No-Build Alternative					2050 Build Alternative					Difference (Build - No-Build)
		EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	
El Mirage Road and Vistancia Boulevard	Total ADT	14,800	11,100	3,400	7,700	37,000	11,200	8,300	7,300	5,600	32,400	-4,600
	MT ADT	1,350	1,170	360	810	3,690	1,160	560	730	560	3,010	-880
	HT ADT	520	390	120	270	1,300	390	320	280	220	1,210	-90
El Mirage Road and Blue Sky Drive	Total ADT	2,000	N/A	1,600	1,700	5,300	2,600	N/A	10,300	9,800	22,700	17,400
	MT ADT	100	N/A	200	210	510	100	N/A	1,240	1,180	2,520	2,010
	HT ADT	0	N/A	70	70	140	0	N/A	430	400	830	690
El Mirage Road and Jomax Road	Total ADT	1,600	N/A	N/A	1,300	2,900	12,500	13,200	14,700	10,300	50,700	47,800
	MT ADT	80	N/A	N/A	160	240	1,590	1,680	1,870	1,310	6,450	6,210
	HT ADT	0	N/A	N/A	70	70	580	790	840	590	2,760	2,690
El Mirage Road and Happy Valley Road	Total ADT	14,400	12,200	N/A	400	27,000	11,000	14,500	14,500	13,600	53,600	26,600
	MT ADT	1,580	1,340	N/A	40	2,960	1,840	2,420	2,420	2,270	8,950	5,990
	HT ADT	820	690	N/A	0	1,510	630	830	830	780	3,070	1,560
El Mirage Road and SR 303L Westbound Ramp	Total ADT	N/A	4,500	6,200	4,500	15,200	N/A	7,000	19,600	10,400	37,000	21,800
	MT ADT	N/A	900	1,240	900	3,040	N/A	1,400	3,920	2,080	7,400	4,360
	HT ADT	N/A	310	420	310	1,040	N/A	50	1,330	710	2,090	1,050
El Mirage Road and SR 303L Eastbound Ramp	Total ADT	9,500	N/A	10,400	4,500	24,400	11,300	N/A	22,000	12,600	45,900	21,500
	MT ADT	1,900	N/A	3,800	900	6,600	2,260	N/A	4,400	2,520	9,180	2,580
	HT ADT	630	N/A	700	30	1,360	770	N/A	1,500	860	3,130	1,770

Notes: ADT - Average daily traffic on Approaching Movements  
 MT - Medium Trucks (vehicles with 2 axles & 6 wheels; gross vehicle weight - 10,000 to 26,400 pounds)  
 HT - Heavy Trucks (vehicles with 3 or more axles; gross vehicle weight greater than 26,400 pounds)

Source: Traffic data provided by Burgess & Niple, Inc. on December 6, 2024.

### Expanded Highway Capacity

Is this an expanded highway projects that have a significant increase in the number of diesel vehicles? *Example: the build scenario of the expanded highway or expressway causes a significant increase in the number of diesel trucks compared with the no-build scenario, truck volumes > 8% of the total traffic.*

**NO** - This project is not an expanded highway project that has a significant number of diesel vehicles.

### Projects with Congested Intersections

Is this a project that affects a congested intersection (LOS D or greater) that has a significant number of diesel trucks, OR will change LOS to D or greater because of an increase in traffic volumes from a significant number of diesel trucks related to the project?

**YES.** This project is a project that affects a congested intersection of LOS D or will change LOS to D or greater which has a significant number of diesel trucks, see Table 3. The intersection operation analysis shows 4 intersections have a LOS of D or E , with total truck ADT at intersections 3,350 to 12,310 vehicles in 2050 Build alternative, as shown in previous Table 2.

Table 3 - Intersections LOS and Peak-Hour Volumes

Intersection	Peak Hour	2050 No-Build Alternative				2050 Build Alternative				Total Truck Volume Difference (Build Alternative - No Build Alternative, vph)
		LOS (delay, sec.)	Volumes (vph)	Medium Truck Volumes (vph)	Heavy Truck Volumes (vph)	LOS (delay, sec.)	Volumes (vph)	Medium Truck Volumes (vph)	Heavy Truck Volumes (vph)	
El Mirage Road and Vistancia Boulevard	AM	E (56.9)	4000	420	140	D (37.4)	4,250	440	150	30
	PM	D (49.7)	3700	390	130	D (37.4)	4,180	430	140	50
El Mirage Road and Blue Sky Drive	AM	A (4.7)	530	20	0	E (36.6)	2,260	250	80	310
	PM	A (4.7)	530	30	0	C (23.4)	2,270	250	70	290
El Mirage Road and Jomax Road	AM	A (0)	330	20	0	C (31.2)	4,580	580	230	790
	PM	A (0)	330	30	0	<b>D (44.6)</b>	5,080	650	250	870
El Mirage Road and Happy Valley Road	AM	A (3.7)	2990	330	170	E (70.8)	5,560	930	280	710
	PM	A (1.7)	2700	300	150	<b>D (45.7)</b>	5,370	900	290	710
El Mirage Road and SR 303L Westbound Ramp	AM	B (11.3)	1170	230	80	B (17.0)	3,650	730	180	600
	PM	A (6.0)	2440	490	80	C (20.7)	3,700	740	180	350
El Mirage Road and SR 303L Eastbound Ramp	AM	B (11.5)	1270	250	160	C (23.8)	4,470	890	220	700
	PM	A (5.8)	2740	590	190	C (28.4)	4,590	920	230	410

Truck Volume Difference includes both MT and HT Volumes (vph) at the intersection includes all approaching movements  
 MT - Medium Trucks (vehicles with 2 axles & 6 wheels; gross vehicle weight - 10,000 to 26,400 pounds) HT - Heavy Trucks (vehicles with 3 or more axles; gross vehicle weight greater than 26,400 pounds)

Source: LOS data provided by Burgess & Niple, Inc. on December 6, 2024.

### New Bus and Rail Terminals

Does the project involve construction of a new bus or intermodal terminal that accommodates a significant number of diesel vehicles?

**NO** - This project does not construct any new bus or rail terminals.

### Expanded Bus and Rail Terminals

Does the project involve an existing bus or intermodal terminal that has a large vehicle fleet where the number of diesel buses (or trains) increases by 50% or more, as measured by arrivals?

**NO** - This project does not expand any bus or rail terminals.

## **Projects Affecting PM Sites of Violation or Possible Violation**

Does the project affect locations, areas or categories of sites that are identified in the PM<sub>10</sub> or PM<sub>2.5</sub> applicable plan or implementation plan submissions, as appropriate, as sites of violation or potential violation?

**NO** - The project location is not listed in MAG's 2012 SIP as a site of violation or potential violation.

## **POAQC Determination**

El Mirage Road project is a new highway project that has a significant increase in the number of diesel vehicles on roadway segments and at intersections. Therefore, ADOT is recommending this project for interagency consultation in accordance with 40 CFR93.105 as a Project of Air Quality Concern and thereby will require a PM hot-spot analysis.

The top three TI/intersections ranked by volume are as follows:

- El Mirage Road and Jomax Road
- El Mirage Road and Happy Valley Road
- El Mirage Road and SR 303L TI with Westbound & Eastbound Ramps

And, the top three intersections ranked by LOS and delay are as follows:

- El Mirage Road and Happy Valley Road (AM Peak Hour)
- El Mirage Road and Happy Valley Road (PM Peak Hour)
- El Mirage Road and Jomax Road (PM Peak Hour)

Based on the top intersections ranked by volume and by LOS and delay, the intersection modeling analysis will be performed for the following three TI/intersections' peak hours of the days for El Mirage Road project:

- El Mirage Road and Jomax Road
- El Mirage Road and Happy Valley Road
- El Mirage Road and SR 303L TI with Westbound & Eastbound Ramps

All intersections within the project limits are selected for analysis. El Mirage Road and Happy Valley Road intersection is selected because it has the largest volumes in 2050 Build alternative and LOS E and D in AM and PM peak hours in the 2050 Build alternative. El Mirage Road and Jomax Road intersection is selected because it has 2<sup>nd</sup> largest volumes in 2050 Build alternative and LOS D in 2050 PM peak hour. El Mirage Road and SR 303L TI is selected because of 3<sup>rd</sup> largest volumes in 2050 Build alternative. El Mirage Road and Vistancia Blvd intersection and El Mirage Road and Blue Sky Drive intersection are not selected for analysis because these two intersections are outside of project limits, and volumes are lower than those of selected intersections.

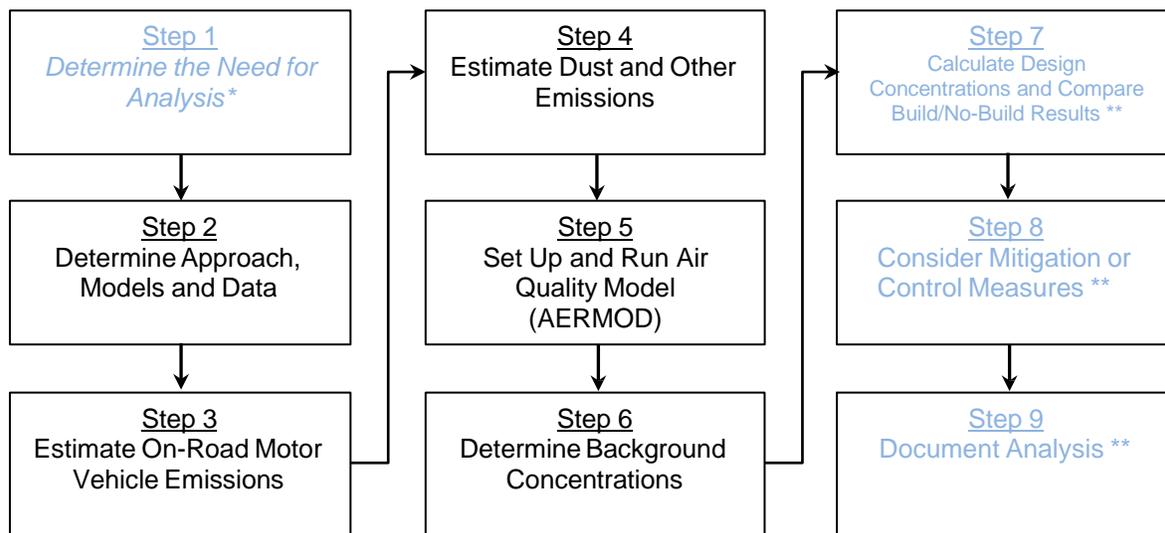
Section 3.3.2 of EPA's PM Hot Spot Guidance indicates the geographic area to be covered by a PM hot-spot analysis is to be determined on a case-by-case basis. The guidance states that it may be appropriate to focus the PM hot-spot analysis only on locations of highest air quality concentrations, and that if conformity requirements are met at such locations, then it can be assumed that conformity is met throughout the project area.

Based on the above reasons, we believe the three intersections selected for PM hotspot analysis in the consultation document are the locations that would result in highest air quality concentrations.

# Project Level PM Quantitative Hot-Spot Analysis – Consultation Document for Project of Air Quality Concern

## Completing a Particulate Matter (PM) Hot-Spot Analysis

The general steps required to complete a quantitative PM hot-spot analysis are outlined below and described in detail in the EPA Office of Transportation and Air Quality guidance document “Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas” [EPA-420-B-21-037, October 2021](#).



- Described in the previous section (Air Quality Concern Questionnaire).

\*\* These Steps will be described and documented in a final air quality analysis report.

### Step 2: Determine the Approach, Models, and Data

- Describe the project area (area substantially affected by the project, 58 FR 62212) and emission sources.
- Determine general approach and analysis year(s) – year(s) of peak emissions during the time frame of the transportation plan (69 FR 40056).
- Determine National Ambient Air Quality Standards (NAAQS) and PM types to be evaluated.
- Select emissions and dispersion models and methods to be used.
- Obtain project-specific data (e.g., fleet mix, peak-hour volumes and average speed).

### Step 3: Estimate On-Road Motor Vehicle Emissions

- a. Estimate on-road motor vehicle emissions using MOVES.

### Step 4: Estimate Dust and Other Emissions

- Estimate road dust emissions using AP-42 Paved Roads.
- Do emissions from other sources (e.g., locomotives) need to be considered?

### Step 5: Set Up and Run Air Quality Model (AERMOD)

- Obtain and input required site data (e.g., meteorological).
- Input MOVES and AP-42 outputs (emission factors).
- Determine number and location of receptors, roadway links, and signal timing.
- Run air quality dispersion model and obtain concentration results.

### Step 6: Determine Background Concentrations

- a. Determine background concentrations from nearby and other emission sources excluding the emissions from the project itself.

### Step 7: Calculate Design Concentrations and Compare Build/No-Build Results

- \* Add step 5 results to background concentrations to obtain values for the Build scenario.
- \* Determine if the design values allow the project to conform.

### Step 8: Consider Mitigation or Control Measures

- a. Consider measures to reduce emissions and redo the analysis. If mitigation measures are required for project conformity, they must be included in the applicable SIP and be enforceable.
- b. Determine if the design values from allow the project to conform after implementing mitigation or control measures.

### Step 9: Document Analysis

- a. Determine if the project conforms or not based on the results of step 7 or step 8.  
*To support the conclusion that a project meets conformity under 40 CFR 93.116 and 93.123, at a minimum the documentation will include:*
  - *Description of proposed project, when it is expected to open, and projected travel activity data.*
  - *Analysis year(s) examined and factors considering in determining year(s) of peak emissions.*
  - *Emissions modeling data, model used with inputs and results, and how characterization of project links.*
  - *Model inputs and results for road dust, construction emissions, and emissions from other source if needed.*
  - *Air Quality modeling data, included model used, inputs and results and receptors.*
  - *How background concentrations were determined.*
  - *Any mitigation and control measures implemented, including public involvement or consultation if needed.*
  - *How interagency and public participation requirements were met.*
  - *Conclusion that the proposed project meets conformity requirements.*
  - *Sources of data for modeling.*

Table 1. Proposed Inputs, Parameters and Data Sources

<b>Estimate On-Road Motor Vehicle Emissions (Step 3)</b>		
<b>MOVES3.1</b>	<b>Input</b>	<b>Data Source/Detail</b>
Scale	<i>Onroad, Project Scale and Inventory</i>	<i>MAG Regional Conformity Data (Fall, 2024)</i>
Time Spans	<i>2050, 16 runs PM<sub>10</sub> emission factors were developed for an analysis year of 2050, which represents the year peak emissions from the project are expected. Vehicle emissions of PM<sub>10</sub> are a combination of vehicle exhaust, brakewear, tirewear, and road dust. Road dust is the largest contributor to the overall emissions. Because road dust is highly dependent on vehicle volumes, the analysis year of 2050 was selected as the year of peak emissions because it was the year with the greatest vehicle volumes. This has been reflected in the 2021 MAG Conformity Analysis budget test, which resulted in highest PM<sub>10</sub> emissions in 2050 due to largest VMT and the most surrounding PM emissions.</i>	<i>4 seasons (Jan, Apr, July &amp; Oct) x 4 weekday time periods (6-9AM, 9AM-4PM, 4-7PM &amp; 7PM-6AM)</i>
Geographic Bounds	<i>Maricopa County</i>	<i>EPA Hot Spot Guidance Section 4.4.4</i>
Onroad Vehicles	<i>All Fuels and Source Use Types</i>	<i>EPA Hot Spot Guidance Section 4.4.5</i>
Road Type	<i>Urban Restricted and Urban Unrestricted access</i>	<i>EPA Hot Spot Guidance Section 4.4.6</i>
Pollutants and Processes	<i>Primary Exhaust PM<sub>10</sub>-Total(for Running Exhaust and Crankcase Running Exhaust), Break Wear Particulate, Tire Wear Particulate</i>	<i>EPA Hot Spot Guidance Sections 2.5, 4.4.7</i>
General Output and Output Emissions Detail	<i>Output Database TBD</i>	<i>EPA Hot Spot Guidance Section 4.4.8, 4.4.9 &amp; 4.6</i>
Create Input Database	<i>Input database will be created and modified for Project level using required Regional Inputs from latest Regional Conformity Analysis.</i>	<i>MAG Regional Conformity Data (Fall, 2024)</i>
Project Data Manager	<i>Database will be created and MOVES3.1 templates will be created to include local project data and information provided by MAG, e.g., Fuel, Age Distribution, Meteorology Data, to be consistent with the regional model. Links and Link Source Type will be specific to project as provided by the traffic study, any missing information will use default MOVES3.1 data.</i>	<i>EPA Hot Spot Guidance Sections 4.5 &amp; Appendix D</i>
Meteorology	<i>Calculated from current ADEQ Phoenix AERMET data based on 4 seasons and 4 weekday time periods from year 2017 to 2021.</i>	<i>16 meteorology data set, 4 seasons (Jan, Apr, July &amp; Oct) x 4 weekday time periods</i>
Age Distribution	<i>MAG local specific data (sourceTypeID: 11 – 62, yearID: 2050, ageID: 0 -30)</i>	<i>MAG Regional Conformity Data (Fall, 2024)</i>
Fuel	<i>MOVES default</i>	<i>EPA Hot Spot Guidance Section 4.5.3</i>

I/M Programs	<i>Not used. Check the box labeled “No I/M Program” in MOVES</i>	MAG Regional Conformity Data (Fall, 2024)
Retrofit Data	<i>Not used</i>	
Links	<i>Please see attached the link maps.</i>	
Link Source Types	<i>Option 2 in the EPA’s PM Hot- spot Guidance Section 4.5.7 will be used.</i>	MAG Regional Conformity Data (Fall, 2024)
Link Drive Schedules, Operating Mode Distribution	<i>Options 1 in the EPA’s PM Hot-spot Guidance Section 4.5.8 will be used. Average speeds and road types through the Links Importer will be used. Detailed information through the Link Drive Schedules of Option 2 and Op-Mode Distribution Importers of Option 3 is not available by MAG. MAG provided travel demand model (TDM) supplied traffic data for PM hotspot analysis. This detailed information is normally used/generated by traffic micro-simulations, which is not the intent for this exercise.</i>	
Off-Network, Hoteling	<i>Not used</i>	
<b>Estimate Dust and Other Emissions (Step 4)</b>		
<b>AP-42, Fifth Edition, 2011</b>	<b>Parameter</b>	<b>Data Source/Detail</b>
Average Weight Vehicles	<i>Freeways 3.95 tons in 2025, 4.00 tons in 2030, 4.12 tons in 2040, and 4.27 tons in 2050. Arterials 2.65 tons in 2025, 2.65 tons in 2030, 2.65 tons in 2040, and 2.65 tons in 2050</i>	MAG Regional Conformity Data (Fall, 2024)
Silt Loading	<i>Section 13.2.1 Paved Roads from AP 42 will be used, consistent with the Regional analysis from MAG. Emission factors for road and construction dust should be added to the emission factors generated for each link by MOVES. Ex. Silt loading – Freeways .02 g/m<sup>2</sup>, Arterials &gt;10,000 ADT .067g/m<sup>2</sup>, Low traffic roads &lt;10,000 ADT .23g/m<sup>2</sup>.</i>	EPA Hot Spot Guidance Section 6, When estimating emissions of re-entrained road dust from paved roads, site-specific silt loading data must be consistent with the data used for the project’s county in the regional emissions analysis (40 CFR 93.123(c)(3)).
Construction Dust	<i>Construction Emissions will not be addressed because the construction of this project is not expected to last longer than 5 years. There are no other sources (e.g., locomotives) that need to be considered for most projects.</i>	EPA Hot Spot Guidance Section 6.5
Precipitation	<i>In 2008-2012 SIP/Regional Conformity used average of 32 days with at least .01 inch of precipitation County.</i>	The MAG 2012 Five Percent Plan for PM-10 (used for the Conformity Analysis for the FY 2022-2025 MAG TIP and the Momentum 2050 RTP, dated December, 2021).
<b>Set Up and Run Air Quality Model (AERMOD) (Step 5)</b>		
<b>AERMOD v.24142</b>	<b>Parameter</b>	<b>Data Source/Detail</b>
Model Setup (CO Pathway)		EPA Hot Spot Guidance Section 7.1, 7.2 & Appendix J, AERMOD User’s Guide Section 2.3.2 & 3.2

TITLEONE	TBD	
MODELOPT	CONC FLAT. Initial modeling will be done with all sources and receptors at grade.	Modeling Concentrations and Flat Terrain
AVERTIME	24	Average across each 24-hour period from the available met data
URBANOPT	1,650,070	Population of Phoenix, AZ <a href="https://www.census.gov/quickfacts/fact/table/phoenixcityarizona/PST045222">https://www.census.gov/quickfacts/fact/table/phoenixcityarizona/PST045222</a>
FLAGPOLE	Receptor height in meter, 1.8	
POLLUTID	PM10	
Source Types and Characters (SO Pathway)		
LOCATION	Srcid Srctyp (VOLUME)	
SRCPARAM	Srcid Vlemis Relhgt Syinit Szinit	VOLUME Source parameters See EPA Hot Spot Guidance Appendix
URBANSRC	ALL	All urban source
EMISFACT	Emission rate=1, Use SEASHR (season by hour-of-day)  As directed by the PM Hot Spot Guidance, emissions were input in a manner to reflect changes in emission factors and vehicle volumes throughout the day. This was represented in AERMOD by specifying an emission rate of 1 g/s/m <sup>2</sup> with the variable emission rate option to specify the emission rate of 96 emission factors (4 seasons/24 hours per day) for each emission source. Excel files that outline this process are included with MOVES and AERMOD modeling files for agency review.	Total 16 MOVES run=4 seasons x 4 time periods to 96 factors (4 seasons/24 hours) See PM hot-spot training slides (FHWA, 2022)
SRCGROUP	ALL	
Meteorological Data (ME Pathway)		
SURFFILE	Phoenix2017-2021.sfc ADOT followed up with ADEQ on the AERMET files- the Phoenix Sky Harbor Airport dataset. ADEQ provided a document detailing the AERMET data completeness, their representativeness of meteorology of the project area, and QA/QC.	ADEQ Phoenix AERMET files
PROFFILE	Phoenix2017-2021.pfl ADOT followed up with ADEQ on the AERMET files- the Phoenix Sky Harbor Airport dataset. ADEQ provided a document detailing the AERMET data completeness, their representativeness of meteorology of the project area, and QA/QC.	ADEQ Phoenix AERMET files
SURFDATA	23183 2017	ADEQ Phoenix AERMET files
UAIRDATA	23160 2017	ADEQ Phoenix AERMET files

PROFBASE	0	ADEQ Phoenix AERMET files
Run Met Pre-Processor	Not used	
Urban or Rural Sources	<p><i>Specifications for URBANSRC (SO Pathway). The emission sources are SR 303L and El Mirage Road mainlines, ramps, and cross streets. No nearby emission sources other than the roadway links included in the model run would be affected by the project.</i></p> <p><i>All emission sources used URBANOPT to specify urban dispersion coefficients. The PM Hot-spot Guidance recommends “in urban areas, sources should generally be treated as urban.” Appendix W recommends multiple procedures to identify an area as urban. Using the Auer land use procedure described in Section 7.2.1.1(b)(i). Based on aerial maps, this project is in the urban fringe of Phoenix that is partially developed. Currently, residential takes 26% of the land use, open space takes 21%, and vacant land takes 34%, other minor land use includes industrial and commercial. Therefore, the use of urban dispersion coefficients is appropriate for the project area.</i></p>	<p><i>EPA Hot Spot Guidance Section 7.5.5 &amp; Appendix J.4, AERMOD Implementation Guide, Section 7.2.3 of Appendix W to 40 CFR Part 51</i></p>
Receptors (RE Pathway)	<p><i>Please see attached receptor maps on pages 15 to 17. El Mirage Road and Jomax Road intersection, El Mirage Road and Happy Valley Road intersection, and El Mirage Road and SR 303L Westbound &amp; Eastbound Ramps intersections were selected for PM hotspot analysis that were ranked by ADT volumes on mainline and at intersections, and LOS and delay at intersections.</i></p> <p><i>The receptor placement is consistent with the guidance. Receptors were placed 5 meter or less when on sidewalk from the edge of the roadway. Receptors were placed at 25 meters spacing. (total 1080 receptors for El Mirage Road and Jomax Road intersection, 1086 receptors for El Mirage Road and Happy Valley Road intersection, and 1154 receptors for El Mirage Road and SR 303L WB&amp;EB Ramp intersections). the highest PM concentration would normally occur at receptors near the roadway sources. the PM concentrations would decrease further away from the roadway sources, and receptor placements further away from the source would not affect the highest PM concentration design value for the intersection and analysis results.</i></p>	<p><i>EPA Hot Spot Guidance Section 7.6, AERMOD User’s Guide Section 2.3.4 &amp; 3.4, Section 7.2.2 of Appendix W to 40 CFR Part 51, See PM hot-spot training slides</i></p>
DISCCART	X Y (Z)	<i>Z is optional if FLAGPOLE is already defined in CO Pathway.</i>

GRIDCART	<i>Not used</i>	
Output (OU Pathway)		
RECTABLE	<i>24 6th</i>	<i>Since PM should be one or less exceedance per year, with 5 years of met data, the 6th highest concentration at each receptor</i>
PLOTFILE	<i>Not used</i>	
POSTFILE	<i>Not used</i>	
Model Runs		
<b>Determine Background Concentrations (Step 6)</b>		
<b>Source Type</b>	<b>Description</b>	<b>Data Source/Detail</b>
Nearby Sources	<i>No nearby sources</i>	
Other Sources (Ambient Monitoring Data)	<p><i>Please see the selected monitor's location map and monitoring data with wind rose information. Zuni Hills (ZH) monitor was selected as PM background monitor. The background concentration data of Zuni Hills (ZH) monitor is representative for the project area.</i></p> <ol style="list-style-type: none"> <li><i>Similar characteristics between the monitor location and project area including density, mix of emission sources, land use, terrain, etc.</i></li> <li><i>Distance of monitor from the project area. ZH monitor is closest monitor to the project and have concentration most similar to the project area.</i></li> <li><i>Wind patterns between the monitor and the project area. ZH monitor does not show significant upwind patterns.</i></li> </ol> <p><i>Draft Atypical Events Report was prepared. See Atypical Events Report for detailed monitor data, calculations, and resulting recommended background concentrations when ready.</i></p> <p><b>Dysart site was also evaluated, but its distance to the project area is further than Zuni Hills site, so it was eliminated for consideration.</b></p> <p><i>For the design concentration, the highest sixth-highest value among all receptors should be added to the fourth highest background monitor value (Section 9.3.4 of PM Hot-spot Guidance). The design concentration will then be compared to NAAQS threshold for conformity determination.</i></p>	<i>EPA Hot Spot Guidance Section 8.3, PM hot-spot training slides Module 5 &amp; 6</i>

## References

*PM Hot-spot guidance*, EPA-420-B-21-037, October 2021.

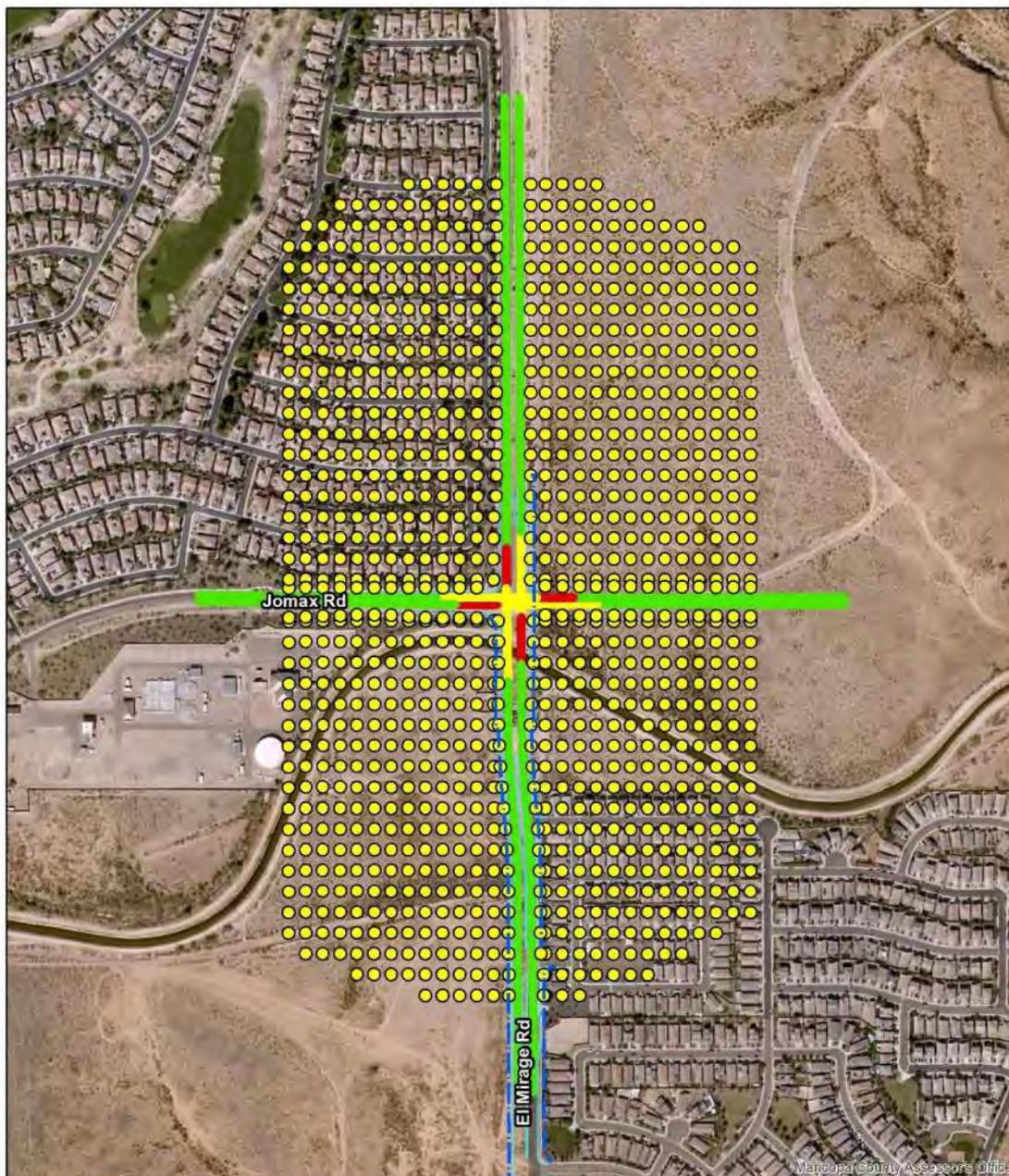
*User's Guide for the AMS/EPA Regulatory Model (AERMOD)*, EPA-454/B-21-001, April 2021.

*AERMOD Implementation Guide*, EPA-454/B-21-006, July 2021.

*User's Guide for the AERMOD Meteorological Preprocessor (AERMET)*, EPA-454/B-22-006, June 2022.

Completing Quantitative PM Hot-spot Analyses: 3-Day Course, FHWA, October 2022.

Figure 1. PM Links and Receptors Placement for Air Quality Modeling  
 (El Mirage Road and Jomax Road)



Source:  
 AZTEC Engineering (2024);  
 ADOT ATIS (2013); Maricopa County Aerial (2022)

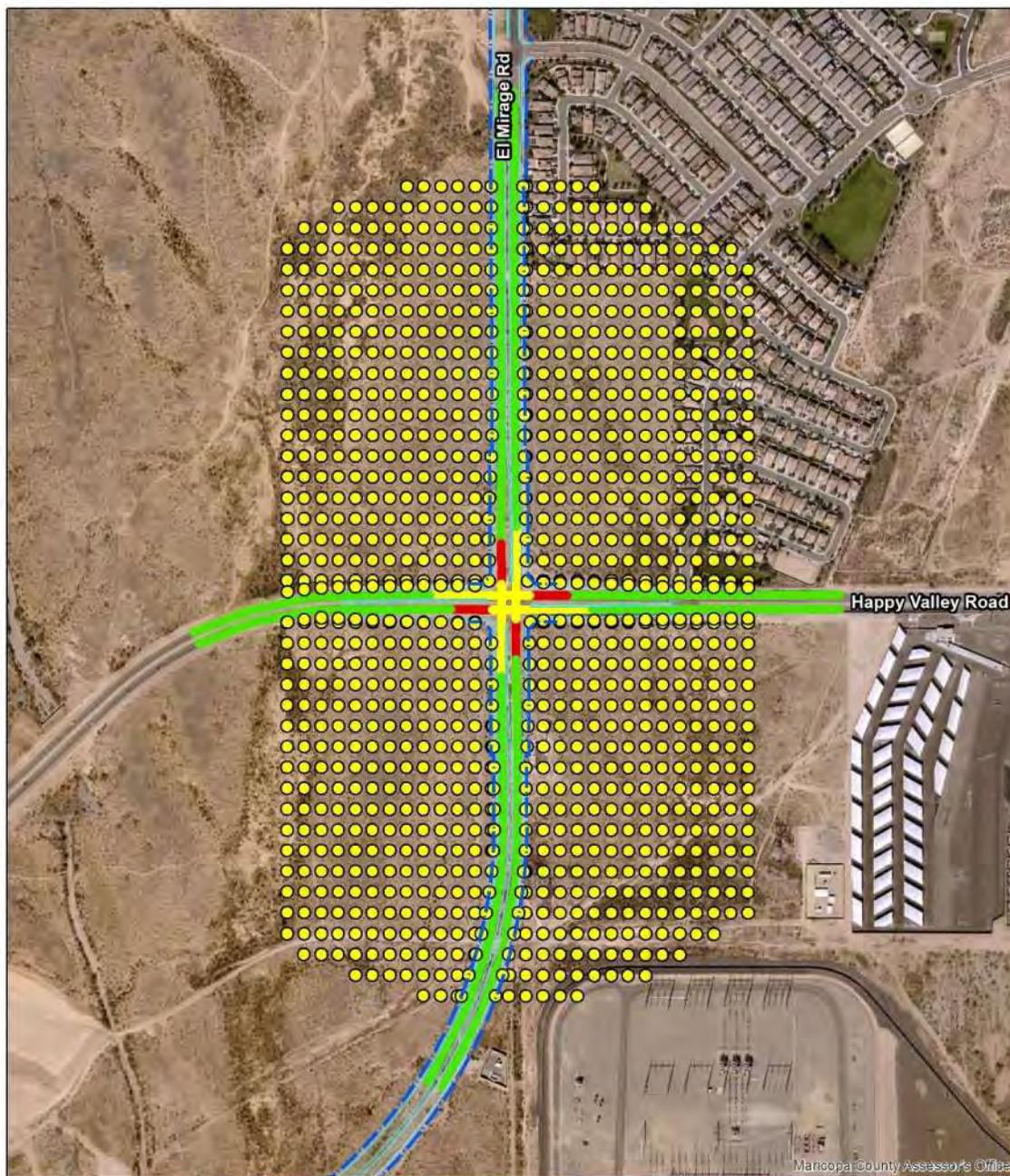
Map Disclaimer: This map is intended for general siting purposes only.

**Legend**

- Cruise
- Acceleration
- Queue
- PM Receptors
- - - R/W Line



Figure 2. PM Links and Receptors Placement for Air Quality Modeling  
(El Mirage Road and Happy Valley Road)



Source:  
AZTEC Engineering (2024);  
ADOT ATIS (2013); Maricopa County Aerial (2022)

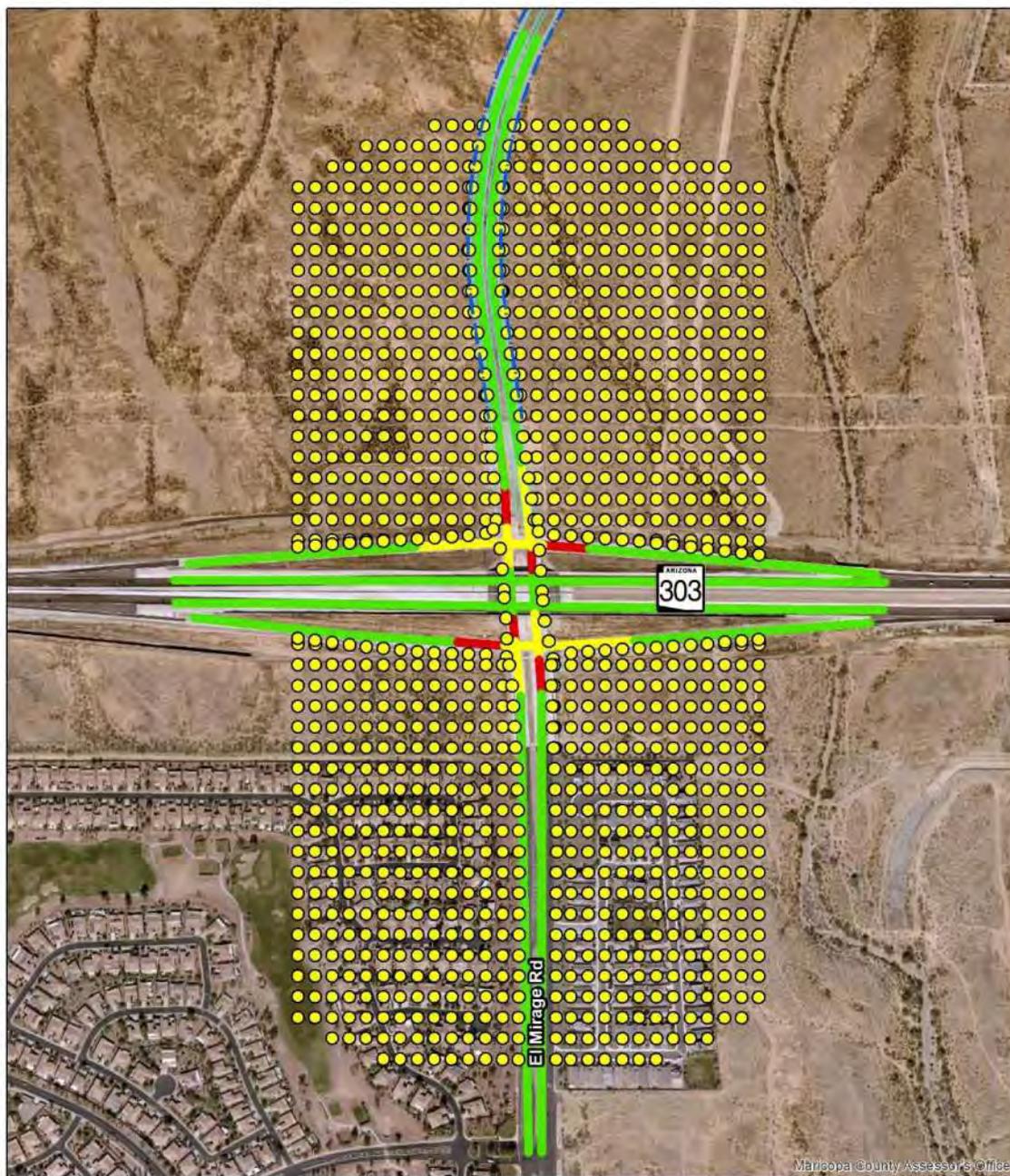
Map Disclaimer: This map is intended for  
general siting purposes only.

**Legend**

- Cruise
- Acceleration
- Queue
- R/W Line
- PM Receptors



Figure 3. PM Links and Receptors Placement for Air Quality Modeling  
(El Mirage Road and SR 303L WB&EB Ramp)



Source:  
AZTEC Engineering (2024);  
ADOT ATIS (2013); Maricopa County Aerial (2022)

Map Disclaimer: This map is intended for  
general siting purposes only.

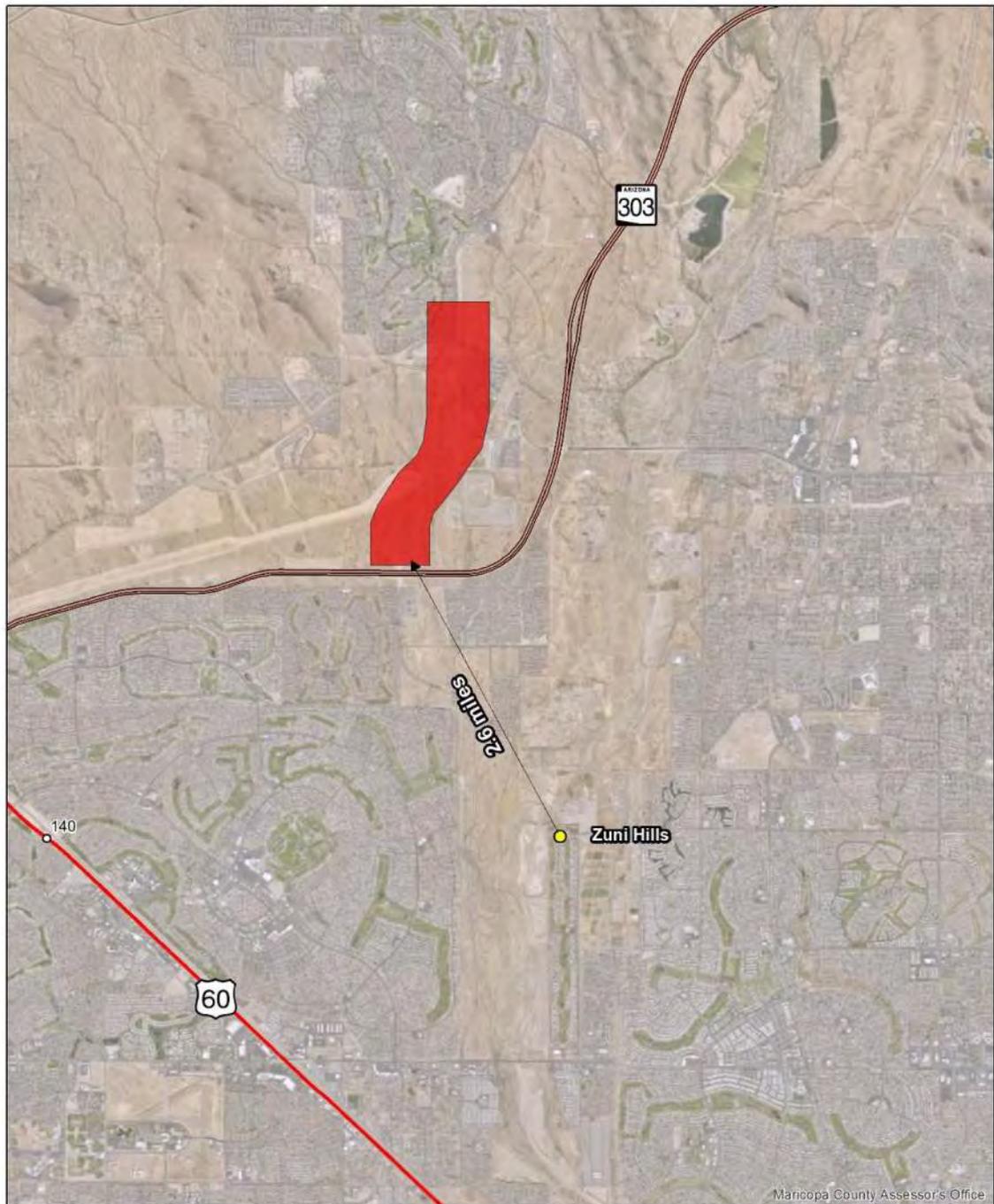
### Legend

- Cruise
- Acceleration
- Queue
- PM Receptors
- R/W Line



PM receptors were placed on the El Mirage Road sidewalks under the freeway mainline.

Figure 4. PM Monitoring Sites adjacent to the Project Area



Source:  
AZTEC Engineering (2024);  
ADOT ATIS (2013); Maricopa County Aerial (2022)

Map Disclaimer: This map is intended for  
general siting purposes only.

**Legend**

- Project Limits
- PM10 Monitoring Sites



**Zuni Hills (ZH) (04-013-4016)**



**Site Location** 109<sup>th</sup> Ave. & Deer Valley Rd., Phoenix

**Spatial Scale** Neighborhood

**Site Type** Population Exposure



**Site Description:** This site began operating in December 2009. This SLAMS location monitors for PM<sub>10</sub>. Meteorological monitoring includes ambient temperature and wind speed/direction.

The station is located on the campus of the Zuni Hills Elementary School.

Number of complete monitoring days at Zuni Hills:

2019	2020	2021	Total
361	365	365	1091

4th Highest 24-hour readings at Zuni Hills **Without** removing atypical events (in red number):

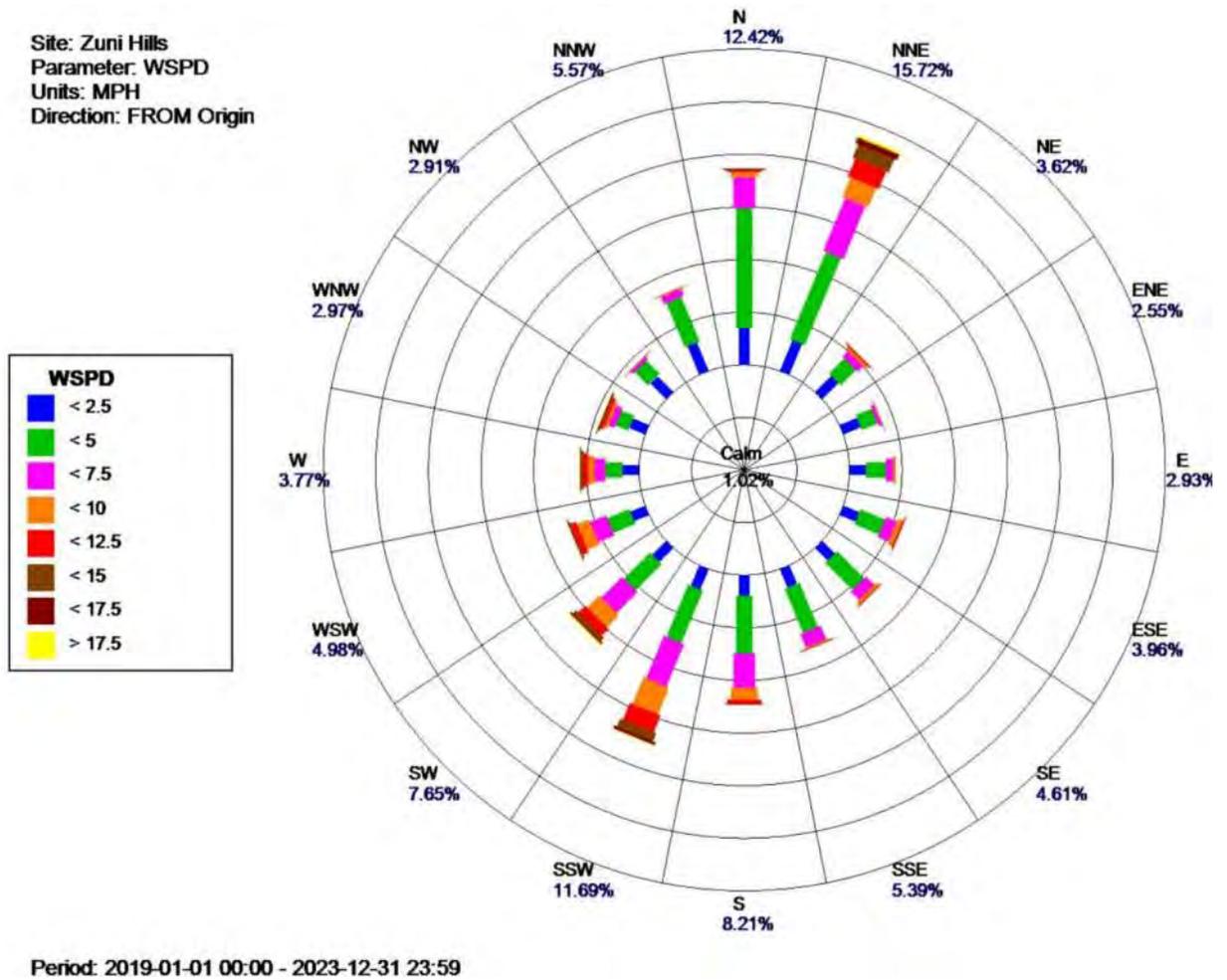
	2021	2022	2023
1	248	167	146
2	<b>142</b>	126	129
3	122	116	125
4	110	107	120

Based on the background PM<sub>10</sub> concentrations and preliminary modeling results, the potential dates (subject to minor changes based on coordination with EPA) of the atypical events to be removed for Zuni Hills are: 7/10/2021; 10/12/2021; 10/11/2021; 9/2/2022; 10/3/2022; 8/31/2023; 7/21/2023; 7/26/2023. These dates have been flagged as atypical events because of PM<sub>10</sub> exceedances at varies PM<sub>10</sub> monitors per communication between Beverly Chenausky (ADOT) and Ron Pope (AQD) on April 5, 2024.

4th Highest 24-hour readings at Zuni Hills after removing atypical events (in red number).  
 Pending EPA approval.

	2021	2022	2023
1	110	126	146
2	84	107	103
3	72	87	66
4	70	81	65

Source: <https://www.epa.gov/outdoor-air-quality-data/download-daily-data>



Source: email from Ron Pope (AQD) Friday, April 5, 2024

## **Attachment A – Meteorological Data Processing Details**

The Arizona Department of Environmental Quality (ADEQ) has compiled pre-processed AERMET meteorological data files that could be used for air quality permit applications for sources located in Arizona under ADEQ jurisdiction. Currently pre-processed AERMET meteorological data files are available for 11 National Weather Service (NWS) meteorological stations across Arizona. The following document provides an overview of the dataset specifically tailored to Phoenix Sky Harbor International Airport, hereinafter referred to as "Sky Harbor Airport."

### **Meteorological Data**

The AERMET meteorological preprocessor requires input of hourly observations of wind speed, wind direction, cloud cover, and ambient temperature. A full morning upper air sounding (rawinsonde) is also required in order to calculate the convective mixing height throughout the day.

In the Phoenix metropolitan area, there are several NWS stations; however, among them, Sky Harbor Airport is the sole Automated Surface Observing Stations (ASOS) station that provides 1-minute or 5-minute wind data. This data is especially valuable because the EPA's AERMINUTE meteorological processor can process 1-minute and 5-minute wind data to reduce the occurrences of calms and missing wind observations. As such, the data from Sky Harbor Airport is considered the most comprehensive and dependable source of surface observations within the Phoenix metropolitan area.

AERMET utilizes upper air data sourced from the NWS Rawinsonde Network. In Arizona, there are two rawinsonde stations, Tucson and Flagstaff. The Tucson rawinsonde station is located in a similar climatic region and is most representative of upper air conditions at the Phoenix metropolitan area.

ADEQ obtained standard hourly weather observations from the National Centers for Environmental Information (NCEI) websites:

NCEI's Integrated Surface Hourly Data (ISHD) TD-3505

<ftp://ftp.ncdc.noaa.gov/pub/data/noaa/>

NCEI's 1-Minute ASOS Wind Data

<ftp://ftp.ncdc.noaa.gov/pub/data/asos-onemin/>

Upper air data are available at the Earth System Research Laboratory Global Systems Divisions web site:

<http://esrl.noaa.gov/gsd>

### **Completeness of Meteorological Data**

Section 5.3.2 of "Meteorological Monitoring Guidance for Regulatory Modeling Applications" states that, to be acceptable for use in regulatory dispersion modeling, a meteorological dataset must be 90% complete on a quarterly basis. The 90% requirement applies to wind direction, wind speed, and temperature. The data completeness for each year of processed data for input to AERMOD is presented in Table 1.

**Table 1 Meteorological Data Completeness**

Year	Quarter	Wind Direction	Wind Speed	Temperature	Cloud Cover
2017	1	99.72%	100.00%	100.00%	100.00%
2017	2	99.86%	99.91%	100.00%	100.00%
2017	3	99.82%	100.00%	100.00%	100.00%
2017	4	99.82%	99.86%	99.68%	99.68%
2018	1	99.68%	100.00%	100.00%	100.00%
2018	2	99.95%	99.95%	100.00%	100.00%
2018	3	98.60%	100.00%	100.00%	100.00%
2018	4	99.68%	99.86%	99.68%	99.68%
2019	1	97.50%	100.00%	99.95%	100.00%
2019	2	99.50%	100.00%	100.00%	100.00%
2019	3	99.46%	99.95%	100.00%	100.00%
2019	4	99.50%	99.91%	99.64%	99.68%
2020	1	100.00%	100.00%	100.00%	100.00%
2020	2	99.91%	100.00%	100.00%	100.00%
2020	3	99.73%	100.00%	100.00%	100.00%
2020	4	99.41%	99.73%	99.68%	99.68%
2021	1	99.77%	100.00%	100.00%	100.00%
2021	2	99.36%	100.00%	100.00%	100.00%
2021	3	99.50%	100.00%	100.00%	100.00%
2021	4	99.59%	99.86%	99.68%	99.68%

Due to the missing data both in surface and upper air observations, the entire model-ready meteorological dataset (PFL and SFC files) has a completeness of 99.15%, which meets the completeness requirements for regulatory modeling purposes.

### **Meteorological Data Processing**

ADEQ used AERMET (version 22112) and AERMINUTE (version 15272) to process five years (2017-2021) of surface meteorological data obtained from Sky Harbor Airport along with concurrent upper air radiosonde data obtained from Tucson. ADEQ also used the EPA's AERSURFACE tool (version 20060) to calculate surface characteristic parameters (albedo, Bowen ration and surface roughness) required by AERMET.

There are two stages of data processing in AERMET. Stage 1 extracts the meteorological data from the input data files (the NWS surface file and the upper air data file), processes the data through various quality assessment checks, and creates intermediate files in a standardized AERMET format. The second stage reads the output from Stage 1, calculates the boundary layer parameters required by AERMOD, and generates two AERMOD-ready meteorological data files. AERMINUTE processes 1-minute ASOS wind data to generate hourly average winds for input to AERMET in Stage 2. Based on the EPA's guidance for AERMINUTE, ADEQ applied a minimum wind speed threshold of 0.5 m/s to the hourly averaged wind speeds provided by AERMINUTE.

Stage 2 also requires the input of surface characteristic data that are used to estimate boundary layer parameters. National Land Cover Data 2016 (NLCD 2016) obtained from the U.S. Geological Survey was input to AERSURFACE. In addition to the NLCD 2016 data, the following inputs were used:

- Method for determining surface roughness length – ZORAD;*
- Study radius for surface roughness (km) – 1 kilometer;*
- Number of sectors – 12;*
- Temporal resolution – Monthly;*
- Continuous snow cover most of the winter? – No;*
- Meteorological tower at an airport? – Yes;*
- Arid Region? – Yes;*
- Surface Moisture? - [Dry, Average or Wet, **see below**]*
- Month/Season assignments - User-specified*
  - Transitional spring (partial green coverage, short annuals): 2 3 4 5 6*
  - Midsummer with lush vegetation: 7 8 9 10*
  - Autumn with unharvested cropland: 1 11 12*

ADEQ determined the surface moisture inputs by comparing annual precipitation for a specific year to the 30-year climatological record of annual precipitation for Sky Harbor Airport. Per the EPA guidance for AERSURFACE, “Dry” is applied if the precipitation is below the 30th percentile of the 30-year climate record, “Wet” is applied if the precipitation is above the 70th percentile of the 30-year climate record, and “Average” is used if the precipitation is between the 30th and 70th percentiles. The resulting surface moisture inputs, as determined by this methodology, are summarized in Table 2.

**Table 2 Surface Moisture Inputs**

<b>Year</b>	<b>Surface Moisture Inputs</b>
2017	Dry
2018	Wet
2019	Average
2020	Dry
2021	Average

To address issues with model overprediction due to underprediction of the surface friction velocity ( $u^*$ ) during light wind/stable conditions, EPA has integrated the ADJ\_U\* option into the AERMET. Based on the EPA’s evaluations, using the ADJ\_U\* option is appropriate when standard NWS data are used. Therefore, ADEQ incorporated the ADJ\_U\* option as a regulatory option in the data processing.

### **Agency and public comments:**

No public comments received on consultation document

Home / Business / Environmental Planning / Air Quality

# Air Quality

The ADOT Air Quality Group works to enhance air quality through congestion mitigation, air quality programs and National Environmental Policy Act (NEPA) planning activities to implement provisions required in the Clean Air Act to meet National Ambient Air Quality Standards throughout Arizona. ([EPA Green Book](#))

## Air Quality Documents Under Review

*Documents for review will be posted below to provide reasonable public access to technical and policy information considered by the agency for transportation conformity determinations, and comments can be directed to [ADOT Air Quality Staff](#).*

- Project Conformity Consultation - [El Mirage Road, SR303L - Jomax Road](#), comments requested by March 26th, 2025.
- Refer to the "Transportation Conformity" tab for prior documents.
- Refer to the "Project Development- Air Quality" tab for consultant resources and instructions.

## Air Quality: Agency Contacts



# Interagency Consultation: El Mirage Rd; L303 to Jomax Road

Created by: Beverly Chenausky · Your response: ✓Yes, I'm going

## Time

1pm - 2pm (Mountain Standard Time - Phoenix)

## Date

Thu Mar 20, 2025

## Description

Discussions on the Modeling Assumptions provided February 24th, and response to comments. The associated draft modeling files are included in the Workfront Link below:

<https://azdot.my.workfront.adobe.com/document/public/view?publicToken=Fa7B7fWsjzfHorSguNKC7lLnkzz4laPulmQfZZ5qIJSgvgIBQEc0G3VKFNQTH2H-KlzHLws3AlmBmiZ0NKauQw==&endcap>

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- Caitlyn Zaremba

## My Notes

# El Mirage Rd; L303 to Jomax Road PE0-0(231)T | T0428 03D

## 3.18.25 EPA Comments on Draft Consultation Documents & Modeling Files

1. El Mirage Road and SR 303L Westbound Ramp was listed as having the highest volumes of ADT, however El Mirage Road and SR 303L Eastbound Ramp has a higher total ADT and a higher truck ADT in the build alternative.
  - a. There is a larger difference between build and no-build ADT in the westbound ramp, however we think that the total volumes are more relevant for PM production. Therefore we think the eastbound ramp should be chosen for analysis.
  - b. We also suggest that, due to the relatively small size of this project and due to the proximity to housing developments, that all intersections be modeled.

**Response:** Will include SR303 eastbound ramp intersection for analysis. All intersections within the project limits will be included for analysis. Vistancia Blvd intersection and Blue Sky Drive intersection are north of the project limit. No CAD files of design or topo are available. Therefore, these two intersections are not included in the analysis.

2. In Table 3- El Mirage Road and Blue Sky Drive AM peak is listed as having a LOS of "E (36.6)". Is this supposed to read LOS D instead of E or was the wrong delay added in parenthesis?

**Response:** Per discussion with the traffic engineer, the Blue Sky Intersection is an Unsignalized intersection which has a different criteria for Delay based LOS. The image below shows the thresholds for both signalized and unsignalized intersections.

LOS	Control Delay for signalized (sec/veh.)	Control Delay for unsignalized (sec/veh.)
A	≤ 10	≤10
B	10-20	10-15
C	20-35	15-25
D	35-55	25-35
E	55-80	35-50
F	≥ 80	≥ 50

3. The last regional conformity analysis was approved on February 28, 2025. We recommend using the most recent MOVES inputs from this most recent conformity determination.

**Response:** Will include most recent MOVES inputs approved on February 28, 2025.

4. Please note that the MOVES3 grace period ends on September 12, 2025. You can continue to use MOVES3 until that time but I would recommend switching to MOVE4/MOVES5.

**Response: Will use MOVES3 till grace period ends.**

5. We recommend expanding the project to include the blue lines below, as these intersections may have changes in their traffic from the proposed changes in this project.



**Response: Will include the roadways shown in the blue lines in the model.**

### 3.12.25 FHWA Comments on Draft Consultation Documents & Modeling Files

1. Pg 6 – The selection of intersection/modeling domain seems to be following the criteria outlined in the EPA CO guideline. I think the intersections identified seem to make sense (based on a combination of volume and delay contributing to highest likely emissions). However, please use a discussion of these factors leading to your conclusion rather than a “ranking”. Also, the document seems to be suggesting that only peak hour volumes/speeds will be used, but it appears this was just used for the ranking process. The modeling files indicate period-

specific traffic data are used. Please clarify in the section that actual volumes are used for the modeling. Since we're evaluating to a 24-hr standard, the full emissions across the entire day at each of this should be considered rather than a peak hour.

Response: Will provide more detailed discussion of these factors leading to the selection conclusion. That is correct that we are evaluating to a 24-hr standard using projected future traffic volumes and average speed in the four periods of the day. The peak hour data was only used for intersection selection based on peak hour LOS and delay because the traffic report only analyzed the peak hour LOS and delay for worst case scenario consideration.

2. Pg – Please justify why the sections of the project in between the focus interchanges/intersections will have lower concentrations and do not need to be evaluated. By default, the entire project should be evaluated. Additional discussion is needed to support the exclusion of the in-between sections (e.g., add discussion of lower emissions density between interchanges which would certainly lead to lower concentrations).

Response: Based on experience from PM hotspot modeling of projects done previously and modeling results of this project, it could be inferred that lower PM emissions concentrations would result along the middle section of the freeway/arterial mainline between adjacent two interchanges/intersections. This is mainly because high PM concentrations normally occur adjacent to the intersections due to greater traffic volumes, worse LOS and delay, and proximity to public (like intersection corner or cross street sidewalk).

Section 3.3.2 of EPA's PM Hot Spot Guidance indicates the geographic area to be covered by a PM hot-spot analysis is to be determined on a case-by-case basis. The guidance states that it may be appropriate to focus the PM hot-spot analysis only on locations of highest air quality concentrations, and that if conformity requirements are met at such locations, then it can be assumed that conformity is met throughout the project area.

Specifically, for Jomax Rd intersection, the highest PM concentration would occur on the intersection sidewalk area at the northwest corner, which is approximately 20 ug/m<sup>3</sup>. The PM concentration at the middle section of El Mirage Rd between Jomax Rd and Happy Valley Road would decrease to approximately 10 ug/m<sup>3</sup>, much less than that on the intersection sidewalk area.

For Happy Valley Rd intersection, the highest PM concentration would occur on the intersection sidewalk area at the northeast corner, which is approximately 22 ug/m<sup>3</sup>. The PM concentration along the El Mirage Rd 1500 feet south of Happy

Valley Rd intersection would decrease to approximately 8 ug/m<sup>3</sup>, much less than that on the intersection sidewalk area.

For SR303 WB Ramp intersection, the highest PM concentration would occur on the El Mirage sidewalk under SR303 mainline, which is approximately 28 ug/m<sup>3</sup>. The PM concentration along the El Mirage Rd 1500 feet north of SR303 WB Ramp intersection would decrease to approximately 8 ug/m<sup>3</sup>, much less than that on the intersection sidewalk area.

3. Pg 9 – Just noting that MOVES3 is quite outdated at this point in terms of vehicle standards, in-use vehicle emissions, fuels, and fleet assumptions. Our preference would be to transition to MOVES5 (or at least MOVES4). However, since we're still in the MOVES4 grace period, you're fine still using MOVES3 for conformity until September.

Response: Thanks for the info. Will use MOVES3 for conformity until September.

4. Pg 10 – No need to provide I/M program (no PM benefit given in MOVES)

Response: Will remove I/M program if EPA also concurs with it.

5. Pg 10 – Might as well note that the fuels (AVFT) assumes no electric vehicles since MOVES3 and default AVFT is being used. This is a conservative assumption for tailpipe emissions as the region has a significant fraction of EVs currently in operation, and likely even more in the analysis year. (Though added EVs with higher weights may contribute more to road dust).

Response: Thanks for the info. Currently we use MOVES default fuel per EPA's direction.

6. Pg 10 – Please describe how the linksource type distribution was determined. Are different mixes used for highway and non-highway and what is this based on? Are the mixes consistent with the truck/non-truck data in tables 1 and 2? Also, the linksource tables are showing much higher fractions for passenger car vs. passenger truck. As we've noted on other projects, the typical modern distribution is skewed towards passenger trucks.

Response: Linksource type distribution was calculated using latest MAG MOVES files for PM conformity for 2050, see detailed approach and steps in the "Link\_Source\_Types" folder in the provided modeling files package. Generally, there are different mixes used for highway and non-highway, which is based on MAG MOVES output from PM conformity analysis. The mixes are consistent with the truck/non-truck data in tables 1 and 2.

7. Pg 11 – Note in the document that all although the project includes roads at multiple heights, sources were modeled at 0 elevation and that this is a conservative assumption (adding exact elevations would lower concentrations).

**Response: Thanks for the info. We use flat terrain model to be conservative.**

8. Pg 11 – In the modeling files package, can you include the table where initsigZ values were calculated for each roadway (presumably based on link LD/HD traffic splits). Also, show how release height and initsigY are calculated.

**Response: Will include in the next modeling package.**

9. Pg 12 – Are there any sidewalks closer than 5 meters where receptors should be placed? (note EPA's 2024 FAQ on receptor placement which now recommends receptors at locations closer than 5 meters if there's a sidewalk.) From the AERMOD files, it looks like these locations were considered. Just confirming.

**Response: There are some sidewalks that may be closer than 5 meters. Per previous Interagency Consultation with EPA, we place receptors on sidewalks for worst case scenario consideration.**

10. Pg 17 – For the Jomax/EI Mirage area, why are receptors and sources not considered for the southern part of the interchange?

**Response: As discussed earlier, it can be inferred that lower PM emissions concentrations would result along the middle section of the freeway/arterial mainline between adjacent two interchanges/intersections. This is mainly because high PM concentrations normally occur adjacent to the intersections due to greater traffic volumes, worse LOS and delay, and close proximity to public (like intersection corner or cross street sidewalk).**

**For Jomax Rd intersection, the highest PM concentration would occur on the intersection sidewalk area at the northwest corner, which is approximately 20 ug/m<sup>3</sup>. The PM concentration at southern part of the intersection would decrease to approximately 10 ug/m<sup>3</sup>, much less than that on the intersection sidewalk area.**

Figure 1. PM Links and Receptors Placement for Air Quality Modeling (El Mirage Road and Jomax Road)



11. Pg 19 – I think the background monitor is appropriate for this project. However, can you also consider showing the other nearby monitors and add discussion about why they are not appropriate (e.g., further distance, non-similar land use)?

Response: will show another nearby Dysart monitor and add discussion about why it is not appropriate.

12. Pg 20 – Noting that the existing atypical report can be applied for this project. However, after May, 2025, the 2024 monitoring data will be certified and available. Future hot-spot analyses should rely on this new data – and if necessary, will need ADEQ’s support in removing 2024 atypical events.

Response: This has been discussed on 2/13/2025 monthly ADOT transportation conformity meeting. Because current Maricopa County 2024 monitoring data is not available yet, EPA and FHWA resource center were okay to remove the same atypical days identified from the SR303 project for this project.

#### General comments

13. How were the average speeds calculated for the various queue and acceleration links around the intersections? It’s outlined in the traffic data how the link lengths are determined, but it would be helpful to see how the volumes/delay lead to the average speed used in the MOVES runs.

Response: the approach to calculate the average speed for the queue and acceleration links will be provided in the next modeling package.

14. It’s hard to tell from the AERMOD files plotted on top of existing aerial photos whether the receptor locations are in appropriate and reasonable locations. Can you add a figure showing the future design (with sidewalks and publicly accessible areas) and show where receptors will be located? It also appears there are some sidewalks not being covered with receptors (though it could be a map projection issue). We should go through the receptor placement on the next IAC call.

Response: Receptors and design files will be exported to Google Earth KMZ files for review, so they can be zoomed for detailed review.

15. Confirmed calculations of AERMOD rates are accurate; appreciate the clear cross-walk.

Response: Thanks for the confirmation.

16. Please check the volume source release heights - it looks like there are 0.0 release heights set for all volume sources. Also, the initsigZ values look low (0.47). Please confirm. (Sometimes AERMODview doesn’t do this quite right).

Response: Thanks for the check. Will double check and revise the source heights and submit the new AERMOD modeling files in the next package.

17. Generally, try to extend roadway sources roughly 100 meters beyond you receptor grid to ensure receptors concentrations reflect full impact.

Response: will try to extend roadway source roughly 100 meters beyond the end receptors.

## El Mirage Rd; L303 to Jomax Road PE0-0(231)T | T0428 03D

### 4.22.25 FHWA Comments on 2<sup>nd</sup> submittal of Draft Consultation Documents, Draft Atypical Events Report, and Modeling Files

1. Overall, this analysis is very well done and the modeling file package includes all the necessary information for a thorough review.

Response: Thanks for the comment.

2. ADOT provided a spreadsheet where linksourcetype inputs (fleet mix) were developed from the regional mix combined with project-specific data on LD/HD. The regional fractions were re-normalized to project-specific LD/HD data with the assumption that source type **11,21,and 31** are “light duty” and all other source types are HD. However, the category of 32 (light commercial truck) should fall under LD. This type of vehicle is identical to 31s (passenger truck), but is used for vocational purposes (think lawn and garden truck). Since these vehicles represent a much higher relative fraction of the fleet than other HD categories, when the numbers are re-normalized to project-specific LD/HD info, the other heavy duty categories are being scaled down significantly – which will have the effect of underestimating PM emissions since those other HD source types emit quite a bit more than the 32s. Please group the 32s with light duty and update the linksourcetype input and re-run MOVES/AERMOD. Apologies for not catching this in the first round of review. Unfortunately I think this is a big enough issue that warrants re-modeling. We can discuss.

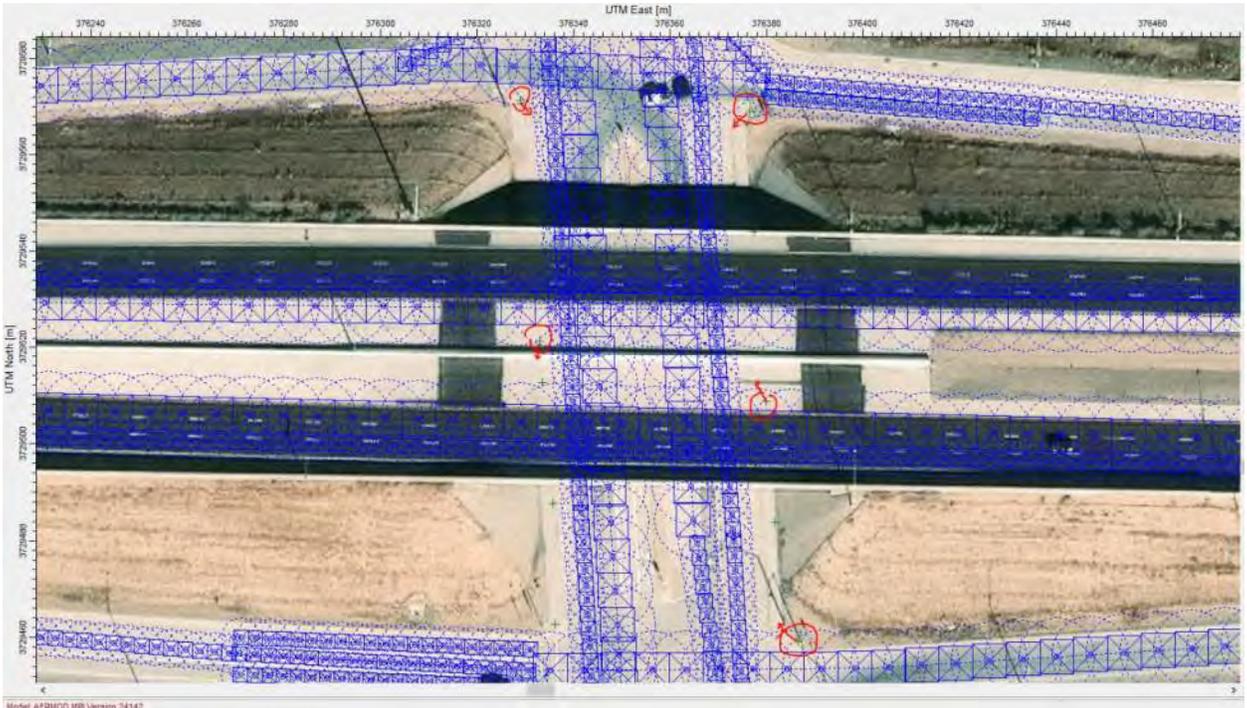
Response: ADOT further coordinated with FHWA on this comment. The SourceType Spreadsheet was developed by ADOT with EPA to modify the MAG travel demand models into the MOVES vehicle types. The MAG network models have only three types: Light, Medium and Heavy vehicles and they are based on the vehicle weights, so it was difficult to modify them into the MOVES vehicle types which are based on the vehicle uses. For this reason, we divided the MAG models into the two groups first, Car (Light) and Truck (Medium/Heavy) and found the % for each group and redistributed them into the MOVES categories: Cars (11,21,31) and Trucks (32-62). FHWA was okay to keep using the original spreadsheet and note this in the report.

It was further agreed by FHWA and EPA on May 14, 2025 Interagency Consultation meeting that the developed link source type spreadsheet for El Mirage Road project was conservative and good for the analysis.

3. It appears in the 303L ramp scenario, there are a few receptors that are falling in the AERMOD receptor “exclusion zone.” When defining volume sources, any receptor that is placed within  $(2.15 \times \text{initsigY}) + 0.99$  of the volume source center will not

include the emissions contribution from that source – effectively underestimating concentrations. Please correct these instances by breaking the highways into smaller volume sources or moving the receptor (if appropriate).

Response: we can move the receptors in the exclusion zone a bit to be outside of exclusion zone, see red circle and arrow below. We further coordinated with FHWA on this comment and FHWA was okay with this change.



### 5.9.25 EPA Comments on 2<sup>nd</sup> submittal of Draft Consultation Documents, Draft Atypical Events Report, and Modeling Files

1. We would like to echo FHWA’s sentiment that the analysis for this project is thorough and well done. Great job! We would like to also emphasize FHWA’s comment to address receptors that fall in the AERMOD receptor Exclusion zone (pasted here):
  - a. *“It appears in the 303L ramp scenario, there are a few receptors that are falling in the AERMOD receptor “exclusion zone.” When defining volume sources, any receptor that is placed within  $(2.15 \cdot \text{initsigY}) + 0.99$  of the volume source center will not include the emissions contribution from that source – effectively underestimating concentrations. Please correct these instances by breaking the highways into smaller volume sources or moving the receptor (if appropriate).”*

Response: Same as FHWA response No. 3 above.

2. Please confirm that the truck/non-truck data used in this analysis is based on vehicle distributions used in the fall 2024 regional conformity analysis and is based on recent vehicle registration data.

Response: Correct. The truck/non-truck data vehicle distributions used in the fall 2024 regional conformity analysis and is based on recent vehicle registration data.

3. In a similar comment to the once transmitted by FHWA, we would like to better understand the rationale behind including MOVES source type 32, “light commercial trucks” in the “truck” category for purposes of determining link source type distributions (vehicle types on each link).
  - a. This comment refers to the analysis in the spreadsheet, “ElMirageRd\_Develop Link Source Types with MAG Regional Conformity.xlsx”
    - i. In the analysis, MOVES source type 31, "light-duty passenger trucks" are considered "cars" and 32s are considered "trucks." However, in MOVES, 31s and 32s are very similar categories. The majority of 31s and 32s are gasoline vehicles rather than diesel. We consider 21s (passenger cars), 31s, and 32s to be light-duty vehicles. When 32s are included in the "truck" category, they account for 30-40% of the total number trucks. This reduces the percentage of other vehicle types in the "truck" category. This reduced percentage is used to estimate numbers of heavy duty diesel trucks on each link.
  - b. We agree with FHWA's suggestion of re-grouping source type 32s with light duty passenger trucks and re-running the MOVES/AERMOD files.

Response: Same as FHWA response No. 2 on first page.

4. Please confirm that AERMOD volume source release heights have been adjusted in this version of the modeling files from 0.0 (per FHWA's previous comment 16).

Response: Correct. The volume source release heights have been adjusted in this version.

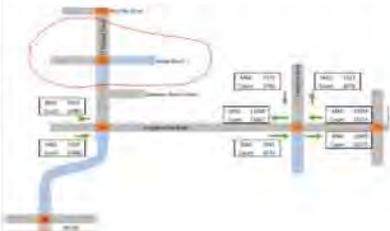
5. Regarding Queuing links – The example provided in the document "Link speed for PM10 hotspot analysis.docx" looks good. Why isn't the calculation for other queuing links provided? The speeds for other queuing links are a bit higher than we would expect.

Response: The document shows the formular and approach we used to get the link speed for the links. All link speed for other queuing links were provided in the “traffic data” spreadsheet, see spreadsheet below.

As further explained in the May 14, 2025 Interagency Consultation meeting, the link speeds calculated for queuing links are in direct proportion to the link speed from MAG travel demand model and the effective green light split percentage. If the queue link from MAG travel demand model is high, or the effective green light split percentage for that movement is high, then the calculated queuing link speed would be high. EPA and FHWA were okay with the response and no further changes were needed.

Segment	FID	Modeled RT Speed	Modeled RT Time	Volume						
SR303 Mainline EB Cruise	255	86	2202	79	1540	76	1401	77	2244	2400
SR303 Mainline WB Cruise	26	79	1440	79	1490	76	1221	79	2400	2400
SR303 WB Onramp Cruise	11	43	540	40	375	37	350	38	384	384
SR303 WB Onramp (RT) Queue	273	44	440	44	5	34	14	14	0	0
SR303 WB Onramp (LT) Queue	280	12	140	11	375	10	330	12	384	384
SR303 WB Onramp (RT from SB El Mirage Rd) Acceleration	277	18	400	20	380	21	315	21	384	384
SR303 WB Onramp (LT from NB El Mirage Rd) Acceleration	275	9	1200	10	800	8	1200	7	240	240
SR303 WB Onramp (Cruise)	258	11	1000	14	1210	8	1300	11	5400	5400
SB El Mirage Rd Cruise	283	39	1040	36	864	37	980	39	1000	1000
SB El Mirage Rd (Queue from SR303 WB Onramp)	283	9	140	12	364	13	380	14	384	384
SB El Mirage Rd (Acceleration)	276	17	1300	20	600	18	171	20	384	384
SB El Mirage Rd (Cruise)	279	26	980	27	847	26	1001	26	384	384
SB El Mirage Rd (Queue from SR303 EB Onramp)	279	13	460	14	667	11	1911	13	384	384
NB El Mirage Rd (Cruise)	281	39	1000	37	1040	39	2200	39	1000	1000
NB El Mirage Rd (Queue from SR303 WB Onramp)	281	10	180	9	1100	8	2200	7	1800	1800
NB El Mirage Rd (Acceleration)	274	18	111	16	860	16	1000	16	384	384
NB El Mirage Rd (Cruise)	284	39	111	37	860	37	1400	38	384	384
SB El Mirage Rd_afterbridge (Acceleration)	269	10	380	12	367	10	1001	10	384	384
SB El Mirage Rd_afterbridge cruise	272	10	900	10	1790	10	1117	10	1400	1400
NB El Mirage Rd Cruise	271	11	1650	10	1790	10	2000	10	1134	1134
NB El Mirage Rd Queue	271	6	1800	6	1790	6	2000	7	1734	1734
NB El Mirage Rd Acceleration	269	14	1390	14	1220	9	1204	12	1560	1560
SR303 EB Onramp Cruise	259	7	1840	10	1287	10	1207	14	1080	1080
SR303 EB Onramp (RT) Queue	267	3	1840	5	1080	5	1210	7	384	384
SR303 EB Onramp (LT) Queue	278	13	1840	12	110	11	811	10	384	384
SR303 EB Onramp (LT from SB El Mirage Rd) Acceleration	282	12	4	32	0	0	0	20	0	0
SR303 EB Onramp (RT from NB El Mirage Rd) Acceleration	270	17	480	18	480	16	220	20	384	384
SR303 EB Onramp Cruise	266	39	950	38	470	40	270	39	384	384

6. Additional editorial comments and responses below.

Page Number	Paragraph	Table	Other	Comment	Response Notes
12	3		Draft Atypical Events Report	There is a superscript error on "July th"; the T is not superscripted	Will correct.
14	1		Draft Atypical Events Report	There is an accidental T after the word recorded at the end of the first paragraph	Will correct.
2		Fig 1	PM10 Consultation Document	We recommend expanding the project area limits in this figure to indicate that the intersection between El Mirage and Loop 303 was also analyzed as part of this hot spot analysis	Will expand the project area limits in this figure and indicate the project limit for air quality analysis.
16		Fig 1	PM10 Consultation Document	The link on Jomax Road El Mirage Intersection to the east doesn't appear to follow the dirt road that is already there. Please explain why this was modeled this way and clarify what the new road (if any) will look extending east of the Jomax, El Mirage Intersection	At this time, there is no design on the east leg for this Jomax Road & El Mirage intersection. It shows as straight roadway in the traffic report. We modeled it in the same way for simplicity and it will not change the maximum concentration for this intersection. 

## **Appendix B**

### ATYPICAL EVENTS REPORT



# Arizona Department of Transportation Environmental Planning

*Final Atypical Events Report*

*El Mirage Road, SR 303L – Jomax Road*

**Federal Project No. PEO-0(231)T  
ADOT Project No. 0000 MA PEO T0428 01D**

*August 12, 2025*

*The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated June 25, 2024, and executed by FHWA and ADOT.*

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## Introduction

This report aims to provide the United States Environmental Protection Agency (U.S. EPA) with a robust rationale for the exclusion of eight specific dates from the background particulate matter (PM) concentration data for a Design Concept Report (DCR) and an Environmental Assessment (EA) to evaluate a potential new segment of El Mirage Road between State Route Loop 303 (SR303L) and Jomax Road. These dates stand out as atypical when compared to the air quality levels and meteorological conditions of the project site. Consequently, the U.S. EPA seeks justification for categorizing these dates as atypical events that warrant their removal from the background concentration analysis.

This report demonstrates that these dates and their instances of exceeding the National Ambient Air Quality Standards (NAAQS) for 24-hour particulates measuring 10 microns or less (PM10) should be disregarded in the projects' PM10 background concentration calculations and the projects assessments of NAAQS exceedance or violations. This recommendation is made due to the dates' air quality characteristics being unique and uncontrollable due to meteorological conditions, which distinguishes them from typical conditions at the project site. This report provides an introductory summary of the project and the regulatory purpose of the report, the projects calculated PM10 background concentrations before and after removing the dates considered atypical to that of standard air quality conditions, and a description of the dates meteorological and air quality conditions that occurred and resulted in 24-hour PM10 NAAQS exceedance.

## 1.0 Project Description

The City of Peoria and the Arizona Department of Transportation (ADOT), in cooperation with other local and state agencies, are preparing a Design Concept Report (DCR) and an Environmental Assessment (EA) to evaluate a potential new segment of El Mirage Road between State Route Loop 303 (SR303L) and Jomax Road (project site, see study area map below). This new segment of roadway would accommodate current and projected traffic needs in response to increased development in areas along SR 303L and near roadways and traffic interchange (TI) locations in the northwest Valley. An Environmental Assessment (EA) that evaluates two alternatives (i.e., a build and a no-build alternative) is being completed for this project.

The DCR and EA will evaluate roadway improvements such as lane configuration, pedestrian and bicycle use, drainage improvements, right of way impacts, traffic impacts, and other considerations. They will also evaluate the potential environmental effects that could result from future implementation of the new roadway segment, as well as potential impacts if no action is taken (that is, no changes are made to El Mirage Road in the study area). Environmental topics to be addressed include but are not limited to biological resources, cultural resources, water resources, hazardous materials, traffic noise, and air quality. The Draft DCR and EA are currently scheduled to be available for public review and comment in spring 2025 and be completed in summer 2025. Construction funding for this project has not yet been planned.

The project occurs between SR303L and Jomax Road within the City of Peoria, and unincorporated Maricopa County lands, in Maricopa County, Arizona. The project would occur within and adjacent to the existing Maricopa County and City of Peoria right-of-way (ROW) and easement. New ROW is anticipated for this project for portions occurring through private and Arizona State Trust lands.

This project is within the Phoenix CO maintenance area and a nonattainment area for PM<sub>10</sub>. The proposed project is included in the Maricopa Association of Governments (MAG) Regional Transportation Plan (RTP) MOMENTUM 2050. In addition, the project is included in the FY 2022-2025 MAG Transportation Improvement Program.

The project scope of work will consist of:

- Constructing a new segment of El Mirage Road between SR303L and Jomax Road. The roadway configuration includes two vehicular lanes in each direction with a center median, bicycle lanes in each direction, and sidewalk in each direction.
- Constructing two proposed structural crossings, one over McMicken Outlet Channel Wash and one over the Beardsley Canal south of Jomax Road.
- Constructing curb and gutter, on site drainage improvements, and off-site drainage improvements.
- Installing traffic signals at Happy Valley Road
- Relocating utilities as needed
- Installing signage and lighting
- Installing a High Intensity Activated CrossWalk (HAWK) at a trail crossing between SR303L and Happy Valley Road
- Installing irrigation and landscaping
- Performing geotechnical structural crossing borings (two at each crossing)

## 2.0 Regulatory Standards

Per U.S. EPA guidelines, specific transportation projects now necessitate a quantitative assessment of PM<sub>10</sub> impacts in proximity to roadways. This PM hotspot evaluation entails includes estimating the background PM<sub>10</sub> concentration levels associated with all sources not explicitly included in the modeling for the project. In part, this estimation involves using a 3-year dataset of historical air quality information to establish the PM<sub>10</sub> background value. This calculated background value is then added to the project's modeled PM<sub>10</sub> values to determine if the project's emissions might result in exceeding the National Ambient Air Quality Standards (NAAQS). Should the background concentration surpass the NAAQS, a build versus no-build project analysis becomes necessary.

40 CFR Part 51, Appendix W, section 8.3 and Hot Spot Guidance Section 8 provide recommendations for determining an appropriate background concentration. 40 CFR Part. 51 (A 2019 clarification memo, "Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events" (available at <https://www.epa.gov/air-quality-analysis/clarification-memo-additional-methods-determinations-and-analyses-modify-air>) confirms the applicability of that CFR section to transportation conformity hot spot analyses.) Appendix W, Section 8.3.2 recommends that for many cases, the current design value at a nearby, representative monitoring station is the best starting point for a background concentration. However, there may be cases where the current design value is not appropriate. Section 8.3.2.c.ii specifies there may be circumstances which would necessitate modifications to the background concentrations, stating that "[s]uch cases could include removal of data from specific days or hours when a monitor is being affected by activities that are not typical or not expected to occur again in the future (e.g., construction, roadway repairs, forest fires, or unusual agricultural activities). Such adjustments would make the monitored background concentrations more temporally and/or spatially representative of the area around the new or modifying source for the purposes of the regulatory assessment." The data used to determine the background concentration includes 24-hour average pollutant levels and annual means, excluding atypical air quality events. If the chosen 3-year period for determining the project's background concentration encompasses atypical air quality such events, data affected by those events can be excluded from the analysis. This is done to mitigate the influence of outliers unrepresentative in air quality events on the determination of the background concentration of an area data stemming from uncontrollable air quality events, which could lead to NAAQS exceedances<sup>1</sup>.

EPA Region 9 recommends examining several criteria for determining whether a high-wind dust event is appropriate to exclude from a project's background concentrations:

1. Hourly and 24-hour average PM<sub>10</sub> exceedances at multiple air monitors in the specified areas indicating it's a regional air quality event.
2. Windspeed conditions greater than 25 mph consistent with an increase in hourly PM<sub>10</sub>
3. Reduced visibility to less than 10 miles consistent with increases in hourly PM<sub>10</sub> concentrations.
4. National Weather Service (NWS) wind/dust advisories consistent with an increase in hourly PM<sub>10</sub> concentrations.
5. Summaries of dust complaints and/or notices of PM<sub>10</sub> violations; if dust complaints are received, or dust complaints do not involve anthropogenic source(s) located upwind of an exceeding monitor.

This document regards the eight requested days as atypical in their meteorological and PM<sub>10</sub> characteristics and proposes their removal from the PM "hot spot" background concentration for the project.

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<sup>1</sup> U.S. EPA, Guidelines on Air Quality Models, 40 CFR Appendix-W-to-Part-51 8.08.3.2.

The days identified are proposed to be considered atypical events, due to the occurrence of high wind conditions and dust storms. ADOT justifies that it is inappropriate to consider these days when calculating the project's hot spot analysis background PM<sub>10</sub> concentrations. To provide justification for exclusion of these dates, the report discusses air pollution forecasts issued by Arizona Department of Environmental Quality (ADEQ), NWS historical weather forecasts, National Oceanic and Atmospheric Association (NOAA) weather station data, and 24-hour average PM<sub>10</sub> concentrations for air quality monitoring stations in the general Phoenix metropolitan area (Phoenix Area).

Maricopa County Air Quality Department (MCAQD), as the designated air quality reporting agency for the SR 303L project, has provided air quality monitoring data for the dates discussed in this report, accessible in **Appendix A**. MCAQD's data has been utilized as a point of reference for the dates under consideration as atypical in this summary report. Details on these dates are provided in **Section 4.0**.

### 3.0 Project PM<sub>10</sub> Background Concentrations, Without Removing Atypical Events

There is one monitor in the vicinity of the project site. The Zuni Hills PM monitor (Zuni Hills) is approximately 2.2 miles southeast from the project. **Figure 1** identifies the project location below.

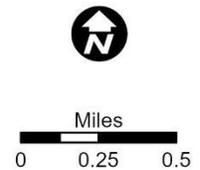
**Figure 1.** Project location map and proximity to Zuni Hills monitor station.



Source: ADOT ATIS (2013); ASLD ALRIS (2023); ASLD Streams (1993); ESRI World Hillshade (2023).

- Study Area
- Interstate
- State Route
- US Highway
- Zuni Hills Monitor
- Local Road
- Railroad
- Mileposts

Map Disclaimer: This map is intended for general siting purposes only.



Using the U.S. EPA’s Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas, the project’s background PM<sub>10</sub> levels were calculated for 2021 through 2023 at Zuni Hills Monitoring Station. **Table 1** shows the number of completed monitoring days and highest 24-hour typical readings for 2021 through 2023 for Zuni Hills.

Using the U.S. EPA’s Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas, the 4<sup>th</sup> highest PM<sub>10</sub> reading each year between 2021 and 2023 were selected for this project.

<b>Table 1: Project Monitoring station Highest 24-hour PM<sub>10</sub> Readings, Without Removing Atypical Events</b>			
<b>Zuni Hills Station</b>			
<b>Data Year</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Number of Readings</b>	361	365	365
<b>1<sup>st</sup></b>	248	167	146
<b>2<sup>nd</sup></b>	142*	126	129
<b>3<sup>rd</sup></b>	122	116	125
<b>4<sup>th</sup></b>	110	107	120

Source: <https://www.epa.gov/outdoor-air-quality-data/download-daily-air-quality-data>  
 Note: \*4<sup>th</sup> highest 24-hour readings are highlighted in red, without removing atypical events.

**Table 1** shows that without considering atypical events, the Zuni Hills monitor's 4<sup>th</sup> highest value over three years (2021-2023) is 142 µg/m<sup>3</sup>. This comes from a total of 1091 days of sampling.

*The predicted background concentration, without removing atypical events, of the project is 142 µg/m<sup>3</sup>.*

Per 40 CFR 50, Appendix K, the Maricopa County NAAQS threshold for PM<sub>10</sub> 24-hour average concentration threshold is 150 µg/m<sup>3</sup>. As such, the predicted PM<sub>10</sub> background concentration does not exceed the PM<sub>10</sub> NAAQS threshold. **Table 2** compares the background concentration to the PM<sub>10</sub> NAAQS threshold.

<b>Table 2: PM<sub>10</sub> NAAQS Threshold &amp; Projects Calculated Background PM<sub>10</sub> Concentrations</b>			
<b>Zuni Hills Station</b>			
<b>4<sup>th</sup> Highest 24-hour Average PM<sub>10</sub> Concentration without Atypical Event Data Exclusion (µg/m<sup>3</sup>)</b>	<b>PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS)</b>	<b>Difference (µg/m<sup>3</sup>)</b>	<b>Exceeds Threshold?</b>
142	150	8	No

As shown in **Table 2**, the project PM<sub>10</sub> background concentrations are close to exceeding the PM<sub>10</sub> NAAQS threshold, without removing atypical event day data from the analysis. This can be attributed to dates within the three-year evaluation period (2021 – 2023) being classified as atypical events (weather conditions attributing to high PM<sub>10</sub> concentrations). As such, the background concentration levels that include atypical event data during this three-year period are unrepresentative of the projects average PM<sub>10</sub> background concentration and should not be included in the project’s PM<sub>10</sub> background concentration calculations.

### 4.0 Atypical Event Days

Hourly and daily PM<sub>10</sub> data for the years 2021 through 2023 was obtained from air quality monitors in the general Phoenix Area from the EPA AirData website to be evaluated for the projects PM<sub>10</sub> background concentration calculations. Within these three years of data, the following dates are being proposed to be considered as atypical events:

- July 10<sup>th</sup>, 2021
- October 11<sup>th</sup>, 2021
- October 12<sup>th</sup>, 2021
- September 2<sup>nd</sup>, 2022
- October 3<sup>rd</sup>, 2022
- July 21<sup>st</sup>, 2023
- July 26<sup>th</sup>, 2023
- August 31<sup>st</sup>, 2023

The dates above are being proposed to be excluded from the projects PM<sub>10</sub> background concentration calculations per guidelines listed in 40 CFR Part 51, Appendix W, Section 8.3.2.c.ii for the 40 CFR Part 53 transportation conformity portion of the project. Monitoring data for these eight days proposed to be removed was obtained from MCAQD’s monitoring records and EPA and was reviewed to ensure that it meets the U.S. EPA’s 75% data completeness criteria<sup>2</sup>. **Table 3** summarizes the days recommended for exclusion due to atypical-type events.

The 8 days proposed for removal from the background concentration analysis are considered atypical in nature because they fit the EPA Region 9’s 5-criteria for the data background modification of atypical events (Section 2.0). For the days proposed, Zuni Hills and other surrounding monitoring sites showed hourly and 24-hour average PM<sub>10</sub> NAAQS exceedances, and the Phoenix Area’s windspeed conditions were recorded to be greater than 25 mph. The high wind conditions time series data recorded on these dates coincides with an increase in hourly PM<sub>10</sub> concentrations throughout the Arizona region. These increases in PM<sub>10</sub> concentrations are consistent with reduced visibility to less than 10 miles as identified in NWS, NOAA Storm Event Reports, ADEQ pollution reports, wind dust advisories, dust complaints received, and notices of PM<sub>10</sub> violations.

The Zuni Hills monitor, chosen as the project’s background monitor, did not record PM<sub>10</sub> NAAQS exceedances on every exceedance day listed for Maricopa County between 2021 and 2023. However, given the regional nature of these atypical events, even on exceedance days which Zuni Hills did not exceed NAAQS, the PM<sub>10</sub> concentrations at this site may not reflect its typical background concentrations. This is because elevated PM<sub>10</sub> concentrations were recorded across the Phoenix Area during these atypical events, as documented by other monitors that did record exceedances on those dates. As such, to accurately demonstrate the regional nature and widespread impact of these atypical events, data from other regional monitors will be reviewed on days that Zuni Hills monitor did not exceed, to properly distinguish typical background levels from the atypical event-driven exceedance anomalies noted for these dates throughout Maricopa County. Wind and PM<sub>10</sub> concentration data at Zuni Hills monitor and additional monitors is provided and discussed, to demonstrate the impact of the atypical weather conditions not only on the Phoenix Area, but on the background concentration at Zuni Hills monitor for each date being proposed as atypical.

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<sup>2</sup> U.S. EPA, Office of Air Quality Planning and Standards, Guideline on Data Handling Conventions for the PM NAAQS, April 1999, Table 8-1. Accessed September 17<sup>th</sup>, 2023. [https://www3.epa.gov/ttn/naaqs/aqmguides/collection/cp2/19990401\\_oaqps\\_epa-454\\_r-99-009\\_guideline\\_data\\_handling\\_pm\\_naaqs.pdf](https://www3.epa.gov/ttn/naaqs/aqmguides/collection/cp2/19990401_oaqps_epa-454_r-99-009_guideline_data_handling_pm_naaqs.pdf)

**Table 3** lists Zuni Hills monitor PM<sub>10</sub> concentrations for each of the days discussed in this report, and additional monitors that exceeded 24-hour average PM<sub>10</sub> NAAQS on these dates in Maricopa County.

July 9<sup>th</sup>, October 11<sup>th</sup> and 12<sup>th</sup>, 2021 have already been deemed atypical from another Atypical Events Report, F0124, for the SR 202L Val Vista to SR 101L Project (SR 202L), which EPA agreed upon on September 28<sup>th</sup>, 2023. These dates are still discussed in this report in relation to the Zuni Hills monitor and the current project’s background concentration but given the widespread nature of the weather conditions occurring on these dates leading to atypical event consideration, the data discussed for these monitors remains the same as the previous report.

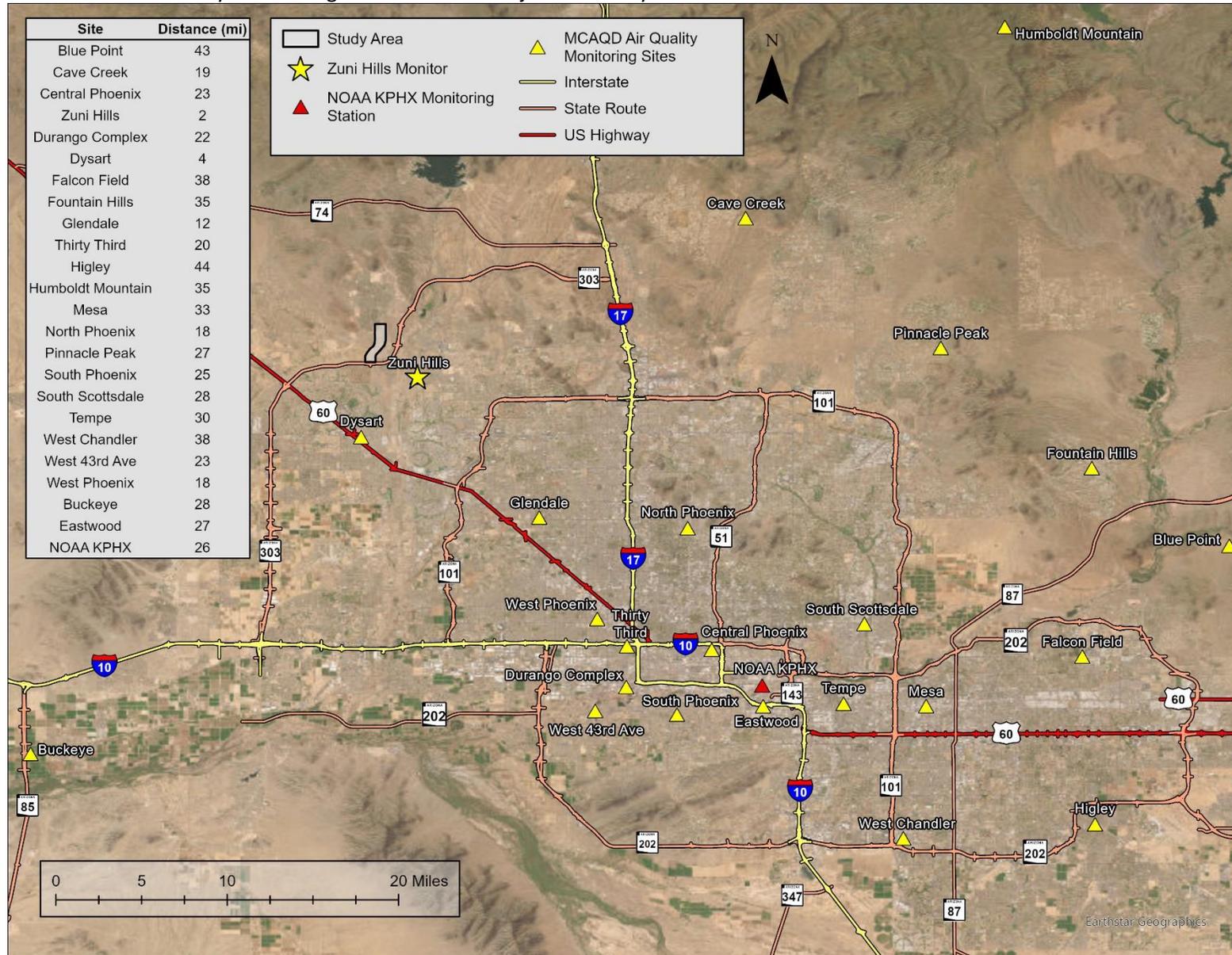
<b>Table 3: Zuni Hills and Other Monitor stations PM<sub>10</sub> NAAQS Atypical Events Days Data</b>					
<b>Station</b>	<b>Date</b>	<b>24-hour Average PM<sub>10</sub> Concentration (µg/m<sup>3</sup>)*</b>	<b>PM<sub>10</sub> NAAQS Exceedance</b>	<b>Identified as a potential Atypical Event</b>	<b>Other Monitors that Exceeded NAAQS on this date (PM<sub>10</sub> values)</b>
<b>Zuni Hills Monitor</b>	7/10/2021	248	Yes	Yes**	Dysart (170.4) Glendale (173.0)
	10/11/2021	122	No	Yes**	Buckey (259.0) Dysart (155.9) West Chandler (160.9)
	10/12/2021	142	No	Yes**	Higley (219.8) West Chandler (181.5) South Scottsdale (180.7) Durango Complex (163.3) Mesa (170.4) Central Phoenix (170.9) Tempe (158.9) West 43 <sup>rd</sup> Street (166.6)
	9/2/2022	167	Yes	Yes	Dysart (206.7) Higley (160.7)
	10/3/2022	116	No	Yes	West 43 <sup>rd</sup> Avenue (316.8)
	7/21/2023	125	No	Yes	West 43 <sup>rd</sup> Street (216.9)
	7/26/2023	120	No	Yes	Higley (165.3)
	8/31/2023	129	No	Yes	Central Phoenix (207.0) Durango Complex (319.2) Dysart (194.7) West Phoenix (182.4)

Source: U.S. EPA Outdoor Air Quality Data, Download Daily Air Quality Data, <https://www.epa.gov/outdoor-air-quality-data/download-daily-data>

Notes:  
\*Highest 24-Hr average PM<sub>10</sub> concentration reading identified during 3-year period’s potential atypical events days.  
\*\* Previously approved SR 202L project atypical events report dates

The data from nearby monitors, with 1-hour and 5-minute PM<sub>10</sub> concentrations provided in **Appendix A**, was flagged for high PM<sub>10</sub> concentrations on the atypical events days, indicating that the atypical air quality events were widespread and regional in nature. **Figure 2** shows the MCAQD monitors proximity to the project site, and NOAA Phoenix Sky Harbor International Airport Weather Station (NOAA KPHX).

**Figure 2. MCAQD’s Air Quality Monitoring Stations within Project Proximity**



Windspeed data from NOAA KPHX was used to show that atypical events occurred over the entire Phoenix Area, including the Zuni Hills monitor, the project site, and other MCAQD monitors with recorded NAAQS exceedances. While some dates did not show PM<sub>10</sub> levels or wind speeds over 25 mph at Zuni Hills, data from NOAA KPHX confirmed sustained wind speeds and wind gusts over 25 mph, along with reduced visibility due to blowing dust and haze. This NOAA KPHX data and MCAQD monitoring site data supports the conclusion that atypical events influenced air quality across the Phoenix Area on these dates.

**Appendix A** includes maximum hourly sustained wind speed and wind gust data for the dates being proposed as atypical at each of MCAQD’s monitors discussed in this report. To demonstrate that all eight dates meet the atypical event criteria of windspeeds exceeding 25 mph, **Table 4** presents the selected days maximum sustained windspeeds and gust speeds from the NOAA KPHX monitoring data. For more detailed NOAA KPHX data referenced in **Table 4**, please refer to **Appendix B**.

<b>Table 4: NOAA Phoenix Sky Harbor Station (WBAN:23183) Windspeed for Atypical Events Days</b>					
<b>Date</b>	<b>Max Wind Gust Speed (mph)</b>	<b>Time Recorded</b>	<b>Max Sustained Windspeed (mph)</b>	<b>Time Recorded</b>	<b>Maximum sustained wind or windspeed &gt; 25 mph?</b>
7/10/2021	41	8:10 P.M.	35	8:15 P.M.	Yes
10/11/2021	46	10:44 P.M.	29	10:45 P.M.	Yes
10/12/2021	37	12:51 A.M.	28	12:25 A.M.	Yes
9/2/2022	33	10:40 P.M.	23	10:40 P.M.	No
10/3/2022	58	4:51 P.M.	40	4:40 P.M.	Yes
7/21/2023	46	11:05 P.M.	35	10:55 P.M.	Yes
7/26/2023	43	9:51 P.M., 9:57 P.M., 10:20 P.M., 10:25 P.M.	29	10:19 P.M.	Yes
8/31/2023	73	8:51 P.M., 9:02 P.M.	49	8:59 P.M.	Yes
Source: U.S. Department of Commerce National Centers for Environmental Information National Oceanic & Atmospheric Administration, <i>National Environmental Satellite, Data, and Information Service for Phoenix Airport Station, AZ US WBAN:23183 (ICAO:KPHX), Local Climatological Data - Hourly Observations for, 7/9/21, 7/10/21, 7/12/21, 10/11/21, 10/12/21, 9/2/22, 10/3/22, 7/26/23, &amp; 8/31/23</i> . <a href="https://www.ncdc.noaa.gov/cdo-web/datasets/LCD/stations/WBAN:23183/detail">https://www.ncdc.noaa.gov/cdo-web/datasets/LCD/stations/WBAN:23183/detail</a>					

Meteorological conditions, beyond human control (nonanthropogenic sources) – such as high temperatures, low precipitation, atmospheric pressure changes, wildfires, and strong winds – can lead to PM<sub>10</sub> emissions spikes. Consequently, the dates discussed in this summary report are characterized by a combination stormy weather, strong winds, dust storms, thunderstorms, drought, or heat wave conditions which led to naturally occurring, uncontrollably elevated regional and project PM<sub>10</sub> background concentrations. As such, these dates are subject to atypical event review per 40 CFR Part 51, Appendix W, Section 8.3.2.c.ii..

July 10<sup>th</sup>, 2021, Atypical Event

Summer monsoon storm activity resulting in a high wind event consisting of a widespread blowing dust throughout the Phoenix Area occurred on July 10<sup>th</sup>, 2021, with wind speeds reaching up to 35 mph at NOAA KPHX (**Table 5**). Three MCAQD monitoring sites exceeded the 24-hour average PM<sub>10</sub> NAAQS on this date including Zuni Hills, Dysart, and Glendale.

Wind gusts and high winds up to 83 mph in Maricopa County were reported throughout the day on NOAA’s SPC Storm Report Page<sup>3</sup>. The previous day (July 9<sup>th</sup>, 2021), blowing dust, high windspeeds, and heavy rainfall were recorded as well, because of an inversion layer producing monsoon-like storm conditions in the Phoenix Area. These storm conditions began on July 9<sup>th</sup>, 2021, and passed through the Phoenix Area for 2 days, resulting in high windspeeds being recorded at NOAA KPHX, and MCAQD monitors throughout the Phoenix Area on the evening of July 9<sup>th</sup>, into the early morning of July 10<sup>th</sup>, and throughout the day on July 10<sup>th</sup>.

During this period, high wind speeds were recorded at NOAA's KPHX station and MCAQD monitors throughout the Phoenix area, from the evening of July 9<sup>th</sup> through the early morning of July 10<sup>th</sup> and continuing throughout the day on July 10<sup>th</sup>. Specifically, wind gusts at the NOAA Phoenix Sky Harbor station reached a maximum of 41 mph at approximately 8:00 P.M. on July 10<sup>th</sup>, 2021. However, high wind speeds were also observed earlier that same day, with wind speeds recorded at 18 mph at 12:20 A.M. on July 10<sup>th</sup>, 2021.

In addition to wind speed and wind gust increases due to the storm conditions, PM<sub>10</sub> concentrations increase at Zuni Hills and Dysart monitors the evening of the 10<sup>th</sup>. The two closest monitors to the project site were analyzed for this date’s inclusion in this report, but it is important to note that the Glendale monitor also exceeded 24-hour average PM<sub>10</sub> NAAQS on this day, with a 24-hour average PM<sub>10</sub> concentration of 173 µg/m<sup>3</sup> recorded, showing the widespread nature of the storm conditions resulting in PM<sub>10</sub> exceedances. PM<sub>10</sub> exceedances were recorded in the early morning of July 10<sup>th</sup>, and then began to increase again in the evening, at the time that the highest windspeeds of the day were recorded. **Table 5** below shows Zuni Hill’s and Dysart monitoring site’s 24-hour PM<sub>10</sub> average, max hourly average windspeed, and max wind gust for July 10<sup>th</sup>, 2021.

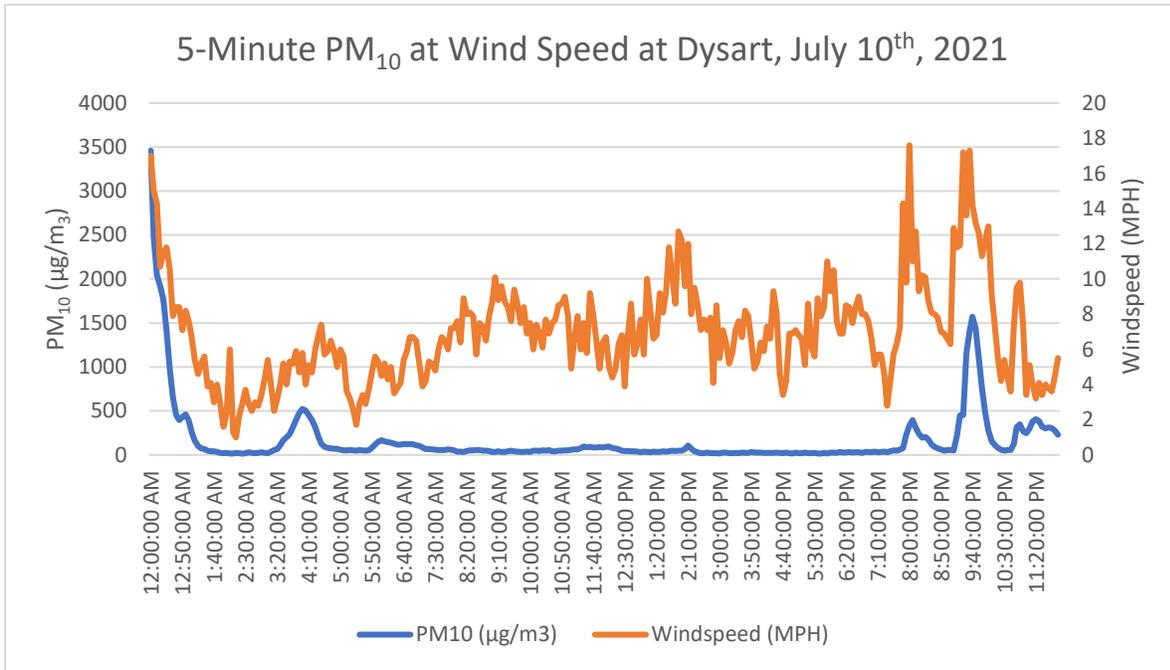
<b>Table 5: Windspeed and PM<sub>10</sub> Data for July 10<sup>th</sup>, 2021</b>					
<b>Site</b>	<b>24-hour average PM<sub>10</sub> (µg/m<sup>3</sup>)</b>	<b>Max Hourly-Averaged Windspeed (MPH)</b>	<b>Time</b>	<b>Max Wind Gust (MPH)</b>	<b>Time</b>
Zuni Hills	248*	18.7	7:50 P.M.	18	7:50 P.M.
Dysart	170.4*	17.6	8:00 P.M.	18.1	8:00 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, Zuni Hills and Dysart Monitor Data for July 10 <sup>th</sup> , 2021.					
Notes: *Measurement exceeds PM <sub>10</sub> NAAQS.					

As shown in **Table 5**, the highest recorded windspeeds, wind gusts at Zuni Hills and Dysart monitors for July 10<sup>th</sup>, 2021, occurred around 8:00 P.M. High winds and elevated PM<sub>10</sub> levels were also noted on the evening of July 9<sup>th</sup>, 2021, leading into the early morning of July 10<sup>th</sup>, 2021. As windspeeds increased, PM<sub>10</sub> levels continued to rise at the Zuni Hills and Dysart monitors, resulting in PM<sub>10</sub> exceedances being

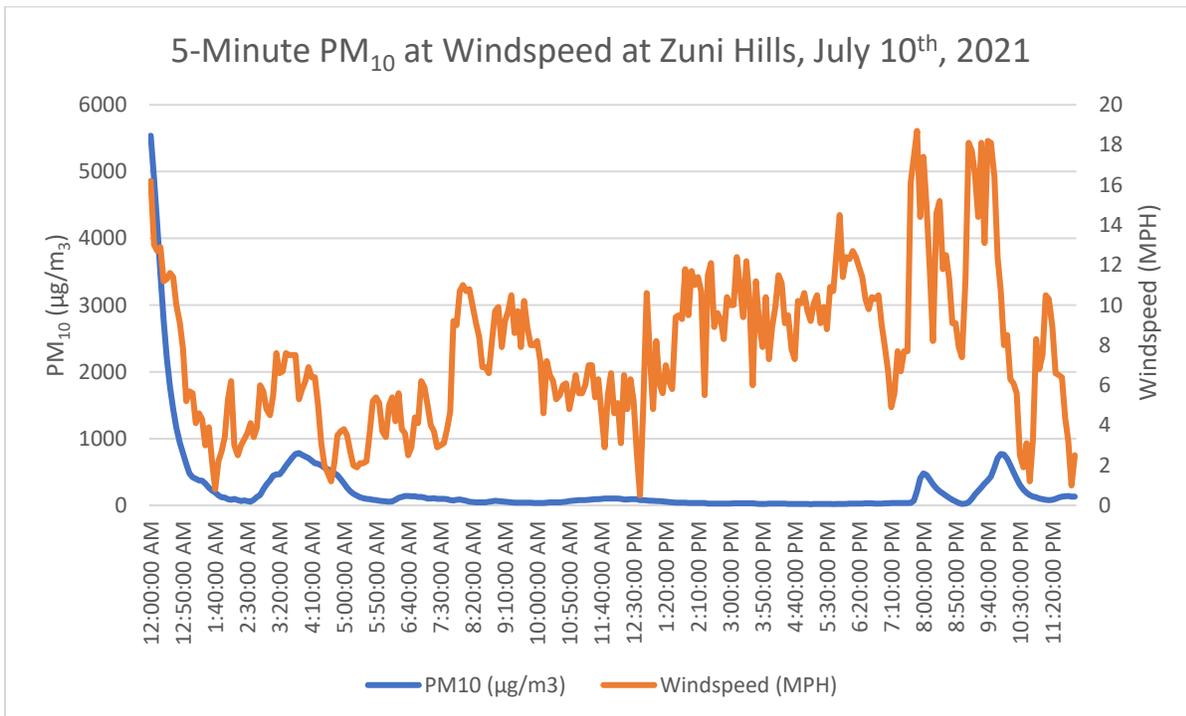
<sup>3</sup>SPC Event Archive: July 10, 2021, NOAA, Storm Prediction Center, <https://www.spc.noaa.gov/exper/archive/event.php?date=20210710>.

recorded for July 10<sup>th</sup>, 2021, in the early morning, and the highest windspeeds being recorded the following evening. **Figures 3 and 4** show the 5-minute windspeed and PM<sub>10</sub> recorded at Zuni Hills and Dysart monitors on July 10<sup>th</sup>, 2021.

**Figure 3:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Dysart monitor on July 10<sup>th</sup>, 2021.



**Figure 4:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Zuni Hills monitor on July 10<sup>th</sup>, 2021.



Figures 3 and 4 show that as windspeeds increased on July 10<sup>th</sup>, 2021, at the Dysart and Zuni Hills monitors, 5-minute PM<sub>10</sub> concentrations rose relatively as well, indicating dust storm activity. Additionally, in the early morning of July 10<sup>th</sup>, there are increased windspeeds and PM<sub>10</sub> levels, indicating that dust storm conditions noted on July 9<sup>th</sup>, 2021, continued into the early morning of July 10<sup>th</sup>, 2021. Although 5-minute windspeeds at Zuni Hills and Dysart monitors did not exceed greater than 25 mph, the increase in PM<sub>10</sub> levels resulting in a NAAQS exceedance follows a noted increase in windspeeds at these stations due to the monsoon storm conditions occurring in the Phoenix Area. At the peak of these high winds, PM<sub>10</sub> concentrations exceeded NAAQS, with the highest concentrations being recorded as 5538 µg/m<sup>3</sup> at Zuni Hills monitor at 8:00 P.M., at the time which it's highest wind speed of 18.7 mph was recorded.

The highest PM<sub>10</sub> concentration recorded at Dysart monitor was 3458 µg/m<sup>3</sup> at 12:50 A.M., earlier in the day than the highest windspeed and PM<sub>10</sub> level being recorded at Zuni Hills monitor. This early morning PM<sub>10</sub> peak at Dysart can be contributed to storm conditions continuing from July 9<sup>th</sup>, 2021, into July 10<sup>th</sup>. When the highest windspeed of 17.6 mph at Dysart is recorded at 7:50 P.M., there is a noted increase in PM<sub>10</sub> levels starting around 290 µg/m<sup>3</sup>, peaking at 9:30 P.M. at 1572 µg/m<sup>3</sup>, and slowly dropping to as windspeeds decrease around 11:00 P.M.

Data from NOAA KPHX also follows this trend, with windspeeds greater than 25 mph beginning around 7:30 P.M., and continuing to 11:00 P.M. NOAA KPHX is approximately 25 miles southeast of Zuni Hills and Dysart monitors, and 26 miles southeast from the project site. The highest wind speed of 35 mph and wind gust of 41 mph were recorded at 8:10 P.M. at NOAA KPHX. **Table 6** shows the time where the highest windspeeds, wind gusts, and their corresponding weather conditions were recorded at NOAA KPHX on July 10<sup>th</sup>, 2021.

Table 6: NOAA KPHX Weather for July 10 <sup>th</sup> , 2021						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
7/10/2021	7:50 P.M.	21	38	-	10	N
7/10/2021	7:51 P.M.	30	38	Squalls	8	N
7/10/2021	7:55 P.M.	23	30	Haze, Squalls	6	NNE
7/10/2021	8:00 P.M.	26	35	Haze	5	NNE
7/10/2021	8:03 P.M.	26	37	Haze	6	NNE
7/10/2021	8:05 P.M.	25	-	-	7	NNE
7/10/2021	8:10 P.M.	35 *	41 *	Thunder	8	NNE
7/10/2021	8:15 P.M.	35	-	-	7	NE
7/10/2021	8:20 P.M.	33	-	-	8	NE
7/10/2021	8:25 P.M.	29	-	-	10	ENE

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 07/10/2021, Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20210709&end=20210711>

Notes:  
 \* Highest windspeed or wind gust recorded for the day  
 - no observation recorded

As shown in **Table 6**, the highest windspeeds and wind gusts recorded for July 10<sup>th</sup>, 2021, correspond with the highest windspeeds and wind gusts recorded at Zuni Hills and Dysart monitors between 7:50 P.M. and 8:10 P.M. In addition, during this time, visibility levels decreased from 10 miles to 5 miles with haze and squalls when the highest windspeed and wind gust were recorded at NOAA KPHX. At 8:00 P.M., when the

highest concentration of PM<sub>10</sub> and highest windspeed was recorded at Zuni Hills, NOAA KPHX weather conditions listed haze with the lowest visibility levels noted for July 10<sup>th</sup>, 2021. In addition, the wind roses for Dysart and Zuni Hills monitors for July 10<sup>th</sup>, 2021, show windspeed and wind direction of the PM<sub>10</sub> recorded blowing south, towards NOAA KPHX stations and the central phoenix area. For more details on these wind roses, please refer to **Appendix C**. This indicates that there were dust storms and high wind conditions resulting in PM<sub>10</sub> exceedances and reduced visibility on July 10<sup>th</sup>, 2021, in the Phoenix Area, and Zuni Hills and Dysart monitors near the project site. For more detailed information about NOAA KPHX, please refer to Appendix B.

Haze, squalls, and thunder along with reduced visibilities were reported on July 10<sup>th</sup>, 2021, in the Phoenix Area. The photographs below show ADEQ’s Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm with reduced visibility on July 10<sup>th</sup>, 2021. Note the dust conditions reached their peak around 8:00 P.M., per NOAA KPHX data.

South Mountain Camera, 7:00 P.M.



South Mountain Camera, 8:15 P.M.



Camelback Mountain Camera, 7:00 P.M.



Camelback Mountain Camera, 8:45 P.M.



Superstition Mountains Camera, 7:00 P.M.



Superstition Mountains Camera, 8:30 P.M.



October 11<sup>th</sup>, 2021, Atypical Event

A high-wind event from monsoon storm activity occurred on October 11<sup>th</sup>, 2021, causing widespread blowing dust throughout Arizona. Wind gusts were recorded to reach up to 46 mph at NOAA KPHX (**Table 7**) Five monitoring sites in both Maricopa and Pinal counties, including the Dysart and Buckeye monitors, exceeded the 24-hour average PM<sub>10</sub> NAAQS<sup>4</sup>.

According to the ADEQ pollution forecast for October 11<sup>th</sup> and 12<sup>th</sup>, two strong low-pressure fronts hit the Southwest United States. The first low pressure front resulted in breezy westerly winds and potential pockets of dust on October 9<sup>th</sup> and 10<sup>th</sup>, and the second low pressure front on October 11<sup>th</sup> brought stronger southwestern winds with elevated PM<sub>10</sub> levels due to a combination of fall seasonally dependent high winds and PM<sub>10</sub> concentration volatility. On October 11<sup>th</sup>, 2021, the NWS Phoenix Area Forecast Discussion reported that a low-pressure front had advanced southward through the Sierra Nevada Mountain range and Central California. In response to this tightening low-pressure gradient, winds intensified. Satellite imagery confirmed the presence of blowing dust near the Salton Sea. This blowing dust propagated eastward into the Phoenix area during the evening of October 11<sup>th</sup>, 2021. Consequently, a Blowing Dust Advisory was issued for the lower desert areas of Arizona. On October 12<sup>th</sup> around 12:00 A.M., due to strong winds and cooler temperatures because of October 11<sup>th</sup>'s low-pressure front and westerly winds, PM<sub>10</sub> levels rose again significantly. On October 11<sup>th</sup> and 12<sup>th</sup>, 2021, PM<sub>10</sub> levels exceeded health standards and resulted in a High Pollution Advisory for PM<sub>10</sub> in the Phoenix Area being placed on October 12<sup>th</sup>, 2021<sup>5</sup>.

With winds over 25 mph throughout the Phoenix Area due to meteorological conditions and a high wind event, high PM<sub>10</sub> concentrations occurred on October 11<sup>th</sup> and 12<sup>th</sup>, 2021. The majority of the elevated PM<sub>10</sub> concentrations occurred between October 11<sup>th</sup>, 2021, and 9:00 P.M. and October 12<sup>th</sup>, 2021, at 3:00 A.M.

MCAQD monitors data from October 11<sup>th</sup>, 2021, captures the high PM<sub>10</sub> levels and exceedances due to these monsoon storm activities. A total of three monitoring locations recorded NAAQS exceedances on October 12<sup>th</sup>, 2021. Of these three, two monitoring stations were evaluated for NAAQS exceedances in relation to the SR 303L project: Buckeye and Dysart, given they had the highest exceedances recorded on this date, and were closer to Zuni Hills monitor and the project site. West Chandler monitor also exceeded 24-hour average PM<sub>10</sub> NAAQS, approximately 35 miles southeast of Zuni Hills monitor.

The Dysart monitor is approximately 5 miles southwest of the project site and 4 miles southwest from the Zuni Hills monitor, and the Buckeye monitor is approximately 28 miles southwest of the project site and 29 miles southwest of the Zuni Hills monitor. PM<sub>10</sub> wind roses for both monitors on October 11<sup>th</sup>, 2021, indicate wind direction with PM<sub>10</sub> concentrations greater than NAAQS primarily flowing southwest or northeast, from the project site and Zuni Hills monitor to the Dysart and Buckeye monitors. For more details on the PM<sub>10</sub> wind roses, please refer to **Appendix C**.

October 11<sup>th</sup>, 2021, was previously approved in another Atypical Events Report for the SR 202L project, which discussed the West Chandler and Higley monitors exceedances in relation to the SR 202L project background PM<sub>10</sub> concentration. As such, this report will discuss these locations as well, with the assumption that this date has been approved as an atypical event day and was removed from project background concentration calculations previously.

<sup>4</sup> F0124, SR 202L Val Visita to SR 101L Project, Atypical Events Report, September 28, 2023.

<sup>5</sup> Valley Metro, *High Pollution Advisory Dates*, 2021. <https://www.valleymetro.org/commute-solutions/high-pollution-advisory>

**Table 7** shows the windspeed levels and highest PM<sub>10</sub> concentrations recorded for October 11<sup>th</sup>, 2021, at Buckeye, Dysart, and Zuni Hills monitors.

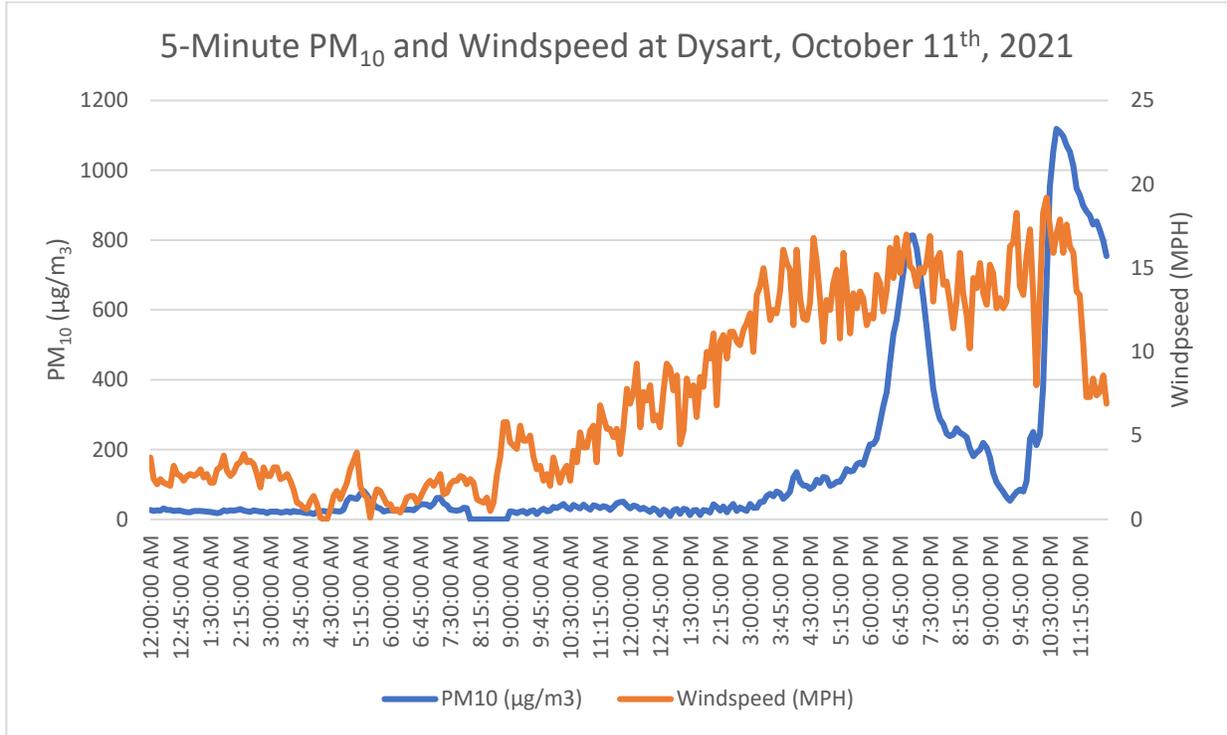
<b>Table 7: Windspeed and PM<sub>10</sub> Data for October 11<sup>th</sup>, 2021</b>						
Site	Date	24-hour average PM <sub>10</sub> (µg/m <sup>3</sup> )	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Buckeye	10/11/2021	259*	25.9	10:15 P.M.	26.3	10:15 P.M.
Dysart	10/11/2021	155*	19.2	10:25 P.M.	19.4	10:25 P.M.
Zuni Hills	10/11/2021	122	30.8	10:00 P.M.	31.8	10:00 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, Dysart and Buckeye Air Quality Monitoring Station Data for July 10 <sup>th</sup> , 2021.						
Notes: *Measurement exceeds PM <sub>10</sub> NAAQS.						

As shown in **Table 7**, the highest recorded windspeeds and wind gusts at Buckeye and Dysart monitors for October 11<sup>th</sup>, 2021, occurred around 10:15 P.M. Throughout the Phoenix Area, wind gusts over 25 mph were recorded, and five PM monitors, including Buckeye and Dysart recorded PM<sub>10</sub> concentrations over NAAQS thresholds. Zuni Hills monitor also recorded max hourly windspeeds greater than 25 mph, reaching up to 30.8 mph at 10:00 P.M., and had wind gusts recorded up to 31.8 mph at 10:00 P.M. The West Chandler and Higley monitors both recorded wind gust speeds surpassing 25 mph at a maximum of 45.6 mph at West Chandler and 36.2 mph at Higley<sup>6</sup>, as well as NAAQS PM<sub>10</sub> exceedances on this day as described in **Table 3**.

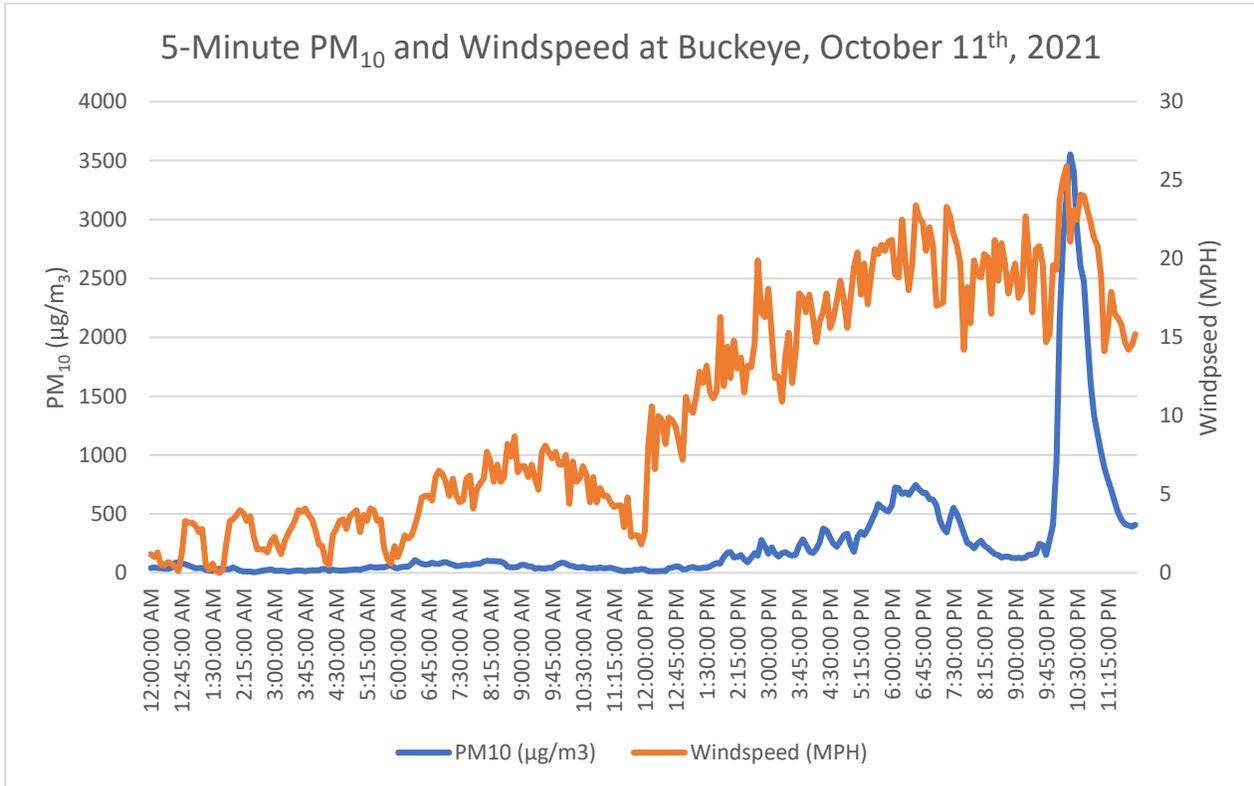
As windspeeds increased, PM<sub>10</sub> levels continued to rise at these monitoring locations, resulting in PM<sub>10</sub> exceedances being recorded for October 11<sup>th</sup>, 2021, at Buckeye and Dysart monitors. **Figures 5, 6, and 7** show 5-minute windspeed and 5-minute PM<sub>10</sub> for the Buckeye, Zuni Hills, and Dysart monitors on October 11<sup>th</sup>, 2021.

<sup>6</sup> F0124, SR 202L Val Visita to SR 101L Project, Atypical Events Report, September 28, 2023.

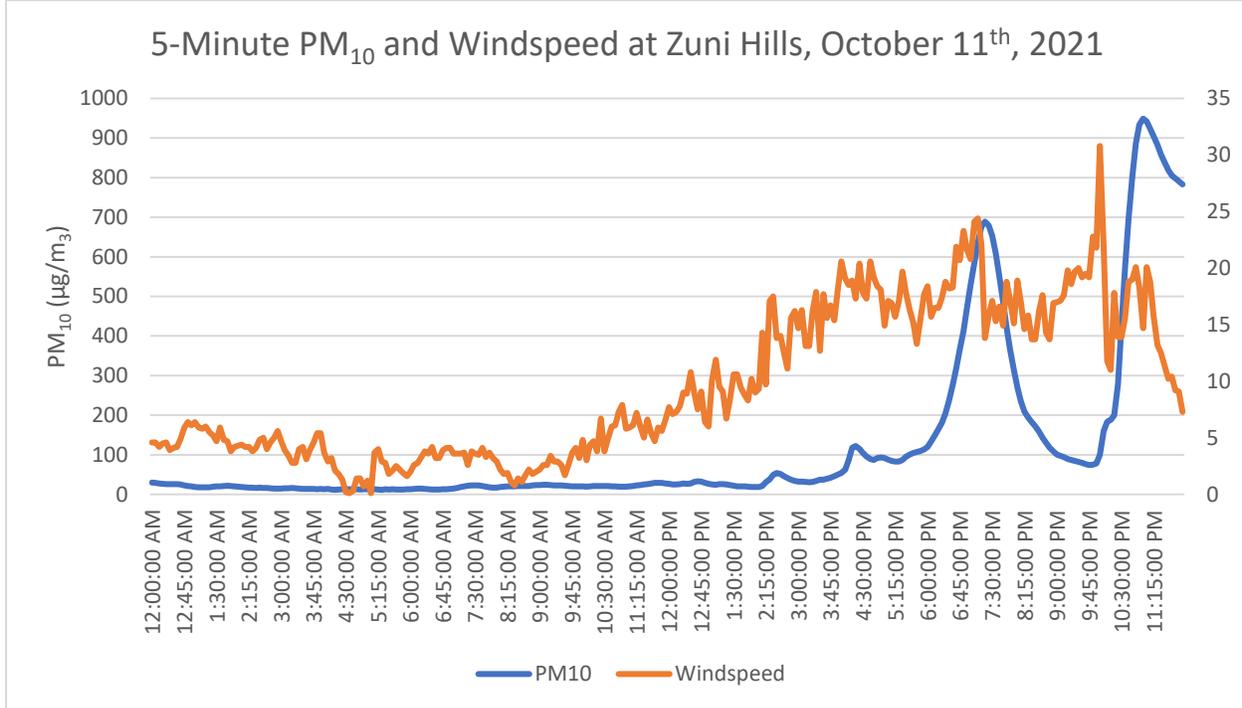
**Figure 5:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Dysart monitor on October 11<sup>th</sup>, 2021.



**Figure 6:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Buckeye monitor on October 11<sup>th</sup>, 2021.



**Figure 7:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Zuni Hills monitor on October 11<sup>th</sup>, 2021.



**Figures 5, 6, and 7** illustrate high windspeeds at Buckeye, Zuni Hills, and Dysart monitors on October 11<sup>th</sup>, 2021, with sustained high windspeeds increasing as the storm progressed. Windspeeds began to gradually increase beginning at 6:00 P.M., reaching up to 25 mph at 7:30 P.M., result in a peak in PM<sub>10</sub> concentrations of 678.9 µg/m<sup>3</sup> shortly after 7:30 P.M. recorded at Zuni Hills monitor. As the storm progressed, windspeeds again increased to their highest levels later that evening around 10:00 P.M. At Dysart monitor, windspeeds gradually increased beginning around 10:30 A.M., reaching a peak at 6:40 P.M. of 17 mph, which was followed with a peak in 5-minute PM<sub>10</sub> concentration of 813.3 µg/m<sup>3</sup> at 7:05 P.M. At both Zuni Hills and Dysart monitors, windspeeds decreased between 8:00 P.M. and 9:00 P.M., but began to increase to their maximum speed for the day around 10:00 P.M.

All three monitors recorded peak windspeeds around the same time on the evening of October 11<sup>th</sup>, 2021. At 10:15 P.M., the highest windspeed of 19.2 mph was recorded at Dysart monitor, at 10:20 P.M. the highest windspeed of 25.9 mph was recorded at Buckeye monitor, and at 10:00 P.M. the highest windspeed of 30.8 mph was recorded at Zuni Hills monitor. Coinciding with peak windspeeds, beginning around 10:00 P.M. on October 11<sup>th</sup> and extending to 12:00 A.M. on October 12<sup>th</sup>, 2021, 5-minute PM<sub>10</sub> concentrations notably rose to a maximum of 3,552 µg/m<sup>3</sup> at Buckeye, and 1,187 µg/m<sup>3</sup> at Dysart, 949 µg/m<sup>3</sup> at Zuni Hills monitors indicate that high winds lofting dust into the atmosphere increasing dust concentrations creating dust storm conditions. As a result, the Dysart and Buckeye monitors exceeded 24-hour average PM<sub>10</sub> NAAQS on October 11<sup>th</sup>, 2021.

There are two visible noted peaks in windspeed and 5-minute PM<sub>10</sub> concentrations at the monitors occurring at similar times as shown in **Figures 5 - 7**. The degree of magnitude of the monitors recorded peak windspeeds and PM<sub>10</sub> concentrations during these two increases depends on the monsoon conditions at the given monitor and the recorded wind direction. However, the similarity in timeline of the increased windspeeds and PM<sub>10</sub> concentrations noted at all three monitors demonstrates that the

monsoon conditions on October 11<sup>th</sup>, 2021, were regional in nature, impacting the Phoenix Area as a whole.

Data from NOAA KPHX also demonstrates the monsoon conditions occurring on October 11<sup>th</sup>, 2021, showing an increase in windspeeds and visible blowing dust beginning at 6:00 P.M., and then windspeeds greater than 25 mph beginning around 7:00 P.M. and continuing through 12:00 A.M. on October 12<sup>th</sup>, 2021. NOAA KPHX is approximately 37 miles east of Buckeye monitor, 24 miles southeast of Dysart monitor, and 24 miles southeast of Zuni Hills monitor. The wind directions noted during the highest wind speeds recorded at NOAA KPHX align with the general wind directions of the Dysart, Zuni Hills, and Buckeye monitors, as the wind direction was primarily blowing west from the Buckeye monitor to NOAA KPHX and the Central Phoenix area. Based on the wind direction observed at NOAA KPHX that coincides with the peak wind speeds and PM<sub>10</sub> concentrations at the monitors, the blowing dust conditions were first received at the Buckeye monitor and then continued to flow further east and northeast towards the Dysart and Zuni Hills monitors.

Earlier in the day, starting around 3:10 P.M., wind gusts at NOAA KPHX reached up to 35 mph, and wind speeds remained elevated, with a minimum of 12 mph for the remainder of the day. This increase in wind speed beginning around 3:00 P.M. was recorded at air quality monitors as well which recorded a gradual increase in wind speeds from 3:00 P.M. until the first peak around 6:00 P.M., as shown in **Figures 5-7**. Because the primary wind direction during the monsoon conditions is southwest, the Buckeye monitor experienced high wind conditions first, followed by Dysart (which is more west than Zuni Hills), then Zuni Hills, and finally, the furthest east, at NOAA KPHX station (which is more east than Zuni Hills).

As monsoon conditions continued to flow east across the Phoenix Area into the evening of the 11<sup>th</sup>, the highest wind speed of 29 mph and wind gust of 46 mph were recorded around 10:45 P.M at NOAA KPHX. Increased PM<sub>10</sub> concentrations observed on October 11<sup>th</sup>, 2021, coincided with these high wind conditions at Buckeye and Dysart monitors, as well as West Chandler and Higley (maximum wind speeds of 25 mph at West Chandler) as discussed above. **Table 8** shows the time period where the highest wind speeds, wind gusts, and their corresponding weather conditions were recorded the NOAA KPHX on October 11<sup>th</sup>, 2021.

**Table 8: NOAA KPHX Weather for October 11<sup>th</sup>, 2021**

Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
10/11/2021	3:30 P.M.	25	35	-	-	SW
10/11/2021	4:51 P.M.	21	29	-	-	SSW
10/11/2021	6:51 P.M.	18	28	-	-	SSW
10/11/2021	7:20 P.M.	18	31	-	-	SSW
10/11/2021	8:10 P.M.	28	36	-	-	SSW
10/11/2021	10:05 P.M.	25	32	-	10	S
10/11/2021	10:10 P.M.	23	30	-	10	S
10/11/2021	10:15 P.M.	24	32	-	9	S
10/11/2021	10:20 P.M.	17	-	-	9	S
10/11/2021	10:25 P.M.	22	35	-	9	S
10/11/2021	10:30 P.M.	22	30	-	9	SSW
10/11/2021	10:35 P.M.	20	25	-	10	SSW
10/11/2021	10:40 P.M.	26	35	-	7	W

10/11/2021	10:44 P.M.	28	46*	Lt rain, Blowing dust	3	W
10/11/2021	10:45 P.M.	29*	37	Lt rain, Blowing dust	3	W
10/11/2021	10:50 P.M.	22	-	Hvy rain, Blowing dust	2.5	W
10/11/2021	10:51 P.M.	21	38	Hvy rain, Blowing dust	2.5	W
10/11/2021	10:55 P.M.	14	-	Rain, Blowing dust	2.5	WSW
10/11/2021	10:56 P.M.	13	-	Lt rain, Blowing dust	3	W
10/11/2021	11:00 P.M.	12	20	Lt rain, Blowing dust	5	WSW
10/11/2021	11:05 P.M.	14	20	Haze, Blowing dust	4	WSW
10/11/2021	11:10 P.M.	16	25	Blowing dust	3.5	W
10/11/2021	11:15 P.M.	22	28	Blowing dust	3	W
10/11/2021	11:20 P.M.	20	26	Blowing dust	2.5	W

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 10/11/2021, Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20211010&end=20211013>

Notes:  
\* Highest windspeed or wind gust recorded for the day  
- no observation recorded

As shown in **Table 8**, the highest windspeeds and wind gusts recorded for October 11<sup>th</sup>, 2021, correspond with the highest windspeeds and wind gusts recorded at Buckeye and Dysart monitors between 10:00 P.M. and 11:20 P.M. In addition, during this time, visibility levels decreased from 10 miles to 2.5 miles with rain, haze, and blowing dust noted as the weather conditions, coinciding with the highest windspeed and wind gust recorded (29 mph, 46 mph).

Although the times when the Dysart, Zuni Hills, and Buckeye monitors highest windspeed and PM<sub>10</sub> levels do not directly correspond with the highest windspeed and wind gust levels recorded at NOAA KPHX, the data demonstrates a presence of high wind conditions resulting in decreased visibility, and blowing dust for the hour in which Dysart, Zuni Hills, and Buckeye experienced their highest PM<sub>10</sub> concentrations and windspeeds. This indicates the presence of dust storms and high wind conditions resulting in PM<sub>10</sub> exceedances and reduced visibility occurring on October 11<sup>th</sup>, 2021, throughout the Phoenix Area. All three monitors are southwest of NOAA KPHX, and as the storm progressed east, it picked up blowing dust and moved from the direction of the monitors, which was initiated from continual high winds and monsoon conditions beginning around 3:00 P.M., as recorded by NOAA KPHX, moving consistently east over the monitors and NOAA KPHX until the early morning of October 12<sup>th</sup>, 2021. For more detailed information about NOAA KPHX data, please refer to **Appendix B**.

An evaluation of all air quality inspections and complaints between October 8<sup>th</sup>, 2021, and October 12<sup>th</sup>, 2021, indicates no evidence of unusual anthropogenic PM<sub>10</sub> emissions. During the 4-day period, 25 air quality related events were received, with 17 related to windblow dust or PM<sub>10</sub><sup>7</sup>.

Blowing dust, haze, and dust storms along with reduced visibilities were reported on October 11<sup>th</sup>, 2021, in the Phoenix Area. The photographs below show ADEQ's Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm with reduced visibility on October 11<sup>th</sup>, 2021. Note the first low pressure wave of the storm hit the Phoenix Area around 9:00 P.M, following high windspeeds flowing east over the Phoenix Area in the afternoon.

<sup>7</sup> F0124, SR 202L Val Visita to SR 101L Project, Atypical Events Report, September 28, 2023.

South Mountain Camera, 4:30 P.M.



*Note: There are no images available in the archive for South Mountain camera after 4:30 P.M. on October 11, 2021*

Camelback Mountain Camera, 9:15 P.M.



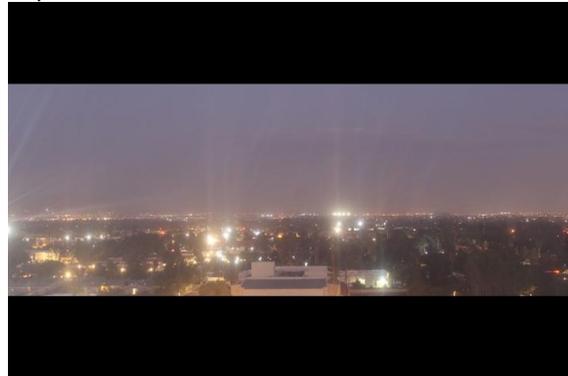
Camelback Mountain Camera, 11:00 P.M.



Superstition Mountains Camera, 3:00 P.M.



Superstition Mountains Camera, 6:30 P.M.



*Note: There are no images available in the archive for Superstition Mountains Camera after 6:30 P.M. on October 11, 2021*

October 12<sup>th</sup>, 2021, Atypical Event

Dust storm conditions continued through October 12<sup>th</sup>, 2021, from the dust storm which occurred on October 11<sup>th</sup>, 2021. On October 12<sup>th</sup> around 12:00 A.M., due to strong winds and cooler temperatures because of October 11<sup>th</sup>'s low-pressure front and westerly winds, PM<sub>10</sub> levels rose significantly. On October 11<sup>th</sup> and 12<sup>th</sup>, 2021, PM<sub>10</sub> levels exceeded health standards and resulted in a High Pollution Advisory for PM<sub>10</sub> in the Phoenix Area being placed on October 12<sup>th</sup>, 2021<sup>8</sup>.

With winds over 25 mph throughout the Phoenix Area and due to meteorological conditions and a high wind event, high PM<sub>10</sub> concentrations occurred on October 11<sup>th</sup> and 12<sup>th</sup>, 2021. The majority of the elevated PM<sub>10</sub> concentrations occurred between October 11<sup>th</sup>, 2021, and 9:00 P.M. and October 12<sup>th</sup>, 2021, at 3:00 A.M.

MCAQD monitoring data from October 12<sup>th</sup>, 2021, captures the high PM<sub>10</sub> levels and exceedances which were a result from the dust storm and high winds which occurred on October 11<sup>th</sup>, 2021. A total of eight monitoring locations recorded NAAQS exceedances on October 12<sup>th</sup>, 2021. Of these eight, four monitoring stations were evaluated for NAAQS exceedances in relation to the SR 303L project: Zuni Hills, Higley, West Chandler, and South Scottsdale. Monitors closer to the project site and Zuni Hills monitor also exceeded NAAQS this day, including Central Phoenix (23 miles from project site), Durango Complex (22 miles southeast from the project site), and West 43<sup>rd</sup> Avenue (23 miles from project site). The closest monitor to Zuni Hills that exceeded 24 hour average PM<sub>10</sub> NAAQS was Durango Complex, approximately 20 miles southeast of Zuni Hills.

Hourly windspeed and max wind gust speeds were recorded and compared to PM<sub>10</sub> levels at these stations, in correlation with October 11<sup>th</sup>, 2021, dust storm dates, and NOAA KPHX weather data. **Table 9** captures windspeed and PM<sub>10</sub> data at Higley, West Chandler, South Scottsdale, and Zuni Hills monitors.

Table 9: Windspeed and PM <sub>10</sub> Data for October 12 <sup>th</sup> , 2021						
Site	Date	24-hour average PM <sub>10</sub> (µg/m <sup>3</sup> )	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Higley	10/12/2021	219.8*	14.1	12:25 A.M.	14.4	12:25 A.M.
South Scottsdale	10/12/2021	180.7*	18.1	12:55 A.M.	18.4	12:55 A.M.
West Chandler	10/12/2021	181.5*	12.9	12:00 A.M.	13.5	12:00 A.M.
Zuni Hills	10/12/2021	146	15.7	2:05 A.M.	15.9	2:05 A.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, Higley, South Scottsdale, West Chandler, and Zuni Hills Air Quality Monitoring Station Data for October 12 <sup>th</sup> , 2021.						
Notes: *Measurement exceeds PM <sub>10</sub> NAAQS.						

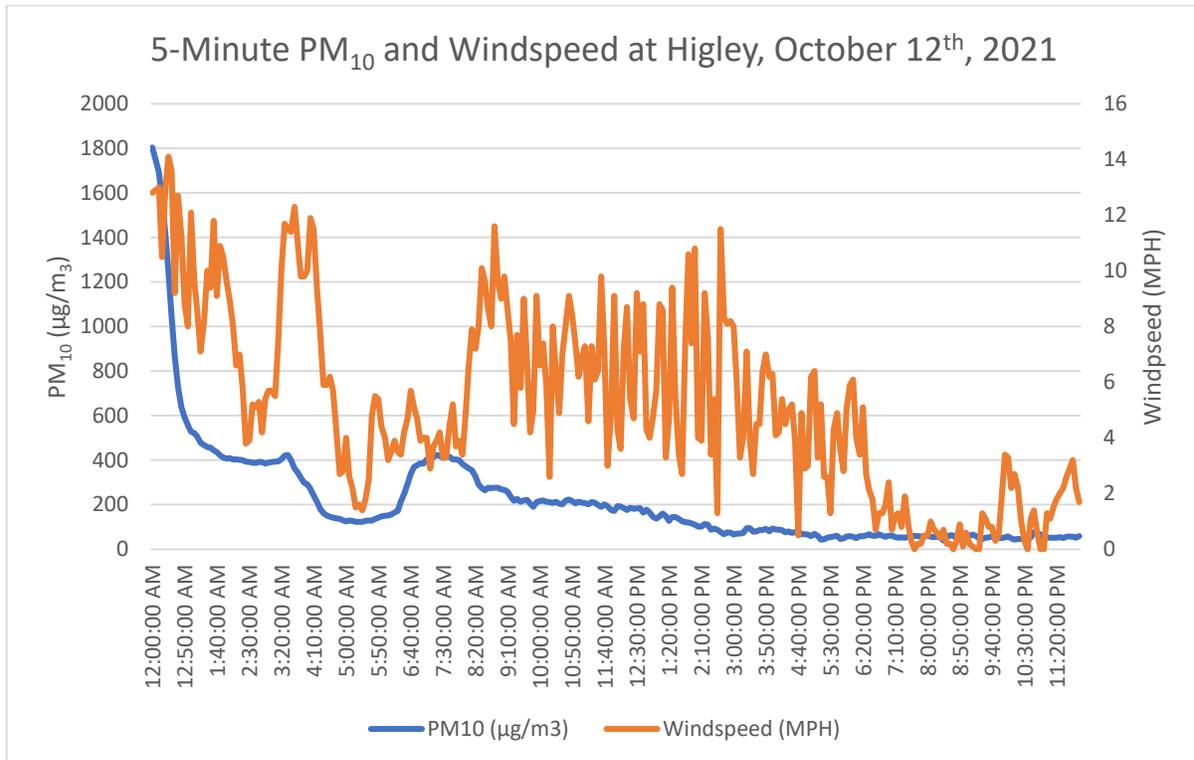
As shown in **Table 9**, Higley, South Scottsdale, and West Chandler monitors exceeded 24-hour average PM<sub>10</sub> NAAQS in the early morning of October 12<sup>th</sup>, 2021, following the storm conditions from the previous night. The Zuni Hills monitor did not exceed 24-hour average PM<sub>10</sub> NAAQS, but came close to exceeding it, only 4 µg/m<sup>3</sup> less than the standard. Although the windspeeds at these selected monitors did not

<sup>8</sup> Valley Metro, *High Pollution Advisory Dates*, 2021. Accessed August 17<sup>th</sup>, 2023. <https://www.valleymetro.org/commute-solutions/high-pollution-advisory>

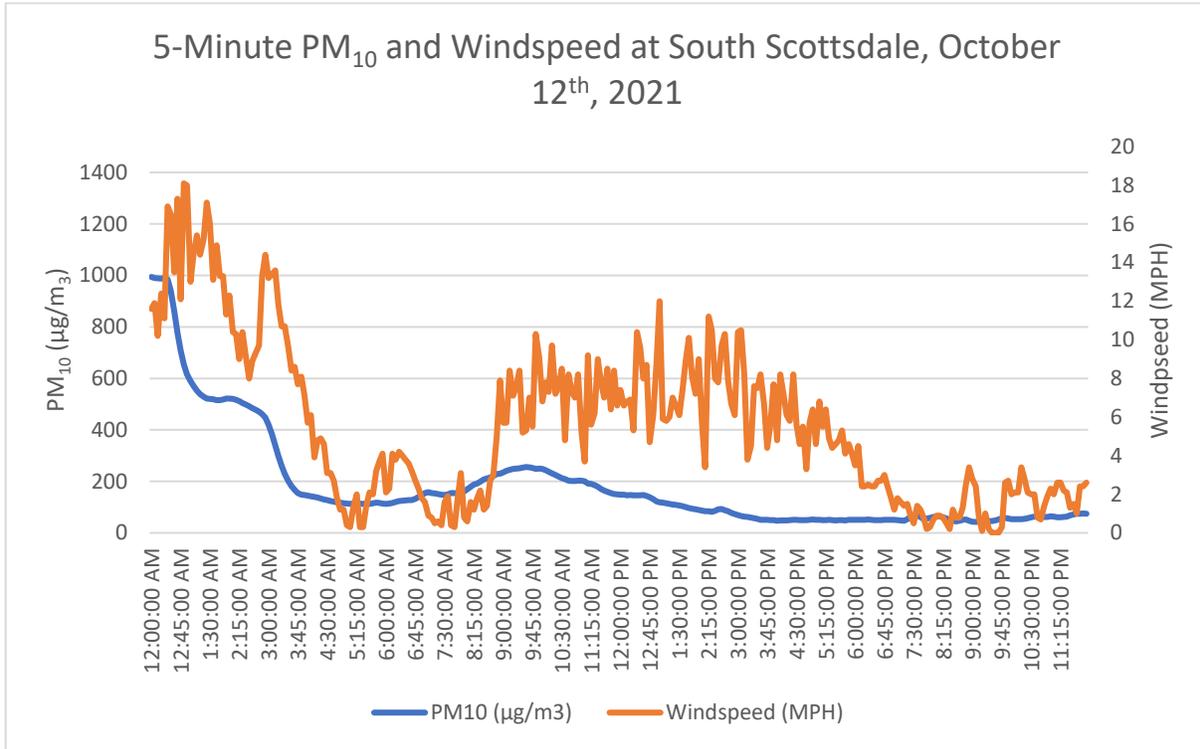
increase to greater than 25 mph, throughout the Phoenix Area, wind gusts over 25 mph were recorded at NOAA KPHX and five PM monitors recorded PM<sub>10</sub> concentrations over NAAQS thresholds.

As windspeeds increased on October 11<sup>th</sup>, 2021, PM<sub>10</sub> levels continued to rise at the Higley, South Scottsdale, and West Chandler monitors, resulting in PM<sub>10</sub> exceedances recorded in the early morning of October 12<sup>th</sup>, 2021. **Figures 8 – 11** show 5-minute windspeed and PM<sub>10</sub> for the Higley, South Scottsdale, Zuni Hills, and West Chandler monitors on October 12<sup>th</sup>, 2021.

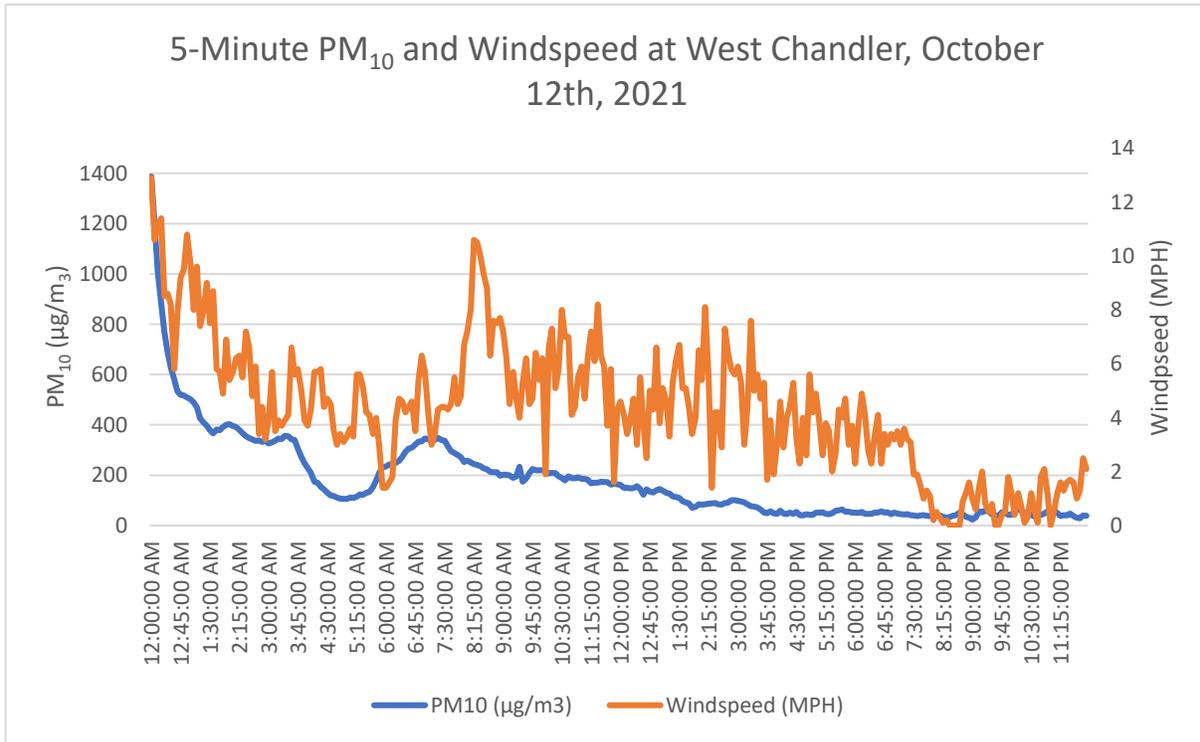
**Figure 8:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Higley monitor on October 12<sup>th</sup>, 2021.



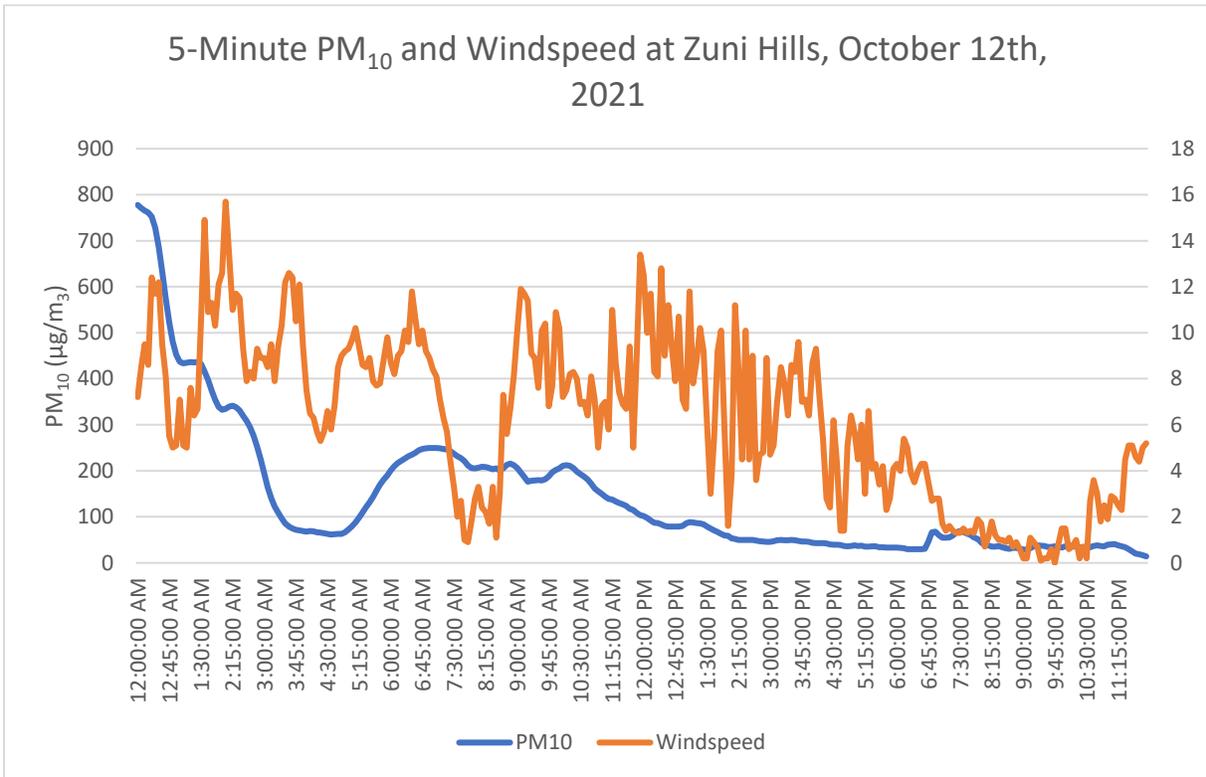
**Figure 9:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at South Scottsdale monitor station October 12<sup>th</sup>, 2021.



**Figure 10:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at West Chandler monitor on October 12<sup>th</sup>, 2021.



**Figure 11:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Zuni Hills monitor on October 12<sup>th</sup>, 2021.



It is important to recognize that these high PM<sub>10</sub> exceedances were initiated from weather conditions which began the night of October 11<sup>th</sup>, 2021, and extended into the early morning of October 12<sup>th</sup>, 2021. This can be seen in **Figures 8-11**, as PM<sub>10</sub> and windspeed concentrations are highest at the start of October 11<sup>th</sup>, 2021, but slowly decrease over time. The slow decrease in intensity of storm conditions overnight from the night of October 11<sup>th</sup>, 2021, meant that an immense concentration of dust was lofted in the air for a significant period of time. As such the 24-hour average NAAQS remained higher than NAAQS until around 7:00 A.M. the morning of the 12<sup>th</sup>.

Data from NOAA KPHX follows suit with the storm conditions observed the evening of October 11<sup>th</sup>, 2021, and following into the early morning of October 12<sup>th</sup>, 2021. Windspeeds greater than 25 mph were recorded at 12:00 A.M. and continued to about 2:00 A.M. on October 12<sup>th</sup>, 2021. The highest wind speed recorded on October 12<sup>th</sup>, 2021, was 28 mph at 12:25 A.M. and the highest wind gust recorded was 37 mph around 12:51 A.M. Dust and decreased visibility were also noted in the NOAA KPHX data, supporting the increased PM<sub>10</sub> concentrations noted at monitors throughout the Phoenix Area on October 12<sup>th</sup>, 2021. **Table 10** shows the period where the highest wind speeds, wind gusts, and their corresponding weather conditions were recorded at NOAA KPHX on October 12<sup>th</sup>, 2021.

**Table 10: NOAA KPHX Weather for October 12<sup>th</sup>, 2021**

Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
10/12/2021	12:00 A.M.	20	-	-	2.5	W
10/12/2021	12:05 A.M.	22	28	-	2.5	W
10/12/2021	12:10 A.M.	24	30	-	2.5	W
10/12/2021	12:15 A.M.	25	31	-	2.5	W
10/12/2021	12:18 A.M.	22	33	Dust	4	W
10/12/2021	12:20 A.M.	23	-	-	4	W
10/12/2021	12:25 A.M.	28*	33	-	4	W
10/12/2021	12:30 A.M.	24	-	-	5	W
10/12/2021	12:32 A.M.	24	33	Dust	4	W
10/12/2021	12:35 A.M.	25	33	-	5	W
10/12/2021	12:40 A.M.	24	-	-	5	W
10/12/2021	12:45 A.M.	24	31	-	5	W
10/12/2021	12:50 A.M.	24	-	-	5	W
10/12/2021	12:51 A.M.	24	37*	Dust	5	W
10/12/2021	12:55 A.M.	25	33	-	5	W
10/12/2021	1:00 A.M.	22	30	-	5	W
10/12/2021	1:05 A.M.	21	-	-	5	W
10/12/2021	1:10 A.M.	18	25	-	5	W
10/12/2021	1:15 A.M.	21	-	-	5	W
10/12/2021	1:20 A.M.	18	-	-	5	W
10/12/2021	1:25 A.M.	20	-	-	5	W
10/12/2021	1:30 A.M.	16	-	-	5	W

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 10/11/2021, Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20211010&end=20211013>

Notes:  
 \* Highest windspeed or wind gust recorded for the day ,  
 - no observation recorded

As shown in **Table 10**, high windspeeds recorded at NOAA KPHX coincide with the high windspeeds and peak PM<sub>10</sub> levels recorded at the MCAQD monitors in the Phoenix Area. Although the storm conditions including windspeeds greater than 25 mph began to reside around 2:00 A.M. on October 11<sup>th</sup>, windspeeds continued to remain greater than 10 mph for the next few hours, and increased again around 2:45 A.M., with wind gusts greater than 25 mph at 2:45 A.M. at NOAA KPHX. The increase in windspeeds coincides with the rise in windspeeds and PM<sub>10</sub> shown in **Figures 8 – 11** at the West Chandler, South Scottsdale, and Higley monitors, which still remained above NAAQS PM<sub>10</sub> standards until about 4:30 A.M., and then saw an increase again in the later morning around 6:45 A.M due to an increase in windspeeds, which can also be seen in the NOAA KPHX data for October 12<sup>th</sup>, 2021.

In addition, PM<sub>10</sub> wind roses from the South Scottsdale monitor indicate the primary wind direction recorded on October 12<sup>th</sup> was southwest and west, aligning with the westerly wind direction recorded at NOAA KPHX. The high winds carried concentrations of PM<sub>10</sub> greater than 600 µg/m<sup>3</sup> from NOAA KPHX and Zuni Hills monitor east to the South Scottsdale monitor approximately 6 miles northeast of NOAA KPHX.

Wind roses from the Higley monitor indicate that the primary wind direction recorded on October 12<sup>th</sup> was west and northwest, carrying concentrations of PM<sub>10</sub> greater than 600 µg/m<sup>3</sup> from Zuni Hills monitor and NOAA KPHX east towards the Higley monitor. Higley monitor is approximately 38 miles southeast of Zuni Hills monitor, and 20 miles southeast of NOAA KPHX. Wind roses from the West Chandler monitor, approximately 35 miles southeast of Zuni Hills monitor, indicates the primary wind direction recorded on October 12<sup>th</sup> was west, carrying concentrations of PM<sub>10</sub> greater than 600 µg/m<sup>3</sup> from NOAA KPHX and Zuni Hills monitor to West Chandler.

These wind directions and high PM<sub>10</sub> concentrations recorded at the monitors on October 12<sup>th</sup>, in coordination with the NOAA KPHX weather data indicates that the monsoon conditions and high wind event was widespread in nature, impacting the whole Phoenix Area, including Zuni Hills monitor and the project site. For more details on the PM<sub>10</sub> wind roses for the Higley, West Chandler, and South Scottsdale monitors on October 12<sup>th</sup>, 2021, please refer to **Appendix C**.

Blowing dust, haze, dust storms , and reduced visibility were reported in the Phoenix Area on October 11<sup>th</sup>, 2021 leading into the early morning of October 12<sup>th</sup>, 2021. The photographs below show ADEQ’s Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm with reduced visibility on October 12<sup>th</sup>, 2021. Note the first low pressure wave of the storm hit the Phoenix Area around 9:00 P.M, October 11<sup>th</sup>, 2021, following high windspeeds and monsoon conditions moving over the Phoenix Area the previous afternoon.

Camelback Mountain Camera, 12:00 A.M



Estrella Mountains Camera, 12:00 A.M.



Camelback Mountain Camera, 2:45 A.M.



Estrella Mountains Camera, 5:45 A.M.



White Tank Mountains Camera, 12:00 A.M.



White Tank Mountains Camera, 2:00 A.M.



*Note: There are no images available in the archive for Superstition Mountains, South Mountain camera on October 12<sup>th</sup>, 2021*

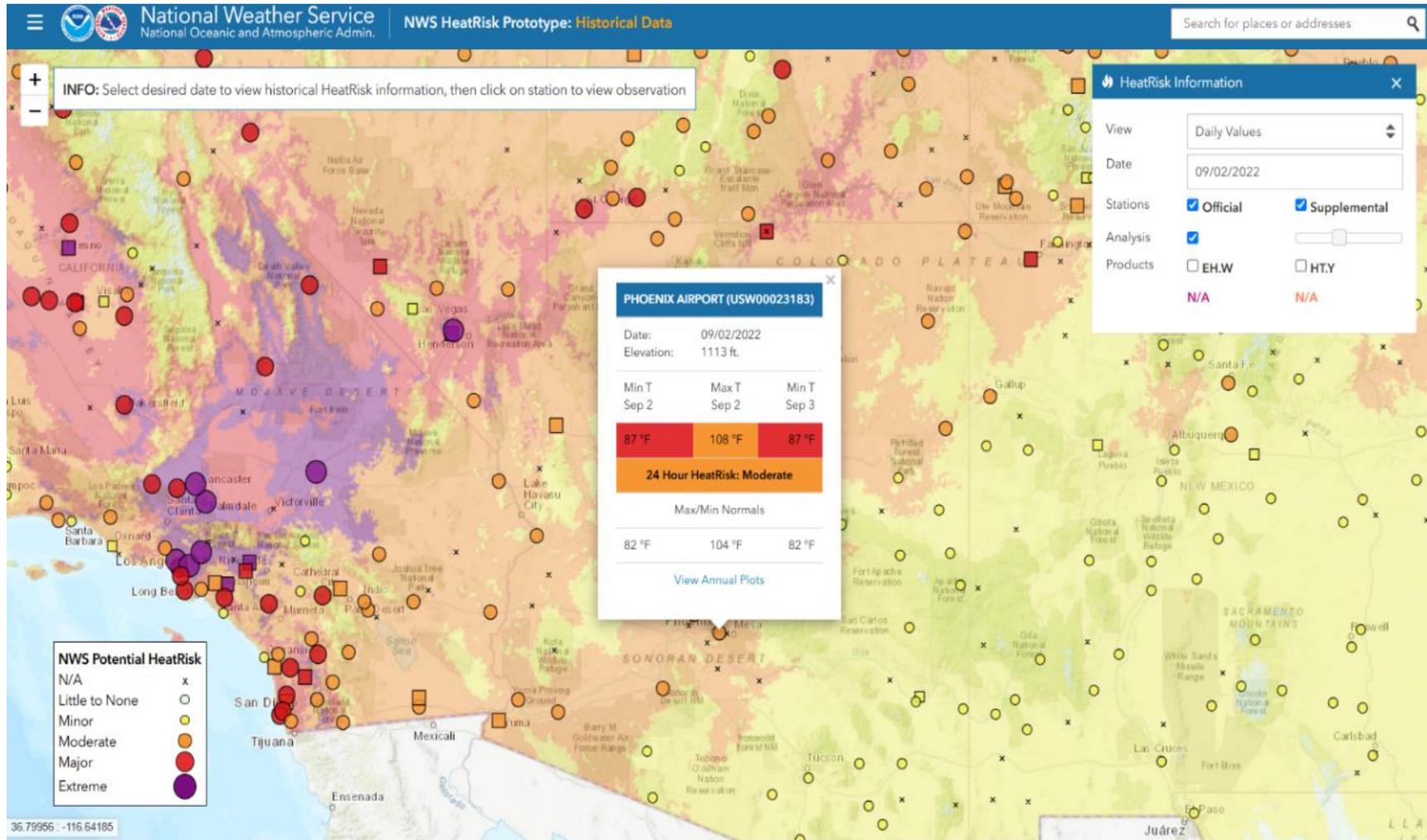
September 2<sup>nd</sup>, 2022, Atypical Event

Extreme heat experienced in California, Nevada, Utah, and Arizona was caused by a long-lasting heat dome settling over the Western United States in early September 2022 and resulted in wildfires and poor air quality conditions across the Western United States<sup>9</sup>. **Figure 12** below shows the NWS Potential Heat Risk Map for the Phoenix Area and surrounding Western United States on September 2<sup>nd</sup>, 2022.

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<sup>9</sup> *Intense Heat Wave Fuels West Coast Wildfires & Air Quality Alerts*, IQAir, September 1, 2022, [https://www.iqair.com/us/newsroom/intense-heat-wave-fuels-west-coast-wildfires-air-quality-alerts?srsId=AfmBOopf24koH2lB5l1ka62HKElBDTX0vLD0RjdeGFPG0\\_RWkn-ifLPS](https://www.iqair.com/us/newsroom/intense-heat-wave-fuels-west-coast-wildfires-air-quality-alerts?srsId=AfmBOopf24koH2lB5l1ka62HKElBDTX0vLD0RjdeGFPG0_RWkn-ifLPS).

Figure 12. NWS HeatRisk Prototype: Historical Data for September 2<sup>nd</sup>, 2022, 24-hour heat risk recorded at NOAA KPHX<sup>10</sup>.



<sup>10</sup> NWS HeatRisk Prototype: Historical Data, NOAA, <https://www.wrh.noaa.gov/wrh/hil/historical/#>

As shown in **Figure 12**, a moderate heat risk was issued specifically for September 2<sup>nd</sup>, 2022, following the development of a strong ridge of high pressure over the Western United States. Heat advisory warnings had already been issued by the NWS for the Phoenix area starting on August 29<sup>th</sup>, 2022, due to excessive heat conditions caused by this high-pressure system<sup>11</sup>. This high-pressure system created excessive heat and monsoon-like conditions for the week of September 1<sup>st</sup>, 2022, continuing through September 5<sup>th</sup>, 2022, in the Phoenix Area. According to the NOAA Storm Events Database report for Central Phoenix on September 5<sup>th</sup>, 2022, weather conditions were due to an “anomalously strong ridge of high pressure, with 500 mb heights around 594 dm, was parked over the western CONUS for the start of September. This resulted in well above normal temperatures as well as excessive heat conditions at times.”

Given the high-pressure system, poor air quality due to wildfires, and extreme heat conditions, dust storms, poor visibility and bouts of precipitation were noted throughout the Phoenix Area between September 1<sup>st</sup> and 5<sup>th</sup>, 2022, per NOAA’s Storm Events Database webpage. Around 10:30 P.M. on September 1<sup>st</sup>, 2022, dust storms were reported in Northwest Pinal County, developing over the White Tank Mountains eventually moving north into Maricopa County, moving towards the project area and Zuni Hills and Dysart monitors. Additionally, a storm developed over Queen Creek Valley and joined this storm cluster in the Phoenix Area. The NOAA Storm Event Report for Southeast Valley and Queen Creek Areas of Southern Arizona states:

*“Under a classic setup for storm motion from the Mogollon Rim to the Valley (Rim-to-Valley), with the monsoon 500mb high positioned over Nevada, a multicell storm cluster descended out of the White Mountains, through Gila County, and into the lower deserts of Maricopa and Pinal Counties in the early overnight hours of the 1st. Moisture levels were near average for the time of year, but steep mid-level lapse rates over the high terrain (7-8 C/km) and modest shear (Sfc-6km around 20-25 kts) was sufficient to support the development of an organized multicell storm cluster. The environment was also supportive of strong downbursts, with DCAPE up around 1000-1500 J/kg. A single ordinary storm also developed in the Queen Creek/San Tan Valley area a couple hours before the multicell cluster moved into the lower deserts and produced a damaging downburst. Strong winds leading to a dust storm was eventually generated by the multicell cluster once it moved into Maricopa and Pinal Counties.”<sup>12</sup>*

Again, on September 2<sup>nd</sup>, 2022, dust storm conditions continued due to the high-pressure system positioned over the Western United states. On the evening of September 2<sup>nd</sup>, 2022, around 6:00 P.M. a NOAA Storm Events Report Maricopa County’s Queen Creek area was published describing the continuity of the monsoon/high pressure conditions which resulted in thunderstorms, high winds, dense blowing dust, low visibility, hail, and localized flash flooding<sup>13</sup>.

With excessive heat and monsoon conditions occurring within the Phoenix Area on September 2<sup>nd</sup>, 2022, NAAQS PM<sub>10</sub> exceedances were noted throughout the Phoenix Area at four MCAQD monitoring stations including the Zuni Hills and Dysart monitors. The highest PM<sub>10</sub> concentrations recorded at these monitors coincides with the times of dust storms reported by NOAA Storm Event Reports for Maricopa County and the Phoenix Area, and aligns with NOAA KPHX data for both September 1<sup>st</sup>, and 2<sup>nd</sup>, 2022. **Table 11** captures windspeed and PM<sub>10</sub> data at Zuni Hills and Dysart monitoring stations on September 2<sup>nd</sup>, 2022.

<sup>11</sup> NOAA, *Storm Events Database*, Event Details "1148966," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1148966>.

<sup>12</sup> NOAA, *Storm Events Database*, Event Details "1148966," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1148966>.

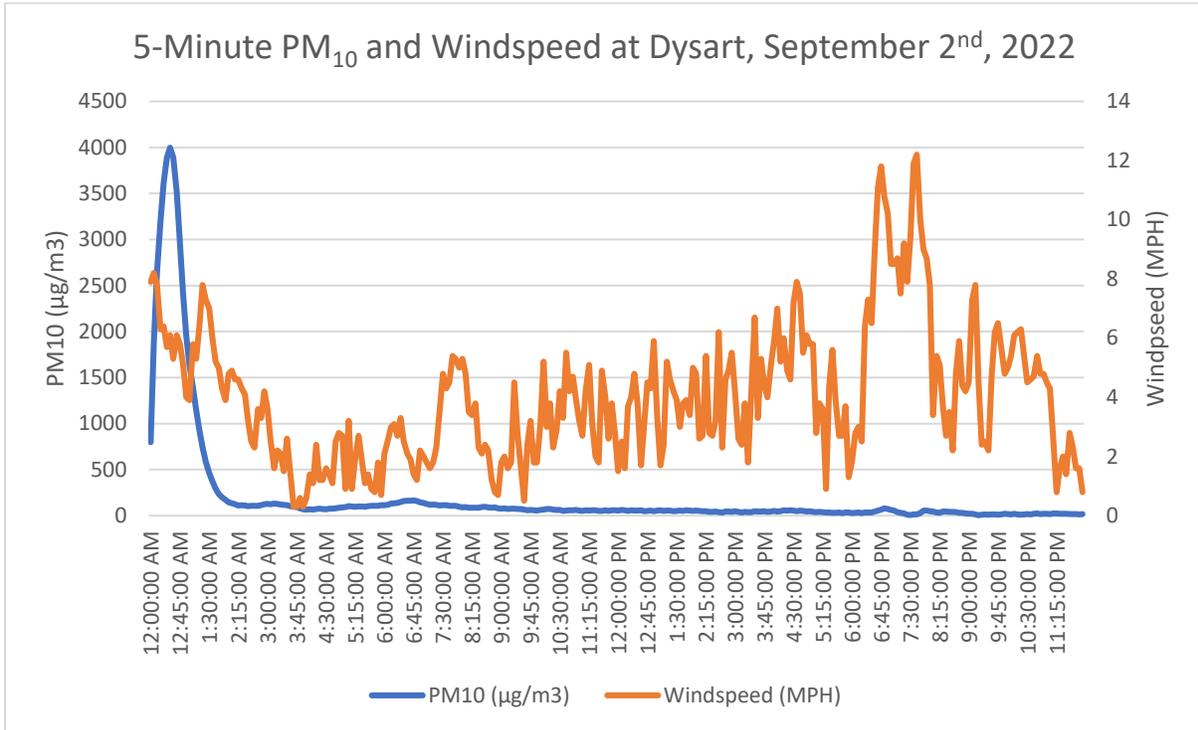
<sup>13</sup> NOAA, *Storm Events Database*, Event Details "1148966," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1148966>.

Table 11: Windspeed and PM <sub>10</sub> Data for September 2 <sup>nd</sup> , 2022						
Site	Date	24-hour average PM <sub>10</sub> (µg/m <sup>3</sup> )	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Zuni Hills	9/2/2022	167.6*	12.2	7:35 P.M.	12.5	7:35 P.M.
Dysart	9/2/2022	206.7*	17.2	7:30 P.M.	17.5	7:30 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, Dysart and Zuni Hills Air Quality Monitoring Station Data for September 2 <sup>nd</sup> , 2022.						
Notes: *Measurement exceeds PM <sub>10</sub> NAAQS.						

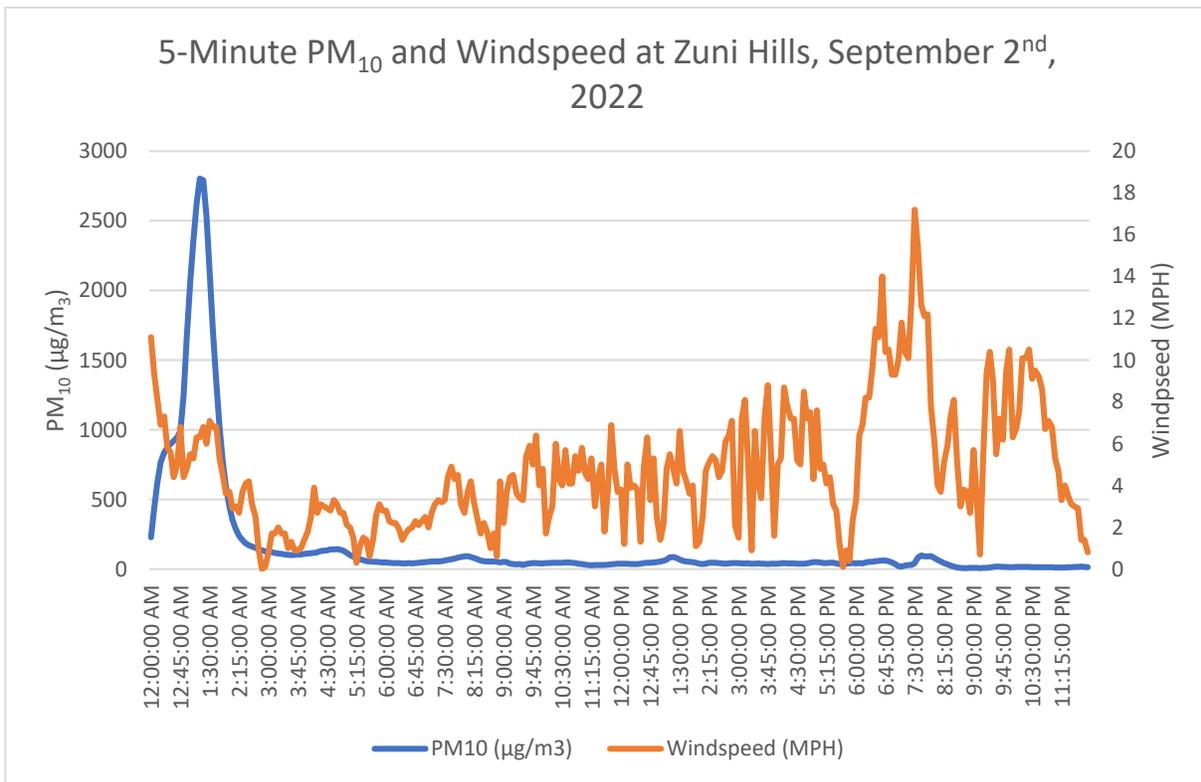
As shown in **Table 11**, the highest windspeed recorded at the Zuni Hills monitor is 12.2 mph, and the max wind gust is 12.5 mph, occurring at 7:35 P.M. The highest wind speed at the Dysart Monitor is 17.2 mph and the max wind gust is 17.5 mph, occurring at 7:30 P.M. **Figures 13** and **14** show the corresponding 5-minute windspeed and PM<sub>10</sub> data recorded at Zuni Hills and Dysart monitors on September 2<sup>nd</sup>, 2022.

PM<sub>10</sub> exceedances were recorded in the early morning of September 2<sup>nd</sup>, 2022, in the Phoenix Area following the storm conditions that began the prior evening. As the storm moved north and northwest from Pinal County to Maricopa County between the night of the 1<sup>st</sup> and the 2<sup>nd</sup>, and storm cells from multiple storm fronts combined over the Phoenix Area, and both Zuni Hills and Dysart monitors recorded exceedances in the 24-hour average PM<sub>10</sub> NAAQS.

**Figure 13:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Dysart monitor on September 2<sup>nd</sup>, 2022.



**Figure 14:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Zuni Hills monitor on September 2<sup>nd</sup>, 2022.



Based on **Figures 13** and **14**, PM<sub>10</sub> concentrations peaked in the early morning of September 2<sup>nd</sup>, 2022, at both monitoring stations, with maximum wind speeds recorded later that evening. This pattern aligns with monsoon conditions affecting the area in early September, influenced by a low-pressure system over the Western United States. According to NOAA’s Storm Events Report for September 1<sup>st</sup>, 2022, strong winds and dust storms developed around 10:00 P.M., extending into the early hours of September 2<sup>nd</sup>, 2022<sup>14</sup>. Dysart monitor recorded a PM<sub>10</sub> peak of 2,791.9 µg/m<sup>3</sup> at 1:10 A.M., while Zuni Hills monitor registered 3,996.9 µg/m<sup>3</sup> at 12:30 A.M. NOAA KPHX data confirmed haze, blowing dust, and high winds approximately 1 hour before the peak PM<sub>10</sub> levels at Zuni Hills and Dysart monitors were recorded, on the evening of September 1<sup>st</sup>, 2022. **Table 12** provides windspeed and weather conditions data recorded the evening of September 1<sup>st</sup>, 2022, at NOAA KPHX, that demonstrates dust storm conditions occurring in the Phoenix Area near the monitors. These conditions continued into the early morning of the 2<sup>nd</sup>, resulting in PM<sub>10</sub> exceedances being recorded at the monitors shown between 12:00 and 1:00 A.M., as shown in **Figures 13** and **14**.

The highest wind gusts recorded at NOAA KPHX around 6:00 p.m. on September 2<sup>nd</sup>, coincide with the time at which maximum wind speeds were recorded at Zuni Hills and Dysart monitors. **Table 12** provides the highest wind speeds, gusts, and weather conditions at NOAA KPHX on September 1-2, as the storm initiated the night of September 1<sup>st</sup>, contributing to PM<sub>10</sub> exceedances occurring early September 2<sup>nd</sup>, 2022.

Additional data from the Luke Airforce Base NOAA Station’s (approximately 23 miles northwest of NOAA KPHX) is provided for the evening of September 1<sup>st</sup>, 2022, to demonstrate the regional wide impact of the multiple storm cells over the Phoenix Area, while focusing on the wind patterns and direction attributing to PM<sub>10</sub> exceedances at the Zuni hills and Dysart monitors in the early morning of September 2<sup>nd</sup>, 2022. Luke Airforce Base NOAA Station is approximately 8 miles southwest of Dysart monitor, and 12 miles southwest of Zuni Hills monitor.

Table 12: NOAA Weather for September 1 <sup>st</sup> and 2 <sup>nd</sup> , 2022						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
<b>NOAA Luke Airforce Base Station Data</b>						
9/1/2022	11:34 P.M.	28	33	-	9	SSE
9/1/2022	11:42 P.M.	24	33	Lt drizzle	3	SE
9/1/2022	11:52 P.M.	21	-	Lt drizzle	2.75	SE
9/1/2022	11:54 P.M.	17	-	Haze	3	SE
9/1/2022	11:56 P.M.	18	-	Haze	2.75	SE
9/2/2022	12:06 A.M.	16	-	Haze	3	ESE
9/2/2022	12:26 A.M.	10	-	-	7	SSE
<b>NOAA KPHX Station Data</b>						
9/1/2022	10:40 P.M.	23*	33*	-	10	SE
9/1/2022	10:45 P.M.	16	22	-	4	SE
9/1/2022	10:51 P.M.	13	23	Haze, Blowing dust	3	SSE

<sup>14</sup> NOAA, *Storm Events Database*, Event Details "1052142," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1052142>.

9/1/2022	11:05 P.M.	16	-	Haze, Blowing dust	2	SE
9/1/2022	11:15 P.M.	18	24	Haze, Blowing dust	4	SE
9/1/2022	11:22 P.M.	13	24	Haze, Blowing dust	5	SSE
9/1/2022	11:25 P.M.	14	20	Haze, Blowing dust	6	SSE
9/1/2022	11:51 P.M.	13	25	-	10	SE
9/2/2022	12:00 A.M.	15	-	-	10	SE
9/2/2022	12:15 A.M.	13	-	-	10	E
9/2/2022	12:25 A.M.	16	-	-	10	E
9/2/2022	12:45 A.M.	14	-	-	10	E
9/2/2022	12:55 A.M.	13	-	-	10	E
9/2/2022	1:00 A.M.	14	20	-	10	ESE
9/2/2022	1:05 A.M.	12	17	-	10	ESE
9/2/2022	1:10 A.M.	14	-	-	10	ESE
9/2/2022	1:15 A.M.	13	18	-	10	ESE
9/2/2022	6:45 P.M.	10	-	-	10	ENE
9/2/2022	6:50 P.M.	20*	-	-	10	ENE
9/2/2022	6:51 P.M.	17	30*	-	10	ENE
9/2/2022	6:55 P.M.	18	-	-	10	NE
9/2/2022	6:58 P.M.	15	-	Thunder	10	ENE
9/2/2022	7:00 P.M.	16	-	-	10	E

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 09/01/2022 - 09/03/2022, Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20220901&end=20220903>,  
NOAA Weather for Phoenix, Luke Airforce Base, AZ on 09/01/2022, Link: <https://www.weather.gov/wrh/timeseries?site=KLUF&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20220901&end=20220903>  
Notes:  
\* Highest windspeed or wind gust recorded for the day  
- no observation recorded

As shown in **Table 12**, high windspeeds recorded at NOAA KPHX coincide with the high windspeeds and peak PM<sub>10</sub> levels recorded at Zuni Hills and Dysart monitors for the early morning of September 2<sup>nd</sup>, 2022, and high windspeeds on the evening of September 2<sup>nd</sup>, 2022. Haze and blowing dust were noted from 10:50 P.M. to 11:30 P.M. on September 1<sup>st</sup>, 2022, which aligns with NOAA Storm Events Report’s description of dust storms occurring around this time throughout the Phoenix Area. On the evening of September 1<sup>st</sup>, 2022, haze and blowing dust was noted at NOAA KPHX with primarily southeasterly winds of speeds greater than 25 mph, from the Casa Grande Area to NOAA KPHX, the Zuni Hills, and Dysart monitors. Wind speeds greater than 25 mph were also recorded at Luke Air Force Base NOAA Station around a similar time, primarily in the southeast direction, demonstrating that areas within closer proximity to the monitors experienced a similar wind direction pattern to that recorded at NOAA KPHX’s during this time.

ADEQ Visibility Camera Historical Archive photos at the South Mountain Camera show a decrease in visibility and dust clouds moving north and northwest towards the Central Phoenix Area around 11:00 P.M., the night of September 1<sup>st</sup>, 2022, which aligns with the NOAA KPHX and Luke Airforce Base NOAA Station weather conditions of blowing dust and haze that were recorded during this time.

From 10:45 P.M. to 11:30 P.M., visibility decreased drastically at NOAA KPHX, coinciding with haze and visible dust being noted in the forecast. Additionally, this blowing dust and peak windspeeds continued into the morning of the 2<sup>nd</sup> and could explain the highest PM<sub>10</sub> levels being recorded at the Zuni Hills and Dysart monitors just after 12:00 A.M. on September 2<sup>nd</sup>, 2022. The highest wind gust speed recorded at NOAA KPHX for September 2<sup>nd</sup>, 2022, was 30 mph at 6:51 P.M. from the east-northeast direction, moving towards the Zuni Hill and Dysart monitors. This was followed by reports of thunder and monsoon conditions that were noted in the NOAA Storm Events Reports throughout the Phoenix Area. This peak wind gusts on the evening of September 2<sup>nd</sup>, 2022, align with the highest windspeeds recorded at the Zuni Hills and Dysart monitors of 12.2 mph at 7:35 P.M., and 17.2 mph at 7:35 P.M., respectively.

It is important to note that windspeeds did not reach levels greater than 25 mph at Zuni Hills and Dysart monitors, but a series of high wind speed and monsoon conditions resulting in dust storm events were noted for this period during September of 2022. As such, Zuni Hills and Dysart monitors PM<sub>10</sub> concentrations increased on the night of September 1<sup>st</sup>, 2022, and exceeded in the morning of September 2<sup>nd</sup>, 2022, as storm conditions moved north and northwest from Central Phoenix towards the monitors.

Based on NOAA Storm Event Reports for both Maricopa County and the Central Phoenix Area, it was demonstrated that the high-pressure excessive heat wave resulted in monsoon-like conditions including high wind, thunder, flashflood, hail, and dust storms. The photographs below show ADEQ’s Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the thunderstorm and monsoon conditions in between the evenings of September 1<sup>st</sup> and September 2<sup>nd</sup>, 2022. Note the first wave of the storm hit the Phoenix Area around 10:00 P.M., September 1<sup>st</sup>, 2022, and moved north and northwest, followed by thunderstorms and high winds the next evening on September 2<sup>nd</sup>, 2022, moving west and southwest.

Camelback Mountain Camera, 10:30 P.M.,  
09/01/2022



Camelback Mountain Camera, 11:15 P.M.,  
09/01/2022



White Tank Mountains Camera, 9:00 P.M.,  
09/01/2022



White Tank Mountains Camera, 11:45 P.M.,  
09/01/2022



South Mountain Camera, 11:00 P.M.,  
09/01/2022



South Mountain Camera, 11:45 P.M.,  
09/01/2022



Estrella Mountains Camera, 10:00 P.M.,  
09/01/2022



Estrella Mountains Camera, 11:30 P.M.,  
09/01/2022



White Tank Mountains Camera, 12:00 A.M.,  
09/02/2022



White Tank Mountains Camera, 5:30 A.M.,  
09/02/2022



South Mountain Camera, 12:15 A.M.,  
09/02/2022



South Mountain Camera, 12:30 A.M.,  
09/02/2022



Estrella Mountains Camera, 12:15 A.M.,  
09/02/2022



Estrella Mountains Camera, 5:45 A.M.,  
09/02/2022



South Mountain Camera, 6:15 A.M.,  
09/02/2022



South Mountain Camera, 5:15 P.M.,  
09/02/2022



Superstition Mountains Camera, 10:30 A.M.,  
09/02/2022



Superstition Mountains Camera, 5:45 P.M.,  
09/02/2022



Camelback Mountain Camera, 12:00 A.M.,  
09/02/2022



Camelback Mountain Camera, 2:00 P.M.,  
09/02/2022



Estrella Mountains Camera, 1:45 P.M.,  
09/02/2022



Estrella Mountains Camera, 5:30 P.M.,  
9/02/2022



Superstition Mountains Camera, 6:30 P.M.,  
09/02/2022



Superstition Mountains Camera, 6:45 P.M.,  
09/02/2022



Camelback Mountain Camera, 6:00 P.M.,  
09/02/2022



Camelback Mountain Camera, 6:30 P.M.,  
09/02/2022



White Tank Mountains Camera, 6:00 P.M.,  
09/02/2022



White Tank Mountains Camera, 7:15 P.M.,  
09/02/2022



October 3<sup>rd</sup>, 2022, Atypical Event

In early October of 2022, a large area of low pressure was stationed over eastern Montana with shortwaves rotating around it over northern Arizona. This provided dynamic support to an already moist environment with numerous showers and thunderstorms. A stronger shortwave moved from the northwest to southcentral portions of Arizona during the afternoon of October 3<sup>rd</sup>, 2022, creating widespread thunderstorms, hail, and high winds which moved from the north south over the Phoenix Area.

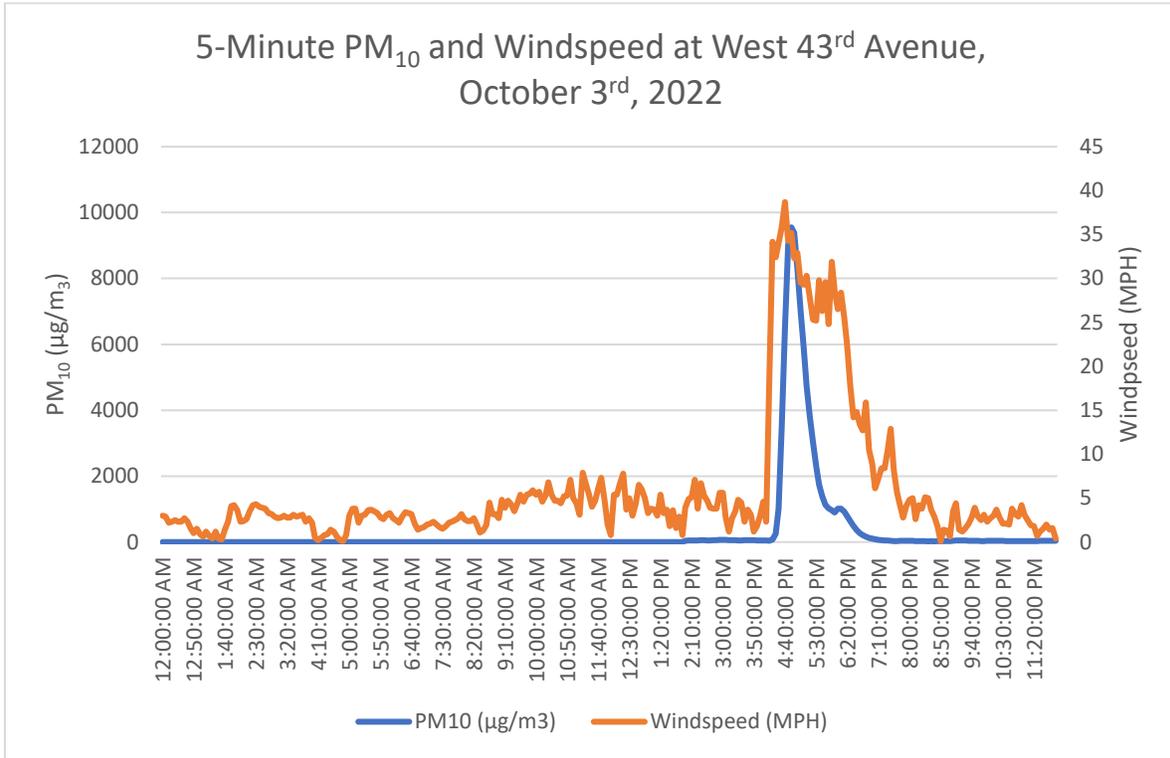
NOAA and NWS weather reports and storm event data for the Phoenix Area list thunderstorms, high winds, and flash flooding in the afternoon hours of October 3<sup>rd</sup>, 2022. Wind gust speeds greater than 50 mph were reported in the Central Phoenix Area, and at NOAA KPHX<sup>15</sup>. High wind speeds and widespread blowing dust throughout the Phoenix Area, windspeeds greater than 25 mph were recorded, and 24-hour average PM<sub>10</sub> NAAQS were exceeded at the West 43<sup>rd</sup> Avenue monitor. Only the West 43<sup>rd</sup> Avenue monitor exceeded 24-hour average PM<sub>10</sub> NAAQS on October 3<sup>rd</sup>, 2022, but Zuni Hills monitor did record windspeeds and wind gust speeds greater than 25 mph coinciding with the max windspeed and wind gusts times recorded at West 43<sup>rd</sup> Avenue monitor. The West 43<sup>rd</sup> Avenue monitor is approximately 21 miles southeast of the Zuni Hills monitor, and 23 miles south of the project site. **Table 13** shows the windspeed and PM<sub>10</sub> data for West 43<sup>rd</sup> Avenue and Zuni Hills monitor on October 3<sup>rd</sup>, 2022.

Table 13: Windspeed and PM <sub>10</sub> Data for October 3 <sup>rd</sup> , 2022						
Site	Date	24-hour average PM <sub>10</sub> (µg/m <sup>3</sup> )	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
West 43 <sup>rd</sup> Avenue	10/3/2022	316.8*	38.7	4:40 P.M.	41.7	4:40 P.M.
Zuni Hills	10/3/2022	116	35.7	3:50 P.M.	36.3	3:50 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, West 43 <sup>rd</sup> Avenue, and Zuni Hills Air Quality Monitoring Station Data for October 3 <sup>rd</sup> , 2022.						
Notes: *Measurement exceeds 24-hour average PM <sub>10</sub> NAAQS.						

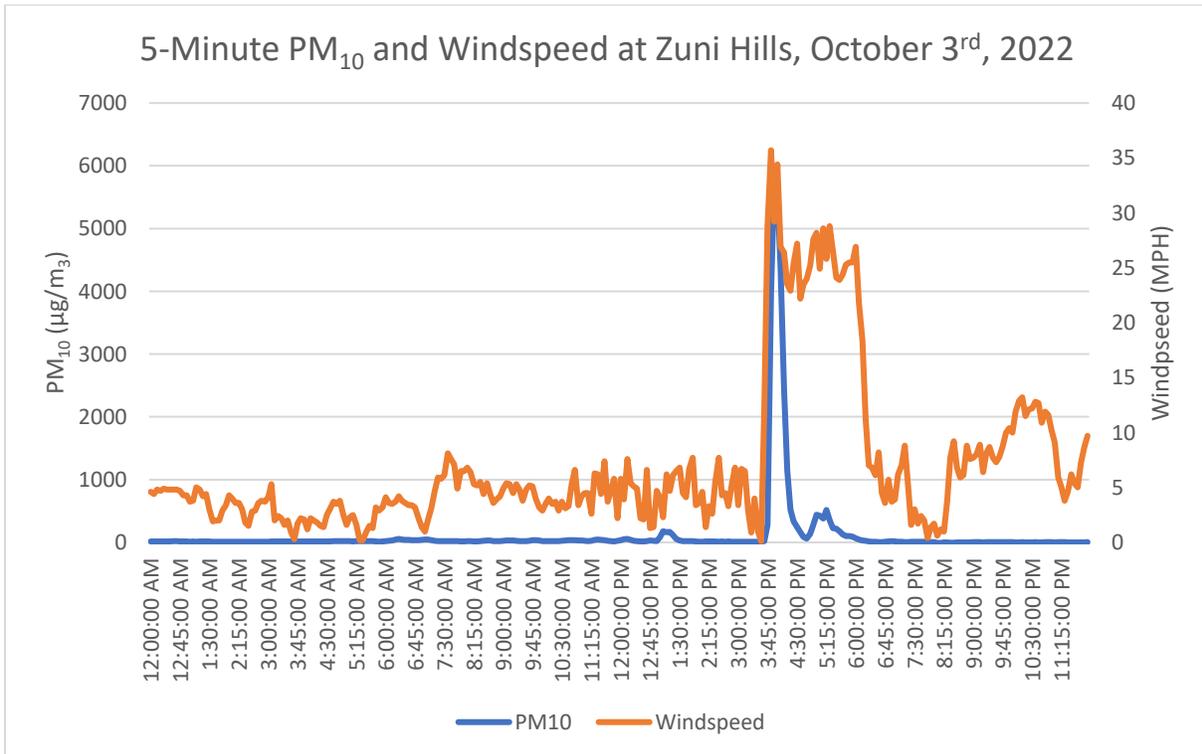
As shown in **Table 13**, the highest windspeed recorded at West 43<sup>rd</sup> Avenue monitor was 38.7 mph at 4:40 P.M., which coincided with the highest PM<sub>10</sub> levels recorded at the monitor for the day, of 9,551.1 µg /m<sup>3</sup> recorded shortly after at 4:50 P.M. Windspeeds at the West 43<sup>rd</sup> Avenue monitor began to increase around 4:15 P.M., reaching greater than 25 mph at 4:20 P.M. and continued to increase to a maximum of 38.7 mph at 4:40 P.M., and remained greater than 25 mph until 6:15 P.M. The highest windspeed recorded at Zuni Hills monitor was 35.7 mph at 3:50 P.M., which coincides with the highest PM<sub>10</sub> levels recorded at the monitor for the day, of 5,722.1 µg /m<sup>3</sup> at 3:55 P.M. Windspeeds began to increase at Zuni Hills monitor around 3:40 P.M., reaching greater than 25 mph at 3:45 P.M. and to a max of 35.7 mph at 3:50 P.M. and continued to remain higher than 20 mph until 6:05 P.M. **Figure 15** and **16** shows the increase in windspeed and coinciding 5-minute PM<sub>10</sub> increase at West 43<sup>rd</sup> Avenue and Zuni Hills monitors on October 3<sup>rd</sup>, 2022.

<sup>15</sup>NOAA, *Storm Events Database*, Event Details "1059584," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1059584>.

**Figure 15:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at West 43<sup>rd</sup> Avenue monitor on October 3<sup>rd</sup>, 2022.



**Figure 16:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Zuni Hills monitor on October 3<sup>rd</sup>, 2022.



As shown in **Figures 15** and **16**, both West 43<sup>rd</sup> Avenue and Zuni Hills monitors recorded similar increasing trends in windspeed to greater than 25 mph. This trend coincided with the monitors PM<sub>10</sub> increasing to its daily maximum concentration on the afternoon of October 3<sup>rd</sup>, 2022.

Based on PM<sub>10</sub> wind roses for the West 43<sup>rd</sup> Avenue monitor, and wind direction recorded at NOAA KPHX, the primary direction of the high winds recorded with PM<sub>10</sub> concentrations greater than 1,000 µg/m<sup>3</sup> was north and northeast. Zuni Hills monitor is approximately 21 northwest of the West 43<sup>rd</sup> Avenue monitor and could have sent an influx of blowing dust south and southwest to the West 43<sup>rd</sup> Avenue monitor area during the thunderstorms on October 3<sup>rd</sup>, 2022.

The thunderstorm conditions moved relatively quickly throughout the Phoenix Area, and high wind and dust storm conditions ended at West 43<sup>rd</sup> Avenue and Zuni Hills monitor around 6:15 P.M. Although the storm event causing PM<sub>10</sub> exceedances at the Zuni Hills and West 43<sup>rd</sup> monitors was brief, the intensity of the dust storm raised PM<sub>10</sub> concentrations drastically, resulting in West 43<sup>rd</sup> Avenue monitor exceeding the 24-hour average PM<sub>10</sub> NAAQS with a level of 316.8 µg/m<sup>3</sup>, nearly twice the allowable limit.

Data from NOAA KPHX also displays this increase in windspeed and blowing dust conditions around the same time that the NOAA Storm Events Reports denotes dust storm advisories and West 43<sup>rd</sup> Avenue and Zuni Hills monitors recorded their highest wind speeds. **Table 14** presents the highest wind speeds, wind gusts, and corresponding weather conditions recorded at NOAA KPHX on October 3<sup>rd</sup>, 2022.

Table 14: NOAA KPHX Weather for October 3 <sup>rd</sup> , 2022						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
10/3/2022	4:20 P.M.	33	44	-	7	NNW
10/3/2022	4:22 P.M.	31	45	Blowing Dust	2.5	NNW
10/3/2022	4:25 P.M.	36	-	Blowing Dust	2.5	N
10/3/2022	4:28 P.M.	31	46	Blowing Dust	3	N
10/3/2022	4:30 P.M.	32	41	Blowing Dust	5	N
10/3/2022	4:35 P.M.	37	43	-	7	NNW
10/3/2022	4:37 P.M.	36	53	Haze	6	NNW
10/3/2022	4:40 P.M.	40*	51	Haze	5	N
10/3/2022	4:45 P.M.	39	49	Blowing Dust	5	N
10/3/2022	4:50 P.M.	35	47	Blowing Dust	7	N
10/3/2022	4:51 P.M.	33	58*	Blowing Dust	6	N
10/3/2022	4:55 P.M.	35	48	-	9	N
10/3/2022	5:00 P.M.	37	46	-	10	N

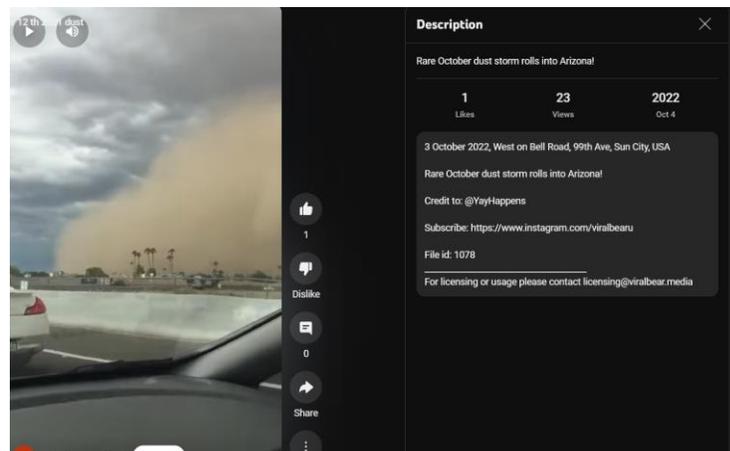
Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 10/03/2022. Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20221002&end=20221004>

Notes:  
 \* Highest windspeed or wind gust recorded for the day  
 - no observation recorded

As shown in **Table 14**, high windspeeds recorded at NOAA KPHX coincide with the high windspeeds and peak PM<sub>10</sub> levels recorded at the West 43<sup>rd</sup> Avenue and Zuni Hills monitor for the afternoon of October 3<sup>rd</sup>, 2022. Haze and blowing dust were noted from 4:22 P.M. to 4:50 P.M. on October 2<sup>nd</sup>, 2022, which

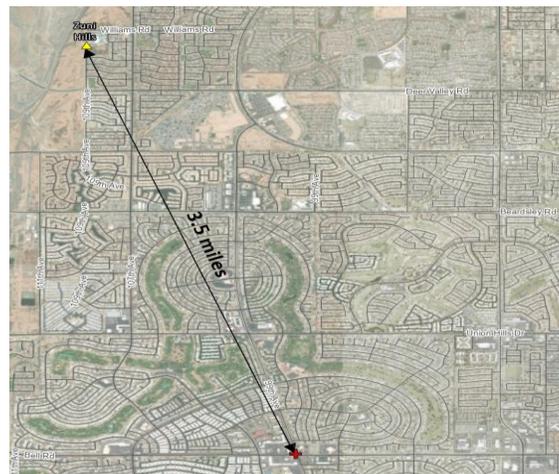
aligns with NOAA Storm Event Report describing dust storms occurring throughout the Phoenix Area. Per the Zuni Hills and West 43<sup>rd</sup> Avenue monitor wind rose and NOAA KPHX wind direction, the storm moved north and northwest to south and southwest as it progressed. Zuni Hills monitor experienced high wind speeds and blowing dust conditions prior to NOAA KPHX and West 43<sup>rd</sup> Avenue monitor, which are further south. As the storm progressed south towards NOAA KPHX, visibility decreased drastically, coinciding with haze and visible dust being noted in its forecast. Additionally, the blowing dust, highest wind gust speeds of 58 mph and windspeed of 40 mph recorded at NOAA KPHX coincided with the highest PM<sub>10</sub> concentrations recorded at the West 43<sup>rd</sup> Avenue monitor, approximately 7 miles southwest of NOAA KPHX, around 4:50 P.M. on October 3<sup>rd</sup>, 2022. The photograph below shows snapshots of a video recording taken on October 3<sup>rd</sup>, 2022, of a cloud of blowing dust in Sun City, approximately 3.5 miles southeast of Zuni Hills monitor.

**Photograph:** Social media video of dust storm conditions at Bell Road and 99<sup>th</sup> Avenue, in Sun City, Arizona on October 3<sup>rd</sup>, 2022.<sup>16</sup>



As shown in the photograph above, there was visual indication of blowing dust in the immediate vicinity of Zuni Hills monitor on October 3<sup>rd</sup>, 2022. **Figure 17** below shows the distance between the location where the photograph was taken and Zuni Hills monitor.

**Figure 17.** Distance between Zuni Hills monitor dust cloud from photograph taken on October 3<sup>rd</sup>, 2022, in Sun City, Arizona.



<sup>16</sup> <https://youtube.com/shorts/bulSdcQVFYA?si=xXpOjX0uVnyJN6I8>

The photographs below show ADEQ’s Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm and thunderstorm conditions on the afternoon of October 3<sup>rd</sup>, 2022. Note the dust storm conditions and dust clouds were documented to hit the Phoenix Area around 4:00 P.M., as shown in NOAA KPHX and MCAQD monitoring data.

South Mountain Camera, 3:15 P.M.



South Mountain Camera, 4:00 P.M.



Camelback Mountain Camera, 4:00 P.M.



Camelback Mountain Camera, 4:15 P.M.



White Tank Mountains Camera, 4:00 P.M.



White Tank Mountains Camera, 4:15 P.M.



Superstition Mountains Camera, 4:00 P.M.



Superstition Mountains Camera, 5:00 P.M.



Estrella Mountains Camera, 3:45 P.M.



Estrella Mountains Camera, 4:15 P.M.



### July 21<sup>st</sup>, 2023, Atypical Event

Per NOAA Storm Event Reports, thunderstorm activities and severe winds were noted Southeastern Arizona on this day because of monsoon like conditions moving west across Southern Arizona during the afternoon of July 21<sup>st</sup>, 2023<sup>17</sup>. As the monsoon conditions winds moved further west and northwest towards the Phoenix Area, thunderstorms hit the Phoenix Area on the evening of July 21<sup>st</sup>, 2023, resulting in high winds and blowing dust throughout the region. In addition, the Chimney Fire began on July 19<sup>th</sup>, 2023, burning over 1,600 acres on the far east side of the Santa Catalina Mountains in Northeast Pima County (approximately 110 miles southeast of Phoenix), resulting in smoke and hazy conditions covering much of southeastern Arizona<sup>18</sup>.

Winds driven by the summer monsoon conditions that brought strong winds to southern Phoenix carried smoke and particulate matter from the Chimney Fire westward toward the Phoenix Area during July 19 – 23, 2023. According to discussions with Rone Pope, an Atmospheric Scientist with ADEQ’s Air Quality Department on February 13<sup>th</sup>, 2025, ADEQ monitoring data from July 20<sup>th</sup>, 2023, indicates haboob conditions across Phoenix demonstrating periodic spikes in wind gust speeds that coincide with increased PM<sub>10</sub> concentrations recorded at MCAQD monitors. For more details on this data, please refer to **Appendix D**.

Nearly all MCAQD monitors recorded elevated wind gusts speeds between 5:00 PM and 10:00 PM on July 20<sup>th</sup>. Zuni Hills monitor experienced wind gust speeds up to 22 mph, while Central Phoenix (near NOAA KPHX) recorded wind gust speeds up to 24 mph, consistent with other countywide weather data (**Appendix D**). These elevated winds, driven by monsoon thunderstorms, lifted dust and particulate matter dispersing it throughout the Phoenix Area. This dispersion, in combination with the smoke particulate matter from the Chimney Fire, resulted in decreased visibility and haze settling over the Phoenix Area during the early morning of July 21<sup>st</sup>, 2023. NOAA KPHX station data recorded reduced visibility that morning, along with increases in PM<sub>10</sub> concentrations being recorded at both Zuni Hills and West 43<sup>rd</sup> Avenue monitors. Please refer to **Table 16** and the figures at the end of this section for more details.

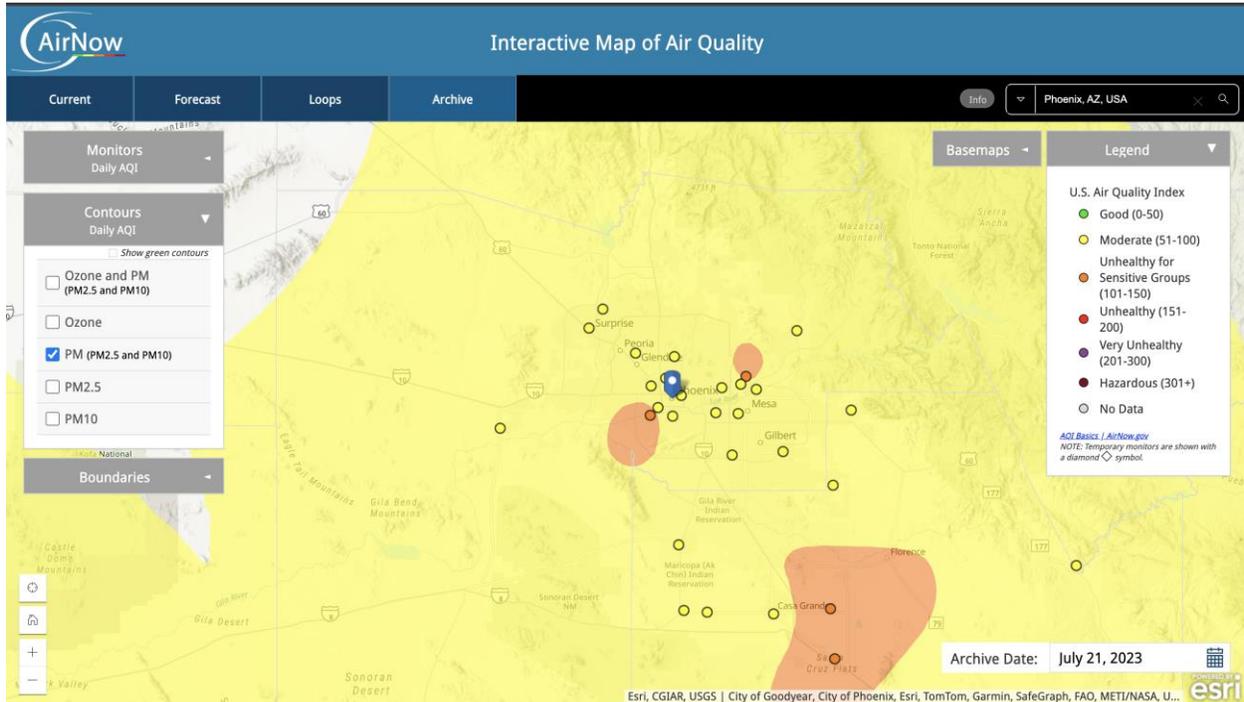
Additional high winds from summer monsoon-related thunderstorms, with speeds exceeding 25 mph, moved northeast from southern Arizona between the late evening of the 20<sup>th</sup> and the early morning of the 21<sup>st</sup>. According to MesoWest Surface Weather Maps, weather data from OTMA3—a Remote Automatic Weather Station operated by the National Interagency Fire Center, located approximately 65 miles southwest of the Zuni Hills monitor—recorded wind speeds above 25 mph between 3:00 A.M. and 4:00 A.M., blowing northeast toward the Phoenix Area and the Zuni Hills monitor. The northeasterly wind direction and elevated speeds correspond with the observed increase in high wind activity, visible haze from Chimney Fire smoke, and blowing dust from thunderstorm activity impacting the Phoenix Area, as documented in weather data around Phoenix between 5:00 A.M. and 6:00 A.M. on the 21<sup>st</sup>.

According to NOAA KPHX data and ADEQ’s Visibility Camera Historical Archive photos, decreased visibility and haze were observed throughout the Phoenix Area beginning in the early morning of July 21<sup>st</sup>, 2023. Photographs from the South Mountain and Estrella Mountains Cameras show visible haze in the atmosphere, particularly in views looking southwest from North Mountain towards Central Phoenix and NOAA KPHX around 6:45 A.M. Following the onset of this haze, Air Quality Index (AQI) values in the Phoenix Area on July 21<sup>st</sup>, 2023, ranged from moderate to unhealthy for sensitive groups.

<sup>17</sup>NOAA, *Storm Events Database*, Event Details "1121576," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1121576>.

<sup>18</sup> NOAA, *Storm Events Database*, Event Details "1125390", <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1125390>

Per the U.S. EPA’s AirNow Interactive Map of Air Quality dashboard<sup>19</sup>, the Zuni Hills monitor reported an AQI of 86 for ozone and particulate matter, while the West Chandler monitor reported an AQI of 94 on July 21<sup>st</sup>, 2023. The image below displays particulate matter levels and AQI values across the Phoenix area for that day. Areas shown in yellow indicate moderate AQI values, while areas in orange represent values categorized as unhealthy for sensitive groups. The West 43<sup>rd</sup> Avenue monitor was located within a region classified as unhealthy for sensitive groups on July 21<sup>st</sup>, 2023.



Windspeeds periodically increased throughout the day, as the thunderstorms moved into the Phoenix Area. Wind gust speeds up to 28 mph were recorded at NOAA KPHX station at 6:50 A.M., up to 24 mph at 4:00 P.M., and up to 26 mph at 7:30 P.M. resulting in decreased visibility from blowing dust in the Phoenix Area. These gusts contributed to decreased visibility due to blowing dust across the region. This blowing dust may have been residual from the morning haze that settled over the Phoenix Area, during which PM<sub>10</sub> concentrations spiked at both the Zuni Hills and West 43<sup>rd</sup> Avenue monitors. This increase in particulate matter is attributed to smoke and dust transported from the Chimney Fire in northeastern Pima County. Additionally, the previous day's monsoon conditions, which brought high wind speeds and blown dust, likely contributed to the dispersion of these particulates across the region on July 20<sup>th</sup>, 2023, and the early morning of July 21<sup>st</sup>, 2023. As the day progressed into the evening, these thunderstorm conditions focused over the Phoenix Area and multiple peaks in PM<sub>10</sub> concentrations were recorded at Zuni Hills and West 43<sup>rd</sup> Avenue monitors.

Due to the thunderstorm conditions moving north into the Phoenix Area, windspeeds over 25 mph were recorded at NOAA KPHX, 24-hour average PM<sub>10</sub> NAAQS exceedances were recorded at West 43<sup>rd</sup> Avenue monitor, and elevated concentrations of PM<sub>10</sub> were recorded at Zuni Hills monitor on the evening of the 21<sup>st</sup>. Although the Zuni Hills monitor did not exceed 24-hour average PM<sub>10</sub> NAAQS on July 21<sup>st</sup>, 2023, elevated concentrations of PM<sub>10</sub> were identified at the monitor on this date, which occurred prior to the

<sup>19</sup>U.S. EPA, *Air Now*, *Air Quality Archive Data*, accessed December 18, 2024, <https://gispub.epa.gov/airnow/?archivedates=07%2F21%2F2023&monitors=pm10&boundaries=county&contours=pm&showlegend=no&tab=archive&xmin=-13334403.77352085&xmax=-11573294.641830858&ymin=3530985.6275526467&ymax=4360174.510390018>.

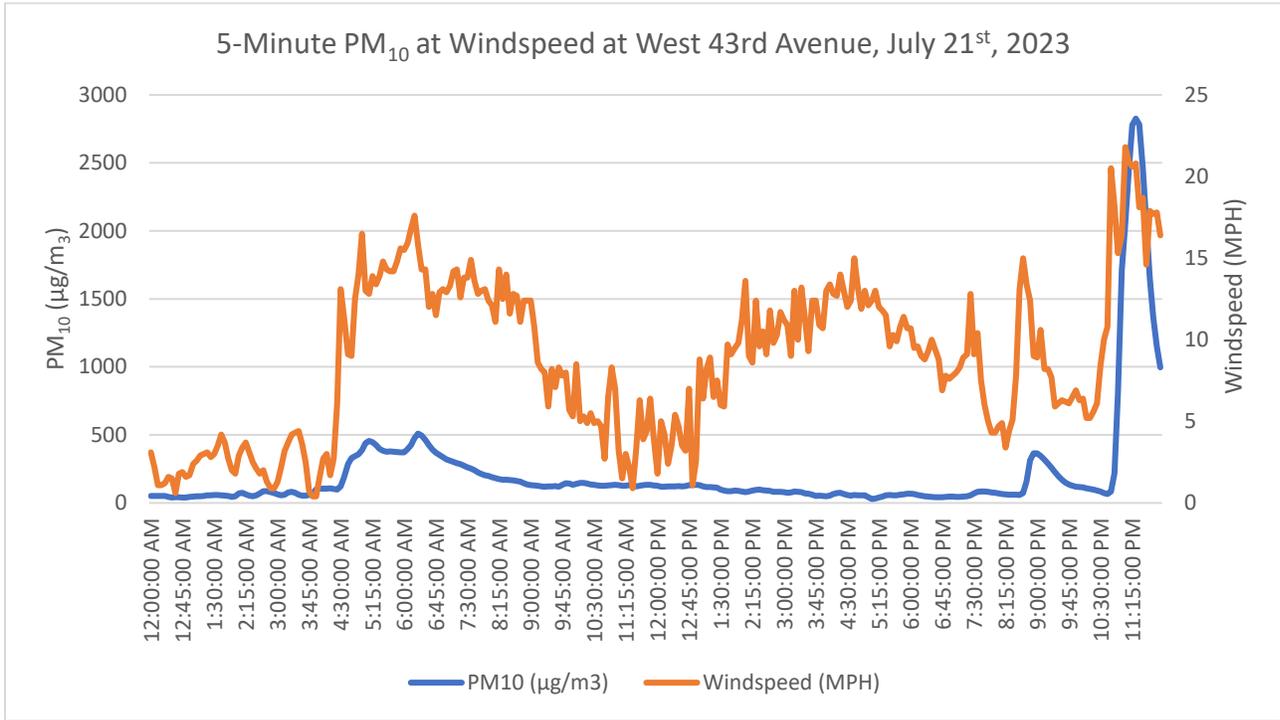
NAAQS PM<sub>10</sub> exceedances at West 43<sup>rd</sup> Avenue and align with blowing dust conditions and high windspeeds noted at the NOAA KPHX and West 43<sup>rd</sup> Avenue monitor.

**Table 15** shows the windspeed levels and highest PM<sub>10</sub> concentrations recorded for July 21<sup>st</sup>, 2023, at West 43<sup>rd</sup> Avenue and Zuni Hills monitor.

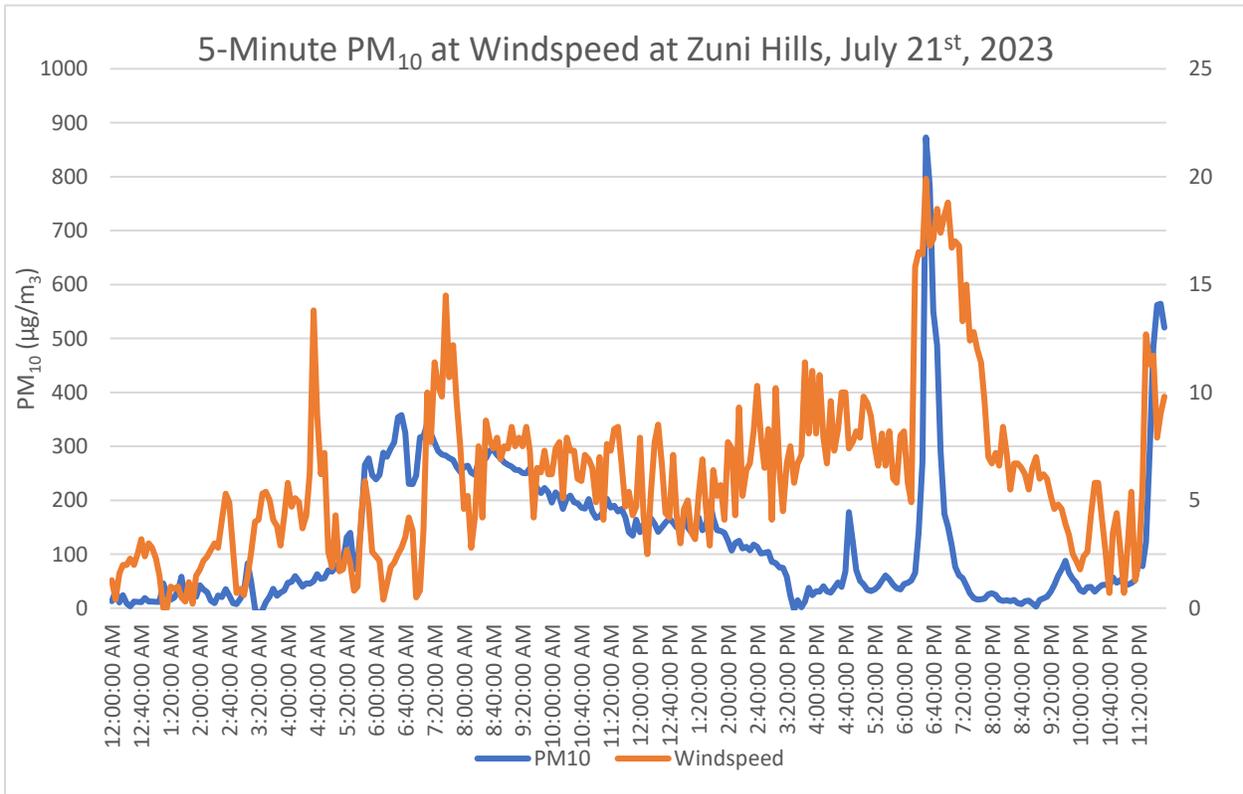
Table 15: Windspeed and PM <sub>10</sub> Data for July 21 <sup>st</sup> , 2023						
Site	Date	24-hour average PM <sub>10</sub> (µg/m <sup>3</sup> )	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
West 43 <sup>rd</sup> Avenue	7/21/2023	216.9*	21.8	11:05 P.M.	22.3	11:05 P.M.
Zuni Hills	7/21/2023	125	19.9	6:30 P.M.	20.2	6:30 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, West 43 <sup>rd</sup> Avenue and Zuni Hills Air Quality Monitoring Station Data for July 21 <sup>st</sup> , 2023.						
Notes: *Measurement exceeds PM <sub>10</sub> NAAQS.						

As shown in **Table 15**, on July 21<sup>st</sup>, 2023, 24-hour average PM<sub>10</sub> NAAQS exceeded in the late evening and windspeeds of over 20 mph were recorded at West 43<sup>rd</sup> Avenue monitor. As windspeeds increased the night of the 21<sup>st</sup>, PM<sub>10</sub> concentrations rose as well, resulting in the highest level of PM<sub>10</sub> recorded at 11:20 P.M. of 2,825.8 µg/m<sup>3</sup>. Earlier in the evening, Zuni Hills monitor recorded a max windspeed of 19.9 mph and wind gust of 20.2 mph at 6:30 P.M. This max wind speed and wind gust speed coincide with the highest PM<sub>10</sub> concentration recorded of 872.8 µg/m<sup>3</sup> **Figures 21** and **22** below shows the corresponding increase in 5-minute PM<sub>10</sub> concentrations and in windspeeds recorded on July 21<sup>st</sup>, 2023, at West 43<sup>rd</sup> Avenue and Zuni Hills monitor.

**Figure 21:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at West 43<sup>rd</sup> Avenue monitor on July 21<sup>st</sup>, 2023.



**Figure 22:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Zuni Hills monitor on July 21<sup>st</sup>, 2023.

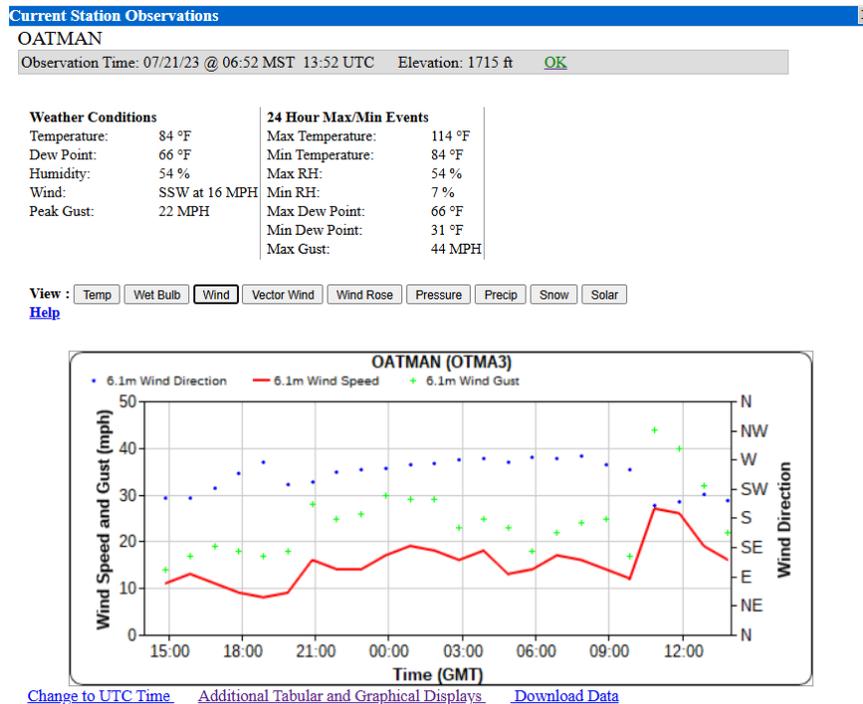


As shown in **Figure 21**, as windspeeds peaked to their highest at 11:05 P.M. on the night of July 21<sup>st</sup>, 2023, at the West 43<sup>rd</sup> Avenue monitor, PM<sub>10</sub> concentrations increased well over the NAAQS threshold, resulting in a 24-hour average PM<sub>10</sub> concentration exceedance. The peaks in windspeed throughout the day noted at Zuni Hills monitor follow these peaks recorded in PM<sub>10</sub> concentration as well, as shown in **Figure 22**.

Although windspeeds did not exceed 25 mph at either monitor, windspeeds over 25 mph were recorded at NOAA KPHX around the same time, coinciding with thunderstorm conditions impacting the Phoenix Area. Additionally, the smaller peaks in windspeed and PM<sub>10</sub> concentrations recorded at the Zuni Hills and West 43<sup>rd</sup> Avenue monitors between 6:00 and 7:30 A.M., and 3:30 P.M. coincide with increases in windspeeds at NOAA KPHX <sup>20</sup> as shown in **Figure 22**.

The early morning spikes in PM<sub>10</sub> concentration at Zuni Hills monitor could be attributed to the monsoon conditions northeasterly blowing winds impacting southern Arizona on July 20<sup>th</sup> and July 21<sup>st</sup>, 2023. As noted at the OTMA3 Weather Station in Gila Bend, approximately 65 miles southwest of Zuni Hills monitor, recorded blowing winds of up to 25 mph between 3:00 - 4:00 A.M. on the morning of the 21<sup>st</sup>. These winds blew north and northeast towards the Phoenix Area between 5:00 A.M. and 6:00 A.M., as noted in NOAA KPHX and Zuni Hills monitor data. **Figure 23** below shows the windspeed trends and direction recorded at OTMA3 weather station between July 20<sup>th</sup> and 21<sup>st</sup>, 2023.

**Figure 23:** Weather Observations at OTMA3 weather station on July 20<sup>th</sup> – 21<sup>st</sup>, 2023.



The north and northeastern blowing winds on the early morning of July 21<sup>st</sup> lofted dust and upon reaching the Phoenix Area, in combination with smoke from the Chimney Fire, contributed to the development of widespread haze. This combination of transported dust and wildfire smoke resulted in reduced visibility, as noted in NOAA KPHX data at 6:00 A.M. Correspondingly, PM<sub>10</sub> concentrations began to rise and peak around 4:30 A.M. at both the Zuni Hills and West 43<sup>rd</sup> Avenue monitors, as dust and smoke particulate

<sup>20</sup> MesoWest, *Surface Weather Maps, Arizona Region - OATMAN3 Station, "7/21/23 Windspeed Station Observations"*, <https://mesowest.utah.edu/cgi-bin/droman/mesomap.cgi?state=AZ&rawsflag=3>

matter was carried by the northeastern blowing winds. **Table 16** shows the time where the highest wind speeds, wind gusts, and their corresponding weather conditions were recorded at NOAA KPHX on July 21<sup>st</sup>, 2023.

Table 16: NOAA KPHX Weather for July 21 <sup>st</sup> , 2023						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
7/21/2023	6:51 A.M.	17	28	-	10	NW
7/21/2023	6:55 A.M.	18	25	Haze	6	NW
7/21/2023	7:00 A.M.	20	20	Haze	6	WNW
7/21/2023	7:20 A.M.	18	28	-	10	NW
7/21/2023	3:51 P.M.	16	21	-	10	WNW
7/21/2023	4:30 P.M.	18	24	-	10	WNW
7/21/2023	5:35 P.M.	14	20	-	10	W
7/21/2023	7:25 P.M.	15	25	-	10	NNW
7/21/2023	7:25 P.M.	13	26	-	10	NNW
7/21/2023	8:25 P.M.	25	-	-	9	NNE
7/21/2023	8:35 P.M.	21	-	-	7	ENE
7/21/2023	10:45 P.M.	25	36	Haze	5	SSE
7/21/2023	10:50 P.M.	23	33	Blowing dust	3	SSE
7/21/2023	10:51 P.M.	26	45	Blowing dust	3	SSE
7/21/2023	10:55 P.M.	35*	44	Blowing dust	3	S
7/21/2023	11:00 P.M.	32	43	Blowing dust	4	S
7/21/2023	11:05 P.M.	32	46*	Haze	4	S
7/21/2023	11:10 P.M.	24	32	Haze	4	S
7/21/2023	11:15 P.M.	28	38	Haze	5	S
7/21/2023	11:20 P.M.	18	24	Haze	6	S
7/21/2023	11:25 P.M.	26	33	-	7	S
7/21/2023	11:30 P.M.	30	-	-	7	S
7/21/2023	11:35 P.M.	23	31	-	7	S
7/21/2023	11:40 P.M.	24	32	-	7	SSW
7/21/2023	11:45 P.M.	18	25	-	8	S
7/21/2023	11:50 P.M.	21	-	-	10	S
7/21/2023	11:51 P.M.	20	30	-	10	SSW

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 07/21/2023 Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20230720&end=20230722>

Notes: \* Highest windspeed or wind gust recorded for the day  
 - no observation recorded

As shown in **Table 16**, NOAA KPHX noted haze, blowing dust, and high windspeeds with wind gusts speeds over 25 mph throughout the day on July 21<sup>st</sup>, 2023. The peaks in PM<sub>10</sub> concentration at 6:35 A.M. of 358.1 µg/m<sup>3</sup> at Zuni Hills monitor and 495.2 µg/m<sup>3</sup> at West 43<sup>rd</sup> Avenue monitor both follow recorded peaks in 5-minute windspeed at these locations and coincide with the wind gust speeds over 24 mph and lowered visibility recorded at NOAA KPHX during this time.

Based on the wind direction recorded during this time, winds were moving from the southeast and east to Central Phoenix and the NOAA KPHX station, towards Zuni Hills and West 43<sup>rd</sup> Avenue. Given the storm conditions developing over southeastern Arizona and moving west and northwest towards the Phoenix area, wind gusts and elevated wind speeds could have pushed concentrations of PM<sub>10</sub> in the direction of the monitors and NOAA KPHX, creating concentrated pockets of haze and particulate matter that moved from the southeast into the Phoenix area as the storm advanced northwest. This is evident in the slight peaks in PM<sub>10</sub> observed at monitors around 6:45 A.M., as well as in the EPA AQI air data, which shows an AQI greater than 100 southwest of the Phoenix area in Casa Grande for July 21<sup>st</sup>, 2023.

Similarly, the afternoon PM<sub>10</sub> concentration peaks of 178.1 µg/m<sup>3</sup> at 4:45 P.M. at Zuni Hills monitor that followed a gradual increase in 5-minute windspeeds directed east towards NOAA KPHX, align with NOAA KPHX's gradual increase in windspeeds of up to 24 mph at 4:51 P.M. By midafternoon, wind continued to flow east and southeast over Zuni Hills and West 43<sup>rd</sup> Avenue monitor until approximately 7:00 P.M. towards NOAA KPHX and Central Phoenix. As the thunderstorm conditions carried blowing dust east across the Phoenix Area towards Zuni Hills monitor, PM<sub>10</sub> concentrations continued to rise, until the highest concentration of PM<sub>10</sub> recorded at Zuni Hills of 872.8 µg/m<sup>3</sup> at 6:30 P.M. This peak concentration also aligns with the highest windspeed recorded at Zuni Hills monitor for July 21<sup>st</sup>, 2023, of 20 mph.

The West 43<sup>rd</sup> Avenue monitor did not record any peaks in PM<sub>10</sub> concentrations again until 9:00 P.M., shortly after decreased visibility and wind speeds of up to 25 mph were recorded at NOAA KPHX. As winds moved east and northeast towards NOAA KPHX from West 43<sup>rd</sup> Avenue, beginning around 7:15 P.M., they pushed up dust and haze into the atmosphere, increasing PM<sub>10</sub> concentrations to 249 µg/m<sup>3</sup> at 9:00 P.M. at the West 43<sup>rd</sup> Avenue monitor, which then flowed east towards NOAA KPHX.

The change in wind direction from primarily west and northwest to south and southwest later in the day (after 7:00 P.M., per NOAA KPHX), may account for the difference in times that the West 43<sup>rd</sup> and Zuni Hills monitors recorded their highest PM<sub>10</sub> concentrations on July 21<sup>st</sup>, 2023. With the change in wind directions flowing east and then north towards Central Phoenix, to north and northwest areas of Central Phoenix experienced higher PM<sub>10</sub> concentrations later in the day, and when thunderstorm conditions pushed winds north and northwest later in the evening resulted in the previously higher concentration area's pushing their dust back towards NOAA KPHX, towards West 43<sup>rd</sup> Avenue and Zuni Hills monitor. As such, West 43<sup>rd</sup> Avenue recorded its highest PM<sub>10</sub> concentration of 2,825.8 µg/m<sup>3</sup> at 11:25 P.M.

The highest windspeed recorded at NOAA KPHX was 35 mph at 10:55 P.M., with blowing dust and a decreased visibility of 3 miles. The highest wind gust was recorded at 11:05 P.M., of 46 mph. The high windspeeds and wind gusts decreased visibility, and noted blowing dust at NOAA KPHX corresponds to similar conditions noted at West 43<sup>rd</sup> Avenue monitor on the night of July 21<sup>st</sup>, 2023. Low visibility due to blowing dust and haze in the atmosphere from thunderstorm activity around the time of the highest PM<sub>10</sub> concentration noted at West 43<sup>rd</sup> Avenue and resulted in 24-hour average PM<sub>10</sub> concentrations to be exceeded on July 21<sup>st</sup>, 2023.

The photographs below show ADEQ's Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm and thunderstorm conditions on the evening of July 21<sup>st</sup>, 2023. Note that haze conditions were recorded around 6:00 A.M. at NOAA KPHX, resulting in reduced visibility. Haze was then followed by thunderstorm weather conditions such as high winds and associated dust accumulation in the early afternoon to early evening, and blowing dust was recorded the evening of July 21<sup>st</sup> as well, following the southwesterly high winds due to the day's thunderstorm conditions.

South Mountain Camera, 6:15 A.M.

South Mountain Camera, 6:45 A.M.



Camelback Mountain Camera, 7:00 A.M.



Camelback Mountain Camera, 11:00 P.M.



Camelback Mountain Camera, 7:00 P.M.



Camelback Mountain Camera, 8:45 P.M.



Superstition Mountains Camera, 9:00 P.M.



Superstition Mountains Camera, 11:00 P.M.



Superstition Mountains Camera, 3:00 P.M.



Superstition Mountains Camera, 7:45 P.M.



Estrella Mountains Camera, 5:45 A.M.



Estrella Mountains Camera, 10:30 P.M.



White Tank Mountains Camera, 6:45 A.M.



White Tank Mountains Camera, 6:45 P.M.



*Note: There are no images available in the archive for South Mountain camera after 12:45 P.M., for Estrella Mountains camera after 10:30 P.M. on July 21, 2023*

July 26<sup>th</sup>, 2023, Atypical Event

A subtropical high-pressure system situated across New Mexico created a southeasterly wind flow in Arizona resulting in thunderstorm activity developing across Southeastern Arizona on the afternoon of July 26<sup>th</sup>, 2023<sup>21</sup>. Per a NOAA Storm Event webpage for Mesa and Maricopa County on July 26<sup>th</sup>, 2023, these thunderstorms created strong downburst of winds and were responsible for dense blowing dust conditions noted across Pinal and Maricopa Counties and affected portions of the Phoenix Area. Thunderstorms, high wind, and dust storms were noted in 36 NOAA Storm Events weather reports in southeastern Arizona counties between July 26<sup>th</sup> and July 27<sup>th</sup>, 2023<sup>22</sup>. In addition to these reports noting dust storm conditions, an exceedance in the 24-hour average PM<sub>10</sub> NAAQS was recorded at the Higley monitor, and wind and wind gust speeds exceeding 25 mph were recorded at both the Zuni Hills and Higley monitors on July 26<sup>th</sup>, 2023. Although Zuni Hills did not record an exceedance in 24-hour average PM<sub>10</sub> NAAQS, its PM<sub>10</sub> concentrations still rose to higher-than-normal levels, coinciding with windspeeds over 25 mph and thunderstorm activity in the Phoenix Area.

Data from the NOAA KPHX also recorded these thunderstorms and resulting high wind speeds and blowing dust conditions. **Table 17** lists the 24-hour average PM<sub>10</sub> concentrations, and highest windspeeds and wind gust speeds recorded at the Higley and Zuni Hills monitor on July 26<sup>th</sup>, 2023.

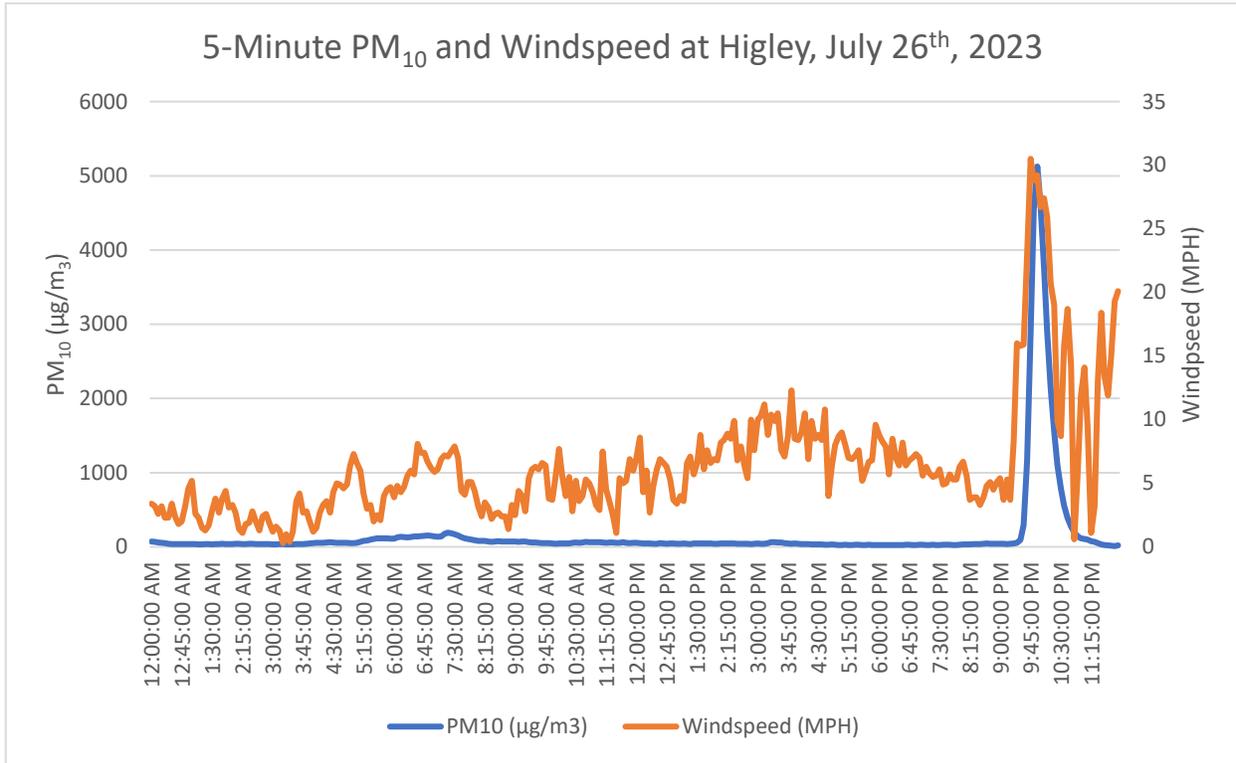
<b>Table 17: Windspeed and PM<sub>10</sub> Data for July 26<sup>th</sup>, 2023</b>						
Site	Date	24-hour average PM <sub>10</sub> (µg/m <sup>3</sup> )	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Higley	7/26/2023	165.3*	30.5	9:45 P.M.	31.1	9:45 P.M.
Zuni Hills	7/26/2023	120	32.4	10:50 P.M.	32.9	10:50 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, Higley and Zuni Hills Air Quality Monitoring Station Data for July 26 <sup>th</sup> , 2023.						
Notes: *Measurement exceeds PM <sub>10</sub> NAAQS.						

As shown in **Table 17**, on July 26<sup>th</sup>, 2023, the highest wind speed of 30.5 mph and wind gust of 31.1 were recorded at 9:45 P.M. at Higley monitor, and 32.4 mph windspeed and 32.9 mph wind gust at 9:45 P.M. Zuni Hills monitor. As windspeeds increased the night of July 26<sup>th</sup>, 2023, PM<sub>10</sub> concentrations rose as well, resulting in the highest level of PM<sub>10</sub> recorded at 9:45 P.M. of 5,125 µg/m<sup>3</sup> at Higley monitor, and 5,704 µg/m<sup>3</sup> at 10:55 P.M. at Zuni Hills monitor. **Figure 24** and **25** below shows the corresponding increase in 5-minute PM<sub>10</sub> with the increase in windspeeds to greater than 25 mph on the evening of July 26<sup>th</sup>, 2023, at Higley and Zuni Hills monitors.

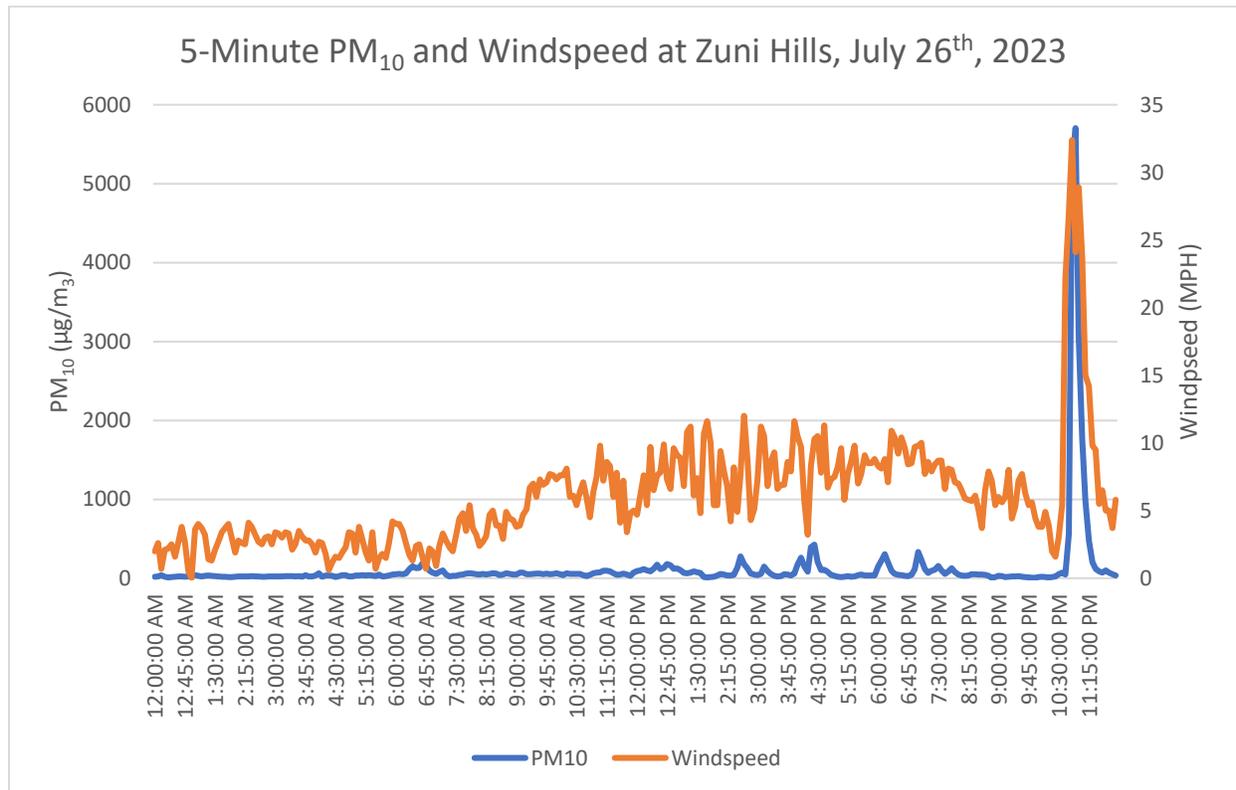
<sup>21</sup> NOAA, *Storm Events Database*, Event Details "1121093," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1121093>.

<sup>22</sup> NOAA, *Storm Events Database*, "Events in Arizona from July 26–27, 2023," [https://www.ncdc.noaa.gov/stormevents/listevents.jsp?eventType=ALL&beginDate\\_mm=07&beginDate\\_dd=26&beginDate\\_yy=2023&endDate\\_mm=07&endDate\\_dd=27&endDate\\_yyyy=2023&county=ALL&hailfilter=0.00&tornfilter=0&windfilter=000&sort=DT&submitbutton=Search&statefips=4%2CARIZONA](https://www.ncdc.noaa.gov/stormevents/listevents.jsp?eventType=ALL&beginDate_mm=07&beginDate_dd=26&beginDate_yy=2023&endDate_mm=07&endDate_dd=27&endDate_yyyy=2023&county=ALL&hailfilter=0.00&tornfilter=0&windfilter=000&sort=DT&submitbutton=Search&statefips=4%2CARIZONA).

**Figure 24:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Higley monitor on July 26<sup>th</sup>, 2023.



**Figure 25:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Zuni Hills monitor on July 26<sup>th</sup>, 2023.



As shown in **Figure 24**, the highest wind speed recorded of 30.5 mph at 9:45 P.M. coincides with the peak in PM<sub>10</sub> concentrations at the Higley monitor shortly after at 9:55 P.M. on July 26<sup>th</sup>, 2023. In **Figure 25**, the highest windspeed recorded of 32.4 mph at 10:50 P.M. coincides with the peak in PM<sub>10</sub> concentrations at the Zuni Hills monitor shortly after at 10:55 P.M on July 26<sup>th</sup>, 2023.

On July 26<sup>th</sup>, 2023, thunderstorm conditions resulting in high winds and blowing dust began in afternoon but slowly began to increase in the evening as thunderstorms drifted into the Phoenix Area. These high windspeeds and resulting blowing dust on the evening of July 26<sup>th</sup>, 2023, were also recorded at NOAA KPHX, where windspeeds reached up to 29 mph and wind gusts were recorded up to 43 mph. **Table 18** below shows the data recorded for the evening of July 26<sup>th</sup>, 2023, at NOAA KPHX during the time when max windspeeds and PM<sub>10</sub> concentrations were recorded at Higley and Zuni Hills monitor.

Table 18: NOAA KPHX Data for July 26 <sup>th</sup> , 2023						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
7/26/2023	9:50 P.M.	20	41	Blowing dust	6	SSE
7/26/2023	9:51 P.M.	25	43*	Blowing dust	3	SSE
7/26/2023	9:55 P.M.	18	-	Blowing dust	1.75	SSE
7/26/2023	9:57 P.M.	17	43*	-	0.5	S
7/26/2023	10:00 P.M.	17	-	-	0.5	S
7/26/2023	10:05 P.M.	25	38	-	0.5	SSE
7/26/2023	10:10 P.M.	23	29	-	0.5	SSE
7/26/2023	10:15 P.M.	23	36	-	0.5	SSE
7/26/2023	10:18 P.M.	29*	41	-	0.5	SE
7/26/2023	10:20 P.M.	25	43*	Blowing dust	2	SE
7/26/2023	10:25 P.M.	23	43*	Blowing dust	2.5	ESE
7/26/2023	10:30 P.M.	22	31	Blowing dust	3	E
7/26/2023	10:35 P.M.	22	30	Blowing dust	6	E
7/26/2023	10:40 P.M.	25	31	-	8	ENE
7/26/2023	10:43 P.M.	26	35	Thunder	8	E
7/26/2023	10:45 P.M.	23	-	-	8	E
7/26/2023	10:51 P.M.	18	30	Thunder	9	E

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 07/26/2023 Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pvview=standard&font=12&history=yes&start=20230725&end=20230727>

Notes: \* Highest windspeed or wind gust recorded for the day  
 - no observation recorded

As shown in **Table 18**, on the evening of July 26<sup>th</sup>, 2023, around 9:50 P.M. blowing dust and wind speeds and wind gusts greater than 25 mph were recorded at NOAA KPHX. The highest wind speed recorded at NOAA KPHX was 29 mph, before and after multiple recordings of wind gust speeds reaching 43 mph. The highest windspeed and wind gusts recorded shown in **Table 18** correspond with the similar time frame at which the highest windspeeds, wind gusts, and PM<sub>10</sub> concentrations were recorded at Higley monitor on July 26<sup>th</sup>, 2023, peaking at 9:55 P.M. **Table 18** shows that blowing dust and high winds were noted at 9:50 P.M., with noted decrease in visibility to ½ a mile during this time and continued until about 10:50 P.M.

In addition, thunder conditions and wind gusts greater than 25 mph are recorded again at the time of the highest windspeed noted at Zuni Hills monitor at 10:50 P.M. As such, thunderstorm activities caused high winds and blowing dust throughout the Phoenix Area and at Higley and Zuni Hills monitors, resulting in low visibility, Higley monitor 24-hour average PM<sub>10</sub> NAAQS exceedance, and increased PM<sub>10</sub> concentrations at Zuni Hills monitor to occur on July 26<sup>th</sup>, 2023.

The photographs below show ADEQ’s Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm and thunderstorm conditions on the evening of July 26<sup>th</sup>, 2023. Note the dust storm conditions and dense blowing winds were documented to hit the Phoenix Area around 9:30 P.M., as shown in NOAA KPHX and MCAQD monitoring data.

Camelback Mountain Camera, 9:45 P.M.



Camelback Mountain Camera, 10:00 P.M.



Superstition Mountains Camera, 9:00 P.M.



Superstition Mountains Camera, 9:45 P.M.



White Tank Mountains Camera, 10:00 P.M.



White Tank Mountains Camera, 10:45 P.M.



*Note: There are no images available in the archive for South Mountain and Estrella Mountains camera on July 26, 2023*

August 31<sup>st</sup>, 2023, Atypical Event

A low-pressure front situated along the west coast of the United States and a subtropical high-pressure front moving over New Mexico resulted in a moisture rich southern flow of air to be transported into Arizona on August 31<sup>st</sup>, 2023. These moist atmospheric conditions became conducive for thunderstorm activities and severe winds. According to the NOAA storm events report for Central Phoenix on August 31<sup>st</sup>, 2023:

*“Thunderstorms first developed over southeast Arizona and then, with the southerly flow, were steered into south-central AZ. There were widespread reports of dense blowing dust with visibilities reduced to 1/4 mile or less as well as wind damage as winds were in excess of 60 mph. In addition, a training thunderstorm over northern Maricopa County, in the Anthem area, resulted in 2-4 of rain according to doppler radar estimates and led to significant flash flooding.”<sup>23</sup>*

As a result of these high winds, widespread dust, and thunderstorm activities on August 31<sup>st</sup>, 2023, 4 monitors throughout the Phoenix Area recorded 24-hour average PM<sub>10</sub> exceedances at four MCAQD monitors. Of these four, two monitoring stations were evaluated for 24-hour average PM<sub>10</sub> NAAQS exceedances in relation to the SR 303L project: Central Phoenix and Durango Complex, given these monitors had the highest exceedances recorded on this date. Monitors closer to the project site and Zuni Hills monitor also exceeded NAAQS this day, including Dysart (5 miles southwest from project site), and West Phoenix (18 miles southeast from the project site). The closest monitor to the Zuni Hills monitors which exceeded NAAQS was Dysart, approximately 4 miles southwest of Zuni Hills monitor. Although Zuni Hills monitor did not record 24-hour average PM<sub>10</sub> NAAQS exceedance on August 31<sup>st</sup>, 2023, windspeeds greater than 25 mph and significant increases in PM<sub>10</sub> concentrations were recorded at similar times to the peak windspeed, wind gust speeds, and PM<sub>10</sub> concentrations noted at Central Phoenix, Dysart, and NOAA KPHX monitors. **Table 19** lists the 24-hour average PM<sub>10</sub> concentrations, highest windspeeds, and wind gust speeds recorded at the Central Phoenix, Durango Complex, and Zuni Hills monitors on August 31<sup>st</sup>, 2023.

Table 19: Windspeed and PM <sub>10</sub> Data for August 31 <sup>st</sup> , 2023						
Site	Date	24-hour average PM <sub>10</sub> (µg/m <sup>3</sup> )	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Central Phoenix	8/31/2023	207*	34.2	8:45 P.M.	34.9	8:45 P.M.
Durango Complex	8/31/2023	319.2*	28.7	9:00 P.M.	30.2	9:00 P.M.
Zuni Hills	8/31/2023	129	29.6	9:30 P.M.	30.2	9:30 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, Central Phoenix, Zuni Hills, and Durango Complex Air Quality Monitoring Station Data for August 31 <sup>st</sup> , 2023.						
Notes: *Measurement exceeds PM <sub>10</sub> NAAQS.						

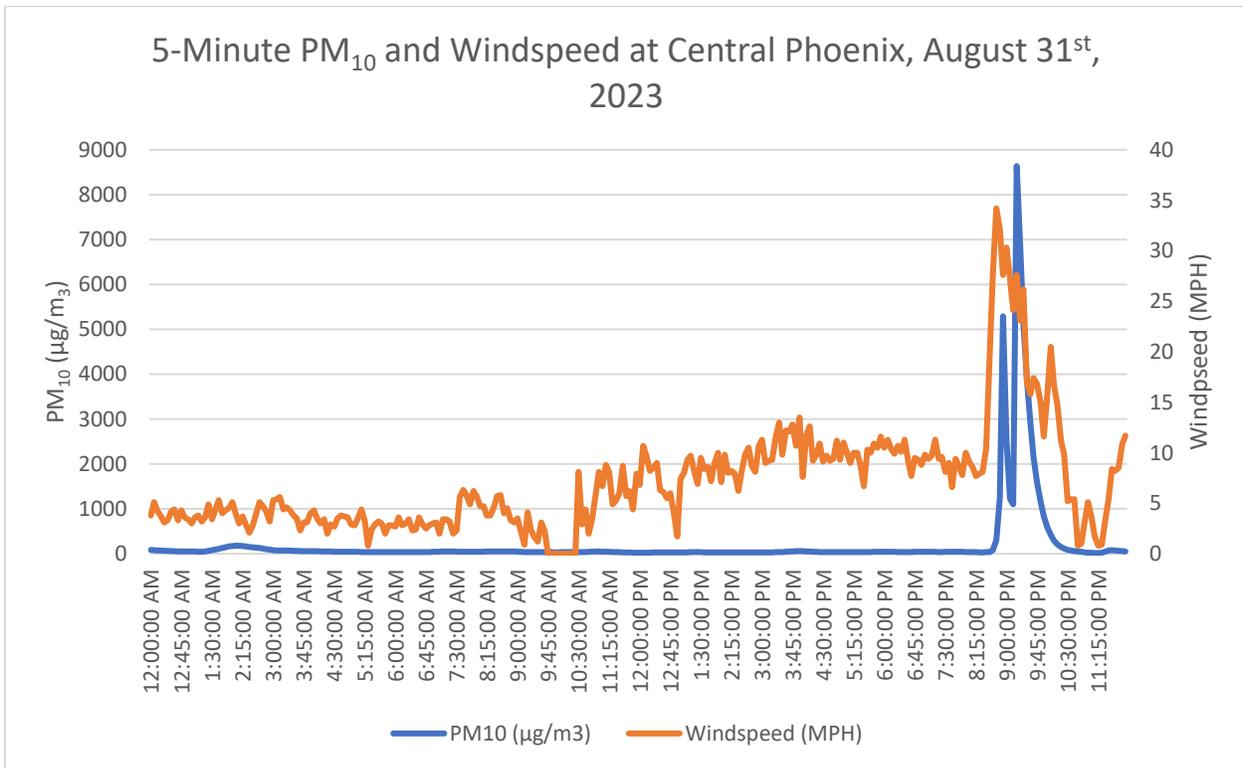
As shown in **Table 19**, both the Central Phoenix and Durango Complex monitors recorded exceedances in 24-hour average PM<sub>10</sub> NAAQS, both with peak windspeeds recorded at similar times during the evening of August 31<sup>st</sup>, 2023. Durango Complex and Central Phoenix monitors selected for this evaluation had windspeeds recorded over 25 mph throughout the evening of August 31<sup>st</sup>, 2023, beginning around 8:00

<sup>23</sup> NOAA, *Storm Events Database*, Event Details "1131796," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1131796>.

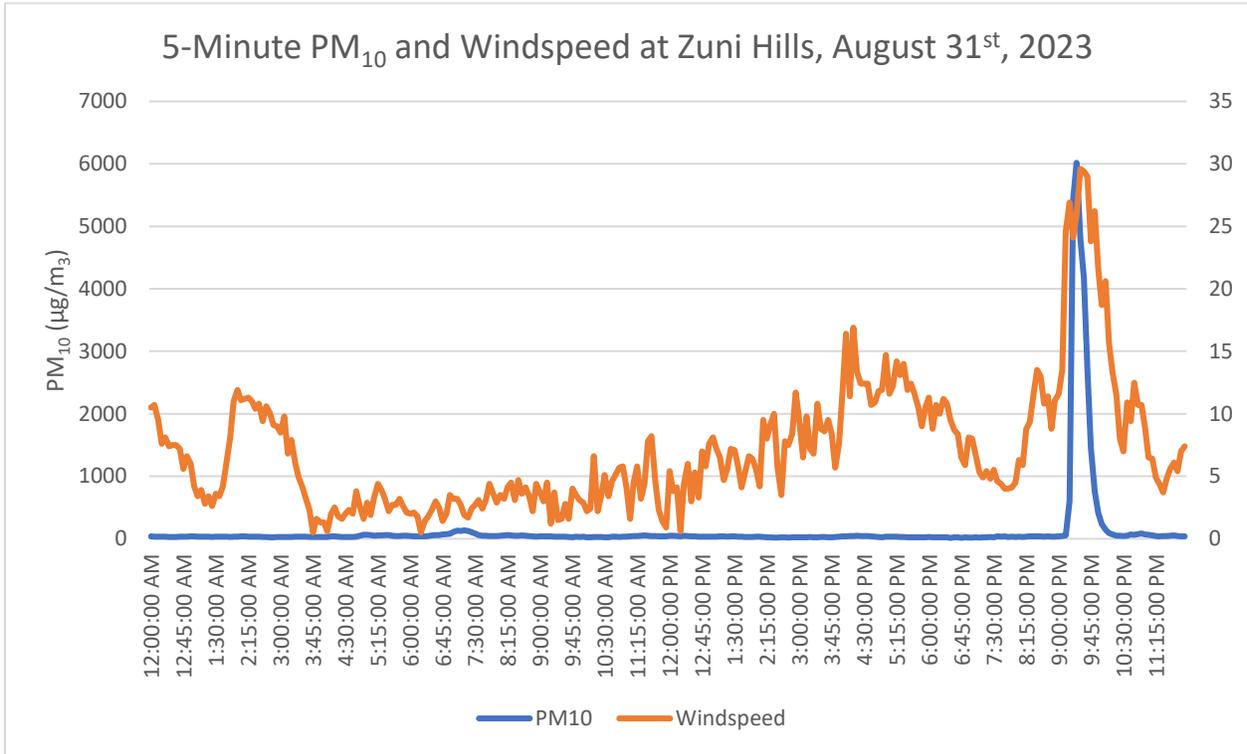
P.M. until 10:00 P.M., when thunderstorm conditions passing through the Phoenix Area began to subside. The highest windspeed recorded at Central Phoenix monitor was 34.2 mph, with wind gusts up to 34.9 mph, and the highest windspeed recorded at Durango Complex was 28.7 mph, with wind gusts up to 30.2 mph. Zuni Hills monitor recorded similar high windspeeds and wind gusts speeds at 9:30 P.M., of 29.6 mph and 30.2 mph, respectively. Due to a data collection error, no 5-minute PM<sub>10</sub> data was provided by Maricopa County for the Durango Complex station for this date, however 1-hour PM<sub>10</sub> concentration data was provided which follows a similar trend in increases.

The 1-hour PM<sub>10</sub> wind roses for Central Phoenix and Durango Complex monitors on August 31<sup>st</sup>, 2023 indicate that the greatest concentrations of PM<sub>10</sub> (> 600 µg/m<sup>3</sup>) blew from the west, southwest, and southeast, towards the Zuni Hills monitor. Given the highest concentration of PM<sub>10</sub> blew from east to west and southeast to northwest, this could have attributed the highest PM<sub>10</sub> concentration at Zuni Hills monitor being recorded at a later time in the evening of August 31<sup>st</sup>, 2023. These concentrations of PM<sub>10</sub> flowing from the southwest and southeast align with the wind direction of the NOAA KPHX blowing dust weather conditions noted documented the evening of August 31<sup>st</sup>, 2023. For more details on the PM<sub>10</sub> wind roses for August 31<sup>st</sup>, 2023, at Central Phoenix and Durango Complex monitors, please refer to **Appendix C. Figures – 26-29** show 5-minute windspeed and PM<sub>10</sub> data for the Central Phoenix and Zuni Hills monitor and windspeed data for the Durango Complex monitor on August 31<sup>st</sup>, 2023.

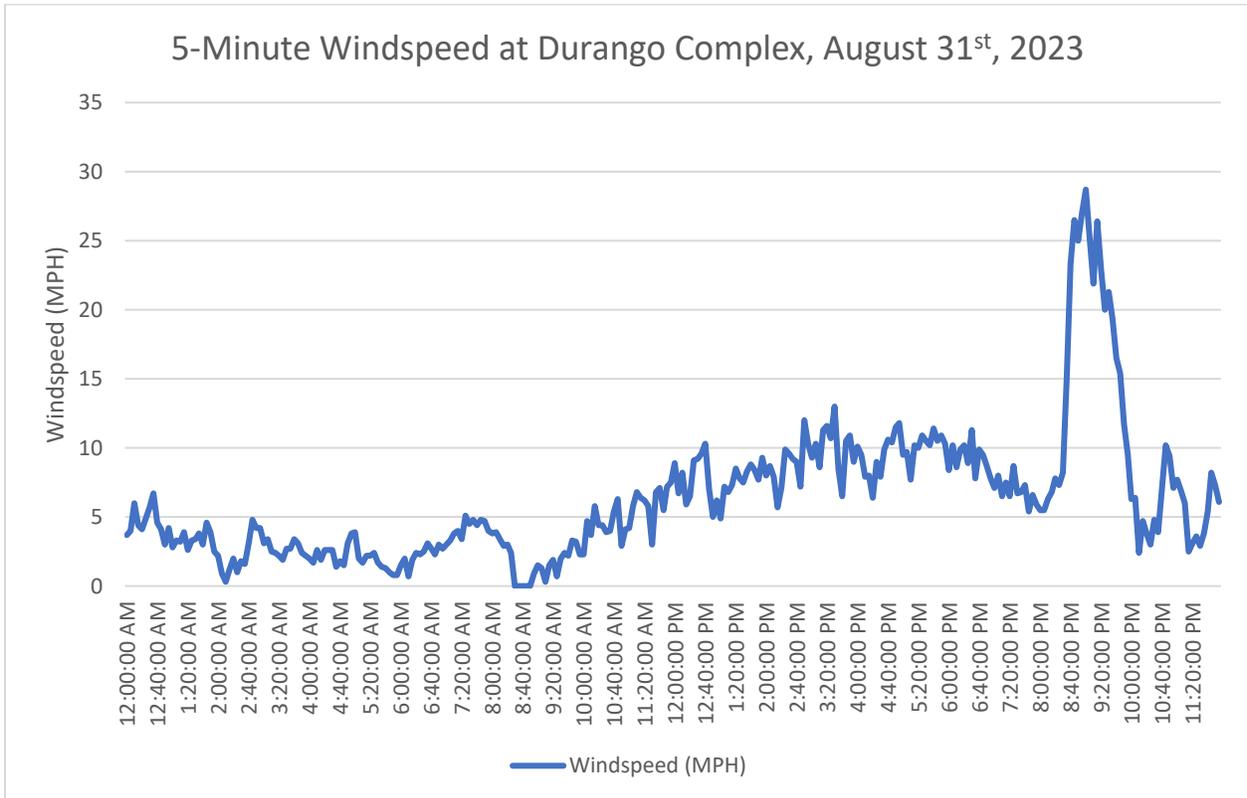
**Figure 26:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Central Phoenix monitor on August 31<sup>st</sup>, 2023.



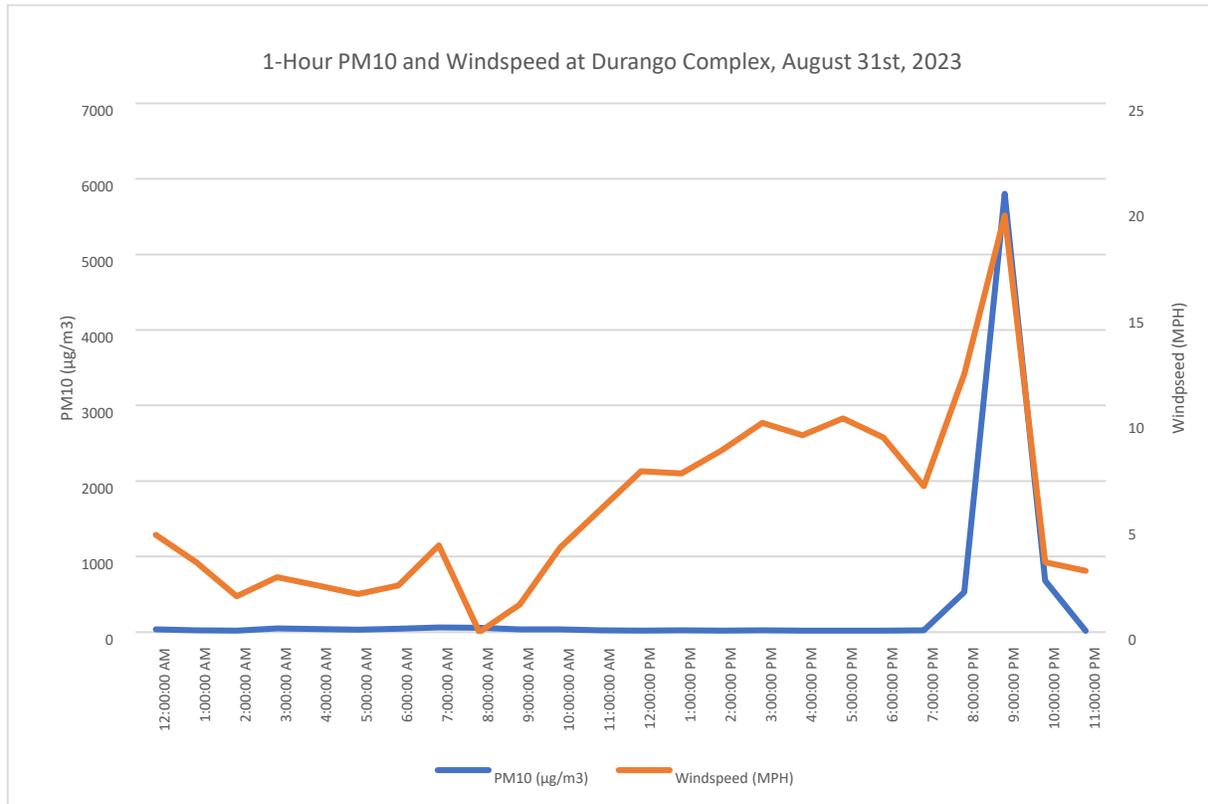
**Figure 27:** 5-Minute PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Zuni Hills monitor on August 31<sup>st</sup>, 2023.



**Figure 28:** 5-minute windspeed (mph) at Durango Complex monitor on August 31<sup>st</sup>, 2023.



**Figure 29:** 1-Hour PM<sub>10</sub> concentrations (µg/m<sup>3</sup>) and windspeed (mph) at Durango Complex monitor on August 31<sup>st</sup>, 2023.



As shown in **Figures 26-29**, as windspeeds increased to their peak recorded levels at the Central Phoenix, Durango Complex, and Zuni Hills monitors on the evening of August 31<sup>st</sup>, 2023, PM<sub>10</sub> concentrations also increased to their maximum values. The highest 5-minute PM<sub>10</sub> concentration recorded at Central Phoenix monitor was 8,636 µg/m<sup>3</sup> at 9:15 P.M., shortly after recording the monitor’s highest wind and wind gust speed. Obvious peaks in both 5-minute and 1-hour windspeed and 1-hour PM<sub>10</sub> concentrations can also be seen at the Durango Complex monitor on August 31<sup>st</sup>, 2023, around 9:00 P.M. The highest 1-hour PM<sub>10</sub> level recorded at Durango Complex monitor was 5,803.7 µg/m<sup>3</sup> at 9:00 P.M. At Zuni Hills monitor, the highest 5-minute PM<sub>10</sub> concentration recorded was 6,016.6 µg/m<sup>3</sup> at 9:25 P.M. while windspeeds were higher than 25 mph, approximately 5 minutes prior to the highest recorded wind speed and wind gust of the day.

Data from NOAA KPHX also displays this increase in windspeed and blowing dust conditions around the same time that NOAA storm event reports list dust storms and thunderstorm activity, and while the Central Phoenix, Durango Complex, and Zuni Hills monitor recorded wind speeds and wind gust speeds over 25 mph. **Table 20** shows the time where the highest wind speeds, wind gusts speeds, and corresponding weather conditions were recorded at the NOAA KPHX on August 31<sup>st</sup>, 2023.

Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
8/31/2023	8:34 P.M.	43	63	Blowing dust, Squalls	2	SSW
8/31/2023	8:35 P.M.	33	41	Blowing dust, Squalls	0.75	S
8/31/2023	8:36 P.M.	26	63	Blowing dust, Squalls	0.75	SSE
8/31/2023	8:40 P.M.	43	66	-	0.5	S
8/31/2023	8:42 P.M.	47	71	-	0.25	S
8/31/2023	8:45 P.M.	37	53	-	0.25	S
8/31/2023	8:50 P.M.	45	64	-	0.5	S
8/31/2023	8:51 P.M.	44	66	-	0.5	S
8/31/2023	8:55 P.M.	49*	60	-	0.75	S
8/31/2023	8:59 P.M.	43	73*	Thunder	1	S
8/31/2023	9:02 P.M.	46	73*	Thunder, Blowing dust	1.25	S
8/31/2023	9:05 P.M.	31	52	Blowing Dust	2	S
8/31/2023	9:08 P.M.	25	68	Thunder, Blowing dust	3	S
8/31/2023	9:10 P.M.	30	53	Lt rain, Blowing dust	4	S
8/31/2023	9:15 P.M.	31	47	Lt rain, Blowing dust	5	S
8/31/2023	9:20 P.M.	37	59	Lt rain, Blowing dust	6	S

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 08/31/2023 Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20230830&end=20230901>

Notes:  
\* Highest windspeed or wind gust recorded for the day, - no observation recorded

As shown in **Table 20**, the highest recorded wind speed on August 31<sup>st</sup>, 2023, at the NOAA KPHX was 49 mph, with the highest wind gust speed recorded of 73 mph around 9:00 P.M., coinciding with the times at which the highest wind speeds were noted at the Durango Complex, Zuni Hills, and Central Phoenix monitors. Reports of thunder and blowing dust throughout the Phoenix Area are also noted in the NOAA KPHX data, as well as decreased visibility to less than 1 mile. With these conditions noted, there was heavy concentration of dust and as a result increased concentration of PM<sub>10</sub> in the air on August 31<sup>st</sup>, 2023, throughout the Phoenix Area near the monitors resulting in 24-hour average PM<sub>10</sub> NAAQS exceedances at Durango Complex and Central Phoenix monitors, and increased concentrations in PM<sub>10</sub> at Zuni Hills monitor above typical levels.

The photographs below show ADEQ’s Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm and thunderstorm conditions on the evening of August 31<sup>st</sup>, 2023. A visible dust cloud was captured at both the South Mountain and Estrella Mountains ADEQ Visibility camera moving west and southeast over the Phoenix area beginning around 8:00 P.M., aligning with the increases of PM<sub>10</sub> concentrations and windspeeds recorded at the Zuni Hills, Durango Complex, Central Phoenix monitors beginning at a similar time.

Note the dust storm conditions and dense blowing winds were documented to hit the Phoenix Area around 8:00 P.M. flowing from the west and southwest, as shown in NOAA KPHX and MCAQD monitoring data.

South Mountain Camera, 8:00 P.M.



South Mountain Camera, 8:45 P.M.



Estrella Mountains Camera, 8:15 P.M.



Estrella Mountains Camera, 8:45 P.M.



White Tank Mountains Camera, 9:00 P.M.



White Tank Mountains Camera, 9:15 P.M.



Superstition Mountains Camera, 8:00 P.M.



Superstition Mountains Camera, 8:00 P.M.



*Note: There are no images available in the archive for Camelback Mountain camera after 11:15 A.M. on August 31, 2023*

## 5.0 Project PM<sub>10</sub> Background Concentrations, Removing Atypical Events

In summary, 9 days are being proposed to be excluded from the project’s background concentration analysis excluded because they have been considered as affected by an atypical air quality event, such as a high wind event, monsoon conditions, or thunderstorm activity. These days were removed from the original Zuni Hills monitor 2021 through 2023 PM<sub>10</sub> data set due to the atypical-type nature of the local conditions when the high PM<sub>10</sub> values were observed (e.g., windblown dust, high winds, haze). Once removed, the remaining data was used to calculate a PM<sub>10</sub> background concentration of 107 µg/m<sup>3</sup>.

<b>Table 21: Project Monitoring Station Highest 24-hour PM<sub>10</sub> Readings, Removing Atypical Events</b>			
<b><u>Zuni Hills Station</u></b>			
<b>Data Year</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Number of Readings</b>	361	365	365
<b>1<sup>st</sup></b>	110	126	146
<b>2<sup>nd</sup></b>	84	<b>107</b>	103
<b>3<sup>rd</sup></b>	72	87	66
<b>4<sup>th</sup></b>	70	81	65

Source: U.S. EPA Outdoor Air Quality Data, Download Daily Air Quality Data, <https://www.epa.gov/outdoor-air-quality-data/download-daily-data>

Note: \*4<sup>th</sup> highest 24-hour readings are highlighted in red, removing atypical events.

**Table 21** shows that with removing atypical events, the Zuni Hills monitor's 4<sup>th</sup> highest value over three years (2021-2023) is 107 µg/m<sup>3</sup>. This comes from the 4<sup>th</sup> highest reading out of a total of 1,091 days of sampling. This background concentration is under the PM<sub>10</sub> NAAQS threshold.

*The predicted background concentration, removing data for atypical events, of the project is **107 µg/m<sup>3</sup>**.*

Per 40 CFR 50, Appendix K, the Maricopa County NAAQS threshold for PM<sub>10</sub> 24-hour average concentration threshold is 150 µg/m<sup>3</sup>. As such, the predicted background concentration when removing atypical event data does not exceed the NAAQs threshold.

Days in which an atypical event, i.e., a dust storm or high wind event occurred in the region and impacting Zuni Hills monitor and the project site have been identified. Because regional atypical events were occurring on these days, it is inappropriate to consider these days when calculating background PM<sub>10</sub> concentrations for the projects hot spot analyses. Finally, after removing days in which an atypical event occurred, the 24-hour PM<sub>10</sub> background concentration identified for 2021 through 2023 is 107 µg/m<sup>3</sup>. This concentration is suitable for use as a reasonable background concentration for the project, as it is more representative of typical background concentrations for the project site excluding atypical events.



**Appendix A:** Maricopa County Air Quality Department Planning & Analysis Division – Air Quality Monitor Data

## Site: Mesa

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	12:00:00 AM	-	260.3	3.5	268.1	3.1
7/9/2021	12:05:00 AM	-	270.5	5.8	271.2	5.4
7/9/2021	12:10:00 AM	-	252.6	2.9	260.5	2.6
7/9/2021	12:15:00 AM	-	238	5.1	236.9	4.7
7/9/2021	12:20:00 AM	-	234.6	2.9	235	2.7
7/9/2021	12:25:00 AM	-	225.8	3.6	227.2	3.4
7/9/2021	12:30:00 AM	-	227.6	4.7	228.2	4.4
7/9/2021	12:35:00 AM	-	233.4	4.8	231	4.5
7/9/2021	12:40:00 AM	-	242.7	4.7	246.6	4.1
7/9/2021	12:45:00 AM	-	246.8	3.7	246.2	3.5
7/9/2021	12:50:00 AM	-	264.3	4.3	262.5	4
7/9/2021	12:55:00 AM	-	268.3	2.9	265.8	2.7
7/9/2021	1:00:00 AM	-	265.8	2.7	263.2	2.6
7/9/2021	1:05:00 AM	-	273	3.5	270.9	3.2
7/9/2021	1:10:00 AM	-	284.3	4.1	281.4	3.9
7/9/2021	1:15:00 AM	-	281.8	3.7	282.5	3.6
7/9/2021	1:20:00 AM	-	283.4	4.6	282.7	4.5
7/9/2021	1:25:00 AM	-	275	3.1	276.1	3
7/9/2021	1:30:00 AM	-	263.8	3.5	262.1	3.2
7/9/2021	1:35:00 AM	-	272.3	3.5	264.1	3.1
7/9/2021	1:40:00 AM	-	266.9	2	262.6	1.8
7/9/2021	1:45:00 AM	-	270.3	3.1	269.4	3
7/9/2021	1:50:00 AM	-	248.3	2.3	249.4	2.2
7/9/2021	1:55:00 AM	-	283.9	1.5	275.6	1.3
7/9/2021	2:00:00 AM	-	279.3	2.8	276.3	2.6
7/9/2021	2:05:00 AM	-	293.9	2.2	293	2.1
7/9/2021	2:10:00 AM	-	301.3	0	302.7	0.5
7/9/2021	2:15:00 AM	-	314.3	0	356.4	0.5
7/9/2021	2:20:00 AM	-	357.5	2.6	354.5	2.4
7/9/2021	2:25:00 AM	-	319.5	1.6	319.1	1.5
7/9/2021	2:30:00 AM	-	323.8	1.6	326.2	1.5
7/9/2021	2:35:00 AM	-	316.5	0	296.8	0.6
7/9/2021	2:40:00 AM	-	299.5	2.1	297.7	1.7
7/9/2021	2:45:00 AM	-	341.6	2.6	340.5	2.5
7/9/2021	2:50:00 AM	-	14.9	2.6	14.6	2.5
7/9/2021	2:55:00 AM	-	37.1	1.3	37.4	1.1
7/9/2021	3:00:00 AM	-	41.1	1.4	35.4	1.3
7/9/2021	3:05:00 AM	-	4.2	2	2.2	1.9
7/9/2021	3:10:00 AM	-	87.1	2.5	100.4	2.1
7/9/2021	3:15:00 AM	-	111.8	2.7	113.7	2.6
7/9/2021	3:20:00 AM	-	84.4	3.3	88.4	3.2
7/9/2021	3:25:00 AM	-	52.4	0.9	57.9	0.8
7/9/2021	3:30:00 AM	-	83.7	2.3	84	2.2
7/9/2021	3:35:00 AM	-	77.2	2.2	77.2	2.1
7/9/2021	3:40:00 AM	-	84.8	2.3	89.5	2.1
7/9/2021	3:45:00 AM	-	115.2	3.7	123.2	2.9
7/9/2021	3:50:00 AM	-	32.3	2.8	19.9	2.4
7/9/2021	3:55:00 AM	-	33.8	3	30.8	2.9
7/9/2021	4:00:00 AM	-	43.8	3.6	42.4	3.5
7/9/2021	4:05:00 AM	-	57.1	2.6	56.4	2.4
7/9/2021	4:10:00 AM	-	56.3	2.3	56.1	2.3
7/9/2021	4:15:00 AM	-	65.2	2.8	64.7	2.7
7/9/2021	4:20:00 AM	-	71.3	4.7	71.6	4.7

Site: Mesa						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	4:25:00 AM	-	54.5	3.1	53.8	2.9
7/9/2021	4:30:00 AM	-	43.5	3.5	43.4	3.4
7/9/2021	4:35:00 AM	-	44.5	3.3	43.3	3.2
7/9/2021	4:40:00 AM	-	57.1	2.3	57.3	2.2
7/9/2021	4:45:00 AM	-	54.9	2	51.9	1.9
7/9/2021	4:50:00 AM	-	43.1	1.8	36.9	1.7
7/9/2021	4:55:00 AM	-	66.9	2.4	67.4	2.4
7/9/2021	5:00:00 AM	-	79	2.6	79	2.5
7/9/2021	5:05:00 AM	-	60.1	1.9	58.5	1.8
7/9/2021	5:10:00 AM	-	57.9	2.9	59.7	2.8
7/9/2021	5:15:00 AM	-	90.1	3.4	89.9	3.4
7/9/2021	5:20:00 AM	-	82.6	3.3	83.2	3.2
7/9/2021	5:25:00 AM	-	78.4	2.4	79.9	2.3
7/9/2021	5:30:00 AM	-	85.8	3.6	85.4	3.6
7/9/2021	5:35:00 AM	-	74.7	4.1	74.6	4
7/9/2021	5:40:00 AM	-	69.6	3.7	70.9	3.6
7/9/2021	5:45:00 AM	-	69.2	3.7	70.7	3.6
7/9/2021	5:50:00 AM	-	84.2	5.2	83.8	5.1
7/9/2021	5:55:00 AM	-	88.8	3.3	88.3	3.2
7/9/2021	6:00:00 AM	-	70.8	3.1	70.2	3
7/9/2021	6:05:00 AM	-	68.3	3	67.8	2.9
7/9/2021	6:10:00 AM	-	68.7	2.4	67.6	2.4
7/9/2021	6:15:00 AM	-	76.1	2	77.6	1.9
7/9/2021	6:20:00 AM	-	64.6	2.4	61.5	2.2
7/9/2021	6:25:00 AM	-	49.8	2.3	44	2.2
7/9/2021	6:30:00 AM	-	47.3	2.9	45.8	2.7
7/9/2021	6:35:00 AM	-	52.1	3.7	52.3	3.5
7/9/2021	6:40:00 AM	-	67.9	4.8	68.3	4.6
7/9/2021	6:45:00 AM	-	62.9	4.4	63.5	4.2
7/9/2021	6:50:00 AM	-	68.3	4.5	69.7	4.4
7/9/2021	6:55:00 AM	-	59.4	5.2	59.3	5
7/9/2021	7:00:00 AM	-	66.6	6	66.8	5.8
7/9/2021	7:05:00 AM	-	66	5.5	66.8	5.3
7/9/2021	7:10:00 AM	-	80.2	5.5	80.5	5.4
7/9/2021	7:15:00 AM	-	59.6	5.4	58.6	5.1
7/9/2021	7:20:00 AM	-	80.7	5.8	81.1	5.7
7/9/2021	7:25:00 AM	-	72.6	4.8	75.8	4.6
7/9/2021	7:30:00 AM	-	80.6	4.5	80.5	4.3
7/9/2021	7:35:00 AM	-	74.8	3.7	76.1	3.2
7/9/2021	7:40:00 AM	-	84.6	4.6	88	4.2
7/9/2021	7:45:00 AM	-	98.7	4.4	96	4.1
7/9/2021	7:50:00 AM	-	103.5	5.4	104.3	5.1
7/9/2021	7:55:00 AM	-	107.9	5.3	107.5	5
7/9/2021	8:00:00 AM	-	102.9	4.8	102.4	4.7
7/9/2021	8:05:00 AM	-	100.1	3.9	99.5	3.6
7/9/2021	8:10:00 AM	-	113.9	3	108.2	2.6
7/9/2021	8:15:00 AM	-	69.8	4.3	63.3	3.7
7/9/2021	8:20:00 AM	-	111.8	4.2	110	4.1
7/9/2021	8:25:00 AM	-	123.5	4.9	121.6	4.6
7/9/2021	8:30:00 AM	-	124.7	2.6	124.7	2.5
7/9/2021	8:35:00 AM	-	62	4.2	64	4.1
7/9/2021	8:40:00 AM	-	74.8	4.2	75.5	4
7/9/2021	8:45:00 AM	-	339.3	0	350.4	0.4

## Site: Mesa

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	8:50:00 AM	-	311	2.1	307.4	2
7/9/2021	8:55:00 AM	-	267.2	2.3	266.6	2.1
7/9/2021	9:00:00 AM	-	317	3.1	312.6	2.3
7/9/2021	9:05:00 AM	-	17.8	1.7	28.4	1.2
7/9/2021	9:10:00 AM	-	107.9	2.4	105.5	2.2
7/9/2021	9:15:00 AM	-	84.5	3.4	74.2	3
7/9/2021	9:20:00 AM	-	343.3	1	342.2	0.4
7/9/2021	9:25:00 AM	-	332.4	1.6	292.7	0.9
7/9/2021	9:30:00 AM	-	350.3	2	346.5	1.7
7/9/2021	9:35:00 AM	-	25.1	3.5	26.1	3.3
7/9/2021	9:40:00 AM	-	43.7	3.7	41.2	3.4
7/9/2021	9:45:00 AM	-	58.1	2.6	51.5	1.9
7/9/2021	9:50:00 AM	-	347	2.4	334.3	2
7/9/2021	9:55:00 AM	-	315	3.1	314.2	2.7
7/9/2021	10:00:00 AM	-	332.8	2.3	327.9	2
7/9/2021	10:05:00 AM	-	350	1.7	355.8	1.5
7/9/2021	10:10:00 AM	-	164.1	4.5	192	1.7
7/9/2021	10:15:00 AM	-	214.3	4.6	213.7	4.3
7/9/2021	10:20:00 AM	-	199.5	4.2	197.7	3.8
7/9/2021	10:25:00 AM	-	187.4	3.1	189.3	2.9
7/9/2021	10:30:00 AM	-	150.6	4.7	150.6	4.4
7/9/2021	10:35:00 AM	-	152	4.8	152.2	4.7
7/9/2021	10:40:00 AM	-	189.7	3.8	205.9	1.7
7/9/2021	10:45:00 AM	-	299.3	4	292.3	3.5
7/9/2021	10:50:00 AM	-	294.8	3	285.4	2.5
7/9/2021	10:55:00 AM	-	279.1	5.3	277	4.8
7/9/2021	11:00:00 AM	-	341.7	1.9	348	1.1
7/9/2021	11:05:00 AM	-	284.6	5	283.7	4.8
7/9/2021	11:10:00 AM	-	259.3	3.7	261.2	2.9
7/9/2021	11:15:00 AM	-	179.4	7.2	175.1	6.8
7/9/2021	11:20:00 AM	-	173	5.6	179.6	4.6
7/9/2021	11:25:00 AM	-	161.2	2.4	135.8	1.8
7/9/2021	11:30:00 AM	-	241.4	3.2	229.7	2.1
7/9/2021	11:35:00 AM	-	281	5.8	280.7	5.6
7/9/2021	11:40:00 AM	-	331.6	3.6	331.9	3.4
7/9/2021	11:45:00 AM	-	179.4	6.8	177.8	5.9
7/9/2021	11:50:00 AM	-	178.2	6.5	169.5	6.1
7/9/2021	11:55:00 AM	-	202.7	7	197.5	6.6
7/9/2021	12:00:00 PM	-	220.4	4	201.9	3.1
7/9/2021	12:05:00 PM	-	188.7	5.6	192.9	5.1
7/9/2021	12:10:00 PM	-	147.6	5.7	145.5	5.2
7/9/2021	12:15:00 PM	-	130.4	5.1	135.8	2.3
7/9/2021	12:20:00 PM	-	299.7	5.1	297.8	3.9
7/9/2021	12:25:00 PM	-	220.7	4.1	217.9	3.7
7/9/2021	12:30:00 PM	-	241	4.4	245.8	4.2
7/9/2021	12:35:00 PM	-	247.5	3.6	221.6	2.9
7/9/2021	12:40:00 PM	-	281	4.6	281.1	4
7/9/2021	12:45:00 PM	-	220.3	4.5	216.4	4
7/9/2021	12:50:00 PM	-	208.9	4.5	208.7	4.4
7/9/2021	12:55:00 PM	-	213.7	1.9	196.2	1.3
7/9/2021	1:00:00 PM	-	90.2	2.2	88.7	2.1
7/9/2021	1:05:00 PM	-	293.1	4.7	284.1	4.5
7/9/2021	1:10:00 PM	-	286	5.7	283	5

Site: Mesa							
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>	
7/9/2021	1:15:00 PM	-	311.8	6.3	309.5	6.1	
7/9/2021	1:20:00 PM	-	316.5	4.6	316.2	4.3	
7/9/2021	1:25:00 PM	-	224.2	4.2	225.5	3.9	
7/9/2021	1:30:00 PM	-	228.9	3	218.8	2.1	
7/9/2021	1:35:00 PM	-	248.8	5.4	245.5	5.2	
7/9/2021	1:40:00 PM	-	266.7	4.1	223.9	2.6	
7/9/2021	1:45:00 PM	-	217.1	4.7	211.9	4.2	
7/9/2021	1:50:00 PM	-	174.9	6.3	175.3	5.8	
7/9/2021	1:55:00 PM	-	283.8	5	275.4	3.1	
7/9/2021	2:00:00 PM	-	289.9	6.8	289.3	6.5	
7/9/2021	2:05:00 PM	-	315.9	4.1	309.5	2.9	
7/9/2021	2:10:00 PM	-	272.4	8	275.3	6.9	
7/9/2021	2:15:00 PM	-	216.3	6.6	219.9	5.7	
7/9/2021	2:20:00 PM	-	264.5	7.9	268.2	7.2	
7/9/2021	2:25:00 PM	-	270.2	8.1	269.7	7.7	
7/9/2021	2:30:00 PM	-	269.9	5.6	275.8	3.2	
7/9/2021	2:35:00 PM	-	295.4	5.9	296.1	5.3	
7/9/2021	2:40:00 PM	-	297.8	8.3	297.6	8.1	
7/9/2021	2:45:00 PM	-	274	6.6	272.4	6.1	
7/9/2021	2:50:00 PM	-	274.8	6.5	277.2	6.1	
7/9/2021	2:55:00 PM	-	266.5	7.3	267.7	6.7	
7/9/2021	3:00:00 PM	-	250.3	5.2	253.6	4.8	
7/9/2021	3:05:00 PM	-	261.7	5.5	252.3	5	
7/9/2021	3:10:00 PM	-	293.5	7.3	289.5	6.3	
7/9/2021	3:15:00 PM	-	282.7	8.1	286.1	7.7	
7/9/2021	3:20:00 PM	-	302.5	6.8	302.7	6.4	
7/9/2021	3:25:00 PM	-	320.5	7.1	321.3	6.5	
7/9/2021	3:30:00 PM	-	293.5	8.3	292.4	7.5	
7/9/2021	3:35:00 PM	-	278.2	5.4	280.4	5.1	
7/9/2021	3:40:00 PM	-	261.8	7.2	268.6	6.4	
7/9/2021	3:45:00 PM	-	280	7.5	282.2	7.3	
7/9/2021	3:50:00 PM	-	287.4	7.3	283.9	6.8	
7/9/2021	3:55:00 PM	-	295.8	5.2	294.5	4.9	
7/9/2021	4:00:00 PM	-	280.7	5.7	287.2	4.8	
7/9/2021	4:05:00 PM	-	288.9	9.5	287.5	9	
7/9/2021	4:10:00 PM	-	284.9	6	284.4	5.8	
7/9/2021	4:15:00 PM	-	311.3	5.9	304.6	5.5	
7/9/2021	4:20:00 PM	-	298.3	4.7	301.4	3.8	
7/9/2021	4:25:00 PM	-	270.3	4.8	286.3	4.5	
7/9/2021	4:30:00 PM	-	273.3	6.5	272.6	6.1	
7/9/2021	4:35:00 PM	-	279	5	281.3	4.7	
7/9/2021	4:40:00 PM	-	306.6	7.3	306.6	7.1	
7/9/2021	4:45:00 PM	-	299.6	7.3	298.8	6.9	
7/9/2021	4:50:00 PM	-	298.7	4.6	303	3.8	
7/9/2021	4:55:00 PM	-	289.9	8.9	289.3	8.8	
7/9/2021	5:00:00 PM	-	274.5	5	280.7	4.5	
7/9/2021	5:05:00 PM	-	292.6	5	291.7	4.5	
7/9/2021	5:10:00 PM	-	283.8	5.6	284.3	5.1	
7/9/2021	5:15:00 PM	-	301.9	9.7	305.4	8.5	
7/9/2021	5:20:00 PM	-	298.8	8.1	297.9	7.9	
7/9/2021	5:25:00 PM	-	285	4.7	289.6	4.1	
7/9/2021	5:30:00 PM	-	274.9	3.4	286.4	2.8	
7/9/2021	5:35:00 PM	-	284.1	7.5	284	7.2	

Site: Mesa						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	5:40:00 PM	-	294.9	6	292	5.7
7/9/2021	5:45:00 PM	-	312.4	5.1	318.2	4.5
7/9/2021	5:50:00 PM	-	284.6	6.7	288.4	6.1
7/9/2021	5:55:00 PM	-	281.2	5	284.6	4.2
7/9/2021	6:00:00 PM	-	282.6	5.8	280.8	5.4
7/9/2021	6:05:00 PM	-	290.5	8.5	289.2	8.2
7/9/2021	6:10:00 PM	-	280.6	6.1	280.6	5.9
7/9/2021	6:15:00 PM	-	283.9	6	284.5	5.8
7/9/2021	6:20:00 PM	-	280.2	7.2	281.6	7
7/9/2021	6:25:00 PM	-	278.2	5.5	280.4	5.2
7/9/2021	6:30:00 PM	-	276.1	6.8	279.4	6.6
7/9/2021	6:35:00 PM	-	268.8	4.9	268.2	4.6
7/9/2021	6:40:00 PM	-	278	4.9	278.5	4.7
7/9/2021	6:45:00 PM	-	284.6	5.4	284.6	5.3
7/9/2021	6:50:00 PM	-	278.3	7.4	278.8	7.3
7/9/2021	6:55:00 PM	-	284.1	6.3	284	6.2
7/9/2021	7:00:00 PM	-	247.3	5.4	245.9	4.9
7/9/2021	7:05:00 PM	-	247.7	3.6	247.7	3.3
7/9/2021	7:10:00 PM	-	248.8	4.4	248.1	4
7/9/2021	7:15:00 PM	-	258.6	6.3	257.7	5.9
7/9/2021	7:20:00 PM	-	248.9	4.9	253.5	4.4
7/9/2021	7:25:00 PM	-	249.2	4.5	251.3	4.2
7/9/2021	7:30:00 PM	-	248.2	5.5	249.2	5
7/9/2021	7:35:00 PM	-	242.8	6	242	5.6
7/9/2021	7:40:00 PM	-	261.4	4.7	260.4	4.2
7/9/2021	7:45:00 PM	-	237.9	4.8	237.4	4.5
7/9/2021	7:50:00 PM	-	236.9	4.2	237.2	3.9
7/9/2021	7:55:00 PM	-	248.3	5.3	248	5
7/9/2021	8:00:00 PM	-	246.5	3.6	241.6	3.3
7/9/2021	8:05:00 PM	-	265.5	4.5	262.2	4.1
7/9/2021	8:10:00 PM	-	252.8	4.9	253.7	4.5
7/9/2021	8:15:00 PM	-	244.6	3.8	243.3	3.6
7/9/2021	8:20:00 PM	-	241	5.8	242.5	5.5
7/9/2021	8:25:00 PM	-	244.8	3.7	243.9	3.5
7/9/2021	8:30:00 PM	-	247.3	4.9	245.4	4.6
7/9/2021	8:35:00 PM	-	271.9	4.4	271.9	4
7/9/2021	8:40:00 PM	-	257.9	4.9	259.7	4.5
7/9/2021	8:45:00 PM	-	258.4	5.4	258.6	4.9
7/9/2021	8:50:00 PM	-	266.7	5.9	265.7	5.4
7/9/2021	8:55:00 PM	-	277.5	6.7	278.3	6.4
7/9/2021	9:00:00 PM	-	275.4	6.8	275.5	6.5
7/9/2021	9:05:00 PM	-	278.7	5.9	278.7	5.7
7/9/2021	9:10:00 PM	-	281.9	6	282.7	5.8
7/9/2021	9:15:00 PM	-	273.6	5	276	4.8
7/9/2021	9:20:00 PM	-	276.4	4.6	277.3	4.4
7/9/2021	9:25:00 PM	-	274.8	4.7	277	4.4
7/9/2021	9:30:00 PM	-	281.2	5.3	282.7	5.1
7/9/2021	9:35:00 PM	-	285.9	5.5	285.6	5.3
7/9/2021	9:40:00 PM	-	285.8	3.9	285.8	3.7
7/9/2021	9:45:00 PM	-	281.8	4.6	281.9	4.5
7/9/2021	9:50:00 PM	-	280.7	6.2	280.6	6.1
7/9/2021	9:55:00 PM	-	285.6	5.4	285.7	5.2
7/9/2021	10:00:00 PM	-	254	2.8	252.8	2.7

Site: Mesa						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	10:05:00 PM	-	279.5	2.2	280.8	2.1
7/9/2021	10:10:00 PM	-	281.9	3.7	281.9	3.6
7/9/2021	10:15:00 PM	-	292.6	0	275.3	0.7
7/9/2021	10:20:00 PM	-	123.7	1.5	105.5	1.4
7/9/2021	10:25:00 PM	-	115.4	13.4	119.2	12.9
7/9/2021	10:30:00 PM	-	124.1	20	124.1	19.3
7/9/2021	10:35:00 PM	-	116.7	23	115.3	21.9
7/9/2021	10:40:00 PM	-	124.8	21.4	126.1	20.7
7/9/2021	10:45:00 PM	-	125.8	20.3	125.5	19.8
7/9/2021	10:50:00 PM	-	142.2	16.9	141.4	16.4
7/9/2021	10:55:00 PM	-	135.5	20.8	135.5	20.4
7/9/2021	11:00:00 PM	-	135.8	15.2	135.5	14.9
7/9/2021	11:05:00 PM	-	152.7	13.8	153.3	13.4
7/9/2021	11:10:00 PM	-	153.7	9	153.6	8.6
7/9/2021	11:15:00 PM	-	162.7	8.8	161.3	8.5
7/9/2021	11:20:00 PM	-	171.7	8.6	171.7	8.3
7/9/2021	11:25:00 PM	-	174.5	9.6	175.3	9.4
7/9/2021	11:30:00 PM	-	168.4	11.1	168.4	10.8
7/9/2021	11:35:00 PM	-	174	9.9	173.6	9.6
7/9/2021	11:40:00 PM	-	188.8	8.7	188.5	8.5
7/9/2021	11:45:00 PM	-	204.9	8.6	205.1	8.4
7/9/2021	11:50:00 PM	-	224.1	10	224.3	9.8
7/9/2021	11:55:00 PM	-	228.3	9.8	228.8	9.5
	Average	-	278	4.9	250.7	1.2
	Max	-	357.5	23	356.4	21.9
	Max Hour	-	9086.451524	10.107003	9089.841227	9.673260622
	Min	-	4.2	0	2.2	0.4
	Count	0	288	288	288	288
	Total	0	59583.7	1432.6	59388.9	1329.1
	Date Printed:		9/30/2024 11:01			

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	12:00:00 AM	44.2	244.1	8.9	243.6	8.7
7/9/2021	12:05:00 AM	41.1	254.5	9.7	255.5	9.3
7/9/2021	12:10:00 AM	37.9	252	11.8	252.8	11.5
7/9/2021	12:15:00 AM	36.1	250.1	10.8	249.9	10.6
7/9/2021	12:20:00 AM	34.3	255	11.4	255.1	11.1
7/9/2021	12:25:00 AM	32.9	257.1	11.9	257.3	11.6
7/9/2021	12:30:00 AM	31.7	259.6	8	260.5	7.8
7/9/2021	12:35:00 AM	31.2	258	10	257.5	9.7
7/9/2021	12:40:00 AM	30.6	251.4	10	251.4	9.8
7/9/2021	12:45:00 AM	30.1	254.3	11.2	254.9	11
7/9/2021	12:50:00 AM	30	257.2	7	259.6	6.8
7/9/2021	12:55:00 AM	30.1	261.4	7.3	262.8	7
7/9/2021	1:00:00 AM	30	265.7	4.4	265.4	4.2
7/9/2021	1:05:00 AM	29.4	263.5	5.9	263.7	5.8
7/9/2021	1:10:00 AM	28.5	266.5	7.6	267.2	7.4
7/9/2021	1:15:00 AM	28	258.9	8.5	258.7	8.2
7/9/2021	1:20:00 AM	26.6	262.2	7.9	261.9	7.7
7/9/2021	1:25:00 AM	26.9	260.9	8.2	261.9	8
7/9/2021	1:30:00 AM	25.6	249.5	6.2	250.2	6
7/9/2021	1:35:00 AM	24.8	249.8	7	249.7	6.7
7/9/2021	1:40:00 AM	24.2	248.2	6.6	248.7	6.4
7/9/2021	1:45:00 AM	24.5	252.3	5.8	253.2	5.6
7/9/2021	1:50:00 AM	24.5	256.6	5.4	257.2	5.2
7/9/2021	1:55:00 AM	24.1	267	5.7	267.2	5.6
7/9/2021	2:00:00 AM	24.2	255.9	4.2	256.9	4
7/9/2021	2:05:00 AM	23.4	260	4	263.2	3.8
7/9/2021	2:10:00 AM	23.6	265.5	4.7	267.4	4.5
7/9/2021	2:15:00 AM	23.6	266.1	5.2	265.5	5
7/9/2021	2:20:00 AM	23.8	275.1	4.4	275.7	4.3
7/9/2021	2:25:00 AM	24.4	274.9	3.6	274.2	3.4
7/9/2021	2:30:00 AM	23.4	273.6	3.5	275.9	3.4
7/9/2021	2:35:00 AM	23.2	283.4	3.4	285	3.2
7/9/2021	2:40:00 AM	22.7	285.1	2	291	1.8
7/9/2021	2:45:00 AM	22.6	285.6	1.6	285.1	1.4
7/9/2021	2:50:00 AM	22.1	241	1.1	248.5	0.9
7/9/2021	2:55:00 AM	21.4	88.6	1	107.9	0.9
7/9/2021	3:00:00 AM	21.6	97.7	1.5	97.6	1.5
7/9/2021	3:05:00 AM	21.1	71.1	1.4	69.7	1.3
7/9/2021	3:10:00 AM	20.5	26.8	0	71	0.3
7/9/2021	3:15:00 AM	21	357.9	1.7	352.8	1.6
7/9/2021	3:20:00 AM	19.9	296.3	2.9	295.3	2.8
7/9/2021	3:25:00 AM	19.8	286.8	3.1	286.5	3
7/9/2021	3:30:00 AM	19.4	293.6	3.2	293	3.2
7/9/2021	3:35:00 AM	18.7	290.6	3.1	290.4	2.8
7/9/2021	3:40:00 AM	18.6	304	4.3	300.8	4
7/9/2021	3:45:00 AM	18.8	298	3.9	298.2	3.7
7/9/2021	3:50:00 AM	18.2	304.6	4.4	303.4	4.2
7/9/2021	3:55:00 AM	18.2	306.2	4.2	305.4	4.1
7/9/2021	4:00:00 AM	18.3	318.6	5.6	318.6	5.4
7/9/2021	4:05:00 AM	18.6	309.7	4.7	308.9	4.4
7/9/2021	4:10:00 AM	18.6	306.6	3.9	305.4	3.8
7/9/2021	4:15:00 AM	18.1	318.3	3.7	319.7	3.6
7/9/2021	4:20:00 AM	18.2	329.5	4.3	330.2	4.1

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	4:25:00 AM	18.6	336.4	3.8	336.8	3.7
7/9/2021	4:30:00 AM	19.2	332.3	4.1	330.4	4
7/9/2021	4:35:00 AM	19.6	329.3	4.7	329.4	4.5
7/9/2021	4:40:00 AM	19.5	326	4	325.9	3.9
7/9/2021	4:45:00 AM	19.1	331.3	5.1	331.5	5
7/9/2021	4:50:00 AM	18.9	329.1	5	328.3	4.8
7/9/2021	4:55:00 AM	19.2	325.7	3.4	325.7	3.3
7/9/2021	5:00:00 AM	19.4	317.5	4	317.5	3.8
7/9/2021	5:05:00 AM	19.6	306.3	4.9	306.3	4.7
7/9/2021	5:10:00 AM	20.3	312.3	4	311.6	3.9
7/9/2021	5:15:00 AM	20.3	302.6	4.3	302.3	4.2
7/9/2021	5:20:00 AM	20.4	297	3.7	296	3.5
7/9/2021	5:25:00 AM	19.8	299.9	3.9	298.9	3.7
7/9/2021	5:30:00 AM	20.3	293.5	5.6	292.8	5.4
7/9/2021	5:35:00 AM	21.1	285.4	4.6	285.3	4.4
7/9/2021	5:40:00 AM	21.4	276.8	3.5	278.8	3.4
7/9/2021	5:45:00 AM	22.4	274.1	2.9	276.7	2.4
7/9/2021	5:50:00 AM	23	290	3.4	290.5	3.2
7/9/2021	5:55:00 AM	22.9	197.4	1.8	179.8	0.9
7/9/2021	6:00:00 AM	25.1	126.3	2.7	125.7	2.7
7/9/2021	6:05:00 AM	27.1	120.3	2.4	119	2.4
7/9/2021	6:10:00 AM	29.2	122.4	2.1	121.2	2
7/9/2021	6:15:00 AM	28.9	119.7	2.8	120	2.8
7/9/2021	6:20:00 AM	28.8	114.4	3.1	114.3	3.1
7/9/2021	6:25:00 AM	31	95.6	1.3	107.1	1.3
7/9/2021	6:30:00 AM	32.1	118.6	0	163.9	0.5
7/9/2021	6:35:00 AM	31	342.8	1.5	5.7	1.2
7/9/2021	6:40:00 AM	28.7	302.6	3	326.8	2.5
7/9/2021	6:45:00 AM	27.4	256.9	1.4	255.4	0.8
7/9/2021	6:50:00 AM	25.7	320.5	2.9	319.7	2.6
7/9/2021	6:55:00 AM	25	295.6	0	297.2	0.7
7/9/2021	7:00:00 AM	24.8	15.2	1.7	20.6	1.5
7/9/2021	7:05:00 AM	25	318.1	4	320.1	3.7
7/9/2021	7:10:00 AM	24.7	17.9	3.6	15.9	3.5
7/9/2021	7:15:00 AM	30.5	58.4	3.3	59	3.1
7/9/2021	7:20:00 AM	34	29	2.4	25.3	1.5
7/9/2021	7:25:00 AM	34.6	349.2	0.9	323.2	0.3
7/9/2021	7:30:00 AM	32.7	306.2	3.3	301.8	2.7
7/9/2021	7:35:00 AM	31	256.9	1.9	257.7	1.7
7/9/2021	7:40:00 AM	30.3	265.9	3.3	268	3.2
7/9/2021	7:45:00 AM	29.3	281.4	2.6	284.7	2.4
7/9/2021	7:50:00 AM	26.7	262.8	2.7	261.3	2.5
7/9/2021	7:55:00 AM	26.5	281.4	3.1	282.7	3
7/9/2021	8:00:00 AM	<	295	4.9	295.4	4.7
7/9/2021	8:05:00 AM	<	301.5	4.1	299.2	4
7/9/2021	8:10:00 AM	<	265.7	3.6	267	3.4
7/9/2021	8:15:00 AM	<	290	4.4	288.3	4.1
7/9/2021	8:20:00 AM	<	269.1	4.7	270.3	4.5
7/9/2021	8:25:00 AM	<	279.8	3.2	274.5	2.7
7/9/2021	8:30:00 AM	<	316.3	3.9	316.6	3
7/9/2021	8:35:00 AM	<	264.5	4	264.4	3.7
7/9/2021	8:40:00 AM	<	293.9	1.2	266.8	0.5
7/9/2021	8:45:00 AM	<	245.7	3.3	245.8	3

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	8:50:00 AM	<	216.6	2.9	219.4	2.5
7/9/2021	8:55:00 AM	<	296.4	2.5	298	2.1
7/9/2021	9:00:00 AM	<	282.5	3.5	279.2	3.2
7/9/2021	9:05:00 AM	<	239.7	3.2	245.8	2.9
7/9/2021	9:10:00 AM	<	214.4	1.2	211.4	0.8
7/9/2021	9:15:00 AM	<	254.8	2.3	259.8	2
7/9/2021	9:20:00 AM	<	304.4	4.2	294.5	3.8
7/9/2021	9:25:00 AM	<	314.5	1.1	265.9	0.7
7/9/2021	9:30:00 AM	<	260.4	3.8	266.3	3.3
7/9/2021	9:35:00 AM	<	283.8	5.2	282.2	5
7/9/2021	9:40:00 AM	<	282.7	3.7	278	3.3
7/9/2021	9:45:00 AM	<	243.9	3.4	247.8	3.2
7/9/2021	9:50:00 AM	<	246.8	4	244.7	3.8
7/9/2021	9:55:00 AM	<	246.9	3	242.4	2.6
7/9/2021	10:00:00 AM	25.6	143.7	2.8	148.6	2.5
7/9/2021	10:05:00 AM	26.2	142.2	2.2	145.4	2
7/9/2021	10:10:00 AM	27.1	162.9	3.1	166.3	2.8
7/9/2021	10:15:00 AM	27.7	207	2.6	245.1	1.3
7/9/2021	10:20:00 AM	29.1	248.3	4.8	252.3	4.5
7/9/2021	10:25:00 AM	30	213.2	4	227.2	3.1
7/9/2021	10:30:00 AM	30.5	247.5	2.1	264.9	1.5
7/9/2021	10:35:00 AM	31.5	271.1	4.1	272.1	3.5
7/9/2021	10:40:00 AM	33.3	198.6	1.5	197.1	0.4
7/9/2021	10:45:00 AM	36.7	141.8	4.7	142.7	4.5
7/9/2021	10:50:00 AM	38.2	135.6	4.4	136	4.3
7/9/2021	10:55:00 AM	38.1	180.3	4.3	167.2	4.1
7/9/2021	11:00:00 AM	37.6	151.1	4.7	155.4	4.2
7/9/2021	11:05:00 AM	37.4	213.3	2.5	208.2	2.2
7/9/2021	11:10:00 AM	36.4	155.8	1.4	158.1	0.7
7/9/2021	11:15:00 AM	36.7	124.7	3.6	128.1	3.3
7/9/2021	11:20:00 AM	35.8	159.4	4.5	159.4	4.2
7/9/2021	11:25:00 AM	35.5	141.5	2.9	139.3	2.6
7/9/2021	11:30:00 AM	37.5	131.3	5.4	134.1	5.1
7/9/2021	11:35:00 AM	39.6	92	5	91.6	4.6
7/9/2021	11:40:00 AM	39.7	129.2	2.8	125.1	2.4
7/9/2021	11:45:00 AM	40.7	191.7	3	201.2	2.4
7/9/2021	11:50:00 AM	40.4	197.2	6.1	199.9	5.1
7/9/2021	11:55:00 AM	40.1	238.3	5.8	239.5	4.9
7/9/2021	12:00:00 PM	40.6	243.9	5.2	239.6	4.6
7/9/2021	12:05:00 PM	44.6	242.2	4.5	251.3	3.9
7/9/2021	12:10:00 PM	46.4	221.8	3	221.1	2.5
7/9/2021	12:15:00 PM	46.5	230.6	6.2	226.5	5.9
7/9/2021	12:20:00 PM	47.2	231.7	6.8	232	6.2
7/9/2021	12:25:00 PM	47.6	196.8	7.1	199.8	6.8
7/9/2021	12:30:00 PM	47.3	203	6.9	203.3	6.7
7/9/2021	12:35:00 PM	46	145.6	4.9	148	4.2
7/9/2021	12:40:00 PM	45.3	191.8	5.4	194	4.3
7/9/2021	12:45:00 PM	43.5	234.2	6.4	234.3	5.9
7/9/2021	12:50:00 PM	40	292.5	7.6	293.4	7.1
7/9/2021	12:55:00 PM	37.2	285.6	4.7	281.9	4.2
7/9/2021	1:00:00 PM	34.8	274	8	274.5	7.5
7/9/2021	1:05:00 PM	34.4	261.6	7.8	263.6	7.3
7/9/2021	1:10:00 PM	34.7	283.7	8	279.8	7.7

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	1:15:00 PM	34.3	312.6	5.4	310.3	5.2
7/9/2021	1:20:00 PM	33.8	291.6	4.9	289.5	4.1
7/9/2021	1:25:00 PM	33.1	254.9	9	256	8.7
7/9/2021	1:30:00 PM	32.2	251.8	7.3	250.2	6.9
7/9/2021	1:35:00 PM	31.5	262.8	9.8	263.2	9.4
7/9/2021	1:40:00 PM	30.7	240.9	9.2	242.5	9
7/9/2021	1:45:00 PM	29.8	235.8	6.4	236.2	6.2
7/9/2021	1:50:00 PM	29.3	267.9	6.1	269.7	5.6
7/9/2021	1:55:00 PM	29.5	277.5	5.7	285.7	5.4
7/9/2021	2:00:00 PM	29.5	282.1	8.5	281.9	8.2
7/9/2021	2:05:00 PM	28.8	283.3	7.9	281.6	7.4
7/9/2021	2:10:00 PM	27.8	295.4	8.5	294.4	7.7
7/9/2021	2:15:00 PM	26.7	277.2	9.2	275.7	8.7
7/9/2021	2:20:00 PM	26.9	274	10.5	272.8	10.2
7/9/2021	2:25:00 PM	28.3	306.9	9.2	307.2	8.7
7/9/2021	2:30:00 PM	29.3	299.9	8.1	299.8	7.8
7/9/2021	2:35:00 PM	29.7	295.4	7.4	303.5	6.8
7/9/2021	2:40:00 PM	29.6	279	6.5	279.6	5.8
7/9/2021	2:45:00 PM	29.9	261.3	8.4	261.3	7.6
7/9/2021	2:50:00 PM	29.7	274.9	8.3	275.8	7.9
7/9/2021	2:55:00 PM	30	263.1	7.3	265.3	6.9
7/9/2021	3:00:00 PM	30.7	263.3	6	264.2	5.4
7/9/2021	3:05:00 PM	30.7	268.4	5.1	263.6	4.6
7/9/2021	3:10:00 PM	30.2	292.9	5.3	294.5	5
7/9/2021	3:15:00 PM	30	297.4	7.4	294.7	6.7
7/9/2021	3:20:00 PM	29.7	290	8.1	291.5	7.7
7/9/2021	3:25:00 PM	29.2	275.9	10.1	275.1	9.6
7/9/2021	3:30:00 PM	29	253.2	9.2	253.9	8.9
7/9/2021	3:35:00 PM	27.8	261	6.1	259.1	5.9
7/9/2021	3:40:00 PM	26.3	272.6	6.4	272.4	5.5
7/9/2021	3:45:00 PM	25.4	274.8	8.5	276.4	8
7/9/2021	3:50:00 PM	25	289.7	8.2	289.7	8
7/9/2021	3:55:00 PM	24.2	271.7	6.6	275.2	6.1
7/9/2021	4:00:00 PM	23.9	245	6.3	245.1	6
7/9/2021	4:05:00 PM	23.6	263.7	4.8	270.5	4.4
7/9/2021	4:10:00 PM	23.4	243.4	9.9	244.2	9.7
7/9/2021	4:15:00 PM	22.9	252.9	7.7	253.1	7.6
7/9/2021	4:20:00 PM	22.8	250.9	7.7	252.2	7.5
7/9/2021	4:25:00 PM	22.3	255.2	8	255.7	7.7
7/9/2021	4:30:00 PM	22.3	247.9	4.2	250	3.8
7/9/2021	4:35:00 PM	22.7	243.5	8	252.2	7.4
7/9/2021	4:40:00 PM	22.5	242.6	5.9	244.3	5.5
7/9/2021	4:45:00 PM	22.1	252.7	11.1	253.8	10.8
7/9/2021	4:50:00 PM	22.3	244.7	4.7	248.7	4.5
7/9/2021	4:55:00 PM	21.9	293.7	4.9	283.3	4.1
7/9/2021	5:00:00 PM	22.1	262.7	10	262.7	9.7
7/9/2021	5:05:00 PM	22.2	266.7	7.1	266.8	6.9
7/9/2021	5:10:00 PM	22	236.6	8.9	236.9	8.6
7/9/2021	5:15:00 PM	23.2	260.4	6.8	258.6	6.3
7/9/2021	5:20:00 PM	23.4	264.9	9.1	263.4	8.6
7/9/2021	5:25:00 PM	23.4	232.5	6.6	233.9	6.3
7/9/2021	5:30:00 PM	24.2	252.8	6.1	254.8	5.8
7/9/2021	5:35:00 PM	24.7	270.6	7.6	271.3	7.2

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	5:40:00 PM	24.6	269.3	7.6	268.7	7.3
7/9/2021	5:45:00 PM	24.8	267.1	5.6	268.6	5.1
7/9/2021	5:50:00 PM	25.4	272	5	274.4	4.5
7/9/2021	5:55:00 PM	25	249.3	7.8	247.6	7.5
7/9/2021	6:00:00 PM	24.5	282.2	7.3	284.4	7
7/9/2021	6:05:00 PM	24.9	257.4	6.7	256.4	6.3
7/9/2021	6:10:00 PM	25.1	253	7.3	252.7	7.1
7/9/2021	6:15:00 PM	23.6	244.7	6.4	243.2	6
7/9/2021	6:20:00 PM	23.4	248.5	5.3	249.1	5.1
7/9/2021	6:25:00 PM	23.9	255.2	4.4	260	4
7/9/2021	6:30:00 PM	24.1	277.2	6.6	276.9	6.3
7/9/2021	6:35:00 PM	24.4	257.3	8.1	257.7	8
7/9/2021	6:40:00 PM	24.2	246.4	6.4	247.1	6.2
7/9/2021	6:45:00 PM	23.7	243.3	7.6	244	7.3
7/9/2021	6:50:00 PM	23	227.3	5.8	226	5.6
7/9/2021	6:55:00 PM	23	235.5	7.5	235.8	7.3
7/9/2021	7:00:00 PM	22.5	252.2	6.8	250.8	6.5
7/9/2021	7:05:00 PM	22.3	248.6	7.6	249.3	7.4
7/9/2021	7:10:00 PM	21.9	244	7	243.6	6.7
7/9/2021	7:15:00 PM	21.8	254.7	8	254.5	7.8
7/9/2021	7:20:00 PM	21.6	256.7	7.7	256.7	7.5
7/9/2021	7:25:00 PM	21.4	252.1	8.1	253.1	7.8
7/9/2021	7:30:00 PM	21.5	248.9	7.2	249.7	7.1
7/9/2021	7:35:00 PM	21.5	248.6	5.4	249.5	5.2
7/9/2021	7:40:00 PM	21.3	255.5	7.1	254.5	6.8
7/9/2021	7:45:00 PM	21.7	244.8	7.3	244.7	7.2
7/9/2021	7:50:00 PM	22.3	234.2	7.8	234.3	7.6
7/9/2021	7:55:00 PM	22.7	239.4	6.5	240.2	6.3
7/9/2021	8:00:00 PM	23.8	243.6	5.4	245.3	5.2
7/9/2021	8:05:00 PM	24.6	247.6	8	248	7.8
7/9/2021	8:10:00 PM	24.4	241.8	7.7	241.8	7.4
7/9/2021	8:15:00 PM	24.4	241.9	9.3	242.3	9
7/9/2021	8:20:00 PM	22	237.7	8.8	238.6	8.5
7/9/2021	8:25:00 PM	20	240.6	10.5	241.8	10.2
7/9/2021	8:30:00 PM	20.4	249.4	9.5	249.6	9.2
7/9/2021	8:35:00 PM	20.5	241.3	7.6	242.1	7.4
7/9/2021	8:40:00 PM	21.4	240.4	9.2	239.6	9
7/9/2021	8:45:00 PM	23.7	240.3	7.8	240	7.6
7/9/2021	8:50:00 PM	25.2	245.1	9.5	245.6	9.3
7/9/2021	8:55:00 PM	24.2	243.2	9.8	243.7	9.6
7/9/2021	9:00:00 PM	23.3	241.3	9.7	241.2	9.5
7/9/2021	9:05:00 PM	23.2	237.9	10	238	9.7
7/9/2021	9:10:00 PM	24	245.8	9.9	245.4	9.6
7/9/2021	9:15:00 PM	26	246.1	9.9	246.4	9.6
7/9/2021	9:20:00 PM	26	243.6	9.1	242	8.8
7/9/2021	9:25:00 PM	25.7	248.8	8	249.5	7.8
7/9/2021	9:30:00 PM	26	242.4	8	242.6	7.9
7/9/2021	9:35:00 PM	27.2	245.5	6.8	246.2	6.6
7/9/2021	9:40:00 PM	26.7	234.6	3.7	235.9	3.5
7/9/2021	9:45:00 PM	26.3	226.4	5.7	228	5.5
7/9/2021	9:50:00 PM	26.8	238	7.7	238.4	7.4
7/9/2021	9:55:00 PM	26.5	247.4	7.2	248.4	7
7/9/2021	10:00:00 PM	25.1	237.1	6.2	238	6.1

Site: South Scottsdale						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	10:05:00 PM	24.3	236.7	4.3	236.6	4.2
7/9/2021	10:10:00 PM	25.2	239.8	4.7	238.6	4.6
7/9/2021	10:15:00 PM	25.2	214.9	3.6	214.9	3.5
7/9/2021	10:20:00 PM	26.9	145	3.2	144.2	3
7/9/2021	10:25:00 PM	30.6	151	4.9	151.4	4.8
7/9/2021	10:30:00 PM	33.5	143.3	7	143.4	6.9
7/9/2021	10:35:00 PM	36.8	129.2	17.6	126.9	16.4
7/9/2021	10:40:00 PM	58.3	117.6	14.5	118	14
7/9/2021	10:45:00 PM	170.2	123.8	20	124.7	19.3
7/9/2021	10:50:00 PM	679	140.5	20.6	139.4	20.1
7/9/2021	10:55:00 PM	2680.6	146.2	15.3	145.9	14.8
7/9/2021	11:00:00 PM	5241.6	137.5	12.8	138	12.3
7/9/2021	11:05:00 PM	6256.8	140.9	12.3	140.3	11.9
7/9/2021	11:10:00 PM	6223.2	149.2	11.8	149.2	11.6
7/9/2021	11:15:00 PM	5541.6	149.5	11	149	10.8
7/9/2021	11:20:00 PM	4534.6	156.8	3.9	151.6	3.8
7/9/2021	11:25:00 PM	3516.8	161.3	6.6	161.4	6.4
7/9/2021	11:30:00 PM	2636.7	168.5	8.7	168.2	8.6
7/9/2021	11:35:00 PM	1927.7	179.3	8.4	180.5	8.2
7/9/2021	11:40:00 PM	1389.3	180.6	5.5	181.1	5.1
7/9/2021	11:45:00 PM	993.6	132.7	5.3	133.8	5.1
7/9/2021	11:50:00 PM	710.8	134.3	3.9	135.6	3.4
7/9/2021	11:55:00 PM	506.8	186.3	6.3	186.5	5.9
	Average	188.7	255	5.8	250.9	3.8
	Max	6256.8	357.9	20.6	352.8	20.1
	Max Hour	691279.1164	3815.410174	9.463256751	3814.660673	9.267372121
	Min	18.1	15.2	0	5.7	0.3
	Count	264	288	288	288	288
	Total	49830	69494.6	1691.7	69326.6	1602.7
	Date Printed:	9/30/2024 11:01				

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	12:00:00 AM		278.7	5.3	276.2	4.8
7/9/2021	12:05:00 AM		280.1	4.4	276	3.9
7/9/2021	12:10:00 AM		269.2	4.5	267.4	4
7/9/2021	12:15:00 AM		270.7	3.3	270	2.9
7/9/2021	12:20:00 AM		270.5	3.6	270.3	3
7/9/2021	12:25:00 AM		263	3.3	252.2	2.7
7/9/2021	12:30:00 AM		263.8	3.6	261.7	3.1
7/9/2021	12:35:00 AM		274.2	2.8	263	2.5
7/9/2021	12:40:00 AM		268.4	4.2	266	3.6
7/9/2021	12:45:00 AM		276.1	3.2	274.3	2.7
7/9/2021	12:50:00 AM		274.9	3.1	270.5	2.5
7/9/2021	12:55:00 AM		261.7	2.1	261.5	1.7
7/9/2021	1:00:00 AM		255.6	2.6	249.8	2.1
7/9/2021	1:05:00 AM		243.9	2.3	233.7	1.9
7/9/2021	1:10:00 AM		250.5	2	246.6	1.7
7/9/2021	1:15:00 AM		275.9	1.4	264.4	1.2
7/9/2021	1:20:00 AM		281.6	1.2	272.9	0.9
7/9/2021	1:25:00 AM		296.8	1.6	295	1.3
7/9/2021	1:30:00 AM		289.9	2	287.8	1.8
7/9/2021	1:35:00 AM		280.9	2.3	279	2.1
7/9/2021	1:40:00 AM		303.2	1.7	302.9	1.6
7/9/2021	1:45:00 AM		289.2	1.8	287.9	1.6
7/9/2021	1:50:00 AM		292.1	1.7	288.8	1.6
7/9/2021	1:55:00 AM		277.3	2.3	277.4	2.2
7/9/2021	2:00:00 AM		297.9	1.5	297.5	1.5
7/9/2021	2:05:00 AM		298.2	2	298.2	1.8
7/9/2021	2:10:00 AM		291.7	1.6	290.1	1.6
7/9/2021	2:15:00 AM		279.6	1.1	275.9	1
7/9/2021	2:20:00 AM		315.2	1.4	314.1	1
7/9/2021	2:25:00 AM		17.3	0	21	0
7/9/2021	2:30:00 AM		327.8	0	319.2	0.5
7/9/2021	2:35:00 AM		280.1	0	259.3	0.4
7/9/2021	2:40:00 AM		302.4	1.1	304	1
7/9/2021	2:45:00 AM		297.6	0	308.2	0.5
7/9/2021	2:50:00 AM		323.4	1	316.1	0.9
7/9/2021	2:55:00 AM		327.4	0	336.2	0.5
7/9/2021	3:00:00 AM		19.8	0	56.4	0.2
7/9/2021	3:05:00 AM		355.6	0	349.7	0.1
7/9/2021	3:10:00 AM		321.4	0	322.8	0.5
7/9/2021	3:15:00 AM		314.1	0	316.4	0
7/9/2021	3:20:00 AM		337	1.3	342.1	1.3
7/9/2021	3:25:00 AM		351	2.1	351.3	2
7/9/2021	3:30:00 AM		351	1	345.8	0.9
7/9/2021	3:35:00 AM		339.1	0	21	0
7/9/2021	3:40:00 AM		355.3	0	355.8	0.6
7/9/2021	3:45:00 AM		340	1.1	340.7	1
7/9/2021	3:50:00 AM		355.8	1.6	355.1	1.5
7/9/2021	3:55:00 AM		341.8	1.8	339.4	1.6
7/9/2021	4:00:00 AM		15.2	0	12.1	0.5
7/9/2021	4:05:00 AM		351.2	0	10.5	0.5
7/9/2021	4:10:00 AM		339.1	1	348.4	0.9
7/9/2021	4:15:00 AM		9.2	0	34.2	0
7/9/2021	4:20:00 AM		125	0	89.8	0.1

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	4:25:00 AM		81.5	1.5	81	1.5
7/9/2021	4:30:00 AM		41.2	0	57.4	0.7
7/9/2021	4:35:00 AM		11.7	0.9	16.6	0.8
7/9/2021	4:40:00 AM		17.5	1	18.1	0.9
7/9/2021	4:45:00 AM		2.7	0	2.9	0.3
7/9/2021	4:50:00 AM		344.8	0	334.3	0
7/9/2021	4:55:00 AM		26.7	0	37.8	0.1
7/9/2021	5:00:00 AM		130.1	0	90.7	0.3
7/9/2021	5:05:00 AM		106.8	0	99.8	0.6
7/9/2021	5:10:00 AM		23.9	0	24.6	0
7/9/2021	5:15:00 AM		48.1	1	67	0.9
7/9/2021	5:20:00 AM		97.9	2.3	97.8	2.2
7/9/2021	5:25:00 AM		82.3	2	82.7	1.9
7/9/2021	5:30:00 AM		39.8	0	55.5	0.8
7/9/2021	5:35:00 AM		48.3	0	57.5	0.5
7/9/2021	5:40:00 AM		53.5	0.9	55.7	0.9
7/9/2021	5:45:00 AM		37.3	0	41.4	0.5
7/9/2021	5:50:00 AM		54.5	0	61	0.7
7/9/2021	5:55:00 AM		71.8	1.7	70.4	1.7
7/9/2021	6:00:00 AM		68.9	1.9	68.8	1.9
7/9/2021	6:05:00 AM		43.2	1.8	45.7	1.6
7/9/2021	6:10:00 AM		40.1	1.8	42.6	1.8
7/9/2021	6:15:00 AM		49.2	1.9	48	1.8
7/9/2021	6:20:00 AM		36.9	1.3	39.3	1.3
7/9/2021	6:25:00 AM		54.6	2	59.5	1.9
7/9/2021	6:30:00 AM		23.6	1.5	23	1.4
7/9/2021	6:35:00 AM		36.1	1.3	33.6	1.2
7/9/2021	6:40:00 AM		19.2	1.2	19	1.1
7/9/2021	6:45:00 AM		12.8	2.2	12.2	2
7/9/2021	6:50:00 AM		17.2	1.3	16	1.3
7/9/2021	6:55:00 AM		16.6	1.4	14.9	1.3
7/9/2021	7:00:00 AM		7.5	2	6.4	1.9
7/9/2021	7:05:00 AM		10.5	1.3	7.6	1.2
7/9/2021	7:10:00 AM		22.6	1.6	25.2	1.5
7/9/2021	7:15:00 AM		6.9	1.7	7.8	1.6
7/9/2021	7:20:00 AM		14.2	1.3	16.6	1.2
7/9/2021	7:25:00 AM		45.4	1.5	56	1.3
7/9/2021	7:30:00 AM		33.7	1	49.8	0.8
7/9/2021	7:35:00 AM		62	2.2	59.7	2
7/9/2021	7:40:00 AM		83.1	2.1	78.6	1.7
7/9/2021	7:45:00 AM		81.2	3.5	81.1	3.3
7/9/2021	7:50:00 AM		73.1	3.2	75.3	3.1
7/9/2021	7:55:00 AM		65.1	2.2	68.6	2.1
7/9/2021	8:00:00 AM		78.7	2.9	80.8	2.7
7/9/2021	8:05:00 AM		34.4	3	33	2.8
7/9/2021	8:10:00 AM		83.7	2	82.7	1.8
7/9/2021	8:15:00 AM		14.4	1	23.9	0.8
7/9/2021	8:20:00 AM		52.3	1.3	70.4	1.1
7/9/2021	8:25:00 AM		85.5	2.4	86.3	2.2
7/9/2021	8:30:00 AM		89.8	2.5	91.6	2.1
7/9/2021	8:35:00 AM		104.1	2.3	110.9	1.9
7/9/2021	8:40:00 AM		250.4	1.5	158	0.1
7/9/2021	8:45:00 AM		226.1	3	243.6	2

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	8:50:00 AM		7.8	3.7	16.1	3.1
7/9/2021	8:55:00 AM		16.5	1.9	7.9	1.2
7/9/2021	9:00:00 AM		325.5	1.6	326.2	1.4
7/9/2021	9:05:00 AM		59.9	2	64.5	1.8
7/9/2021	9:10:00 AM		90.3	2.4	78.2	1.8
7/9/2021	9:15:00 AM		113.4	3.1	112.5	2.9
7/9/2021	9:20:00 AM		173.1	2.6	167.2	2.2
7/9/2021	9:25:00 AM		104.1	3	113.7	2.7
7/9/2021	9:30:00 AM		20.6	0	13.8	0.4
7/9/2021	9:35:00 AM		288.1	3	282.4	2.8
7/9/2021	9:40:00 AM		275.2	3.6	278.4	3.4
7/9/2021	9:45:00 AM		293.2	2.7	292.2	2.6
7/9/2021	9:50:00 AM		249.6	2.5	245.8	1.9
7/9/2021	9:55:00 AM		237.7	2.1	230.4	1.6
7/9/2021	10:00:00 AM		113.1	1.7	113.7	0.9
7/9/2021	10:05:00 AM		135	1.7	147.6	0.9
7/9/2021	10:10:00 AM		232.2	3.5	230.3	3.3
7/9/2021	10:15:00 AM		261.7	3.1	255.6	2.6
7/9/2021	10:20:00 AM		253.5	4	246.9	3.8
7/9/2021	10:25:00 AM		265.5	4	270.5	3.7
7/9/2021	10:30:00 AM		193.2	1.1	189.8	0.5
7/9/2021	10:35:00 AM		254	3.1	243.3	3
7/9/2021	10:40:00 AM		351.3	0	351.2	0.4
7/9/2021	10:45:00 AM		97.6	1.4	99.2	1.3
7/9/2021	10:50:00 AM		78.2	3.5	78.7	3.3
7/9/2021	10:55:00 AM		193.9	1.6	186.9	1
7/9/2021	11:00:00 AM		100.7	1.4	106.1	0.9
7/9/2021	11:05:00 AM		93.7	4.2	95.5	4
7/9/2021	11:10:00 AM		71.7	3.2	74.7	3
7/9/2021	11:15:00 AM		184.6	4.8	198.5	4.1
7/9/2021	11:20:00 AM		137.3	3.1	151	2.2
7/9/2021	11:25:00 AM		185.3	1.7	163.4	1.2
7/9/2021	11:30:00 AM		175.8	3.1	155.3	2.6
7/9/2021	11:35:00 AM		88.6	3.6	91.4	3.1
7/9/2021	11:40:00 AM		60.5	2.8	59.7	2.7
7/9/2021	11:45:00 AM		62.8	2.3	70.1	1.9
7/9/2021	11:50:00 AM		111	2.9	108.9	2.6
7/9/2021	11:55:00 AM		216.7	3.8	214.7	3.1
7/9/2021	12:00:00 PM		219.2	2.9	220.6	2.3
7/9/2021	12:05:00 PM		0.5	2.7	344.9	2.2
7/9/2021	12:10:00 PM		287.1	2.3	314.3	0.2
7/9/2021	12:15:00 PM		163.4	3.8	161.5	3.2
7/9/2021	12:20:00 PM		240.9	4.2	240.2	3.9
7/9/2021	12:25:00 PM		176.4	2	200	1.5
7/9/2021	12:30:00 PM		215.5	4.1	221.1	3.8
7/9/2021	12:35:00 PM		236.3	2.5	236.3	1.9
7/9/2021	12:40:00 PM		319.5	4.9	317.7	4.6
7/9/2021	12:45:00 PM		298.1	2.5	302.3	2.1
7/9/2021	12:50:00 PM		241.5	2.9	237.7	2.7
7/9/2021	12:55:00 PM		243.2	4.2	243.2	3.7
7/9/2021	1:00:00 PM		161.2	3.1	168.3	2.3
7/9/2021	1:05:00 PM		193.9	3	188.7	2.4
7/9/2021	1:10:00 PM		241.8	3.9	234.7	3.3

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	1:15:00 PM		237.9	4.4	246	3.2
7/9/2021	1:20:00 PM		223.7	4.8	215.8	4.2
7/9/2021	1:25:00 PM		300.8	5.5	300.7	5.2
7/9/2021	1:30:00 PM		305.5	5.3	306.6	5.1
7/9/2021	1:35:00 PM		302.3	5.7	303.5	5.1
7/9/2021	1:40:00 PM		313.2	4.7	313	4.1
7/9/2021	1:45:00 PM		289.6	5.4	287.8	5.1
7/9/2021	1:50:00 PM		295.5	5.7	292.2	4.6
7/9/2021	1:55:00 PM		268.4	7	259.9	6
7/9/2021	2:00:00 PM		291.8	4.7	288.6	4.5
7/9/2021	2:05:00 PM		273.4	5.3	271.8	4.7
7/9/2021	2:10:00 PM		298.1	2.7	293.4	2.5
7/9/2021	2:15:00 PM		286.8	5.8	286	5.4
7/9/2021	2:20:00 PM		263	5.5	263.5	4.8
7/9/2021	2:25:00 PM		253	5	250.2	4.4
7/9/2021	2:30:00 PM		248.8	6.1	249.8	5.3
7/9/2021	2:35:00 PM		276.5	4.9	284.1	4.1
7/9/2021	2:40:00 PM		304.7	6.3	303.6	5.9
7/9/2021	2:45:00 PM		290.2	3.8	288.2	3.4
7/9/2021	2:50:00 PM		269.6	4.8	263.2	4.1
7/9/2021	2:55:00 PM		244.6	5.6	237.5	4.9
7/9/2021	3:00:00 PM		280.2	5.5	284	4.7
7/9/2021	3:05:00 PM		296.6	6.4	296	6.1
7/9/2021	3:10:00 PM		310.9	5.2	310.4	4.9
7/9/2021	3:15:00 PM		275.2	3.3	276.8	2.7
7/9/2021	3:20:00 PM		262.6	3.5	258.6	2.9
7/9/2021	3:25:00 PM		284.8	4.6	282	4.1
7/9/2021	3:30:00 PM		292.8	5.5	289.5	5.2
7/9/2021	3:35:00 PM		290.5	5.4	285.1	4.5
7/9/2021	3:40:00 PM		257.5	4.3	257.1	3.3
7/9/2021	3:45:00 PM		287.2	4.7	286.8	4.2
7/9/2021	3:50:00 PM		272.3	4.7	272	4.4
7/9/2021	3:55:00 PM		294.5	4.7	294.6	4.2
7/9/2021	4:00:00 PM		295.2	5.6	298.2	4.9
7/9/2021	4:05:00 PM		256.7	3.5	246.8	3
7/9/2021	4:10:00 PM		289.5	5	288.9	4.5
7/9/2021	4:15:00 PM		294.1	6.1	291.3	5.7
7/9/2021	4:20:00 PM		285.5	6.2	286.9	5.9
7/9/2021	4:25:00 PM		298.5	3.6	296.4	3.2
7/9/2021	4:30:00 PM		266.2	2.9	273.2	2.6
7/9/2021	4:35:00 PM		276	4.1	280.9	3.5
7/9/2021	4:40:00 PM		293.2	3.9	295.3	3.6
7/9/2021	4:45:00 PM		265.5	2.9	267	2.5
7/9/2021	4:50:00 PM		284.6	2.2	282.2	1.9
7/9/2021	4:55:00 PM		286.9	6.8	287.5	6.1
7/9/2021	5:00:00 PM		278.6	4.7	278.9	4.1
7/9/2021	5:05:00 PM		278.9	4.7	280	4.3
7/9/2021	5:10:00 PM		274.7	4	251.4	3.5
7/9/2021	5:15:00 PM		285.8	4.4	286	3.9
7/9/2021	5:20:00 PM		252.7	3.9	246	3.5
7/9/2021	5:25:00 PM		291.6	6.9	292.4	6.6
7/9/2021	5:30:00 PM		306.5	5.3	305	4.9
7/9/2021	5:35:00 PM		306.2	3.1	310.6	2.7

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	5:40:00 PM		279.7	5.1	284.5	4.6
7/9/2021	5:45:00 PM		247.9	4.5	242.1	4.1
7/9/2021	5:50:00 PM		256.1	3.4	251	2.9
7/9/2021	5:55:00 PM		289.1	3	288	2.8
7/9/2021	6:00:00 PM		277.3	3	277.2	2.6
7/9/2021	6:05:00 PM		296.9	5.1	295.6	4.9
7/9/2021	6:10:00 PM		306.1	3.5	309	3.1
7/9/2021	6:15:00 PM		262.1	3.5	259	3.2
7/9/2021	6:20:00 PM		278.9	3.2	278	3
7/9/2021	6:25:00 PM		248	5.3	242	4.9
7/9/2021	6:30:00 PM		289	3.9	286.5	3.7
7/9/2021	6:35:00 PM		267	3.7	261.5	3.2
7/9/2021	6:40:00 PM		270.8	3	271.7	2.6
7/9/2021	6:45:00 PM		230.5	5	229.6	4.6
7/9/2021	6:50:00 PM		228.6	5.2	227.8	5
7/9/2021	6:55:00 PM		241.2	5.1	236.7	4.8
7/9/2021	7:00:00 PM		239.5	4.5	229.8	4.2
7/9/2021	7:05:00 PM		237.5	3.8	235.6	3.6
7/9/2021	7:10:00 PM		247.7	3.2	233.1	2.9
7/9/2021	7:15:00 PM		238.7	3.2	237.5	3
7/9/2021	7:20:00 PM		253.5	2.4	244.3	2.2
7/9/2021	7:25:00 PM		236.6	3.5	236.5	3.2
7/9/2021	7:30:00 PM		237.9	5.1	234.3	4.8
7/9/2021	7:35:00 PM		270.5	2.1	257.9	1.7
7/9/2021	7:40:00 PM		245.1	4.5	240.6	4.2
7/9/2021	7:45:00 PM		238.2	3	236.6	2.8
7/9/2021	7:50:00 PM		234.1	4.1	232.8	3.9
7/9/2021	7:55:00 PM		240.5	3.2	235.7	3
7/9/2021	8:00:00 PM		233.8	2.6	233.8	2.4
7/9/2021	8:05:00 PM		245.1	2.6	240.5	2.2
7/9/2021	8:10:00 PM		250.4	1.9	244.8	1.7
7/9/2021	8:15:00 PM		252.9	2.7	249.3	2.4
7/9/2021	8:20:00 PM		252.8	3.5	246.6	3.1
7/9/2021	8:25:00 PM		247.3	4	242.2	3.6
7/9/2021	8:30:00 PM		246.5	4.4	241.8	3.9
7/9/2021	8:35:00 PM		238.6	6.3	236.2	6
7/9/2021	8:40:00 PM		241.8	4.6	239	4.3
7/9/2021	8:45:00 PM		233.7	5.8	233.3	5.5
7/9/2021	8:50:00 PM		248.1	3.8	241.7	3.4
7/9/2021	8:55:00 PM		251.5	2.9	244.3	2.6
7/9/2021	9:00:00 PM		254.9	4	249.1	3.6
7/9/2021	9:05:00 PM		260.6	2.6	264.7	2.2
7/9/2021	9:10:00 PM		275.4	1.9	277.4	1.7
7/9/2021	9:15:00 PM		268.1	2.1	268	2
7/9/2021	9:20:00 PM		252.2	2.5	253.9	2.1
7/9/2021	9:25:00 PM		244.7	2.6	240.3	2.3
7/9/2021	9:30:00 PM		254.1	2.1	246.3	1.8
7/9/2021	9:35:00 PM		280.3	1.8	276.5	1.6
7/9/2021	9:40:00 PM		249.8	2.6	244.3	2.4
7/9/2021	9:45:00 PM		256.9	2	243.8	1.6
7/9/2021	9:50:00 PM		263.2	1.9	254.1	1.5
7/9/2021	9:55:00 PM		286.2	2	276.4	1.7
7/9/2021	10:00:00 PM		276.3	1.7	266.6	1.5

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	10:05:00 PM		253	1.5	245.1	1.4
7/9/2021	10:10:00 PM		287.8	1.5	273.3	1.1
7/9/2021	10:15:00 PM		37	0	118.2	0.2
7/9/2021	10:20:00 PM		113.5	2.4	105.4	2.3
7/9/2021	10:25:00 PM		97.9	3.1	97.8	3.1
7/9/2021	10:30:00 PM		111.8	7.7	114.6	7.2
7/9/2021	10:35:00 PM		93.3	17	92.7	16.4
7/9/2021	10:40:00 PM		105.7	13.4	108.7	12.1
7/9/2021	10:45:00 PM		96.7	15.7	97.9	15.1
7/9/2021	10:50:00 PM		103	10.4	103.7	9.6
7/9/2021	10:55:00 PM		115.7	14.5	116	13.8
7/9/2021	11:00:00 PM		123.3	10.9	124.6	10.1
7/9/2021	11:05:00 PM		129.7	10.7	129.6	9.8
7/9/2021	11:10:00 PM		146.3	8.5	146.6	8
7/9/2021	11:15:00 PM		156.5	7.3	156.8	6.8
7/9/2021	11:20:00 PM		179.4	7.9	181	7.7
7/9/2021	11:25:00 PM		175.6	7.4	177	7.1
7/9/2021	11:30:00 PM		189.4	9.7	189.8	9.4
7/9/2021	11:35:00 PM		196.3	10.1	195.4	9.7
7/9/2021	11:40:00 PM		202.5	9.6	200.7	9.2
7/9/2021	11:45:00 PM		196.5	8.9	195.7	8.7
7/9/2021	11:50:00 PM		206.1	9.9	205.1	9.5
7/9/2021	11:55:00 PM		198.3	10.6	197.7	10.1
	Average		285	3.2	251.3	1.1
	Max		355.8	17	355.8	16.4
	Max Hour		10469.39127	6.684029714	10086.63731	5.864924022
	Min		0.5	0	2.9	0
	Count	0	288	288	288	288
	Total	0	59222.2	949.4	58645.5	862.6

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	12:00:00 AM	3458.1	153.9	17.4	153.7	17
7/10/2021	12:05:00 AM	2468.8	154.1	15.3	154.3	15
7/10/2021	12:10:00 AM	2042.4	159.2	14.6	159.6	14.3
7/10/2021	12:15:00 AM	1924	170.6	10.9	170.3	10.7
7/10/2021	12:20:00 AM	1769.2	175.3	11.8	176.6	11.5
7/10/2021	12:25:00 AM	1421	184.2	12	184.1	11.8
7/10/2021	12:30:00 AM	988.4	187.1	10.8	187.3	10.6
7/10/2021	12:35:00 AM	658.1	202.4	8.1	202.3	7.9
7/10/2021	12:40:00 AM	457.6	211.9	8.5	211.9	8.4
7/10/2021	12:45:00 AM	397.3	215.4	8.5	215.3	8.4
7/10/2021	12:50:00 AM	432.3	222.6	7.2	222	7.1
7/10/2021	12:55:00 AM	459.9	212.7	8.3	213.2	8.2
7/10/2021	1:00:00 AM	389	218.9	7.8	218.6	7.6
7/10/2021	1:05:00 AM	263.2	221	7	221	6.7
7/10/2021	1:10:00 AM	160.5	211.8	5.6	210.9	5.4
7/10/2021	1:15:00 AM	101.3	199.3	4.7	199.2	4.6
7/10/2021	1:20:00 AM	73.4	199.8	5.5	199.5	5.2
7/10/2021	1:25:00 AM	65	203.5	5.8	203.3	5.6
7/10/2021	1:30:00 AM	49.7	205.4	4	206.3	3.9
7/10/2021	1:35:00 AM	41.7	207.5	4.2	207.3	4.1
7/10/2021	1:40:00 AM	41.8	207.6	3.2	206.7	3
7/10/2021	1:45:00 AM	33.8	210.5	4.2	209.1	4
7/10/2021	1:50:00 AM	23	213.2	3.2	208.8	2.9
7/10/2021	1:55:00 AM	21.4	252.2	1.8	250.8	1.6
7/10/2021	2:00:00 AM	22.4	299.5	2.5	303.1	2.4
7/10/2021	2:05:00 AM	15.1	313.8	6.1	313.3	6
7/10/2021	2:10:00 AM	14.4	18.3	2.1	12.1	1.3
7/10/2021	2:15:00 AM	23	77.6	1.3	95.4	1
7/10/2021	2:20:00 AM	20.9	355.2	2.3	356.3	2.2
7/10/2021	2:25:00 AM	13.9	37.3	3.1	40.3	2.9
7/10/2021	2:30:00 AM	21.1	55.4	3.8	55.7	3.7
7/10/2021	2:35:00 AM	30.4	357	3.1	356.2	2.9
7/10/2021	2:40:00 AM	24	17.2	2.9	15.2	2.5
7/10/2021	2:45:00 AM	17.8	70.9	3.1	70.2	3
7/10/2021	2:50:00 AM	24.4	55.4	2.9	55.4	2.8
7/10/2021	2:55:00 AM	30	22.8	3.5	22.9	3.4
7/10/2021	3:00:00 AM	21.6	15.3	4.4	15	4.3
7/10/2021	3:05:00 AM	20.7	20.8	5.4	19.9	5.4
7/10/2021	3:10:00 AM	37.6	11.5	4.2	12.3	4
7/10/2021	3:15:00 AM	55.2	11.5	2.6	8.9	2.5
7/10/2021	3:20:00 AM	65.1	24.5	3.3	24.8	3.2
7/10/2021	3:25:00 AM	111.1	25.8	4.1	25.2	4
7/10/2021	3:30:00 AM	167.7	27.5	5.3	27.7	5.2
7/10/2021	3:35:00 AM	200.9	9.7	4.1	10.4	4
7/10/2021	3:40:00 AM	238.4	19.8	5.4	19.1	5.3
7/10/2021	3:45:00 AM	316.5	23	5.3	23	5.2
7/10/2021	3:50:00 AM	399.4	29.8	6	30.8	5.9
7/10/2021	3:55:00 AM	479.4	20.9	4.8	22.1	4.7
7/10/2021	4:00:00 AM	521.8	20.9	5.9	20.5	5.8
7/10/2021	4:05:00 AM	504.9	10.7	4.2	8.7	4
7/10/2021	4:10:00 AM	449.4	357.5	5.2	357.7	5.1
7/10/2021	4:15:00 AM	394.7	348.1	4.8	347.7	4.7
7/10/2021	4:20:00 AM	315.1	325.1	6.2	324.3	6
7/10/2021	4:25:00 AM	208.1	328.4	6.9	328.5	6.8

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	4:30:00 AM	128.6	324.7	7.5	324.8	7.4
7/10/2021	4:35:00 AM	93.7	316.7	5.8	316.6	5.7
7/10/2021	4:40:00 AM	81.4	312.5	6	312.5	5.9
7/10/2021	4:45:00 AM	72.2	302.7	6.5	302.8	6.5
7/10/2021	4:50:00 AM	71.2	296.6	5.9	296.6	5.9
7/10/2021	4:55:00 AM	71.4	285.8	5.1	285.6	5
7/10/2021	5:00:00 AM	60.1	281.4	6	281.3	6
7/10/2021	5:05:00 AM	52.4	280.2	5.7	280.2	5.6
7/10/2021	5:10:00 AM	52.3	272.7	3.7	272.6	3.6
7/10/2021	5:15:00 AM	56.6	260	3.2	261.9	3.2
7/10/2021	5:20:00 AM	51.5	259.7	2.7	259.8	2.6
7/10/2021	5:25:00 AM	47.1	239.5	1.8	241.8	1.7
7/10/2021	5:30:00 AM	56.4	214	2.9	214.4	2.9
7/10/2021	5:35:00 AM	52.1	204.4	3.5	204.2	3.4
7/10/2021	5:40:00 AM	46.8	202.9	3	203	2.9
7/10/2021	5:45:00 AM	50.4	188.6	3.7	187.1	3.7
7/10/2021	5:50:00 AM	82	185.1	4.7	185	4.7
7/10/2021	5:55:00 AM	117.7	184.6	5.6	184.8	5.6
7/10/2021	6:00:00 AM	149.7	171.8	5.5	172.8	5.3
7/10/2021	6:05:00 AM	167.6	170.9	4.6	171.4	4.5
7/10/2021	6:10:00 AM	154.9	179.4	5.2	179.7	5.2
7/10/2021	6:15:00 AM	145	162.5	4.4	162.5	4.3
7/10/2021	6:20:00 AM	140.6	169.6	5.1	170	5
7/10/2021	6:25:00 AM	129.2	172.3	3.6	172.3	3.5
7/10/2021	6:30:00 AM	118.7	182.4	3.8	183.3	3.8
7/10/2021	6:35:00 AM	117.6	178.8	4.2	181	4.1
7/10/2021	6:40:00 AM	125.2	183.8	5.4	183.6	5.4
7/10/2021	6:45:00 AM	121.3	185	5.9	185.4	5.9
7/10/2021	6:50:00 AM	123.3	182.9	6.8	182.8	6.7
7/10/2021	6:55:00 AM	120.6	175.3	6.8	175	6.7
7/10/2021	7:00:00 AM	110.2	164.9	6.7	165	6.5
7/10/2021	7:05:00 AM	101.3	175.5	5.4	175.5	5.2
7/10/2021	7:10:00 AM	83.7	178	4.1	178.3	3.9
7/10/2021	7:15:00 AM	68.2	185.2	4.4	185.8	4.2
7/10/2021	7:20:00 AM	66.1	197.6	5.4	198.2	5.3
7/10/2021	7:25:00 AM	64.5	179.8	5.3	179.8	5.2
7/10/2021	7:30:00 AM	61.1	181.7	4.9	182.1	4.8
7/10/2021	7:35:00 AM	56.8	182.6	6.1	182.9	6
7/10/2021	7:40:00 AM	55.7	189.1	6.7	188.9	6.7
7/10/2021	7:45:00 AM	55.2	185.5	6.7	186	6.5
7/10/2021	7:50:00 AM	62.2	183.5	6.1	184.5	6
7/10/2021	7:55:00 AM	59.2	181.7	7.3	181.6	7.2
7/10/2021	8:00:00 AM	50.6	189.4	7.4	189.4	7.2
7/10/2021	8:05:00 AM	38.8	185.7	7.7	185.7	7.6
7/10/2021	8:10:00 AM	39.4	185.1	6.5	184.8	6.4
7/10/2021	8:15:00 AM	35.8	181.6	9	181.4	8.9
7/10/2021	8:20:00 AM	43.2	183.3	8.1	183.3	8
7/10/2021	8:25:00 AM	52.9	178.4	8.2	178.2	8.1
7/10/2021	8:30:00 AM	50.7	183.3	8	183.4	7.9
7/10/2021	8:35:00 AM	55.9	189.4	5.8	189.5	5.7
7/10/2021	8:40:00 AM	55.9	190.9	7.6	191.1	7.5
7/10/2021	8:45:00 AM	49.7	188.4	7.5	189.2	7.3
7/10/2021	8:50:00 AM	47	189.9	6.6	189.2	6.5
7/10/2021	8:55:00 AM	44.5	191.7	8	191.2	7.9

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	9:00:00 AM	35	184.7	8.8	185.3	8.7
7/10/2021	9:05:00 AM	34.5	188.9	10.2	188.9	10.1
7/10/2021	9:10:00 AM	39.9	192.1	8.9	192	8.8
7/10/2021	9:15:00 AM	34.9	188.4	9.7	188.4	9.6
7/10/2021	9:20:00 AM	35.2	198.2	8.9	198	8.7
7/10/2021	9:25:00 AM	42.4	192.2	8.7	191.5	8.4
7/10/2021	9:30:00 AM	48.2	195.3	7.8	194.8	7.6
7/10/2021	9:35:00 AM	41.2	186.9	9.5	187	9.4
7/10/2021	9:40:00 AM	36	189.5	8.9	188.3	8.6
7/10/2021	9:45:00 AM	33	214.2	7.7	214.3	7.5
7/10/2021	9:50:00 AM	35.5	214.3	8.6	213.6	8.4
7/10/2021	9:55:00 AM	39.4	197.4	7.2	198.5	6.9
7/10/2021	10:00:00 AM	32.8	199.5	7.7	199.8	7.5
7/10/2021	10:05:00 AM	50	198.3	6.5	197.3	6
7/10/2021	10:10:00 AM	49.6	198.1	7.8	196.2	7.4
7/10/2021	10:15:00 AM	46	178.7	7.4	183	6.9
7/10/2021	10:20:00 AM	53.8	194.1	6.4	196.3	6.1
7/10/2021	10:25:00 AM	47.4	191.2	8.2	190.9	7.7
7/10/2021	10:30:00 AM	54.2	187.4	7.5	187.1	6.9
7/10/2021	10:35:00 AM	42.4	198.9	7.8	201.4	7.5
7/10/2021	10:40:00 AM	41.9	188.6	8.1	189.2	7.7
7/10/2021	10:45:00 AM	49.2	194	8.7	193.4	8.5
7/10/2021	10:50:00 AM	47.2	183.6	8.9	184.4	8.6
7/10/2021	10:55:00 AM	52.8	182.8	9.2	182.3	9
7/10/2021	11:00:00 AM	53.6	191.4	8.1	190.5	7.9
7/10/2021	11:05:00 AM	58.6	217.5	5.5	216.9	4.9
7/10/2021	11:10:00 AM	63.2	220.9	6.9	222.6	6.6
7/10/2021	11:15:00 AM	62.9	184.9	8.2	182.5	7.9
7/10/2021	11:20:00 AM	77.2	186.6	6.3	187.6	6
7/10/2021	11:25:00 AM	97	201.7	7.8	204	7.5
7/10/2021	11:30:00 AM	87.3	194.8	6.1	198.9	5.8
7/10/2021	11:35:00 AM	90.7	189.6	9.5	189.7	9.2
7/10/2021	11:40:00 AM	83.7	196.5	8.3	194.9	8
7/10/2021	11:45:00 AM	84.8	188.1	6.9	187.5	6.5
7/10/2021	11:50:00 AM	90.1	171.9	5.5	172.3	4.9
7/10/2021	11:55:00 AM	83.3	188.1	6.6	187.7	6.4
7/10/2021	12:00:00 PM	91.2	192.9	7	192.2	6.7
7/10/2021	12:05:00 PM	95.2	202	5.3	202.2	5
7/10/2021	12:10:00 PM	78.2	231.2	4.6	231.3	4.4
7/10/2021	12:15:00 PM	72.9	216.8	5.8	212.7	4.9
7/10/2021	12:20:00 PM	63.2	199.7	6.7	203.1	6.3
7/10/2021	12:25:00 PM	49.4	189.4	7.4	190.3	6.8
7/10/2021	12:30:00 PM	45.9	166.1	5.7	166.4	3.9
7/10/2021	12:35:00 PM	44.6	196.9	7.7	192.1	6.8
7/10/2021	12:40:00 PM	39.7	178.7	8.8	176.8	8.6
7/10/2021	12:45:00 PM	43	145.7	6.6	142.7	5.7
7/10/2021	12:50:00 PM	39.3	199.9	6.7	200.8	6.3
7/10/2021	12:55:00 PM	30.3	182.5	8	182.5	7.7
7/10/2021	1:00:00 PM	38.1	156.5	5.9	159	5.7
7/10/2021	1:05:00 PM	32.3	185.5	10.4	184.1	10
7/10/2021	1:10:00 PM	32.2	212.1	8.7	210.2	8.3
7/10/2021	1:15:00 PM	38.1	206	6.9	205.7	6.6
7/10/2021	1:20:00 PM	32.4	195.9	7.2	197.4	6.8
7/10/2021	1:25:00 PM	33.3	196.6	9.5	196.3	9.2

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	1:30:00 PM	42.2	191.8	8.6	186.1	8.1
7/10/2021	1:35:00 PM	38.6	174	9.7	174.5	9.3
7/10/2021	1:40:00 PM	42.6	188.2	12.3	187	11.8
7/10/2021	1:45:00 PM	50	175.4	10.4	175.7	10.2
7/10/2021	1:50:00 PM	45.6	188.8	8.8	189.4	8.6
7/10/2021	1:55:00 PM	50	177.9	13	178	12.7
7/10/2021	2:00:00 PM	48.3	177.7	12.9	181.1	12.2
7/10/2021	2:05:00 PM	65	206.4	10	208	9.6
7/10/2021	2:10:00 PM	105.6	203.4	12.3	204.6	12
7/10/2021	2:15:00 PM	69.9	206.8	9.1	203.1	8
7/10/2021	2:20:00 PM	41	230.4	10.1	227	9.5
7/10/2021	2:25:00 PM	30.2	240.3	9.1	239.8	8.5
7/10/2021	2:30:00 PM	19.9	227.5	7.5	228.3	7.1
7/10/2021	2:35:00 PM	21.4	231.9	8.3	229.7	7.7
7/10/2021	2:40:00 PM	26.6	212	7.4	209.8	7.1
7/10/2021	2:45:00 PM	21.1	240.2	8.2	239.5	7.8
7/10/2021	2:50:00 PM	18.7	224	4.4	225.8	4.1
7/10/2021	2:55:00 PM	20.4	224.5	8.8	224.7	8.5
7/10/2021	3:00:00 PM	14.9	240.5	6.5	245.7	5.5
7/10/2021	3:05:00 PM	26.8	233.6	7.5	231.4	7.1
7/10/2021	3:10:00 PM	26.4	260.8	7.3	262.9	6.4
7/10/2021	3:15:00 PM	18.3	195.3	5.6	205.3	5.2
7/10/2021	3:20:00 PM	21.3	207.9	6.4	207.7	5.8
7/10/2021	3:25:00 PM	23	239.7	7.9	242.3	7.1
7/10/2021	3:30:00 PM	18.2	243.5	8.3	245.8	7.6
7/10/2021	3:35:00 PM	27.7	259.6	7.3	260.6	6.7
7/10/2021	3:40:00 PM	22.6	279.5	8.7	280.8	8.2
7/10/2021	3:45:00 PM	23.8	257.6	8.4	258.3	7.9
7/10/2021	3:50:00 PM	35.3	233.7	6.8	230.9	6.4
7/10/2021	3:55:00 PM	25.5	241.1	5.3	239.9	4.9
7/10/2021	4:00:00 PM	26.7	256.8	5.8	251.7	5.3
7/10/2021	4:05:00 PM	28.5	256.9	7.4	256.5	6.4
7/10/2021	4:10:00 PM	24.1	241	6.4	240.6	5.9
7/10/2021	4:15:00 PM	24.7	225.3	7.9	224.8	7.3
7/10/2021	4:20:00 PM	24.5	227.9	7	227.8	6.6
7/10/2021	4:25:00 PM	22.4	274	9.7	274.5	9.3
7/10/2021	4:30:00 PM	28.1	284.5	8.3	283.1	8.1
7/10/2021	4:35:00 PM	24.5	259.4	5.5	257.4	4.6
7/10/2021	4:40:00 PM	20.4	261	3.7	259.1	3.4
7/10/2021	4:45:00 PM	25.2	262.4	4.5	266.9	4.2
7/10/2021	4:50:00 PM	21.1	255.7	7.3	258	6.9
7/10/2021	4:55:00 PM	15.7	277.5	7.1	278.2	6.9
7/10/2021	5:00:00 PM	25.3	253	7.4	254.1	7.1
7/10/2021	5:05:00 PM	19.9	272.4	7	273	6.8
7/10/2021	5:10:00 PM	20.5	263.1	6.9	262.9	6.6
7/10/2021	5:15:00 PM	28.4	230.3	5.8	231.3	5.1
7/10/2021	5:20:00 PM	19.6	221.2	9.2	220.2	8.6
7/10/2021	5:25:00 PM	19	225.5	6.7	222.1	6.2
7/10/2021	5:30:00 PM	23.7	224.8	5.9	223	5.6
7/10/2021	5:35:00 PM	15.4	213.6	9.1	213.5	8.9
7/10/2021	5:40:00 PM	17.3	217.7	8.1	217.7	7.9
7/10/2021	5:45:00 PM	23.2	228	8.8	226.2	8.4
7/10/2021	5:50:00 PM	17	222.5	11.2	222.3	11
7/10/2021	5:55:00 PM	25.9	220.8	9.6	220.4	9.3

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	6:00:00 PM	26	214	10.8	213.8	10.5
7/10/2021	6:05:00 PM	22.3	228.1	8.3	227.4	7.6
7/10/2021	6:10:00 PM	34.8	222.1	7.5	222.7	6.9
7/10/2021	6:15:00 PM	26.1	215.5	7.1	215.8	6.9
7/10/2021	6:20:00 PM	26.7	213.9	8.8	214.7	8.5
7/10/2021	6:25:00 PM	34.7	215.9	8.6	215.8	8.4
7/10/2021	6:30:00 PM	28	223.6	7.9	222.5	7.5
7/10/2021	6:35:00 PM	30.5	217.1	8.6	217.1	8.4
7/10/2021	6:40:00 PM	30	216	9.2	216.5	9
7/10/2021	6:45:00 PM	22.9	218	8.2	217.6	8
7/10/2021	6:50:00 PM	33.2	221.6	8.2	222	8
7/10/2021	6:55:00 PM	32.5	220.7	7.8	220.3	7.6
7/10/2021	7:00:00 PM	30.2	224.5	6.8	225	6.6
7/10/2021	7:05:00 PM	36.7	201.7	5.4	203.7	5.1
7/10/2021	7:10:00 PM	32.1	195.9	5.9	197.5	5.7
7/10/2021	7:15:00 PM	32.6	197.6	5.9	197.4	5.7
7/10/2021	7:20:00 PM	38	215.1	4.8	213.6	4.6
7/10/2021	7:25:00 PM	29.4	165.3	3.5	169.9	2.8
7/10/2021	7:30:00 PM	42	111	4.3	111.6	4.2
7/10/2021	7:35:00 PM	53.8	109.2	5.8	109.6	5.7
7/10/2021	7:40:00 PM	48.2	100.5	6.5	100.4	6.3
7/10/2021	7:45:00 PM	57.7	91.6	7.4	91	7.2
7/10/2021	7:50:00 PM	78.7	81.1	14.8	80.1	14.3
7/10/2021	7:55:00 PM	229	88.8	10.4	89.5	9.8
7/10/2021	8:00:00 PM	335.4	61.8	18.1	61.3	17.6
7/10/2021	8:05:00 PM	395.4	68.7	11.4	68.4	11
7/10/2021	8:10:00 PM	310.7	78.1	13.1	79	12.7
7/10/2021	8:15:00 PM	241.7	83.4	9.8	82.1	9.3
7/10/2021	8:20:00 PM	195.8	98.1	10.6	98.8	10.2
7/10/2021	8:25:00 PM	204.8	98.4	10.4	99.3	10.1
7/10/2021	8:30:00 PM	179.5	120.2	9.1	119.7	8.8
7/10/2021	8:35:00 PM	119.5	129.4	8.3	129.5	8.1
7/10/2021	8:40:00 PM	90.7	135.3	8.2	135	8
7/10/2021	8:45:00 PM	75.6	132.5	8	132.2	7.8
7/10/2021	8:50:00 PM	61.6	139.5	7.2	139.5	7
7/10/2021	8:55:00 PM	48.3	154.3	7	154.8	6.9
7/10/2021	9:00:00 PM	56.7	165.9	6.8	166.5	6.6
7/10/2021	9:05:00 PM	55.1	166.1	6.4	166.2	6.3
7/10/2021	9:10:00 PM	52.6	140.5	13.3	139.2	12.9
7/10/2021	9:15:00 PM	209.6	153.5	12.2	151.2	11.8
7/10/2021	9:20:00 PM	449.1	159.9	12.1	160.7	11.9
7/10/2021	9:25:00 PM	454.6	162.4	17.9	163.4	17.2
7/10/2021	9:30:00 PM	1156.3	166.9	14	166.2	13.6
7/10/2021	9:35:00 PM	1409.6	165.5	17.7	165.6	17.3
7/10/2021	9:40:00 PM	1572.3	172.5	14.5	172.2	14.2
7/10/2021	9:45:00 PM	1437	174.6	13.4	174.5	13.2
7/10/2021	9:50:00 PM	1102.6	174.1	12.8	174.2	12.6
7/10/2021	9:55:00 PM	757.5	170.6	11.6	171.3	11.3
7/10/2021	10:00:00 PM	481.3	166.8	12.5	166.9	12.2
7/10/2021	10:05:00 PM	280.2	172.2	13.2	172	13
7/10/2021	10:10:00 PM	160.4	169.4	9.5	171.4	9.2
7/10/2021	10:15:00 PM	113.7	167.1	7.7	166.7	7.4
7/10/2021	10:20:00 PM	79.8	226.3	6	225.9	5.5
7/10/2021	10:25:00 PM	57.7	204.6	4.7	204.7	4.2

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	10:30:00 PM	48.6	249.4	5.7	249.8	5.4
7/10/2021	10:35:00 PM	56.7	249	4.6	249.3	4.4
7/10/2021	10:40:00 PM	55.6	230.7	3.8	229.1	3.6
7/10/2021	10:45:00 PM	124.4	221.5	7.5	221.1	7.3
7/10/2021	10:50:00 PM	317	220.8	9.8	220	9.5
7/10/2021	10:55:00 PM	347.4	186.2	10.1	186.1	9.8
7/10/2021	11:00:00 PM	268.1	160.4	7.9	166	7.4
7/10/2021	11:05:00 PM	246.3	145.6	3.7	144.8	3.4
7/10/2021	11:10:00 PM	298.5	202.9	5.2	202.2	5.1
7/10/2021	11:15:00 PM	381.3	206	4.1	206	4
7/10/2021	11:20:00 PM	405.6	252.3	3.4	248.9	3.2
7/10/2021	11:25:00 PM	384.3	282	4.2	281.9	4.1
7/10/2021	11:30:00 PM	320.4	266.1	3.7	262.5	3.4
7/10/2021	11:35:00 PM	301.2	244.1	4.2	243.8	4
7/10/2021	11:40:00 PM	314	255.7	4	255.7	3.8
7/10/2021	11:45:00 PM	306.6	241.5	3.8	243.1	3.6
7/10/2021	11:50:00 PM	274.7	255.8	4.8	255.7	4.5
7/10/2021	11:55:00 PM	227.9	261.3	5.6	262.1	5.5
	Average	170.4	202	7.1	195.9	4.5
	Max	3458.1	357.5	18.1	357.7	17.6
	Max Hour	139482.5915	4386.151916	8.466146801	4382.680834	8.196004525
	Min	13.9	9.7	1.3	8.7	1
	Count	288	288	288	288	288
	Total	49088.1	55092	2072.3	55108.4	1991.9
	Date Printed:	9/30/2024 11:02				

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	12:00:00 AM	5538	161.2	16.5	161.1	16.2
7/10/2021	12:05:00 AM	4887.1	156.2	13.4	156.5	13
7/10/2021	12:10:00 AM	4195.7	157.3	13	157	12.7
7/10/2021	12:15:00 AM	3460.7	158.1	13.1	158.5	12.9
7/10/2021	12:20:00 AM	2778.4	169	11.5	168.5	11.2
7/10/2021	12:25:00 AM	2204.8	174.3	11.5	174.3	11.3
7/10/2021	12:30:00 AM	1774.7	184.6	11.7	184.7	11.6
7/10/2021	12:35:00 AM	1439.4	191.8	11.6	191.8	11.4
7/10/2021	12:40:00 AM	1159.5	194.6	10.1	194.6	10
7/10/2021	12:45:00 AM	938.7	190.3	9.2	190.6	9.1
7/10/2021	12:50:00 AM	780.1	193.7	7.9	193.6	7.8
7/10/2021	12:55:00 AM	621.2	203.5	5.3	203.2	5.2
7/10/2021	1:00:00 AM	480.2	220.8	5.7	220.4	5.7
7/10/2021	1:05:00 AM	423.2	225.8	5.7	225.8	5.6
7/10/2021	1:10:00 AM	397.3	223.5	4.3	225.3	4.1
7/10/2021	1:15:00 AM	375.3	207	4.8	208.8	4.6
7/10/2021	1:20:00 AM	368.5	198.9	4.4	198.9	4.3
7/10/2021	1:25:00 AM	326.1	214.6	3	219.1	3
7/10/2021	1:30:00 AM	266.1	224.5	4	226.2	3.9
7/10/2021	1:35:00 AM	221.2	234.6	2.2	233.4	2.2
7/10/2021	1:40:00 AM	191.3	260.1	1.1	269.4	0.8
7/10/2021	1:45:00 AM	149.7	318.1	2.4	319.4	2.2
7/10/2021	1:50:00 AM	122.7	312.7	2.8	316.1	2.7
7/10/2021	1:55:00 AM	117.3	317.4	3.5	317.3	3.4
7/10/2021	2:00:00 AM	93	321.3	5.4	320.9	5.3
7/10/2021	2:05:00 AM	84.1	319.6	6.4	318.4	6.2
7/10/2021	2:10:00 AM	95.9	43.1	3.6	37.7	3
7/10/2021	2:15:00 AM	77.6	33.7	2.8	37.3	2.5
7/10/2021	2:20:00 AM	64	342.5	3.1	343.5	3
7/10/2021	2:25:00 AM	72.6	1.8	3.4	2.3	3.3
7/10/2021	2:30:00 AM	63.7	3.4	3.7	4.8	3.6
7/10/2021	2:35:00 AM	55.8	348.2	4.1	348.5	4.1
7/10/2021	2:40:00 AM	83.5	3.1	3.5	2.5	3.4
7/10/2021	2:45:00 AM	124	27.6	4	25.8	3.9
7/10/2021	2:50:00 AM	154.4	12.9	6.1	13	6
7/10/2021	2:55:00 AM	241.3	22.2	5.8	22.8	5.7
7/10/2021	3:00:00 AM	312	30.4	4.9	28.5	4.8
7/10/2021	3:05:00 AM	373.9	19.4	4.7	18.3	4.5
7/10/2021	3:10:00 AM	447	7.1	5.6	7.3	5.5
7/10/2021	3:15:00 AM	464.4	12.4	7.7	12.2	7.6
7/10/2021	3:20:00 AM	464.3	10.6	6.7	10.4	6.6
7/10/2021	3:25:00 AM	522.5	8.7	6.9	8.4	6.7
7/10/2021	3:30:00 AM	593.6	10.6	7.7	10.3	7.6
7/10/2021	3:35:00 AM	653.4	16.8	7.6	16.8	7.5
7/10/2021	3:40:00 AM	715.3	9.7	7.7	9.5	7.5
7/10/2021	3:45:00 AM	771.4	8.3	7.7	8.7	7.5
7/10/2021	3:50:00 AM	783.2	355.3	5.6	355.4	5.3
7/10/2021	3:55:00 AM	754.4	348.1	5.9	348	5.8
7/10/2021	4:00:00 AM	729.9	341	6.2	340.8	6.2
7/10/2021	4:05:00 AM	706.8	343.6	6.9	343.6	6.9
7/10/2021	4:10:00 AM	669.7	343.4	6.5	343.5	6.4
7/10/2021	4:15:00 AM	633.5	333.2	6.4	333.5	6.4
7/10/2021	4:20:00 AM	623.9	333.3	5	333.2	5
7/10/2021	4:25:00 AM	599.9	331.6	3.1	332.5	3.1

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	4:30:00 AM	563.7	325.2	2	325.1	2
7/10/2021	4:35:00 AM	542.9	326.5	1.7	328.3	1.6
7/10/2021	4:40:00 AM	507.5	273.4	1.3	271.5	1.2
7/10/2021	4:45:00 AM	483.1	246.4	2.1	246.5	2.1
7/10/2021	4:50:00 AM	450.9	251.1	3.5	251.2	3.5
7/10/2021	4:55:00 AM	395.2	244.3	3.7	244.2	3.7
7/10/2021	5:00:00 AM	329.6	243.1	3.8	243.2	3.8
7/10/2021	5:05:00 AM	263.4	257.2	3.5	257	3.5
7/10/2021	5:10:00 AM	214.2	258.1	2.7	258.4	2.7
7/10/2021	5:15:00 AM	172.3	244.8	2	245.1	2
7/10/2021	5:20:00 AM	143.7	213.8	1.9	214.9	1.9
7/10/2021	5:25:00 AM	123.3	187.1	2.1	187.2	2.1
7/10/2021	5:30:00 AM	108.9	185.9	2.2	186.3	2.1
7/10/2021	5:35:00 AM	97.2	175.1	2.2	175.4	2.2
7/10/2021	5:40:00 AM	92.5	181	3.6	181.5	3.6
7/10/2021	5:45:00 AM	84.6	183.3	5.2	183.2	5.2
7/10/2021	5:50:00 AM	78.3	184.8	5.4	184.8	5.4
7/10/2021	5:55:00 AM	71.1	186.3	5.2	186.4	5.1
7/10/2021	6:00:00 AM	65.5	193.4	3.8	192.8	3.7
7/10/2021	6:05:00 AM	60.4	200.4	3.4	200.4	3.4
7/10/2021	6:10:00 AM	55.7	184.9	5.1	184.2	5
7/10/2021	6:15:00 AM	59.7	162	5.5	162.3	5.4
7/10/2021	6:20:00 AM	83.6	160.9	4.3	160.6	4.2
7/10/2021	6:25:00 AM	110.2	157.4	5.7	157.7	5.6
7/10/2021	6:30:00 AM	128.4	150.2	4	154.1	3.8
7/10/2021	6:35:00 AM	139.6	138.9	3.6	139.4	3.6
7/10/2021	6:40:00 AM	138.6	144.8	2.6	144.3	2.5
7/10/2021	6:45:00 AM	136.8	126.7	2.9	126.5	2.9
7/10/2021	6:50:00 AM	136.4	130	4.5	129.9	4.4
7/10/2021	6:55:00 AM	125.6	141.4	4.2	141.7	4.1
7/10/2021	7:00:00 AM	124.1	153.5	6.2	153.6	6.2
7/10/2021	7:05:00 AM	116.4	153.1	6	153.6	5.9
7/10/2021	7:10:00 AM	102.1	134.9	5.1	134.8	5
7/10/2021	7:15:00 AM	104.4	153.6	4.2	154.3	4
7/10/2021	7:20:00 AM	105.4	154.7	3.8	155.3	3.7
7/10/2021	7:25:00 AM	97.8	141.5	3	141.5	2.9
7/10/2021	7:30:00 AM	98.7	165.4	3.1	164.9	3
7/10/2021	7:35:00 AM	99.7	148.3	3.2	148.1	3.1
7/10/2021	7:40:00 AM	92.1	168.7	3.9	168.9	3.8
7/10/2021	7:45:00 AM	76.8	169.2	4.9	172.1	4.7
7/10/2021	7:50:00 AM	72.7	195.2	9.3	194.8	9.2
7/10/2021	7:55:00 AM	84	187.5	9.1	188	9
7/10/2021	8:00:00 AM	86.6	196.9	10.8	196.9	10.7
7/10/2021	8:05:00 AM	79.4	195.8	11.1	195.4	11
7/10/2021	8:10:00 AM	66.6	201.3	10.7	201.4	10.7
7/10/2021	8:15:00 AM	55.8	199.4	10.9	199.5	10.8
7/10/2021	8:20:00 AM	47.7	197	10.1	197.9	9.9
7/10/2021	8:25:00 AM	44.5	191.4	9.2	191.8	9.1
7/10/2021	8:30:00 AM	44.4	192.5	8.6	193.7	8.4
7/10/2021	8:35:00 AM	44.8	176.4	7.2	176.7	6.9
7/10/2021	8:40:00 AM	47.1	163.4	7.1	163.4	6.9
7/10/2021	8:45:00 AM	53.7	178	6.8	178.3	6.6
7/10/2021	8:50:00 AM	61.5	172.4	8.3	173	8.2
7/10/2021	8:55:00 AM	67.1	200.1	9.9	199.9	9.7

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	9:00:00 AM	65.3	203.5	10	202.9	9.9
7/10/2021	9:05:00 AM	61.6	179.9	8.1	179.9	7.9
7/10/2021	9:10:00 AM	56.6	184.1	9.5	184	9.2
7/10/2021	9:15:00 AM	51.1	212.3	9.9	212.4	9.7
7/10/2021	9:20:00 AM	46.1	203.6	10.7	202.7	10.5
7/10/2021	9:25:00 AM	41.6	209.6	8.8	209.9	8.6
7/10/2021	9:30:00 AM	40.7	177.1	10	177.2	9.7
7/10/2021	9:35:00 AM	41.2	191.2	8	191	7.9
7/10/2021	9:40:00 AM	40.8	207.2	10.3	207.4	10.2
7/10/2021	9:45:00 AM	38.9	191.3	9	191.7	8.9
7/10/2021	9:50:00 AM	38.7	182.4	8.3	182.7	8
7/10/2021	9:55:00 AM	35.8	206.3	8.1	206.3	8
7/10/2021	10:00:00 AM	34.2	197.1	8.6	196.4	8.2
7/10/2021	10:05:00 AM	35.5	178.2	7.4	177.7	7.2
7/10/2021	10:10:00 AM	35.9	210	5.2	209.5	4.6
7/10/2021	10:15:00 AM	38.8	204.1	7.6	203.4	7.2
7/10/2021	10:20:00 AM	43.2	215.3	6.9	216	6.5
7/10/2021	10:25:00 AM	44.4	206.2	7	204.1	6.2
7/10/2021	10:30:00 AM	46.1	205	5.8	202.8	5.3
7/10/2021	10:35:00 AM	45.7	245.9	5.9	244.2	5.5
7/10/2021	10:40:00 AM	48.9	218.3	6.3	215.9	6
7/10/2021	10:45:00 AM	55.3	221	6.3	222.1	6.1
7/10/2021	10:50:00 AM	62.7	241.6	5.2	237.9	4.8
7/10/2021	10:55:00 AM	69.4	203.5	5.9	201	5.6
7/10/2021	11:00:00 AM	74.5	174.5	6.9	171.9	6.5
7/10/2021	11:05:00 AM	77.4	162.4	5.8	162.1	5.6
7/10/2021	11:10:00 AM	78.5	158.4	5.8	158.4	5.6
7/10/2021	11:15:00 AM	79.5	199.9	6.4	199.2	6
7/10/2021	11:20:00 AM	82.4	168.5	7.4	165.6	7
7/10/2021	11:25:00 AM	90.2	186.4	7.3	190.4	7
7/10/2021	11:30:00 AM	94.8	203.5	5.6	201.7	5.4
7/10/2021	11:35:00 AM	95	190.9	6.9	186.7	6.3
7/10/2021	11:40:00 AM	99.3	160.1	5	162.7	4.6
7/10/2021	11:45:00 AM	101.9	184.9	3.5	192.6	2.9
7/10/2021	11:50:00 AM	102.2	167	7.1	181.2	5.5
7/10/2021	11:55:00 AM	101.8	226	7	225.7	6.6
7/10/2021	12:00:00 PM	101.5	167.1	5.3	160.8	4.6
7/10/2021	12:05:00 PM	103.4	200.6	6.2	211	5.1
7/10/2021	12:10:00 PM	96.6	198.7	4.2	203.9	3.1
7/10/2021	12:15:00 PM	89	166.3	6.7	166.8	6.5
7/10/2021	12:20:00 PM	88	173.2	5.6	169.6	4.8
7/10/2021	12:25:00 PM	92	191.3	6.6	192	6.3
7/10/2021	12:30:00 PM	94.1	200.9	5.4	202.2	5.2
7/10/2021	12:35:00 PM	92.1	170.7	3.1	190.3	2.6
7/10/2021	12:40:00 PM	80.4	242.3	1.7	282.5	0.5
7/10/2021	12:45:00 PM	78.2	207.9	5.6	218.3	4.9
7/10/2021	12:50:00 PM	75.1	228.3	10.8	228.8	10.6
7/10/2021	12:55:00 PM	70.2	239.2	7.7	242.5	7.5
7/10/2021	1:00:00 PM	66.7	222.5	5.2	216.5	4.8
7/10/2021	1:05:00 PM	65.7	206.1	8.6	205.9	8.2
7/10/2021	1:10:00 PM	61.9	198.9	6.8	195.4	6.1
7/10/2021	1:15:00 PM	57.1	212.1	6.6	208	5.6
7/10/2021	1:20:00 PM	52.9	175.5	7.3	174.9	7
7/10/2021	1:25:00 PM	48.2	212.4	6.7	206.9	6.2

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	1:30:00 PM	45.9	178.9	6	179.1	5.8
7/10/2021	1:35:00 PM	41.5	177.6	9.9	178.9	9.4
7/10/2021	1:40:00 PM	40.1	213	9.7	213.1	9.5
7/10/2021	1:45:00 PM	38.1	184.4	9.8	184.1	9.3
7/10/2021	1:50:00 PM	38	190.2	12.2	190.3	11.8
7/10/2021	1:55:00 PM	37.3	191	10.1	190.2	9.5
7/10/2021	2:00:00 PM	37.1	194.5	12.7	194.2	11.7
7/10/2021	2:05:00 PM	37.6	193.7	11.1	194.4	11
7/10/2021	2:10:00 PM	37.9	197.4	12	201.3	11.4
7/10/2021	2:15:00 PM	37	203.1	11.6	196.3	10.7
7/10/2021	2:20:00 PM	33.6	259.5	6.1	261	5.5
7/10/2021	2:25:00 PM	28.4	267.6	11.8	267.7	11.5
7/10/2021	2:30:00 PM	27.3	257	12.4	256.8	12.1
7/10/2021	2:35:00 PM	28.3	269.7	9.3	268.8	8.9
7/10/2021	2:40:00 PM	28.4	249.6	10.7	253.6	9.6
7/10/2021	2:45:00 PM	26.6	260.1	9.6	260.9	9.3
7/10/2021	2:50:00 PM	25.6	277.5	8.5	279.2	8.3
7/10/2021	2:55:00 PM	25.8	241.2	11	242.1	10.4
7/10/2021	3:00:00 PM	27.4	267.4	10.8	265.4	10
7/10/2021	3:05:00 PM	28.5	260.4	10.2	260.1	10
7/10/2021	3:10:00 PM	29	255	12.7	255.6	12.4
7/10/2021	3:15:00 PM	29	239.1	11.8	237.6	10.9
7/10/2021	3:20:00 PM	30.3	220.1	9.7	220.1	9.4
7/10/2021	3:25:00 PM	31.1	204.7	12.5	203.6	12.2
7/10/2021	3:30:00 PM	31.9	209.3	10.5	206.8	10.2
7/10/2021	3:35:00 PM	30.6	211.1	6.4	211.8	6
7/10/2021	3:40:00 PM	26	259.5	11.5	259.5	11.2
7/10/2021	3:45:00 PM	20.2	265	9.3	265.8	9.1
7/10/2021	3:50:00 PM	19.1	256.3	8.1	255.3	7.9
7/10/2021	3:55:00 PM	21.6	239.1	10.6	237.8	10.4
7/10/2021	4:00:00 PM	23.7	250.2	8	251.4	7.3
7/10/2021	4:05:00 PM	24.1	272.1	9.6	272	8.9
7/10/2021	4:10:00 PM	25.1	233.8	10.2	233.9	9.9
7/10/2021	4:15:00 PM	26	236.1	12.1	237.3	11.5
7/10/2021	4:20:00 PM	27.3	239.3	11.8	240	11.1
7/10/2021	4:25:00 PM	25.3	265.9	9.2	265.7	9.1
7/10/2021	4:30:00 PM	23.1	258.4	10.3	257.4	9.5
7/10/2021	4:35:00 PM	22.3	260.1	8.1	260.5	7.8
7/10/2021	4:40:00 PM	21.5	264.9	7.7	267	7.3
7/10/2021	4:45:00 PM	21.5	238.8	10.4	238	10.2
7/10/2021	4:50:00 PM	21.9	235	10.3	235.5	10.1
7/10/2021	4:55:00 PM	20.8	243.4	10.8	242.5	10.6
7/10/2021	5:00:00 PM	19.3	231.9	9.9	231.7	9.7
7/10/2021	5:05:00 PM	18.8	230	9.5	231.7	9.2
7/10/2021	5:10:00 PM	19.1	232.6	10.4	232.4	10.1
7/10/2021	5:15:00 PM	21.2	230.1	10.6	230.1	10.5
7/10/2021	5:20:00 PM	21.2	244.8	9.3	244.9	9.1
7/10/2021	5:25:00 PM	20.5	242.7	10.1	243	9.9
7/10/2021	5:30:00 PM	19.9	239.9	9	240.4	8.8
7/10/2021	5:35:00 PM	19.1	246.9	11	247.2	10.9
7/10/2021	5:40:00 PM	18.4	232.6	11	232.4	10.7
7/10/2021	5:45:00 PM	20.3	225	13	225.8	12.6
7/10/2021	5:50:00 PM	21.5	227.1	14.8	226.9	14.5
7/10/2021	5:55:00 PM	22.2	224.3	11.5	224.4	11.4

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	6:00:00 PM	23.2	220.8	12.6	221	12.4
7/10/2021	6:05:00 PM	24.2	214.5	12.6	214.1	12.3
7/10/2021	6:10:00 PM	25.2	213.1	12.8	213.2	12.7
7/10/2021	6:15:00 PM	26	215.6	12.5	215.9	12.4
7/10/2021	6:20:00 PM	25.9	212.9	12.1	212.7	11.9
7/10/2021	6:25:00 PM	27.9	214.8	11.5	215.2	11.4
7/10/2021	6:30:00 PM	29.2	209	10.4	208.6	10.3
7/10/2021	6:35:00 PM	28.8	216.5	9.9	216.5	9.8
7/10/2021	6:40:00 PM	28.6	210.5	10.5	210.3	10.4
7/10/2021	6:45:00 PM	28	219.6	10.5	220.1	10.3
7/10/2021	6:50:00 PM	27.4	208	10.5	208.4	10.5
7/10/2021	6:55:00 PM	27.4	208.8	9.1	209.1	9
7/10/2021	7:00:00 PM	29.4	200.2	8	201.2	7.9
7/10/2021	7:05:00 PM	32	194.4	6.9	195.1	6.7
7/10/2021	7:10:00 PM	33.8	166	5.2	167.8	4.9
7/10/2021	7:15:00 PM	35.7	148.5	5.9	147.9	5.6
7/10/2021	7:20:00 PM	36.2	123.2	7.8	123.1	7.7
7/10/2021	7:25:00 PM	36.7	115.4	6.9	116.2	6.7
7/10/2021	7:30:00 PM	36.5	107	7.8	107.1	7.7
7/10/2021	7:35:00 PM	34.8	81.5	7.8	80.7	7.7
7/10/2021	7:40:00 PM	36.9	65.5	16.8	65.3	16.1
7/10/2021	7:45:00 PM	68.5	70	17.9	68.9	17.4
7/10/2021	7:50:00 PM	216.5	66.6	19	66.3	18.7
7/10/2021	7:55:00 PM	408.3	81.7	14.8	81.3	14.4
7/10/2021	8:00:00 PM	477.4	73.7	17.8	73.3	17.4
7/10/2021	8:05:00 PM	456.3	79	15.2	79	14.9
7/10/2021	8:10:00 PM	388.9	78.6	12	79.1	11.8
7/10/2021	8:15:00 PM	315.9	86.1	8.4	86.7	8.2
7/10/2021	8:20:00 PM	256.1	86.7	14.9	86.7	14.6
7/10/2021	8:25:00 PM	210.2	92.1	15.4	92.4	15.2
7/10/2021	8:30:00 PM	177	101.8	12	101.3	11.8
7/10/2021	8:35:00 PM	143.3	113.1	12.6	112.8	12.5
7/10/2021	8:40:00 PM	110.6	116.5	11.5	116.4	11.3
7/10/2021	8:45:00 PM	84.3	121.8	9.3	121.7	9.1
7/10/2021	8:50:00 PM	58.4	129.6	9.2	129.5	9.1
7/10/2021	8:55:00 PM	33.5	138.8	8.1	138.3	7.9
7/10/2021	9:00:00 PM	22.1	149.2	7.5	149.8	7.4
7/10/2021	9:05:00 PM	25.5	119.9	11.4	119.8	11.2
7/10/2021	9:10:00 PM	44.5	127	18.6	127.1	18.1
7/10/2021	9:15:00 PM	95.7	139.2	18	139.3	17.7
7/10/2021	9:20:00 PM	163.3	137.6	16.7	137.8	16.5
7/10/2021	9:25:00 PM	219	149.1	14.9	149.3	14.4
7/10/2021	9:30:00 PM	270.4	167.6	18.5	168	18.1
7/10/2021	9:35:00 PM	324.8	169.8	13.4	171.5	13.1
7/10/2021	9:40:00 PM	375.1	179.9	18.4	180.5	18.2
7/10/2021	9:45:00 PM	432.7	191.6	18.3	191.5	18.1
7/10/2021	9:50:00 PM	564.6	177.1	17	178.2	16.4
7/10/2021	9:55:00 PM	705.8	164.5	12.8	165.7	12.4
7/10/2021	10:00:00 PM	771.7	148.8	11.1	149.8	10.7
7/10/2021	10:05:00 PM	761.5	171.5	8.1	172	8
7/10/2021	10:10:00 PM	695.9	183	8.6	183.2	8.5
7/10/2021	10:15:00 PM	604.2	193.4	6.4	193.9	6.3
7/10/2021	10:20:00 PM	500	202.4	6.4	201.5	6.1
7/10/2021	10:25:00 PM	395.9	246.6	5.8	246	5.6

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	10:30:00 PM	305.3	305.8	3.4	287.4	2.5
7/10/2021	10:35:00 PM	238	0.6	3.1	336.6	1.9
7/10/2021	10:40:00 PM	188.5	346.6	4.3	330.1	3.1
7/10/2021	10:45:00 PM	152.9	32.1	1.3	36.1	1.2
7/10/2021	10:50:00 PM	131	85.1	3.4	97.4	3.3
7/10/2021	10:55:00 PM	120.2	105.1	8.4	105	8.3
7/10/2021	11:00:00 PM	103.4	103.9	6.9	104.2	6.8
7/10/2021	11:05:00 PM	90.5	108.1	7.7	108.9	7.5
7/10/2021	11:10:00 PM	81.3	105.8	10.7	105.8	10.5
7/10/2021	11:15:00 PM	79.6	105	10.5	104.8	10.3
7/10/2021	11:20:00 PM	83.4	104.6	9.1	105.3	8.9
7/10/2021	11:25:00 PM	97.6	98.9	6.7	99.2	6.6
7/10/2021	11:30:00 PM	115.4	93.8	6.6	94.3	6.5
7/10/2021	11:35:00 PM	129.3	92.7	6.5	93.3	6.4
7/10/2021	11:40:00 PM	137.6	89.7	4.5	90.3	4.4
7/10/2021	11:45:00 PM	139.5	78	3.3	77.8	3.2
7/10/2021	11:50:00 PM	131.2	25.9	1.6	25.3	1
7/10/2021	11:55:00 PM	132.3	292.8	2.8	290.8	2.5
	Average	248.6	196	7.9	191.9	4.1
	Max	5538	355.3	19	355.4	18.7
	Max Hour	359763.294	5624.38631	14.56961564	5576.286442	14.31871842
	Min	18.4	0.6	1.1	2.3	0.5
	Count	288	288	288	288	288
	Total	71623.6	53468.8	2289.3	53892.6	2214.3

Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	12:00:00 AM	15.4	218.8	2.4	220.2	2.2
7/12/2021	12:05:00 AM	13.9	219.1	2.5	214	2.2
7/12/2021	12:10:00 AM	14.7	201.1	1.6	195.7	1.4
7/12/2021	12:15:00 AM	13.5	179.3	1.3	183.7	1.2
7/12/2021	12:20:00 AM	12	176.9	1.3	180.3	1.2
7/12/2021	12:25:00 AM	13.7	207.6	0.9	219.8	0.6
7/12/2021	12:30:00 AM	40.3	302.7	1	301.3	1
7/12/2021	12:35:00 AM	27.7	341.4	0	343	0.8
7/12/2021	12:40:00 AM	25	309.2	0	317.9	0.7
7/12/2021	12:45:00 AM	19.1	299.6	0	303.1	0.7
7/12/2021	12:50:00 AM	17	284.5	1.2	284.5	1.2
7/12/2021	12:55:00 AM	31.1	301.7	2.2	301.8	2.1
7/12/2021	1:00:00 AM	27	305.7	1.9	307.4	1.9
7/12/2021	1:05:00 AM	20.4	263.1	2.2	261.3	2.1
7/12/2021	1:10:00 AM	12	252.7	2.3	252.3	2.3
7/12/2021	1:15:00 AM	16	252.4	2.6	251.1	2.6
7/12/2021	1:20:00 AM	14.3	242.4	3.9	242.4	3.9
7/12/2021	1:25:00 AM	10.5	220.5	2.6	223.3	2.4
7/12/2021	1:30:00 AM	14.8	241.6	3.2	240.7	3.1
7/12/2021	1:35:00 AM	19.3	283.7	2.2	278.1	2
7/12/2021	1:40:00 AM	30.5	352.9	2.5	358.8	2.4
7/12/2021	1:45:00 AM	49.2	12.1	4.4	12.3	4.3
7/12/2021	1:50:00 AM	37.5	5.5	3.3	7.5	3.2
7/12/2021	1:55:00 AM	35.2	352.3	3.1	351.1	3
7/12/2021	2:00:00 AM	26.1	338	3.8	338	3.8
7/12/2021	2:05:00 AM	19.9	328.6	2.6	328.8	2.6
7/12/2021	2:10:00 AM	14.6	328.5	3.2	328.5	3.2
7/12/2021	2:15:00 AM	21.3	328.3	3.9	328.2	3.9
7/12/2021	2:20:00 AM	32.2	323.5	3.5	323.6	3.4
7/12/2021	2:25:00 AM	38.4	323	3.5	322.8	3.5
7/12/2021	2:30:00 AM	44.2	314.5	3.6	314.4	3.6
7/12/2021	2:35:00 AM	35.2	305	2.2	306	2.2
7/12/2021	2:40:00 AM	32.9	246.1	0	271.1	0.3
7/12/2021	2:45:00 AM	23.3	247.7	1.4	249.2	1.3
7/12/2021	2:50:00 AM	22.8	272.9	1.4	272.9	1.4
7/12/2021	2:55:00 AM	29	247	0	234.9	0.5
7/12/2021	3:00:00 AM	23.3	210.3	1.2	210	1.2
7/12/2021	3:05:00 AM	19.3	210.2	1.5	208.7	1.5
7/12/2021	3:10:00 AM	16.5	205.8	1.9	206.2	1.8
7/12/2021	3:15:00 AM	20.7	267	1.8	265.4	1.6
7/12/2021	3:20:00 AM	31.8	298.7	1.5	299.8	1.4
7/12/2021	3:25:00 AM	37.7	309.5	2.6	308.9	2.5
7/12/2021	3:30:00 AM	40.3	291	2.9	291.2	2.8
7/12/2021	3:35:00 AM	28.1	275.2	3.7	274.8	3.6
7/12/2021	3:40:00 AM	20.3	272.9	3.7	273.1	3.7
7/12/2021	3:45:00 AM	20.3	251.3	2.6	251.1	2.5
7/12/2021	3:50:00 AM	16.5	221	4	222.9	3.8
7/12/2021	3:55:00 AM	24	197.1	4.3	197.4	4.2
7/12/2021	4:00:00 AM	38.6	187.5	4	187.3	3.9
7/12/2021	4:05:00 AM	45	212.1	2.5	212.9	2.4
7/12/2021	4:10:00 AM	33	252.9	1.4	249.3	1.3
7/12/2021	4:15:00 AM	28.8	285.9	2.3	282.8	2.2
7/12/2021	4:20:00 AM	31	293.2	1.7	294	1.7

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/12/2021	4:25:00 AM	36.3	302	2.8	302.1	2.7
7/12/2021	4:30:00 AM	40.8	313.3	2.3	312.8	2.2
7/12/2021	4:35:00 AM	38.1	304.2	2.1	305	2
7/12/2021	4:40:00 AM	51.6	298.6	2	298.4	2
7/12/2021	4:45:00 AM	66.2	284.4	1.6	279.5	1.3
7/12/2021	4:50:00 AM	57.6	242.3	3	242.1	2.9
7/12/2021	4:55:00 AM	39.4	209.8	2.8	211.9	2.7
7/12/2021	5:00:00 AM	30	225.3	3	228.1	2.8
7/12/2021	5:05:00 AM	25.9	222.8	2.6	223.8	2.5
7/12/2021	5:10:00 AM	29.2	224.4	1.9	228.7	1.8
7/12/2021	5:15:00 AM	24.9	219.7	2.9	223.4	2.7
7/12/2021	5:20:00 AM	23.7	230	4.5	230.9	4.2
7/12/2021	5:25:00 AM	17.3	231.1	6.1	232.4	5.9
7/12/2021	5:30:00 AM	18.5	235.9	7.6	237	7.4
7/12/2021	5:35:00 AM	20.2	219.1	6.5	220.3	6.2
7/12/2021	5:40:00 AM	17.9	220.2	6.9	220.2	6.6
7/12/2021	5:45:00 AM	26	228.8	5.8	229.8	5.6
7/12/2021	5:50:00 AM	52	223.6	4.7	225.4	4.5
7/12/2021	5:55:00 AM	50.4	231.7	4.9	232	4.8
7/12/2021	6:00:00 AM	45	214.2	8.5	212.4	8.2
7/12/2021	6:05:00 AM	50	200.1	8	200.2	7.9
7/12/2021	6:10:00 AM	49.8	200.5	9	200.4	8.9
7/12/2021	6:15:00 AM	48.5	206.2	9.3	205.3	9.1
7/12/2021	6:20:00 AM	33.3	210.3	9	210.3	8.7
7/12/2021	6:25:00 AM	39.4	210.4	9.5	210.2	9.3
7/12/2021	6:30:00 AM	39.6	220.8	8.6	220.5	8.2
7/12/2021	6:35:00 AM	44.7	223.7	7.6	224.4	7.2
7/12/2021	6:40:00 AM	47.2	227.8	8.3	228.2	7.9
7/12/2021	6:45:00 AM	62.9	237.8	7.7	238.2	7.6
7/12/2021	6:50:00 AM	63.5	238.2	6.9	238.5	6.8
7/12/2021	6:55:00 AM	72.4	225.4	6.7	226.8	6.3
7/12/2021	7:00:00 AM	65.9	210	9.1	209.7	8.8
7/12/2021	7:05:00 AM	45.9	215.5	5.1	216.1	4.9
7/12/2021	7:10:00 AM	45.7	225.1	3.9	223.4	3.8
7/12/2021	7:15:00 AM	59.9	211.3	4.9	212.5	4.6
7/12/2021	7:20:00 AM	34.5	228.2	6.8	228.7	6.5
7/12/2021	7:25:00 AM	36	238	5.6	237.1	5.4
7/12/2021	7:30:00 AM	39.3	230.8	5.2	233.3	5
7/12/2021	7:35:00 AM	72.8	218.3	5	219.1	4.7
7/12/2021	7:40:00 AM	57.5	211.1	7.5	210.7	7.2
7/12/2021	7:45:00 AM	38.4	219	6.2	218.6	5.8
7/12/2021	7:50:00 AM	46.3	218	6.2	217.1	5.9
7/12/2021	7:55:00 AM	52.4	232.7	6.9	233.3	6.7
7/12/2021	8:00:00 AM	<	232.2	7.1	233.2	6.9
7/12/2021	8:05:00 AM	<	224.6	8.5	226.5	8.2
7/12/2021	8:10:00 AM	<	230.9	10.8	231.9	10.5
7/12/2021	8:15:00 AM	<	226.4	8.8	228.6	8.6
7/12/2021	8:20:00 AM	<	216.3	7.3	214.7	6.9
7/12/2021	8:25:00 AM	<	223.5	8.2	225.2	7.8
7/12/2021	8:30:00 AM	<	208	10.5	208.8	10
7/12/2021	8:35:00 AM	<	195.1	10.2	195.1	10
7/12/2021	8:40:00 AM	<	203	11.4	202.8	11.2
7/12/2021	8:45:00 AM	<	190.6	9.3	190.6	9.2

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	8:50:00 AM	<	191.3	8.6	191	8.5
7/12/2021	8:55:00 AM	<	196.8	8.3	195.4	7.9
7/12/2021	9:00:00 AM	<	228	6.7	229.1	6.5
7/12/2021	9:05:00 AM	112.6	232.6	6.1	232.4	5.9
7/12/2021	9:10:00 AM	101.3	230.1	6	231.8	5.8
7/12/2021	9:15:00 AM	81.5	243.4	5.9	242.9	5.7
7/12/2021	9:20:00 AM	80.4	242.7	5.8	244	5.6
7/12/2021	9:25:00 AM	78.1	244.2	7.5	244.3	7.3
7/12/2021	9:30:00 AM	80.9	245	6.1	242.2	5.8
7/12/2021	9:35:00 AM	84.2	276.3	6.7	275.7	6.3
7/12/2021	9:40:00 AM	83.6	261.5	6.4	260.1	6
7/12/2021	9:45:00 AM	82.3	244.3	5	247.2	4.9
7/12/2021	9:50:00 AM	82.6	224.5	3.8	223.3	3.6
7/12/2021	9:55:00 AM	74.2	200.4	4	202.3	3.7
7/12/2021	10:00:00 AM	69.6	235	3.8	230.1	3.6
7/12/2021	10:05:00 AM	74.6	207.1	4.6	206.5	4.5
7/12/2021	10:10:00 AM	70.4	204.7	3.7	213.2	2.5
7/12/2021	10:15:00 AM	71.8	239.9	7.1	239	6.9
7/12/2021	10:20:00 AM	90.6	247	7.6	247.6	7.2
7/12/2021	10:25:00 AM	109.9	257.3	7.7	256.9	7.5
7/12/2021	10:30:00 AM	122.7	250.8	6.5	250	6.3
7/12/2021	10:35:00 AM	131.5	254.8	9.3	253.7	9.1
7/12/2021	10:40:00 AM	151.6	258.9	7.3	256.2	7
7/12/2021	10:45:00 AM	162.7	257.3	6.3	254.3	5.9
7/12/2021	10:50:00 AM	165.7	272.6	5.8	275.3	5.5
7/12/2021	10:55:00 AM	169.7	237.7	6.4	238.7	6.2
7/12/2021	11:00:00 AM	179.4	240	6.4	242.3	6
7/12/2021	11:05:00 AM	200.6	261.7	6.2	257.1	5.5
7/12/2021	11:10:00 AM	209.3	228.7	3	223.6	2.6
7/12/2021	11:15:00 AM	207.2	294.1	2.8	309.9	2
7/12/2021	11:20:00 AM	211.1	246.6	4.5	248.8	3.9
7/12/2021	11:25:00 AM	212.8	258.3	6.1	257.8	5.8
7/12/2021	11:30:00 AM	234.3	249.8	3.8	247.4	3.2
7/12/2021	11:35:00 AM	244.5	227.2	6.8	229.4	6.5
7/12/2021	11:40:00 AM	269	214.3	5	217.3	4.6
7/12/2021	11:45:00 AM	265.9	183.8	4	200.3	3.3
7/12/2021	11:50:00 AM	279.8	219.1	5.7	222.3	5.4
7/12/2021	11:55:00 AM	277.1	300.2	3.2	293.3	2.9
7/12/2021	12:00:00 PM	269.9	278.8	5.1	278.1	4.8
7/12/2021	12:05:00 PM	288.4	251.3	3.5	250.5	3.2
7/12/2021	12:10:00 PM	321	221.2	4.9	220.7	4.5
7/12/2021	12:15:00 PM	331	278	4.1	282.7	3.4
7/12/2021	12:20:00 PM	336.1	210.4	6.8	209.9	6.6
7/12/2021	12:25:00 PM	335.9	219.3	6	219.4	5.6
7/12/2021	12:30:00 PM	319.6	200.7	5.3	196	5
7/12/2021	12:35:00 PM	323.3	242.5	6.7	243.6	6.4
7/12/2021	12:40:00 PM	316.2	220	2	242.4	1.4
7/12/2021	12:45:00 PM	300.1	264.8	5	268.6	4.6
7/12/2021	12:50:00 PM	311.8	306.7	5	311.5	4.7
7/12/2021	12:55:00 PM	327.9	266.8	7.3	262.8	6.2
7/12/2021	1:00:00 PM	339.6	268.6	2.6	260.5	2.3
7/12/2021	1:05:00 PM	340.2	272.5	5.8	272.1	5.5
7/12/2021	1:10:00 PM	364.3	260.4	5.8	259.5	5.3

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	1:15:00 PM	367.4	220.1	4.3	223.7	3.8
7/12/2021	1:20:00 PM	348.3	142.3	2.8	270.2	0.6
7/12/2021	1:25:00 PM	342.1	238.5	5.3	239.3	5.2
7/12/2021	1:30:00 PM	315.3	200.9	2.2	213.8	1.6
7/12/2021	1:35:00 PM	310.7	278.1	8.5	277.3	8.4
7/12/2021	1:40:00 PM	332.5	269.9	3.5	271.9	3.3
7/12/2021	1:45:00 PM	317.3	257	3.9	255.1	3.3
7/12/2021	1:50:00 PM	323.5	243.6	4.9	241.8	4.7
7/12/2021	1:55:00 PM	347.2	278.3	4.8	276.5	4.6
7/12/2021	2:00:00 PM	339.4	247.3	4.2	252.2	3.4
7/12/2021	2:05:00 PM	326.4	246	4.5	240.5	3.5
7/12/2021	2:10:00 PM	341.7	258	5.9	250.7	5.2
7/12/2021	2:15:00 PM	332	302.1	5.5	302.8	5.1
7/12/2021	2:20:00 PM	330.7	260.3	3.7	265.8	2.7
7/12/2021	2:25:00 PM	346.1	267.6	6	265.1	5.6
7/12/2021	2:30:00 PM	335.9	269.9	5.1	266.5	4.6
7/12/2021	2:35:00 PM	311.6	265.4	4.6	266.2	4.4
7/12/2021	2:40:00 PM	307.9	271.8	7	272.4	6.8
7/12/2021	2:45:00 PM	324.7	240.5	5.4	251.3	4.8
7/12/2021	2:50:00 PM	311.8	233.5	2.8	233.1	2.3
7/12/2021	2:55:00 PM	311.6	260.7	6.4	255.5	6.1
7/12/2021	3:00:00 PM	322.6	247.9	7.8	246.3	7.7
7/12/2021	3:05:00 PM	315.7	268.1	7.7	270.1	7.3
7/12/2021	3:10:00 PM	322.7	286	7.5	286.3	7.3
7/12/2021	3:15:00 PM	327.4	293.1	6.6	293	6.5
7/12/2021	3:20:00 PM	322.7	280.9	8.3	281.1	8.1
7/12/2021	3:25:00 PM	321.3	246.8	3.7	252.2	2.9
7/12/2021	3:30:00 PM	311.6	277.3	1.1	245.2	0.8
7/12/2021	3:35:00 PM	300.6	243.1	4.2	247.1	3.8
7/12/2021	3:40:00 PM	313	268.9	4.6	268.2	4.3
7/12/2021	3:45:00 PM	310	246.9	3.7	244.6	3.4
7/12/2021	3:50:00 PM	313.3	262.6	3.4	255.7	2.2
7/12/2021	3:55:00 PM	321.9	245.1	4.8	242.3	4.4
7/12/2021	4:00:00 PM	317.9	238	6.6	237.8	6.4
7/12/2021	4:05:00 PM	310	244.4	7.7	243.7	7.5
7/12/2021	4:10:00 PM	287.8	239.9	5.6	240.1	5.3
7/12/2021	4:15:00 PM	271.3	215.2	3.8	218.1	3.6
7/12/2021	4:20:00 PM	261.7	216	3.8	215.4	3.6
7/12/2021	4:25:00 PM	251.4	234.4	3.3	230.3	3.1
7/12/2021	4:30:00 PM	248.4	207.1	5.3	206.8	5.1
7/12/2021	4:35:00 PM	246.1	239.5	3.8	233	3.4
7/12/2021	4:40:00 PM	229.5	260.6	3.2	259	3.1
7/12/2021	4:45:00 PM	246.8	232	3	232.5	2.8
7/12/2021	4:50:00 PM	267.3	185.5	3.1	185.1	2.9
7/12/2021	4:55:00 PM	276.7	216.7	3.3	218.5	3
7/12/2021	5:00:00 PM	284.7	233.8	4.1	235.9	3.9
7/12/2021	5:05:00 PM	288.9	217.1	3	208.1	2.7
7/12/2021	5:10:00 PM	296.8	187.5	3.8	186.9	3.7
7/12/2021	5:15:00 PM	319.9	219.4	4.3	219.7	4
7/12/2021	5:20:00 PM	315.9	234	5.1	234.9	5
7/12/2021	5:25:00 PM	324.5	236.2	5.3	237	5.1
7/12/2021	5:30:00 PM	336	216.1	4	216.9	3.8
7/12/2021	5:35:00 PM	334.4	208.5	3.8	207.3	3.7

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	5:40:00 PM	328.9	207.5	3.6	206.2	3.5
7/12/2021	5:45:00 PM	336.9	208.3	4.3	208.6	4.1
7/12/2021	5:50:00 PM	342.3	227.8	4.4	230	4.2
7/12/2021	5:55:00 PM	344.4	235.3	6.1	235.1	6
7/12/2021	6:00:00 PM	362.6	237.6	6.6	237.9	6.5
7/12/2021	6:05:00 PM	374.1	217.7	5	216.3	4.8
7/12/2021	6:10:00 PM	389	225.8	4.8	226.9	4.6
7/12/2021	6:15:00 PM	365.4	229.1	4.5	230.3	4.3
7/12/2021	6:20:00 PM	328.2	214.9	3.5	214.9	3.2
7/12/2021	6:25:00 PM	327.2	217.2	4.7	218.7	4.5
7/12/2021	6:30:00 PM	307.3	209.2	5.3	209.5	5.2
7/12/2021	6:35:00 PM	314.4	216.5	4	215.9	3.8
7/12/2021	6:40:00 PM	320.1	215.9	4.1	215.7	4
7/12/2021	6:45:00 PM	298.1	210.9	4	210.6	3.9
7/12/2021	6:50:00 PM	283.3	214.3	5.1	213.4	4.9
7/12/2021	6:55:00 PM	295.6	215.3	4.5	215.8	4.3
7/12/2021	7:00:00 PM	310.3	216.1	4.2	217.6	4.1
7/12/2021	7:05:00 PM	316.5	215.7	3.1	216.2	2.9
7/12/2021	7:10:00 PM	331.3	213.8	3.6	214.8	3.4
7/12/2021	7:15:00 PM	348.4	232	6.3	233	6.1
7/12/2021	7:20:00 PM	364	222.1	4.1	224	4
7/12/2021	7:25:00 PM	356.6	233.5	5.5	233.8	5.4
7/12/2021	7:30:00 PM	365.7	231.3	5.4	231.8	5.3
7/12/2021	7:35:00 PM	392.9	216.4	3.5	218.5	3.4
7/12/2021	7:40:00 PM	400.3	230.8	4.5	231.7	4.4
7/12/2021	7:45:00 PM	388.7	228.5	4.7	229.3	4.6
7/12/2021	7:50:00 PM	370	236.1	4.8	235.8	4.8
7/12/2021	7:55:00 PM	355.2	233	5.4	233.2	5.3
7/12/2021	8:00:00 PM	349.2	231.2	6.5	231.2	6.4
7/12/2021	8:05:00 PM	373.2	230.9	6.3	231	6.2
7/12/2021	8:10:00 PM	382.5	227	5.9	227.8	5.8
7/12/2021	8:15:00 PM	346.9	233	6.6	233.1	6.4
7/12/2021	8:20:00 PM	314.2	231.7	5.8	232.2	5.7
7/12/2021	8:25:00 PM	268.4	231.5	5.1	232	5
7/12/2021	8:30:00 PM	237	236.3	5.2	235.8	5.1
7/12/2021	8:35:00 PM	213.2	232.7	5.3	233.1	5.2
7/12/2021	8:40:00 PM	204	232.6	5.5	233	5.4
7/12/2021	8:45:00 PM	192.1	238	6	238	5.9
7/12/2021	8:50:00 PM	189	234.7	5.3	234.5	5.2
7/12/2021	8:55:00 PM	180.4	243.3	5.3	242.5	5.2
7/12/2021	9:00:00 PM	171.9	248.9	4.2	248.6	4.1
7/12/2021	9:05:00 PM	176.5	242.3	4.9	241.5	4.8
7/12/2021	9:10:00 PM	170	242.7	6.2	242.6	6.1
7/12/2021	9:15:00 PM	162.2	237.4	5.3	237.2	5.2
7/12/2021	9:20:00 PM	162.1	236.5	4.7	236.6	4.6
7/12/2021	9:25:00 PM	162.4	238.2	4.7	238.4	4.7
7/12/2021	9:30:00 PM	156.6	240	5.4	239.8	5.4
7/12/2021	9:35:00 PM	143.2	241.8	6.2	241.8	6.2
7/12/2021	9:40:00 PM	144	238.3	7.1	238	7
7/12/2021	9:45:00 PM	125.2	238.7	8.4	238.7	8.3
7/12/2021	9:50:00 PM	99.8	244.8	7.8	244.3	7.7
7/12/2021	9:55:00 PM	72.7	246.4	7.2	246.2	7.1
7/12/2021	10:00:00 PM	48.2	245.7	7.3	245.4	7.2

Site: Buckeye						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	10:05:00 PM	39.9	241.4	7.7	241.4	7.6
7/12/2021	10:10:00 PM	41.3	237.5	6.5	237.4	6.4
7/12/2021	10:15:00 PM	43.3	238.9	5.7	238.7	5.6
7/12/2021	10:20:00 PM	41.9	236.1	5.9	236.1	5.8
7/12/2021	10:25:00 PM	39.3	238.8	5.7	238.5	5.6
7/12/2021	10:30:00 PM	31.6	241.7	6.1	241.9	6
7/12/2021	10:35:00 PM	28.4	249.5	4.4	249.5	4.3
7/12/2021	10:40:00 PM	27.6	249.1	5.3	248.9	5.2
7/12/2021	10:45:00 PM	22.3	245.3	6.5	244.8	6.4
7/12/2021	10:50:00 PM	27.3	240.6	7.3	240.6	7.2
7/12/2021	10:55:00 PM	25.3	222.6	5.6	223.6	5.4
7/12/2021	11:00:00 PM	42.1	205.4	4.4	206.4	4.2
7/12/2021	11:05:00 PM	48.4	227.5	4.4	228.3	4.3
7/12/2021	11:10:00 PM	23.9	235.3	4.6	235.5	4.4
7/12/2021	11:15:00 PM	27.9	212.5	4.1	212.6	4
7/12/2021	11:20:00 PM	33.4	210.2	5.1	210.6	5
7/12/2021	11:25:00 PM	18.6	206.8	6	206.8	5.9
7/12/2021	11:30:00 PM	10.7	203.7	5.9	203.8	5.8
7/12/2021	11:35:00 PM	18.4	202.2	4	202.3	3.9
7/12/2021	11:40:00 PM	22	195	5.2	195.3	5.1
7/12/2021	11:45:00 PM	20.1	205.4	8.1	205.2	8
7/12/2021	11:50:00 PM	26.2	200.1	6.7	201	6.6
7/12/2021	11:55:00 PM	34.4	184.7	6.4	184.8	6.3
	Average	163.4	239	4.9	235.9	4.1
	Max	400.3	352.9	11.4	358.8	11.2
	Max Hour	18172.09275	1469.082957	4.611469101	1427.626724	4.485958067
	Min	10.5	5.5	0	7.5	0.3
	Count	275	288	288	288	288
	Total	44950.7	68820.6	1415.3	69026.6	1353.5

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	12:00:00 AM	21.5	238	0	244.1	0.1
4/3/2023	12:05:00 AM	22.5	272.1	0.9	279.3	0.8
4/3/2023	12:10:00 AM	22.8	6.7	0	6.9	0
4/3/2023	12:15:00 AM	21.3	347.6	1.9	347.7	1.9
4/3/2023	12:20:00 AM	20.3	14.4	2.6	14.5	2.6
4/3/2023	12:25:00 AM	19	25	3	25.1	3
4/3/2023	12:30:00 AM	18	6.9	1.9	13.6	1.7
4/3/2023	12:35:00 AM	17.4	27.4	2.4	27.2	2.4
4/3/2023	12:40:00 AM	16.6	1.3	1.8	357	1.6
4/3/2023	12:45:00 AM	17.9	3	1.7	355.1	1.5
4/3/2023	12:50:00 AM	15.9	194.4	0	189.4	0.2
4/3/2023	12:55:00 AM	14.9	352.1	1.1	333.8	1
4/3/2023	1:00:00 AM	18.1	347.1	1.3	341.7	1.2
4/3/2023	1:05:00 AM	19.1	19.3	1	15.8	0.8
4/3/2023	1:10:00 AM	18.6	346.1	1.2	341.8	1.1
4/3/2023	1:15:00 AM	17.9	339.5	1.9	340.1	1.8
4/3/2023	1:20:00 AM	17.7	330.8	2.7	330.3	2.7
4/3/2023	1:25:00 AM	18.8	332.6	2.3	332.3	2.2
4/3/2023	1:30:00 AM	18.6	332.5	2.6	331.8	2.6
4/3/2023	1:35:00 AM	17.5	332.7	3.1	333.8	3
4/3/2023	1:40:00 AM	18.1	322.2	4.2	322.3	4.1
4/3/2023	1:45:00 AM	18.4	331	4.9	331.1	4.9
4/3/2023	1:50:00 AM	17.7	330.7	3.3	330.6	3.2
4/3/2023	1:55:00 AM	18.1	332.6	2.3	330.2	2.2
4/3/2023	2:00:00 AM	17.4	329.6	2.4	331.7	2.4
4/3/2023	2:05:00 AM	16.8	330.3	3.5	330	3.5
4/3/2023	2:10:00 AM	16	335.4	4.3	335.4	4.3
4/3/2023	2:15:00 AM	15.5	333	4.6	333	4.6
4/3/2023	2:20:00 AM	15.2	326.1	4.1	325.6	4.1
4/3/2023	2:25:00 AM	16.8	319.7	5.7	319.7	5.7
4/3/2023	2:30:00 AM	17.8	309.8	4.9	310.2	4.9
4/3/2023	2:35:00 AM	18	303.8	4.2	303.2	4.1
4/3/2023	2:40:00 AM	18.3	318.6	1.8	303.5	1.7
4/3/2023	2:45:00 AM	18.7	305.9	1.5	308.3	1.5
4/3/2023	2:50:00 AM	19.1	341.8	3	342.4	2.9
4/3/2023	2:55:00 AM	20.5	354.3	3.4	354.1	3.4
4/3/2023	3:00:00 AM	20.4	356.1	2.9	355.5	2.8
4/3/2023	3:05:00 AM	20.4	359.4	2.2	356.6	2.1
4/3/2023	3:10:00 AM	20	340.2	2.7	340.9	2.7
4/3/2023	3:15:00 AM	19.9	322.3	2.3	322.1	2.2
4/3/2023	3:20:00 AM	19.9	310	2.3	310.3	2.3
4/3/2023	3:25:00 AM	19.7	310	3.2	309.9	3.1
4/3/2023	3:30:00 AM	19	325.4	2.4	319.1	1.6
4/3/2023	3:35:00 AM	19.3	128.7	4.5	128.8	4.5
4/3/2023	3:40:00 AM	20.1	88.1	1.2	95	1
4/3/2023	3:45:00 AM	20.2	52.2	1.5	52.6	1.5
4/3/2023	3:50:00 AM	22	60.1	2.3	60.3	2.3
4/3/2023	3:55:00 AM	22.3	80	2.6	80.2	2.6
4/3/2023	4:00:00 AM	21	85.6	3.1	85.6	3.1
4/3/2023	4:05:00 AM	21.4	79.2	2.5	79.6	2.5
4/3/2023	4:10:00 AM	27.9	43.1	1.8	59.3	1.6
4/3/2023	4:15:00 AM	33.9	348.5	3.8	341.8	3.5
4/3/2023	4:20:00 AM	34.8	337.3	3.6	338.7	3.6

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	4:25:00 AM	31.9	337.6	4.8	337.8	4.7
4/3/2023	4:30:00 AM	28.4	346.2	3	348.4	2.9
4/3/2023	4:35:00 AM	24.7	345.5	3.9	346	3.8
4/3/2023	4:40:00 AM	21	342.3	3	343.5	3
4/3/2023	4:45:00 AM	19.4	346.8	1.8	344.4	1.7
4/3/2023	4:50:00 AM	21.3	359.1	2.4	359.8	2.4
4/3/2023	4:55:00 AM	24.1	351.3	2.8	351.7	2.8
4/3/2023	5:00:00 AM	24.8	358	2.7	358.1	2.7
4/3/2023	5:05:00 AM	26.6	10.3	2.4	12.3	2.4
4/3/2023	5:10:00 AM	27.1	39.1	2.3	38.4	2.2
4/3/2023	5:15:00 AM	28.4	29.9	2.7	29.5	2.6
4/3/2023	5:20:00 AM	29.4	21.9	2.9	23	2.9
4/3/2023	5:25:00 AM	32.4	27.1	2.3	27.1	2.2
4/3/2023	5:30:00 AM	37.3	31.3	2.5	32.3	2.5
4/3/2023	5:35:00 AM	44.7	28.5	2.6	29.3	2.5
4/3/2023	5:40:00 AM	47.8	20.7	2.6	21.2	2.5
4/3/2023	5:45:00 AM	50.4	20	2.5	20.1	2.5
4/3/2023	5:50:00 AM	61.4	30.1	2.1	29.8	2
4/3/2023	5:55:00 AM	79	42.7	2.3	44	2.3
4/3/2023	6:00:00 AM	92.8	52.3	2.6	52.5	2.6
4/3/2023	6:05:00 AM	117.5	41.5	3.1	41.7	3.1
4/3/2023	6:10:00 AM	167.6	60.5	3.2	62.3	3.1
4/3/2023	6:15:00 AM	255	31.2	2.7	32.1	2.5
4/3/2023	6:20:00 AM	306.6	3.7	2.7	4.4	2.5
4/3/2023	6:25:00 AM	315.5	53.1	2.9	52.5	2.9
4/3/2023	6:30:00 AM	292	43	3.1	43.4	3
4/3/2023	6:35:00 AM	255.4	12.8	2.8	15.8	2.7
4/3/2023	6:40:00 AM	221.2	9.7	3.3	9.8	3.2
4/3/2023	6:45:00 AM	183.1	36.9	3.6	36.7	3.5
4/3/2023	6:50:00 AM	157.6	49.4	3	48.8	3
4/3/2023	6:55:00 AM	151	64.6	3.4	64.3	3.4
4/3/2023	7:00:00 AM	174.9	69.8	4.3	69.7	4.3
4/3/2023	7:05:00 AM	204.5	86.7	3.4	86.7	3.4
4/3/2023	7:10:00 AM	223.5	107	3.3	106.1	3.2
4/3/2023	7:15:00 AM	248.7	91.3	3.5	91.8	3.4
4/3/2023	7:20:00 AM	234.3	75	2.1	75	2
4/3/2023	7:25:00 AM	200	56.7	2	56.9	1.9
4/3/2023	7:30:00 AM	172.3	47.4	1.7	47.8	1.6
4/3/2023	7:35:00 AM	157.9	71.1	2.8	72.9	2.7
4/3/2023	7:40:00 AM	150.9	80.4	2.9	80.2	2.8
4/3/2023	7:45:00 AM	143	93.7	3.5	93.7	3.4
4/3/2023	7:50:00 AM	125	100.5	3.7	99.2	3.6
4/3/2023	7:55:00 AM	105.8	107.8	3.6	108.7	3.6
4/3/2023	8:00:00 AM	90.1	107.1	4	107.1	4
4/3/2023	8:05:00 AM	74.9	114.1	4.1	113.4	4
4/3/2023	8:10:00 AM	65.6	102.8	3.9	103.1	3.7
4/3/2023	8:15:00 AM	63.6	104.4	3.5	104.8	3.4
4/3/2023	8:20:00 AM	59.5	103.8	2.9	105.4	2.7
4/3/2023	8:25:00 AM	55.5	137.5	4.6	149.1	4.3
4/3/2023	8:30:00 AM	49.3	166.2	8.6	166.7	8.5
4/3/2023	8:35:00 AM	44.6	169.9	9.5	169.9	9.3
4/3/2023	8:40:00 AM	43.8	175.1	8.3	174	8.1
4/3/2023	8:45:00 AM	44.1	179.8	7	179.1	6.8

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	8:50:00 AM	41.9	188	5.2	184.3	4.9
4/3/2023	8:55:00 AM	42	197	6.1	197.4	5.9
4/3/2023	9:00:00 AM	41.4	199.3	5.4	200.1	5.1
4/3/2023	9:05:00 AM	37.9	188.7	7.9	188.4	7.8
4/3/2023	9:10:00 AM	36.8	190.7	8	189.8	7.7
4/3/2023	9:15:00 AM	45	186.6	9.5	186.5	9.3
4/3/2023	9:20:00 AM	53.3	183.8	8.7	183.7	8.5
4/3/2023	9:25:00 AM	63.1	193.6	8.7	193.1	8.4
4/3/2023	9:30:00 AM	69.9	187.8	8.3	188.3	8.2
4/3/2023	9:35:00 AM	65.5	183.5	7.1	182	6.9
4/3/2023	9:40:00 AM	59.6	186.8	8.8	184.5	8.5
4/3/2023	9:45:00 AM	55.6	184.5	9.8	184.5	9.6
4/3/2023	9:50:00 AM	57	194.6	9.6	194.4	9.3
4/3/2023	9:55:00 AM	58.6	189.1	8.4	189.6	8.1
4/3/2023	10:00:00 AM	61.6	183.1	10.6	183.2	10.4
4/3/2023	10:05:00 AM	64.7	190.1	9.9	189.6	9.8
4/3/2023	10:10:00 AM	75.7	195.3	9.4	196.2	9.1
4/3/2023	10:15:00 AM	82.8	222.6	9.9	223.7	9.6
4/3/2023	10:20:00 AM	80.6	206.1	9.6	208.2	9
4/3/2023	10:25:00 AM	79.3	201.8	8.6	203.2	8.2
4/3/2023	10:30:00 AM	76	194	8.5	193.2	8.2
4/3/2023	10:35:00 AM	72.3	195.5	9.5	194.6	9
4/3/2023	10:40:00 AM	69.2	217.1	8.6	222.2	8.2
4/3/2023	10:45:00 AM	64.7	222.2	12	223	11.7
4/3/2023	10:50:00 AM	60.8	230.7	11.4	230	11.1
4/3/2023	10:55:00 AM	59.1	231.1	13.5	231	13.3
4/3/2023	11:00:00 AM	58.2	229.4	7.7	230.6	7.5
4/3/2023	11:05:00 AM	58.6	205.2	7.9	207.2	7.4
4/3/2023	11:10:00 AM	57.1	220.3	12.1	221.2	11.7
4/3/2023	11:15:00 AM	54.6	217.1	12	218.5	11.6
4/3/2023	11:20:00 AM	52.5	224.7	12	224.3	11.8
4/3/2023	11:25:00 AM	55	228.9	12.4	228.5	12.2
4/3/2023	11:30:00 AM	67.6	228.3	12.5	228.3	12.2
4/3/2023	11:35:00 AM	75.8	223.9	13.5	224.4	13.2
4/3/2023	11:40:00 AM	78	210.9	10.3	212.3	9.8
4/3/2023	11:45:00 AM	78.4	205.1	11.8	205.3	11.2
4/3/2023	11:50:00 AM	77.4	196.4	12.4	196.7	12
4/3/2023	11:55:00 AM	110.4	200	11.3	201.5	10.7
4/3/2023	12:00:00 PM	171.6	202.5	11.5	204.9	11
4/3/2023	12:05:00 PM	179.8	192.6	13.1	192.8	12.6
4/3/2023	12:10:00 PM	186.3	191.5	11.8	192	11.5
4/3/2023	12:15:00 PM	181.4	199	9	199.9	8.5
4/3/2023	12:20:00 PM	158.6	191.3	13.4	191.2	13.1
4/3/2023	12:25:00 PM	144.3	196.6	12.4	197.5	12
4/3/2023	12:30:00 PM	180.8	188.7	14.1	189	13.8
4/3/2023	12:35:00 PM	225.5	202.7	12.2	203.5	11.6
4/3/2023	12:40:00 PM	222.3	203	11.5	205.5	10.9
4/3/2023	12:45:00 PM	207.8	206.9	11.9	207.8	11.2
4/3/2023	12:50:00 PM	184	195.5	13.4	195.6	12.9
4/3/2023	12:55:00 PM	182.8	204.8	10.2	205.9	9.6
4/3/2023	1:00:00 PM	173.9	195.9	11.3	196	10.8
4/3/2023	1:05:00 PM	156.2	222.7	12	225.6	11.5
4/3/2023	1:10:00 PM	136.8	207.5	13.3	209.3	12.4

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	1:15:00 PM	120.1	216.2	13.9	217	13.4
4/3/2023	1:20:00 PM	118.2	216.8	15.1	217.7	14.3
4/3/2023	1:25:00 PM	118.6	208.8	13.5	211.9	13
4/3/2023	1:30:00 PM	140.9	212.5	14	213.1	13.5
4/3/2023	1:35:00 PM	153.9	203.7	15.2	203.5	14.4
4/3/2023	1:40:00 PM	160.1	202.6	14	204.6	13.2
4/3/2023	1:45:00 PM	222.1	203.6	12.7	205.6	11.9
4/3/2023	1:50:00 PM	320	213.4	13.8	215.1	13.1
4/3/2023	1:55:00 PM	322.4	203.1	12.5	204.4	12
4/3/2023	2:00:00 PM	282.6	215.2	12.5	217.7	12
4/3/2023	2:05:00 PM	245.7	198.3	14.2	198.4	13.5
4/3/2023	2:10:00 PM	226.6	225.2	17.9	225.5	17.5
4/3/2023	2:15:00 PM	218	218.7	18.7	219.5	18.3
4/3/2023	2:20:00 PM	228	214.2	15.7	216.5	15.2
4/3/2023	2:25:00 PM	259.3	214.8	18.2	215.7	17.7
4/3/2023	2:30:00 PM	308.9	230.1	19.3	230.1	19
4/3/2023	2:35:00 PM	348.8	228.3	19.7	228.3	19.4
4/3/2023	2:40:00 PM	323.4	229	18.5	228.5	18.2
4/3/2023	2:45:00 PM	276.5	225.5	18.8	226.2	18.4
4/3/2023	2:50:00 PM	238.2	234	18.3	233.9	18
4/3/2023	2:55:00 PM	203.3	227.1	20.8	227.1	20.5
4/3/2023	3:00:00 PM	185.7	234.2	18.6	234.3	18.3
4/3/2023	3:05:00 PM	174.2	232	21.1	231.8	20.7
4/3/2023	3:10:00 PM	166	231.8	18.5	231.6	18.2
4/3/2023	3:15:00 PM	173.5	230.6	18.5	230.2	18.2
4/3/2023	3:20:00 PM	186.5	228.7	17.6	228	17.3
4/3/2023	3:25:00 PM	188.6	228.1	18.4	227.2	18.1
4/3/2023	3:30:00 PM	195.1	238.3	17.4	238.6	17
4/3/2023	3:35:00 PM	209.9	237.6	18.3	238	18
4/3/2023	3:40:00 PM	217.9	237.5	18.9	237.4	18.6
4/3/2023	3:45:00 PM	225	232.4	16.5	231.6	16.2
4/3/2023	3:50:00 PM	216.1	231.9	20.9	231.5	20.5
4/3/2023	3:55:00 PM	219	228.8	19.1	228.6	18.8
4/3/2023	4:00:00 PM	232.5	231.5	18.7	231.5	18.5
4/3/2023	4:05:00 PM	226.8	227.4	19	227.3	18.7
4/3/2023	4:10:00 PM	227.3	229.6	18.7	229.3	18.3
4/3/2023	4:15:00 PM	235.5	226.1	22.2	226	21.8
4/3/2023	4:20:00 PM	277.5	227	25	226.9	24.6
4/3/2023	4:25:00 PM	460.2	228.2	22.4	228.4	22.1
4/3/2023	4:30:00 PM	561	235.8	21.5	235.7	21.2
4/3/2023	4:35:00 PM	583.6	239.6	19.9	239.6	19.6
4/3/2023	4:40:00 PM	565.8	235	20.1	234.8	19.8
4/3/2023	4:45:00 PM	584.6	241.3	20.5	241.6	20.1
4/3/2023	4:50:00 PM	629.9	239.8	19.1	239.6	18.7
4/3/2023	4:55:00 PM	623.1	233.9	17.4	233.9	17.1
4/3/2023	5:00:00 PM	565.9	237.4	18.5	237.4	18.2
4/3/2023	5:05:00 PM	510.3	232.4	19.4	231.5	19
4/3/2023	5:10:00 PM	469.7	232.1	18.9	232.4	18.6
4/3/2023	5:15:00 PM	428.6	233.6	18.5	232.9	18.1
4/3/2023	5:20:00 PM	398.1	240.1	16.6	240.1	16.3
4/3/2023	5:25:00 PM	379.7	239.8	18.1	240.1	17.8
4/3/2023	5:30:00 PM	372.4	238.1	13.2	238.1	13
4/3/2023	5:35:00 PM	352.3	238.4	12.5	237.9	12.3

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	5:40:00 PM	329.9	234.9	16.8	234.4	16.5
4/3/2023	5:45:00 PM	307	239.7	14.2	239.8	14
4/3/2023	5:50:00 PM	301.2	234.3	14.3	234.3	14.1
4/3/2023	5:55:00 PM	312.2	236.4	14	236.5	13.8
4/3/2023	6:00:00 PM	311.6	235.1	14.3	235.1	14.1
4/3/2023	6:05:00 PM	296.9	239.1	17.3	239.4	16.9
4/3/2023	6:10:00 PM	282.5	235.6	19.3	235.8	19.1
4/3/2023	6:15:00 PM	268.2	239.7	17.5	239.7	17.1
4/3/2023	6:20:00 PM	262.7	244	15.3	244.2	15
4/3/2023	6:25:00 PM	262.3	241.7	16.9	241.7	16.5
4/3/2023	6:30:00 PM	258.3	250.5	17.5	250.8	17.2
4/3/2023	6:35:00 PM	251.6	249.7	17.6	250.3	17.4
4/3/2023	6:40:00 PM	244.8	243.9	13.8	244	13.6
4/3/2023	6:45:00 PM	252.3	243.9	13.8	244.3	13.5
4/3/2023	6:50:00 PM	268.6	248.4	14.4	248.7	14.2
4/3/2023	6:55:00 PM	254.6	245	13	245.1	12.8
4/3/2023	7:00:00 PM	241.7	244.3	12.7	244.5	12.6
4/3/2023	7:05:00 PM	235.9	249.7	13.4	250	13.3
4/3/2023	7:10:00 PM	221.2	256.8	15.8	257.3	15.6
4/3/2023	7:15:00 PM	206	254.7	14	254.8	13.8
4/3/2023	7:20:00 PM	195.6	256.5	16.4	256.8	16.2
4/3/2023	7:25:00 PM	191.6	254	16	254.4	15.8
4/3/2023	7:30:00 PM	192.6	253.1	17.9	253.3	17.6
4/3/2023	7:35:00 PM	201.8	250.6	18	250.7	17.8
4/3/2023	7:40:00 PM	216.2	242.3	16.3	242.4	16
4/3/2023	7:45:00 PM	233	244.1	16.2	244.2	15.9
4/3/2023	7:50:00 PM	250.8	242.6	14.6	242.5	14.4
4/3/2023	7:55:00 PM	263.9	239.2	13.1	239.7	12.8
4/3/2023	8:00:00 PM	269	236	13.2	235.8	13
4/3/2023	8:05:00 PM	268.2	232.6	13.8	232.2	13.6
4/3/2023	8:10:00 PM	264.2	233.4	14.4	233.1	14.2
4/3/2023	8:15:00 PM	256.9	232.5	15.3	232.2	15
4/3/2023	8:20:00 PM	249.8	234.3	13.5	234.1	13.3
4/3/2023	8:25:00 PM	244	232.6	14	232.6	13.8
4/3/2023	8:30:00 PM	239.7	232.2	14.9	231.9	14.7
4/3/2023	8:35:00 PM	233	235.5	14.1	235.4	13.9
4/3/2023	8:40:00 PM	226	238.2	14	238.4	13.8
4/3/2023	8:45:00 PM	218.8	258.3	17.5	258.5	17.4
4/3/2023	8:50:00 PM	219.5	268.5	14.7	268.9	14.4
4/3/2023	8:55:00 PM	287.6	272.8	16.5	273	16.2
4/3/2023	9:00:00 PM	363.1	272.1	18	272.5	17.7
4/3/2023	9:05:00 PM	432.2	271.1	18.6	271.4	18.3
4/3/2023	9:10:00 PM	536.2	271.7	19.7	271.9	19.3
4/3/2023	9:15:00 PM	639.1	269.7	16.7	270.1	16.4
4/3/2023	9:20:00 PM	672.4	269.6	15.3	270.2	15
4/3/2023	9:25:00 PM	659.9	269.8	17.5	269.9	17.1
4/3/2023	9:30:00 PM	662.5	272	16.7	272.5	16.4
4/3/2023	9:35:00 PM	664.1	272.6	19.7	272.8	19.4
4/3/2023	9:40:00 PM	663.3	272.7	17.8	273.5	17.4
4/3/2023	9:45:00 PM	651.6	272.6	17.1	272.9	16.9
4/3/2023	9:50:00 PM	617.2	268.2	16.1	268.3	15.9
4/3/2023	9:55:00 PM	572.3	271.2	15.5	271.4	15.2
4/3/2023	10:00:00 PM	526.3	268.2	15.1	268.6	14.9

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	10:05:00 PM	486.3	267.9	15.3	267.7	15.1
4/3/2023	10:10:00 PM	451.7	264.1	13.2	264.1	13
4/3/2023	10:15:00 PM	418.7	262	15.4	262	15.2
4/3/2023	10:20:00 PM	387.3	261.7	16	261.6	15.9
4/3/2023	10:25:00 PM	360	261.3	15.1	260.9	14.8
4/3/2023	10:30:00 PM	333.6	260.7	16.1	261	16
4/3/2023	10:35:00 PM	310.6	259.5	15.4	259.3	15.2
4/3/2023	10:40:00 PM	289.7	258	14.1	258.6	13.9
4/3/2023	10:45:00 PM	271.4	259.6	13.9	259.4	13.8
4/3/2023	10:50:00 PM	256.2	260.5	14.4	260.6	14.2
4/3/2023	10:55:00 PM	244.1	260	14.5	260.1	14.4
4/3/2023	11:00:00 PM	237.7	258	13.3	258	13.1
4/3/2023	11:05:00 PM	231.6	255.2	14.7	255.4	14.5
4/3/2023	11:10:00 PM	229.5	255.2	14.3	255.6	14.1
4/3/2023	11:15:00 PM	229.6	253.8	12.7	254.2	12.5
4/3/2023	11:20:00 PM	230	252.6	11.7	252.7	11.5
4/3/2023	11:25:00 PM	231	253.2	13	253.6	12.8
4/3/2023	11:30:00 PM	233.2	253.5	12.9	254.2	12.7
4/3/2023	11:35:00 PM	234.4	250.8	12	251.2	11.8
4/3/2023	11:40:00 PM	234.3	253.5	14.5	253.7	14.3
4/3/2023	11:45:00 PM	234.1	256.2	13.3	256.2	13.1
4/3/2023	11:50:00 PM	233.8	252.4	12.2	252.3	12
4/3/2023	11:55:00 PM	232.2	253.4	11.1	253.6	10.9
	Average	181.4	247	10.2	236.2	7.8
	Max	672.4	359.4	25	359.8	24.6
	Max Hour	25602.60156	8037.45776	40.39667526	7789.414805	39.10875678
	Min	14.9	1.3	0	4.4	0
	Count	288	288	288	288	288
	Total	52267.1	60572.1	2962.1	61338.1	2895.8
	Date Printed:		9/30/2024 11:57			

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	12:00:00 AM	46.3	99.3	3	98.6	2.9
4/3/2023	12:05:00 AM	38.1	109.3	2.7	107.7	2.6
4/3/2023	12:10:00 AM	31.7	88.1	3.2	87.6	3.2
4/3/2023	12:15:00 AM	30.4	57.3	1.4	53.1	1
4/3/2023	12:20:00 AM	29.9	88.6	2.1	89.1	2.1
4/3/2023	12:25:00 AM	28.8	89.8	2.2	89.9	2.2
4/3/2023	12:30:00 AM	28.2	71.4	2.2	71.6	2.2
4/3/2023	12:35:00 AM	29	80.4	2	80	2
4/3/2023	12:40:00 AM	30.7	74.8	3	74.7	2.9
4/3/2023	12:45:00 AM	33.6	54.7	1.9	56.5	1.9
4/3/2023	12:50:00 AM	37.6	38.9	3	40.3	3
4/3/2023	12:55:00 AM	47.4	62.6	3.9	62.8	3.8
4/3/2023	1:00:00 AM	46.9	82.3	4	82.1	4
4/3/2023	1:05:00 AM	43.1	92.1	3.8	92.2	3.7
4/3/2023	1:10:00 AM	44.4	89.7	3.4	90.5	3.4
4/3/2023	1:15:00 AM	44.3	63	2.8	64	2.8
4/3/2023	1:20:00 AM	41.7	66.5	4.5	66.6	4.5
4/3/2023	1:25:00 AM	40.1	62.5	5.6	62.9	5.6
4/3/2023	1:30:00 AM	41.9	34	5.5	34.2	5.4
4/3/2023	1:35:00 AM	55.8	32.7	4.5	32.7	4.4
4/3/2023	1:40:00 AM	59.9	92.8	3	81.4	2
4/3/2023	1:45:00 AM	57.2	88.9	3.2	88	3.1
4/3/2023	1:50:00 AM	53.1	60.6	3.4	60.7	3.4
4/3/2023	1:55:00 AM	52.1	93.9	2.3	90.1	2.1
4/3/2023	2:00:00 AM	50.5	61.1	3.7	60.9	3.7
4/3/2023	2:05:00 AM	48.9	55.1	3.3	54.4	3.3
4/3/2023	2:10:00 AM	49.2	57	2.9	54.2	2.8
4/3/2023	2:15:00 AM	51.7	21.7	4.4	21.5	4.4
4/3/2023	2:20:00 AM	54.8	56.7	4	56.7	3.9
4/3/2023	2:25:00 AM	50.6	47.6	3.6	47.3	3.6
4/3/2023	2:30:00 AM	46.6	36	4.5	36	4.5
4/3/2023	2:35:00 AM	42.1	19.9	4.4	19.8	4.4
4/3/2023	2:40:00 AM	37.6	44.3	4	44.4	3.9
4/3/2023	2:45:00 AM	34.2	51.4	4.8	51.5	4.8
4/3/2023	2:50:00 AM	34	56.5	4.5	56.7	4.5
4/3/2023	2:55:00 AM	33.5	55.7	4.5	56.4	4.5
4/3/2023	3:00:00 AM	31.2	58.4	4.7	58.6	4.7
4/3/2023	3:05:00 AM	30.6	72.4	3.6	72.3	3.6
4/3/2023	3:10:00 AM	31.1	71	3.1	70.1	3.1
4/3/2023	3:15:00 AM	31.9	66.3	5.4	65.7	5.4
4/3/2023	3:20:00 AM	31.7	70.5	5.2	70.3	5.1
4/3/2023	3:25:00 AM	32.8	70.1	6.2	70	6.1
4/3/2023	3:30:00 AM	35.6	67	5.9	67	5.9
4/3/2023	3:35:00 AM	37.8	62.9	6.5	62.9	6.4
4/3/2023	3:40:00 AM	38.7	60.7	5.4	61.2	5.4
4/3/2023	3:45:00 AM	38.4	57.3	4.4	57.1	4.3
4/3/2023	3:50:00 AM	37.9	43.1	6.1	43.1	6
4/3/2023	3:55:00 AM	37.4	41.1	6.3	41.3	6.3
4/3/2023	4:00:00 AM	35.3	72.7	3.3	53.5	3
4/3/2023	4:05:00 AM	34.2	148.5	2.5	149.1	2.3
4/3/2023	4:10:00 AM	40.5	220.3	1.8	238.5	1.5
4/3/2023	4:15:00 AM	51.6	154.7	0	210	0.5
4/3/2023	4:20:00 AM	57.2	113.9	2	114.1	1.9

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	4:25:00 AM	62.3	95.9	1.8	93	1.7
4/3/2023	4:30:00 AM	63.5	116.3	2.9	116.4	2.8
4/3/2023	4:35:00 AM	62.8	123	2.6	116.6	2.3
4/3/2023	4:40:00 AM	62.6	132.8	1.4	131.5	1.2
4/3/2023	4:45:00 AM	62.9	98.2	2.1	96.8	2
4/3/2023	4:50:00 AM	65.2	117.7	2.2	115.3	2.1
4/3/2023	4:55:00 AM	67.2	91.1	3.8	90.6	3.8
4/3/2023	5:00:00 AM	66	91.6	3.9	91.5	3.8
4/3/2023	5:05:00 AM	64.5	89.7	2.6	89.5	2.5
4/3/2023	5:10:00 AM	65.3	103.7	2.6	101.7	2.5
4/3/2023	5:15:00 AM	69	73.6	1.7	72.5	1.6
4/3/2023	5:20:00 AM	69.7	66.4	2.2	68.3	2.2
4/3/2023	5:25:00 AM	75.5	75.4	3.4	76	3.3
4/3/2023	5:30:00 AM	86.4	53.3	3.9	53.2	3.9
4/3/2023	5:35:00 AM	91.8	75.3	3.8	75	3.8
4/3/2023	5:40:00 AM	94.4	67	6.3	66.8	6.3
4/3/2023	5:45:00 AM	98.2	100.2	2.9	81.5	2.5
4/3/2023	5:50:00 AM	101	77.6	3.8	75.9	3.7
4/3/2023	5:55:00 AM	105.9	115.9	2.4	113	2.2
4/3/2023	6:00:00 AM	113	121.4	2.6	120.1	2.5
4/3/2023	6:05:00 AM	118.9	142.7	2.1	139.1	1.9
4/3/2023	6:10:00 AM	123.1	130.8	2.8	127.9	2.7
4/3/2023	6:15:00 AM	119.7	101.5	3.9	100.8	3.9
4/3/2023	6:20:00 AM	109	99.2	3.1	98	3
4/3/2023	6:25:00 AM	101.5	104.3	3.2	104	3.1
4/3/2023	6:30:00 AM	97.3	107.5	2.6	105.2	2.5
4/3/2023	6:35:00 AM	97.1	63	2.3	64.3	2.2
4/3/2023	6:40:00 AM	103	88.5	2.5	90.7	2.3
4/3/2023	6:45:00 AM	112.6	131.3	2.1	129.9	2
4/3/2023	6:50:00 AM	120.7	123.8	2.2	123	2.2
4/3/2023	6:55:00 AM	127.8	165.8	2	163.5	1.8
4/3/2023	7:00:00 AM	127.4	159.3	1.6	158.1	1.5
4/3/2023	7:05:00 AM	122.9	183.5	1.4	167.3	1.1
4/3/2023	7:10:00 AM	123.6	147.4	1	140	0.9
4/3/2023	7:15:00 AM	119.7	140.1	1.1	145.3	0.9
4/3/2023	7:20:00 AM	113.7	106.9	2.6	109.5	2.5
4/3/2023	7:25:00 AM	111.5	111.6	2.9	112.8	2.8
4/3/2023	7:30:00 AM	109.8	111.2	2.8	107.2	2.6
4/3/2023	7:35:00 AM	108.8	105.9	2.8	94.9	2.5
4/3/2023	7:40:00 AM	109	111.4	3.1	110.7	3
4/3/2023	7:45:00 AM	113.7	121.2	4.8	120.9	4.7
4/3/2023	7:50:00 AM	116.4	123.8	6.5	123.2	6.4
4/3/2023	7:55:00 AM	116.9	120.8	6	121.6	5.9
4/3/2023	8:00:00 AM	112.2	105.9	3.4	106	3.2
4/3/2023	8:05:00 AM	105.8	107	3.3	104.4	3.1
4/3/2023	8:10:00 AM	99.8	125	3.5	128.4	3.3
4/3/2023	8:15:00 AM	92.3	126.8	4.2	124.7	4.1
4/3/2023	8:20:00 AM	91.4	126	3.3	125.1	3.3
4/3/2023	8:25:00 AM	97.4	116.6	2.4	116.3	2.3
4/3/2023	8:30:00 AM	98.8	109.6	2.8	109.3	2.7
4/3/2023	8:35:00 AM	94.2	108.8	2.9	108.7	2.8
4/3/2023	8:40:00 AM	85.9	111.9	2.1	108.6	2
4/3/2023	8:45:00 AM	80.6	127.2	2.7	129.4	2.5

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	8:50:00 AM	74.6	132.4	3	133.4	2.8
4/3/2023	8:55:00 AM	74.2	123.4	3.7	124.7	3.6
4/3/2023	9:00:00 AM	77.4	114.2	2.5	117.1	2.2
4/3/2023	9:05:00 AM	78.9	130.9	2.5	124.4	2.4
4/3/2023	9:10:00 AM	73.8	192.6	1.4	160.1	0.8
4/3/2023	9:15:00 AM	71.9	312.9	0	333.6	0.6
4/3/2023	9:20:00 AM	70	185.5	1.8	196	1.6
4/3/2023	9:25:00 AM	63.8	229.6	0.9	209	0.7
4/3/2023	9:30:00 AM	58	172.8	1.4	211.6	1
4/3/2023	9:35:00 AM	52.8	138.3	1.7	121.7	1.2
4/3/2023	9:40:00 AM	52.5	226.2	3.8	227	3.5
4/3/2023	9:45:00 AM	55.5	222.6	5.1	223.4	4.8
4/3/2023	9:50:00 AM	52.1	193.3	4.2	195.2	3.9
4/3/2023	9:55:00 AM	41.5	211.5	4.3	212.9	4
4/3/2023	10:00:00 AM	32.5	219.4	5.3	219.6	5.1
4/3/2023	10:05:00 AM	33.7	183.8	7	180.1	6.7
4/3/2023	10:10:00 AM	36.3	209.3	6.2	205.1	5.3
4/3/2023	10:15:00 AM	34.1	215.2	6.6	207.1	4.8
4/3/2023	10:20:00 AM	35.4	165.5	5.3	162.4	5.1
4/3/2023	10:25:00 AM	37.4	169.9	3.6	173.1	3.2
4/3/2023	10:30:00 AM	32.2	223.6	2.7	213.8	2
4/3/2023	10:35:00 AM	28.3	220.3	3.5	218.3	2
4/3/2023	10:40:00 AM	28.7	262.1	6.5	263	6.3
4/3/2023	10:45:00 AM	33.8	266.3	6.6	265.4	6.3
4/3/2023	10:50:00 AM	35.1	269.7	4.6	266.1	4.2
4/3/2023	10:55:00 AM	32.2	258.7	3.3	259	2.9
4/3/2023	11:00:00 AM	36.9	259.8	5.2	259.5	4.9
4/3/2023	11:05:00 AM	37.7	266.7	4.5	272.4	3.9
4/3/2023	11:10:00 AM	35.7	252.3	4.9	250	4.3
4/3/2023	11:15:00 AM	34.9	228.8	8.4	229.3	8.1
4/3/2023	11:20:00 AM	34.4	220.9	6.2	217.7	5.8
4/3/2023	11:25:00 AM	34.2	200.3	6.2	200	5.7
4/3/2023	11:30:00 AM	35.9	210.6	4	207.6	3.3
4/3/2023	11:35:00 AM	35.2	240.1	5.9	239.3	5.5
4/3/2023	11:40:00 AM	37.9	235	12.2	236.9	11.7
4/3/2023	11:45:00 AM	68	237.1	10.8	239.3	10.1
4/3/2023	11:50:00 AM	133.6	234.3	7.9	235.1	7.5
4/3/2023	11:55:00 AM	148.3	233.2	7.2	233.6	6.8
4/3/2023	12:00:00 PM	135.5	232.5	9.7	234.9	9.2
4/3/2023	12:05:00 PM	130.7	231.5	12.3	232.9	11.9
4/3/2023	12:10:00 PM	151.7	236.5	13.4	236.1	13.2
4/3/2023	12:15:00 PM	167.1	234.9	13.5	234.9	13.2
4/3/2023	12:20:00 PM	166.1	232.8	8.3	232.9	7.9
4/3/2023	12:25:00 PM	141.3	213.7	8.9	207.5	7.5
4/3/2023	12:30:00 PM	121.4	227.9	9.7	230.7	9.2
4/3/2023	12:35:00 PM	133.4	233.7	8.9	233.5	8.4
4/3/2023	12:40:00 PM	133.9	228.3	9.7	232	9.2
4/3/2023	12:45:00 PM	123.4	226.2	11.6	226.7	11.2
4/3/2023	12:50:00 PM	134.5	241.1	10	240.5	9.5
4/3/2023	12:55:00 PM	146.6	230.8	9.6	230.3	9.4
4/3/2023	1:00:00 PM	139.6	238.7	14.7	238.1	14.4
4/3/2023	1:05:00 PM	148.7	225	12.8	225.3	12.4
4/3/2023	1:10:00 PM	180.1	233.1	10.5	234.8	10.1

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	1:15:00 PM	176.9	225.1	12.2	227	11.6
4/3/2023	1:20:00 PM	173.7	242.4	14.9	242.5	14.5
4/3/2023	1:25:00 PM	203.7	232	14.2	232.6	13.7
4/3/2023	1:30:00 PM	217.7	239.5	15.9	239.1	15.6
4/3/2023	1:35:00 PM	239.4	235.9	16.8	235.8	16.6
4/3/2023	1:40:00 PM	279.4	238.4	16.2	238.1	15.9
4/3/2023	1:45:00 PM	295.6	241.7	11.6	242.3	11.3
4/3/2023	1:50:00 PM	287.3	226.9	11.5	227.8	11
4/3/2023	1:55:00 PM	263	227.1	15.8	228.5	15.2
4/3/2023	2:00:00 PM	286.1	234.1	14.6	234	14.3
4/3/2023	2:05:00 PM	286.4	221	10.8	221.1	10.4
4/3/2023	2:10:00 PM	249.5	237.5	14.8	237.2	14.5
4/3/2023	2:15:00 PM	229.2	233.4	14.3	233.7	14
4/3/2023	2:20:00 PM	231.5	229.8	15.4	230.4	15.1
4/3/2023	2:25:00 PM	282.9	238.2	16.2	238.2	15.9
4/3/2023	2:30:00 PM	339.7	228	17.2	227.6	16.3
4/3/2023	2:35:00 PM	372.9	224.2	16.5	225.2	15.7
4/3/2023	2:40:00 PM	400.3	215.6	13.9	215.2	13.4
4/3/2023	2:45:00 PM	371.7	227.4	17	228.2	16.6
4/3/2023	2:50:00 PM	347.4	236.9	19.1	236.8	18.6
4/3/2023	2:55:00 PM	385.9	227.4	16.6	226.9	16.1
4/3/2023	3:00:00 PM	398.8	231.7	16.6	232.1	16.1
4/3/2023	3:05:00 PM	392.9	230	16.5	229.2	15.2
4/3/2023	3:10:00 PM	408	238.6	17.9	238.5	17.5
4/3/2023	3:15:00 PM	450.6	228.2	16.3	229.2	15.9
4/3/2023	3:20:00 PM	471.8	231.6	16.3	232.8	15.7
4/3/2023	3:25:00 PM	479.5	230.9	18.7	231.4	18.3
4/3/2023	3:30:00 PM	570.4	222.3	18.5	222.3	17.8
4/3/2023	3:35:00 PM	655.2	228.5	19.9	228.6	19.3
4/3/2023	3:40:00 PM	658.6	219.6	18.2	219.8	17.6
4/3/2023	3:45:00 PM	643.6	224.7	18.1	224.4	17.7
4/3/2023	3:50:00 PM	634.9	227.8	19.2	228.2	18.8
4/3/2023	3:55:00 PM	585	228.2	13.4	228.9	13
4/3/2023	4:00:00 PM	494.1	237.5	16.4	237.3	16
4/3/2023	4:05:00 PM	404.2	234.6	16.2	234.4	15.8
4/3/2023	4:10:00 PM	350.2	236.4	19.2	236.5	18.8
4/3/2023	4:15:00 PM	328.4	233.5	18	233.4	17.7
4/3/2023	4:20:00 PM	308.9	240.1	14.2	239.8	13.9
4/3/2023	4:25:00 PM	290.4	242.8	18.8	242.8	18.5
4/3/2023	4:30:00 PM	290.3	248.3	15.4	247.9	15
4/3/2023	4:35:00 PM	268.7	240.2	18.6	239.9	18.3
4/3/2023	4:40:00 PM	251.4	234.6	17.6	234.3	17.2
4/3/2023	4:45:00 PM	240.6	246.8	16.9	246.4	16.4
4/3/2023	4:50:00 PM	259.5	243.8	15.7	243.6	15.4
4/3/2023	4:55:00 PM	293.3	244	18	243.7	17.7
4/3/2023	5:00:00 PM	307.8	246.3	16	246	15.7
4/3/2023	5:05:00 PM	332.5	245.3	18.2	244.2	17.6
4/3/2023	5:10:00 PM	379.3	251	17	250.5	16.6
4/3/2023	5:15:00 PM	412.2	247.2	19	246.2	18.6
4/3/2023	5:20:00 PM	425.8	245.5	19.9	244.9	19.5
4/3/2023	5:25:00 PM	441.5	247.7	19.8	247.3	19.4
4/3/2023	5:30:00 PM	465.4	248.3	16.9	247.9	16.6
4/3/2023	5:35:00 PM	468	245	19	244.8	18.7

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	5:40:00 PM	459	245.5	19	245.5	18.7
4/3/2023	5:45:00 PM	458.7	247.3	20	247.2	19.6
4/3/2023	5:50:00 PM	518	245	19.5	245.4	19.1
4/3/2023	5:55:00 PM	553	239.8	18	239.6	17.7
4/3/2023	6:00:00 PM	515.5	239.4	19.9	239.3	19.6
4/3/2023	6:05:00 PM	489.9	240.9	18.3	240.5	17.9
4/3/2023	6:10:00 PM	452.9	242	19.9	241.4	19.6
4/3/2023	6:15:00 PM	414.2	259	14.3	258.4	13.9
4/3/2023	6:20:00 PM	369.8	254.6	13.2	254.5	12.9
4/3/2023	6:25:00 PM	327.5	253.7	13.9	253.9	13.5
4/3/2023	6:30:00 PM	299	253.5	12.9	253.8	12.5
4/3/2023	6:35:00 PM	289.5	253.9	11.9	254.2	11.6
4/3/2023	6:40:00 PM	277	257	12.9	257.3	12.7
4/3/2023	6:45:00 PM	265.1	261.8	13.4	262.1	13.1
4/3/2023	6:50:00 PM	261.9	255.3	15.2	255	14.9
4/3/2023	6:55:00 PM	262.9	252.2	14.5	252.2	14.3
4/3/2023	7:00:00 PM	257.8	256.2	13.6	256.5	13.3
4/3/2023	7:05:00 PM	251	262.1	11.3	262	11
4/3/2023	7:10:00 PM	240.6	261.4	12.3	262.3	12
4/3/2023	7:15:00 PM	223.1	261.4	14.4	261.9	14.1
4/3/2023	7:20:00 PM	205.5	256.6	12.9	257.2	12.6
4/3/2023	7:25:00 PM	191.9	252.9	13.3	253.2	13
4/3/2023	7:30:00 PM	179.6	253.8	14.3	254.1	14
4/3/2023	7:35:00 PM	176.4	252.2	14.6	252.2	14.3
4/3/2023	7:40:00 PM	184.3	249.2	15.3	249.4	14.9
4/3/2023	7:45:00 PM	195.1	247.5	18.6	247.3	18.3
4/3/2023	7:50:00 PM	239.9	254.5	16.4	254.5	16.2
4/3/2023	7:55:00 PM	306.3	260.3	15.5	260.8	15
4/3/2023	8:00:00 PM	331.9	260.7	15.6	260.5	15.2
4/3/2023	8:05:00 PM	335.7	260.6	18	260.8	17.7
4/3/2023	8:10:00 PM	337.7	255.4	15.1	255.9	14.7
4/3/2023	8:15:00 PM	328.2	260	15.1	259.9	14.7
4/3/2023	8:20:00 PM	312.9	255.7	12.7	255.1	12.4
4/3/2023	8:25:00 PM	298	254	12.3	254.8	12
4/3/2023	8:30:00 PM	289.5	249	11.9	248.6	11.6
4/3/2023	8:35:00 PM	279.9	248.4	9.9	248.7	9.7
4/3/2023	8:40:00 PM	270.9	255	11.7	255.4	11.4
4/3/2023	8:45:00 PM	266.3	253.1	12.1	252.5	11.7
4/3/2023	8:50:00 PM	262.1	252.2	13.4	251.9	13.2
4/3/2023	8:55:00 PM	262.3	254.1	13.3	254.6	13
4/3/2023	9:00:00 PM	262.4	258.4	13.9	258.4	13.6
4/3/2023	9:05:00 PM	262.1	264.1	14.3	264.3	14
4/3/2023	9:10:00 PM	261.2	259.8	16.2	259.9	15.9
4/3/2023	9:15:00 PM	273.5	269.1	19.4	269.6	18.9
4/3/2023	9:20:00 PM	296.3	272.8	19.4	273.4	19
4/3/2023	9:25:00 PM	321.5	268.3	16	269.4	15.6
4/3/2023	9:30:00 PM	343.9	264	12.9	265	12.6
4/3/2023	9:35:00 PM	363.8	304.4	17.3	304.2	17
4/3/2023	9:40:00 PM	390.7	307.1	20	307.4	19.7
4/3/2023	9:45:00 PM	436.1	305.7	18.7	306	18.5
4/3/2023	9:50:00 PM	474.7	300.3	16.5	301.1	16.3
4/3/2023	9:55:00 PM	499.7	303.3	16.9	304.1	16.6
4/3/2023	10:00:00 PM	511.3	301.5	16.9	302.6	16.6

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	10:05:00 PM	514.1	303.8	14.4	304	14.2
4/3/2023	10:10:00 PM	508.8	303.8	13.3	303.3	13
4/3/2023	10:15:00 PM	500.1	306.5	15.2	306.8	15
4/3/2023	10:20:00 PM	491	307.1	14.7	307.7	14.5
4/3/2023	10:25:00 PM	485.4	305.1	15.6	305.5	15.4
4/3/2023	10:30:00 PM	480.7	308.3	13.1	309	13
4/3/2023	10:35:00 PM	476.5	294.7	9.7	295.6	9.4
4/3/2023	10:40:00 PM	467.3	291.5	9.5	291.1	9.3
4/3/2023	10:45:00 PM	457.1	290.6	10.4	291.2	10.2
4/3/2023	10:50:00 PM	450.8	288.5	11.3	288.6	11
4/3/2023	10:55:00 PM	441.9	289.2	12.2	288.9	12
4/3/2023	11:00:00 PM	433.8	296.5	8.6	298	8.4
4/3/2023	11:05:00 PM	425.5	294.4	6.4	294.6	6.2
4/3/2023	11:10:00 PM	414	280.8	7.8	280.6	7.6
4/3/2023	11:15:00 PM	406.1	267.8	7.7	268.9	7.5
4/3/2023	11:20:00 PM	394.3	243	6.8	242.1	6.7
4/3/2023	11:25:00 PM	383.3	248.3	6.8	247.9	6.7
4/3/2023	11:30:00 PM	374.3	252.3	8.9	252.2	8.7
4/3/2023	11:35:00 PM	362.2	257.2	10.2	257	10
4/3/2023	11:40:00 PM	348	257.6	8.5	257.5	8.3
4/3/2023	11:45:00 PM	327.7	262.8	12.7	263.4	12.4
4/3/2023	11:50:00 PM	306.2	260.1	10.3	260.1	10.1
4/3/2023	11:55:00 PM	289	260.7	11.2	260.6	10.9
	Average	199.8	219	9.1	246.4	5.9
	Max	658.6	312.9	20	333.6	19.7
	Max Hour	26639.44091	6565.408407	36.88399487	6674.844386	35.73414622
	Min	28.2	19.9	0	19.8	0.5
	Count	288	288	288	288	288
	Total	57571	53916.4	2627	53856.6	2548.7

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	12:00:00 AM	21.2	<	3.8	<	3.7
4/3/2023	12:05:00 AM	19	<	4.3	<	4.3
4/3/2023	12:10:00 AM	16.1	<	4.8	<	4.8
4/3/2023	12:15:00 AM	15.9	<	4.3	<	4.2
4/3/2023	12:20:00 AM	17.3	<	2.7	<	2.5
4/3/2023	12:25:00 AM	17.5	<	3.8	<	3.8
4/3/2023	12:30:00 AM	15.8	<	3.7	<	3.7
4/3/2023	12:35:00 AM	15.1	<	2.7	<	2.6
4/3/2023	12:40:00 AM	15.4	<	2.3	<	2.3
4/3/2023	12:45:00 AM	15	<	3	<	3
4/3/2023	12:50:00 AM	16.8	<	2.6	<	2.6
4/3/2023	12:55:00 AM	16.5	<	1.7	<	1.6
4/3/2023	1:00:00 AM	15.6	<	2.8	<	2.7
4/3/2023	1:05:00 AM	14	<	2	<	1.8
4/3/2023	1:10:00 AM	12.8	<	3.1	<	2.8
4/3/2023	1:15:00 AM	14.1	<	4	<	4
4/3/2023	1:20:00 AM	13.5	<	1.5	<	1.2
4/3/2023	1:25:00 AM	13.9	<	1.5	<	1.3
4/3/2023	1:30:00 AM	13.1	<	2.5	<	2.4
4/3/2023	1:35:00 AM	15.2	<	3.8	<	3.7
4/3/2023	1:40:00 AM	16.1	<	3.8	<	3.7
4/3/2023	1:45:00 AM	13.8	<	3	<	2.9
4/3/2023	1:50:00 AM	13.1	<	3.6	<	3.5
4/3/2023	1:55:00 AM	15.2	<	3	<	2.9
4/3/2023	2:00:00 AM	16.5	<	4.3	<	4.3
4/3/2023	2:05:00 AM	16.3	<	2.2	<	2.1
4/3/2023	2:10:00 AM	15.4	<	3.5	<	3.4
4/3/2023	2:15:00 AM	16.1	<	2.9	<	2.9
4/3/2023	2:20:00 AM	15.5	<	2.3	<	2.1
4/3/2023	2:25:00 AM	15.5	<	3.5	<	3.4
4/3/2023	2:30:00 AM	14.1	<	2.7	<	2.7
4/3/2023	2:35:00 AM	14.7	<	3.7	<	3.6
4/3/2023	2:40:00 AM	16.7	<	5.4	<	5.3
4/3/2023	2:45:00 AM	16	<	4.5	<	4.4
4/3/2023	2:50:00 AM	17.8	<	4.5	<	4.4
4/3/2023	2:55:00 AM	20.4	<	2.8	<	2.3
4/3/2023	3:00:00 AM	17.3	<	3.9	<	3.9
4/3/2023	3:05:00 AM	16.8	<	2.6	<	2.3
4/3/2023	3:10:00 AM	17.8	<	4.1	<	4.1
4/3/2023	3:15:00 AM	16.1	<	4.3	<	4.2
4/3/2023	3:20:00 AM	14.4	<	4	<	3.9
4/3/2023	3:25:00 AM	11.1	<	2.5	<	2.4
4/3/2023	3:30:00 AM	12.1	<	3.2	<	3.1
4/3/2023	3:35:00 AM	13.3	<	3	<	2.9
4/3/2023	3:40:00 AM	12.2	<	2.8	<	2.8
4/3/2023	3:45:00 AM	16	<	3.2	<	3.1
4/3/2023	3:50:00 AM	18.5	<	4	<	3.9
4/3/2023	3:55:00 AM	16	<	3.6	<	3.6
4/3/2023	4:00:00 AM	16	<	3.6	<	3.5
4/3/2023	4:05:00 AM	14.9	<	2.8	<	2.8
4/3/2023	4:10:00 AM	15	<	3	<	2.9
4/3/2023	4:15:00 AM	13.7	<	1.7	<	1.7
4/3/2023	4:20:00 AM	13.6	<	2.8	<	2.8

Site: Zuni Hills						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	4:25:00 AM	16.1	<	2.3	<	2.2
4/3/2023	4:30:00 AM	15.8	<	1.3	<	1.2
4/3/2023	4:35:00 AM	12.4	<	1.8	<	1.8
4/3/2023	4:40:00 AM	14	<	3.9	<	3.9
4/3/2023	4:45:00 AM	14.7	<	3.5	<	3.4
4/3/2023	4:50:00 AM	12.6	<	2.3	<	2
4/3/2023	4:55:00 AM	16.1	<	2.9	<	2.9
4/3/2023	5:00:00 AM	15.6	<	2.2	<	2.1
4/3/2023	5:05:00 AM	20.7	<	1.8	<	1.7
4/3/2023	5:10:00 AM	20.7	<	2.7	<	2.6
4/3/2023	5:15:00 AM	19.3	<	2.8	<	2.8
4/3/2023	5:20:00 AM	19.7	<	2.7	<	2.7
4/3/2023	5:25:00 AM	15.7	<	1.7	<	1.6
4/3/2023	5:30:00 AM	20.5	<	2.2	<	2.2
4/3/2023	5:35:00 AM	22.5	<	2.7	<	2.7
4/3/2023	5:40:00 AM	24.4	<	2.7	<	2.7
4/3/2023	5:45:00 AM	28.7	<	2.7	<	2.6
4/3/2023	5:50:00 AM	31.2	<	3.9	<	3.9
4/3/2023	5:55:00 AM	32.7	<	4.1	<	4
4/3/2023	6:00:00 AM	34.8	<	3.9	<	3.9
4/3/2023	6:05:00 AM	35.5	<	3.3	<	3.2
4/3/2023	6:10:00 AM	33.4	<	3.2	<	3.1
4/3/2023	6:15:00 AM	34.1	<	2.6	<	2.5
4/3/2023	6:20:00 AM	33.2	<	2.8	<	2.7
4/3/2023	6:25:00 AM	36.1	<	2.2	<	2.1
4/3/2023	6:30:00 AM	38.6	<	2.8	<	2.8
4/3/2023	6:35:00 AM	41.8	<	3.7	<	3.7
4/3/2023	6:40:00 AM	40.9	<	3.7	<	3.7
4/3/2023	6:45:00 AM	30.5	<	3.7	<	3.7
4/3/2023	6:50:00 AM	26.1	<	3.8	<	3.7
4/3/2023	6:55:00 AM	29.9	<	4.4	<	4.2
4/3/2023	7:00:00 AM	49.2	<	3.5	<	2.4
4/3/2023	7:05:00 AM	57.1	<	3.5	<	3.4
4/3/2023	7:10:00 AM	61.1	<	3.8	<	3.7
4/3/2023	7:15:00 AM	66.4	<	3.8	<	3.7
4/3/2023	7:20:00 AM	58.1	<	2.3	<	2
4/3/2023	7:25:00 AM	49.6	<	2.7	<	2.6
4/3/2023	7:30:00 AM	45.2	<	1.5	<	1.5
4/3/2023	7:35:00 AM	39.5	<	1.8	<	0.8
4/3/2023	7:40:00 AM	35.6	<	0.7	<	0.2
4/3/2023	7:45:00 AM	33	<	0.7	<	0.6
4/3/2023	7:50:00 AM	31.7	<	2.2	<	2.1
4/3/2023	7:55:00 AM	32.8	<	2.7	<	2.6
4/3/2023	8:00:00 AM	31.6	<	0.5	<	0.3
4/3/2023	8:05:00 AM	29.3	<	2.5	<	2.4
4/3/2023	8:10:00 AM	31.8	<	0.8	<	0.7
4/3/2023	8:15:00 AM	26.8	<	1.4	<	1.2
4/3/2023	8:20:00 AM	23.9	<	1.4	<	1.1
4/3/2023	8:25:00 AM	22.2	<	3.7	<	3.4
4/3/2023	8:30:00 AM	20.4	<	6.1	<	6
4/3/2023	8:35:00 AM	17.1	<	6.3	<	6.1
4/3/2023	8:40:00 AM	17.3	<	6.6	<	6.4
4/3/2023	8:45:00 AM	18.2	<	7	<	6.7

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	8:50:00 AM	22	<	8.5	<	8.4
4/3/2023	8:55:00 AM	23.3	<	8.3	<	8.1
4/3/2023	9:00:00 AM	25.3	<	8.1	<	7.7
4/3/2023	9:05:00 AM	29.4	<	8.2	<	8
4/3/2023	9:10:00 AM	33.2	<	8.4	<	8.2
4/3/2023	9:15:00 AM	38.5	<	7	<	6.8
4/3/2023	9:20:00 AM	34.8	<	8.5	<	8.3
4/3/2023	9:25:00 AM	33.7	<	8.4	<	8.3
4/3/2023	9:30:00 AM	45.2	<	7.7	<	7.3
4/3/2023	9:35:00 AM	39.8	<	6.3	<	6.2
4/3/2023	9:40:00 AM	34.3	<	6.1	<	5.8
4/3/2023	9:45:00 AM	30.8	<	8.1	<	7.7
4/3/2023	9:50:00 AM	26.9	<	11.9	<	11.7
4/3/2023	9:55:00 AM	22.8	<	12	<	11.7
4/3/2023	10:00:00 AM	25.9	<	13.8	<	13.6
4/3/2023	10:05:00 AM	28.8	<	13.7	<	13.6
4/3/2023	10:10:00 AM	27.8	<	14.4	<	14.1
4/3/2023	10:15:00 AM	27.9	<	<	<	<
4/3/2023	10:20:00 AM	30.3	<	<	<	<
4/3/2023	10:25:00 AM	30.7	<	<	<	<
4/3/2023	10:30:00 AM	29.2	<	<	<	<
4/3/2023	10:35:00 AM	33.1	<	<	<	<
4/3/2023	10:40:00 AM	31.9	<	<	<	<
4/3/2023	10:45:00 AM	31.9	<	<	<	<
4/3/2023	10:50:00 AM	41.9	<	<	<	<
4/3/2023	10:55:00 AM	42.8	<	<	<	<
4/3/2023	11:00:00 AM	38.4	<	<	<	<
4/3/2023	11:05:00 AM	33.8	<	<	<	<
4/3/2023	11:10:00 AM	31.4	<	<	<	<
4/3/2023	11:15:00 AM	31.3	<	<	<	<
4/3/2023	11:20:00 AM	28.4	<	<	<	<
4/3/2023	11:25:00 AM	28.3	<	13.9	<	13.3
4/3/2023	11:30:00 AM	25.7	<	15	<	14.7
4/3/2023	11:35:00 AM	27.1	<	14.7	<	14.3
4/3/2023	11:40:00 AM	36.5	<	16.9	<	16.6
4/3/2023	11:45:00 AM	35.6	<	15.9	<	15.6
4/3/2023	11:50:00 AM	35.5	<	16.9	<	16.6
4/3/2023	11:55:00 AM	42.2	<	16.4	<	16.1
4/3/2023	12:00:00 PM	43.3	<	15.2	<	14.6
4/3/2023	12:05:00 PM	47.8	<	13.1	<	12.8
4/3/2023	12:10:00 PM	44.6	<	12.9	<	11.8
4/3/2023	12:15:00 PM	39.5	<	17.2	<	16.9
4/3/2023	12:20:00 PM	44.3	<	15.9	<	15.7
4/3/2023	12:25:00 PM	42.7	<	14.1	<	13.8
4/3/2023	12:30:00 PM	118.4	<	17.7	<	17.1
4/3/2023	12:35:00 PM	313.5	<	20.1	<	19.8
4/3/2023	12:40:00 PM	204.2	<	18.4	<	18.1
4/3/2023	12:45:00 PM	120.7	<	19.5	<	19.3
4/3/2023	12:50:00 PM	94.7	<	18.8	<	18.6
4/3/2023	12:55:00 PM	74.7	<	17.8	<	17.5
4/3/2023	1:00:00 PM	60.2	<	17.9	<	17.4
4/3/2023	1:05:00 PM	67.2	<	17.6	<	17.4
4/3/2023	1:10:00 PM	61.5	<	15.9	<	15.4

Site: Zuni Hills						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	1:15:00 PM	55.8	<	18.3	<	18.1
4/3/2023	1:20:00 PM	55.9	<	18.7	<	18.6
4/3/2023	1:25:00 PM	47.9	<	17.1	<	16.7
4/3/2023	1:30:00 PM	39.1	<	19.3	<	18.8
4/3/2023	1:35:00 PM	58	<	21.9	<	21.7
4/3/2023	1:40:00 PM	68.8	<	18.9	<	18.6
4/3/2023	1:45:00 PM	58.8	<	19.6	<	19.3
4/3/2023	1:50:00 PM	57.6	<	19.9	<	19.5
4/3/2023	1:55:00 PM	59.3	<	18.8	<	18.6
4/3/2023	2:00:00 PM	58.7	<	18.9	<	18.6
4/3/2023	2:05:00 PM	53.4	<	16.1	<	15.8
4/3/2023	2:10:00 PM	47.3	<	17.3	<	17
4/3/2023	2:15:00 PM	43.2	<	17.8	<	17.5
4/3/2023	2:20:00 PM	48	<	22.5	<	22
4/3/2023	2:25:00 PM	60.3	<	18.5	<	18.2
4/3/2023	2:30:00 PM	45.4	<	19.4	<	19.1
4/3/2023	2:35:00 PM	47.8	<	21.4	<	21
4/3/2023	2:40:00 PM	47.2	<	21.9	<	21.4
4/3/2023	2:45:00 PM	57.8	<	22.3	<	22
4/3/2023	2:50:00 PM	66.3	<	19.3	<	18.9
4/3/2023	2:55:00 PM	83	<	22.8	<	22.5
4/3/2023	3:00:00 PM	105.1	<	23.3	<	22.9
4/3/2023	3:05:00 PM	115.4	<	21.7	<	21.4
4/3/2023	3:10:00 PM	124.6	<	18.8	<	18.3
4/3/2023	3:15:00 PM	116.8	<	19.8	<	19.3
4/3/2023	3:20:00 PM	90	<	20.8	<	20.5
4/3/2023	3:25:00 PM	82.4	<	22.1	<	21.6
4/3/2023	3:30:00 PM	92.5	<	20.5	<	20.2
4/3/2023	3:35:00 PM	88.6	<	19.2	<	18.9
4/3/2023	3:40:00 PM	74	<	21.1	<	20.8
4/3/2023	3:45:00 PM	69.9	<	23.4	<	22.9
4/3/2023	3:50:00 PM	90.4	<	22.7	<	22.4
4/3/2023	3:55:00 PM	112.9	<	20.8	<	20.5
4/3/2023	4:00:00 PM	122.3	<	22.8	<	22.6
4/3/2023	4:05:00 PM	123.1	<	18.4	<	18.1
4/3/2023	4:10:00 PM	104.4	<	24.3	<	24
4/3/2023	4:15:00 PM	115.2	<	18	<	17.7
4/3/2023	4:20:00 PM	127.8	<	23.2	<	22.9
4/3/2023	4:25:00 PM	150.6	<	22.3	<	21.7
4/3/2023	4:30:00 PM	152.7	<	18.8	<	18.5
4/3/2023	4:35:00 PM	133.1	<	16.4	<	16.1
4/3/2023	4:40:00 PM	149.6	<	22.4	<	22
4/3/2023	4:45:00 PM	164.9	<	20.4	<	20.1
4/3/2023	4:50:00 PM	165.7	<	20.1	<	19.8
4/3/2023	4:55:00 PM	156.1	<	20.2	<	19.9
4/3/2023	5:00:00 PM	161.5	<	24.4	<	24
4/3/2023	5:05:00 PM	196.6	<	20.9	<	20.5
4/3/2023	5:10:00 PM	206.8	<	20.6	<	20.4
4/3/2023	5:15:00 PM	222.5	<	20.1	<	19.8
4/3/2023	5:20:00 PM	224.1	<	21.4	<	21
4/3/2023	5:25:00 PM	230.9	<	21.4	<	21.1
4/3/2023	5:30:00 PM	214	<	21	<	20.8
4/3/2023	5:35:00 PM	197.2	<	22.6	<	22.4

Site: Zuni Hills						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	5:40:00 PM	213.6	<	23.7	<	23.5
4/3/2023	5:45:00 PM	218.4	<	21.6	<	21.1
4/3/2023	5:50:00 PM	222.6	<	20.8	<	20.5
4/3/2023	5:55:00 PM	213.3	<	19	<	18.8
4/3/2023	6:00:00 PM	187.9	<	22.3	<	22.1
4/3/2023	6:05:00 PM	180.8	<	20.8	<	20.6
4/3/2023	6:10:00 PM	173.6	<	20.1	<	19.9
4/3/2023	6:15:00 PM	162.2	<	21.9	<	21.5
4/3/2023	6:20:00 PM	142.6	<	21.3	<	21
4/3/2023	6:25:00 PM	132.3	<	17.5	<	17.2
4/3/2023	6:30:00 PM	123	<	19.3	<	19.1
4/3/2023	6:35:00 PM	126.4	<	26	<	25.6
4/3/2023	6:40:00 PM	148.4	<	21.3	<	21
4/3/2023	6:45:00 PM	130.2	<	18.5	<	18.2
4/3/2023	6:50:00 PM	106.7	<	17.6	<	17.4
4/3/2023	6:55:00 PM	98.6	<	18.7	<	18.5
4/3/2023	7:00:00 PM	98.1	<	16.6	<	16.4
4/3/2023	7:05:00 PM	107.6	<	15.9	<	15.7
4/3/2023	7:10:00 PM	106.5	<	19.7	<	19.5
4/3/2023	7:15:00 PM	103.6	<	17.2	<	16.9
4/3/2023	7:20:00 PM	106	<	15.2	<	15
4/3/2023	7:25:00 PM	107.1	<	13	<	12.8
4/3/2023	7:30:00 PM	105.2	<	16.1	<	15.8
4/3/2023	7:35:00 PM	104.8	<	14.4	<	14.2
4/3/2023	7:40:00 PM	112	<	15.2	<	15
4/3/2023	7:45:00 PM	128.4	<	16.3	<	16.1
4/3/2023	7:50:00 PM	150.8	<	15	<	14.7
4/3/2023	7:55:00 PM	165.2	<	15.2	<	15
4/3/2023	8:00:00 PM	179	<	16.8	<	16.5
4/3/2023	8:05:00 PM	194.9	<	16.3	<	16
4/3/2023	8:10:00 PM	209.3	<	14.8	<	14.6
4/3/2023	8:15:00 PM	209.2	<	14.6	<	14.3
4/3/2023	8:20:00 PM	198.6	<	15.3	<	15.1
4/3/2023	8:25:00 PM	197.4	<	12.8	<	12.6
4/3/2023	8:30:00 PM	190.2	<	12.6	<	12.5
4/3/2023	8:35:00 PM	185.7	<	13.7	<	13.5
4/3/2023	8:40:00 PM	191.3	<	15.1	<	14.1
4/3/2023	8:45:00 PM	251.6	<	23	<	22.8
4/3/2023	8:50:00 PM	383.5	<	22.7	<	22.4
4/3/2023	8:55:00 PM	448.4	<	26.6	<	26.4
4/3/2023	9:00:00 PM	472.6	<	25.1	<	24.9
4/3/2023	9:05:00 PM	476	<	24.6	<	24.3
4/3/2023	9:10:00 PM	453.1	<	19.9	<	19.6
4/3/2023	9:15:00 PM	436.7	<	15.5	<	15.3
4/3/2023	9:20:00 PM	411	<	12.8	<	12.6
4/3/2023	9:25:00 PM	400	<	19.5	<	19.2
4/3/2023	9:30:00 PM	410.6	<	21.3	<	21.1
4/3/2023	9:35:00 PM	417.9	<	19.3	<	19
4/3/2023	9:40:00 PM	411.8	<	19.9	<	19.7
4/3/2023	9:45:00 PM	425.7	<	25.7	<	25.4
4/3/2023	9:50:00 PM	453	<	22.3	<	22.1
4/3/2023	9:55:00 PM	429.2	<	23.5	<	23.3
4/3/2023	10:00:00 PM	402.1	<	21.6	<	21.3

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	10:05:00 PM	378.9	<	21.7	<	21.5
4/3/2023	10:10:00 PM	373.2	<	23.5	<	23.3
4/3/2023	10:15:00 PM	362.1	<	20.7	<	20.5
4/3/2023	10:20:00 PM	341.4	<	18	<	17.8
4/3/2023	10:25:00 PM	330.8	<	16.3	<	16.1
4/3/2023	10:30:00 PM	319.2	<	19.8	<	19.6
4/3/2023	10:35:00 PM	315.7	<	17.1	<	16.9
4/3/2023	10:40:00 PM	306.8	<	16.7	<	16.6
4/3/2023	10:45:00 PM	287.6	<	16.2	<	16
4/3/2023	10:50:00 PM	281	<	15.6	<	15.4
4/3/2023	10:55:00 PM	275.5	<	15.1	<	14.9
4/3/2023	11:00:00 PM	263.1	<	17.6	<	17.5
4/3/2023	11:05:00 PM	254.8	<	15.3	<	15
4/3/2023	11:10:00 PM	250.4	<	14.5	<	14.3
4/3/2023	11:15:00 PM	251.1	<	15.4	<	15.3
4/3/2023	11:20:00 PM	260.1	<	12.9	<	12.7
4/3/2023	11:25:00 PM	265.8	<	12.9	<	12.7
4/3/2023	11:30:00 PM	262.1	<	13.4	<	13.2
4/3/2023	11:35:00 PM	262	<	15.4	<	15.2
4/3/2023	11:40:00 PM	268	<	16.9	<	16.8
4/3/2023	11:45:00 PM	277.4	<	15.6	<	15.4
4/3/2023	11:50:00 PM	283.9	<	15.7	<	15.6
4/3/2023	11:55:00 PM	285.2	<	13	<	12.8
	Average	103.5		12.1		11.9
	Max	476	0	26.6	0	26.4
	Max Hour					
	Min	11.1	0	0.5	0	0.2
	Count	288	0	274	0	274
	Total					

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	12:00:00 AM	51.2	255.5	3.1	255.7	3.1
7/21/2023	12:05:00 AM	52.3	258.6	2.2	258.1	2.2
7/21/2023	12:10:00 AM	52.1	287	1.1	285.8	1.1
7/21/2023	12:15:00 AM	51.1	287.6	1.1	287.5	1.1
7/21/2023	12:20:00 AM	50.4	255.8	1.3	256.3	1.2
7/21/2023	12:25:00 AM	45	259.5	1.6	260	1.6
7/21/2023	12:30:00 AM	40.4	252.6	1.5	250.6	1.5
7/21/2023	12:35:00 AM	42.1	301.5	0	305.1	0.6
7/21/2023	12:40:00 AM	41.1	325.8	1.8	326.6	1.8
7/21/2023	12:45:00 AM	40	7.9	2	8.3	1.9
7/21/2023	12:50:00 AM	40.4	11.2	1.7	12.5	1.6
7/21/2023	12:55:00 AM	44.1	334	1.7	334.3	1.7
7/21/2023	1:00:00 AM	47.6	343.3	2.4	343.3	2.4
7/21/2023	1:05:00 AM	48	331.7	2.6	331.3	2.6
7/21/2023	1:10:00 AM	49.2	331	2.9	330.9	2.9
7/21/2023	1:15:00 AM	52	316.5	3	316.7	3
7/21/2023	1:20:00 AM	55	301.3	3.1	301.2	3.1
7/21/2023	1:25:00 AM	56.4	295.1	2.8	295.2	2.8
7/21/2023	1:30:00 AM	57.4	291.5	3	291.4	3
7/21/2023	1:35:00 AM	57.7	281.9	3.5	282.1	3.5
7/21/2023	1:40:00 AM	56.8	282.2	4.3	282.3	4.2
7/21/2023	1:45:00 AM	54.4	278.8	3.7	279	3.7
7/21/2023	1:50:00 AM	50.8	265.1	2.7	266.4	2.7
7/21/2023	1:55:00 AM	45.2	233.1	2.1	233.3	2
7/21/2023	2:00:00 AM	49.9	218.9	1.8	219.1	1.8
7/21/2023	2:05:00 AM	70.6	227.9	2.9	228.8	2.9
7/21/2023	2:10:00 AM	74.3	238.6	3.4	238.7	3.4
7/21/2023	2:15:00 AM	62.1	234.3	3.7	234.3	3.7
7/21/2023	2:20:00 AM	53.2	240	3.1	240.3	3.1
7/21/2023	2:25:00 AM	49.2	240	2.6	240.3	2.5
7/21/2023	2:30:00 AM	56.4	248.5	2.1	248.8	2.1
7/21/2023	2:35:00 AM	70.9	232.4	1.9	233	1.8
7/21/2023	2:40:00 AM	86.3	198	2.1	199.6	2
7/21/2023	2:45:00 AM	85.6	195.2	1.3	194.3	1.3
7/21/2023	2:50:00 AM	79.3	176.6	1	178.2	0.9
7/21/2023	2:55:00 AM	71.7	170	1	171.7	0.9
7/21/2023	3:00:00 AM	64.1	227.6	1.3	228.9	1.3
7/21/2023	3:05:00 AM	56.5	244	2.3	243.5	2.2
7/21/2023	3:10:00 AM	60	249.8	3.3	249.9	3.2
7/21/2023	3:15:00 AM	76.4	260.3	3.7	260.5	3.7
7/21/2023	3:20:00 AM	82.8	262.4	4.2	262.5	4.2
7/21/2023	3:25:00 AM	74.2	260.8	4.3	260.8	4.3
7/21/2023	3:30:00 AM	61.9	262.4	4.4	262.6	4.4
7/21/2023	3:35:00 AM	54.1	256.6	3.7	256.7	3.6
7/21/2023	3:40:00 AM	54.9	242	2.5	242.7	2.5
7/21/2023	3:45:00 AM	57.4	201.3	0	204.3	0.7
7/21/2023	3:50:00 AM	68.9	151.5	0	157.7	0.4
7/21/2023	3:55:00 AM	100.1	202.4	0	192.9	0.4
7/21/2023	4:00:00 AM	106.3	44.1	1.7	43	1.6
7/21/2023	4:05:00 AM	104.1	37.9	2.7	37.6	2.7
7/21/2023	4:10:00 AM	105	50.6	3.1	50.7	3
7/21/2023	4:15:00 AM	107.4	27.2	1.8	33.5	1.7
7/21/2023	4:20:00 AM	102.2	286	2.9	277.4	2.7

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	4:25:00 AM	98.7	240	6.3	240.1	6.1
7/21/2023	4:30:00 AM	120.5	241.6	13.3	241.5	13.1
7/21/2023	4:35:00 AM	192.6	241.1	11.4	241.3	11.3
7/21/2023	4:40:00 AM	285.3	243.2	9.2	243	9.1
7/21/2023	4:45:00 AM	330.3	243.6	9.2	243.5	9
7/21/2023	4:50:00 AM	343.1	252.5	12.7	252.7	12.5
7/21/2023	4:55:00 AM	359	256.1	14.2	256.3	14
7/21/2023	5:00:00 AM	388	253.2	16.7	253.1	16.5
7/21/2023	5:05:00 AM	439.9	257.4	13.3	257.4	13
7/21/2023	5:10:00 AM	456.6	262.8	12.9	263.2	12.8
7/21/2023	5:15:00 AM	445.8	269.6	14.1	269.8	13.9
7/21/2023	5:20:00 AM	424.9	272.8	13.5	272.8	13.4
7/21/2023	5:25:00 AM	398.4	271.7	14.1	272	13.9
7/21/2023	5:30:00 AM	383.8	269.2	14.9	269.5	14.8
7/21/2023	5:35:00 AM	376.8	267.2	14.5	267.5	14.3
7/21/2023	5:40:00 AM	378.4	268.7	14.4	268.8	14.2
7/21/2023	5:45:00 AM	377.4	268.8	14.3	269.2	14.2
7/21/2023	5:50:00 AM	374.2	269.1	14.9	269.5	14.8
7/21/2023	5:55:00 AM	372.6	268.8	15.7	269	15.6
7/21/2023	6:00:00 AM	373	263.6	15.7	263.9	15.5
7/21/2023	6:05:00 AM	394.8	265.9	16	266.1	15.9
7/21/2023	6:10:00 AM	425.4	263.3	17	263.5	16.8
7/21/2023	6:15:00 AM	476.6	268.2	17.8	268.3	17.6
7/21/2023	6:20:00 AM	509.8	267.1	16	267.6	15.8
7/21/2023	6:25:00 AM	495.2	270.1	14.5	270.3	14.3
7/21/2023	6:30:00 AM	463	270.6	14.4	271	14.3
7/21/2023	6:35:00 AM	425.7	264.2	12.3	264.1	12
7/21/2023	6:40:00 AM	393.9	274.9	12.9	275	12.8
7/21/2023	6:45:00 AM	370.7	267	11.7	267.3	11.5
7/21/2023	6:50:00 AM	353	270.9	13	271	12.9
7/21/2023	6:55:00 AM	336.3	268.2	13.3	268.3	13.1
7/21/2023	7:00:00 AM	320.1	270.7	13	270.8	12.9
7/21/2023	7:05:00 AM	311.2	271.5	13.4	271.8	13.3
7/21/2023	7:10:00 AM	300.8	272.9	14.3	273.3	14.2
7/21/2023	7:15:00 AM	291.7	274.5	14.4	274.7	14.3
7/21/2023	7:20:00 AM	284.7	277.3	12.8	277.5	12.6
7/21/2023	7:25:00 AM	273.5	273.3	14	273.8	13.8
7/21/2023	7:30:00 AM	261.9	273.7	14	273.7	13.8
7/21/2023	7:35:00 AM	252.2	274	15.1	274.4	14.9
7/21/2023	7:40:00 AM	240.2	273.2	13.7	273.7	13.6
7/21/2023	7:45:00 AM	224.5	272.5	13	272.2	12.8
7/21/2023	7:50:00 AM	212.2	279.1	13.2	279	13
7/21/2023	7:55:00 AM	203.8	274.4	13.2	274.3	13.1
7/21/2023	8:00:00 AM	198.8	279.8	12.5	279.6	12.4
7/21/2023	8:05:00 AM	190.1	279.2	12.3	279.6	12.1
7/21/2023	8:10:00 AM	181.7	286.9	11.2	286.2	11.1
7/21/2023	8:15:00 AM	176.5	288.7	14.5	288.8	14.3
7/21/2023	8:20:00 AM	170.2	289.6	12.6	289.5	12.5
7/21/2023	8:25:00 AM	169.7	294.2	14.1	294.4	14
7/21/2023	8:30:00 AM	169.1	292	11.8	291.1	11.6
7/21/2023	8:35:00 AM	167	288.2	13	288.3	12.8
7/21/2023	8:40:00 AM	161.6	288.7	12.9	288.8	12.7
7/21/2023	8:45:00 AM	156.1	279	11.3	279.5	11.1

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	8:50:00 AM	146.1	276	12.5	276	12.4
7/21/2023	8:55:00 AM	135.5	277.8	12.5	277.8	12.4
7/21/2023	9:00:00 AM	130.9	272	12.5	272.5	12.4
7/21/2023	9:05:00 AM	128	273.3	10.9	273.7	10.8
7/21/2023	9:10:00 AM	125.7	265.6	8.9	266.7	8.6
7/21/2023	9:15:00 AM	120.9	258.8	8.4	258.6	8.2
7/21/2023	9:20:00 AM	118.5	257.3	8.2	257.1	8
7/21/2023	9:25:00 AM	121.6	260.1	6.2	258.9	5.9
7/21/2023	9:30:00 AM	122.4	272.8	8.4	273.6	8.2
7/21/2023	9:35:00 AM	123.9	240.2	7.2	240.4	7.1
7/21/2023	9:40:00 AM	120.1	242.8	8.6	242.9	8.3
7/21/2023	9:45:00 AM	132.3	255.1	8.4	257	7.8
7/21/2023	9:50:00 AM	144.4	270.6	8.2	271.2	8
7/21/2023	9:55:00 AM	141.7	239.4	6.1	239.8	5.7
7/21/2023	10:00:00 AM	132.7	224.2	5.7	233.4	5.3
7/21/2023	10:05:00 AM	141.1	258.4	8.7	258.4	8.5
7/21/2023	10:10:00 AM	148.2	253	5.5	250	5
7/21/2023	10:15:00 AM	146.4	264.6	5.5	264.8	5.3
7/21/2023	10:20:00 AM	142.4	266	5.2	267.5	4.9
7/21/2023	10:25:00 AM	136.5	272.2	5.8	273.3	5.5
7/21/2023	10:30:00 AM	132.4	293.6	5	292.4	4.9
7/21/2023	10:35:00 AM	128.6	274.2	5.4	274.3	5
7/21/2023	10:40:00 AM	125.9	236.4	5.1	233.1	4.7
7/21/2023	10:45:00 AM	126.2	242.3	3.5	254	2.7
7/21/2023	10:50:00 AM	128.1	275.9	6.6	276.6	6.5
7/21/2023	10:55:00 AM	131.5	279	8.6	278.8	8.3
7/21/2023	11:00:00 AM	132.5	263.2	7.2	263.6	7
7/21/2023	11:05:00 AM	130.3	233.7	3.7	243.2	3.2
7/21/2023	11:10:00 AM	127.2	207	2.1	214.6	1.5
7/21/2023	11:15:00 AM	125.4	244.7	3.4	249.2	3
7/21/2023	11:20:00 AM	129.8	213.5	3.9	225.1	2.2
7/21/2023	11:25:00 AM	129.2	273.4	3.3	275.1	0.9
7/21/2023	11:30:00 AM	121.8	203.5	4.2	191	3.3
7/21/2023	11:35:00 AM	126.4	257.4	6.9	254.3	6.3
7/21/2023	11:40:00 AM	131.4	224.7	4.9	220.4	3.9
7/21/2023	11:45:00 AM	133.5	208.1	5.3	203.9	4.4
7/21/2023	11:50:00 AM	133.7	283.7	6.6	283.9	6.4
7/21/2023	11:55:00 AM	129	309.1	4.1	309.2	4
7/21/2023	12:00:00 PM	125.3	339.4	2.4	321	1.8
7/21/2023	12:05:00 PM	120.4	175.5	5.3	175.5	5
7/21/2023	12:10:00 PM	118.5	166.5	4.7	170.7	4.2
7/21/2023	12:15:00 PM	120.8	241.9	2.8	239.2	2.4
7/21/2023	12:20:00 PM	121.2	254.4	5.2	252.6	3.5
7/21/2023	12:25:00 PM	122.6	191.7	5.7	190.9	5.4
7/21/2023	12:30:00 PM	123.4	169.6	4.9	171.6	4.7
7/21/2023	12:35:00 PM	122.1	92	3.7	91.8	3.5
7/21/2023	12:40:00 PM	124.9	176.9	3.7	188.7	3.2
7/21/2023	12:45:00 PM	130.8	241.6	7.3	239.2	7
7/21/2023	12:50:00 PM	131	200.9	2.7	223.5	1.1
7/21/2023	12:55:00 PM	133	264.6	3.5	256.2	2.6
7/21/2023	1:00:00 PM	130.2	257.9	9	258.6	8.8
7/21/2023	1:05:00 PM	121	252.7	6.8	252	6.4
7/21/2023	1:10:00 PM	115.9	268	8.6	268	8.2

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	1:15:00 PM	116.6	287.2	9.5	286.3	8.9
7/21/2023	1:20:00 PM	115.2	251.1	7	258.1	6.5
7/21/2023	1:25:00 PM	112.5	261.9	7.8	265	7.5
7/21/2023	1:30:00 PM	98.5	258.5	6.2	257.4	6
7/21/2023	1:35:00 PM	90.7	281.2	6.3	281.9	5.9
7/21/2023	1:40:00 PM	85.8	238.6	10	238.7	9.7
7/21/2023	1:45:00 PM	85.7	273	9.5	271.9	9.1
7/21/2023	1:50:00 PM	90.3	261.8	9.8	263	9.5
7/21/2023	1:55:00 PM	88	264.4	10.1	265.6	9.8
7/21/2023	2:00:00 PM	85	271.5	11.8	272.6	11.2
7/21/2023	2:05:00 PM	78.5	265.3	13.8	265.2	13.6
7/21/2023	2:10:00 PM	83.4	261	9.4	263.1	9
7/21/2023	2:15:00 PM	91.6	262.2	9.3	262.5	8.6
7/21/2023	2:20:00 PM	96.9	276	12.6	276.8	12.4
7/21/2023	2:25:00 PM	97.7	255.4	10.6	252.2	9.6
7/21/2023	2:30:00 PM	92.7	263.6	10.8	263.9	10.5
7/21/2023	2:35:00 PM	91.9	263.7	9.3	264.3	9.1
7/21/2023	2:40:00 PM	88	270.7	12	271.5	11.8
7/21/2023	2:45:00 PM	81.5	262.1	10.1	262.5	9.8
7/21/2023	2:50:00 PM	81.4	261.9	10.7	260.8	10.3
7/21/2023	2:55:00 PM	80.8	260.3	11.9	260.3	11.7
7/21/2023	3:00:00 PM	80.5	267	11.5	267.4	11.2
7/21/2023	3:05:00 PM	75.4	268.2	11.2	268	10.9
7/21/2023	3:10:00 PM	78.1	254.6	9.4	254.1	9
7/21/2023	3:15:00 PM	84.1	267.2	13.4	268.3	13
7/21/2023	3:20:00 PM	81.7	259.1	10.4	260.5	10
7/21/2023	3:25:00 PM	78.7	274.9	13.5	274.3	13.2
7/21/2023	3:30:00 PM	70.1	259.1	11.7	259.6	11.3
7/21/2023	3:35:00 PM	68.5	258.3	9.8	257.3	9.3
7/21/2023	3:40:00 PM	60.4	270.9	12.9	270.8	12.4
7/21/2023	3:45:00 PM	52.1	256.4	12.6	256.2	12.4
7/21/2023	3:50:00 PM	53.1	263.8	11.3	265.7	10.9
7/21/2023	3:55:00 PM	51.2	257.2	11.2	257.3	10.7
7/21/2023	4:00:00 PM	49	256.7	13.4	256.8	13
7/21/2023	4:05:00 PM	53.6	243.5	13.6	243.5	13.4
7/21/2023	4:10:00 PM	66.4	254.5	13.3	255.8	12.8
7/21/2023	4:15:00 PM	73.6	261.8	13	262.2	12.7
7/21/2023	4:20:00 PM	74.3	259.8	14.2	260.5	14
7/21/2023	4:25:00 PM	65.7	247.1	13.2	247.5	13
7/21/2023	4:30:00 PM	59	261.2	12.3	261.3	12
7/21/2023	4:35:00 PM	53.8	265.4	12.6	265.6	12.4
7/21/2023	4:40:00 PM	59.1	275.8	15.1	276.3	15
7/21/2023	4:45:00 PM	57.1	262.9	13.4	262.5	13.2
7/21/2023	4:50:00 PM	56.3	266	12.2	265.9	11.9
7/21/2023	4:55:00 PM	55.3	276.2	13.2	276.1	13
7/21/2023	5:00:00 PM	42.5	268.5	12.3	268.5	12.1
7/21/2023	5:05:00 PM	28.6	266.4	12.6	267.4	12.4
7/21/2023	5:10:00 PM	31.9	265.5	13.2	265.6	13
7/21/2023	5:15:00 PM	39.7	255.2	12.3	254.8	12
7/21/2023	5:20:00 PM	47.5	254.3	11.9	254.1	11.8
7/21/2023	5:25:00 PM	55.4	257.4	11.7	257.4	11.5
7/21/2023	5:30:00 PM	58.4	255.8	9.8	256.5	9.6
7/21/2023	5:35:00 PM	56.3	249	10.5	248.7	10.3

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	5:40:00 PM	55.5	253.2	10	252.4	9.9
7/21/2023	5:45:00 PM	59.8	253	10.9	252.8	10.8
7/21/2023	5:50:00 PM	63.2	258.4	11.5	258.7	11.4
7/21/2023	5:55:00 PM	67.8	251.1	10.9	251.4	10.7
7/21/2023	6:00:00 PM	67.8	250.1	10.9	249.8	10.7
7/21/2023	6:05:00 PM	64.7	258.3	9.7	258.7	9.5
7/21/2023	6:10:00 PM	59.2	254.6	9.7	254.7	9.6
7/21/2023	6:15:00 PM	54.2	254.5	9.1	254.3	9
7/21/2023	6:20:00 PM	49.9	255.1	8.9	254.9	8.8
7/21/2023	6:25:00 PM	46.5	257.3	9.5	257.6	9.3
7/21/2023	6:30:00 PM	44.9	252.6	10.1	251.9	10
7/21/2023	6:35:00 PM	42	254.7	9.6	254.8	9.4
7/21/2023	6:40:00 PM	41.5	253.7	9	253.3	8.8
7/21/2023	6:45:00 PM	41.8	252.2	7.1	252.5	6.9
7/21/2023	6:50:00 PM	43.9	262.5	8	262.6	7.8
7/21/2023	6:55:00 PM	46.6	270.3	7.7	270.7	7.6
7/21/2023	7:00:00 PM	46.5	272.1	7.8	272.3	7.8
7/21/2023	7:05:00 PM	44.5	284.9	8.2	285.4	8
7/21/2023	7:10:00 PM	45.1	308.8	8.4	307.7	8.3
7/21/2023	7:15:00 PM	46.3	332.9	9	333.2	8.9
7/21/2023	7:20:00 PM	48.3	346.2	9.4	346.1	9.1
7/21/2023	7:25:00 PM	56.3	346.5	13	346.9	12.8
7/21/2023	7:30:00 PM	70.9	353.9	9.4	354.8	9.1
7/21/2023	7:35:00 PM	81.8	349.4	10.6	349.3	10.4
7/21/2023	7:40:00 PM	84.4	358.1	7.8	357.8	7.5
7/21/2023	7:45:00 PM	83.4	349.9	6.1	350.6	6
7/21/2023	7:50:00 PM	81.7	350	5.2	350.2	5
7/21/2023	7:55:00 PM	77.9	351.4	4.4	352.4	4.3
7/21/2023	8:00:00 PM	74.5	335.4	4.4	337.2	4.3
7/21/2023	8:05:00 PM	70.4	9	5.2	6.6	4.7
7/21/2023	8:10:00 PM	65.4	358.6	5.1	358.7	4.9
7/21/2023	8:15:00 PM	64.2	0.3	3.5	359.5	3.4
7/21/2023	8:20:00 PM	61.1	4.3	4.5	4.3	4.4
7/21/2023	8:25:00 PM	60.1	5	5.2	4.6	5.1
7/21/2023	8:30:00 PM	60	21.1	7.9	21.3	7.8
7/21/2023	8:35:00 PM	58.7	46.3	13.4	47.1	13.1
7/21/2023	8:40:00 PM	71.4	45.5	15.1	45.2	15
7/21/2023	8:45:00 PM	159.7	44.7	13.6	44.6	13.4
7/21/2023	8:50:00 PM	313.6	53.3	12.6	52.9	12.4
7/21/2023	8:55:00 PM	364.6	73.1	9.1	72.3	9
7/21/2023	9:00:00 PM	364.6	70.3	9.1	70	8.9
7/21/2023	9:05:00 PM	345.4	69.2	10.7	69.5	10.6
7/21/2023	9:10:00 PM	319	61.8	8.3	62.3	8.2
7/21/2023	9:15:00 PM	290.2	65.6	8.3	65.7	8.2
7/21/2023	9:20:00 PM	258.9	70.6	7.8	70.6	7.7
7/21/2023	9:25:00 PM	226.8	72.3	6.1	72.5	5.9
7/21/2023	9:30:00 PM	197.5	86.4	6.3	85.7	6.1
7/21/2023	9:35:00 PM	170.2	86.6	6.5	86.9	6.3
7/21/2023	9:40:00 PM	149.4	81.3	6.3	81.7	6.2
7/21/2023	9:45:00 PM	135.1	83.4	6.2	83.8	6.1
7/21/2023	9:50:00 PM	125.3	69.4	6.6	69.7	6.5
7/21/2023	9:55:00 PM	119.1	62.6	7	62.8	6.9
7/21/2023	10:00:00 PM	116.3	72.3	6.3	72	6.3

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	10:05:00 PM	113.4	82	6.5	82	6.4
7/21/2023	10:10:00 PM	107.9	106.2	5.4	105.1	5.2
7/21/2023	10:15:00 PM	103.8	123.4	5.3	123.2	5.2
7/21/2023	10:20:00 PM	98.2	116.2	5.8	116.3	5.6
7/21/2023	10:25:00 PM	91.7	134.3	6.4	134.2	6.1
7/21/2023	10:30:00 PM	83.3	148.1	8.6	147.8	8.4
7/21/2023	10:35:00 PM	72.6	145.8	10.1	145.6	10
7/21/2023	10:40:00 PM	64.9	145.1	10.9	144	10.8
7/21/2023	10:45:00 PM	83.2	156.7	21.1	156.2	20.5
7/21/2023	10:50:00 PM	217.6	159.5	18.6	159.6	18.2
7/21/2023	10:55:00 PM	815.1	150.9	15.6	151	15.3
7/21/2023	11:00:00 PM	1711.9	155.6	16.8	155.9	16.4
7/21/2023	11:05:00 PM	2056.4	154	22.3	154	21.8
7/21/2023	11:10:00 PM	2443.5	156.1	21.3	155.5	20.9
7/21/2023	11:15:00 PM	2777.9	158	21.1	158.2	20.6
7/21/2023	11:20:00 PM	2825.8	162.3	21.2	162.3	20.8
7/21/2023	11:25:00 PM	2780.4	162.6	18.5	162.7	18.1
7/21/2023	11:30:00 PM	2463.4	176.9	19.2	176.5	18.7
7/21/2023	11:35:00 PM	2053.4	181.2	15.2	180.3	14.6
7/21/2023	11:40:00 PM	1650.7	180.9	18.4	179.9	17.9
7/21/2023	11:45:00 PM	1360.7	180.7	18.2	180.1	17.7
7/21/2023	11:50:00 PM	1151.2	179.1	18.2	178	17.8
7/21/2023	11:55:00 PM	995.8	182.8	16.9	181.9	16.4
	Average	216.9	261	8.8	259.3	5.4
	Max	2825.8	358.6	22.3	359.5	21.8
	Max Hour	171535.1092	5820.927452	23.87581446	5669.745795	23.59950784
	Min	28.6	0.3	0	4.3	0.4
	Count	288	288	288	288	288
	Total	62481.9	67031.4	2557.8	67459.3	2490.6

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	12:00:00 AM	12.8	<	1.4	<	1.3
7/21/2023	12:05:00 AM	32.4	<	0.4	<	0.4
7/21/2023	12:10:00 AM	10.2	<	1.7	<	1.6
7/21/2023	12:15:00 AM	23.7	<	2.1	<	2
7/21/2023	12:20:00 AM	8.9	<	2.1	<	2
7/21/2023	12:25:00 AM	3.4	<	2.4	<	2.3
7/21/2023	12:30:00 AM	12.4	<	2.2	<	2
7/21/2023	12:35:00 AM	11.7	<	2.6	<	2.5
7/21/2023	12:40:00 AM	11.1	<	3.3	<	3.2
7/21/2023	12:45:00 AM	18.5	<	2.4	<	2.4
7/21/2023	12:50:00 AM	12.2	<	3	<	3
7/21/2023	12:55:00 AM	12	<	2.8	<	2.8
7/21/2023	1:00:00 AM	11.4	<	2.4	<	2.3
7/21/2023	1:05:00 AM	11.4	<	1.6	<	1.5
7/21/2023	1:10:00 AM	45.9	<	0	<	0
7/21/2023	1:15:00 AM	24.2	<	0.1	<	0
7/21/2023	1:20:00 AM	15.5	<	1.1	<	1
7/21/2023	1:25:00 AM	19.3	<	0.9	<	0.9
7/21/2023	1:30:00 AM	31.7	<	1	<	1
7/21/2023	1:35:00 AM	58.4	<	0.9	<	0.5
7/21/2023	1:40:00 AM	13.6	<	0.3	<	0.3
7/21/2023	1:45:00 AM	31.4	<	1.2	<	1.2
7/21/2023	1:50:00 AM	25.8	<	0.2	<	0.2
7/21/2023	1:55:00 AM	21.3	<	1.5	<	1.5
7/21/2023	2:00:00 AM	42.1	<	2.1	<	1.8
7/21/2023	2:05:00 AM	34.4	<	2.3	<	2.2
7/21/2023	2:10:00 AM	29.2	<	2.5	<	2.4
7/21/2023	2:15:00 AM	14.1	<	2.7	<	2.7
7/21/2023	2:20:00 AM	9.2	<	3	<	3
7/21/2023	2:25:00 AM	23.3	<	2.8	<	2.8
7/21/2023	2:30:00 AM	20.7	<	4.1	<	4.1
7/21/2023	2:35:00 AM	35.1	<	5.4	<	5.3
7/21/2023	2:40:00 AM	23.5	<	5	<	4.9
7/21/2023	2:45:00 AM	9	<	2.7	<	2.7
7/21/2023	2:50:00 AM	7.4	<	0.7	<	0.7
7/21/2023	2:55:00 AM	17.4	<	0.9	<	0.9
7/21/2023	3:00:00 AM	29.1	<	0.6	<	0.6
7/21/2023	3:05:00 AM	83	<	1.6	<	1.5
7/21/2023	3:10:00 AM	48.4	<	2.7	<	2.6
7/21/2023	3:15:00 AM	-1.2	<	4.2	<	4
7/21/2023	3:20:00 AM	-15.2	<	4.2	<	4.1
7/21/2023	3:25:00 AM	-3.5	<	5.3	<	5.3
7/21/2023	3:30:00 AM	11	<	5.4	<	5.4
7/21/2023	3:35:00 AM	21.7	<	5	<	5
7/21/2023	3:40:00 AM	35.7	<	4.1	<	4.1
7/21/2023	3:45:00 AM	22.6	<	3.8	<	3.8
7/21/2023	3:50:00 AM	28.9	<	2.9	<	2.9
7/21/2023	3:55:00 AM	32.9	<	4.3	<	4.3
7/21/2023	4:00:00 AM	47.1	<	5.9	<	5.8
7/21/2023	4:05:00 AM	48.8	<	4.8	<	4.7
7/21/2023	4:10:00 AM	59.4	<	5.2	<	5.1
7/21/2023	4:15:00 AM	50	<	5	<	4.9
7/21/2023	4:20:00 AM	40.2	<	3.8	<	3.7

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	4:25:00 AM	45.8	<	4.5	<	4.3
7/21/2023	4:30:00 AM	45.1	<	6.4	<	6.3
7/21/2023	4:35:00 AM	49.9	<	14	<	13.8
7/21/2023	4:40:00 AM	62.7	<	9.1	<	9
7/21/2023	4:45:00 AM	54	<	6.3	<	6.2
7/21/2023	4:50:00 AM	55.9	<	7.4	<	7.2
7/21/2023	4:55:00 AM	70	<	2.8	<	2.6
7/21/2023	5:00:00 AM	67.7	<	2	<	1.9
7/21/2023	5:05:00 AM	75.8	<	4.4	<	4.3
7/21/2023	5:10:00 AM	84.2	<	1.7	<	1.7
7/21/2023	5:15:00 AM	82.8	<	2	<	1.8
7/21/2023	5:20:00 AM	131.6	<	2.8	<	2.7
7/21/2023	5:25:00 AM	139.5	<	4	<	2.1
7/21/2023	5:30:00 AM	72.5	<	1	<	0.8
7/21/2023	5:35:00 AM	82.7	<	1.3	<	1
7/21/2023	5:40:00 AM	160.6	<	4.6	<	4.4
7/21/2023	5:45:00 AM	265.2	<	6.1	<	5.9
7/21/2023	5:50:00 AM	277.8	<	4.9	<	4.7
7/21/2023	5:55:00 AM	246.6	<	2.8	<	2.6
7/21/2023	6:00:00 AM	238.6	<	2.9	<	2.4
7/21/2023	6:05:00 AM	246.9	<	2.7	<	2.2
7/21/2023	6:10:00 AM	288.3	<	0.5	<	0.4
7/21/2023	6:15:00 AM	280.5	<	1.1	<	1.1
7/21/2023	6:20:00 AM	296	<	2	<	1.9
7/21/2023	6:25:00 AM	307.3	<	2.1	<	2.1
7/21/2023	6:30:00 AM	353.6	<	2.5	<	2.5
7/21/2023	6:35:00 AM	358.1	<	2.9	<	2.8
7/21/2023	6:40:00 AM	324.7	<	3.4	<	3.3
7/21/2023	6:45:00 AM	230.7	<	4.2	<	4.2
7/21/2023	6:50:00 AM	229.8	<	3.8	<	3.6
7/21/2023	6:55:00 AM	246	<	1.2	<	0.5
7/21/2023	7:00:00 AM	316.6	<	1.9	<	0.8
7/21/2023	7:05:00 AM	318.5	<	4.2	<	3.6
7/21/2023	7:10:00 AM	342.4	<	10.3	<	10
7/21/2023	7:15:00 AM	323.8	<	7.9	<	7.7
7/21/2023	7:20:00 AM	306.8	<	11.7	<	11.4
7/21/2023	7:25:00 AM	291.2	<	10.5	<	10.3
7/21/2023	7:30:00 AM	285	<	10	<	9.8
7/21/2023	7:35:00 AM	283.2	<	14.6	<	14.5
7/21/2023	7:40:00 AM	278.4	<	10.8	<	10.7
7/21/2023	7:45:00 AM	274.9	<	12.4	<	12.2
7/21/2023	7:50:00 AM	261.9	<	9.8	<	9.6
7/21/2023	7:55:00 AM	252.5	<	7.9	<	7.4
7/21/2023	8:00:00 AM	261.7	<	4.7	<	4.6
7/21/2023	8:05:00 AM	264.2	<	5.8	<	5.2
7/21/2023	8:10:00 AM	251.2	<	3	<	2.8
7/21/2023	8:15:00 AM	246.8	<	4.6	<	4.3
7/21/2023	8:20:00 AM	272.8	<	7.9	<	7.5
7/21/2023	8:25:00 AM	274.3	<	4.5	<	4.2
7/21/2023	8:30:00 AM	277.4	<	9	<	8.7
7/21/2023	8:35:00 AM	291.7	<	8.1	<	7.8
7/21/2023	8:40:00 AM	293.6	<	7.6	<	7.4
7/21/2023	8:45:00 AM	284.3	<	8.2	<	7.9

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	8:50:00 AM	277.9	<	7.1	<	6.9
7/21/2023	8:55:00 AM	270.2	<	7.7	<	7.5
7/21/2023	9:00:00 AM	265.7	<	7.6	<	7.4
7/21/2023	9:05:00 AM	262.6	<	8.5	<	8.4
7/21/2023	9:10:00 AM	256.6	<	7.7	<	7.5
7/21/2023	9:15:00 AM	255.7	<	8.1	<	7.9
7/21/2023	9:20:00 AM	250.3	<	7.8	<	7.5
7/21/2023	9:25:00 AM	250	<	8.6	<	8.4
7/21/2023	9:30:00 AM	259.2	<	7.5	<	7.3
7/21/2023	9:35:00 AM	230.9	<	4.8	<	4.2
7/21/2023	9:40:00 AM	222.7	<	6.8	<	6.5
7/21/2023	9:45:00 AM	213.4	<	6.7	<	6.3
7/21/2023	9:50:00 AM	222.9	<	7.6	<	7.3
7/21/2023	9:55:00 AM	214.3	<	6.4	<	6.2
7/21/2023	10:00:00 AM	195.4	<	7	<	6.2
7/21/2023	10:05:00 AM	214.5	<	7.5	<	7.4
7/21/2023	10:10:00 AM	207	<	8	<	7.7
7/21/2023	10:15:00 AM	183.8	<	5.6	<	5.1
7/21/2023	10:20:00 AM	203.1	<	8.2	<	7.9
7/21/2023	10:25:00 AM	208.8	<	7.5	<	7.3
7/21/2023	10:30:00 AM	196.4	<	8	<	7.3
7/21/2023	10:35:00 AM	194.5	<	6.6	<	6
7/21/2023	10:40:00 AM	186	<	6	<	5.9
7/21/2023	10:45:00 AM	184.7	<	7.4	<	7.1
7/21/2023	10:50:00 AM	202.2	<	7	<	6.9
7/21/2023	10:55:00 AM	179.3	<	6.8	<	6.5
7/21/2023	11:00:00 AM	167.2	<	5.1	<	4.9
7/21/2023	11:05:00 AM	170	<	7.3	<	7
7/21/2023	11:10:00 AM	179.4	<	4.5	<	4.1
7/21/2023	11:15:00 AM	202.9	<	7.9	<	7.6
7/21/2023	11:20:00 AM	186.1	<	7.5	<	7.3
7/21/2023	11:25:00 AM	189.5	<	8.6	<	8.3
7/21/2023	11:30:00 AM	179.2	<	8.6	<	8.4
7/21/2023	11:35:00 AM	183.7	<	7.1	<	6.7
7/21/2023	11:40:00 AM	168.4	<	5.9	<	4.7
7/21/2023	11:45:00 AM	140.8	<	5.6	<	5.4
7/21/2023	11:50:00 AM	134.5	<	5	<	4.3
7/21/2023	11:55:00 AM	163.7	<	5.4	<	4.7
7/21/2023	12:00:00 PM	140.9	<	8.3	<	7.9
7/21/2023	12:05:00 PM	155.2	<	6	<	4.3
7/21/2023	12:10:00 PM	145.3	<	3	<	2.5
7/21/2023	12:15:00 PM	166.5	<	6.1	<	5.3
7/21/2023	12:20:00 PM	155.9	<	8	<	7.7
7/21/2023	12:25:00 PM	141.3	<	8.6	<	8.5
7/21/2023	12:30:00 PM	150.4	<	6.8	<	6.6
7/21/2023	12:35:00 PM	158.3	<	5.3	<	4.4
7/21/2023	12:40:00 PM	166.2	<	4.5	<	4.2
7/21/2023	12:45:00 PM	158.7	<	7.4	<	7.1
7/21/2023	12:50:00 PM	149.7	<	5	<	4.3
7/21/2023	12:55:00 PM	155.6	<	4.2	<	3
7/21/2023	1:00:00 PM	168.5	<	4.8	<	4.6
7/21/2023	1:05:00 PM	149.9	<	5.4	<	5
7/21/2023	1:10:00 PM	140.6	<	3.8	<	3.5

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	1:15:00 PM	147.7	<	3.5	<	3.2
7/21/2023	1:20:00 PM	168.1	<	5.3	<	5.2
7/21/2023	1:25:00 PM	144.5	<	7.8	<	6.9
7/21/2023	1:30:00 PM	150.8	<	5	<	4.7
7/21/2023	1:35:00 PM	196.7	<	3.9	<	2.9
7/21/2023	1:40:00 PM	166.5	<	6.8	<	6.4
7/21/2023	1:45:00 PM	144.1	<	6.1	<	5.2
7/21/2023	1:50:00 PM	143.4	<	5.9	<	5.7
7/21/2023	1:55:00 PM	139.6	<	4.9	<	4.1
7/21/2023	2:00:00 PM	125.4	<	8.3	<	7.7
7/21/2023	2:05:00 PM	106.5	<	7.7	<	7.4
7/21/2023	2:10:00 PM	120.9	<	4.5	<	4.3
7/21/2023	2:15:00 PM	124.8	<	9.7	<	9.3
7/21/2023	2:20:00 PM	110.7	<	5.6	<	5.2
7/21/2023	2:25:00 PM	113.7	<	6.6	<	6.4
7/21/2023	2:30:00 PM	107	<	6.9	<	6.7
7/21/2023	2:35:00 PM	117.7	<	9	<	8.2
7/21/2023	2:40:00 PM	113.7	<	10.8	<	10.3
7/21/2023	2:45:00 PM	101.4	<	9	<	7.9
7/21/2023	2:50:00 PM	102.7	<	7	<	6.5
7/21/2023	2:55:00 PM	104	<	8.8	<	8.3
7/21/2023	3:00:00 PM	85.9	<	4.3	<	4.1
7/21/2023	3:05:00 PM	83.8	<	10.6	<	10.2
7/21/2023	3:10:00 PM	75.4	<	6.8	<	6.4
7/21/2023	3:15:00 PM	75	<	4.7	<	4.5
7/21/2023	3:20:00 PM	58.3	<	6.9	<	6.7
7/21/2023	3:25:00 PM	23.3	<	7.8	<	7.5
7/21/2023	3:30:00 PM	-3.8	<	6.4	<	5.8
7/21/2023	3:35:00 PM	14.3	<	7.5	<	6.7
7/21/2023	3:40:00 PM	1.3	<	7.6	<	7.1
7/21/2023	3:45:00 PM	12	<	11.9	<	11.4
7/21/2023	3:50:00 PM	37.6	<	8.3	<	8.1
7/21/2023	3:55:00 PM	23.7	<	11.4	<	11
7/21/2023	4:00:00 PM	30.9	<	8.3	<	8.1
7/21/2023	4:05:00 PM	30.5	<	11.2	<	10.8
7/21/2023	4:10:00 PM	40.3	<	8	<	7.9
7/21/2023	4:15:00 PM	31.1	<	7	<	6.7
7/21/2023	4:20:00 PM	28.7	<	10.1	<	9.6
7/21/2023	4:25:00 PM	37.7	<	7.6	<	7.3
7/21/2023	4:30:00 PM	47.8	<	8.8	<	8.3
7/21/2023	4:35:00 PM	39.1	<	10.8	<	10
7/21/2023	4:40:00 PM	67.9	<	10.2	<	10
7/21/2023	4:45:00 PM	178.1	<	8	<	7.4
7/21/2023	4:50:00 PM	123.8	<	8	<	7.7
7/21/2023	4:55:00 PM	70.4	<	8.5	<	8.2
7/21/2023	5:00:00 PM	50.6	<	8.2	<	7.9
7/21/2023	5:05:00 PM	44.2	<	10.1	<	9.8
7/21/2023	5:10:00 PM	34	<	10	<	9.5
7/21/2023	5:15:00 PM	31.6	<	9	<	8.9
7/21/2023	5:20:00 PM	34.7	<	7.6	<	7.5
7/21/2023	5:25:00 PM	40.6	<	6.8	<	6.6
7/21/2023	5:30:00 PM	51.2	<	8.3	<	8.1
7/21/2023	5:35:00 PM	60.8	<	6.7	<	6.6

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	5:40:00 PM	53.6	<	8.3	<	8.2
7/21/2023	5:45:00 PM	43.4	<	6.1	<	6
7/21/2023	5:50:00 PM	36.9	<	6.1	<	5.8
7/21/2023	5:55:00 PM	34.6	<	8.3	<	8
7/21/2023	6:00:00 PM	44.4	<	8.2	<	8.2
7/21/2023	6:05:00 PM	47.1	<	6	<	5.8
7/21/2023	6:10:00 PM	51.1	<	5.8	<	4.9
7/21/2023	6:15:00 PM	65.2	<	16	<	15.8
7/21/2023	6:20:00 PM	139.4	<	17.4	<	16.5
7/21/2023	6:25:00 PM	271	<	16.8	<	16.4
7/21/2023	6:30:00 PM	872.8	<	20.2	<	19.9
7/21/2023	6:35:00 PM	781.3	<	17.1	<	16.8
7/21/2023	6:40:00 PM	550.8	<	18	<	17.1
7/21/2023	6:45:00 PM	487.2	<	18.9	<	18.5
7/21/2023	6:50:00 PM	290	<	18.2	<	17.4
7/21/2023	6:55:00 PM	174.6	<	18.8	<	18.2
7/21/2023	7:00:00 PM	151.6	<	19.1	<	18.8
7/21/2023	7:05:00 PM	116.1	<	16.9	<	16.7
7/21/2023	7:10:00 PM	76.7	<	17.3	<	17
7/21/2023	7:15:00 PM	60.6	<	17	<	16.8
7/21/2023	7:20:00 PM	56.1	<	13.6	<	13.3
7/21/2023	7:25:00 PM	41.4	<	15.3	<	15
7/21/2023	7:30:00 PM	27.6	<	12.6	<	12.4
7/21/2023	7:35:00 PM	18.7	<	13	<	12.8
7/21/2023	7:40:00 PM	15.5	<	12.3	<	12
7/21/2023	7:45:00 PM	16.5	<	11.6	<	11.4
7/21/2023	7:50:00 PM	17.5	<	9.9	<	9.6
7/21/2023	7:55:00 PM	25.8	<	7.2	<	7
7/21/2023	8:00:00 PM	27.5	<	7	<	6.7
7/21/2023	8:05:00 PM	24.7	<	7.4	<	7.2
7/21/2023	8:10:00 PM	15.9	<	6.9	<	6.6
7/21/2023	8:15:00 PM	13.2	<	8.7	<	8.4
7/21/2023	8:20:00 PM	14.8	<	7.5	<	7.1
7/21/2023	8:25:00 PM	13	<	5.6	<	5.5
7/21/2023	8:30:00 PM	15.3	<	7	<	6.7
7/21/2023	8:35:00 PM	9	<	7	<	6.7
7/21/2023	8:40:00 PM	7.7	<	6.6	<	6.5
7/21/2023	8:45:00 PM	13	<	6.3	<	6.2
7/21/2023	8:50:00 PM	13.8	<	5.7	<	5.5
7/21/2023	8:55:00 PM	8.6	<	6.7	<	6.5
7/21/2023	9:00:00 PM	2.5	<	7.1	<	7
7/21/2023	9:05:00 PM	15.1	<	6.1	<	6
7/21/2023	9:10:00 PM	17.9	<	6.3	<	6.2
7/21/2023	9:15:00 PM	20.8	<	6.1	<	6
7/21/2023	9:20:00 PM	30.3	<	5.3	<	5.2
7/21/2023	9:25:00 PM	43	<	4.7	<	4.6
7/21/2023	9:30:00 PM	59.9	<	4.8	<	4.8
7/21/2023	9:35:00 PM	71.7	<	4.6	<	4.6
7/21/2023	9:40:00 PM	87.9	<	4	<	3.9
7/21/2023	9:45:00 PM	65.9	<	3.4	<	3.4
7/21/2023	9:50:00 PM	54	<	2.6	<	2.5
7/21/2023	9:55:00 PM	47.1	<	2.2	<	2.2
7/21/2023	10:00:00 PM	33.7	<	1.9	<	1.8

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	10:05:00 PM	29.8	<	2.4	<	2.4
7/21/2023	10:10:00 PM	38.6	<	2.7	<	2.6
7/21/2023	10:15:00 PM	39.6	<	4.3	<	4.3
7/21/2023	10:20:00 PM	30.6	<	5.9	<	5.8
7/21/2023	10:25:00 PM	36.7	<	5.8	<	5.8
7/21/2023	10:30:00 PM	42.6	<	4.2	<	4.1
7/21/2023	10:35:00 PM	43.5	<	2.6	<	2.6
7/21/2023	10:40:00 PM	41.2	<	1.5	<	0.7
7/21/2023	10:45:00 PM	57.3	<	3.5	<	3.5
7/21/2023	10:50:00 PM	46.9	<	4.4	<	4.4
7/21/2023	10:55:00 PM	52.6	<	2.8	<	2.6
7/21/2023	11:00:00 PM	44.1	<	0.8	<	0.7
7/21/2023	11:05:00 PM	43.5	<	3	<	3
7/21/2023	11:10:00 PM	46.4	<	5.4	<	5.4
7/21/2023	11:15:00 PM	51.8	<	3.4	<	1.3
7/21/2023	11:20:00 PM	87.1	<	3.4	<	2.2
7/21/2023	11:25:00 PM	77.5	<	6	<	5.6
7/21/2023	11:30:00 PM	122.5	<	13	<	12.7
7/21/2023	11:35:00 PM	297.2	<	11.7	<	11.3
7/21/2023	11:40:00 PM	483.5	<	11.9	<	11.7
7/21/2023	11:45:00 PM	562.2	<	8	<	7.9
7/21/2023	11:50:00 PM	564.6	<	9.2	<	9
7/21/2023	11:55:00 PM	520.2	<	10.1	<	9.8
	Average	125.5		6.4		6.1
	Max	872.8	0	20.2	0	19.9
	Max Hour					
	Min	-15.2	0	0	0	0
	Count	288	0	288	0	288
	Total					

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	12:00:00 AM	71.7	142.6	3.4	142.7	3.4
7/26/2023	12:05:00 AM	66.2	145.2	3.2	145.8	3.2
7/26/2023	12:10:00 AM	61.4	161	2.6	160.7	2.6
7/26/2023	12:15:00 AM	56	169.6	3.2	169.8	3.2
7/26/2023	12:20:00 AM	48.8	180.7	2.4	180.6	2.3
7/26/2023	12:25:00 AM	42.1	186.8	2.3	186.5	2.3
7/26/2023	12:30:00 AM	39.2	194.7	3.5	194.8	3.4
7/26/2023	12:35:00 AM	39.5	197.4	2.5	197.2	2.4
7/26/2023	12:40:00 AM	38.4	169.9	1.8	171	1.8
7/26/2023	12:45:00 AM	36.5	129.6	2.1	129.3	2
7/26/2023	12:50:00 AM	36.2	90.5	3.2	89.7	3.2
7/26/2023	12:55:00 AM	38.2	84.8	4.7	84.4	4.6
7/26/2023	1:00:00 AM	39.1	82.5	5.3	82.4	5.2
7/26/2023	1:05:00 AM	37.5	116.8	2.7	118	2.6
7/26/2023	1:10:00 AM	34.9	141.8	2.3	142.6	2.3
7/26/2023	1:15:00 AM	35.5	110.6	1.6	109.1	1.5
7/26/2023	1:20:00 AM	37.9	149.1	1.4	148.7	1.3
7/26/2023	1:25:00 AM	37.4	139.5	1.7	138.8	1.7
7/26/2023	1:30:00 AM	35.7	120.1	2.8	120.1	2.8
7/26/2023	1:35:00 AM	36.2	138.4	3.8	138.6	3.8
7/26/2023	1:40:00 AM	39.6	91.3	2.8	89.3	2.7
7/26/2023	1:45:00 AM	41.5	128.3	3.9	130.3	3.8
7/26/2023	1:50:00 AM	40	133.6	4.4	133.5	4.4
7/26/2023	1:55:00 AM	38.5	158.7	3.1	158	3.1
7/26/2023	2:00:00 AM	39.9	176.1	3.3	175.4	3.3
7/26/2023	2:05:00 AM	42.4	171.9	2.7	172.2	2.7
7/26/2023	2:10:00 AM	42	156.9	1.4	158.6	1.4
7/26/2023	2:15:00 AM	39.5	139	1.1	139.2	1.1
7/26/2023	2:20:00 AM	38.9	138.7	1.8	138.4	1.8
7/26/2023	2:25:00 AM	41.1	152.7	2	153.6	1.9
7/26/2023	2:30:00 AM	41.9	163.6	2.8	163.9	2.8
7/26/2023	2:35:00 AM	40.1	156.5	2	157.5	2
7/26/2023	2:40:00 AM	38	168.9	1.5	172.7	1.3
7/26/2023	2:45:00 AM	38.3	216.1	2.4	216.5	2.4
7/26/2023	2:50:00 AM	39	215.2	2.6	215.3	2.6
7/26/2023	2:55:00 AM	37.7	200.8	1.9	209.4	1.9
7/26/2023	3:00:00 AM	35.5	138.7	1.3	138.4	1.2
7/26/2023	3:05:00 AM	35.4	154.2	1.7	154.3	1.6
7/26/2023	3:10:00 AM	36.9	180.6	1.3	177.8	1.3
7/26/2023	3:15:00 AM	36.8	203.4	0	198.2	0.3
7/26/2023	3:20:00 AM	34.9	185.5	1	191.2	1
7/26/2023	3:25:00 AM	33.1	185.1	0	214.1	0.4
7/26/2023	3:30:00 AM	34.5	47.3	1.3	38.5	1.2
7/26/2023	3:35:00 AM	36.6	32	3.6	32.6	3.6
7/26/2023	3:40:00 AM	36.7	38.7	4.2	38.5	4.2
7/26/2023	3:45:00 AM	37.2	47.4	2.8	47.4	2.7
7/26/2023	3:50:00 AM	41.6	63.3	2.8	64	2.8
7/26/2023	3:55:00 AM	47.8	80.5	2.1	79.8	2
7/26/2023	4:00:00 AM	51.9	87.6	1.3	87.7	1.2
7/26/2023	4:05:00 AM	53.2	34.3	1.6	31.4	1.5
7/26/2023	4:10:00 AM	53.8	35.9	2.7	36.1	2.7
7/26/2023	4:15:00 AM	55.2	55.4	3.3	55.8	3.3
7/26/2023	4:20:00 AM	59.6	65.9	3.6	64.6	3.6

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	4:25:00 AM	62.5	80.1	2.8	81.4	2.7
7/26/2023	4:30:00 AM	60.4	82.8	4.3	83.9	4.3
7/26/2023	4:35:00 AM	57	91.6	5.1	91.3	5
7/26/2023	4:40:00 AM	55.5	84.3	5	83.8	4.9
7/26/2023	4:45:00 AM	54.6	86.9	4.7	86.4	4.6
7/26/2023	4:50:00 AM	54.5	107.1	5	107.8	4.9
7/26/2023	4:55:00 AM	52.5	113.9	6.5	113.3	6.4
7/26/2023	5:00:00 AM	49.3	111	7.5	111	7.3
7/26/2023	5:05:00 AM	54.1	107.7	6.6	107.6	6.6
7/26/2023	5:10:00 AM	66.2	108.4	6.1	108.5	6
7/26/2023	5:15:00 AM	79.6	106.2	4.2	107.1	4.2
7/26/2023	5:20:00 AM	86.5	124.1	3.1	123.8	3
7/26/2023	5:25:00 AM	98	119	3.4	118.9	3.3
7/26/2023	5:30:00 AM	106.7	96.5	2.1	97.7	2
7/26/2023	5:35:00 AM	114.7	75.6	2.6	75.8	2.5
7/26/2023	5:40:00 AM	116.7	66.6	2.1	66.4	2.1
7/26/2023	5:45:00 AM	113.6	60.9	4	60.9	4
7/26/2023	5:50:00 AM	113.7	63.7	4.5	63.6	4.5
7/26/2023	5:55:00 AM	111.4	68	4.8	68.8	4.7
7/26/2023	6:00:00 AM	109.1	71.6	4	71.4	3.9
7/26/2023	6:05:00 AM	128.5	82.1	4.9	82.4	4.8
7/26/2023	6:10:00 AM	134.5	84.6	4.4	84.5	4.3
7/26/2023	6:15:00 AM	130.3	92.5	4.8	93	4.7
7/26/2023	6:20:00 AM	126.3	94.5	5.7	95	5.6
7/26/2023	6:25:00 AM	131.2	93.7	6.1	94	6
7/26/2023	6:30:00 AM	140.9	97.3	5.8	97.8	5.7
7/26/2023	6:35:00 AM	141.1	96.3	8.2	96.5	8.1
7/26/2023	6:40:00 AM	143.5	104	7.5	104.2	7.4
7/26/2023	6:45:00 AM	150.8	105.3	7.5	105.4	7.4
7/26/2023	6:50:00 AM	154.8	113.3	6.8	113.3	6.7
7/26/2023	6:55:00 AM	149.5	112.8	6.3	112.5	6.2
7/26/2023	7:00:00 AM	140.2	109.6	6	109.8	5.9
7/26/2023	7:05:00 AM	134.5	113.7	6.2	113.5	6.1
7/26/2023	7:10:00 AM	141.9	109.9	7	109.7	6.9
7/26/2023	7:15:00 AM	177	109.4	7.3	109.4	7.2
7/26/2023	7:20:00 AM	193	115.3	7.2	115.4	7.1
7/26/2023	7:25:00 AM	183.4	120.4	7.6	120.5	7.5
7/26/2023	7:30:00 AM	170.7	120.5	7.9	120.7	7.9
7/26/2023	7:35:00 AM	154.7	117.7	7.1	118.9	7
7/26/2023	7:40:00 AM	133.9	122.7	4.5	122.8	4.4
7/26/2023	7:45:00 AM	115.3	125	4.3	126.1	4.1
7/26/2023	7:50:00 AM	104.9	116.7	5.4	116.9	5.1
7/26/2023	7:55:00 AM	97.8	139.5	5.2	138.9	5.1
7/26/2023	8:00:00 AM	88.3	128.7	4.5	128.4	4.4
7/26/2023	8:05:00 AM	80.6	118.7	3.4	118	3.2
7/26/2023	8:10:00 AM	80.1	140.7	2.6	140.8	2.4
7/26/2023	8:15:00 AM	79.6	151.4	3.6	151.2	3.5
7/26/2023	8:20:00 AM	74.4	185.9	3.2	184.9	3.1
7/26/2023	8:25:00 AM	69.8	163.3	2.3	161	2.2
7/26/2023	8:30:00 AM	74	146.7	2.8	147.3	2.6
7/26/2023	8:35:00 AM	75.4	139	2.7	139.3	2.7
7/26/2023	8:40:00 AM	73.4	177.7	2.7	182.5	2.4
7/26/2023	8:45:00 AM	70.7	199.6	2.6	202.4	2.4

## Site: Higley

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	8:50:00 AM	73.4	220.8	1.6	216.1	1.4
7/26/2023	8:55:00 AM	74.4	210.2	3.6	210.1	3.3
7/26/2023	9:00:00 AM	70.3	191.9	2.6	190.8	2.5
7/26/2023	9:05:00 AM	68.9	228.3	4.6	227.7	4.4
7/26/2023	9:10:00 AM	74.3	232.9	4.1	234.7	4
7/26/2023	9:15:00 AM	73.2	217.4	3.2	221.6	2.8
7/26/2023	9:20:00 AM	65	231.4	5.6	230.8	5.4
7/26/2023	9:25:00 AM	60.7	231.6	6.2	231.1	6.1
7/26/2023	9:30:00 AM	61.1	233.8	6.5	233.7	6.3
7/26/2023	9:35:00 AM	57.2	224.1	6.4	225.9	6.1
7/26/2023	9:40:00 AM	51.1	228	6.7	228.8	6.6
7/26/2023	9:45:00 AM	50.6	228.7	6.6	229.9	6.4
7/26/2023	9:50:00 AM	51.5	186.2	4.1	189.4	3.8
7/26/2023	9:55:00 AM	46.5	181.7	4.1	174.2	3.7
7/26/2023	10:00:00 AM	44.1	212.4	6	214	5.5
7/26/2023	10:05:00 AM	47.3	231.1	7.9	230.3	7.7
7/26/2023	10:10:00 AM	47.9	235.5	5.7	234.5	5.6
7/26/2023	10:15:00 AM	45.5	225	4.2	224.4	4
7/26/2023	10:20:00 AM	47.7	200.5	5.7	203.3	5.5
7/26/2023	10:25:00 AM	55.6	157.2	3.2	162.8	2.8
7/26/2023	10:30:00 AM	57.8	202.7	5.5	205.2	5.2
7/26/2023	10:35:00 AM	56.7	213.3	4.1	215.7	3.6
7/26/2023	10:40:00 AM	61	216.4	4.6	216.3	4
7/26/2023	10:45:00 AM	65.9	210.1	5.5	209.8	5.3
7/26/2023	10:50:00 AM	64.3	180.1	5.7	182.9	5
7/26/2023	10:55:00 AM	62.1	200.1	4.8	196	4.3
7/26/2023	11:00:00 AM	65.3	181.3	4.2	176	3.3
7/26/2023	11:05:00 AM	65.4	132.7	3.2	131.7	2.9
7/26/2023	11:10:00 AM	59.4	231.9	7.7	234.6	7.5
7/26/2023	11:15:00 AM	56.8	242.8	4.8	242.9	4.5
7/26/2023	11:20:00 AM	59.7	192.3	4.1	225.3	3.5
7/26/2023	11:25:00 AM	59.5	200.7	2.8	228.8	2.5
7/26/2023	11:30:00 AM	56.3	233.7	1.6	242.1	1.1
7/26/2023	11:35:00 AM	56.6	252.9	5.7	250.6	5.4
7/26/2023	11:40:00 AM	61.6	229	5.2	229	5
7/26/2023	11:45:00 AM	56.9	240.2	5.4	238.1	5.2
7/26/2023	11:50:00 AM	51.1	239.8	7.6	237.6	6.9
7/26/2023	11:55:00 AM	54.3	216.3	6.1	216.8	6
7/26/2023	12:00:00 PM	54.2	250.4	7.5	249.8	7
7/26/2023	12:05:00 PM	49.1	290	8.7	290.3	8.6
7/26/2023	12:10:00 PM	47	308.5	4.5	306.4	4.3
7/26/2023	12:15:00 PM	47.1	241.5	7.3	236.5	6
7/26/2023	12:20:00 PM	45.2	256.6	4.8	249.6	2.7
7/26/2023	12:25:00 PM	40.6	277.3	5.2	277	4.8
7/26/2023	12:30:00 PM	44	250.2	6.7	252.4	6.1
7/26/2023	12:35:00 PM	49.1	270.6	7.2	274.7	6.9
7/26/2023	12:40:00 PM	46.6	233.5	6.8	234.1	6.6
7/26/2023	12:45:00 PM	43.5	244.1	6.8	241.2	6.3
7/26/2023	12:50:00 PM	46.2	287.9	5.6	287.9	5.3
7/26/2023	12:55:00 PM	46.3	297.8	4.1	296.8	3.7
7/26/2023	1:00:00 PM	40.3	301.3	4.5	297.7	3.4
7/26/2023	1:05:00 PM	40.9	287.7	4.5	281.4	4
7/26/2023	1:10:00 PM	44.7	302.2	4.2	300.9	3.6

## Site: Higley

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	1:15:00 PM	42.2	294.3	7	283.4	6.6
7/26/2023	1:20:00 PM	39.4	282.8	7.6	277.3	7.1
7/26/2023	1:25:00 PM	44.4	252.5	6.4	257.7	5.7
7/26/2023	1:30:00 PM	47.4	286.1	6.8	283.6	6.6
7/26/2023	1:35:00 PM	44.4	285.2	9.2	286.6	8.8
7/26/2023	1:40:00 PM	44.4	300.6	6.3	299.1	6.1
7/26/2023	1:45:00 PM	48.6	256.6	7.9	255.2	7.6
7/26/2023	1:50:00 PM	47	258.5	6.9	258.2	6.6
7/26/2023	1:55:00 PM	42.1	300.2	7.3	291.5	6.9
7/26/2023	2:00:00 PM	42.8	315.8	7.7	304.2	6.8
7/26/2023	2:05:00 PM	47.3	286.3	8.8	285	8.2
7/26/2023	2:10:00 PM	46.7	308.7	8.7	304.1	8.4
7/26/2023	2:15:00 PM	45.2	294.3	9.1	293.8	8.9
7/26/2023	2:20:00 PM	45.9	286.5	8.9	285	8.5
7/26/2023	2:25:00 PM	45.8	283	10.1	284.1	9.9
7/26/2023	2:30:00 PM	41.7	283.9	7	283.6	6.8
7/26/2023	2:35:00 PM	41	279.9	8.3	282.8	7.9
7/26/2023	2:40:00 PM	44.1	304.7	6.6	300	6.4
7/26/2023	2:45:00 PM	42.7	291.7	5.8	288.4	5.4
7/26/2023	2:50:00 PM	38.8	289.4	10.2	290.8	10
7/26/2023	2:55:00 PM	42.1	282.2	7.8	278.6	7.6
7/26/2023	3:00:00 PM	44.8	275.2	10.6	276.5	10
7/26/2023	3:05:00 PM	41.7	280.6	10.8	281.2	10.3
7/26/2023	3:10:00 PM	40.4	287.5	11.4	287.8	11.2
7/26/2023	3:15:00 PM	48.7	257.9	9.2	262.4	8.8
7/26/2023	3:20:00 PM	64.4	265.6	11.1	266	10.4
7/26/2023	3:25:00 PM	64	269.5	10.2	269.2	9.9
7/26/2023	3:30:00 PM	61.3	276.2	10.7	275.4	10.5
7/26/2023	3:35:00 PM	58.8	278.2	7.8	278	7.6
7/26/2023	3:40:00 PM	52.4	259.5	7.4	257.4	7.1
7/26/2023	3:45:00 PM	44.9	279.4	9.2	282.2	8.7
7/26/2023	3:50:00 PM	44	285.1	12.5	283.3	12.3
7/26/2023	3:55:00 PM	44.6	289.3	8.8	287.1	8.5
7/26/2023	4:00:00 PM	40.6	305.2	8.8	300.2	8.4
7/26/2023	4:05:00 PM	38.8	281.4	9.3	283.4	9
7/26/2023	4:10:00 PM	39.9	283.6	11	283.2	10.5
7/26/2023	4:15:00 PM	39.8	304	7.3	296.3	6.9
7/26/2023	4:20:00 PM	34.7	281.1	10.2	280.6	9.9
7/26/2023	4:25:00 PM	33.6	274.3	9	275.4	8.5
7/26/2023	4:30:00 PM	34.9	273.8	9.3	274.5	8.8
7/26/2023	4:35:00 PM	32.6	273.1	8.9	274.7	8.4
7/26/2023	4:40:00 PM	29.2	292.7	11.1	291.5	10.8
7/26/2023	4:45:00 PM	31.5	317.8	4.6	304.7	4
7/26/2023	4:50:00 PM	32.1	315.1	6.9	301.3	6.4
7/26/2023	4:55:00 PM	27.3	289.4	8.3	288.6	8
7/26/2023	5:00:00 PM	24.6	300.8	8.9	299.3	8.7
7/26/2023	5:05:00 PM	26.7	273.3	9.3	274.5	9
7/26/2023	5:10:00 PM	27.8	290.4	8.1	290.7	8
7/26/2023	5:15:00 PM	25	276	7.5	278.9	7
7/26/2023	5:20:00 PM	24.9	265.2	7.2	265.4	6.9
7/26/2023	5:25:00 PM	28	293.8	7.4	292.3	7.2
7/26/2023	5:30:00 PM	27.5	308.3	7.9	302.6	7.6
7/26/2023	5:35:00 PM	24.7	305.5	5.4	302.8	5.2

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	5:40:00 PM	26.1	293.2	6.1	289.5	5.9
7/26/2023	5:45:00 PM	28.6	293.5	6.9	290.9	6.7
7/26/2023	5:50:00 PM	26.2	287.4	7	285.6	6.8
7/26/2023	5:55:00 PM	24	282.9	9.8	282.8	9.6
7/26/2023	6:00:00 PM	25.8	294	8.9	294.1	8.8
7/26/2023	6:05:00 PM	26.9	292.3	8.4	292.5	8.3
7/26/2023	6:10:00 PM	24.4	288.1	8	288.4	7.9
7/26/2023	6:15:00 PM	23.9	302.6	6	301.7	5.7
7/26/2023	6:20:00 PM	26.4	295.6	8.6	295.7	8.5
7/26/2023	6:25:00 PM	26.6	290.6	7.1	290.8	7
7/26/2023	6:30:00 PM	24.1	285	6.5	285.6	6.4
7/26/2023	6:35:00 PM	25.1	289.2	8.3	288.2	8.2
7/26/2023	6:40:00 PM	28.4	281.1	6.6	281.3	6.4
7/26/2023	6:45:00 PM	27.8	284.3	6.9	284.8	6.8
7/26/2023	6:50:00 PM	25.1	280	7.1	279.6	7
7/26/2023	6:55:00 PM	25.5	277.6	7.3	277.4	7.3
7/26/2023	7:00:00 PM	28.6	282.9	7.2	283.1	7
7/26/2023	7:05:00 PM	27.3	276	5.7	275.9	5.6
7/26/2023	7:10:00 PM	25.2	271.8	6.3	271.5	6.3
7/26/2023	7:15:00 PM	26.5	274.1	5.9	274	5.8
7/26/2023	7:20:00 PM	28.5	277.7	5.6	278.3	5.5
7/26/2023	7:25:00 PM	27	279.6	5.7	279.3	5.6
7/26/2023	7:30:00 PM	24.9	280.6	6.2	280.3	6.1
7/26/2023	7:35:00 PM	27.4	277.6	5	277.6	4.9
7/26/2023	7:40:00 PM	29.7	275	5.1	274.8	5
7/26/2023	7:45:00 PM	28	273.5	5.8	273.6	5.7
7/26/2023	7:50:00 PM	25.5	272.5	5.3	272.3	5.3
7/26/2023	7:55:00 PM	27.2	265.2	5.4	266.1	5.3
7/26/2023	8:00:00 PM	31.2	255.2	6.3	255.3	6.3
7/26/2023	8:05:00 PM	32.1	260.3	6.9	260.4	6.7
7/26/2023	8:10:00 PM	32	261.4	5.7	261	5.6
7/26/2023	8:15:00 PM	35.8	265.6	3.8	265.9	3.7
7/26/2023	8:20:00 PM	39.4	262.7	3.9	262.6	3.9
7/26/2023	8:25:00 PM	38.1	257	4	258.1	3.9
7/26/2023	8:30:00 PM	36	228.6	3.7	230.6	3.3
7/26/2023	8:35:00 PM	40.2	240.1	4	240.1	3.9
7/26/2023	8:40:00 PM	46	242.6	4.9	242	4.8
7/26/2023	8:45:00 PM	44.1	245.2	5.2	245.9	5.1
7/26/2023	8:50:00 PM	40.2	247.5	4.6	248	4.5
7/26/2023	8:55:00 PM	40.8	238.9	5.2	238.9	5.1
7/26/2023	9:00:00 PM	42.4	230.9	5.5	231	5.4
7/26/2023	9:05:00 PM	40.7	205.1	3.7	205.2	3.7
7/26/2023	9:10:00 PM	39.8	198.4	5.4	198.6	5.3
7/26/2023	9:15:00 PM	43	182.2	3.9	183.4	3.7
7/26/2023	9:20:00 PM	48.1	163.3	8.7	164.4	8.4
7/26/2023	9:25:00 PM	54.5	172.2	16.8	171	16
7/26/2023	9:30:00 PM	93.9	175.3	16.4	176.1	15.8
7/26/2023	9:35:00 PM	293.3	141	16.3	140.5	15.9
7/26/2023	9:40:00 PM	1169.5	141.8	23.8	141.5	23
7/26/2023	9:45:00 PM	2894.2	127.6	31.1	128.1	30.5
7/26/2023	9:50:00 PM	4555	130	29.1	130	28.8
7/26/2023	9:55:00 PM	5125	130.4	29.5	129.9	29.2
7/26/2023	10:00:00 PM	4617.3	126.8	27.1	126.7	26.7

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	10:05:00 PM	3766.2	118.3	27.8	118.4	27.4
7/26/2023	10:10:00 PM	2893.5	118.5	26.4	118.4	25.9
7/26/2023	10:15:00 PM	2135.7	129.7	21.2	130.2	20.7
7/26/2023	10:20:00 PM	1550	139.1	19.3	139.2	19
7/26/2023	10:25:00 PM	1107.5	150.5	10.5	147.4	9.9
7/26/2023	10:30:00 PM	786.5	154.6	9.3	156	8.7
7/26/2023	10:35:00 PM	555.4	124.6	16.2	124.3	15.8
7/26/2023	10:40:00 PM	388.7	119.7	19.1	119.6	18.7
7/26/2023	10:45:00 PM	274	123.8	14.6	122.9	14.2
7/26/2023	10:50:00 PM	194.5	119	5.5	122.7	0.6
7/26/2023	10:55:00 PM	142.3	4.2	6.4	1.9	5.9
7/26/2023	11:00:00 PM	115.8	12.6	13.1	12.2	11.9
7/26/2023	11:05:00 PM	106.6	24.1	14.5	24.5	14.1
7/26/2023	11:10:00 PM	99	44.6	9.9	41.4	9.4
7/26/2023	11:15:00 PM	77.3	334.1	3.2	324.4	1.1
7/26/2023	11:20:00 PM	68.8	63.6	5.3	95	3.2
7/26/2023	11:25:00 PM	50.8	135.8	13.5	136.7	13
7/26/2023	11:30:00 PM	33.1	121.6	18.6	122.2	18.4
7/26/2023	11:35:00 PM	24.1	108.5	13.6	109	13.4
7/26/2023	11:40:00 PM	22.1	116.5	12.1	116.5	11.9
7/26/2023	11:45:00 PM	17.4	100.3	15.3	100.6	15
7/26/2023	11:50:00 PM	10.6	87.7	20.1	87.5	19.3
7/26/2023	11:55:00 PM	20.4	68.6	20.4	68.8	20.1
Average		165.3	207	6.6	205.2	1.4
Max		5125	334.1	31.1	324.4	30.5
Max Hour		360257.3448	6592.675765	24.36151846	6493.778775	23.67709337
Min		10.6	4.2	0	1.9	0.3
Count		288	288	288	288	288
Total		47622.7	55860.8	1919.5	55872.7	1844.3

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	12:00:00 AM	19.9	<	2.1	<	2
7/26/2023	12:05:00 AM	22.4	<	2.6	<	2.6
7/26/2023	12:10:00 AM	37.9	<	1.2	<	0.7
7/26/2023	12:15:00 AM	18.6	<	2.3	<	2.1
7/26/2023	12:20:00 AM	10.3	<	2.2	<	2.2
7/26/2023	12:25:00 AM	12.7	<	2.5	<	2.5
7/26/2023	12:30:00 AM	18	<	1.6	<	1.6
7/26/2023	12:35:00 AM	22	<	2.6	<	2.6
7/26/2023	12:40:00 AM	21.9	<	3.8	<	3.8
7/26/2023	12:45:00 AM	20	<	2.7	<	2.7
7/26/2023	12:50:00 AM	23.6	<	0.5	<	0.5
7/26/2023	12:55:00 AM	33.1	<	0	<	0
7/26/2023	1:00:00 AM	36.7	<	3.6	<	3.6
7/26/2023	1:05:00 AM	30.9	<	4	<	4
7/26/2023	1:10:00 AM	23	<	3.7	<	3.7
7/26/2023	1:15:00 AM	30.8	<	3.2	<	3.2
7/26/2023	1:20:00 AM	32.9	<	1.5	<	1.4
7/26/2023	1:25:00 AM	31.1	<	1.4	<	1.3
7/26/2023	1:30:00 AM	27.7	<	2.2	<	2.1
7/26/2023	1:35:00 AM	22.5	<	2.8	<	2.7
7/26/2023	1:40:00 AM	19.1	<	3.4	<	3.4
7/26/2023	1:45:00 AM	17.3	<	3.7	<	3.7
7/26/2023	1:50:00 AM	14.6	<	4.1	<	4
7/26/2023	1:55:00 AM	12.8	<	3	<	3
7/26/2023	2:00:00 AM	16.9	<	2	<	1.9
7/26/2023	2:05:00 AM	22	<	3	<	2.8
7/26/2023	2:10:00 AM	21.9	<	2.7	<	2.6
7/26/2023	2:15:00 AM	23.3	<	2.6	<	2.5
7/26/2023	2:20:00 AM	24.1	<	4.3	<	4.1
7/26/2023	2:25:00 AM	24.4	<	3.9	<	3.8
7/26/2023	2:30:00 AM	23.1	<	3.4	<	3.2
7/26/2023	2:35:00 AM	21.3	<	2.9	<	2.7
7/26/2023	2:40:00 AM	19.8	<	3.3	<	2.5
7/26/2023	2:45:00 AM	20.2	<	3.2	<	3
7/26/2023	2:50:00 AM	20.5	<	3.2	<	3.1
7/26/2023	2:55:00 AM	22.2	<	2.6	<	2.5
7/26/2023	3:00:00 AM	22.1	<	3.5	<	3.4
7/26/2023	3:05:00 AM	21.7	<	3.3	<	3.3
7/26/2023	3:10:00 AM	20.5	<	3.1	<	3
7/26/2023	3:15:00 AM	25.2	<	3.5	<	3.4
7/26/2023	3:20:00 AM	28.2	<	3.4	<	3.3
7/26/2023	3:25:00 AM	27.4	<	2.1	<	2.1
7/26/2023	3:30:00 AM	24.3	<	2.5	<	2.5
7/26/2023	3:35:00 AM	25.4	<	3.6	<	3.5
7/26/2023	3:40:00 AM	19.8	<	3.6	<	3.1
7/26/2023	3:45:00 AM	38.2	<	2.9	<	2.8
7/26/2023	3:50:00 AM	23.5	<	2.9	<	2.8
7/26/2023	3:55:00 AM	22.2	<	2.5	<	2.5
7/26/2023	4:00:00 AM	34.3	<	1.9	<	1.9
7/26/2023	4:05:00 AM	63.6	<	2.8	<	2.7
7/26/2023	4:10:00 AM	17.7	<	3.5	<	2.6
7/26/2023	4:15:00 AM	33.2	<	2	<	1.8
7/26/2023	4:20:00 AM	35.4	<	0.6	<	0.6

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	4:25:00 AM	29	<	1.3	<	1.2
7/26/2023	4:30:00 AM	15.2	<	1.6	<	1.6
7/26/2023	4:35:00 AM	27.7	<	1.5	<	1.5
7/26/2023	4:40:00 AM	38.8	<	1.9	<	1.9
7/26/2023	4:45:00 AM	36.9	<	2.4	<	2.3
7/26/2023	4:50:00 AM	21.9	<	3.4	<	3.4
7/26/2023	4:55:00 AM	23.8	<	3.3	<	3.3
7/26/2023	5:00:00 AM	32.8	<	2	<	1.9
7/26/2023	5:05:00 AM	35.4	<	3.9	<	3.8
7/26/2023	5:10:00 AM	40.1	<	3.1	<	2.9
7/26/2023	5:15:00 AM	33.5	<	2	<	1.9
7/26/2023	5:20:00 AM	40.3	<	1.6	<	1.3
7/26/2023	5:25:00 AM	33	<	3.4	<	3.4
7/26/2023	5:30:00 AM	28.3	<	0.7	<	0.7
7/26/2023	5:35:00 AM	45.3	<	1.6	<	1.5
7/26/2023	5:40:00 AM	21.8	<	2	<	1.8
7/26/2023	5:45:00 AM	24.7	<	1.5	<	1.5
7/26/2023	5:50:00 AM	32.6	<	2.7	<	2.6
7/26/2023	5:55:00 AM	45.4	<	4.2	<	4.2
7/26/2023	6:00:00 AM	48.7	<	4	<	4
7/26/2023	6:05:00 AM	53.7	<	4	<	4
7/26/2023	6:10:00 AM	49.9	<	3.5	<	3.5
7/26/2023	6:15:00 AM	57.7	<	2.8	<	2.6
7/26/2023	6:20:00 AM	113.5	<	1.9	<	1.7
7/26/2023	6:25:00 AM	150.6	<	1.5	<	1.3
7/26/2023	6:30:00 AM	128.1	<	2.5	<	2.4
7/26/2023	6:35:00 AM	130.7	<	2.7	<	2.5
7/26/2023	6:40:00 AM	191.9	<	1.5	<	1.5
7/26/2023	6:45:00 AM	165.5	<	0.9	<	0.7
7/26/2023	6:50:00 AM	96.9	<	2.2	<	2.2
7/26/2023	6:55:00 AM	68.8	<	2	<	2
7/26/2023	7:00:00 AM	56	<	1.1	<	0.9
7/26/2023	7:05:00 AM	78.8	<	2.4	<	2.4
7/26/2023	7:10:00 AM	99.8	<	3.4	<	3.3
7/26/2023	7:15:00 AM	45.9	<	2.9	<	2.8
7/26/2023	7:20:00 AM	23.9	<	2.6	<	2.3
7/26/2023	7:25:00 AM	31.9	<	2.1	<	2
7/26/2023	7:30:00 AM	29.4	<	3.3	<	3.2
7/26/2023	7:35:00 AM	41.4	<	4.4	<	4.4
7/26/2023	7:40:00 AM	46.3	<	4.9	<	4.8
7/26/2023	7:45:00 AM	59.9	<	3.7	<	3.5
7/26/2023	7:50:00 AM	63.4	<	5.6	<	5.4
7/26/2023	7:55:00 AM	56.9	<	3.8	<	3.7
7/26/2023	8:00:00 AM	49.8	<	3.4	<	3.2
7/26/2023	8:05:00 AM	47.7	<	2.7	<	2.4
7/26/2023	8:10:00 AM	52.8	<	2.9	<	2.7
7/26/2023	8:15:00 AM	48.3	<	3.2	<	3.1
7/26/2023	8:20:00 AM	52.7	<	4.8	<	4.7
7/26/2023	8:25:00 AM	61.3	<	5.3	<	5
7/26/2023	8:30:00 AM	60.2	<	4.1	<	3.9
7/26/2023	8:35:00 AM	37.7	<	4.2	<	3.9
7/26/2023	8:40:00 AM	47.2	<	3.4	<	2.9
7/26/2023	8:45:00 AM	61	<	5	<	4.9

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	8:50:00 AM	52.8	<	4.5	<	4.4
7/26/2023	8:55:00 AM	48.5	<	4.4	<	4.3
7/26/2023	9:00:00 AM	45	<	3.9	<	3.8
7/26/2023	9:05:00 AM	70.1	<	4.1	<	3.9
7/26/2023	9:10:00 AM	70	<	5.2	<	4.7
7/26/2023	9:15:00 AM	48.7	<	5.3	<	5.1
7/26/2023	9:20:00 AM	49.6	<	6.8	<	6.7
7/26/2023	9:25:00 AM	54.3	<	7.1	<	7
7/26/2023	9:30:00 AM	56.8	<	6.1	<	6
7/26/2023	9:35:00 AM	59.4	<	7.5	<	7.3
7/26/2023	9:40:00 AM	49.9	<	7.2	<	6.9
7/26/2023	9:45:00 AM	59.4	<	7.3	<	7.1
7/26/2023	9:50:00 AM	50.5	<	7.9	<	7.7
7/26/2023	9:55:00 AM	53.2	<	7.8	<	7.6
7/26/2023	10:00:00 AM	63.5	<	7.7	<	7.3
7/26/2023	10:05:00 AM	52.4	<	8.6	<	7.6
7/26/2023	10:10:00 AM	38.4	<	7.8	<	7.6
7/26/2023	10:15:00 AM	60.8	<	8.3	<	8.1
7/26/2023	10:20:00 AM	53.6	<	6.4	<	6
7/26/2023	10:25:00 AM	53.5	<	6.3	<	6.1
7/26/2023	10:30:00 AM	55.7	<	5.6	<	5.4
7/26/2023	10:35:00 AM	53.1	<	6.7	<	6.4
7/26/2023	10:40:00 AM	37.6	<	7.2	<	7.1
7/26/2023	10:45:00 AM	28.1	<	6.2	<	5.9
7/26/2023	10:50:00 AM	41.5	<	4.9	<	4.5
7/26/2023	10:55:00 AM	61.7	<	6.5	<	6.4
7/26/2023	11:00:00 AM	69.1	<	7.7	<	7.5
7/26/2023	11:05:00 AM	73.8	<	10.1	<	9.8
7/26/2023	11:10:00 AM	95.5	<	7.6	<	7.2
7/26/2023	11:15:00 AM	94.5	<	8.9	<	8.6
7/26/2023	11:20:00 AM	86.6	<	8.4	<	8.3
7/26/2023	11:25:00 AM	63.7	<	6.3	<	6
7/26/2023	11:30:00 AM	41.2	<	8.2	<	7.8
7/26/2023	11:35:00 AM	46.6	<	4.3	<	4.1
7/26/2023	11:40:00 AM	60.6	<	7.5	<	7.2
7/26/2023	11:45:00 AM	48.3	<	4	<	3.4
7/26/2023	11:50:00 AM	31.2	<	5.7	<	4.8
7/26/2023	11:55:00 AM	71.3	<	5.4	<	5
7/26/2023	12:00:00 PM	92	<	5.4	<	4.7
7/26/2023	12:05:00 PM	99.8	<	6.9	<	6.1
7/26/2023	12:10:00 PM	113.6	<	7.8	<	7.6
7/26/2023	12:15:00 PM	100.8	<	6.3	<	5.4
7/26/2023	12:20:00 PM	85.6	<	9.9	<	9.7
7/26/2023	12:25:00 PM	117.8	<	7.1	<	6.5
7/26/2023	12:30:00 PM	170.6	<	9.1	<	7.6
7/26/2023	12:35:00 PM	115.2	<	9	<	7.8
7/26/2023	12:40:00 PM	132.3	<	10.3	<	9.9
7/26/2023	12:45:00 PM	178.9	<	7.7	<	7.3
7/26/2023	12:50:00 PM	161.8	<	7.5	<	6.6
7/26/2023	12:55:00 PM	118.5	<	10.2	<	9.6
7/26/2023	1:00:00 PM	124.1	<	9.3	<	9.1
7/26/2023	1:05:00 PM	101.5	<	9.5	<	8.9
7/26/2023	1:10:00 PM	67.1	<	7.6	<	6.8

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	1:15:00 PM	63.6	<	11.2	<	10.8
7/26/2023	1:20:00 PM	72.5	<	11.9	<	11.2
7/26/2023	1:25:00 PM	85.2	<	6.7	<	6.1
7/26/2023	1:30:00 PM	73.6	<	8.2	<	7.4
7/26/2023	1:35:00 PM	66.7	<	10.3	<	4.8
7/26/2023	1:40:00 PM	16.2	<	10.9	<	10.7
7/26/2023	1:45:00 PM	9.6	<	11.8	<	11.6
7/26/2023	1:50:00 PM	13.6	<	10.4	<	10
7/26/2023	1:55:00 PM	18.8	<	5.8	<	5.4
7/26/2023	2:00:00 PM	35	<	6	<	5.4
7/26/2023	2:05:00 PM	53.7	<	10	<	9.4
7/26/2023	2:10:00 PM	44.7	<	8.3	<	7.9
7/26/2023	2:15:00 PM	34.6	<	7.5	<	6.8
7/26/2023	2:20:00 PM	35.6	<	5.2	<	4.2
7/26/2023	2:25:00 PM	41.6	<	8.3	<	8.2
7/26/2023	2:30:00 PM	136.2	<	5.1	<	4.9
7/26/2023	2:35:00 PM	276.6	<	8.6	<	7.7
7/26/2023	2:40:00 PM	179.6	<	12.2	<	12
7/26/2023	2:45:00 PM	121.7	<	9	<	8.7
7/26/2023	2:50:00 PM	58.4	<	4.8	<	4.3
7/26/2023	2:55:00 PM	44.9	<	5.5	<	5.1
7/26/2023	3:00:00 PM	40.3	<	7.4	<	7.2
7/26/2023	3:05:00 PM	54.5	<	11.4	<	11.2
7/26/2023	3:10:00 PM	145.4	<	10.7	<	10.5
7/26/2023	3:15:00 PM	91.5	<	8.8	<	6.8
7/26/2023	3:20:00 PM	54.7	<	8.9	<	8.6
7/26/2023	3:25:00 PM	32.3	<	9.7	<	9.3
7/26/2023	3:30:00 PM	23.5	<	7.2	<	6.6
7/26/2023	3:35:00 PM	25.2	<	7.2	<	6.9
7/26/2023	3:40:00 PM	49	<	7.1	<	6.9
7/26/2023	3:45:00 PM	45.4	<	8.7	<	8.6
7/26/2023	3:50:00 PM	36.1	<	8.4	<	7.9
7/26/2023	3:55:00 PM	59.4	<	11.8	<	11.6
7/26/2023	4:00:00 PM	169.8	<	10.7	<	10.5
7/26/2023	4:05:00 PM	259.4	<	10	<	9.7
7/26/2023	4:10:00 PM	153.3	<	6.3	<	5.8
7/26/2023	4:15:00 PM	83.7	<	5.1	<	3.2
7/26/2023	4:20:00 PM	392.9	<	8.5	<	8.3
7/26/2023	4:25:00 PM	425.5	<	10.6	<	10.3
7/26/2023	4:30:00 PM	207.3	<	10.8	<	10.5
7/26/2023	4:35:00 PM	103.2	<	8	<	7.8
7/26/2023	4:40:00 PM	106.6	<	11.7	<	11.3
7/26/2023	4:45:00 PM	77.9	<	6.8	<	6.7
7/26/2023	4:50:00 PM	43.8	<	7.6	<	7.3
7/26/2023	4:55:00 PM	30.5	<	8.2	<	7.5
7/26/2023	5:00:00 PM	19.2	<	8.4	<	8.2
7/26/2023	5:05:00 PM	13.9	<	9.7	<	9.6
7/26/2023	5:10:00 PM	18.4	<	6	<	5.8
7/26/2023	5:15:00 PM	24.4	<	8	<	7.7
7/26/2023	5:20:00 PM	18.9	<	9.1	<	8.6
7/26/2023	5:25:00 PM	22.5	<	9.9	<	9.8
7/26/2023	5:30:00 PM	37.6	<	7.1	<	7
7/26/2023	5:35:00 PM	47.1	<	7.9	<	7.7

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	5:40:00 PM	34.9	<	9.3	<	9.1
7/26/2023	5:45:00 PM	33.4	<	8.7	<	8.5
7/26/2023	5:50:00 PM	33.3	<	8.7	<	8.5
7/26/2023	5:55:00 PM	32.8	<	9.1	<	8.8
7/26/2023	6:00:00 PM	145.5	<	8.4	<	8.3
7/26/2023	6:05:00 PM	220.2	<	8.3	<	8.1
7/26/2023	6:10:00 PM	304.6	<	9.1	<	8.8
7/26/2023	6:15:00 PM	200.2	<	7.2	<	7.1
7/26/2023	6:20:00 PM	96.8	<	11	<	10.9
7/26/2023	6:25:00 PM	52.7	<	10.5	<	10.4
7/26/2023	6:30:00 PM	41.8	<	9.3	<	9.2
7/26/2023	6:35:00 PM	38.2	<	10.6	<	10.4
7/26/2023	6:40:00 PM	31.6	<	9.7	<	9.6
7/26/2023	6:45:00 PM	28.2	<	8.5	<	8.4
7/26/2023	6:50:00 PM	40.8	<	8.6	<	8.5
7/26/2023	6:55:00 PM	115.8	<	9.8	<	9.7
7/26/2023	7:00:00 PM	333	<	9.9	<	9.8
7/26/2023	7:05:00 PM	231.3	<	10.2	<	10
7/26/2023	7:10:00 PM	114.3	<	7.8	<	7.7
7/26/2023	7:15:00 PM	65.4	<	8.7	<	8.6
7/26/2023	7:20:00 PM	93.4	<	8.1	<	7.9
7/26/2023	7:25:00 PM	108	<	8.5	<	8.4
7/26/2023	7:30:00 PM	156.5	<	8.8	<	8.7
7/26/2023	7:35:00 PM	97.1	<	8.8	<	8.7
7/26/2023	7:40:00 PM	54.9	<	6.7	<	6.6
7/26/2023	7:45:00 PM	82.7	<	8.1	<	8.1
7/26/2023	7:50:00 PM	129.1	<	8.1	<	8
7/26/2023	7:55:00 PM	79.6	<	7.2	<	7.1
7/26/2023	8:00:00 PM	47.7	<	7	<	7
7/26/2023	8:05:00 PM	35.3	<	6.6	<	6.5
7/26/2023	8:10:00 PM	32.4	<	6	<	5.9
7/26/2023	8:15:00 PM	36.2	<	5.8	<	5.8
7/26/2023	8:20:00 PM	49.1	<	5.8	<	5.7
7/26/2023	8:25:00 PM	51.8	<	6.2	<	6.1
7/26/2023	8:30:00 PM	47.6	<	5.1	<	5.1
7/26/2023	8:35:00 PM	46.3	<	4	<	3.7
7/26/2023	8:40:00 PM	42.3	<	6.9	<	6.5
7/26/2023	8:45:00 PM	31	<	8.3	<	7.9
7/26/2023	8:50:00 PM	3.7	<	7.4	<	7.2
7/26/2023	8:55:00 PM	16.2	<	5.5	<	5.4
7/26/2023	9:00:00 PM	28.9	<	6.3	<	6
7/26/2023	9:05:00 PM	27.7	<	5.9	<	5.6
7/26/2023	9:10:00 PM	14.8	<	6.4	<	6
7/26/2023	9:15:00 PM	18.1	<	8.3	<	8
7/26/2023	9:20:00 PM	23.1	<	4.6	<	4.4
7/26/2023	9:25:00 PM	21.1	<	5.5	<	5.3
7/26/2023	9:30:00 PM	25.3	<	7.3	<	7.2
7/26/2023	9:35:00 PM	18.9	<	7.9	<	7.7
7/26/2023	9:40:00 PM	14.6	<	6.4	<	6.3
7/26/2023	9:45:00 PM	10.1	<	5.6	<	5.4
7/26/2023	9:50:00 PM	7.5	<	5.8	<	5.6
7/26/2023	9:55:00 PM	8.1	<	4.5	<	4.4
7/26/2023	10:00:00 PM	12.9	<	4	<	3.8

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	10:05:00 PM	19.8	<	4	<	3.8
7/26/2023	10:10:00 PM	13.1	<	5.1	<	4.9
7/26/2023	10:15:00 PM	10.9	<	4.1	<	3.9
7/26/2023	10:20:00 PM	13.3	<	2.2	<	2
7/26/2023	10:25:00 PM	21.3	<	1.8	<	1.6
7/26/2023	10:30:00 PM	50	<	3.1	<	3
7/26/2023	10:35:00 PM	69.4	<	5.5	<	5.4
7/26/2023	10:40:00 PM	48.4	<	23	<	22.1
7/26/2023	10:45:00 PM	560.2	<	27.5	<	27
7/26/2023	10:50:00 PM	5137.3	<	32.9	<	32.4
7/26/2023	10:55:00 PM	5704.6	<	24.6	<	24.1
7/26/2023	11:00:00 PM	3053.5	<	29.6	<	28.9
7/26/2023	11:05:00 PM	1760.3	<	24.1	<	23.7
7/26/2023	11:10:00 PM	980.2	<	15.3	<	15
7/26/2023	11:15:00 PM	479.4	<	14.5	<	14.2
7/26/2023	11:20:00 PM	205.1	<	10.3	<	9.8
7/26/2023	11:25:00 PM	120.3	<	9.8	<	9.5
7/26/2023	11:30:00 PM	88.2	<	5.8	<	5.5
7/26/2023	11:35:00 PM	71.4	<	7.5	<	6.5
7/26/2023	11:40:00 PM	100.8	<	5	<	5
7/26/2023	11:45:00 PM	72.2	<	5.1	<	5
7/26/2023	11:50:00 PM	51.6	<	3.7	<	3.7
7/26/2023	11:55:00 PM	33.9	<	6.7	<	5.8
	Average	121.4		6.3		6.0
	Max	5704.6	0	32.9	0	32.4
	Max Hour					
	Min	3.7	0	0	0	0
	Count	288	0	288	0	288
	Total					

Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	12:00:00 AM	83.7	242.5	3.9	242.7	3.8
8/31/2023	12:05:00 AM	79.2	251	5.2	250.7	5.1
8/31/2023	12:10:00 AM	74.7	249.7	4.3	250.4	4.2
8/31/2023	12:15:00 AM	70.4	260.1	3.8	258.2	3.7
8/31/2023	12:20:00 AM	66.4	271.9	3.2	270.6	3.1
8/31/2023	12:25:00 AM	62.8	276.2	3.6	274.5	3.3
8/31/2023	12:30:00 AM	58.7	296.4	4.3	296.2	4.2
8/31/2023	12:35:00 AM	57.4	300.7	4.8	299.8	4.4
8/31/2023	12:40:00 AM	53.6	315.7	3.5	314.9	3.3
8/31/2023	12:45:00 AM	52.1	300.5	4.6	301.7	4.3
8/31/2023	12:50:00 AM	52.3	295.5	3.8	295.7	3.6
8/31/2023	12:55:00 AM	52.5	293.1	3.6	295.8	3.4
8/31/2023	1:00:00 AM	50.7	313	3.2	310.7	3
8/31/2023	1:05:00 AM	48.3	302.3	3.9	298.8	3.6
8/31/2023	1:10:00 AM	44.1	13.5	3.9	13.4	3.8
8/31/2023	1:15:00 AM	44	24.8	3.4	22.9	3.2
8/31/2023	1:20:00 AM	52.4	21.9	3.8	23.4	3.6
8/31/2023	1:25:00 AM	65.3	34.7	5.1	35.3	4.9
8/31/2023	1:30:00 AM	78.8	39.5	3.4	39.3	3.4
8/31/2023	1:35:00 AM	91.8	50.6	4.4	50.7	4.3
8/31/2023	1:40:00 AM	108.7	45.3	5.4	45.5	5.3
8/31/2023	1:45:00 AM	128.3	38.3	4.2	38.3	4
8/31/2023	1:50:00 AM	146	47.8	4.4	47.4	4.3
8/31/2023	1:55:00 AM	161.8	57.5	4.6	57.3	4.5
8/31/2023	2:00:00 AM	171.5	64.8	5.2	63.9	5.1
8/31/2023	2:05:00 AM	175.7	57.5	4.1	56.8	4
8/31/2023	2:10:00 AM	176.5	73.5	3.1	74.4	3
8/31/2023	2:15:00 AM	172.6	79.7	3.8	81.4	3.7
8/31/2023	2:20:00 AM	163.3	74	3	74.6	2.9
8/31/2023	2:25:00 AM	152	58.5	2.2	60.3	2.1
8/31/2023	2:30:00 AM	142.4	67.4	2.8	66.4	2.8
8/31/2023	2:35:00 AM	134.9	68.8	4	69.1	3.9
8/31/2023	2:40:00 AM	128.4	73.5	5.3	74	5.1
8/31/2023	2:45:00 AM	117	83.4	4.8	84.2	4.7
8/31/2023	2:50:00 AM	103.4	102.7	4.4	101.4	4.2
8/31/2023	2:55:00 AM	90.5	96.9	3.4	95.3	3.2
8/31/2023	3:00:00 AM	81.5	55.3	5.4	54.9	5.3
8/31/2023	3:05:00 AM	75.9	52.4	5.5	52.3	5.4
8/31/2023	3:10:00 AM	72.9	52.4	5.7	52.6	5.6
8/31/2023	3:15:00 AM	69.7	45.2	4.5	46.2	4.4
8/31/2023	3:20:00 AM	69.2	46.6	4.7	47.6	4.6
8/31/2023	3:25:00 AM	69.4	66.6	4.5	66.7	4.3
8/31/2023	3:30:00 AM	68.2	59.3	3.9	59.2	3.8
8/31/2023	3:35:00 AM	64.9	43.8	3.6	44.4	3.5
8/31/2023	3:40:00 AM	61.3	20.4	2.5	24.9	2.3
8/31/2023	3:45:00 AM	59.2	19.9	3.3	18.8	3.1
8/31/2023	3:50:00 AM	58.3	23.5	3.3	23.9	3.1
8/31/2023	3:55:00 AM	57.5	30.4	4.1	30.5	4
8/31/2023	4:00:00 AM	56.5	28.7	4.5	28.3	4.3
8/31/2023	4:05:00 AM	54.9	39.2	3.6	38.8	3.5
8/31/2023	4:10:00 AM	53.3	41	3.2	41.2	3
8/31/2023	4:15:00 AM	50.9	40.6	3.5	41.3	3.4
8/31/2023	4:20:00 AM	49.1	27.9	2.1	23.8	2

Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	4:25:00 AM	47.9	38.4	3	38.6	2.9
8/31/2023	4:30:00 AM	46.4	45.7	2.7	47.4	2.7
8/31/2023	4:35:00 AM	45.6	54	3.6	55.4	3.5
8/31/2023	4:40:00 AM	44.9	66.6	3.9	67.3	3.8
8/31/2023	4:45:00 AM	44.2	68.5	3.8	68.8	3.7
8/31/2023	4:50:00 AM	43.1	68.9	3.7	68.8	3.6
8/31/2023	4:55:00 AM	41.8	47.5	3.1	49	2.9
8/31/2023	5:00:00 AM	40.9	24.5	2.9	26.2	2.8
8/31/2023	5:05:00 AM	40.9	31.7	3.7	30.1	3.5
8/31/2023	5:10:00 AM	40.4	47.8	4.5	48.2	4.4
8/31/2023	5:15:00 AM	39.7	54.3	3.2	52.6	3.2
8/31/2023	5:20:00 AM	39.9	117.9	1.3	103.2	0.8
8/31/2023	5:25:00 AM	39.1	117.7	2.6	112.6	2.4
8/31/2023	5:30:00 AM	37.8	49.3	3	50.4	2.9
8/31/2023	5:35:00 AM	37.2	45.6	3.3	46.5	3.2
8/31/2023	5:40:00 AM	37.5	53.1	3.1	53.3	3
8/31/2023	5:45:00 AM	37	54.1	2.1	54.1	2
8/31/2023	5:50:00 AM	36.9	46.1	2.8	45.7	2.8
8/31/2023	5:55:00 AM	35.8	49.4	2.8	49.7	2.8
8/31/2023	6:00:00 AM	35.7	37.4	2.8	37.1	2.7
8/31/2023	6:05:00 AM	35.6	46.8	3.7	47.3	3.6
8/31/2023	6:10:00 AM	35.7	42.2	2.9	42	2.8
8/31/2023	6:15:00 AM	36.3	60.5	3.1	60.2	3
8/31/2023	6:20:00 AM	37	69.3	3.5	69.4	3.4
8/31/2023	6:25:00 AM	37.7	68.7	2.4	68.4	2.3
8/31/2023	6:30:00 AM	37.5	67.3	2.4	67.3	2.4
8/31/2023	6:35:00 AM	37.3	63.9	3.7	63.4	3.6
8/31/2023	6:40:00 AM	37.7	71.9	3	71.9	2.9
8/31/2023	6:45:00 AM	38.8	81	2.5	81.5	2.5
8/31/2023	6:50:00 AM	39.7	69.1	2.9	68.7	2.8
8/31/2023	6:55:00 AM	41.3	90.7	3	90.3	3
8/31/2023	7:00:00 AM	44.2	102.4	3.2	101.8	3.1
8/31/2023	7:05:00 AM	46.8	100.3	2.1	101.8	2
8/31/2023	7:10:00 AM	48.2	113.4	3.5	112.5	3.4
8/31/2023	7:15:00 AM	48.4	100	3.6	100	3.4
8/31/2023	7:20:00 AM	47.8	98.1	3.4	99.2	3.2
8/31/2023	7:25:00 AM	47.9	107.6	2.1	103.8	2
8/31/2023	7:30:00 AM	47.7	117.4	2.5	116.9	2.3
8/31/2023	7:35:00 AM	47.3	134.9	5.8	136.5	5.6
8/31/2023	7:40:00 AM	46.3	140.6	6.4	141.3	6.3
8/31/2023	7:45:00 AM	45	138.5	6	138.4	5.8
8/31/2023	7:50:00 AM	44	126	5.2	128.2	4.9
8/31/2023	7:55:00 AM	44	138.5	6.3	139.1	6.2
8/31/2023	8:00:00 AM	45.5	141.6	5.7	141.4	5.7
8/31/2023	8:05:00 AM	46.5	116.3	5	116.3	4.7
8/31/2023	8:10:00 AM	47.5	119	4.9	118.8	4.7
8/31/2023	8:15:00 AM	48.3	134.3	4.1	138.6	3.8
8/31/2023	8:20:00 AM	49.2	131.2	4	126.8	3.8
8/31/2023	8:25:00 AM	50.7	146.8	4.7	148.6	4.6
8/31/2023	8:30:00 AM	50.8	139	5.8	137.9	5.7
8/31/2023	8:35:00 AM	51	129.1	6.1	130.3	5.8
8/31/2023	8:40:00 AM	51.6	107.2	4.3	110.5	4
8/31/2023	8:45:00 AM	51.1	131	4.7	129.4	4.5

Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	8:50:00 AM	50.1	106.9	3.6	104	3.3
8/31/2023	8:55:00 AM	48.8	123.5	3.4	122.2	3.1
8/31/2023	9:00:00 AM	46.2	158.8	3.6	158.7	3.5
8/31/2023	9:05:00 AM	43	175.5	2.7	166.9	2.2
8/31/2023	9:10:00 AM	40.4	119.2	1.2	141	0.9
8/31/2023	9:15:00 AM	38.8	135.2	4.5	136.4	4.1
8/31/2023	9:20:00 AM	37.4	111.1	2.4	108.9	2.3
8/31/2023	9:25:00 AM	36.9	71.9	2.1	66.6	1.6
8/31/2023	9:30:00 AM	36.2	92	1.4	95.1	1.2
8/31/2023	9:35:00 AM	36.1	137.1	3.3	136.2	3.1
8/31/2023	9:40:00 AM	35.6	149.4	2.3	141.6	2.2
8/31/2023	9:45:00 AM	35.1	<	<	<	<
8/31/2023	9:50:00 AM	33.6	<	<	<	<
8/31/2023	9:55:00 AM	32.7	<	<	<	<
8/31/2023	10:00:00 AM	32.7	<	<	<	<
8/31/2023	10:05:00 AM	34.8	<	<	<	<
8/31/2023	10:10:00 AM	36.2	<	<	<	<
8/31/2023	10:15:00 AM	35.6	<	<	<	<
8/31/2023	10:20:00 AM	36	<	<	<	<
8/31/2023	10:25:00 AM	35.3	<	<	<	<
8/31/2023	10:30:00 AM	34.4	256.5	8.3	255.7	8.1
8/31/2023	10:35:00 AM	36.8	230.8	4.2	245.7	2.9
8/31/2023	10:40:00 AM	40.3	276.6	4.8	271.2	4.4
8/31/2023	10:45:00 AM	43.8	265.6	2.5	265.3	2
8/31/2023	10:50:00 AM	46.5	311.2	3.9	301	3.5
8/31/2023	10:55:00 AM	48.6	261	6.6	259.4	5.9
8/31/2023	11:00:00 AM	47.8	255.8	8.7	258.9	8.1
8/31/2023	11:05:00 AM	43.6	268	7.1	271.8	6.7
8/31/2023	11:10:00 AM	41.5	288.8	9.4	290	8.8
8/31/2023	11:15:00 AM	41.1	252.6	8.3	252.2	8.1
8/31/2023	11:20:00 AM	39.9	236.3	5.8	240.3	4.9
8/31/2023	11:25:00 AM	37.8	221.7	6.5	218.1	5.3
8/31/2023	11:30:00 AM	36	308.8	6.6	314.5	6
8/31/2023	11:35:00 AM	32.8	280	9.1	280.1	8.7
8/31/2023	11:40:00 AM	30.6	277.1	5.9	275.7	5.7
8/31/2023	11:45:00 AM	28.7	305.5	6.5	305.4	6.2
8/31/2023	11:50:00 AM	26	309.2	4.9	313.3	4.4
8/31/2023	11:55:00 AM	23.7	256.5	8.2	257.4	7.9
8/31/2023	12:00:00 PM	22.8	263	7.4	265.8	6.8
8/31/2023	12:05:00 PM	22.8	282.3	11	282.2	10.7
8/31/2023	12:10:00 PM	23.5	274	10	274.5	9.6
8/31/2023	12:15:00 PM	24.7	270.5	8.7	271.4	8.2
8/31/2023	12:20:00 PM	26.8	267.4	9	268.5	8.5
8/31/2023	12:25:00 PM	29.9	275.5	9.8	277.5	9
8/31/2023	12:30:00 PM	32.5	257.6	7.1	257.7	6.3
8/31/2023	12:35:00 PM	32.3	304.4	6.9	301.7	6.1
8/31/2023	12:40:00 PM	31.3	270.3	6.1	271.3	5.5
8/31/2023	12:45:00 PM	29.5	299.8	6.5	299.6	6
8/31/2023	12:50:00 PM	28.3	289.3	4.8	277	4.1
8/31/2023	12:55:00 PM	26.6	286.5	3.3	274.9	1.7
8/31/2023	1:00:00 PM	26.9	254.8	7.7	257.6	7.4
8/31/2023	1:05:00 PM	28.8	252.4	8.5	251.6	8
8/31/2023	1:10:00 PM	31.1	243.2	9.8	240.8	9.3

## Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	1:15:00 PM	34.3	251.7	10.1	253.4	9.7
8/31/2023	1:20:00 PM	35.8	263.3	8.5	263.7	8.2
8/31/2023	1:25:00 PM	36.2	252.9	7.1	253.6	6.9
8/31/2023	1:30:00 PM	34.8	269.3	9.9	269.8	9.5
8/31/2023	1:35:00 PM	32.9	279.4	8.9	278.8	8.4
8/31/2023	1:40:00 PM	30.5	279	8.9	279.5	8.6
8/31/2023	1:45:00 PM	28.6	259.9	7.5	260.2	7.2
8/31/2023	1:50:00 PM	28.4	264.1	9.7	264	9
8/31/2023	1:55:00 PM	27.6	260.8	10.2	261.3	10
8/31/2023	2:00:00 PM	27.4	271.5	7.8	271.2	7.1
8/31/2023	2:05:00 PM	26.7	274.7	10.4	274.8	9.8
8/31/2023	2:10:00 PM	27	301.4	8.4	302.4	8
8/31/2023	2:15:00 PM	28.2	251.9	8.7	250.8	8.2
8/31/2023	2:20:00 PM	28.8	273	8.1	272.6	7.9
8/31/2023	2:25:00 PM	27.5	277.7	6.6	274.6	6.2
8/31/2023	2:30:00 PM	28.9	263.7	8.4	264	8.1
8/31/2023	2:35:00 PM	29.8	282.6	10.4	283.9	9.8
8/31/2023	2:40:00 PM	30.3	262.4	10.9	261	10.5
8/31/2023	2:45:00 PM	30.4	282.4	9.2	277.4	8.7
8/31/2023	2:50:00 PM	29.4	267.3	8.6	266.7	8.1
8/31/2023	2:55:00 PM	30	265.3	11	265.2	10.7
8/31/2023	3:00:00 PM	31.2	261.2	11.5	260.9	11.3
8/31/2023	3:05:00 PM	32.5	255.2	9.3	258.2	9
8/31/2023	3:10:00 PM	32.9	270.8	9.5	269.1	9.2
8/31/2023	3:15:00 PM	33.1	272	9.7	273	9.3
8/31/2023	3:20:00 PM	35	274	11.9	273.6	11.5
8/31/2023	3:25:00 PM	37.4	271.3	13.5	271.1	13
8/31/2023	3:30:00 PM	40.2	284.8	10.3	286	9.8
8/31/2023	3:35:00 PM	43	264.5	13	264.9	12.2
8/31/2023	3:40:00 PM	48.9	251.1	13.1	245.8	12.1
8/31/2023	3:45:00 PM	54.2	265.5	13.2	264.5	12.8
8/31/2023	3:50:00 PM	55.5	258	11	257.9	10.7
8/31/2023	3:55:00 PM	56	239.8	13.8	239.8	13.5
8/31/2023	4:00:00 PM	55.5	248	8.1	249.2	7.6
8/31/2023	4:05:00 PM	52.3	264.4	12.2	264.5	11.7
8/31/2023	4:10:00 PM	48.3	251.1	12.9	250.6	12.6
8/31/2023	4:15:00 PM	44.9	251.4	9.5	251.6	9.2
8/31/2023	4:20:00 PM	41.7	257.7	10	256.9	9.8
8/31/2023	4:25:00 PM	38.9	266.7	11.5	266.6	10.9
8/31/2023	4:30:00 PM	36.9	273.5	9.9	273.7	9.1
8/31/2023	4:35:00 PM	35.6	251	9.9	251.9	9.7
8/31/2023	4:40:00 PM	35.3	263.9	9.4	262.3	9.2
8/31/2023	4:45:00 PM	35.2	261.4	9.7	262.4	9.4
8/31/2023	4:50:00 PM	34.6	248.2	11.4	248.1	11.2
8/31/2023	4:55:00 PM	34.7	256.7	9.5	256.1	9.3
8/31/2023	5:00:00 PM	34.6	250	11.4	250.2	11
8/31/2023	5:05:00 PM	35.6	263.5	10.5	261.9	10
8/31/2023	5:10:00 PM	35.8	269.1	9.5	271.4	9
8/31/2023	5:15:00 PM	36.7	262.1	10.3	262.9	10
8/31/2023	5:20:00 PM	38.4	268.1	10.3	267.8	10
8/31/2023	5:25:00 PM	38.3	273.1	9.1	272.7	8.8
8/31/2023	5:30:00 PM	35.4	269.8	7.2	273.3	6.7
8/31/2023	5:35:00 PM	36	259.4	10.7	258.3	10.3

## Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	5:40:00 PM	39.3	256.4	10.2	256.1	10
8/31/2023	5:45:00 PM	40.7	261.9	11.8	260.9	10.9
8/31/2023	5:50:00 PM	42.5	252.7	10.8	252.9	10.5
8/31/2023	5:55:00 PM	42.7	267.9	12	268.4	11.6
8/31/2023	6:00:00 PM	42.4	257.1	10.9	257.8	10.5
8/31/2023	6:05:00 PM	42.1	263.8	11.6	264.2	11.3
8/31/2023	6:10:00 PM	41.6	263.1	10.7	263.6	10.4
8/31/2023	6:15:00 PM	41.1	262.3	10.3	262.9	9.9
8/31/2023	6:20:00 PM	39.7	266.5	11	265.2	10.7
8/31/2023	6:25:00 PM	38.3	266	10.4	265.3	10.1
8/31/2023	6:30:00 PM	37	262.4	11.7	262.1	11.3
8/31/2023	6:35:00 PM	38	261.1	9.5	261.1	9.2
8/31/2023	6:40:00 PM	39.6	273.3	7.9	273.8	7.7
8/31/2023	6:45:00 PM	40.7	262.2	9.8	261.3	9.5
8/31/2023	6:50:00 PM	41.6	265.1	9.5	265.2	9.3
8/31/2023	6:55:00 PM	42.2	263.4	9.1	264.6	8.8
8/31/2023	7:00:00 PM	41.8	269.7	10.1	268.9	9.8
8/31/2023	7:05:00 PM	41.5	261.2	9.6	260.8	9.4
8/31/2023	7:10:00 PM	42.1	275.1	10	275.6	9.7
8/31/2023	7:15:00 PM	41.6	270.4	11.5	270.4	11.3
8/31/2023	7:20:00 PM	40.4	261.1	9.7	260.9	9.4
8/31/2023	7:25:00 PM	40.3	250	9.9	249.4	9.6
8/31/2023	7:30:00 PM	41.9	258	8.6	258.2	8.1
8/31/2023	7:35:00 PM	42.1	266.1	9.3	266.5	9
8/31/2023	7:40:00 PM	43.1	260.8	7	261.3	6.6
8/31/2023	7:45:00 PM	42.8	261.4	9.7	262.1	9.4
8/31/2023	7:50:00 PM	41.4	255.3	8.9	256.4	8.6
8/31/2023	7:55:00 PM	40.9	240.7	8.1	240.7	7.8
8/31/2023	8:00:00 PM	40.4	250.4	10.3	250.1	10
8/31/2023	8:05:00 PM	38.7	243.8	9.3	243.8	9.1
8/31/2023	8:10:00 PM	36.4	242.3	8.9	242.8	8.6
8/31/2023	8:15:00 PM	34.5	243.1	7.9	242.5	7.7
8/31/2023	8:20:00 PM	33.4	244.9	8.2	243.5	7.9
8/31/2023	8:25:00 PM	32.9	244.6	8.5	244.1	8.1
8/31/2023	8:30:00 PM	34.3	224.7	11	224.3	10.4
8/31/2023	8:35:00 PM	39.9	164.7	20.2	162.8	19.5
8/31/2023	8:40:00 PM	82.8	159.6	28.5	160.2	27.6
8/31/2023	8:45:00 PM	296.7	162.4	34.9	162.6	34.2
8/31/2023	8:50:00 PM	1245.3	165.5	32.9	165.5	32.2
8/31/2023	8:55:00 PM	5291.9	165.1	28.3	165.3	27.6
8/31/2023	9:00:00 PM	2517.6	167.4	31.1	167.5	30.3
8/31/2023	9:05:00 PM	1218.9	161.5	28	161.7	27.2
8/31/2023	9:10:00 PM	1098.3	164.7	24.7	165.2	24.1
8/31/2023	9:15:00 PM	8636	165.9	28.2	166	27.6
8/31/2023	9:20:00 PM	6838.9	166.2	23.9	165.9	23.1
8/31/2023	9:25:00 PM	5132.9	178.1	26.7	178.1	26.2
8/31/2023	9:30:00 PM	3886.5	172.2	17.7	170.2	17
8/31/2023	9:35:00 PM	2914.1	174.3	16.7	174.8	15.8
8/31/2023	9:40:00 PM	2143.9	215.5	18.1	214.4	17.4
8/31/2023	9:45:00 PM	1582.3	210.9	17.8	209.5	16.8
8/31/2023	9:50:00 PM	1161.3	206	15.5	207	15
8/31/2023	9:55:00 PM	835.1	223	12.3	222.2	11.6
8/31/2023	10:00:00 PM	587.6	222.4	16.1	222.6	15.7

Site: Central Phoenix						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	10:05:00 PM	417.7	236.4	21.1	235.5	20.5
8/31/2023	10:10:00 PM	292.7	241.6	17.2	242	16.7
8/31/2023	10:15:00 PM	209.3	236.3	15.2	235.6	14.7
8/31/2023	10:20:00 PM	153.2	239	11.7	238.6	11.2
8/31/2023	10:25:00 PM	116.5	236.9	10.1	235.9	9.8
8/31/2023	10:30:00 PM	88.6	214.8	5.4	214	5.2
8/31/2023	10:35:00 PM	69.6	97.9	7.8	87.7	5.4
8/31/2023	10:40:00 PM	55.4	149.4	6.5	143.5	5.4
8/31/2023	10:45:00 PM	50.8	117.6	1.9	72.3	0.8
8/31/2023	10:50:00 PM	43.4	130.1	2.5	201.2	1
8/31/2023	10:55:00 PM	32	86.2	3.5	88.8	3.1
8/31/2023	11:00:00 PM	25.9	142	5.2	141.7	5.1
8/31/2023	11:05:00 PM	24.6	123.1	4	124.2	3.6
8/31/2023	11:10:00 PM	18.8	108.9	1.8	113.7	1.7
8/31/2023	11:15:00 PM	17.2	46.5	0.9	44.9	0.8
8/31/2023	11:20:00 PM	22.7	14.4	1.5	16.1	0.9
8/31/2023	11:25:00 PM	44.7	294.3	3.3	296.4	3.1
8/31/2023	11:30:00 PM	72.2	319.2	5.3	319.5	5.3
8/31/2023	11:35:00 PM	78.1	315.3	8.5	315.1	8.4
8/31/2023	11:40:00 PM	73.4	317.5	8.3	318.2	8.2
8/31/2023	11:45:00 PM	65.5	322.1	8.6	322.3	8.5
8/31/2023	11:50:00 PM	57.3	326.3	10.9	326.4	10.8
8/31/2023	11:55:00 PM	49.8	316	11.9	316.5	11.7
	Average	207	265	7.6	242.2	3.3
	Max	8636	326.3	34.9	326.4	34.2
	Max Hour	725766.3824	9106.928271	31.02413347	9114.572453	29.74794384
	Min	17.2	13.5	0.9	13.4	0.8
	Count	288	279	279	279	279
	Total	59628.7	51770.7	2141.6	51756	2047.8
	Date Printed:	9/30/2024 12:04				

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	12:00:00 AM	35.9	<	10.6	<	10.5
8/31/2023	12:05:00 AM	31.3	<	10.8	<	10.7
8/31/2023	12:10:00 AM	31.6	<	9.6	<	9.5
8/31/2023	12:15:00 AM	30.8	<	7.8	<	7.6
8/31/2023	12:20:00 AM	31.9	<	8.1	<	8.1
8/31/2023	12:25:00 AM	30.3	<	7.5	<	7.4
8/31/2023	12:30:00 AM	29.8	<	7.6	<	7.5
8/31/2023	12:35:00 AM	29.7	<	7.6	<	7.5
8/31/2023	12:40:00 AM	31.3	<	7.3	<	7.2
8/31/2023	12:45:00 AM	34.3	<	5.6	<	5.6
8/31/2023	12:50:00 AM	34.7	<	6.7	<	6.6
8/31/2023	12:55:00 AM	37.3	<	6.1	<	6
8/31/2023	1:00:00 AM	38	<	4.3	<	4.2
8/31/2023	1:05:00 AM	34.6	<	3.4	<	3.4
8/31/2023	1:10:00 AM	31.3	<	4	<	3.9
8/31/2023	1:15:00 AM	31.4	<	3.2	<	2.8
8/31/2023	1:20:00 AM	31.2	<	3.4	<	3.4
8/31/2023	1:25:00 AM	26.9	<	2.8	<	2.6
8/31/2023	1:30:00 AM	33.2	<	3.7	<	3.6
8/31/2023	1:35:00 AM	31.4	<	3.5	<	3.4
8/31/2023	1:40:00 AM	33.9	<	4.4	<	4.2
8/31/2023	1:45:00 AM	32.9	<	6.4	<	6.2
8/31/2023	1:50:00 AM	27.6	<	8.3	<	8.1
8/31/2023	1:55:00 AM	30.8	<	11.1	<	11
8/31/2023	2:00:00 AM	34.8	<	12	<	11.9
8/31/2023	2:05:00 AM	40.1	<	11.2	<	11.1
8/31/2023	2:10:00 AM	38.3	<	11.2	<	11.2
8/31/2023	2:15:00 AM	34.3	<	11.5	<	11.3
8/31/2023	2:20:00 AM	34.4	<	11.1	<	11
8/31/2023	2:25:00 AM	32.9	<	10.6	<	10.4
8/31/2023	2:30:00 AM	30.9	<	10.9	<	10.8
8/31/2023	2:35:00 AM	28.1	<	9.5	<	9.4
8/31/2023	2:40:00 AM	27.6	<	10.7	<	10.6
8/31/2023	2:45:00 AM	23.4	<	10.2	<	10.1
8/31/2023	2:50:00 AM	24.6	<	9.1	<	9.1
8/31/2023	2:55:00 AM	27.6	<	9	<	9
8/31/2023	3:00:00 AM	27.3	<	8.6	<	8.5
8/31/2023	3:05:00 AM	26.4	<	9.8	<	9.8
8/31/2023	3:10:00 AM	28.6	<	6.9	<	6.8
8/31/2023	3:15:00 AM	30.4	<	8	<	7.9
8/31/2023	3:20:00 AM	32.5	<	6.2	<	6.1
8/31/2023	3:25:00 AM	33.9	<	5	<	4.9
8/31/2023	3:30:00 AM	32.7	<	4.4	<	4.2
8/31/2023	3:35:00 AM	34	<	3.3	<	3.2
8/31/2023	3:40:00 AM	29.3	<	2.6	<	2.3
8/31/2023	3:45:00 AM	27.5	<	0.7	<	0.5
8/31/2023	3:50:00 AM	28.7	<	1.7	<	1.6
8/31/2023	3:55:00 AM	27.2	<	1.4	<	1.3
8/31/2023	4:00:00 AM	27	<	1.5	<	1.3
8/31/2023	4:05:00 AM	28.1	<	0.8	<	0.6
8/31/2023	4:10:00 AM	36.7	<	2	<	2
8/31/2023	4:15:00 AM	38.1	<	2.6	<	2.5
8/31/2023	4:20:00 AM	32.5	<	1.8	<	1.8

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	4:25:00 AM	29.9	<	1.6	<	1.6
8/31/2023	4:30:00 AM	29.5	<	2	<	2
8/31/2023	4:35:00 AM	30	<	2.3	<	2.3
8/31/2023	4:40:00 AM	27.7	<	2.1	<	2
8/31/2023	4:45:00 AM	31.1	<	3.9	<	3.8
8/31/2023	4:50:00 AM	49.3	<	2.7	<	2.6
8/31/2023	4:55:00 AM	61.3	<	1.7	<	1.6
8/31/2023	5:00:00 AM	64.8	<	2.9	<	2.9
8/31/2023	5:05:00 AM	56.8	<	2	<	1.9
8/31/2023	5:10:00 AM	50	<	3.3	<	3.3
8/31/2023	5:15:00 AM	54	<	4.4	<	4.4
8/31/2023	5:20:00 AM	55.4	<	3.9	<	3.9
8/31/2023	5:25:00 AM	59.4	<	3.3	<	3.2
8/31/2023	5:30:00 AM	55.9	<	2.3	<	2.2
8/31/2023	5:35:00 AM	48.8	<	2.7	<	2.7
8/31/2023	5:40:00 AM	44.8	<	3	<	2.7
8/31/2023	5:45:00 AM	43.7	<	3.3	<	3.2
8/31/2023	5:50:00 AM	48.1	<	2.6	<	2.6
8/31/2023	5:55:00 AM	46.3	<	2.2	<	2.1
8/31/2023	6:00:00 AM	42.3	<	2	<	2
8/31/2023	6:05:00 AM	39.7	<	2.1	<	2.1
8/31/2023	6:10:00 AM	39.4	<	1.8	<	1.8
8/31/2023	6:15:00 AM	40.3	<	0.5	<	0.5
8/31/2023	6:20:00 AM	39.2	<	1.5	<	1.4
8/31/2023	6:25:00 AM	44.9	<	1.8	<	1.8
8/31/2023	6:30:00 AM	51.1	<	2.3	<	2.3
8/31/2023	6:35:00 AM	58.5	<	3	<	3
8/31/2023	6:40:00 AM	57.5	<	2.5	<	2.5
8/31/2023	6:45:00 AM	67.5	<	1.4	<	1.4
8/31/2023	6:50:00 AM	74.7	<	2.1	<	2
8/31/2023	6:55:00 AM	80.6	<	3.5	<	3.5
8/31/2023	7:00:00 AM	111.2	<	3.2	<	3.2
8/31/2023	7:05:00 AM	128.3	<	3.3	<	3.2
8/31/2023	7:10:00 AM	123.9	<	2.8	<	2.7
8/31/2023	7:15:00 AM	133.3	<	2	<	1.9
8/31/2023	7:20:00 AM	126.8	<	1.9	<	1.7
8/31/2023	7:25:00 AM	104.3	<	2.5	<	2.4
8/31/2023	7:30:00 AM	83.6	<	2.8	<	2.7
8/31/2023	7:35:00 AM	58	<	3.1	<	3.1
8/31/2023	7:40:00 AM	48.9	<	2.5	<	2.4
8/31/2023	7:45:00 AM	47.8	<	3.1	<	3.1
8/31/2023	7:50:00 AM	43.4	<	4.4	<	4.4
8/31/2023	7:55:00 AM	44	<	3.6	<	3.6
8/31/2023	8:00:00 AM	45	<	3	<	2.9
8/31/2023	8:05:00 AM	48.4	<	3.6	<	3.5
8/31/2023	8:10:00 AM	55.3	<	3.4	<	3.2
8/31/2023	8:15:00 AM	60.9	<	4.1	<	4.1
8/31/2023	8:20:00 AM	50.8	<	4.7	<	4.5
8/31/2023	8:25:00 AM	47.6	<	3.5	<	3.1
8/31/2023	8:30:00 AM	50.7	<	4.8	<	4.7
8/31/2023	8:35:00 AM	53.7	<	3.8	<	3.6
8/31/2023	8:40:00 AM	48.4	<	4.2	<	4.1
8/31/2023	8:45:00 AM	43.7	<	3.5	<	3.4

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	8:50:00 AM	37.7	<	2.3	<	2.2
8/31/2023	8:55:00 AM	33.9	<	4.7	<	4.4
8/31/2023	9:00:00 AM	37.1	<	3.9	<	3.7
8/31/2023	9:05:00 AM	37.2	<	3.4	<	3
8/31/2023	9:10:00 AM	36.6	<	4.8	<	4.5
8/31/2023	9:15:00 AM	40.3	<	2	<	1.2
8/31/2023	9:20:00 AM	34.8	<	3.9	<	3.7
8/31/2023	9:25:00 AM	33.5	<	1.8	<	1.5
8/31/2023	9:30:00 AM	35	<	2.1	<	1.6
8/31/2023	9:35:00 AM	32.3	<	2.9	<	2.8
8/31/2023	9:40:00 AM	29.1	<	2.1	<	1.6
8/31/2023	9:45:00 AM	25.2	<	4.1	<	4
8/31/2023	9:50:00 AM	30.9	<	3.7	<	3.5
8/31/2023	9:55:00 AM	30.2	<	3.5	<	3.1
8/31/2023	10:00:00 AM	30.9	<	3.5	<	2.9
8/31/2023	10:05:00 AM	25.3	<	2.6	<	2.2
8/31/2023	10:10:00 AM	22.9	<	3.1	<	2.4
8/31/2023	10:15:00 AM	28.2	<	6.9	<	6.6
8/31/2023	10:20:00 AM	29.5	<	2.6	<	2.2
8/31/2023	10:25:00 AM	26.3	<	3.6	<	3.4
8/31/2023	10:30:00 AM	24.8	<	5.8	<	5.1
8/31/2023	10:35:00 AM	23.8	<	4.3	<	3.4
8/31/2023	10:40:00 AM	31.5	<	4.8	<	4.6
8/31/2023	10:45:00 AM	33	<	5.4	<	5.1
8/31/2023	10:50:00 AM	27.5	<	5.9	<	5.7
8/31/2023	10:55:00 AM	32.4	<	5.9	<	5.8
8/31/2023	11:00:00 AM	32.3	<	4.4	<	4.2
8/31/2023	11:05:00 AM	37.4	<	1.7	<	1.6
8/31/2023	11:10:00 AM	45.3	<	4.7	<	4.5
8/31/2023	11:15:00 AM	43	<	5.9	<	5.8
8/31/2023	11:20:00 AM	47.4	<	3.4	<	3.2
8/31/2023	11:25:00 AM	54	<	6.1	<	4.4
8/31/2023	11:30:00 AM	48.3	<	8	<	7.8
8/31/2023	11:35:00 AM	43.8	<	8.4	<	8.2
8/31/2023	11:40:00 AM	41.3	<	5	<	4.6
8/31/2023	11:45:00 AM	39.8	<	3.2	<	2.3
8/31/2023	11:50:00 AM	38.8	<	1.6	<	1.4
8/31/2023	11:55:00 AM	38.6	<	3.1	<	0.9
8/31/2023	12:00:00 PM	50.4	<	5.5	<	5.4
8/31/2023	12:05:00 PM	49	<	4.1	<	3.8
8/31/2023	12:10:00 PM	41.3	<	4.4	<	4.1
8/31/2023	12:15:00 PM	38.2	<	4.1	<	0.6
8/31/2023	12:20:00 PM	45.8	<	4.7	<	4.4
8/31/2023	12:25:00 PM	43.7	<	6.2	<	6
8/31/2023	12:30:00 PM	39.6	<	3.5	<	3
8/31/2023	12:35:00 PM	36.3	<	5.7	<	5.3
8/31/2023	12:40:00 PM	34.6	<	4.4	<	3.3
8/31/2023	12:45:00 PM	35.3	<	7.5	<	7
8/31/2023	12:50:00 PM	33.7	<	6.3	<	5.8
8/31/2023	12:55:00 PM	31.7	<	7.9	<	7.6
8/31/2023	1:00:00 PM	32.8	<	8.4	<	8.1
8/31/2023	1:05:00 PM	34.3	<	8.1	<	7.2
8/31/2023	1:10:00 PM	35.6	<	6.7	<	6.5

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	1:15:00 PM	35.6	<	5.7	<	4.7
8/31/2023	1:20:00 PM	33.3	<	6.2	<	5.6
8/31/2023	1:25:00 PM	39.2	<	7.4	<	7.2
8/31/2023	1:30:00 PM	36.4	<	7.3	<	7.1
8/31/2023	1:35:00 PM	32.2	<	6.3	<	5.8
8/31/2023	1:40:00 PM	31	<	5.4	<	4.1
8/31/2023	1:45:00 PM	30.4	<	5.7	<	5.4
8/31/2023	1:50:00 PM	28.2	<	7	<	6.6
8/31/2023	1:55:00 PM	28.1	<	6.7	<	6.4
8/31/2023	2:00:00 PM	32.6	<	5.9	<	5.6
8/31/2023	2:05:00 PM	31.2	<	4.6	<	4.2
8/31/2023	2:10:00 PM	28.4	<	9.7	<	9.5
8/31/2023	2:15:00 PM	24.4	<	8.2	<	8
8/31/2023	2:20:00 PM	21.3	<	9.6	<	9.2
8/31/2023	2:25:00 PM	18.9	<	10.3	<	10
8/31/2023	2:30:00 PM	18.9	<	5.9	<	5.7
8/31/2023	2:35:00 PM	21.8	<	3.7	<	3.5
8/31/2023	2:40:00 PM	20.5	<	8.5	<	7.8
8/31/2023	2:45:00 PM	18.3	<	8	<	7.5
8/31/2023	2:50:00 PM	20.8	<	8.6	<	8.4
8/31/2023	2:55:00 PM	22.2	<	12.1	<	11.7
8/31/2023	3:00:00 PM	21.8	<	9.6	<	9.5
8/31/2023	3:05:00 PM	23	<	7.1	<	6.5
8/31/2023	3:10:00 PM	24.6	<	10.5	<	9.8
8/31/2023	3:15:00 PM	27.4	<	7.5	<	7.2
8/31/2023	3:20:00 PM	21.4	<	7.3	<	6.8
8/31/2023	3:25:00 PM	23.3	<	11.5	<	10.8
8/31/2023	3:30:00 PM	28.3	<	9.5	<	8.8
8/31/2023	3:35:00 PM	25.7	<	9	<	8.6
8/31/2023	3:40:00 PM	21	<	9.7	<	9.5
8/31/2023	3:45:00 PM	22.8	<	8.5	<	8.4
8/31/2023	3:50:00 PM	28.3	<	6	<	5.7
8/31/2023	3:55:00 PM	35.4	<	8.2	<	7.6
8/31/2023	4:00:00 PM	37.4	<	12.3	<	11.8
8/31/2023	4:05:00 PM	39.1	<	16.6	<	16.4
8/31/2023	4:10:00 PM	45.1	<	11.7	<	11.4
8/31/2023	4:15:00 PM	41.6	<	17.1	<	16.9
8/31/2023	4:20:00 PM	46.7	<	13.7	<	13.4
8/31/2023	4:25:00 PM	42	<	12.7	<	12.4
8/31/2023	4:30:00 PM	45.5	<	12.6	<	12.4
8/31/2023	4:35:00 PM	40.9	<	12.9	<	12.4
8/31/2023	4:40:00 PM	38.5	<	10.9	<	10.7
8/31/2023	4:45:00 PM	34.9	<	11.3	<	10.9
8/31/2023	4:50:00 PM	27.1	<	12.2	<	11.8
8/31/2023	4:55:00 PM	24.6	<	12.1	<	11.9
8/31/2023	5:00:00 PM	34.4	<	14.8	<	14.7
8/31/2023	5:05:00 PM	34.5	<	11.7	<	11.6
8/31/2023	5:10:00 PM	32.2	<	12.4	<	12.2
8/31/2023	5:15:00 PM	31.1	<	14.4	<	14.2
8/31/2023	5:20:00 PM	25.6	<	13.3	<	13.1
8/31/2023	5:25:00 PM	27.9	<	14.2	<	14
8/31/2023	5:30:00 PM	23.9	<	12.1	<	11.9
8/31/2023	5:35:00 PM	22	<	12.6	<	12.4

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	5:40:00 PM	21.6	<	11.8	<	11.6
8/31/2023	5:45:00 PM	22.6	<	10.7	<	10.5
8/31/2023	5:50:00 PM	22.7	<	9.1	<	9
8/31/2023	5:55:00 PM	21.7	<	10.7	<	10.5
8/31/2023	6:00:00 PM	26.1	<	11.4	<	11.3
8/31/2023	6:05:00 PM	25.2	<	9	<	8.8
8/31/2023	6:10:00 PM	24.1	<	10.9	<	10.7
8/31/2023	6:15:00 PM	21.7	<	10.1	<	10
8/31/2023	6:20:00 PM	21.5	<	11.3	<	11.2
8/31/2023	6:25:00 PM	21.1	<	10.9	<	10.8
8/31/2023	6:30:00 PM	15.1	<	9.6	<	9.5
8/31/2023	6:35:00 PM	21.1	<	8.8	<	8.7
8/31/2023	6:40:00 PM	22.6	<	8.4	<	8.4
8/31/2023	6:45:00 PM	13.6	<	6.6	<	6.5
8/31/2023	6:50:00 PM	21	<	6	<	5.9
8/31/2023	6:55:00 PM	17.8	<	8.2	<	8.1
8/31/2023	7:00:00 PM	18.8	<	8.1	<	8
8/31/2023	7:05:00 PM	23.2	<	6.7	<	6.6
8/31/2023	7:10:00 PM	17.7	<	5.4	<	5.3
8/31/2023	7:15:00 PM	25.3	<	4.9	<	4.9
8/31/2023	7:20:00 PM	20.5	<	5.5	<	5.4
8/31/2023	7:25:00 PM	27.4	<	4.8	<	4.8
8/31/2023	7:30:00 PM	21.1	<	5.5	<	5.5
8/31/2023	7:35:00 PM	36.8	<	4.6	<	4.6
8/31/2023	7:40:00 PM	33.1	<	4.5	<	4.4
8/31/2023	7:45:00 PM	35.7	<	4	<	4
8/31/2023	7:50:00 PM	27.5	<	4.1	<	4
8/31/2023	7:55:00 PM	32.7	<	4.1	<	4.1
8/31/2023	8:00:00 PM	25.6	<	4.5	<	4.5
8/31/2023	8:05:00 PM	34.7	<	6.3	<	6.3
8/31/2023	8:10:00 PM	29.7	<	6	<	5.9
8/31/2023	8:15:00 PM	32.9	<	8.9	<	8.8
8/31/2023	8:20:00 PM	38.6	<	9.4	<	9.3
8/31/2023	8:25:00 PM	39.8	<	11.7	<	11.6
8/31/2023	8:30:00 PM	37.5	<	13.6	<	13.5
8/31/2023	8:35:00 PM	36	<	13.2	<	13
8/31/2023	8:40:00 PM	35.4	<	10.9	<	10.8
8/31/2023	8:45:00 PM	35.6	<	11.5	<	11.4
8/31/2023	8:50:00 PM	31	<	9	<	8.8
8/31/2023	8:55:00 PM	34.2	<	11.3	<	11.1
8/31/2023	9:00:00 PM	35.7	<	11.8	<	11.6
8/31/2023	9:05:00 PM	45.5	<	13.8	<	13.5
8/31/2023	9:10:00 PM	54.7	<	25.9	<	24.6
8/31/2023	9:15:00 PM	601.5	<	27.4	<	26.9
8/31/2023	9:20:00 PM	5419.3	<	24.8	<	24.1
8/31/2023	9:25:00 PM	6016.6	<	26.4	<	25.9
8/31/2023	9:30:00 PM	4794.4	<	30.2	<	29.6
8/31/2023	9:35:00 PM	4175.4	<	29.9	<	29.4
8/31/2023	9:40:00 PM	2709.3	<	29.5	<	29
8/31/2023	9:45:00 PM	1449.6	<	24.4	<	23.8
8/31/2023	9:50:00 PM	753.9	<	26.8	<	26.2
8/31/2023	9:55:00 PM	412.6	<	22.2	<	21.6
8/31/2023	10:00:00 PM	236.9	<	19.1	<	18.7

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	10:05:00 PM	142.8	<	20.9	<	20.6
8/31/2023	10:10:00 PM	90.8	<	16	<	15.6
8/31/2023	10:15:00 PM	68.6	<	13.7	<	13.3
8/31/2023	10:20:00 PM	50.1	<	11.8	<	11.5
8/31/2023	10:25:00 PM	46	<	8.4	<	8
8/31/2023	10:30:00 PM	42.7	<	7.4	<	7
8/31/2023	10:35:00 PM	47.9	<	11.5	<	10.9
8/31/2023	10:40:00 PM	66.2	<	10.1	<	9.4
8/31/2023	10:45:00 PM	64.5	<	12.8	<	12.5
8/31/2023	10:50:00 PM	72.4	<	11	<	10.7
8/31/2023	10:55:00 PM	82.2	<	11.1	<	10.7
8/31/2023	11:00:00 PM	69.7	<	9.4	<	8.9
8/31/2023	11:05:00 PM	63	<	6.8	<	6.5
8/31/2023	11:10:00 PM	53.4	<	6.6	<	6.4
8/31/2023	11:15:00 PM	44.2	<	5	<	4.9
8/31/2023	11:20:00 PM	38.8	<	4.6	<	4.4
8/31/2023	11:25:00 PM	44	<	3.8	<	3.7
8/31/2023	11:30:00 PM	41.7	<	4.9	<	4.8
8/31/2023	11:35:00 PM	50.1	<	5.7	<	5.6
8/31/2023	11:40:00 PM	52.1	<	6.2	<	6.1
8/31/2023	11:45:00 PM	44.8	<	5.5	<	5.4
8/31/2023	11:50:00 PM	39.1	<	7.1	<	7
8/31/2023	11:55:00 PM	37.3	<	7.4	<	7.4
	Average	129.7		7.3		7.1
	Max	6016.6	0	30.2	0	29.6
	Max Hour					
	Min	13.6	0	0.5	0	0.5
	Count	288	0	288	0	288
	Total					

## Site: Mesa

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	12:00:00 AM	-	260.3	3.5	268.1	3.1
7/9/2021	12:05:00 AM	-	270.5	5.8	271.2	5.4
7/9/2021	12:10:00 AM	-	252.6	2.9	260.5	2.6
7/9/2021	12:15:00 AM	-	238	5.1	236.9	4.7
7/9/2021	12:20:00 AM	-	234.6	2.9	235	2.7
7/9/2021	12:25:00 AM	-	225.8	3.6	227.2	3.4
7/9/2021	12:30:00 AM	-	227.6	4.7	228.2	4.4
7/9/2021	12:35:00 AM	-	233.4	4.8	231	4.5
7/9/2021	12:40:00 AM	-	242.7	4.7	246.6	4.1
7/9/2021	12:45:00 AM	-	246.8	3.7	246.2	3.5
7/9/2021	12:50:00 AM	-	264.3	4.3	262.5	4
7/9/2021	12:55:00 AM	-	268.3	2.9	265.8	2.7
7/9/2021	1:00:00 AM	-	265.8	2.7	263.2	2.6
7/9/2021	1:05:00 AM	-	273	3.5	270.9	3.2
7/9/2021	1:10:00 AM	-	284.3	4.1	281.4	3.9
7/9/2021	1:15:00 AM	-	281.8	3.7	282.5	3.6
7/9/2021	1:20:00 AM	-	283.4	4.6	282.7	4.5
7/9/2021	1:25:00 AM	-	275	3.1	276.1	3
7/9/2021	1:30:00 AM	-	263.8	3.5	262.1	3.2
7/9/2021	1:35:00 AM	-	272.3	3.5	264.1	3.1
7/9/2021	1:40:00 AM	-	266.9	2	262.6	1.8
7/9/2021	1:45:00 AM	-	270.3	3.1	269.4	3
7/9/2021	1:50:00 AM	-	248.3	2.3	249.4	2.2
7/9/2021	1:55:00 AM	-	283.9	1.5	275.6	1.3
7/9/2021	2:00:00 AM	-	279.3	2.8	276.3	2.6
7/9/2021	2:05:00 AM	-	293.9	2.2	293	2.1
7/9/2021	2:10:00 AM	-	301.3	0	302.7	0.5
7/9/2021	2:15:00 AM	-	314.3	0	356.4	0.5
7/9/2021	2:20:00 AM	-	357.5	2.6	354.5	2.4
7/9/2021	2:25:00 AM	-	319.5	1.6	319.1	1.5
7/9/2021	2:30:00 AM	-	323.8	1.6	326.2	1.5
7/9/2021	2:35:00 AM	-	316.5	0	296.8	0.6
7/9/2021	2:40:00 AM	-	299.5	2.1	297.7	1.7
7/9/2021	2:45:00 AM	-	341.6	2.6	340.5	2.5
7/9/2021	2:50:00 AM	-	14.9	2.6	14.6	2.5
7/9/2021	2:55:00 AM	-	37.1	1.3	37.4	1.1
7/9/2021	3:00:00 AM	-	41.1	1.4	35.4	1.3
7/9/2021	3:05:00 AM	-	4.2	2	2.2	1.9
7/9/2021	3:10:00 AM	-	87.1	2.5	100.4	2.1
7/9/2021	3:15:00 AM	-	111.8	2.7	113.7	2.6
7/9/2021	3:20:00 AM	-	84.4	3.3	88.4	3.2
7/9/2021	3:25:00 AM	-	52.4	0.9	57.9	0.8
7/9/2021	3:30:00 AM	-	83.7	2.3	84	2.2
7/9/2021	3:35:00 AM	-	77.2	2.2	77.2	2.1
7/9/2021	3:40:00 AM	-	84.8	2.3	89.5	2.1
7/9/2021	3:45:00 AM	-	115.2	3.7	123.2	2.9
7/9/2021	3:50:00 AM	-	32.3	2.8	19.9	2.4
7/9/2021	3:55:00 AM	-	33.8	3	30.8	2.9
7/9/2021	4:00:00 AM	-	43.8	3.6	42.4	3.5
7/9/2021	4:05:00 AM	-	57.1	2.6	56.4	2.4
7/9/2021	4:10:00 AM	-	56.3	2.3	56.1	2.3
7/9/2021	4:15:00 AM	-	65.2	2.8	64.7	2.7
7/9/2021	4:20:00 AM	-	71.3	4.7	71.6	4.7

Site: Mesa						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	4:25:00 AM	-	54.5	3.1	53.8	2.9
7/9/2021	4:30:00 AM	-	43.5	3.5	43.4	3.4
7/9/2021	4:35:00 AM	-	44.5	3.3	43.3	3.2
7/9/2021	4:40:00 AM	-	57.1	2.3	57.3	2.2
7/9/2021	4:45:00 AM	-	54.9	2	51.9	1.9
7/9/2021	4:50:00 AM	-	43.1	1.8	36.9	1.7
7/9/2021	4:55:00 AM	-	66.9	2.4	67.4	2.4
7/9/2021	5:00:00 AM	-	79	2.6	79	2.5
7/9/2021	5:05:00 AM	-	60.1	1.9	58.5	1.8
7/9/2021	5:10:00 AM	-	57.9	2.9	59.7	2.8
7/9/2021	5:15:00 AM	-	90.1	3.4	89.9	3.4
7/9/2021	5:20:00 AM	-	82.6	3.3	83.2	3.2
7/9/2021	5:25:00 AM	-	78.4	2.4	79.9	2.3
7/9/2021	5:30:00 AM	-	85.8	3.6	85.4	3.6
7/9/2021	5:35:00 AM	-	74.7	4.1	74.6	4
7/9/2021	5:40:00 AM	-	69.6	3.7	70.9	3.6
7/9/2021	5:45:00 AM	-	69.2	3.7	70.7	3.6
7/9/2021	5:50:00 AM	-	84.2	5.2	83.8	5.1
7/9/2021	5:55:00 AM	-	88.8	3.3	88.3	3.2
7/9/2021	6:00:00 AM	-	70.8	3.1	70.2	3
7/9/2021	6:05:00 AM	-	68.3	3	67.8	2.9
7/9/2021	6:10:00 AM	-	68.7	2.4	67.6	2.4
7/9/2021	6:15:00 AM	-	76.1	2	77.6	1.9
7/9/2021	6:20:00 AM	-	64.6	2.4	61.5	2.2
7/9/2021	6:25:00 AM	-	49.8	2.3	44	2.2
7/9/2021	6:30:00 AM	-	47.3	2.9	45.8	2.7
7/9/2021	6:35:00 AM	-	52.1	3.7	52.3	3.5
7/9/2021	6:40:00 AM	-	67.9	4.8	68.3	4.6
7/9/2021	6:45:00 AM	-	62.9	4.4	63.5	4.2
7/9/2021	6:50:00 AM	-	68.3	4.5	69.7	4.4
7/9/2021	6:55:00 AM	-	59.4	5.2	59.3	5
7/9/2021	7:00:00 AM	-	66.6	6	66.8	5.8
7/9/2021	7:05:00 AM	-	66	5.5	66.8	5.3
7/9/2021	7:10:00 AM	-	80.2	5.5	80.5	5.4
7/9/2021	7:15:00 AM	-	59.6	5.4	58.6	5.1
7/9/2021	7:20:00 AM	-	80.7	5.8	81.1	5.7
7/9/2021	7:25:00 AM	-	72.6	4.8	75.8	4.6
7/9/2021	7:30:00 AM	-	80.6	4.5	80.5	4.3
7/9/2021	7:35:00 AM	-	74.8	3.7	76.1	3.2
7/9/2021	7:40:00 AM	-	84.6	4.6	88	4.2
7/9/2021	7:45:00 AM	-	98.7	4.4	96	4.1
7/9/2021	7:50:00 AM	-	103.5	5.4	104.3	5.1
7/9/2021	7:55:00 AM	-	107.9	5.3	107.5	5
7/9/2021	8:00:00 AM	-	102.9	4.8	102.4	4.7
7/9/2021	8:05:00 AM	-	100.1	3.9	99.5	3.6
7/9/2021	8:10:00 AM	-	113.9	3	108.2	2.6
7/9/2021	8:15:00 AM	-	69.8	4.3	63.3	3.7
7/9/2021	8:20:00 AM	-	111.8	4.2	110	4.1
7/9/2021	8:25:00 AM	-	123.5	4.9	121.6	4.6
7/9/2021	8:30:00 AM	-	124.7	2.6	124.7	2.5
7/9/2021	8:35:00 AM	-	62	4.2	64	4.1
7/9/2021	8:40:00 AM	-	74.8	4.2	75.5	4
7/9/2021	8:45:00 AM	-	339.3	0	350.4	0.4

## Site: Mesa

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	8:50:00 AM	-	311	2.1	307.4	2
7/9/2021	8:55:00 AM	-	267.2	2.3	266.6	2.1
7/9/2021	9:00:00 AM	-	317	3.1	312.6	2.3
7/9/2021	9:05:00 AM	-	17.8	1.7	28.4	1.2
7/9/2021	9:10:00 AM	-	107.9	2.4	105.5	2.2
7/9/2021	9:15:00 AM	-	84.5	3.4	74.2	3
7/9/2021	9:20:00 AM	-	343.3	1	342.2	0.4
7/9/2021	9:25:00 AM	-	332.4	1.6	292.7	0.9
7/9/2021	9:30:00 AM	-	350.3	2	346.5	1.7
7/9/2021	9:35:00 AM	-	25.1	3.5	26.1	3.3
7/9/2021	9:40:00 AM	-	43.7	3.7	41.2	3.4
7/9/2021	9:45:00 AM	-	58.1	2.6	51.5	1.9
7/9/2021	9:50:00 AM	-	347	2.4	334.3	2
7/9/2021	9:55:00 AM	-	315	3.1	314.2	2.7
7/9/2021	10:00:00 AM	-	332.8	2.3	327.9	2
7/9/2021	10:05:00 AM	-	350	1.7	355.8	1.5
7/9/2021	10:10:00 AM	-	164.1	4.5	192	1.7
7/9/2021	10:15:00 AM	-	214.3	4.6	213.7	4.3
7/9/2021	10:20:00 AM	-	199.5	4.2	197.7	3.8
7/9/2021	10:25:00 AM	-	187.4	3.1	189.3	2.9
7/9/2021	10:30:00 AM	-	150.6	4.7	150.6	4.4
7/9/2021	10:35:00 AM	-	152	4.8	152.2	4.7
7/9/2021	10:40:00 AM	-	189.7	3.8	205.9	1.7
7/9/2021	10:45:00 AM	-	299.3	4	292.3	3.5
7/9/2021	10:50:00 AM	-	294.8	3	285.4	2.5
7/9/2021	10:55:00 AM	-	279.1	5.3	277	4.8
7/9/2021	11:00:00 AM	-	341.7	1.9	348	1.1
7/9/2021	11:05:00 AM	-	284.6	5	283.7	4.8
7/9/2021	11:10:00 AM	-	259.3	3.7	261.2	2.9
7/9/2021	11:15:00 AM	-	179.4	7.2	175.1	6.8
7/9/2021	11:20:00 AM	-	173	5.6	179.6	4.6
7/9/2021	11:25:00 AM	-	161.2	2.4	135.8	1.8
7/9/2021	11:30:00 AM	-	241.4	3.2	229.7	2.1
7/9/2021	11:35:00 AM	-	281	5.8	280.7	5.6
7/9/2021	11:40:00 AM	-	331.6	3.6	331.9	3.4
7/9/2021	11:45:00 AM	-	179.4	6.8	177.8	5.9
7/9/2021	11:50:00 AM	-	178.2	6.5	169.5	6.1
7/9/2021	11:55:00 AM	-	202.7	7	197.5	6.6
7/9/2021	12:00:00 PM	-	220.4	4	201.9	3.1
7/9/2021	12:05:00 PM	-	188.7	5.6	192.9	5.1
7/9/2021	12:10:00 PM	-	147.6	5.7	145.5	5.2
7/9/2021	12:15:00 PM	-	130.4	5.1	135.8	2.3
7/9/2021	12:20:00 PM	-	299.7	5.1	297.8	3.9
7/9/2021	12:25:00 PM	-	220.7	4.1	217.9	3.7
7/9/2021	12:30:00 PM	-	241	4.4	245.8	4.2
7/9/2021	12:35:00 PM	-	247.5	3.6	221.6	2.9
7/9/2021	12:40:00 PM	-	281	4.6	281.1	4
7/9/2021	12:45:00 PM	-	220.3	4.5	216.4	4
7/9/2021	12:50:00 PM	-	208.9	4.5	208.7	4.4
7/9/2021	12:55:00 PM	-	213.7	1.9	196.2	1.3
7/9/2021	1:00:00 PM	-	90.2	2.2	88.7	2.1
7/9/2021	1:05:00 PM	-	293.1	4.7	284.1	4.5
7/9/2021	1:10:00 PM	-	286	5.7	283	5

Site: Mesa							
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>	
7/9/2021	1:15:00 PM	-	311.8	6.3	309.5	6.1	
7/9/2021	1:20:00 PM	-	316.5	4.6	316.2	4.3	
7/9/2021	1:25:00 PM	-	224.2	4.2	225.5	3.9	
7/9/2021	1:30:00 PM	-	228.9	3	218.8	2.1	
7/9/2021	1:35:00 PM	-	248.8	5.4	245.5	5.2	
7/9/2021	1:40:00 PM	-	266.7	4.1	223.9	2.6	
7/9/2021	1:45:00 PM	-	217.1	4.7	211.9	4.2	
7/9/2021	1:50:00 PM	-	174.9	6.3	175.3	5.8	
7/9/2021	1:55:00 PM	-	283.8	5	275.4	3.1	
7/9/2021	2:00:00 PM	-	289.9	6.8	289.3	6.5	
7/9/2021	2:05:00 PM	-	315.9	4.1	309.5	2.9	
7/9/2021	2:10:00 PM	-	272.4	8	275.3	6.9	
7/9/2021	2:15:00 PM	-	216.3	6.6	219.9	5.7	
7/9/2021	2:20:00 PM	-	264.5	7.9	268.2	7.2	
7/9/2021	2:25:00 PM	-	270.2	8.1	269.7	7.7	
7/9/2021	2:30:00 PM	-	269.9	5.6	275.8	3.2	
7/9/2021	2:35:00 PM	-	295.4	5.9	296.1	5.3	
7/9/2021	2:40:00 PM	-	297.8	8.3	297.6	8.1	
7/9/2021	2:45:00 PM	-	274	6.6	272.4	6.1	
7/9/2021	2:50:00 PM	-	274.8	6.5	277.2	6.1	
7/9/2021	2:55:00 PM	-	266.5	7.3	267.7	6.7	
7/9/2021	3:00:00 PM	-	250.3	5.2	253.6	4.8	
7/9/2021	3:05:00 PM	-	261.7	5.5	252.3	5	
7/9/2021	3:10:00 PM	-	293.5	7.3	289.5	6.3	
7/9/2021	3:15:00 PM	-	282.7	8.1	286.1	7.7	
7/9/2021	3:20:00 PM	-	302.5	6.8	302.7	6.4	
7/9/2021	3:25:00 PM	-	320.5	7.1	321.3	6.5	
7/9/2021	3:30:00 PM	-	293.5	8.3	292.4	7.5	
7/9/2021	3:35:00 PM	-	278.2	5.4	280.4	5.1	
7/9/2021	3:40:00 PM	-	261.8	7.2	268.6	6.4	
7/9/2021	3:45:00 PM	-	280	7.5	282.2	7.3	
7/9/2021	3:50:00 PM	-	287.4	7.3	283.9	6.8	
7/9/2021	3:55:00 PM	-	295.8	5.2	294.5	4.9	
7/9/2021	4:00:00 PM	-	280.7	5.7	287.2	4.8	
7/9/2021	4:05:00 PM	-	288.9	9.5	287.5	9	
7/9/2021	4:10:00 PM	-	284.9	6	284.4	5.8	
7/9/2021	4:15:00 PM	-	311.3	5.9	304.6	5.5	
7/9/2021	4:20:00 PM	-	298.3	4.7	301.4	3.8	
7/9/2021	4:25:00 PM	-	270.3	4.8	286.3	4.5	
7/9/2021	4:30:00 PM	-	273.3	6.5	272.6	6.1	
7/9/2021	4:35:00 PM	-	279	5	281.3	4.7	
7/9/2021	4:40:00 PM	-	306.6	7.3	306.6	7.1	
7/9/2021	4:45:00 PM	-	299.6	7.3	298.8	6.9	
7/9/2021	4:50:00 PM	-	298.7	4.6	303	3.8	
7/9/2021	4:55:00 PM	-	289.9	8.9	289.3	8.8	
7/9/2021	5:00:00 PM	-	274.5	5	280.7	4.5	
7/9/2021	5:05:00 PM	-	292.6	5	291.7	4.5	
7/9/2021	5:10:00 PM	-	283.8	5.6	284.3	5.1	
7/9/2021	5:15:00 PM	-	301.9	9.7	305.4	8.5	
7/9/2021	5:20:00 PM	-	298.8	8.1	297.9	7.9	
7/9/2021	5:25:00 PM	-	285	4.7	289.6	4.1	
7/9/2021	5:30:00 PM	-	274.9	3.4	286.4	2.8	
7/9/2021	5:35:00 PM	-	284.1	7.5	284	7.2	

Site: Mesa						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	5:40:00 PM	-	294.9	6	292	5.7
7/9/2021	5:45:00 PM	-	312.4	5.1	318.2	4.5
7/9/2021	5:50:00 PM	-	284.6	6.7	288.4	6.1
7/9/2021	5:55:00 PM	-	281.2	5	284.6	4.2
7/9/2021	6:00:00 PM	-	282.6	5.8	280.8	5.4
7/9/2021	6:05:00 PM	-	290.5	8.5	289.2	8.2
7/9/2021	6:10:00 PM	-	280.6	6.1	280.6	5.9
7/9/2021	6:15:00 PM	-	283.9	6	284.5	5.8
7/9/2021	6:20:00 PM	-	280.2	7.2	281.6	7
7/9/2021	6:25:00 PM	-	278.2	5.5	280.4	5.2
7/9/2021	6:30:00 PM	-	276.1	6.8	279.4	6.6
7/9/2021	6:35:00 PM	-	268.8	4.9	268.2	4.6
7/9/2021	6:40:00 PM	-	278	4.9	278.5	4.7
7/9/2021	6:45:00 PM	-	284.6	5.4	284.6	5.3
7/9/2021	6:50:00 PM	-	278.3	7.4	278.8	7.3
7/9/2021	6:55:00 PM	-	284.1	6.3	284	6.2
7/9/2021	7:00:00 PM	-	247.3	5.4	245.9	4.9
7/9/2021	7:05:00 PM	-	247.7	3.6	247.7	3.3
7/9/2021	7:10:00 PM	-	248.8	4.4	248.1	4
7/9/2021	7:15:00 PM	-	258.6	6.3	257.7	5.9
7/9/2021	7:20:00 PM	-	248.9	4.9	253.5	4.4
7/9/2021	7:25:00 PM	-	249.2	4.5	251.3	4.2
7/9/2021	7:30:00 PM	-	248.2	5.5	249.2	5
7/9/2021	7:35:00 PM	-	242.8	6	242	5.6
7/9/2021	7:40:00 PM	-	261.4	4.7	260.4	4.2
7/9/2021	7:45:00 PM	-	237.9	4.8	237.4	4.5
7/9/2021	7:50:00 PM	-	236.9	4.2	237.2	3.9
7/9/2021	7:55:00 PM	-	248.3	5.3	248	5
7/9/2021	8:00:00 PM	-	246.5	3.6	241.6	3.3
7/9/2021	8:05:00 PM	-	265.5	4.5	262.2	4.1
7/9/2021	8:10:00 PM	-	252.8	4.9	253.7	4.5
7/9/2021	8:15:00 PM	-	244.6	3.8	243.3	3.6
7/9/2021	8:20:00 PM	-	241	5.8	242.5	5.5
7/9/2021	8:25:00 PM	-	244.8	3.7	243.9	3.5
7/9/2021	8:30:00 PM	-	247.3	4.9	245.4	4.6
7/9/2021	8:35:00 PM	-	271.9	4.4	271.9	4
7/9/2021	8:40:00 PM	-	257.9	4.9	259.7	4.5
7/9/2021	8:45:00 PM	-	258.4	5.4	258.6	4.9
7/9/2021	8:50:00 PM	-	266.7	5.9	265.7	5.4
7/9/2021	8:55:00 PM	-	277.5	6.7	278.3	6.4
7/9/2021	9:00:00 PM	-	275.4	6.8	275.5	6.5
7/9/2021	9:05:00 PM	-	278.7	5.9	278.7	5.7
7/9/2021	9:10:00 PM	-	281.9	6	282.7	5.8
7/9/2021	9:15:00 PM	-	273.6	5	276	4.8
7/9/2021	9:20:00 PM	-	276.4	4.6	277.3	4.4
7/9/2021	9:25:00 PM	-	274.8	4.7	277	4.4
7/9/2021	9:30:00 PM	-	281.2	5.3	282.7	5.1
7/9/2021	9:35:00 PM	-	285.9	5.5	285.6	5.3
7/9/2021	9:40:00 PM	-	285.8	3.9	285.8	3.7
7/9/2021	9:45:00 PM	-	281.8	4.6	281.9	4.5
7/9/2021	9:50:00 PM	-	280.7	6.2	280.6	6.1
7/9/2021	9:55:00 PM	-	285.6	5.4	285.7	5.2
7/9/2021	10:00:00 PM	-	254	2.8	252.8	2.7

Site: Mesa						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	10:05:00 PM	-	279.5	2.2	280.8	2.1
7/9/2021	10:10:00 PM	-	281.9	3.7	281.9	3.6
7/9/2021	10:15:00 PM	-	292.6	0	275.3	0.7
7/9/2021	10:20:00 PM	-	123.7	1.5	105.5	1.4
7/9/2021	10:25:00 PM	-	115.4	13.4	119.2	12.9
7/9/2021	10:30:00 PM	-	124.1	20	124.1	19.3
7/9/2021	10:35:00 PM	-	116.7	23	115.3	21.9
7/9/2021	10:40:00 PM	-	124.8	21.4	126.1	20.7
7/9/2021	10:45:00 PM	-	125.8	20.3	125.5	19.8
7/9/2021	10:50:00 PM	-	142.2	16.9	141.4	16.4
7/9/2021	10:55:00 PM	-	135.5	20.8	135.5	20.4
7/9/2021	11:00:00 PM	-	135.8	15.2	135.5	14.9
7/9/2021	11:05:00 PM	-	152.7	13.8	153.3	13.4
7/9/2021	11:10:00 PM	-	153.7	9	153.6	8.6
7/9/2021	11:15:00 PM	-	162.7	8.8	161.3	8.5
7/9/2021	11:20:00 PM	-	171.7	8.6	171.7	8.3
7/9/2021	11:25:00 PM	-	174.5	9.6	175.3	9.4
7/9/2021	11:30:00 PM	-	168.4	11.1	168.4	10.8
7/9/2021	11:35:00 PM	-	174	9.9	173.6	9.6
7/9/2021	11:40:00 PM	-	188.8	8.7	188.5	8.5
7/9/2021	11:45:00 PM	-	204.9	8.6	205.1	8.4
7/9/2021	11:50:00 PM	-	224.1	10	224.3	9.8
7/9/2021	11:55:00 PM	-	228.3	9.8	228.8	9.5
	Average	-	278	4.9	250.7	1.2
	Max	-	357.5	23	356.4	21.9
	Max Hour	-	9086.451524	10.107003	9089.841227	9.673260622
	Min	-	4.2	0	2.2	0.4
	Count	0	288	288	288	288
	Total	0	59583.7	1432.6	59388.9	1329.1
	Date Printed:		9/30/2024 11:01			

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	12:00:00 AM	44.2	244.1	8.9	243.6	8.7
7/9/2021	12:05:00 AM	41.1	254.5	9.7	255.5	9.3
7/9/2021	12:10:00 AM	37.9	252	11.8	252.8	11.5
7/9/2021	12:15:00 AM	36.1	250.1	10.8	249.9	10.6
7/9/2021	12:20:00 AM	34.3	255	11.4	255.1	11.1
7/9/2021	12:25:00 AM	32.9	257.1	11.9	257.3	11.6
7/9/2021	12:30:00 AM	31.7	259.6	8	260.5	7.8
7/9/2021	12:35:00 AM	31.2	258	10	257.5	9.7
7/9/2021	12:40:00 AM	30.6	251.4	10	251.4	9.8
7/9/2021	12:45:00 AM	30.1	254.3	11.2	254.9	11
7/9/2021	12:50:00 AM	30	257.2	7	259.6	6.8
7/9/2021	12:55:00 AM	30.1	261.4	7.3	262.8	7
7/9/2021	1:00:00 AM	30	265.7	4.4	265.4	4.2
7/9/2021	1:05:00 AM	29.4	263.5	5.9	263.7	5.8
7/9/2021	1:10:00 AM	28.5	266.5	7.6	267.2	7.4
7/9/2021	1:15:00 AM	28	258.9	8.5	258.7	8.2
7/9/2021	1:20:00 AM	26.6	262.2	7.9	261.9	7.7
7/9/2021	1:25:00 AM	26.9	260.9	8.2	261.9	8
7/9/2021	1:30:00 AM	25.6	249.5	6.2	250.2	6
7/9/2021	1:35:00 AM	24.8	249.8	7	249.7	6.7
7/9/2021	1:40:00 AM	24.2	248.2	6.6	248.7	6.4
7/9/2021	1:45:00 AM	24.5	252.3	5.8	253.2	5.6
7/9/2021	1:50:00 AM	24.5	256.6	5.4	257.2	5.2
7/9/2021	1:55:00 AM	24.1	267	5.7	267.2	5.6
7/9/2021	2:00:00 AM	24.2	255.9	4.2	256.9	4
7/9/2021	2:05:00 AM	23.4	260	4	263.2	3.8
7/9/2021	2:10:00 AM	23.6	265.5	4.7	267.4	4.5
7/9/2021	2:15:00 AM	23.6	266.1	5.2	265.5	5
7/9/2021	2:20:00 AM	23.8	275.1	4.4	275.7	4.3
7/9/2021	2:25:00 AM	24.4	274.9	3.6	274.2	3.4
7/9/2021	2:30:00 AM	23.4	273.6	3.5	275.9	3.4
7/9/2021	2:35:00 AM	23.2	283.4	3.4	285	3.2
7/9/2021	2:40:00 AM	22.7	285.1	2	291	1.8
7/9/2021	2:45:00 AM	22.6	285.6	1.6	285.1	1.4
7/9/2021	2:50:00 AM	22.1	241	1.1	248.5	0.9
7/9/2021	2:55:00 AM	21.4	88.6	1	107.9	0.9
7/9/2021	3:00:00 AM	21.6	97.7	1.5	97.6	1.5
7/9/2021	3:05:00 AM	21.1	71.1	1.4	69.7	1.3
7/9/2021	3:10:00 AM	20.5	26.8	0	71	0.3
7/9/2021	3:15:00 AM	21	357.9	1.7	352.8	1.6
7/9/2021	3:20:00 AM	19.9	296.3	2.9	295.3	2.8
7/9/2021	3:25:00 AM	19.8	286.8	3.1	286.5	3
7/9/2021	3:30:00 AM	19.4	293.6	3.2	293	3.2
7/9/2021	3:35:00 AM	18.7	290.6	3.1	290.4	2.8
7/9/2021	3:40:00 AM	18.6	304	4.3	300.8	4
7/9/2021	3:45:00 AM	18.8	298	3.9	298.2	3.7
7/9/2021	3:50:00 AM	18.2	304.6	4.4	303.4	4.2
7/9/2021	3:55:00 AM	18.2	306.2	4.2	305.4	4.1
7/9/2021	4:00:00 AM	18.3	318.6	5.6	318.6	5.4
7/9/2021	4:05:00 AM	18.6	309.7	4.7	308.9	4.4
7/9/2021	4:10:00 AM	18.6	306.6	3.9	305.4	3.8
7/9/2021	4:15:00 AM	18.1	318.3	3.7	319.7	3.6
7/9/2021	4:20:00 AM	18.2	329.5	4.3	330.2	4.1

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	4:25:00 AM	18.6	336.4	3.8	336.8	3.7
7/9/2021	4:30:00 AM	19.2	332.3	4.1	330.4	4
7/9/2021	4:35:00 AM	19.6	329.3	4.7	329.4	4.5
7/9/2021	4:40:00 AM	19.5	326	4	325.9	3.9
7/9/2021	4:45:00 AM	19.1	331.3	5.1	331.5	5
7/9/2021	4:50:00 AM	18.9	329.1	5	328.3	4.8
7/9/2021	4:55:00 AM	19.2	325.7	3.4	325.7	3.3
7/9/2021	5:00:00 AM	19.4	317.5	4	317.5	3.8
7/9/2021	5:05:00 AM	19.6	306.3	4.9	306.3	4.7
7/9/2021	5:10:00 AM	20.3	312.3	4	311.6	3.9
7/9/2021	5:15:00 AM	20.3	302.6	4.3	302.3	4.2
7/9/2021	5:20:00 AM	20.4	297	3.7	296	3.5
7/9/2021	5:25:00 AM	19.8	299.9	3.9	298.9	3.7
7/9/2021	5:30:00 AM	20.3	293.5	5.6	292.8	5.4
7/9/2021	5:35:00 AM	21.1	285.4	4.6	285.3	4.4
7/9/2021	5:40:00 AM	21.4	276.8	3.5	278.8	3.4
7/9/2021	5:45:00 AM	22.4	274.1	2.9	276.7	2.4
7/9/2021	5:50:00 AM	23	290	3.4	290.5	3.2
7/9/2021	5:55:00 AM	22.9	197.4	1.8	179.8	0.9
7/9/2021	6:00:00 AM	25.1	126.3	2.7	125.7	2.7
7/9/2021	6:05:00 AM	27.1	120.3	2.4	119	2.4
7/9/2021	6:10:00 AM	29.2	122.4	2.1	121.2	2
7/9/2021	6:15:00 AM	28.9	119.7	2.8	120	2.8
7/9/2021	6:20:00 AM	28.8	114.4	3.1	114.3	3.1
7/9/2021	6:25:00 AM	31	95.6	1.3	107.1	1.3
7/9/2021	6:30:00 AM	32.1	118.6	0	163.9	0.5
7/9/2021	6:35:00 AM	31	342.8	1.5	5.7	1.2
7/9/2021	6:40:00 AM	28.7	302.6	3	326.8	2.5
7/9/2021	6:45:00 AM	27.4	256.9	1.4	255.4	0.8
7/9/2021	6:50:00 AM	25.7	320.5	2.9	319.7	2.6
7/9/2021	6:55:00 AM	25	295.6	0	297.2	0.7
7/9/2021	7:00:00 AM	24.8	15.2	1.7	20.6	1.5
7/9/2021	7:05:00 AM	25	318.1	4	320.1	3.7
7/9/2021	7:10:00 AM	24.7	17.9	3.6	15.9	3.5
7/9/2021	7:15:00 AM	30.5	58.4	3.3	59	3.1
7/9/2021	7:20:00 AM	34	29	2.4	25.3	1.5
7/9/2021	7:25:00 AM	34.6	349.2	0.9	323.2	0.3
7/9/2021	7:30:00 AM	32.7	306.2	3.3	301.8	2.7
7/9/2021	7:35:00 AM	31	256.9	1.9	257.7	1.7
7/9/2021	7:40:00 AM	30.3	265.9	3.3	268	3.2
7/9/2021	7:45:00 AM	29.3	281.4	2.6	284.7	2.4
7/9/2021	7:50:00 AM	26.7	262.8	2.7	261.3	2.5
7/9/2021	7:55:00 AM	26.5	281.4	3.1	282.7	3
7/9/2021	8:00:00 AM	<	295	4.9	295.4	4.7
7/9/2021	8:05:00 AM	<	301.5	4.1	299.2	4
7/9/2021	8:10:00 AM	<	265.7	3.6	267	3.4
7/9/2021	8:15:00 AM	<	290	4.4	288.3	4.1
7/9/2021	8:20:00 AM	<	269.1	4.7	270.3	4.5
7/9/2021	8:25:00 AM	<	279.8	3.2	274.5	2.7
7/9/2021	8:30:00 AM	<	316.3	3.9	316.6	3
7/9/2021	8:35:00 AM	<	264.5	4	264.4	3.7
7/9/2021	8:40:00 AM	<	293.9	1.2	266.8	0.5
7/9/2021	8:45:00 AM	<	245.7	3.3	245.8	3

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	8:50:00 AM	<	216.6	2.9	219.4	2.5
7/9/2021	8:55:00 AM	<	296.4	2.5	298	2.1
7/9/2021	9:00:00 AM	<	282.5	3.5	279.2	3.2
7/9/2021	9:05:00 AM	<	239.7	3.2	245.8	2.9
7/9/2021	9:10:00 AM	<	214.4	1.2	211.4	0.8
7/9/2021	9:15:00 AM	<	254.8	2.3	259.8	2
7/9/2021	9:20:00 AM	<	304.4	4.2	294.5	3.8
7/9/2021	9:25:00 AM	<	314.5	1.1	265.9	0.7
7/9/2021	9:30:00 AM	<	260.4	3.8	266.3	3.3
7/9/2021	9:35:00 AM	<	283.8	5.2	282.2	5
7/9/2021	9:40:00 AM	<	282.7	3.7	278	3.3
7/9/2021	9:45:00 AM	<	243.9	3.4	247.8	3.2
7/9/2021	9:50:00 AM	<	246.8	4	244.7	3.8
7/9/2021	9:55:00 AM	<	246.9	3	242.4	2.6
7/9/2021	10:00:00 AM	25.6	143.7	2.8	148.6	2.5
7/9/2021	10:05:00 AM	26.2	142.2	2.2	145.4	2
7/9/2021	10:10:00 AM	27.1	162.9	3.1	166.3	2.8
7/9/2021	10:15:00 AM	27.7	207	2.6	245.1	1.3
7/9/2021	10:20:00 AM	29.1	248.3	4.8	252.3	4.5
7/9/2021	10:25:00 AM	30	213.2	4	227.2	3.1
7/9/2021	10:30:00 AM	30.5	247.5	2.1	264.9	1.5
7/9/2021	10:35:00 AM	31.5	271.1	4.1	272.1	3.5
7/9/2021	10:40:00 AM	33.3	198.6	1.5	197.1	0.4
7/9/2021	10:45:00 AM	36.7	141.8	4.7	142.7	4.5
7/9/2021	10:50:00 AM	38.2	135.6	4.4	136	4.3
7/9/2021	10:55:00 AM	38.1	180.3	4.3	167.2	4.1
7/9/2021	11:00:00 AM	37.6	151.1	4.7	155.4	4.2
7/9/2021	11:05:00 AM	37.4	213.3	2.5	208.2	2.2
7/9/2021	11:10:00 AM	36.4	155.8	1.4	158.1	0.7
7/9/2021	11:15:00 AM	36.7	124.7	3.6	128.1	3.3
7/9/2021	11:20:00 AM	35.8	159.4	4.5	159.4	4.2
7/9/2021	11:25:00 AM	35.5	141.5	2.9	139.3	2.6
7/9/2021	11:30:00 AM	37.5	131.3	5.4	134.1	5.1
7/9/2021	11:35:00 AM	39.6	92	5	91.6	4.6
7/9/2021	11:40:00 AM	39.7	129.2	2.8	125.1	2.4
7/9/2021	11:45:00 AM	40.7	191.7	3	201.2	2.4
7/9/2021	11:50:00 AM	40.4	197.2	6.1	199.9	5.1
7/9/2021	11:55:00 AM	40.1	238.3	5.8	239.5	4.9
7/9/2021	12:00:00 PM	40.6	243.9	5.2	239.6	4.6
7/9/2021	12:05:00 PM	44.6	242.2	4.5	251.3	3.9
7/9/2021	12:10:00 PM	46.4	221.8	3	221.1	2.5
7/9/2021	12:15:00 PM	46.5	230.6	6.2	226.5	5.9
7/9/2021	12:20:00 PM	47.2	231.7	6.8	232	6.2
7/9/2021	12:25:00 PM	47.6	196.8	7.1	199.8	6.8
7/9/2021	12:30:00 PM	47.3	203	6.9	203.3	6.7
7/9/2021	12:35:00 PM	46	145.6	4.9	148	4.2
7/9/2021	12:40:00 PM	45.3	191.8	5.4	194	4.3
7/9/2021	12:45:00 PM	43.5	234.2	6.4	234.3	5.9
7/9/2021	12:50:00 PM	40	292.5	7.6	293.4	7.1
7/9/2021	12:55:00 PM	37.2	285.6	4.7	281.9	4.2
7/9/2021	1:00:00 PM	34.8	274	8	274.5	7.5
7/9/2021	1:05:00 PM	34.4	261.6	7.8	263.6	7.3
7/9/2021	1:10:00 PM	34.7	283.7	8	279.8	7.7

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	1:15:00 PM	34.3	312.6	5.4	310.3	5.2
7/9/2021	1:20:00 PM	33.8	291.6	4.9	289.5	4.1
7/9/2021	1:25:00 PM	33.1	254.9	9	256	8.7
7/9/2021	1:30:00 PM	32.2	251.8	7.3	250.2	6.9
7/9/2021	1:35:00 PM	31.5	262.8	9.8	263.2	9.4
7/9/2021	1:40:00 PM	30.7	240.9	9.2	242.5	9
7/9/2021	1:45:00 PM	29.8	235.8	6.4	236.2	6.2
7/9/2021	1:50:00 PM	29.3	267.9	6.1	269.7	5.6
7/9/2021	1:55:00 PM	29.5	277.5	5.7	285.7	5.4
7/9/2021	2:00:00 PM	29.5	282.1	8.5	281.9	8.2
7/9/2021	2:05:00 PM	28.8	283.3	7.9	281.6	7.4
7/9/2021	2:10:00 PM	27.8	295.4	8.5	294.4	7.7
7/9/2021	2:15:00 PM	26.7	277.2	9.2	275.7	8.7
7/9/2021	2:20:00 PM	26.9	274	10.5	272.8	10.2
7/9/2021	2:25:00 PM	28.3	306.9	9.2	307.2	8.7
7/9/2021	2:30:00 PM	29.3	299.9	8.1	299.8	7.8
7/9/2021	2:35:00 PM	29.7	295.4	7.4	303.5	6.8
7/9/2021	2:40:00 PM	29.6	279	6.5	279.6	5.8
7/9/2021	2:45:00 PM	29.9	261.3	8.4	261.3	7.6
7/9/2021	2:50:00 PM	29.7	274.9	8.3	275.8	7.9
7/9/2021	2:55:00 PM	30	263.1	7.3	265.3	6.9
7/9/2021	3:00:00 PM	30.7	263.3	6	264.2	5.4
7/9/2021	3:05:00 PM	30.7	268.4	5.1	263.6	4.6
7/9/2021	3:10:00 PM	30.2	292.9	5.3	294.5	5
7/9/2021	3:15:00 PM	30	297.4	7.4	294.7	6.7
7/9/2021	3:20:00 PM	29.7	290	8.1	291.5	7.7
7/9/2021	3:25:00 PM	29.2	275.9	10.1	275.1	9.6
7/9/2021	3:30:00 PM	29	253.2	9.2	253.9	8.9
7/9/2021	3:35:00 PM	27.8	261	6.1	259.1	5.9
7/9/2021	3:40:00 PM	26.3	272.6	6.4	272.4	5.5
7/9/2021	3:45:00 PM	25.4	274.8	8.5	276.4	8
7/9/2021	3:50:00 PM	25	289.7	8.2	289.7	8
7/9/2021	3:55:00 PM	24.2	271.7	6.6	275.2	6.1
7/9/2021	4:00:00 PM	23.9	245	6.3	245.1	6
7/9/2021	4:05:00 PM	23.6	263.7	4.8	270.5	4.4
7/9/2021	4:10:00 PM	23.4	243.4	9.9	244.2	9.7
7/9/2021	4:15:00 PM	22.9	252.9	7.7	253.1	7.6
7/9/2021	4:20:00 PM	22.8	250.9	7.7	252.2	7.5
7/9/2021	4:25:00 PM	22.3	255.2	8	255.7	7.7
7/9/2021	4:30:00 PM	22.3	247.9	4.2	250	3.8
7/9/2021	4:35:00 PM	22.7	243.5	8	252.2	7.4
7/9/2021	4:40:00 PM	22.5	242.6	5.9	244.3	5.5
7/9/2021	4:45:00 PM	22.1	252.7	11.1	253.8	10.8
7/9/2021	4:50:00 PM	22.3	244.7	4.7	248.7	4.5
7/9/2021	4:55:00 PM	21.9	293.7	4.9	283.3	4.1
7/9/2021	5:00:00 PM	22.1	262.7	10	262.7	9.7
7/9/2021	5:05:00 PM	22.2	266.7	7.1	266.8	6.9
7/9/2021	5:10:00 PM	22	236.6	8.9	236.9	8.6
7/9/2021	5:15:00 PM	23.2	260.4	6.8	258.6	6.3
7/9/2021	5:20:00 PM	23.4	264.9	9.1	263.4	8.6
7/9/2021	5:25:00 PM	23.4	232.5	6.6	233.9	6.3
7/9/2021	5:30:00 PM	24.2	252.8	6.1	254.8	5.8
7/9/2021	5:35:00 PM	24.7	270.6	7.6	271.3	7.2

## Site: South Scottsdale

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/9/2021	5:40:00 PM	24.6	269.3	7.6	268.7	7.3
7/9/2021	5:45:00 PM	24.8	267.1	5.6	268.6	5.1
7/9/2021	5:50:00 PM	25.4	272	5	274.4	4.5
7/9/2021	5:55:00 PM	25	249.3	7.8	247.6	7.5
7/9/2021	6:00:00 PM	24.5	282.2	7.3	284.4	7
7/9/2021	6:05:00 PM	24.9	257.4	6.7	256.4	6.3
7/9/2021	6:10:00 PM	25.1	253	7.3	252.7	7.1
7/9/2021	6:15:00 PM	23.6	244.7	6.4	243.2	6
7/9/2021	6:20:00 PM	23.4	248.5	5.3	249.1	5.1
7/9/2021	6:25:00 PM	23.9	255.2	4.4	260	4
7/9/2021	6:30:00 PM	24.1	277.2	6.6	276.9	6.3
7/9/2021	6:35:00 PM	24.4	257.3	8.1	257.7	8
7/9/2021	6:40:00 PM	24.2	246.4	6.4	247.1	6.2
7/9/2021	6:45:00 PM	23.7	243.3	7.6	244	7.3
7/9/2021	6:50:00 PM	23	227.3	5.8	226	5.6
7/9/2021	6:55:00 PM	23	235.5	7.5	235.8	7.3
7/9/2021	7:00:00 PM	22.5	252.2	6.8	250.8	6.5
7/9/2021	7:05:00 PM	22.3	248.6	7.6	249.3	7.4
7/9/2021	7:10:00 PM	21.9	244	7	243.6	6.7
7/9/2021	7:15:00 PM	21.8	254.7	8	254.5	7.8
7/9/2021	7:20:00 PM	21.6	256.7	7.7	256.7	7.5
7/9/2021	7:25:00 PM	21.4	252.1	8.1	253.1	7.8
7/9/2021	7:30:00 PM	21.5	248.9	7.2	249.7	7.1
7/9/2021	7:35:00 PM	21.5	248.6	5.4	249.5	5.2
7/9/2021	7:40:00 PM	21.3	255.5	7.1	254.5	6.8
7/9/2021	7:45:00 PM	21.7	244.8	7.3	244.7	7.2
7/9/2021	7:50:00 PM	22.3	234.2	7.8	234.3	7.6
7/9/2021	7:55:00 PM	22.7	239.4	6.5	240.2	6.3
7/9/2021	8:00:00 PM	23.8	243.6	5.4	245.3	5.2
7/9/2021	8:05:00 PM	24.6	247.6	8	248	7.8
7/9/2021	8:10:00 PM	24.4	241.8	7.7	241.8	7.4
7/9/2021	8:15:00 PM	24.4	241.9	9.3	242.3	9
7/9/2021	8:20:00 PM	22	237.7	8.8	238.6	8.5
7/9/2021	8:25:00 PM	20	240.6	10.5	241.8	10.2
7/9/2021	8:30:00 PM	20.4	249.4	9.5	249.6	9.2
7/9/2021	8:35:00 PM	20.5	241.3	7.6	242.1	7.4
7/9/2021	8:40:00 PM	21.4	240.4	9.2	239.6	9
7/9/2021	8:45:00 PM	23.7	240.3	7.8	240	7.6
7/9/2021	8:50:00 PM	25.2	245.1	9.5	245.6	9.3
7/9/2021	8:55:00 PM	24.2	243.2	9.8	243.7	9.6
7/9/2021	9:00:00 PM	23.3	241.3	9.7	241.2	9.5
7/9/2021	9:05:00 PM	23.2	237.9	10	238	9.7
7/9/2021	9:10:00 PM	24	245.8	9.9	245.4	9.6
7/9/2021	9:15:00 PM	26	246.1	9.9	246.4	9.6
7/9/2021	9:20:00 PM	26	243.6	9.1	242	8.8
7/9/2021	9:25:00 PM	25.7	248.8	8	249.5	7.8
7/9/2021	9:30:00 PM	26	242.4	8	242.6	7.9
7/9/2021	9:35:00 PM	27.2	245.5	6.8	246.2	6.6
7/9/2021	9:40:00 PM	26.7	234.6	3.7	235.9	3.5
7/9/2021	9:45:00 PM	26.3	226.4	5.7	228	5.5
7/9/2021	9:50:00 PM	26.8	238	7.7	238.4	7.4
7/9/2021	9:55:00 PM	26.5	247.4	7.2	248.4	7
7/9/2021	10:00:00 PM	25.1	237.1	6.2	238	6.1

Site: South Scottsdale						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	10:05:00 PM	24.3	236.7	4.3	236.6	4.2
7/9/2021	10:10:00 PM	25.2	239.8	4.7	238.6	4.6
7/9/2021	10:15:00 PM	25.2	214.9	3.6	214.9	3.5
7/9/2021	10:20:00 PM	26.9	145	3.2	144.2	3
7/9/2021	10:25:00 PM	30.6	151	4.9	151.4	4.8
7/9/2021	10:30:00 PM	33.5	143.3	7	143.4	6.9
7/9/2021	10:35:00 PM	36.8	129.2	17.6	126.9	16.4
7/9/2021	10:40:00 PM	58.3	117.6	14.5	118	14
7/9/2021	10:45:00 PM	170.2	123.8	20	124.7	19.3
7/9/2021	10:50:00 PM	679	140.5	20.6	139.4	20.1
7/9/2021	10:55:00 PM	2680.6	146.2	15.3	145.9	14.8
7/9/2021	11:00:00 PM	5241.6	137.5	12.8	138	12.3
7/9/2021	11:05:00 PM	6256.8	140.9	12.3	140.3	11.9
7/9/2021	11:10:00 PM	6223.2	149.2	11.8	149.2	11.6
7/9/2021	11:15:00 PM	5541.6	149.5	11	149	10.8
7/9/2021	11:20:00 PM	4534.6	156.8	3.9	151.6	3.8
7/9/2021	11:25:00 PM	3516.8	161.3	6.6	161.4	6.4
7/9/2021	11:30:00 PM	2636.7	168.5	8.7	168.2	8.6
7/9/2021	11:35:00 PM	1927.7	179.3	8.4	180.5	8.2
7/9/2021	11:40:00 PM	1389.3	180.6	5.5	181.1	5.1
7/9/2021	11:45:00 PM	993.6	132.7	5.3	133.8	5.1
7/9/2021	11:50:00 PM	710.8	134.3	3.9	135.6	3.4
7/9/2021	11:55:00 PM	506.8	186.3	6.3	186.5	5.9
	Average	188.7	255	5.8	250.9	3.8
	Max	6256.8	357.9	20.6	352.8	20.1
	Max Hour	691279.1164	3815.410174	9.463256751	3814.660673	9.267372121
	Min	18.1	15.2	0	5.7	0.3
	Count	264	288	288	288	288
	Total	49830	69494.6	1691.7	69326.6	1602.7
	Date Printed:	9/30/2024 11:01				

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	12:00:00 AM		278.7	5.3	276.2	4.8
7/9/2021	12:05:00 AM		280.1	4.4	276	3.9
7/9/2021	12:10:00 AM		269.2	4.5	267.4	4
7/9/2021	12:15:00 AM		270.7	3.3	270	2.9
7/9/2021	12:20:00 AM		270.5	3.6	270.3	3
7/9/2021	12:25:00 AM		263	3.3	252.2	2.7
7/9/2021	12:30:00 AM		263.8	3.6	261.7	3.1
7/9/2021	12:35:00 AM		274.2	2.8	263	2.5
7/9/2021	12:40:00 AM		268.4	4.2	266	3.6
7/9/2021	12:45:00 AM		276.1	3.2	274.3	2.7
7/9/2021	12:50:00 AM		274.9	3.1	270.5	2.5
7/9/2021	12:55:00 AM		261.7	2.1	261.5	1.7
7/9/2021	1:00:00 AM		255.6	2.6	249.8	2.1
7/9/2021	1:05:00 AM		243.9	2.3	233.7	1.9
7/9/2021	1:10:00 AM		250.5	2	246.6	1.7
7/9/2021	1:15:00 AM		275.9	1.4	264.4	1.2
7/9/2021	1:20:00 AM		281.6	1.2	272.9	0.9
7/9/2021	1:25:00 AM		296.8	1.6	295	1.3
7/9/2021	1:30:00 AM		289.9	2	287.8	1.8
7/9/2021	1:35:00 AM		280.9	2.3	279	2.1
7/9/2021	1:40:00 AM		303.2	1.7	302.9	1.6
7/9/2021	1:45:00 AM		289.2	1.8	287.9	1.6
7/9/2021	1:50:00 AM		292.1	1.7	288.8	1.6
7/9/2021	1:55:00 AM		277.3	2.3	277.4	2.2
7/9/2021	2:00:00 AM		297.9	1.5	297.5	1.5
7/9/2021	2:05:00 AM		298.2	2	298.2	1.8
7/9/2021	2:10:00 AM		291.7	1.6	290.1	1.6
7/9/2021	2:15:00 AM		279.6	1.1	275.9	1
7/9/2021	2:20:00 AM		315.2	1.4	314.1	1
7/9/2021	2:25:00 AM		17.3	0	21	0
7/9/2021	2:30:00 AM		327.8	0	319.2	0.5
7/9/2021	2:35:00 AM		280.1	0	259.3	0.4
7/9/2021	2:40:00 AM		302.4	1.1	304	1
7/9/2021	2:45:00 AM		297.6	0	308.2	0.5
7/9/2021	2:50:00 AM		323.4	1	316.1	0.9
7/9/2021	2:55:00 AM		327.4	0	336.2	0.5
7/9/2021	3:00:00 AM		19.8	0	56.4	0.2
7/9/2021	3:05:00 AM		355.6	0	349.7	0.1
7/9/2021	3:10:00 AM		321.4	0	322.8	0.5
7/9/2021	3:15:00 AM		314.1	0	316.4	0
7/9/2021	3:20:00 AM		337	1.3	342.1	1.3
7/9/2021	3:25:00 AM		351	2.1	351.3	2
7/9/2021	3:30:00 AM		351	1	345.8	0.9
7/9/2021	3:35:00 AM		339.1	0	21	0
7/9/2021	3:40:00 AM		355.3	0	355.8	0.6
7/9/2021	3:45:00 AM		340	1.1	340.7	1
7/9/2021	3:50:00 AM		355.8	1.6	355.1	1.5
7/9/2021	3:55:00 AM		341.8	1.8	339.4	1.6
7/9/2021	4:00:00 AM		15.2	0	12.1	0.5
7/9/2021	4:05:00 AM		351.2	0	10.5	0.5
7/9/2021	4:10:00 AM		339.1	1	348.4	0.9
7/9/2021	4:15:00 AM		9.2	0	34.2	0
7/9/2021	4:20:00 AM		125	0	89.8	0.1

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	4:25:00 AM		81.5	1.5	81	1.5
7/9/2021	4:30:00 AM		41.2	0	57.4	0.7
7/9/2021	4:35:00 AM		11.7	0.9	16.6	0.8
7/9/2021	4:40:00 AM		17.5	1	18.1	0.9
7/9/2021	4:45:00 AM		2.7	0	2.9	0.3
7/9/2021	4:50:00 AM		344.8	0	334.3	0
7/9/2021	4:55:00 AM		26.7	0	37.8	0.1
7/9/2021	5:00:00 AM		130.1	0	90.7	0.3
7/9/2021	5:05:00 AM		106.8	0	99.8	0.6
7/9/2021	5:10:00 AM		23.9	0	24.6	0
7/9/2021	5:15:00 AM		48.1	1	67	0.9
7/9/2021	5:20:00 AM		97.9	2.3	97.8	2.2
7/9/2021	5:25:00 AM		82.3	2	82.7	1.9
7/9/2021	5:30:00 AM		39.8	0	55.5	0.8
7/9/2021	5:35:00 AM		48.3	0	57.5	0.5
7/9/2021	5:40:00 AM		53.5	0.9	55.7	0.9
7/9/2021	5:45:00 AM		37.3	0	41.4	0.5
7/9/2021	5:50:00 AM		54.5	0	61	0.7
7/9/2021	5:55:00 AM		71.8	1.7	70.4	1.7
7/9/2021	6:00:00 AM		68.9	1.9	68.8	1.9
7/9/2021	6:05:00 AM		43.2	1.8	45.7	1.6
7/9/2021	6:10:00 AM		40.1	1.8	42.6	1.8
7/9/2021	6:15:00 AM		49.2	1.9	48	1.8
7/9/2021	6:20:00 AM		36.9	1.3	39.3	1.3
7/9/2021	6:25:00 AM		54.6	2	59.5	1.9
7/9/2021	6:30:00 AM		23.6	1.5	23	1.4
7/9/2021	6:35:00 AM		36.1	1.3	33.6	1.2
7/9/2021	6:40:00 AM		19.2	1.2	19	1.1
7/9/2021	6:45:00 AM		12.8	2.2	12.2	2
7/9/2021	6:50:00 AM		17.2	1.3	16	1.3
7/9/2021	6:55:00 AM		16.6	1.4	14.9	1.3
7/9/2021	7:00:00 AM		7.5	2	6.4	1.9
7/9/2021	7:05:00 AM		10.5	1.3	7.6	1.2
7/9/2021	7:10:00 AM		22.6	1.6	25.2	1.5
7/9/2021	7:15:00 AM		6.9	1.7	7.8	1.6
7/9/2021	7:20:00 AM		14.2	1.3	16.6	1.2
7/9/2021	7:25:00 AM		45.4	1.5	56	1.3
7/9/2021	7:30:00 AM		33.7	1	49.8	0.8
7/9/2021	7:35:00 AM		62	2.2	59.7	2
7/9/2021	7:40:00 AM		83.1	2.1	78.6	1.7
7/9/2021	7:45:00 AM		81.2	3.5	81.1	3.3
7/9/2021	7:50:00 AM		73.1	3.2	75.3	3.1
7/9/2021	7:55:00 AM		65.1	2.2	68.6	2.1
7/9/2021	8:00:00 AM		78.7	2.9	80.8	2.7
7/9/2021	8:05:00 AM		34.4	3	33	2.8
7/9/2021	8:10:00 AM		83.7	2	82.7	1.8
7/9/2021	8:15:00 AM		14.4	1	23.9	0.8
7/9/2021	8:20:00 AM		52.3	1.3	70.4	1.1
7/9/2021	8:25:00 AM		85.5	2.4	86.3	2.2
7/9/2021	8:30:00 AM		89.8	2.5	91.6	2.1
7/9/2021	8:35:00 AM		104.1	2.3	110.9	1.9
7/9/2021	8:40:00 AM		250.4	1.5	158	0.1
7/9/2021	8:45:00 AM		226.1	3	243.6	2

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	8:50:00 AM		7.8	3.7	16.1	3.1
7/9/2021	8:55:00 AM		16.5	1.9	7.9	1.2
7/9/2021	9:00:00 AM		325.5	1.6	326.2	1.4
7/9/2021	9:05:00 AM		59.9	2	64.5	1.8
7/9/2021	9:10:00 AM		90.3	2.4	78.2	1.8
7/9/2021	9:15:00 AM		113.4	3.1	112.5	2.9
7/9/2021	9:20:00 AM		173.1	2.6	167.2	2.2
7/9/2021	9:25:00 AM		104.1	3	113.7	2.7
7/9/2021	9:30:00 AM		20.6	0	13.8	0.4
7/9/2021	9:35:00 AM		288.1	3	282.4	2.8
7/9/2021	9:40:00 AM		275.2	3.6	278.4	3.4
7/9/2021	9:45:00 AM		293.2	2.7	292.2	2.6
7/9/2021	9:50:00 AM		249.6	2.5	245.8	1.9
7/9/2021	9:55:00 AM		237.7	2.1	230.4	1.6
7/9/2021	10:00:00 AM		113.1	1.7	113.7	0.9
7/9/2021	10:05:00 AM		135	1.7	147.6	0.9
7/9/2021	10:10:00 AM		232.2	3.5	230.3	3.3
7/9/2021	10:15:00 AM		261.7	3.1	255.6	2.6
7/9/2021	10:20:00 AM		253.5	4	246.9	3.8
7/9/2021	10:25:00 AM		265.5	4	270.5	3.7
7/9/2021	10:30:00 AM		193.2	1.1	189.8	0.5
7/9/2021	10:35:00 AM		254	3.1	243.3	3
7/9/2021	10:40:00 AM		351.3	0	351.2	0.4
7/9/2021	10:45:00 AM		97.6	1.4	99.2	1.3
7/9/2021	10:50:00 AM		78.2	3.5	78.7	3.3
7/9/2021	10:55:00 AM		193.9	1.6	186.9	1
7/9/2021	11:00:00 AM		100.7	1.4	106.1	0.9
7/9/2021	11:05:00 AM		93.7	4.2	95.5	4
7/9/2021	11:10:00 AM		71.7	3.2	74.7	3
7/9/2021	11:15:00 AM		184.6	4.8	198.5	4.1
7/9/2021	11:20:00 AM		137.3	3.1	151	2.2
7/9/2021	11:25:00 AM		185.3	1.7	163.4	1.2
7/9/2021	11:30:00 AM		175.8	3.1	155.3	2.6
7/9/2021	11:35:00 AM		88.6	3.6	91.4	3.1
7/9/2021	11:40:00 AM		60.5	2.8	59.7	2.7
7/9/2021	11:45:00 AM		62.8	2.3	70.1	1.9
7/9/2021	11:50:00 AM		111	2.9	108.9	2.6
7/9/2021	11:55:00 AM		216.7	3.8	214.7	3.1
7/9/2021	12:00:00 PM		219.2	2.9	220.6	2.3
7/9/2021	12:05:00 PM		0.5	2.7	344.9	2.2
7/9/2021	12:10:00 PM		287.1	2.3	314.3	0.2
7/9/2021	12:15:00 PM		163.4	3.8	161.5	3.2
7/9/2021	12:20:00 PM		240.9	4.2	240.2	3.9
7/9/2021	12:25:00 PM		176.4	2	200	1.5
7/9/2021	12:30:00 PM		215.5	4.1	221.1	3.8
7/9/2021	12:35:00 PM		236.3	2.5	236.3	1.9
7/9/2021	12:40:00 PM		319.5	4.9	317.7	4.6
7/9/2021	12:45:00 PM		298.1	2.5	302.3	2.1
7/9/2021	12:50:00 PM		241.5	2.9	237.7	2.7
7/9/2021	12:55:00 PM		243.2	4.2	243.2	3.7
7/9/2021	1:00:00 PM		161.2	3.1	168.3	2.3
7/9/2021	1:05:00 PM		193.9	3	188.7	2.4
7/9/2021	1:10:00 PM		241.8	3.9	234.7	3.3

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	1:15:00 PM		237.9	4.4	246	3.2
7/9/2021	1:20:00 PM		223.7	4.8	215.8	4.2
7/9/2021	1:25:00 PM		300.8	5.5	300.7	5.2
7/9/2021	1:30:00 PM		305.5	5.3	306.6	5.1
7/9/2021	1:35:00 PM		302.3	5.7	303.5	5.1
7/9/2021	1:40:00 PM		313.2	4.7	313	4.1
7/9/2021	1:45:00 PM		289.6	5.4	287.8	5.1
7/9/2021	1:50:00 PM		295.5	5.7	292.2	4.6
7/9/2021	1:55:00 PM		268.4	7	259.9	6
7/9/2021	2:00:00 PM		291.8	4.7	288.6	4.5
7/9/2021	2:05:00 PM		273.4	5.3	271.8	4.7
7/9/2021	2:10:00 PM		298.1	2.7	293.4	2.5
7/9/2021	2:15:00 PM		286.8	5.8	286	5.4
7/9/2021	2:20:00 PM		263	5.5	263.5	4.8
7/9/2021	2:25:00 PM		253	5	250.2	4.4
7/9/2021	2:30:00 PM		248.8	6.1	249.8	5.3
7/9/2021	2:35:00 PM		276.5	4.9	284.1	4.1
7/9/2021	2:40:00 PM		304.7	6.3	303.6	5.9
7/9/2021	2:45:00 PM		290.2	3.8	288.2	3.4
7/9/2021	2:50:00 PM		269.6	4.8	263.2	4.1
7/9/2021	2:55:00 PM		244.6	5.6	237.5	4.9
7/9/2021	3:00:00 PM		280.2	5.5	284	4.7
7/9/2021	3:05:00 PM		296.6	6.4	296	6.1
7/9/2021	3:10:00 PM		310.9	5.2	310.4	4.9
7/9/2021	3:15:00 PM		275.2	3.3	276.8	2.7
7/9/2021	3:20:00 PM		262.6	3.5	258.6	2.9
7/9/2021	3:25:00 PM		284.8	4.6	282	4.1
7/9/2021	3:30:00 PM		292.8	5.5	289.5	5.2
7/9/2021	3:35:00 PM		290.5	5.4	285.1	4.5
7/9/2021	3:40:00 PM		257.5	4.3	257.1	3.3
7/9/2021	3:45:00 PM		287.2	4.7	286.8	4.2
7/9/2021	3:50:00 PM		272.3	4.7	272	4.4
7/9/2021	3:55:00 PM		294.5	4.7	294.6	4.2
7/9/2021	4:00:00 PM		295.2	5.6	298.2	4.9
7/9/2021	4:05:00 PM		256.7	3.5	246.8	3
7/9/2021	4:10:00 PM		289.5	5	288.9	4.5
7/9/2021	4:15:00 PM		294.1	6.1	291.3	5.7
7/9/2021	4:20:00 PM		285.5	6.2	286.9	5.9
7/9/2021	4:25:00 PM		298.5	3.6	296.4	3.2
7/9/2021	4:30:00 PM		266.2	2.9	273.2	2.6
7/9/2021	4:35:00 PM		276	4.1	280.9	3.5
7/9/2021	4:40:00 PM		293.2	3.9	295.3	3.6
7/9/2021	4:45:00 PM		265.5	2.9	267	2.5
7/9/2021	4:50:00 PM		284.6	2.2	282.2	1.9
7/9/2021	4:55:00 PM		286.9	6.8	287.5	6.1
7/9/2021	5:00:00 PM		278.6	4.7	278.9	4.1
7/9/2021	5:05:00 PM		278.9	4.7	280	4.3
7/9/2021	5:10:00 PM		274.7	4	251.4	3.5
7/9/2021	5:15:00 PM		285.8	4.4	286	3.9
7/9/2021	5:20:00 PM		252.7	3.9	246	3.5
7/9/2021	5:25:00 PM		291.6	6.9	292.4	6.6
7/9/2021	5:30:00 PM		306.5	5.3	305	4.9
7/9/2021	5:35:00 PM		306.2	3.1	310.6	2.7

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	5:40:00 PM		279.7	5.1	284.5	4.6
7/9/2021	5:45:00 PM		247.9	4.5	242.1	4.1
7/9/2021	5:50:00 PM		256.1	3.4	251	2.9
7/9/2021	5:55:00 PM		289.1	3	288	2.8
7/9/2021	6:00:00 PM		277.3	3	277.2	2.6
7/9/2021	6:05:00 PM		296.9	5.1	295.6	4.9
7/9/2021	6:10:00 PM		306.1	3.5	309	3.1
7/9/2021	6:15:00 PM		262.1	3.5	259	3.2
7/9/2021	6:20:00 PM		278.9	3.2	278	3
7/9/2021	6:25:00 PM		248	5.3	242	4.9
7/9/2021	6:30:00 PM		289	3.9	286.5	3.7
7/9/2021	6:35:00 PM		267	3.7	261.5	3.2
7/9/2021	6:40:00 PM		270.8	3	271.7	2.6
7/9/2021	6:45:00 PM		230.5	5	229.6	4.6
7/9/2021	6:50:00 PM		228.6	5.2	227.8	5
7/9/2021	6:55:00 PM		241.2	5.1	236.7	4.8
7/9/2021	7:00:00 PM		239.5	4.5	229.8	4.2
7/9/2021	7:05:00 PM		237.5	3.8	235.6	3.6
7/9/2021	7:10:00 PM		247.7	3.2	233.1	2.9
7/9/2021	7:15:00 PM		238.7	3.2	237.5	3
7/9/2021	7:20:00 PM		253.5	2.4	244.3	2.2
7/9/2021	7:25:00 PM		236.6	3.5	236.5	3.2
7/9/2021	7:30:00 PM		237.9	5.1	234.3	4.8
7/9/2021	7:35:00 PM		270.5	2.1	257.9	1.7
7/9/2021	7:40:00 PM		245.1	4.5	240.6	4.2
7/9/2021	7:45:00 PM		238.2	3	236.6	2.8
7/9/2021	7:50:00 PM		234.1	4.1	232.8	3.9
7/9/2021	7:55:00 PM		240.5	3.2	235.7	3
7/9/2021	8:00:00 PM		233.8	2.6	233.8	2.4
7/9/2021	8:05:00 PM		245.1	2.6	240.5	2.2
7/9/2021	8:10:00 PM		250.4	1.9	244.8	1.7
7/9/2021	8:15:00 PM		252.9	2.7	249.3	2.4
7/9/2021	8:20:00 PM		252.8	3.5	246.6	3.1
7/9/2021	8:25:00 PM		247.3	4	242.2	3.6
7/9/2021	8:30:00 PM		246.5	4.4	241.8	3.9
7/9/2021	8:35:00 PM		238.6	6.3	236.2	6
7/9/2021	8:40:00 PM		241.8	4.6	239	4.3
7/9/2021	8:45:00 PM		233.7	5.8	233.3	5.5
7/9/2021	8:50:00 PM		248.1	3.8	241.7	3.4
7/9/2021	8:55:00 PM		251.5	2.9	244.3	2.6
7/9/2021	9:00:00 PM		254.9	4	249.1	3.6
7/9/2021	9:05:00 PM		260.6	2.6	264.7	2.2
7/9/2021	9:10:00 PM		275.4	1.9	277.4	1.7
7/9/2021	9:15:00 PM		268.1	2.1	268	2
7/9/2021	9:20:00 PM		252.2	2.5	253.9	2.1
7/9/2021	9:25:00 PM		244.7	2.6	240.3	2.3
7/9/2021	9:30:00 PM		254.1	2.1	246.3	1.8
7/9/2021	9:35:00 PM		280.3	1.8	276.5	1.6
7/9/2021	9:40:00 PM		249.8	2.6	244.3	2.4
7/9/2021	9:45:00 PM		256.9	2	243.8	1.6
7/9/2021	9:50:00 PM		263.2	1.9	254.1	1.5
7/9/2021	9:55:00 PM		286.2	2	276.4	1.7
7/9/2021	10:00:00 PM		276.3	1.7	266.6	1.5

Site: Tempe						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/9/2021	10:05:00 PM		253	1.5	245.1	1.4
7/9/2021	10:10:00 PM		287.8	1.5	273.3	1.1
7/9/2021	10:15:00 PM		37	0	118.2	0.2
7/9/2021	10:20:00 PM		113.5	2.4	105.4	2.3
7/9/2021	10:25:00 PM		97.9	3.1	97.8	3.1
7/9/2021	10:30:00 PM		111.8	7.7	114.6	7.2
7/9/2021	10:35:00 PM		93.3	17	92.7	16.4
7/9/2021	10:40:00 PM		105.7	13.4	108.7	12.1
7/9/2021	10:45:00 PM		96.7	15.7	97.9	15.1
7/9/2021	10:50:00 PM		103	10.4	103.7	9.6
7/9/2021	10:55:00 PM		115.7	14.5	116	13.8
7/9/2021	11:00:00 PM		123.3	10.9	124.6	10.1
7/9/2021	11:05:00 PM		129.7	10.7	129.6	9.8
7/9/2021	11:10:00 PM		146.3	8.5	146.6	8
7/9/2021	11:15:00 PM		156.5	7.3	156.8	6.8
7/9/2021	11:20:00 PM		179.4	7.9	181	7.7
7/9/2021	11:25:00 PM		175.6	7.4	177	7.1
7/9/2021	11:30:00 PM		189.4	9.7	189.8	9.4
7/9/2021	11:35:00 PM		196.3	10.1	195.4	9.7
7/9/2021	11:40:00 PM		202.5	9.6	200.7	9.2
7/9/2021	11:45:00 PM		196.5	8.9	195.7	8.7
7/9/2021	11:50:00 PM		206.1	9.9	205.1	9.5
7/9/2021	11:55:00 PM		198.3	10.6	197.7	10.1
	Average		285	3.2	251.3	1.1
	Max		355.8	17	355.8	16.4
	Max Hour		10469.39127	6.684029714	10086.63731	5.864924022
	Min		0.5	0	2.9	0
	Count	0	288	288	288	288
	Total	0	59222.2	949.4	58645.5	862.6

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	12:00:00 AM	3458.1	153.9	17.4	153.7	17
7/10/2021	12:05:00 AM	2468.8	154.1	15.3	154.3	15
7/10/2021	12:10:00 AM	2042.4	159.2	14.6	159.6	14.3
7/10/2021	12:15:00 AM	1924	170.6	10.9	170.3	10.7
7/10/2021	12:20:00 AM	1769.2	175.3	11.8	176.6	11.5
7/10/2021	12:25:00 AM	1421	184.2	12	184.1	11.8
7/10/2021	12:30:00 AM	988.4	187.1	10.8	187.3	10.6
7/10/2021	12:35:00 AM	658.1	202.4	8.1	202.3	7.9
7/10/2021	12:40:00 AM	457.6	211.9	8.5	211.9	8.4
7/10/2021	12:45:00 AM	397.3	215.4	8.5	215.3	8.4
7/10/2021	12:50:00 AM	432.3	222.6	7.2	222	7.1
7/10/2021	12:55:00 AM	459.9	212.7	8.3	213.2	8.2
7/10/2021	1:00:00 AM	389	218.9	7.8	218.6	7.6
7/10/2021	1:05:00 AM	263.2	221	7	221	6.7
7/10/2021	1:10:00 AM	160.5	211.8	5.6	210.9	5.4
7/10/2021	1:15:00 AM	101.3	199.3	4.7	199.2	4.6
7/10/2021	1:20:00 AM	73.4	199.8	5.5	199.5	5.2
7/10/2021	1:25:00 AM	65	203.5	5.8	203.3	5.6
7/10/2021	1:30:00 AM	49.7	205.4	4	206.3	3.9
7/10/2021	1:35:00 AM	41.7	207.5	4.2	207.3	4.1
7/10/2021	1:40:00 AM	41.8	207.6	3.2	206.7	3
7/10/2021	1:45:00 AM	33.8	210.5	4.2	209.1	4
7/10/2021	1:50:00 AM	23	213.2	3.2	208.8	2.9
7/10/2021	1:55:00 AM	21.4	252.2	1.8	250.8	1.6
7/10/2021	2:00:00 AM	22.4	299.5	2.5	303.1	2.4
7/10/2021	2:05:00 AM	15.1	313.8	6.1	313.3	6
7/10/2021	2:10:00 AM	14.4	18.3	2.1	12.1	1.3
7/10/2021	2:15:00 AM	23	77.6	1.3	95.4	1
7/10/2021	2:20:00 AM	20.9	355.2	2.3	356.3	2.2
7/10/2021	2:25:00 AM	13.9	37.3	3.1	40.3	2.9
7/10/2021	2:30:00 AM	21.1	55.4	3.8	55.7	3.7
7/10/2021	2:35:00 AM	30.4	357	3.1	356.2	2.9
7/10/2021	2:40:00 AM	24	17.2	2.9	15.2	2.5
7/10/2021	2:45:00 AM	17.8	70.9	3.1	70.2	3
7/10/2021	2:50:00 AM	24.4	55.4	2.9	55.4	2.8
7/10/2021	2:55:00 AM	30	22.8	3.5	22.9	3.4
7/10/2021	3:00:00 AM	21.6	15.3	4.4	15	4.3
7/10/2021	3:05:00 AM	20.7	20.8	5.4	19.9	5.4
7/10/2021	3:10:00 AM	37.6	11.5	4.2	12.3	4
7/10/2021	3:15:00 AM	55.2	11.5	2.6	8.9	2.5
7/10/2021	3:20:00 AM	65.1	24.5	3.3	24.8	3.2
7/10/2021	3:25:00 AM	111.1	25.8	4.1	25.2	4
7/10/2021	3:30:00 AM	167.7	27.5	5.3	27.7	5.2
7/10/2021	3:35:00 AM	200.9	9.7	4.1	10.4	4
7/10/2021	3:40:00 AM	238.4	19.8	5.4	19.1	5.3
7/10/2021	3:45:00 AM	316.5	23	5.3	23	5.2
7/10/2021	3:50:00 AM	399.4	29.8	6	30.8	5.9
7/10/2021	3:55:00 AM	479.4	20.9	4.8	22.1	4.7
7/10/2021	4:00:00 AM	521.8	20.9	5.9	20.5	5.8
7/10/2021	4:05:00 AM	504.9	10.7	4.2	8.7	4
7/10/2021	4:10:00 AM	449.4	357.5	5.2	357.7	5.1
7/10/2021	4:15:00 AM	394.7	348.1	4.8	347.7	4.7
7/10/2021	4:20:00 AM	315.1	325.1	6.2	324.3	6
7/10/2021	4:25:00 AM	208.1	328.4	6.9	328.5	6.8

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	4:30:00 AM	128.6	324.7	7.5	324.8	7.4
7/10/2021	4:35:00 AM	93.7	316.7	5.8	316.6	5.7
7/10/2021	4:40:00 AM	81.4	312.5	6	312.5	5.9
7/10/2021	4:45:00 AM	72.2	302.7	6.5	302.8	6.5
7/10/2021	4:50:00 AM	71.2	296.6	5.9	296.6	5.9
7/10/2021	4:55:00 AM	71.4	285.8	5.1	285.6	5
7/10/2021	5:00:00 AM	60.1	281.4	6	281.3	6
7/10/2021	5:05:00 AM	52.4	280.2	5.7	280.2	5.6
7/10/2021	5:10:00 AM	52.3	272.7	3.7	272.6	3.6
7/10/2021	5:15:00 AM	56.6	260	3.2	261.9	3.2
7/10/2021	5:20:00 AM	51.5	259.7	2.7	259.8	2.6
7/10/2021	5:25:00 AM	47.1	239.5	1.8	241.8	1.7
7/10/2021	5:30:00 AM	56.4	214	2.9	214.4	2.9
7/10/2021	5:35:00 AM	52.1	204.4	3.5	204.2	3.4
7/10/2021	5:40:00 AM	46.8	202.9	3	203	2.9
7/10/2021	5:45:00 AM	50.4	188.6	3.7	187.1	3.7
7/10/2021	5:50:00 AM	82	185.1	4.7	185	4.7
7/10/2021	5:55:00 AM	117.7	184.6	5.6	184.8	5.6
7/10/2021	6:00:00 AM	149.7	171.8	5.5	172.8	5.3
7/10/2021	6:05:00 AM	167.6	170.9	4.6	171.4	4.5
7/10/2021	6:10:00 AM	154.9	179.4	5.2	179.7	5.2
7/10/2021	6:15:00 AM	145	162.5	4.4	162.5	4.3
7/10/2021	6:20:00 AM	140.6	169.6	5.1	170	5
7/10/2021	6:25:00 AM	129.2	172.3	3.6	172.3	3.5
7/10/2021	6:30:00 AM	118.7	182.4	3.8	183.3	3.8
7/10/2021	6:35:00 AM	117.6	178.8	4.2	181	4.1
7/10/2021	6:40:00 AM	125.2	183.8	5.4	183.6	5.4
7/10/2021	6:45:00 AM	121.3	185	5.9	185.4	5.9
7/10/2021	6:50:00 AM	123.3	182.9	6.8	182.8	6.7
7/10/2021	6:55:00 AM	120.6	175.3	6.8	175	6.7
7/10/2021	7:00:00 AM	110.2	164.9	6.7	165	6.5
7/10/2021	7:05:00 AM	101.3	175.5	5.4	175.5	5.2
7/10/2021	7:10:00 AM	83.7	178	4.1	178.3	3.9
7/10/2021	7:15:00 AM	68.2	185.2	4.4	185.8	4.2
7/10/2021	7:20:00 AM	66.1	197.6	5.4	198.2	5.3
7/10/2021	7:25:00 AM	64.5	179.8	5.3	179.8	5.2
7/10/2021	7:30:00 AM	61.1	181.7	4.9	182.1	4.8
7/10/2021	7:35:00 AM	56.8	182.6	6.1	182.9	6
7/10/2021	7:40:00 AM	55.7	189.1	6.7	188.9	6.7
7/10/2021	7:45:00 AM	55.2	185.5	6.7	186	6.5
7/10/2021	7:50:00 AM	62.2	183.5	6.1	184.5	6
7/10/2021	7:55:00 AM	59.2	181.7	7.3	181.6	7.2
7/10/2021	8:00:00 AM	50.6	189.4	7.4	189.4	7.2
7/10/2021	8:05:00 AM	38.8	185.7	7.7	185.7	7.6
7/10/2021	8:10:00 AM	39.4	185.1	6.5	184.8	6.4
7/10/2021	8:15:00 AM	35.8	181.6	9	181.4	8.9
7/10/2021	8:20:00 AM	43.2	183.3	8.1	183.3	8
7/10/2021	8:25:00 AM	52.9	178.4	8.2	178.2	8.1
7/10/2021	8:30:00 AM	50.7	183.3	8	183.4	7.9
7/10/2021	8:35:00 AM	55.9	189.4	5.8	189.5	5.7
7/10/2021	8:40:00 AM	55.9	190.9	7.6	191.1	7.5
7/10/2021	8:45:00 AM	49.7	188.4	7.5	189.2	7.3
7/10/2021	8:50:00 AM	47	189.9	6.6	189.2	6.5
7/10/2021	8:55:00 AM	44.5	191.7	8	191.2	7.9

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	9:00:00 AM	35	184.7	8.8	185.3	8.7
7/10/2021	9:05:00 AM	34.5	188.9	10.2	188.9	10.1
7/10/2021	9:10:00 AM	39.9	192.1	8.9	192	8.8
7/10/2021	9:15:00 AM	34.9	188.4	9.7	188.4	9.6
7/10/2021	9:20:00 AM	35.2	198.2	8.9	198	8.7
7/10/2021	9:25:00 AM	42.4	192.2	8.7	191.5	8.4
7/10/2021	9:30:00 AM	48.2	195.3	7.8	194.8	7.6
7/10/2021	9:35:00 AM	41.2	186.9	9.5	187	9.4
7/10/2021	9:40:00 AM	36	189.5	8.9	188.3	8.6
7/10/2021	9:45:00 AM	33	214.2	7.7	214.3	7.5
7/10/2021	9:50:00 AM	35.5	214.3	8.6	213.6	8.4
7/10/2021	9:55:00 AM	39.4	197.4	7.2	198.5	6.9
7/10/2021	10:00:00 AM	32.8	199.5	7.7	199.8	7.5
7/10/2021	10:05:00 AM	50	198.3	6.5	197.3	6
7/10/2021	10:10:00 AM	49.6	198.1	7.8	196.2	7.4
7/10/2021	10:15:00 AM	46	178.7	7.4	183	6.9
7/10/2021	10:20:00 AM	53.8	194.1	6.4	196.3	6.1
7/10/2021	10:25:00 AM	47.4	191.2	8.2	190.9	7.7
7/10/2021	10:30:00 AM	54.2	187.4	7.5	187.1	6.9
7/10/2021	10:35:00 AM	42.4	198.9	7.8	201.4	7.5
7/10/2021	10:40:00 AM	41.9	188.6	8.1	189.2	7.7
7/10/2021	10:45:00 AM	49.2	194	8.7	193.4	8.5
7/10/2021	10:50:00 AM	47.2	183.6	8.9	184.4	8.6
7/10/2021	10:55:00 AM	52.8	182.8	9.2	182.3	9
7/10/2021	11:00:00 AM	53.6	191.4	8.1	190.5	7.9
7/10/2021	11:05:00 AM	58.6	217.5	5.5	216.9	4.9
7/10/2021	11:10:00 AM	63.2	220.9	6.9	222.6	6.6
7/10/2021	11:15:00 AM	62.9	184.9	8.2	182.5	7.9
7/10/2021	11:20:00 AM	77.2	186.6	6.3	187.6	6
7/10/2021	11:25:00 AM	97	201.7	7.8	204	7.5
7/10/2021	11:30:00 AM	87.3	194.8	6.1	198.9	5.8
7/10/2021	11:35:00 AM	90.7	189.6	9.5	189.7	9.2
7/10/2021	11:40:00 AM	83.7	196.5	8.3	194.9	8
7/10/2021	11:45:00 AM	84.8	188.1	6.9	187.5	6.5
7/10/2021	11:50:00 AM	90.1	171.9	5.5	172.3	4.9
7/10/2021	11:55:00 AM	83.3	188.1	6.6	187.7	6.4
7/10/2021	12:00:00 PM	91.2	192.9	7	192.2	6.7
7/10/2021	12:05:00 PM	95.2	202	5.3	202.2	5
7/10/2021	12:10:00 PM	78.2	231.2	4.6	231.3	4.4
7/10/2021	12:15:00 PM	72.9	216.8	5.8	212.7	4.9
7/10/2021	12:20:00 PM	63.2	199.7	6.7	203.1	6.3
7/10/2021	12:25:00 PM	49.4	189.4	7.4	190.3	6.8
7/10/2021	12:30:00 PM	45.9	166.1	5.7	166.4	3.9
7/10/2021	12:35:00 PM	44.6	196.9	7.7	192.1	6.8
7/10/2021	12:40:00 PM	39.7	178.7	8.8	176.8	8.6
7/10/2021	12:45:00 PM	43	145.7	6.6	142.7	5.7
7/10/2021	12:50:00 PM	39.3	199.9	6.7	200.8	6.3
7/10/2021	12:55:00 PM	30.3	182.5	8	182.5	7.7
7/10/2021	1:00:00 PM	38.1	156.5	5.9	159	5.7
7/10/2021	1:05:00 PM	32.3	185.5	10.4	184.1	10
7/10/2021	1:10:00 PM	32.2	212.1	8.7	210.2	8.3
7/10/2021	1:15:00 PM	38.1	206	6.9	205.7	6.6
7/10/2021	1:20:00 PM	32.4	195.9	7.2	197.4	6.8
7/10/2021	1:25:00 PM	33.3	196.6	9.5	196.3	9.2

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	1:30:00 PM	42.2	191.8	8.6	186.1	8.1
7/10/2021	1:35:00 PM	38.6	174	9.7	174.5	9.3
7/10/2021	1:40:00 PM	42.6	188.2	12.3	187	11.8
7/10/2021	1:45:00 PM	50	175.4	10.4	175.7	10.2
7/10/2021	1:50:00 PM	45.6	188.8	8.8	189.4	8.6
7/10/2021	1:55:00 PM	50	177.9	13	178	12.7
7/10/2021	2:00:00 PM	48.3	177.7	12.9	181.1	12.2
7/10/2021	2:05:00 PM	65	206.4	10	208	9.6
7/10/2021	2:10:00 PM	105.6	203.4	12.3	204.6	12
7/10/2021	2:15:00 PM	69.9	206.8	9.1	203.1	8
7/10/2021	2:20:00 PM	41	230.4	10.1	227	9.5
7/10/2021	2:25:00 PM	30.2	240.3	9.1	239.8	8.5
7/10/2021	2:30:00 PM	19.9	227.5	7.5	228.3	7.1
7/10/2021	2:35:00 PM	21.4	231.9	8.3	229.7	7.7
7/10/2021	2:40:00 PM	26.6	212	7.4	209.8	7.1
7/10/2021	2:45:00 PM	21.1	240.2	8.2	239.5	7.8
7/10/2021	2:50:00 PM	18.7	224	4.4	225.8	4.1
7/10/2021	2:55:00 PM	20.4	224.5	8.8	224.7	8.5
7/10/2021	3:00:00 PM	14.9	240.5	6.5	245.7	5.5
7/10/2021	3:05:00 PM	26.8	233.6	7.5	231.4	7.1
7/10/2021	3:10:00 PM	26.4	260.8	7.3	262.9	6.4
7/10/2021	3:15:00 PM	18.3	195.3	5.6	205.3	5.2
7/10/2021	3:20:00 PM	21.3	207.9	6.4	207.7	5.8
7/10/2021	3:25:00 PM	23	239.7	7.9	242.3	7.1
7/10/2021	3:30:00 PM	18.2	243.5	8.3	245.8	7.6
7/10/2021	3:35:00 PM	27.7	259.6	7.3	260.6	6.7
7/10/2021	3:40:00 PM	22.6	279.5	8.7	280.8	8.2
7/10/2021	3:45:00 PM	23.8	257.6	8.4	258.3	7.9
7/10/2021	3:50:00 PM	35.3	233.7	6.8	230.9	6.4
7/10/2021	3:55:00 PM	25.5	241.1	5.3	239.9	4.9
7/10/2021	4:00:00 PM	26.7	256.8	5.8	251.7	5.3
7/10/2021	4:05:00 PM	28.5	256.9	7.4	256.5	6.4
7/10/2021	4:10:00 PM	24.1	241	6.4	240.6	5.9
7/10/2021	4:15:00 PM	24.7	225.3	7.9	224.8	7.3
7/10/2021	4:20:00 PM	24.5	227.9	7	227.8	6.6
7/10/2021	4:25:00 PM	22.4	274	9.7	274.5	9.3
7/10/2021	4:30:00 PM	28.1	284.5	8.3	283.1	8.1
7/10/2021	4:35:00 PM	24.5	259.4	5.5	257.4	4.6
7/10/2021	4:40:00 PM	20.4	261	3.7	259.1	3.4
7/10/2021	4:45:00 PM	25.2	262.4	4.5	266.9	4.2
7/10/2021	4:50:00 PM	21.1	255.7	7.3	258	6.9
7/10/2021	4:55:00 PM	15.7	277.5	7.1	278.2	6.9
7/10/2021	5:00:00 PM	25.3	253	7.4	254.1	7.1
7/10/2021	5:05:00 PM	19.9	272.4	7	273	6.8
7/10/2021	5:10:00 PM	20.5	263.1	6.9	262.9	6.6
7/10/2021	5:15:00 PM	28.4	230.3	5.8	231.3	5.1
7/10/2021	5:20:00 PM	19.6	221.2	9.2	220.2	8.6
7/10/2021	5:25:00 PM	19	225.5	6.7	222.1	6.2
7/10/2021	5:30:00 PM	23.7	224.8	5.9	223	5.6
7/10/2021	5:35:00 PM	15.4	213.6	9.1	213.5	8.9
7/10/2021	5:40:00 PM	17.3	217.7	8.1	217.7	7.9
7/10/2021	5:45:00 PM	23.2	228	8.8	226.2	8.4
7/10/2021	5:50:00 PM	17	222.5	11.2	222.3	11
7/10/2021	5:55:00 PM	25.9	220.8	9.6	220.4	9.3

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	6:00:00 PM	26	214	10.8	213.8	10.5
7/10/2021	6:05:00 PM	22.3	228.1	8.3	227.4	7.6
7/10/2021	6:10:00 PM	34.8	222.1	7.5	222.7	6.9
7/10/2021	6:15:00 PM	26.1	215.5	7.1	215.8	6.9
7/10/2021	6:20:00 PM	26.7	213.9	8.8	214.7	8.5
7/10/2021	6:25:00 PM	34.7	215.9	8.6	215.8	8.4
7/10/2021	6:30:00 PM	28	223.6	7.9	222.5	7.5
7/10/2021	6:35:00 PM	30.5	217.1	8.6	217.1	8.4
7/10/2021	6:40:00 PM	30	216	9.2	216.5	9
7/10/2021	6:45:00 PM	22.9	218	8.2	217.6	8
7/10/2021	6:50:00 PM	33.2	221.6	8.2	222	8
7/10/2021	6:55:00 PM	32.5	220.7	7.8	220.3	7.6
7/10/2021	7:00:00 PM	30.2	224.5	6.8	225	6.6
7/10/2021	7:05:00 PM	36.7	201.7	5.4	203.7	5.1
7/10/2021	7:10:00 PM	32.1	195.9	5.9	197.5	5.7
7/10/2021	7:15:00 PM	32.6	197.6	5.9	197.4	5.7
7/10/2021	7:20:00 PM	38	215.1	4.8	213.6	4.6
7/10/2021	7:25:00 PM	29.4	165.3	3.5	169.9	2.8
7/10/2021	7:30:00 PM	42	111	4.3	111.6	4.2
7/10/2021	7:35:00 PM	53.8	109.2	5.8	109.6	5.7
7/10/2021	7:40:00 PM	48.2	100.5	6.5	100.4	6.3
7/10/2021	7:45:00 PM	57.7	91.6	7.4	91	7.2
7/10/2021	7:50:00 PM	78.7	81.1	14.8	80.1	14.3
7/10/2021	7:55:00 PM	229	88.8	10.4	89.5	9.8
7/10/2021	8:00:00 PM	335.4	61.8	18.1	61.3	17.6
7/10/2021	8:05:00 PM	395.4	68.7	11.4	68.4	11
7/10/2021	8:10:00 PM	310.7	78.1	13.1	79	12.7
7/10/2021	8:15:00 PM	241.7	83.4	9.8	82.1	9.3
7/10/2021	8:20:00 PM	195.8	98.1	10.6	98.8	10.2
7/10/2021	8:25:00 PM	204.8	98.4	10.4	99.3	10.1
7/10/2021	8:30:00 PM	179.5	120.2	9.1	119.7	8.8
7/10/2021	8:35:00 PM	119.5	129.4	8.3	129.5	8.1
7/10/2021	8:40:00 PM	90.7	135.3	8.2	135	8
7/10/2021	8:45:00 PM	75.6	132.5	8	132.2	7.8
7/10/2021	8:50:00 PM	61.6	139.5	7.2	139.5	7
7/10/2021	8:55:00 PM	48.3	154.3	7	154.8	6.9
7/10/2021	9:00:00 PM	56.7	165.9	6.8	166.5	6.6
7/10/2021	9:05:00 PM	55.1	166.1	6.4	166.2	6.3
7/10/2021	9:10:00 PM	52.6	140.5	13.3	139.2	12.9
7/10/2021	9:15:00 PM	209.6	153.5	12.2	151.2	11.8
7/10/2021	9:20:00 PM	449.1	159.9	12.1	160.7	11.9
7/10/2021	9:25:00 PM	454.6	162.4	17.9	163.4	17.2
7/10/2021	9:30:00 PM	1156.3	166.9	14	166.2	13.6
7/10/2021	9:35:00 PM	1409.6	165.5	17.7	165.6	17.3
7/10/2021	9:40:00 PM	1572.3	172.5	14.5	172.2	14.2
7/10/2021	9:45:00 PM	1437	174.6	13.4	174.5	13.2
7/10/2021	9:50:00 PM	1102.6	174.1	12.8	174.2	12.6
7/10/2021	9:55:00 PM	757.5	170.6	11.6	171.3	11.3
7/10/2021	10:00:00 PM	481.3	166.8	12.5	166.9	12.2
7/10/2021	10:05:00 PM	280.2	172.2	13.2	172	13
7/10/2021	10:10:00 PM	160.4	169.4	9.5	171.4	9.2
7/10/2021	10:15:00 PM	113.7	167.1	7.7	166.7	7.4
7/10/2021	10:20:00 PM	79.8	226.3	6	225.9	5.5
7/10/2021	10:25:00 PM	57.7	204.6	4.7	204.7	4.2

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	10:30:00 PM	48.6	249.4	5.7	249.8	5.4
7/10/2021	10:35:00 PM	56.7	249	4.6	249.3	4.4
7/10/2021	10:40:00 PM	55.6	230.7	3.8	229.1	3.6
7/10/2021	10:45:00 PM	124.4	221.5	7.5	221.1	7.3
7/10/2021	10:50:00 PM	317	220.8	9.8	220	9.5
7/10/2021	10:55:00 PM	347.4	186.2	10.1	186.1	9.8
7/10/2021	11:00:00 PM	268.1	160.4	7.9	166	7.4
7/10/2021	11:05:00 PM	246.3	145.6	3.7	144.8	3.4
7/10/2021	11:10:00 PM	298.5	202.9	5.2	202.2	5.1
7/10/2021	11:15:00 PM	381.3	206	4.1	206	4
7/10/2021	11:20:00 PM	405.6	252.3	3.4	248.9	3.2
7/10/2021	11:25:00 PM	384.3	282	4.2	281.9	4.1
7/10/2021	11:30:00 PM	320.4	266.1	3.7	262.5	3.4
7/10/2021	11:35:00 PM	301.2	244.1	4.2	243.8	4
7/10/2021	11:40:00 PM	314	255.7	4	255.7	3.8
7/10/2021	11:45:00 PM	306.6	241.5	3.8	243.1	3.6
7/10/2021	11:50:00 PM	274.7	255.8	4.8	255.7	4.5
7/10/2021	11:55:00 PM	227.9	261.3	5.6	262.1	5.5
	Average	170.4	202	7.1	195.9	4.5
	Max	3458.1	357.5	18.1	357.7	17.6
	Max Hour	139482.5915	4386.151916	8.466146801	4382.680834	8.196004525
	Min	13.9	9.7	1.3	8.7	1
	Count	288	288	288	288	288
	Total	49088.1	55092	2072.3	55108.4	1991.9
	Date Printed:	9/30/2024 11:02				

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	12:00:00 AM	5538	161.2	16.5	161.1	16.2
7/10/2021	12:05:00 AM	4887.1	156.2	13.4	156.5	13
7/10/2021	12:10:00 AM	4195.7	157.3	13	157	12.7
7/10/2021	12:15:00 AM	3460.7	158.1	13.1	158.5	12.9
7/10/2021	12:20:00 AM	2778.4	169	11.5	168.5	11.2
7/10/2021	12:25:00 AM	2204.8	174.3	11.5	174.3	11.3
7/10/2021	12:30:00 AM	1774.7	184.6	11.7	184.7	11.6
7/10/2021	12:35:00 AM	1439.4	191.8	11.6	191.8	11.4
7/10/2021	12:40:00 AM	1159.5	194.6	10.1	194.6	10
7/10/2021	12:45:00 AM	938.7	190.3	9.2	190.6	9.1
7/10/2021	12:50:00 AM	780.1	193.7	7.9	193.6	7.8
7/10/2021	12:55:00 AM	621.2	203.5	5.3	203.2	5.2
7/10/2021	1:00:00 AM	480.2	220.8	5.7	220.4	5.7
7/10/2021	1:05:00 AM	423.2	225.8	5.7	225.8	5.6
7/10/2021	1:10:00 AM	397.3	223.5	4.3	225.3	4.1
7/10/2021	1:15:00 AM	375.3	207	4.8	208.8	4.6
7/10/2021	1:20:00 AM	368.5	198.9	4.4	198.9	4.3
7/10/2021	1:25:00 AM	326.1	214.6	3	219.1	3
7/10/2021	1:30:00 AM	266.1	224.5	4	226.2	3.9
7/10/2021	1:35:00 AM	221.2	234.6	2.2	233.4	2.2
7/10/2021	1:40:00 AM	191.3	260.1	1.1	269.4	0.8
7/10/2021	1:45:00 AM	149.7	318.1	2.4	319.4	2.2
7/10/2021	1:50:00 AM	122.7	312.7	2.8	316.1	2.7
7/10/2021	1:55:00 AM	117.3	317.4	3.5	317.3	3.4
7/10/2021	2:00:00 AM	93	321.3	5.4	320.9	5.3
7/10/2021	2:05:00 AM	84.1	319.6	6.4	318.4	6.2
7/10/2021	2:10:00 AM	95.9	43.1	3.6	37.7	3
7/10/2021	2:15:00 AM	77.6	33.7	2.8	37.3	2.5
7/10/2021	2:20:00 AM	64	342.5	3.1	343.5	3
7/10/2021	2:25:00 AM	72.6	1.8	3.4	2.3	3.3
7/10/2021	2:30:00 AM	63.7	3.4	3.7	4.8	3.6
7/10/2021	2:35:00 AM	55.8	348.2	4.1	348.5	4.1
7/10/2021	2:40:00 AM	83.5	3.1	3.5	2.5	3.4
7/10/2021	2:45:00 AM	124	27.6	4	25.8	3.9
7/10/2021	2:50:00 AM	154.4	12.9	6.1	13	6
7/10/2021	2:55:00 AM	241.3	22.2	5.8	22.8	5.7
7/10/2021	3:00:00 AM	312	30.4	4.9	28.5	4.8
7/10/2021	3:05:00 AM	373.9	19.4	4.7	18.3	4.5
7/10/2021	3:10:00 AM	447	7.1	5.6	7.3	5.5
7/10/2021	3:15:00 AM	464.4	12.4	7.7	12.2	7.6
7/10/2021	3:20:00 AM	464.3	10.6	6.7	10.4	6.6
7/10/2021	3:25:00 AM	522.5	8.7	6.9	8.4	6.7
7/10/2021	3:30:00 AM	593.6	10.6	7.7	10.3	7.6
7/10/2021	3:35:00 AM	653.4	16.8	7.6	16.8	7.5
7/10/2021	3:40:00 AM	715.3	9.7	7.7	9.5	7.5
7/10/2021	3:45:00 AM	771.4	8.3	7.7	8.7	7.5
7/10/2021	3:50:00 AM	783.2	355.3	5.6	355.4	5.3
7/10/2021	3:55:00 AM	754.4	348.1	5.9	348	5.8
7/10/2021	4:00:00 AM	729.9	341	6.2	340.8	6.2
7/10/2021	4:05:00 AM	706.8	343.6	6.9	343.6	6.9
7/10/2021	4:10:00 AM	669.7	343.4	6.5	343.5	6.4
7/10/2021	4:15:00 AM	633.5	333.2	6.4	333.5	6.4
7/10/2021	4:20:00 AM	623.9	333.3	5	333.2	5
7/10/2021	4:25:00 AM	599.9	331.6	3.1	332.5	3.1

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	4:30:00 AM	563.7	325.2	2	325.1	2
7/10/2021	4:35:00 AM	542.9	326.5	1.7	328.3	1.6
7/10/2021	4:40:00 AM	507.5	273.4	1.3	271.5	1.2
7/10/2021	4:45:00 AM	483.1	246.4	2.1	246.5	2.1
7/10/2021	4:50:00 AM	450.9	251.1	3.5	251.2	3.5
7/10/2021	4:55:00 AM	395.2	244.3	3.7	244.2	3.7
7/10/2021	5:00:00 AM	329.6	243.1	3.8	243.2	3.8
7/10/2021	5:05:00 AM	263.4	257.2	3.5	257	3.5
7/10/2021	5:10:00 AM	214.2	258.1	2.7	258.4	2.7
7/10/2021	5:15:00 AM	172.3	244.8	2	245.1	2
7/10/2021	5:20:00 AM	143.7	213.8	1.9	214.9	1.9
7/10/2021	5:25:00 AM	123.3	187.1	2.1	187.2	2.1
7/10/2021	5:30:00 AM	108.9	185.9	2.2	186.3	2.1
7/10/2021	5:35:00 AM	97.2	175.1	2.2	175.4	2.2
7/10/2021	5:40:00 AM	92.5	181	3.6	181.5	3.6
7/10/2021	5:45:00 AM	84.6	183.3	5.2	183.2	5.2
7/10/2021	5:50:00 AM	78.3	184.8	5.4	184.8	5.4
7/10/2021	5:55:00 AM	71.1	186.3	5.2	186.4	5.1
7/10/2021	6:00:00 AM	65.5	193.4	3.8	192.8	3.7
7/10/2021	6:05:00 AM	60.4	200.4	3.4	200.4	3.4
7/10/2021	6:10:00 AM	55.7	184.9	5.1	184.2	5
7/10/2021	6:15:00 AM	59.7	162	5.5	162.3	5.4
7/10/2021	6:20:00 AM	83.6	160.9	4.3	160.6	4.2
7/10/2021	6:25:00 AM	110.2	157.4	5.7	157.7	5.6
7/10/2021	6:30:00 AM	128.4	150.2	4	154.1	3.8
7/10/2021	6:35:00 AM	139.6	138.9	3.6	139.4	3.6
7/10/2021	6:40:00 AM	138.6	144.8	2.6	144.3	2.5
7/10/2021	6:45:00 AM	136.8	126.7	2.9	126.5	2.9
7/10/2021	6:50:00 AM	136.4	130	4.5	129.9	4.4
7/10/2021	6:55:00 AM	125.6	141.4	4.2	141.7	4.1
7/10/2021	7:00:00 AM	124.1	153.5	6.2	153.6	6.2
7/10/2021	7:05:00 AM	116.4	153.1	6	153.6	5.9
7/10/2021	7:10:00 AM	102.1	134.9	5.1	134.8	5
7/10/2021	7:15:00 AM	104.4	153.6	4.2	154.3	4
7/10/2021	7:20:00 AM	105.4	154.7	3.8	155.3	3.7
7/10/2021	7:25:00 AM	97.8	141.5	3	141.5	2.9
7/10/2021	7:30:00 AM	98.7	165.4	3.1	164.9	3
7/10/2021	7:35:00 AM	99.7	148.3	3.2	148.1	3.1
7/10/2021	7:40:00 AM	92.1	168.7	3.9	168.9	3.8
7/10/2021	7:45:00 AM	76.8	169.2	4.9	172.1	4.7
7/10/2021	7:50:00 AM	72.7	195.2	9.3	194.8	9.2
7/10/2021	7:55:00 AM	84	187.5	9.1	188	9
7/10/2021	8:00:00 AM	86.6	196.9	10.8	196.9	10.7
7/10/2021	8:05:00 AM	79.4	195.8	11.1	195.4	11
7/10/2021	8:10:00 AM	66.6	201.3	10.7	201.4	10.7
7/10/2021	8:15:00 AM	55.8	199.4	10.9	199.5	10.8
7/10/2021	8:20:00 AM	47.7	197	10.1	197.9	9.9
7/10/2021	8:25:00 AM	44.5	191.4	9.2	191.8	9.1
7/10/2021	8:30:00 AM	44.4	192.5	8.6	193.7	8.4
7/10/2021	8:35:00 AM	44.8	176.4	7.2	176.7	6.9
7/10/2021	8:40:00 AM	47.1	163.4	7.1	163.4	6.9
7/10/2021	8:45:00 AM	53.7	178	6.8	178.3	6.6
7/10/2021	8:50:00 AM	61.5	172.4	8.3	173	8.2
7/10/2021	8:55:00 AM	67.1	200.1	9.9	199.9	9.7

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	9:00:00 AM	65.3	203.5	10	202.9	9.9
7/10/2021	9:05:00 AM	61.6	179.9	8.1	179.9	7.9
7/10/2021	9:10:00 AM	56.6	184.1	9.5	184	9.2
7/10/2021	9:15:00 AM	51.1	212.3	9.9	212.4	9.7
7/10/2021	9:20:00 AM	46.1	203.6	10.7	202.7	10.5
7/10/2021	9:25:00 AM	41.6	209.6	8.8	209.9	8.6
7/10/2021	9:30:00 AM	40.7	177.1	10	177.2	9.7
7/10/2021	9:35:00 AM	41.2	191.2	8	191	7.9
7/10/2021	9:40:00 AM	40.8	207.2	10.3	207.4	10.2
7/10/2021	9:45:00 AM	38.9	191.3	9	191.7	8.9
7/10/2021	9:50:00 AM	38.7	182.4	8.3	182.7	8
7/10/2021	9:55:00 AM	35.8	206.3	8.1	206.3	8
7/10/2021	10:00:00 AM	34.2	197.1	8.6	196.4	8.2
7/10/2021	10:05:00 AM	35.5	178.2	7.4	177.7	7.2
7/10/2021	10:10:00 AM	35.9	210	5.2	209.5	4.6
7/10/2021	10:15:00 AM	38.8	204.1	7.6	203.4	7.2
7/10/2021	10:20:00 AM	43.2	215.3	6.9	216	6.5
7/10/2021	10:25:00 AM	44.4	206.2	7	204.1	6.2
7/10/2021	10:30:00 AM	46.1	205	5.8	202.8	5.3
7/10/2021	10:35:00 AM	45.7	245.9	5.9	244.2	5.5
7/10/2021	10:40:00 AM	48.9	218.3	6.3	215.9	6
7/10/2021	10:45:00 AM	55.3	221	6.3	222.1	6.1
7/10/2021	10:50:00 AM	62.7	241.6	5.2	237.9	4.8
7/10/2021	10:55:00 AM	69.4	203.5	5.9	201	5.6
7/10/2021	11:00:00 AM	74.5	174.5	6.9	171.9	6.5
7/10/2021	11:05:00 AM	77.4	162.4	5.8	162.1	5.6
7/10/2021	11:10:00 AM	78.5	158.4	5.8	158.4	5.6
7/10/2021	11:15:00 AM	79.5	199.9	6.4	199.2	6
7/10/2021	11:20:00 AM	82.4	168.5	7.4	165.6	7
7/10/2021	11:25:00 AM	90.2	186.4	7.3	190.4	7
7/10/2021	11:30:00 AM	94.8	203.5	5.6	201.7	5.4
7/10/2021	11:35:00 AM	95	190.9	6.9	186.7	6.3
7/10/2021	11:40:00 AM	99.3	160.1	5	162.7	4.6
7/10/2021	11:45:00 AM	101.9	184.9	3.5	192.6	2.9
7/10/2021	11:50:00 AM	102.2	167	7.1	181.2	5.5
7/10/2021	11:55:00 AM	101.8	226	7	225.7	6.6
7/10/2021	12:00:00 PM	101.5	167.1	5.3	160.8	4.6
7/10/2021	12:05:00 PM	103.4	200.6	6.2	211	5.1
7/10/2021	12:10:00 PM	96.6	198.7	4.2	203.9	3.1
7/10/2021	12:15:00 PM	89	166.3	6.7	166.8	6.5
7/10/2021	12:20:00 PM	88	173.2	5.6	169.6	4.8
7/10/2021	12:25:00 PM	92	191.3	6.6	192	6.3
7/10/2021	12:30:00 PM	94.1	200.9	5.4	202.2	5.2
7/10/2021	12:35:00 PM	92.1	170.7	3.1	190.3	2.6
7/10/2021	12:40:00 PM	80.4	242.3	1.7	282.5	0.5
7/10/2021	12:45:00 PM	78.2	207.9	5.6	218.3	4.9
7/10/2021	12:50:00 PM	75.1	228.3	10.8	228.8	10.6
7/10/2021	12:55:00 PM	70.2	239.2	7.7	242.5	7.5
7/10/2021	1:00:00 PM	66.7	222.5	5.2	216.5	4.8
7/10/2021	1:05:00 PM	65.7	206.1	8.6	205.9	8.2
7/10/2021	1:10:00 PM	61.9	198.9	6.8	195.4	6.1
7/10/2021	1:15:00 PM	57.1	212.1	6.6	208	5.6
7/10/2021	1:20:00 PM	52.9	175.5	7.3	174.9	7
7/10/2021	1:25:00 PM	48.2	212.4	6.7	206.9	6.2

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	1:30:00 PM	45.9	178.9	6	179.1	5.8
7/10/2021	1:35:00 PM	41.5	177.6	9.9	178.9	9.4
7/10/2021	1:40:00 PM	40.1	213	9.7	213.1	9.5
7/10/2021	1:45:00 PM	38.1	184.4	9.8	184.1	9.3
7/10/2021	1:50:00 PM	38	190.2	12.2	190.3	11.8
7/10/2021	1:55:00 PM	37.3	191	10.1	190.2	9.5
7/10/2021	2:00:00 PM	37.1	194.5	12.7	194.2	11.7
7/10/2021	2:05:00 PM	37.6	193.7	11.1	194.4	11
7/10/2021	2:10:00 PM	37.9	197.4	12	201.3	11.4
7/10/2021	2:15:00 PM	37	203.1	11.6	196.3	10.7
7/10/2021	2:20:00 PM	33.6	259.5	6.1	261	5.5
7/10/2021	2:25:00 PM	28.4	267.6	11.8	267.7	11.5
7/10/2021	2:30:00 PM	27.3	257	12.4	256.8	12.1
7/10/2021	2:35:00 PM	28.3	269.7	9.3	268.8	8.9
7/10/2021	2:40:00 PM	28.4	249.6	10.7	253.6	9.6
7/10/2021	2:45:00 PM	26.6	260.1	9.6	260.9	9.3
7/10/2021	2:50:00 PM	25.6	277.5	8.5	279.2	8.3
7/10/2021	2:55:00 PM	25.8	241.2	11	242.1	10.4
7/10/2021	3:00:00 PM	27.4	267.4	10.8	265.4	10
7/10/2021	3:05:00 PM	28.5	260.4	10.2	260.1	10
7/10/2021	3:10:00 PM	29	255	12.7	255.6	12.4
7/10/2021	3:15:00 PM	29	239.1	11.8	237.6	10.9
7/10/2021	3:20:00 PM	30.3	220.1	9.7	220.1	9.4
7/10/2021	3:25:00 PM	31.1	204.7	12.5	203.6	12.2
7/10/2021	3:30:00 PM	31.9	209.3	10.5	206.8	10.2
7/10/2021	3:35:00 PM	30.6	211.1	6.4	211.8	6
7/10/2021	3:40:00 PM	26	259.5	11.5	259.5	11.2
7/10/2021	3:45:00 PM	20.2	265	9.3	265.8	9.1
7/10/2021	3:50:00 PM	19.1	256.3	8.1	255.3	7.9
7/10/2021	3:55:00 PM	21.6	239.1	10.6	237.8	10.4
7/10/2021	4:00:00 PM	23.7	250.2	8	251.4	7.3
7/10/2021	4:05:00 PM	24.1	272.1	9.6	272	8.9
7/10/2021	4:10:00 PM	25.1	233.8	10.2	233.9	9.9
7/10/2021	4:15:00 PM	26	236.1	12.1	237.3	11.5
7/10/2021	4:20:00 PM	27.3	239.3	11.8	240	11.1
7/10/2021	4:25:00 PM	25.3	265.9	9.2	265.7	9.1
7/10/2021	4:30:00 PM	23.1	258.4	10.3	257.4	9.5
7/10/2021	4:35:00 PM	22.3	260.1	8.1	260.5	7.8
7/10/2021	4:40:00 PM	21.5	264.9	7.7	267	7.3
7/10/2021	4:45:00 PM	21.5	238.8	10.4	238	10.2
7/10/2021	4:50:00 PM	21.9	235	10.3	235.5	10.1
7/10/2021	4:55:00 PM	20.8	243.4	10.8	242.5	10.6
7/10/2021	5:00:00 PM	19.3	231.9	9.9	231.7	9.7
7/10/2021	5:05:00 PM	18.8	230	9.5	231.7	9.2
7/10/2021	5:10:00 PM	19.1	232.6	10.4	232.4	10.1
7/10/2021	5:15:00 PM	21.2	230.1	10.6	230.1	10.5
7/10/2021	5:20:00 PM	21.2	244.8	9.3	244.9	9.1
7/10/2021	5:25:00 PM	20.5	242.7	10.1	243	9.9
7/10/2021	5:30:00 PM	19.9	239.9	9	240.4	8.8
7/10/2021	5:35:00 PM	19.1	246.9	11	247.2	10.9
7/10/2021	5:40:00 PM	18.4	232.6	11	232.4	10.7
7/10/2021	5:45:00 PM	20.3	225	13	225.8	12.6
7/10/2021	5:50:00 PM	21.5	227.1	14.8	226.9	14.5
7/10/2021	5:55:00 PM	22.2	224.3	11.5	224.4	11.4

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	6:00:00 PM	23.2	220.8	12.6	221	12.4
7/10/2021	6:05:00 PM	24.2	214.5	12.6	214.1	12.3
7/10/2021	6:10:00 PM	25.2	213.1	12.8	213.2	12.7
7/10/2021	6:15:00 PM	26	215.6	12.5	215.9	12.4
7/10/2021	6:20:00 PM	25.9	212.9	12.1	212.7	11.9
7/10/2021	6:25:00 PM	27.9	214.8	11.5	215.2	11.4
7/10/2021	6:30:00 PM	29.2	209	10.4	208.6	10.3
7/10/2021	6:35:00 PM	28.8	216.5	9.9	216.5	9.8
7/10/2021	6:40:00 PM	28.6	210.5	10.5	210.3	10.4
7/10/2021	6:45:00 PM	28	219.6	10.5	220.1	10.3
7/10/2021	6:50:00 PM	27.4	208	10.5	208.4	10.5
7/10/2021	6:55:00 PM	27.4	208.8	9.1	209.1	9
7/10/2021	7:00:00 PM	29.4	200.2	8	201.2	7.9
7/10/2021	7:05:00 PM	32	194.4	6.9	195.1	6.7
7/10/2021	7:10:00 PM	33.8	166	5.2	167.8	4.9
7/10/2021	7:15:00 PM	35.7	148.5	5.9	147.9	5.6
7/10/2021	7:20:00 PM	36.2	123.2	7.8	123.1	7.7
7/10/2021	7:25:00 PM	36.7	115.4	6.9	116.2	6.7
7/10/2021	7:30:00 PM	36.5	107	7.8	107.1	7.7
7/10/2021	7:35:00 PM	34.8	81.5	7.8	80.7	7.7
7/10/2021	7:40:00 PM	36.9	65.5	16.8	65.3	16.1
7/10/2021	7:45:00 PM	68.5	70	17.9	68.9	17.4
7/10/2021	7:50:00 PM	216.5	66.6	19	66.3	18.7
7/10/2021	7:55:00 PM	408.3	81.7	14.8	81.3	14.4
7/10/2021	8:00:00 PM	477.4	73.7	17.8	73.3	17.4
7/10/2021	8:05:00 PM	456.3	79	15.2	79	14.9
7/10/2021	8:10:00 PM	388.9	78.6	12	79.1	11.8
7/10/2021	8:15:00 PM	315.9	86.1	8.4	86.7	8.2
7/10/2021	8:20:00 PM	256.1	86.7	14.9	86.7	14.6
7/10/2021	8:25:00 PM	210.2	92.1	15.4	92.4	15.2
7/10/2021	8:30:00 PM	177	101.8	12	101.3	11.8
7/10/2021	8:35:00 PM	143.3	113.1	12.6	112.8	12.5
7/10/2021	8:40:00 PM	110.6	116.5	11.5	116.4	11.3
7/10/2021	8:45:00 PM	84.3	121.8	9.3	121.7	9.1
7/10/2021	8:50:00 PM	58.4	129.6	9.2	129.5	9.1
7/10/2021	8:55:00 PM	33.5	138.8	8.1	138.3	7.9
7/10/2021	9:00:00 PM	22.1	149.2	7.5	149.8	7.4
7/10/2021	9:05:00 PM	25.5	119.9	11.4	119.8	11.2
7/10/2021	9:10:00 PM	44.5	127	18.6	127.1	18.1
7/10/2021	9:15:00 PM	95.7	139.2	18	139.3	17.7
7/10/2021	9:20:00 PM	163.3	137.6	16.7	137.8	16.5
7/10/2021	9:25:00 PM	219	149.1	14.9	149.3	14.4
7/10/2021	9:30:00 PM	270.4	167.6	18.5	168	18.1
7/10/2021	9:35:00 PM	324.8	169.8	13.4	171.5	13.1
7/10/2021	9:40:00 PM	375.1	179.9	18.4	180.5	18.2
7/10/2021	9:45:00 PM	432.7	191.6	18.3	191.5	18.1
7/10/2021	9:50:00 PM	564.6	177.1	17	178.2	16.4
7/10/2021	9:55:00 PM	705.8	164.5	12.8	165.7	12.4
7/10/2021	10:00:00 PM	771.7	148.8	11.1	149.8	10.7
7/10/2021	10:05:00 PM	761.5	171.5	8.1	172	8
7/10/2021	10:10:00 PM	695.9	183	8.6	183.2	8.5
7/10/2021	10:15:00 PM	604.2	193.4	6.4	193.9	6.3
7/10/2021	10:20:00 PM	500	202.4	6.4	201.5	6.1
7/10/2021	10:25:00 PM	395.9	246.6	5.8	246	5.6

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/10/2021	10:30:00 PM	305.3	305.8	3.4	287.4	2.5
7/10/2021	10:35:00 PM	238	0.6	3.1	336.6	1.9
7/10/2021	10:40:00 PM	188.5	346.6	4.3	330.1	3.1
7/10/2021	10:45:00 PM	152.9	32.1	1.3	36.1	1.2
7/10/2021	10:50:00 PM	131	85.1	3.4	97.4	3.3
7/10/2021	10:55:00 PM	120.2	105.1	8.4	105	8.3
7/10/2021	11:00:00 PM	103.4	103.9	6.9	104.2	6.8
7/10/2021	11:05:00 PM	90.5	108.1	7.7	108.9	7.5
7/10/2021	11:10:00 PM	81.3	105.8	10.7	105.8	10.5
7/10/2021	11:15:00 PM	79.6	105	10.5	104.8	10.3
7/10/2021	11:20:00 PM	83.4	104.6	9.1	105.3	8.9
7/10/2021	11:25:00 PM	97.6	98.9	6.7	99.2	6.6
7/10/2021	11:30:00 PM	115.4	93.8	6.6	94.3	6.5
7/10/2021	11:35:00 PM	129.3	92.7	6.5	93.3	6.4
7/10/2021	11:40:00 PM	137.6	89.7	4.5	90.3	4.4
7/10/2021	11:45:00 PM	139.5	78	3.3	77.8	3.2
7/10/2021	11:50:00 PM	131.2	25.9	1.6	25.3	1
7/10/2021	11:55:00 PM	132.3	292.8	2.8	290.8	2.5
	Average	248.6	196	7.9	191.9	4.1
	Max	5538	355.3	19	355.4	18.7
	Max Hour	359763.294	5624.38631	14.56961564	5576.286442	14.31871842
	Min	18.4	0.6	1.1	2.3	0.5
	Count	288	288	288	288	288
	Total	71623.6	53468.8	2289.3	53892.6	2214.3

Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	12:00:00 AM	15.4	218.8	2.4	220.2	2.2
7/12/2021	12:05:00 AM	13.9	219.1	2.5	214	2.2
7/12/2021	12:10:00 AM	14.7	201.1	1.6	195.7	1.4
7/12/2021	12:15:00 AM	13.5	179.3	1.3	183.7	1.2
7/12/2021	12:20:00 AM	12	176.9	1.3	180.3	1.2
7/12/2021	12:25:00 AM	13.7	207.6	0.9	219.8	0.6
7/12/2021	12:30:00 AM	40.3	302.7	1	301.3	1
7/12/2021	12:35:00 AM	27.7	341.4	0	343	0.8
7/12/2021	12:40:00 AM	25	309.2	0	317.9	0.7
7/12/2021	12:45:00 AM	19.1	299.6	0	303.1	0.7
7/12/2021	12:50:00 AM	17	284.5	1.2	284.5	1.2
7/12/2021	12:55:00 AM	31.1	301.7	2.2	301.8	2.1
7/12/2021	1:00:00 AM	27	305.7	1.9	307.4	1.9
7/12/2021	1:05:00 AM	20.4	263.1	2.2	261.3	2.1
7/12/2021	1:10:00 AM	12	252.7	2.3	252.3	2.3
7/12/2021	1:15:00 AM	16	252.4	2.6	251.1	2.6
7/12/2021	1:20:00 AM	14.3	242.4	3.9	242.4	3.9
7/12/2021	1:25:00 AM	10.5	220.5	2.6	223.3	2.4
7/12/2021	1:30:00 AM	14.8	241.6	3.2	240.7	3.1
7/12/2021	1:35:00 AM	19.3	283.7	2.2	278.1	2
7/12/2021	1:40:00 AM	30.5	352.9	2.5	358.8	2.4
7/12/2021	1:45:00 AM	49.2	12.1	4.4	12.3	4.3
7/12/2021	1:50:00 AM	37.5	5.5	3.3	7.5	3.2
7/12/2021	1:55:00 AM	35.2	352.3	3.1	351.1	3
7/12/2021	2:00:00 AM	26.1	338	3.8	338	3.8
7/12/2021	2:05:00 AM	19.9	328.6	2.6	328.8	2.6
7/12/2021	2:10:00 AM	14.6	328.5	3.2	328.5	3.2
7/12/2021	2:15:00 AM	21.3	328.3	3.9	328.2	3.9
7/12/2021	2:20:00 AM	32.2	323.5	3.5	323.6	3.4
7/12/2021	2:25:00 AM	38.4	323	3.5	322.8	3.5
7/12/2021	2:30:00 AM	44.2	314.5	3.6	314.4	3.6
7/12/2021	2:35:00 AM	35.2	305	2.2	306	2.2
7/12/2021	2:40:00 AM	32.9	246.1	0	271.1	0.3
7/12/2021	2:45:00 AM	23.3	247.7	1.4	249.2	1.3
7/12/2021	2:50:00 AM	22.8	272.9	1.4	272.9	1.4
7/12/2021	2:55:00 AM	29	247	0	234.9	0.5
7/12/2021	3:00:00 AM	23.3	210.3	1.2	210	1.2
7/12/2021	3:05:00 AM	19.3	210.2	1.5	208.7	1.5
7/12/2021	3:10:00 AM	16.5	205.8	1.9	206.2	1.8
7/12/2021	3:15:00 AM	20.7	267	1.8	265.4	1.6
7/12/2021	3:20:00 AM	31.8	298.7	1.5	299.8	1.4
7/12/2021	3:25:00 AM	37.7	309.5	2.6	308.9	2.5
7/12/2021	3:30:00 AM	40.3	291	2.9	291.2	2.8
7/12/2021	3:35:00 AM	28.1	275.2	3.7	274.8	3.6
7/12/2021	3:40:00 AM	20.3	272.9	3.7	273.1	3.7
7/12/2021	3:45:00 AM	20.3	251.3	2.6	251.1	2.5
7/12/2021	3:50:00 AM	16.5	221	4	222.9	3.8
7/12/2021	3:55:00 AM	24	197.1	4.3	197.4	4.2
7/12/2021	4:00:00 AM	38.6	187.5	4	187.3	3.9
7/12/2021	4:05:00 AM	45	212.1	2.5	212.9	2.4
7/12/2021	4:10:00 AM	33	252.9	1.4	249.3	1.3
7/12/2021	4:15:00 AM	28.8	285.9	2.3	282.8	2.2
7/12/2021	4:20:00 AM	31	293.2	1.7	294	1.7

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/12/2021	4:25:00 AM	36.3	302	2.8	302.1	2.7
7/12/2021	4:30:00 AM	40.8	313.3	2.3	312.8	2.2
7/12/2021	4:35:00 AM	38.1	304.2	2.1	305	2
7/12/2021	4:40:00 AM	51.6	298.6	2	298.4	2
7/12/2021	4:45:00 AM	66.2	284.4	1.6	279.5	1.3
7/12/2021	4:50:00 AM	57.6	242.3	3	242.1	2.9
7/12/2021	4:55:00 AM	39.4	209.8	2.8	211.9	2.7
7/12/2021	5:00:00 AM	30	225.3	3	228.1	2.8
7/12/2021	5:05:00 AM	25.9	222.8	2.6	223.8	2.5
7/12/2021	5:10:00 AM	29.2	224.4	1.9	228.7	1.8
7/12/2021	5:15:00 AM	24.9	219.7	2.9	223.4	2.7
7/12/2021	5:20:00 AM	23.7	230	4.5	230.9	4.2
7/12/2021	5:25:00 AM	17.3	231.1	6.1	232.4	5.9
7/12/2021	5:30:00 AM	18.5	235.9	7.6	237	7.4
7/12/2021	5:35:00 AM	20.2	219.1	6.5	220.3	6.2
7/12/2021	5:40:00 AM	17.9	220.2	6.9	220.2	6.6
7/12/2021	5:45:00 AM	26	228.8	5.8	229.8	5.6
7/12/2021	5:50:00 AM	52	223.6	4.7	225.4	4.5
7/12/2021	5:55:00 AM	50.4	231.7	4.9	232	4.8
7/12/2021	6:00:00 AM	45	214.2	8.5	212.4	8.2
7/12/2021	6:05:00 AM	50	200.1	8	200.2	7.9
7/12/2021	6:10:00 AM	49.8	200.5	9	200.4	8.9
7/12/2021	6:15:00 AM	48.5	206.2	9.3	205.3	9.1
7/12/2021	6:20:00 AM	33.3	210.3	9	210.3	8.7
7/12/2021	6:25:00 AM	39.4	210.4	9.5	210.2	9.3
7/12/2021	6:30:00 AM	39.6	220.8	8.6	220.5	8.2
7/12/2021	6:35:00 AM	44.7	223.7	7.6	224.4	7.2
7/12/2021	6:40:00 AM	47.2	227.8	8.3	228.2	7.9
7/12/2021	6:45:00 AM	62.9	237.8	7.7	238.2	7.6
7/12/2021	6:50:00 AM	63.5	238.2	6.9	238.5	6.8
7/12/2021	6:55:00 AM	72.4	225.4	6.7	226.8	6.3
7/12/2021	7:00:00 AM	65.9	210	9.1	209.7	8.8
7/12/2021	7:05:00 AM	45.9	215.5	5.1	216.1	4.9
7/12/2021	7:10:00 AM	45.7	225.1	3.9	223.4	3.8
7/12/2021	7:15:00 AM	59.9	211.3	4.9	212.5	4.6
7/12/2021	7:20:00 AM	34.5	228.2	6.8	228.7	6.5
7/12/2021	7:25:00 AM	36	238	5.6	237.1	5.4
7/12/2021	7:30:00 AM	39.3	230.8	5.2	233.3	5
7/12/2021	7:35:00 AM	72.8	218.3	5	219.1	4.7
7/12/2021	7:40:00 AM	57.5	211.1	7.5	210.7	7.2
7/12/2021	7:45:00 AM	38.4	219	6.2	218.6	5.8
7/12/2021	7:50:00 AM	46.3	218	6.2	217.1	5.9
7/12/2021	7:55:00 AM	52.4	232.7	6.9	233.3	6.7
7/12/2021	8:00:00 AM	<	232.2	7.1	233.2	6.9
7/12/2021	8:05:00 AM	<	224.6	8.5	226.5	8.2
7/12/2021	8:10:00 AM	<	230.9	10.8	231.9	10.5
7/12/2021	8:15:00 AM	<	226.4	8.8	228.6	8.6
7/12/2021	8:20:00 AM	<	216.3	7.3	214.7	6.9
7/12/2021	8:25:00 AM	<	223.5	8.2	225.2	7.8
7/12/2021	8:30:00 AM	<	208	10.5	208.8	10
7/12/2021	8:35:00 AM	<	195.1	10.2	195.1	10
7/12/2021	8:40:00 AM	<	203	11.4	202.8	11.2
7/12/2021	8:45:00 AM	<	190.6	9.3	190.6	9.2

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	8:50:00 AM	<	191.3	8.6	191	8.5
7/12/2021	8:55:00 AM	<	196.8	8.3	195.4	7.9
7/12/2021	9:00:00 AM	<	228	6.7	229.1	6.5
7/12/2021	9:05:00 AM	112.6	232.6	6.1	232.4	5.9
7/12/2021	9:10:00 AM	101.3	230.1	6	231.8	5.8
7/12/2021	9:15:00 AM	81.5	243.4	5.9	242.9	5.7
7/12/2021	9:20:00 AM	80.4	242.7	5.8	244	5.6
7/12/2021	9:25:00 AM	78.1	244.2	7.5	244.3	7.3
7/12/2021	9:30:00 AM	80.9	245	6.1	242.2	5.8
7/12/2021	9:35:00 AM	84.2	276.3	6.7	275.7	6.3
7/12/2021	9:40:00 AM	83.6	261.5	6.4	260.1	6
7/12/2021	9:45:00 AM	82.3	244.3	5	247.2	4.9
7/12/2021	9:50:00 AM	82.6	224.5	3.8	223.3	3.6
7/12/2021	9:55:00 AM	74.2	200.4	4	202.3	3.7
7/12/2021	10:00:00 AM	69.6	235	3.8	230.1	3.6
7/12/2021	10:05:00 AM	74.6	207.1	4.6	206.5	4.5
7/12/2021	10:10:00 AM	70.4	204.7	3.7	213.2	2.5
7/12/2021	10:15:00 AM	71.8	239.9	7.1	239	6.9
7/12/2021	10:20:00 AM	90.6	247	7.6	247.6	7.2
7/12/2021	10:25:00 AM	109.9	257.3	7.7	256.9	7.5
7/12/2021	10:30:00 AM	122.7	250.8	6.5	250	6.3
7/12/2021	10:35:00 AM	131.5	254.8	9.3	253.7	9.1
7/12/2021	10:40:00 AM	151.6	258.9	7.3	256.2	7
7/12/2021	10:45:00 AM	162.7	257.3	6.3	254.3	5.9
7/12/2021	10:50:00 AM	165.7	272.6	5.8	275.3	5.5
7/12/2021	10:55:00 AM	169.7	237.7	6.4	238.7	6.2
7/12/2021	11:00:00 AM	179.4	240	6.4	242.3	6
7/12/2021	11:05:00 AM	200.6	261.7	6.2	257.1	5.5
7/12/2021	11:10:00 AM	209.3	228.7	3	223.6	2.6
7/12/2021	11:15:00 AM	207.2	294.1	2.8	309.9	2
7/12/2021	11:20:00 AM	211.1	246.6	4.5	248.8	3.9
7/12/2021	11:25:00 AM	212.8	258.3	6.1	257.8	5.8
7/12/2021	11:30:00 AM	234.3	249.8	3.8	247.4	3.2
7/12/2021	11:35:00 AM	244.5	227.2	6.8	229.4	6.5
7/12/2021	11:40:00 AM	269	214.3	5	217.3	4.6
7/12/2021	11:45:00 AM	265.9	183.8	4	200.3	3.3
7/12/2021	11:50:00 AM	279.8	219.1	5.7	222.3	5.4
7/12/2021	11:55:00 AM	277.1	300.2	3.2	293.3	2.9
7/12/2021	12:00:00 PM	269.9	278.8	5.1	278.1	4.8
7/12/2021	12:05:00 PM	288.4	251.3	3.5	250.5	3.2
7/12/2021	12:10:00 PM	321	221.2	4.9	220.7	4.5
7/12/2021	12:15:00 PM	331	278	4.1	282.7	3.4
7/12/2021	12:20:00 PM	336.1	210.4	6.8	209.9	6.6
7/12/2021	12:25:00 PM	335.9	219.3	6	219.4	5.6
7/12/2021	12:30:00 PM	319.6	200.7	5.3	196	5
7/12/2021	12:35:00 PM	323.3	242.5	6.7	243.6	6.4
7/12/2021	12:40:00 PM	316.2	220	2	242.4	1.4
7/12/2021	12:45:00 PM	300.1	264.8	5	268.6	4.6
7/12/2021	12:50:00 PM	311.8	306.7	5	311.5	4.7
7/12/2021	12:55:00 PM	327.9	266.8	7.3	262.8	6.2
7/12/2021	1:00:00 PM	339.6	268.6	2.6	260.5	2.3
7/12/2021	1:05:00 PM	340.2	272.5	5.8	272.1	5.5
7/12/2021	1:10:00 PM	364.3	260.4	5.8	259.5	5.3

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	1:15:00 PM	367.4	220.1	4.3	223.7	3.8
7/12/2021	1:20:00 PM	348.3	142.3	2.8	270.2	0.6
7/12/2021	1:25:00 PM	342.1	238.5	5.3	239.3	5.2
7/12/2021	1:30:00 PM	315.3	200.9	2.2	213.8	1.6
7/12/2021	1:35:00 PM	310.7	278.1	8.5	277.3	8.4
7/12/2021	1:40:00 PM	332.5	269.9	3.5	271.9	3.3
7/12/2021	1:45:00 PM	317.3	257	3.9	255.1	3.3
7/12/2021	1:50:00 PM	323.5	243.6	4.9	241.8	4.7
7/12/2021	1:55:00 PM	347.2	278.3	4.8	276.5	4.6
7/12/2021	2:00:00 PM	339.4	247.3	4.2	252.2	3.4
7/12/2021	2:05:00 PM	326.4	246	4.5	240.5	3.5
7/12/2021	2:10:00 PM	341.7	258	5.9	250.7	5.2
7/12/2021	2:15:00 PM	332	302.1	5.5	302.8	5.1
7/12/2021	2:20:00 PM	330.7	260.3	3.7	265.8	2.7
7/12/2021	2:25:00 PM	346.1	267.6	6	265.1	5.6
7/12/2021	2:30:00 PM	335.9	269.9	5.1	266.5	4.6
7/12/2021	2:35:00 PM	311.6	265.4	4.6	266.2	4.4
7/12/2021	2:40:00 PM	307.9	271.8	7	272.4	6.8
7/12/2021	2:45:00 PM	324.7	240.5	5.4	251.3	4.8
7/12/2021	2:50:00 PM	311.8	233.5	2.8	233.1	2.3
7/12/2021	2:55:00 PM	311.6	260.7	6.4	255.5	6.1
7/12/2021	3:00:00 PM	322.6	247.9	7.8	246.3	7.7
7/12/2021	3:05:00 PM	315.7	268.1	7.7	270.1	7.3
7/12/2021	3:10:00 PM	322.7	286	7.5	286.3	7.3
7/12/2021	3:15:00 PM	327.4	293.1	6.6	293	6.5
7/12/2021	3:20:00 PM	322.7	280.9	8.3	281.1	8.1
7/12/2021	3:25:00 PM	321.3	246.8	3.7	252.2	2.9
7/12/2021	3:30:00 PM	311.6	277.3	1.1	245.2	0.8
7/12/2021	3:35:00 PM	300.6	243.1	4.2	247.1	3.8
7/12/2021	3:40:00 PM	313	268.9	4.6	268.2	4.3
7/12/2021	3:45:00 PM	310	246.9	3.7	244.6	3.4
7/12/2021	3:50:00 PM	313.3	262.6	3.4	255.7	2.2
7/12/2021	3:55:00 PM	321.9	245.1	4.8	242.3	4.4
7/12/2021	4:00:00 PM	317.9	238	6.6	237.8	6.4
7/12/2021	4:05:00 PM	310	244.4	7.7	243.7	7.5
7/12/2021	4:10:00 PM	287.8	239.9	5.6	240.1	5.3
7/12/2021	4:15:00 PM	271.3	215.2	3.8	218.1	3.6
7/12/2021	4:20:00 PM	261.7	216	3.8	215.4	3.6
7/12/2021	4:25:00 PM	251.4	234.4	3.3	230.3	3.1
7/12/2021	4:30:00 PM	248.4	207.1	5.3	206.8	5.1
7/12/2021	4:35:00 PM	246.1	239.5	3.8	233	3.4
7/12/2021	4:40:00 PM	229.5	260.6	3.2	259	3.1
7/12/2021	4:45:00 PM	246.8	232	3	232.5	2.8
7/12/2021	4:50:00 PM	267.3	185.5	3.1	185.1	2.9
7/12/2021	4:55:00 PM	276.7	216.7	3.3	218.5	3
7/12/2021	5:00:00 PM	284.7	233.8	4.1	235.9	3.9
7/12/2021	5:05:00 PM	288.9	217.1	3	208.1	2.7
7/12/2021	5:10:00 PM	296.8	187.5	3.8	186.9	3.7
7/12/2021	5:15:00 PM	319.9	219.4	4.3	219.7	4
7/12/2021	5:20:00 PM	315.9	234	5.1	234.9	5
7/12/2021	5:25:00 PM	324.5	236.2	5.3	237	5.1
7/12/2021	5:30:00 PM	336	216.1	4	216.9	3.8
7/12/2021	5:35:00 PM	334.4	208.5	3.8	207.3	3.7

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	5:40:00 PM	328.9	207.5	3.6	206.2	3.5
7/12/2021	5:45:00 PM	336.9	208.3	4.3	208.6	4.1
7/12/2021	5:50:00 PM	342.3	227.8	4.4	230	4.2
7/12/2021	5:55:00 PM	344.4	235.3	6.1	235.1	6
7/12/2021	6:00:00 PM	362.6	237.6	6.6	237.9	6.5
7/12/2021	6:05:00 PM	374.1	217.7	5	216.3	4.8
7/12/2021	6:10:00 PM	389	225.8	4.8	226.9	4.6
7/12/2021	6:15:00 PM	365.4	229.1	4.5	230.3	4.3
7/12/2021	6:20:00 PM	328.2	214.9	3.5	214.9	3.2
7/12/2021	6:25:00 PM	327.2	217.2	4.7	218.7	4.5
7/12/2021	6:30:00 PM	307.3	209.2	5.3	209.5	5.2
7/12/2021	6:35:00 PM	314.4	216.5	4	215.9	3.8
7/12/2021	6:40:00 PM	320.1	215.9	4.1	215.7	4
7/12/2021	6:45:00 PM	298.1	210.9	4	210.6	3.9
7/12/2021	6:50:00 PM	283.3	214.3	5.1	213.4	4.9
7/12/2021	6:55:00 PM	295.6	215.3	4.5	215.8	4.3
7/12/2021	7:00:00 PM	310.3	216.1	4.2	217.6	4.1
7/12/2021	7:05:00 PM	316.5	215.7	3.1	216.2	2.9
7/12/2021	7:10:00 PM	331.3	213.8	3.6	214.8	3.4
7/12/2021	7:15:00 PM	348.4	232	6.3	233	6.1
7/12/2021	7:20:00 PM	364	222.1	4.1	224	4
7/12/2021	7:25:00 PM	356.6	233.5	5.5	233.8	5.4
7/12/2021	7:30:00 PM	365.7	231.3	5.4	231.8	5.3
7/12/2021	7:35:00 PM	392.9	216.4	3.5	218.5	3.4
7/12/2021	7:40:00 PM	400.3	230.8	4.5	231.7	4.4
7/12/2021	7:45:00 PM	388.7	228.5	4.7	229.3	4.6
7/12/2021	7:50:00 PM	370	236.1	4.8	235.8	4.8
7/12/2021	7:55:00 PM	355.2	233	5.4	233.2	5.3
7/12/2021	8:00:00 PM	349.2	231.2	6.5	231.2	6.4
7/12/2021	8:05:00 PM	373.2	230.9	6.3	231	6.2
7/12/2021	8:10:00 PM	382.5	227	5.9	227.8	5.8
7/12/2021	8:15:00 PM	346.9	233	6.6	233.1	6.4
7/12/2021	8:20:00 PM	314.2	231.7	5.8	232.2	5.7
7/12/2021	8:25:00 PM	268.4	231.5	5.1	232	5
7/12/2021	8:30:00 PM	237	236.3	5.2	235.8	5.1
7/12/2021	8:35:00 PM	213.2	232.7	5.3	233.1	5.2
7/12/2021	8:40:00 PM	204	232.6	5.5	233	5.4
7/12/2021	8:45:00 PM	192.1	238	6	238	5.9
7/12/2021	8:50:00 PM	189	234.7	5.3	234.5	5.2
7/12/2021	8:55:00 PM	180.4	243.3	5.3	242.5	5.2
7/12/2021	9:00:00 PM	171.9	248.9	4.2	248.6	4.1
7/12/2021	9:05:00 PM	176.5	242.3	4.9	241.5	4.8
7/12/2021	9:10:00 PM	170	242.7	6.2	242.6	6.1
7/12/2021	9:15:00 PM	162.2	237.4	5.3	237.2	5.2
7/12/2021	9:20:00 PM	162.1	236.5	4.7	236.6	4.6
7/12/2021	9:25:00 PM	162.4	238.2	4.7	238.4	4.7
7/12/2021	9:30:00 PM	156.6	240	5.4	239.8	5.4
7/12/2021	9:35:00 PM	143.2	241.8	6.2	241.8	6.2
7/12/2021	9:40:00 PM	144	238.3	7.1	238	7
7/12/2021	9:45:00 PM	125.2	238.7	8.4	238.7	8.3
7/12/2021	9:50:00 PM	99.8	244.8	7.8	244.3	7.7
7/12/2021	9:55:00 PM	72.7	246.4	7.2	246.2	7.1
7/12/2021	10:00:00 PM	48.2	245.7	7.3	245.4	7.2

Site: Buckeye						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/12/2021	10:05:00 PM	39.9	241.4	7.7	241.4	7.6
7/12/2021	10:10:00 PM	41.3	237.5	6.5	237.4	6.4
7/12/2021	10:15:00 PM	43.3	238.9	5.7	238.7	5.6
7/12/2021	10:20:00 PM	41.9	236.1	5.9	236.1	5.8
7/12/2021	10:25:00 PM	39.3	238.8	5.7	238.5	5.6
7/12/2021	10:30:00 PM	31.6	241.7	6.1	241.9	6
7/12/2021	10:35:00 PM	28.4	249.5	4.4	249.5	4.3
7/12/2021	10:40:00 PM	27.6	249.1	5.3	248.9	5.2
7/12/2021	10:45:00 PM	22.3	245.3	6.5	244.8	6.4
7/12/2021	10:50:00 PM	27.3	240.6	7.3	240.6	7.2
7/12/2021	10:55:00 PM	25.3	222.6	5.6	223.6	5.4
7/12/2021	11:00:00 PM	42.1	205.4	4.4	206.4	4.2
7/12/2021	11:05:00 PM	48.4	227.5	4.4	228.3	4.3
7/12/2021	11:10:00 PM	23.9	235.3	4.6	235.5	4.4
7/12/2021	11:15:00 PM	27.9	212.5	4.1	212.6	4
7/12/2021	11:20:00 PM	33.4	210.2	5.1	210.6	5
7/12/2021	11:25:00 PM	18.6	206.8	6	206.8	5.9
7/12/2021	11:30:00 PM	10.7	203.7	5.9	203.8	5.8
7/12/2021	11:35:00 PM	18.4	202.2	4	202.3	3.9
7/12/2021	11:40:00 PM	22	195	5.2	195.3	5.1
7/12/2021	11:45:00 PM	20.1	205.4	8.1	205.2	8
7/12/2021	11:50:00 PM	26.2	200.1	6.7	201	6.6
7/12/2021	11:55:00 PM	34.4	184.7	6.4	184.8	6.3
	Average	163.4	239	4.9	235.9	4.1
	Max	400.3	352.9	11.4	358.8	11.2
	Max Hour	18172.09275	1469.082957	4.611469101	1427.626724	4.485958067
	Min	10.5	5.5	0	7.5	0.3
	Count	275	288	288	288	288
	Total	44950.7	68820.6	1415.3	69026.6	1353.5

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	12:00:00 AM	21.5	238	0	244.1	0.1
4/3/2023	12:05:00 AM	22.5	272.1	0.9	279.3	0.8
4/3/2023	12:10:00 AM	22.8	6.7	0	6.9	0
4/3/2023	12:15:00 AM	21.3	347.6	1.9	347.7	1.9
4/3/2023	12:20:00 AM	20.3	14.4	2.6	14.5	2.6
4/3/2023	12:25:00 AM	19	25	3	25.1	3
4/3/2023	12:30:00 AM	18	6.9	1.9	13.6	1.7
4/3/2023	12:35:00 AM	17.4	27.4	2.4	27.2	2.4
4/3/2023	12:40:00 AM	16.6	1.3	1.8	357	1.6
4/3/2023	12:45:00 AM	17.9	3	1.7	355.1	1.5
4/3/2023	12:50:00 AM	15.9	194.4	0	189.4	0.2
4/3/2023	12:55:00 AM	14.9	352.1	1.1	333.8	1
4/3/2023	1:00:00 AM	18.1	347.1	1.3	341.7	1.2
4/3/2023	1:05:00 AM	19.1	19.3	1	15.8	0.8
4/3/2023	1:10:00 AM	18.6	346.1	1.2	341.8	1.1
4/3/2023	1:15:00 AM	17.9	339.5	1.9	340.1	1.8
4/3/2023	1:20:00 AM	17.7	330.8	2.7	330.3	2.7
4/3/2023	1:25:00 AM	18.8	332.6	2.3	332.3	2.2
4/3/2023	1:30:00 AM	18.6	332.5	2.6	331.8	2.6
4/3/2023	1:35:00 AM	17.5	332.7	3.1	333.8	3
4/3/2023	1:40:00 AM	18.1	322.2	4.2	322.3	4.1
4/3/2023	1:45:00 AM	18.4	331	4.9	331.1	4.9
4/3/2023	1:50:00 AM	17.7	330.7	3.3	330.6	3.2
4/3/2023	1:55:00 AM	18.1	332.6	2.3	330.2	2.2
4/3/2023	2:00:00 AM	17.4	329.6	2.4	331.7	2.4
4/3/2023	2:05:00 AM	16.8	330.3	3.5	330	3.5
4/3/2023	2:10:00 AM	16	335.4	4.3	335.4	4.3
4/3/2023	2:15:00 AM	15.5	333	4.6	333	4.6
4/3/2023	2:20:00 AM	15.2	326.1	4.1	325.6	4.1
4/3/2023	2:25:00 AM	16.8	319.7	5.7	319.7	5.7
4/3/2023	2:30:00 AM	17.8	309.8	4.9	310.2	4.9
4/3/2023	2:35:00 AM	18	303.8	4.2	303.2	4.1
4/3/2023	2:40:00 AM	18.3	318.6	1.8	303.5	1.7
4/3/2023	2:45:00 AM	18.7	305.9	1.5	308.3	1.5
4/3/2023	2:50:00 AM	19.1	341.8	3	342.4	2.9
4/3/2023	2:55:00 AM	20.5	354.3	3.4	354.1	3.4
4/3/2023	3:00:00 AM	20.4	356.1	2.9	355.5	2.8
4/3/2023	3:05:00 AM	20.4	359.4	2.2	356.6	2.1
4/3/2023	3:10:00 AM	20	340.2	2.7	340.9	2.7
4/3/2023	3:15:00 AM	19.9	322.3	2.3	322.1	2.2
4/3/2023	3:20:00 AM	19.9	310	2.3	310.3	2.3
4/3/2023	3:25:00 AM	19.7	310	3.2	309.9	3.1
4/3/2023	3:30:00 AM	19	325.4	2.4	319.1	1.6
4/3/2023	3:35:00 AM	19.3	128.7	4.5	128.8	4.5
4/3/2023	3:40:00 AM	20.1	88.1	1.2	95	1
4/3/2023	3:45:00 AM	20.2	52.2	1.5	52.6	1.5
4/3/2023	3:50:00 AM	22	60.1	2.3	60.3	2.3
4/3/2023	3:55:00 AM	22.3	80	2.6	80.2	2.6
4/3/2023	4:00:00 AM	21	85.6	3.1	85.6	3.1
4/3/2023	4:05:00 AM	21.4	79.2	2.5	79.6	2.5
4/3/2023	4:10:00 AM	27.9	43.1	1.8	59.3	1.6
4/3/2023	4:15:00 AM	33.9	348.5	3.8	341.8	3.5
4/3/2023	4:20:00 AM	34.8	337.3	3.6	338.7	3.6

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	4:25:00 AM	31.9	337.6	4.8	337.8	4.7
4/3/2023	4:30:00 AM	28.4	346.2	3	348.4	2.9
4/3/2023	4:35:00 AM	24.7	345.5	3.9	346	3.8
4/3/2023	4:40:00 AM	21	342.3	3	343.5	3
4/3/2023	4:45:00 AM	19.4	346.8	1.8	344.4	1.7
4/3/2023	4:50:00 AM	21.3	359.1	2.4	359.8	2.4
4/3/2023	4:55:00 AM	24.1	351.3	2.8	351.7	2.8
4/3/2023	5:00:00 AM	24.8	358	2.7	358.1	2.7
4/3/2023	5:05:00 AM	26.6	10.3	2.4	12.3	2.4
4/3/2023	5:10:00 AM	27.1	39.1	2.3	38.4	2.2
4/3/2023	5:15:00 AM	28.4	29.9	2.7	29.5	2.6
4/3/2023	5:20:00 AM	29.4	21.9	2.9	23	2.9
4/3/2023	5:25:00 AM	32.4	27.1	2.3	27.1	2.2
4/3/2023	5:30:00 AM	37.3	31.3	2.5	32.3	2.5
4/3/2023	5:35:00 AM	44.7	28.5	2.6	29.3	2.5
4/3/2023	5:40:00 AM	47.8	20.7	2.6	21.2	2.5
4/3/2023	5:45:00 AM	50.4	20	2.5	20.1	2.5
4/3/2023	5:50:00 AM	61.4	30.1	2.1	29.8	2
4/3/2023	5:55:00 AM	79	42.7	2.3	44	2.3
4/3/2023	6:00:00 AM	92.8	52.3	2.6	52.5	2.6
4/3/2023	6:05:00 AM	117.5	41.5	3.1	41.7	3.1
4/3/2023	6:10:00 AM	167.6	60.5	3.2	62.3	3.1
4/3/2023	6:15:00 AM	255	31.2	2.7	32.1	2.5
4/3/2023	6:20:00 AM	306.6	3.7	2.7	4.4	2.5
4/3/2023	6:25:00 AM	315.5	53.1	2.9	52.5	2.9
4/3/2023	6:30:00 AM	292	43	3.1	43.4	3
4/3/2023	6:35:00 AM	255.4	12.8	2.8	15.8	2.7
4/3/2023	6:40:00 AM	221.2	9.7	3.3	9.8	3.2
4/3/2023	6:45:00 AM	183.1	36.9	3.6	36.7	3.5
4/3/2023	6:50:00 AM	157.6	49.4	3	48.8	3
4/3/2023	6:55:00 AM	151	64.6	3.4	64.3	3.4
4/3/2023	7:00:00 AM	174.9	69.8	4.3	69.7	4.3
4/3/2023	7:05:00 AM	204.5	86.7	3.4	86.7	3.4
4/3/2023	7:10:00 AM	223.5	107	3.3	106.1	3.2
4/3/2023	7:15:00 AM	248.7	91.3	3.5	91.8	3.4
4/3/2023	7:20:00 AM	234.3	75	2.1	75	2
4/3/2023	7:25:00 AM	200	56.7	2	56.9	1.9
4/3/2023	7:30:00 AM	172.3	47.4	1.7	47.8	1.6
4/3/2023	7:35:00 AM	157.9	71.1	2.8	72.9	2.7
4/3/2023	7:40:00 AM	150.9	80.4	2.9	80.2	2.8
4/3/2023	7:45:00 AM	143	93.7	3.5	93.7	3.4
4/3/2023	7:50:00 AM	125	100.5	3.7	99.2	3.6
4/3/2023	7:55:00 AM	105.8	107.8	3.6	108.7	3.6
4/3/2023	8:00:00 AM	90.1	107.1	4	107.1	4
4/3/2023	8:05:00 AM	74.9	114.1	4.1	113.4	4
4/3/2023	8:10:00 AM	65.6	102.8	3.9	103.1	3.7
4/3/2023	8:15:00 AM	63.6	104.4	3.5	104.8	3.4
4/3/2023	8:20:00 AM	59.5	103.8	2.9	105.4	2.7
4/3/2023	8:25:00 AM	55.5	137.5	4.6	149.1	4.3
4/3/2023	8:30:00 AM	49.3	166.2	8.6	166.7	8.5
4/3/2023	8:35:00 AM	44.6	169.9	9.5	169.9	9.3
4/3/2023	8:40:00 AM	43.8	175.1	8.3	174	8.1
4/3/2023	8:45:00 AM	44.1	179.8	7	179.1	6.8

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	8:50:00 AM	41.9	188	5.2	184.3	4.9
4/3/2023	8:55:00 AM	42	197	6.1	197.4	5.9
4/3/2023	9:00:00 AM	41.4	199.3	5.4	200.1	5.1
4/3/2023	9:05:00 AM	37.9	188.7	7.9	188.4	7.8
4/3/2023	9:10:00 AM	36.8	190.7	8	189.8	7.7
4/3/2023	9:15:00 AM	45	186.6	9.5	186.5	9.3
4/3/2023	9:20:00 AM	53.3	183.8	8.7	183.7	8.5
4/3/2023	9:25:00 AM	63.1	193.6	8.7	193.1	8.4
4/3/2023	9:30:00 AM	69.9	187.8	8.3	188.3	8.2
4/3/2023	9:35:00 AM	65.5	183.5	7.1	182	6.9
4/3/2023	9:40:00 AM	59.6	186.8	8.8	184.5	8.5
4/3/2023	9:45:00 AM	55.6	184.5	9.8	184.5	9.6
4/3/2023	9:50:00 AM	57	194.6	9.6	194.4	9.3
4/3/2023	9:55:00 AM	58.6	189.1	8.4	189.6	8.1
4/3/2023	10:00:00 AM	61.6	183.1	10.6	183.2	10.4
4/3/2023	10:05:00 AM	64.7	190.1	9.9	189.6	9.8
4/3/2023	10:10:00 AM	75.7	195.3	9.4	196.2	9.1
4/3/2023	10:15:00 AM	82.8	222.6	9.9	223.7	9.6
4/3/2023	10:20:00 AM	80.6	206.1	9.6	208.2	9
4/3/2023	10:25:00 AM	79.3	201.8	8.6	203.2	8.2
4/3/2023	10:30:00 AM	76	194	8.5	193.2	8.2
4/3/2023	10:35:00 AM	72.3	195.5	9.5	194.6	9
4/3/2023	10:40:00 AM	69.2	217.1	8.6	222.2	8.2
4/3/2023	10:45:00 AM	64.7	222.2	12	223	11.7
4/3/2023	10:50:00 AM	60.8	230.7	11.4	230	11.1
4/3/2023	10:55:00 AM	59.1	231.1	13.5	231	13.3
4/3/2023	11:00:00 AM	58.2	229.4	7.7	230.6	7.5
4/3/2023	11:05:00 AM	58.6	205.2	7.9	207.2	7.4
4/3/2023	11:10:00 AM	57.1	220.3	12.1	221.2	11.7
4/3/2023	11:15:00 AM	54.6	217.1	12	218.5	11.6
4/3/2023	11:20:00 AM	52.5	224.7	12	224.3	11.8
4/3/2023	11:25:00 AM	55	228.9	12.4	228.5	12.2
4/3/2023	11:30:00 AM	67.6	228.3	12.5	228.3	12.2
4/3/2023	11:35:00 AM	75.8	223.9	13.5	224.4	13.2
4/3/2023	11:40:00 AM	78	210.9	10.3	212.3	9.8
4/3/2023	11:45:00 AM	78.4	205.1	11.8	205.3	11.2
4/3/2023	11:50:00 AM	77.4	196.4	12.4	196.7	12
4/3/2023	11:55:00 AM	110.4	200	11.3	201.5	10.7
4/3/2023	12:00:00 PM	171.6	202.5	11.5	204.9	11
4/3/2023	12:05:00 PM	179.8	192.6	13.1	192.8	12.6
4/3/2023	12:10:00 PM	186.3	191.5	11.8	192	11.5
4/3/2023	12:15:00 PM	181.4	199	9	199.9	8.5
4/3/2023	12:20:00 PM	158.6	191.3	13.4	191.2	13.1
4/3/2023	12:25:00 PM	144.3	196.6	12.4	197.5	12
4/3/2023	12:30:00 PM	180.8	188.7	14.1	189	13.8
4/3/2023	12:35:00 PM	225.5	202.7	12.2	203.5	11.6
4/3/2023	12:40:00 PM	222.3	203	11.5	205.5	10.9
4/3/2023	12:45:00 PM	207.8	206.9	11.9	207.8	11.2
4/3/2023	12:50:00 PM	184	195.5	13.4	195.6	12.9
4/3/2023	12:55:00 PM	182.8	204.8	10.2	205.9	9.6
4/3/2023	1:00:00 PM	173.9	195.9	11.3	196	10.8
4/3/2023	1:05:00 PM	156.2	222.7	12	225.6	11.5
4/3/2023	1:10:00 PM	136.8	207.5	13.3	209.3	12.4

## Site: Buckeye

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	1:15:00 PM	120.1	216.2	13.9	217	13.4
4/3/2023	1:20:00 PM	118.2	216.8	15.1	217.7	14.3
4/3/2023	1:25:00 PM	118.6	208.8	13.5	211.9	13
4/3/2023	1:30:00 PM	140.9	212.5	14	213.1	13.5
4/3/2023	1:35:00 PM	153.9	203.7	15.2	203.5	14.4
4/3/2023	1:40:00 PM	160.1	202.6	14	204.6	13.2
4/3/2023	1:45:00 PM	222.1	203.6	12.7	205.6	11.9
4/3/2023	1:50:00 PM	320	213.4	13.8	215.1	13.1
4/3/2023	1:55:00 PM	322.4	203.1	12.5	204.4	12
4/3/2023	2:00:00 PM	282.6	215.2	12.5	217.7	12
4/3/2023	2:05:00 PM	245.7	198.3	14.2	198.4	13.5
4/3/2023	2:10:00 PM	226.6	225.2	17.9	225.5	17.5
4/3/2023	2:15:00 PM	218	218.7	18.7	219.5	18.3
4/3/2023	2:20:00 PM	228	214.2	15.7	216.5	15.2
4/3/2023	2:25:00 PM	259.3	214.8	18.2	215.7	17.7
4/3/2023	2:30:00 PM	308.9	230.1	19.3	230.1	19
4/3/2023	2:35:00 PM	348.8	228.3	19.7	228.3	19.4
4/3/2023	2:40:00 PM	323.4	229	18.5	228.5	18.2
4/3/2023	2:45:00 PM	276.5	225.5	18.8	226.2	18.4
4/3/2023	2:50:00 PM	238.2	234	18.3	233.9	18
4/3/2023	2:55:00 PM	203.3	227.1	20.8	227.1	20.5
4/3/2023	3:00:00 PM	185.7	234.2	18.6	234.3	18.3
4/3/2023	3:05:00 PM	174.2	232	21.1	231.8	20.7
4/3/2023	3:10:00 PM	166	231.8	18.5	231.6	18.2
4/3/2023	3:15:00 PM	173.5	230.6	18.5	230.2	18.2
4/3/2023	3:20:00 PM	186.5	228.7	17.6	228	17.3
4/3/2023	3:25:00 PM	188.6	228.1	18.4	227.2	18.1
4/3/2023	3:30:00 PM	195.1	238.3	17.4	238.6	17
4/3/2023	3:35:00 PM	209.9	237.6	18.3	238	18
4/3/2023	3:40:00 PM	217.9	237.5	18.9	237.4	18.6
4/3/2023	3:45:00 PM	225	232.4	16.5	231.6	16.2
4/3/2023	3:50:00 PM	216.1	231.9	20.9	231.5	20.5
4/3/2023	3:55:00 PM	219	228.8	19.1	228.6	18.8
4/3/2023	4:00:00 PM	232.5	231.5	18.7	231.5	18.5
4/3/2023	4:05:00 PM	226.8	227.4	19	227.3	18.7
4/3/2023	4:10:00 PM	227.3	229.6	18.7	229.3	18.3
4/3/2023	4:15:00 PM	235.5	226.1	22.2	226	21.8
4/3/2023	4:20:00 PM	277.5	227	25	226.9	24.6
4/3/2023	4:25:00 PM	460.2	228.2	22.4	228.4	22.1
4/3/2023	4:30:00 PM	561	235.8	21.5	235.7	21.2
4/3/2023	4:35:00 PM	583.6	239.6	19.9	239.6	19.6
4/3/2023	4:40:00 PM	565.8	235	20.1	234.8	19.8
4/3/2023	4:45:00 PM	584.6	241.3	20.5	241.6	20.1
4/3/2023	4:50:00 PM	629.9	239.8	19.1	239.6	18.7
4/3/2023	4:55:00 PM	623.1	233.9	17.4	233.9	17.1
4/3/2023	5:00:00 PM	565.9	237.4	18.5	237.4	18.2
4/3/2023	5:05:00 PM	510.3	232.4	19.4	231.5	19
4/3/2023	5:10:00 PM	469.7	232.1	18.9	232.4	18.6
4/3/2023	5:15:00 PM	428.6	233.6	18.5	232.9	18.1
4/3/2023	5:20:00 PM	398.1	240.1	16.6	240.1	16.3
4/3/2023	5:25:00 PM	379.7	239.8	18.1	240.1	17.8
4/3/2023	5:30:00 PM	372.4	238.1	13.2	238.1	13
4/3/2023	5:35:00 PM	352.3	238.4	12.5	237.9	12.3

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	5:40:00 PM	329.9	234.9	16.8	234.4	16.5
4/3/2023	5:45:00 PM	307	239.7	14.2	239.8	14
4/3/2023	5:50:00 PM	301.2	234.3	14.3	234.3	14.1
4/3/2023	5:55:00 PM	312.2	236.4	14	236.5	13.8
4/3/2023	6:00:00 PM	311.6	235.1	14.3	235.1	14.1
4/3/2023	6:05:00 PM	296.9	239.1	17.3	239.4	16.9
4/3/2023	6:10:00 PM	282.5	235.6	19.3	235.8	19.1
4/3/2023	6:15:00 PM	268.2	239.7	17.5	239.7	17.1
4/3/2023	6:20:00 PM	262.7	244	15.3	244.2	15
4/3/2023	6:25:00 PM	262.3	241.7	16.9	241.7	16.5
4/3/2023	6:30:00 PM	258.3	250.5	17.5	250.8	17.2
4/3/2023	6:35:00 PM	251.6	249.7	17.6	250.3	17.4
4/3/2023	6:40:00 PM	244.8	243.9	13.8	244	13.6
4/3/2023	6:45:00 PM	252.3	243.9	13.8	244.3	13.5
4/3/2023	6:50:00 PM	268.6	248.4	14.4	248.7	14.2
4/3/2023	6:55:00 PM	254.6	245	13	245.1	12.8
4/3/2023	7:00:00 PM	241.7	244.3	12.7	244.5	12.6
4/3/2023	7:05:00 PM	235.9	249.7	13.4	250	13.3
4/3/2023	7:10:00 PM	221.2	256.8	15.8	257.3	15.6
4/3/2023	7:15:00 PM	206	254.7	14	254.8	13.8
4/3/2023	7:20:00 PM	195.6	256.5	16.4	256.8	16.2
4/3/2023	7:25:00 PM	191.6	254	16	254.4	15.8
4/3/2023	7:30:00 PM	192.6	253.1	17.9	253.3	17.6
4/3/2023	7:35:00 PM	201.8	250.6	18	250.7	17.8
4/3/2023	7:40:00 PM	216.2	242.3	16.3	242.4	16
4/3/2023	7:45:00 PM	233	244.1	16.2	244.2	15.9
4/3/2023	7:50:00 PM	250.8	242.6	14.6	242.5	14.4
4/3/2023	7:55:00 PM	263.9	239.2	13.1	239.7	12.8
4/3/2023	8:00:00 PM	269	236	13.2	235.8	13
4/3/2023	8:05:00 PM	268.2	232.6	13.8	232.2	13.6
4/3/2023	8:10:00 PM	264.2	233.4	14.4	233.1	14.2
4/3/2023	8:15:00 PM	256.9	232.5	15.3	232.2	15
4/3/2023	8:20:00 PM	249.8	234.3	13.5	234.1	13.3
4/3/2023	8:25:00 PM	244	232.6	14	232.6	13.8
4/3/2023	8:30:00 PM	239.7	232.2	14.9	231.9	14.7
4/3/2023	8:35:00 PM	233	235.5	14.1	235.4	13.9
4/3/2023	8:40:00 PM	226	238.2	14	238.4	13.8
4/3/2023	8:45:00 PM	218.8	258.3	17.5	258.5	17.4
4/3/2023	8:50:00 PM	219.5	268.5	14.7	268.9	14.4
4/3/2023	8:55:00 PM	287.6	272.8	16.5	273	16.2
4/3/2023	9:00:00 PM	363.1	272.1	18	272.5	17.7
4/3/2023	9:05:00 PM	432.2	271.1	18.6	271.4	18.3
4/3/2023	9:10:00 PM	536.2	271.7	19.7	271.9	19.3
4/3/2023	9:15:00 PM	639.1	269.7	16.7	270.1	16.4
4/3/2023	9:20:00 PM	672.4	269.6	15.3	270.2	15
4/3/2023	9:25:00 PM	659.9	269.8	17.5	269.9	17.1
4/3/2023	9:30:00 PM	662.5	272	16.7	272.5	16.4
4/3/2023	9:35:00 PM	664.1	272.6	19.7	272.8	19.4
4/3/2023	9:40:00 PM	663.3	272.7	17.8	273.5	17.4
4/3/2023	9:45:00 PM	651.6	272.6	17.1	272.9	16.9
4/3/2023	9:50:00 PM	617.2	268.2	16.1	268.3	15.9
4/3/2023	9:55:00 PM	572.3	271.2	15.5	271.4	15.2
4/3/2023	10:00:00 PM	526.3	268.2	15.1	268.6	14.9

Site: Buckeye						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	10:05:00 PM	486.3	267.9	15.3	267.7	15.1
4/3/2023	10:10:00 PM	451.7	264.1	13.2	264.1	13
4/3/2023	10:15:00 PM	418.7	262	15.4	262	15.2
4/3/2023	10:20:00 PM	387.3	261.7	16	261.6	15.9
4/3/2023	10:25:00 PM	360	261.3	15.1	260.9	14.8
4/3/2023	10:30:00 PM	333.6	260.7	16.1	261	16
4/3/2023	10:35:00 PM	310.6	259.5	15.4	259.3	15.2
4/3/2023	10:40:00 PM	289.7	258	14.1	258.6	13.9
4/3/2023	10:45:00 PM	271.4	259.6	13.9	259.4	13.8
4/3/2023	10:50:00 PM	256.2	260.5	14.4	260.6	14.2
4/3/2023	10:55:00 PM	244.1	260	14.5	260.1	14.4
4/3/2023	11:00:00 PM	237.7	258	13.3	258	13.1
4/3/2023	11:05:00 PM	231.6	255.2	14.7	255.4	14.5
4/3/2023	11:10:00 PM	229.5	255.2	14.3	255.6	14.1
4/3/2023	11:15:00 PM	229.6	253.8	12.7	254.2	12.5
4/3/2023	11:20:00 PM	230	252.6	11.7	252.7	11.5
4/3/2023	11:25:00 PM	231	253.2	13	253.6	12.8
4/3/2023	11:30:00 PM	233.2	253.5	12.9	254.2	12.7
4/3/2023	11:35:00 PM	234.4	250.8	12	251.2	11.8
4/3/2023	11:40:00 PM	234.3	253.5	14.5	253.7	14.3
4/3/2023	11:45:00 PM	234.1	256.2	13.3	256.2	13.1
4/3/2023	11:50:00 PM	233.8	252.4	12.2	252.3	12
4/3/2023	11:55:00 PM	232.2	253.4	11.1	253.6	10.9
	Average	181.4	247	10.2	236.2	7.8
	Max	672.4	359.4	25	359.8	24.6
	Max Hour	25602.60156	8037.45776	40.39667526	7789.414805	39.10875678
	Min	14.9	1.3	0	4.4	0
	Count	288	288	288	288	288
	Total	52267.1	60572.1	2962.1	61338.1	2895.8
	Date Printed:		9/30/2024 11:57			

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	12:00:00 AM	46.3	99.3	3	98.6	2.9
4/3/2023	12:05:00 AM	38.1	109.3	2.7	107.7	2.6
4/3/2023	12:10:00 AM	31.7	88.1	3.2	87.6	3.2
4/3/2023	12:15:00 AM	30.4	57.3	1.4	53.1	1
4/3/2023	12:20:00 AM	29.9	88.6	2.1	89.1	2.1
4/3/2023	12:25:00 AM	28.8	89.8	2.2	89.9	2.2
4/3/2023	12:30:00 AM	28.2	71.4	2.2	71.6	2.2
4/3/2023	12:35:00 AM	29	80.4	2	80	2
4/3/2023	12:40:00 AM	30.7	74.8	3	74.7	2.9
4/3/2023	12:45:00 AM	33.6	54.7	1.9	56.5	1.9
4/3/2023	12:50:00 AM	37.6	38.9	3	40.3	3
4/3/2023	12:55:00 AM	47.4	62.6	3.9	62.8	3.8
4/3/2023	1:00:00 AM	46.9	82.3	4	82.1	4
4/3/2023	1:05:00 AM	43.1	92.1	3.8	92.2	3.7
4/3/2023	1:10:00 AM	44.4	89.7	3.4	90.5	3.4
4/3/2023	1:15:00 AM	44.3	63	2.8	64	2.8
4/3/2023	1:20:00 AM	41.7	66.5	4.5	66.6	4.5
4/3/2023	1:25:00 AM	40.1	62.5	5.6	62.9	5.6
4/3/2023	1:30:00 AM	41.9	34	5.5	34.2	5.4
4/3/2023	1:35:00 AM	55.8	32.7	4.5	32.7	4.4
4/3/2023	1:40:00 AM	59.9	92.8	3	81.4	2
4/3/2023	1:45:00 AM	57.2	88.9	3.2	88	3.1
4/3/2023	1:50:00 AM	53.1	60.6	3.4	60.7	3.4
4/3/2023	1:55:00 AM	52.1	93.9	2.3	90.1	2.1
4/3/2023	2:00:00 AM	50.5	61.1	3.7	60.9	3.7
4/3/2023	2:05:00 AM	48.9	55.1	3.3	54.4	3.3
4/3/2023	2:10:00 AM	49.2	57	2.9	54.2	2.8
4/3/2023	2:15:00 AM	51.7	21.7	4.4	21.5	4.4
4/3/2023	2:20:00 AM	54.8	56.7	4	56.7	3.9
4/3/2023	2:25:00 AM	50.6	47.6	3.6	47.3	3.6
4/3/2023	2:30:00 AM	46.6	36	4.5	36	4.5
4/3/2023	2:35:00 AM	42.1	19.9	4.4	19.8	4.4
4/3/2023	2:40:00 AM	37.6	44.3	4	44.4	3.9
4/3/2023	2:45:00 AM	34.2	51.4	4.8	51.5	4.8
4/3/2023	2:50:00 AM	34	56.5	4.5	56.7	4.5
4/3/2023	2:55:00 AM	33.5	55.7	4.5	56.4	4.5
4/3/2023	3:00:00 AM	31.2	58.4	4.7	58.6	4.7
4/3/2023	3:05:00 AM	30.6	72.4	3.6	72.3	3.6
4/3/2023	3:10:00 AM	31.1	71	3.1	70.1	3.1
4/3/2023	3:15:00 AM	31.9	66.3	5.4	65.7	5.4
4/3/2023	3:20:00 AM	31.7	70.5	5.2	70.3	5.1
4/3/2023	3:25:00 AM	32.8	70.1	6.2	70	6.1
4/3/2023	3:30:00 AM	35.6	67	5.9	67	5.9
4/3/2023	3:35:00 AM	37.8	62.9	6.5	62.9	6.4
4/3/2023	3:40:00 AM	38.7	60.7	5.4	61.2	5.4
4/3/2023	3:45:00 AM	38.4	57.3	4.4	57.1	4.3
4/3/2023	3:50:00 AM	37.9	43.1	6.1	43.1	6
4/3/2023	3:55:00 AM	37.4	41.1	6.3	41.3	6.3
4/3/2023	4:00:00 AM	35.3	72.7	3.3	53.5	3
4/3/2023	4:05:00 AM	34.2	148.5	2.5	149.1	2.3
4/3/2023	4:10:00 AM	40.5	220.3	1.8	238.5	1.5
4/3/2023	4:15:00 AM	51.6	154.7	0	210	0.5
4/3/2023	4:20:00 AM	57.2	113.9	2	114.1	1.9

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	4:25:00 AM	62.3	95.9	1.8	93	1.7
4/3/2023	4:30:00 AM	63.5	116.3	2.9	116.4	2.8
4/3/2023	4:35:00 AM	62.8	123	2.6	116.6	2.3
4/3/2023	4:40:00 AM	62.6	132.8	1.4	131.5	1.2
4/3/2023	4:45:00 AM	62.9	98.2	2.1	96.8	2
4/3/2023	4:50:00 AM	65.2	117.7	2.2	115.3	2.1
4/3/2023	4:55:00 AM	67.2	91.1	3.8	90.6	3.8
4/3/2023	5:00:00 AM	66	91.6	3.9	91.5	3.8
4/3/2023	5:05:00 AM	64.5	89.7	2.6	89.5	2.5
4/3/2023	5:10:00 AM	65.3	103.7	2.6	101.7	2.5
4/3/2023	5:15:00 AM	69	73.6	1.7	72.5	1.6
4/3/2023	5:20:00 AM	69.7	66.4	2.2	68.3	2.2
4/3/2023	5:25:00 AM	75.5	75.4	3.4	76	3.3
4/3/2023	5:30:00 AM	86.4	53.3	3.9	53.2	3.9
4/3/2023	5:35:00 AM	91.8	75.3	3.8	75	3.8
4/3/2023	5:40:00 AM	94.4	67	6.3	66.8	6.3
4/3/2023	5:45:00 AM	98.2	100.2	2.9	81.5	2.5
4/3/2023	5:50:00 AM	101	77.6	3.8	75.9	3.7
4/3/2023	5:55:00 AM	105.9	115.9	2.4	113	2.2
4/3/2023	6:00:00 AM	113	121.4	2.6	120.1	2.5
4/3/2023	6:05:00 AM	118.9	142.7	2.1	139.1	1.9
4/3/2023	6:10:00 AM	123.1	130.8	2.8	127.9	2.7
4/3/2023	6:15:00 AM	119.7	101.5	3.9	100.8	3.9
4/3/2023	6:20:00 AM	109	99.2	3.1	98	3
4/3/2023	6:25:00 AM	101.5	104.3	3.2	104	3.1
4/3/2023	6:30:00 AM	97.3	107.5	2.6	105.2	2.5
4/3/2023	6:35:00 AM	97.1	63	2.3	64.3	2.2
4/3/2023	6:40:00 AM	103	88.5	2.5	90.7	2.3
4/3/2023	6:45:00 AM	112.6	131.3	2.1	129.9	2
4/3/2023	6:50:00 AM	120.7	123.8	2.2	123	2.2
4/3/2023	6:55:00 AM	127.8	165.8	2	163.5	1.8
4/3/2023	7:00:00 AM	127.4	159.3	1.6	158.1	1.5
4/3/2023	7:05:00 AM	122.9	183.5	1.4	167.3	1.1
4/3/2023	7:10:00 AM	123.6	147.4	1	140	0.9
4/3/2023	7:15:00 AM	119.7	140.1	1.1	145.3	0.9
4/3/2023	7:20:00 AM	113.7	106.9	2.6	109.5	2.5
4/3/2023	7:25:00 AM	111.5	111.6	2.9	112.8	2.8
4/3/2023	7:30:00 AM	109.8	111.2	2.8	107.2	2.6
4/3/2023	7:35:00 AM	108.8	105.9	2.8	94.9	2.5
4/3/2023	7:40:00 AM	109	111.4	3.1	110.7	3
4/3/2023	7:45:00 AM	113.7	121.2	4.8	120.9	4.7
4/3/2023	7:50:00 AM	116.4	123.8	6.5	123.2	6.4
4/3/2023	7:55:00 AM	116.9	120.8	6	121.6	5.9
4/3/2023	8:00:00 AM	112.2	105.9	3.4	106	3.2
4/3/2023	8:05:00 AM	105.8	107	3.3	104.4	3.1
4/3/2023	8:10:00 AM	99.8	125	3.5	128.4	3.3
4/3/2023	8:15:00 AM	92.3	126.8	4.2	124.7	4.1
4/3/2023	8:20:00 AM	91.4	126	3.3	125.1	3.3
4/3/2023	8:25:00 AM	97.4	116.6	2.4	116.3	2.3
4/3/2023	8:30:00 AM	98.8	109.6	2.8	109.3	2.7
4/3/2023	8:35:00 AM	94.2	108.8	2.9	108.7	2.8
4/3/2023	8:40:00 AM	85.9	111.9	2.1	108.6	2
4/3/2023	8:45:00 AM	80.6	127.2	2.7	129.4	2.5

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	8:50:00 AM	74.6	132.4	3	133.4	2.8
4/3/2023	8:55:00 AM	74.2	123.4	3.7	124.7	3.6
4/3/2023	9:00:00 AM	77.4	114.2	2.5	117.1	2.2
4/3/2023	9:05:00 AM	78.9	130.9	2.5	124.4	2.4
4/3/2023	9:10:00 AM	73.8	192.6	1.4	160.1	0.8
4/3/2023	9:15:00 AM	71.9	312.9	0	333.6	0.6
4/3/2023	9:20:00 AM	70	185.5	1.8	196	1.6
4/3/2023	9:25:00 AM	63.8	229.6	0.9	209	0.7
4/3/2023	9:30:00 AM	58	172.8	1.4	211.6	1
4/3/2023	9:35:00 AM	52.8	138.3	1.7	121.7	1.2
4/3/2023	9:40:00 AM	52.5	226.2	3.8	227	3.5
4/3/2023	9:45:00 AM	55.5	222.6	5.1	223.4	4.8
4/3/2023	9:50:00 AM	52.1	193.3	4.2	195.2	3.9
4/3/2023	9:55:00 AM	41.5	211.5	4.3	212.9	4
4/3/2023	10:00:00 AM	32.5	219.4	5.3	219.6	5.1
4/3/2023	10:05:00 AM	33.7	183.8	7	180.1	6.7
4/3/2023	10:10:00 AM	36.3	209.3	6.2	205.1	5.3
4/3/2023	10:15:00 AM	34.1	215.2	6.6	207.1	4.8
4/3/2023	10:20:00 AM	35.4	165.5	5.3	162.4	5.1
4/3/2023	10:25:00 AM	37.4	169.9	3.6	173.1	3.2
4/3/2023	10:30:00 AM	32.2	223.6	2.7	213.8	2
4/3/2023	10:35:00 AM	28.3	220.3	3.5	218.3	2
4/3/2023	10:40:00 AM	28.7	262.1	6.5	263	6.3
4/3/2023	10:45:00 AM	33.8	266.3	6.6	265.4	6.3
4/3/2023	10:50:00 AM	35.1	269.7	4.6	266.1	4.2
4/3/2023	10:55:00 AM	32.2	258.7	3.3	259	2.9
4/3/2023	11:00:00 AM	36.9	259.8	5.2	259.5	4.9
4/3/2023	11:05:00 AM	37.7	266.7	4.5	272.4	3.9
4/3/2023	11:10:00 AM	35.7	252.3	4.9	250	4.3
4/3/2023	11:15:00 AM	34.9	228.8	8.4	229.3	8.1
4/3/2023	11:20:00 AM	34.4	220.9	6.2	217.7	5.8
4/3/2023	11:25:00 AM	34.2	200.3	6.2	200	5.7
4/3/2023	11:30:00 AM	35.9	210.6	4	207.6	3.3
4/3/2023	11:35:00 AM	35.2	240.1	5.9	239.3	5.5
4/3/2023	11:40:00 AM	37.9	235	12.2	236.9	11.7
4/3/2023	11:45:00 AM	68	237.1	10.8	239.3	10.1
4/3/2023	11:50:00 AM	133.6	234.3	7.9	235.1	7.5
4/3/2023	11:55:00 AM	148.3	233.2	7.2	233.6	6.8
4/3/2023	12:00:00 PM	135.5	232.5	9.7	234.9	9.2
4/3/2023	12:05:00 PM	130.7	231.5	12.3	232.9	11.9
4/3/2023	12:10:00 PM	151.7	236.5	13.4	236.1	13.2
4/3/2023	12:15:00 PM	167.1	234.9	13.5	234.9	13.2
4/3/2023	12:20:00 PM	166.1	232.8	8.3	232.9	7.9
4/3/2023	12:25:00 PM	141.3	213.7	8.9	207.5	7.5
4/3/2023	12:30:00 PM	121.4	227.9	9.7	230.7	9.2
4/3/2023	12:35:00 PM	133.4	233.7	8.9	233.5	8.4
4/3/2023	12:40:00 PM	133.9	228.3	9.7	232	9.2
4/3/2023	12:45:00 PM	123.4	226.2	11.6	226.7	11.2
4/3/2023	12:50:00 PM	134.5	241.1	10	240.5	9.5
4/3/2023	12:55:00 PM	146.6	230.8	9.6	230.3	9.4
4/3/2023	1:00:00 PM	139.6	238.7	14.7	238.1	14.4
4/3/2023	1:05:00 PM	148.7	225	12.8	225.3	12.4
4/3/2023	1:10:00 PM	180.1	233.1	10.5	234.8	10.1

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	1:15:00 PM	176.9	225.1	12.2	227	11.6
4/3/2023	1:20:00 PM	173.7	242.4	14.9	242.5	14.5
4/3/2023	1:25:00 PM	203.7	232	14.2	232.6	13.7
4/3/2023	1:30:00 PM	217.7	239.5	15.9	239.1	15.6
4/3/2023	1:35:00 PM	239.4	235.9	16.8	235.8	16.6
4/3/2023	1:40:00 PM	279.4	238.4	16.2	238.1	15.9
4/3/2023	1:45:00 PM	295.6	241.7	11.6	242.3	11.3
4/3/2023	1:50:00 PM	287.3	226.9	11.5	227.8	11
4/3/2023	1:55:00 PM	263	227.1	15.8	228.5	15.2
4/3/2023	2:00:00 PM	286.1	234.1	14.6	234	14.3
4/3/2023	2:05:00 PM	286.4	221	10.8	221.1	10.4
4/3/2023	2:10:00 PM	249.5	237.5	14.8	237.2	14.5
4/3/2023	2:15:00 PM	229.2	233.4	14.3	233.7	14
4/3/2023	2:20:00 PM	231.5	229.8	15.4	230.4	15.1
4/3/2023	2:25:00 PM	282.9	238.2	16.2	238.2	15.9
4/3/2023	2:30:00 PM	339.7	228	17.2	227.6	16.3
4/3/2023	2:35:00 PM	372.9	224.2	16.5	225.2	15.7
4/3/2023	2:40:00 PM	400.3	215.6	13.9	215.2	13.4
4/3/2023	2:45:00 PM	371.7	227.4	17	228.2	16.6
4/3/2023	2:50:00 PM	347.4	236.9	19.1	236.8	18.6
4/3/2023	2:55:00 PM	385.9	227.4	16.6	226.9	16.1
4/3/2023	3:00:00 PM	398.8	231.7	16.6	232.1	16.1
4/3/2023	3:05:00 PM	392.9	230	16.5	229.2	15.2
4/3/2023	3:10:00 PM	408	238.6	17.9	238.5	17.5
4/3/2023	3:15:00 PM	450.6	228.2	16.3	229.2	15.9
4/3/2023	3:20:00 PM	471.8	231.6	16.3	232.8	15.7
4/3/2023	3:25:00 PM	479.5	230.9	18.7	231.4	18.3
4/3/2023	3:30:00 PM	570.4	222.3	18.5	222.3	17.8
4/3/2023	3:35:00 PM	655.2	228.5	19.9	228.6	19.3
4/3/2023	3:40:00 PM	658.6	219.6	18.2	219.8	17.6
4/3/2023	3:45:00 PM	643.6	224.7	18.1	224.4	17.7
4/3/2023	3:50:00 PM	634.9	227.8	19.2	228.2	18.8
4/3/2023	3:55:00 PM	585	228.2	13.4	228.9	13
4/3/2023	4:00:00 PM	494.1	237.5	16.4	237.3	16
4/3/2023	4:05:00 PM	404.2	234.6	16.2	234.4	15.8
4/3/2023	4:10:00 PM	350.2	236.4	19.2	236.5	18.8
4/3/2023	4:15:00 PM	328.4	233.5	18	233.4	17.7
4/3/2023	4:20:00 PM	308.9	240.1	14.2	239.8	13.9
4/3/2023	4:25:00 PM	290.4	242.8	18.8	242.8	18.5
4/3/2023	4:30:00 PM	290.3	248.3	15.4	247.9	15
4/3/2023	4:35:00 PM	268.7	240.2	18.6	239.9	18.3
4/3/2023	4:40:00 PM	251.4	234.6	17.6	234.3	17.2
4/3/2023	4:45:00 PM	240.6	246.8	16.9	246.4	16.4
4/3/2023	4:50:00 PM	259.5	243.8	15.7	243.6	15.4
4/3/2023	4:55:00 PM	293.3	244	18	243.7	17.7
4/3/2023	5:00:00 PM	307.8	246.3	16	246	15.7
4/3/2023	5:05:00 PM	332.5	245.3	18.2	244.2	17.6
4/3/2023	5:10:00 PM	379.3	251	17	250.5	16.6
4/3/2023	5:15:00 PM	412.2	247.2	19	246.2	18.6
4/3/2023	5:20:00 PM	425.8	245.5	19.9	244.9	19.5
4/3/2023	5:25:00 PM	441.5	247.7	19.8	247.3	19.4
4/3/2023	5:30:00 PM	465.4	248.3	16.9	247.9	16.6
4/3/2023	5:35:00 PM	468	245	19	244.8	18.7

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	5:40:00 PM	459	245.5	19	245.5	18.7
4/3/2023	5:45:00 PM	458.7	247.3	20	247.2	19.6
4/3/2023	5:50:00 PM	518	245	19.5	245.4	19.1
4/3/2023	5:55:00 PM	553	239.8	18	239.6	17.7
4/3/2023	6:00:00 PM	515.5	239.4	19.9	239.3	19.6
4/3/2023	6:05:00 PM	489.9	240.9	18.3	240.5	17.9
4/3/2023	6:10:00 PM	452.9	242	19.9	241.4	19.6
4/3/2023	6:15:00 PM	414.2	259	14.3	258.4	13.9
4/3/2023	6:20:00 PM	369.8	254.6	13.2	254.5	12.9
4/3/2023	6:25:00 PM	327.5	253.7	13.9	253.9	13.5
4/3/2023	6:30:00 PM	299	253.5	12.9	253.8	12.5
4/3/2023	6:35:00 PM	289.5	253.9	11.9	254.2	11.6
4/3/2023	6:40:00 PM	277	257	12.9	257.3	12.7
4/3/2023	6:45:00 PM	265.1	261.8	13.4	262.1	13.1
4/3/2023	6:50:00 PM	261.9	255.3	15.2	255	14.9
4/3/2023	6:55:00 PM	262.9	252.2	14.5	252.2	14.3
4/3/2023	7:00:00 PM	257.8	256.2	13.6	256.5	13.3
4/3/2023	7:05:00 PM	251	262.1	11.3	262	11
4/3/2023	7:10:00 PM	240.6	261.4	12.3	262.3	12
4/3/2023	7:15:00 PM	223.1	261.4	14.4	261.9	14.1
4/3/2023	7:20:00 PM	205.5	256.6	12.9	257.2	12.6
4/3/2023	7:25:00 PM	191.9	252.9	13.3	253.2	13
4/3/2023	7:30:00 PM	179.6	253.8	14.3	254.1	14
4/3/2023	7:35:00 PM	176.4	252.2	14.6	252.2	14.3
4/3/2023	7:40:00 PM	184.3	249.2	15.3	249.4	14.9
4/3/2023	7:45:00 PM	195.1	247.5	18.6	247.3	18.3
4/3/2023	7:50:00 PM	239.9	254.5	16.4	254.5	16.2
4/3/2023	7:55:00 PM	306.3	260.3	15.5	260.8	15
4/3/2023	8:00:00 PM	331.9	260.7	15.6	260.5	15.2
4/3/2023	8:05:00 PM	335.7	260.6	18	260.8	17.7
4/3/2023	8:10:00 PM	337.7	255.4	15.1	255.9	14.7
4/3/2023	8:15:00 PM	328.2	260	15.1	259.9	14.7
4/3/2023	8:20:00 PM	312.9	255.7	12.7	255.1	12.4
4/3/2023	8:25:00 PM	298	254	12.3	254.8	12
4/3/2023	8:30:00 PM	289.5	249	11.9	248.6	11.6
4/3/2023	8:35:00 PM	279.9	248.4	9.9	248.7	9.7
4/3/2023	8:40:00 PM	270.9	255	11.7	255.4	11.4
4/3/2023	8:45:00 PM	266.3	253.1	12.1	252.5	11.7
4/3/2023	8:50:00 PM	262.1	252.2	13.4	251.9	13.2
4/3/2023	8:55:00 PM	262.3	254.1	13.3	254.6	13
4/3/2023	9:00:00 PM	262.4	258.4	13.9	258.4	13.6
4/3/2023	9:05:00 PM	262.1	264.1	14.3	264.3	14
4/3/2023	9:10:00 PM	261.2	259.8	16.2	259.9	15.9
4/3/2023	9:15:00 PM	273.5	269.1	19.4	269.6	18.9
4/3/2023	9:20:00 PM	296.3	272.8	19.4	273.4	19
4/3/2023	9:25:00 PM	321.5	268.3	16	269.4	15.6
4/3/2023	9:30:00 PM	343.9	264	12.9	265	12.6
4/3/2023	9:35:00 PM	363.8	304.4	17.3	304.2	17
4/3/2023	9:40:00 PM	390.7	307.1	20	307.4	19.7
4/3/2023	9:45:00 PM	436.1	305.7	18.7	306	18.5
4/3/2023	9:50:00 PM	474.7	300.3	16.5	301.1	16.3
4/3/2023	9:55:00 PM	499.7	303.3	16.9	304.1	16.6
4/3/2023	10:00:00 PM	511.3	301.5	16.9	302.6	16.6

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	10:05:00 PM	514.1	303.8	14.4	304	14.2
4/3/2023	10:10:00 PM	508.8	303.8	13.3	303.3	13
4/3/2023	10:15:00 PM	500.1	306.5	15.2	306.8	15
4/3/2023	10:20:00 PM	491	307.1	14.7	307.7	14.5
4/3/2023	10:25:00 PM	485.4	305.1	15.6	305.5	15.4
4/3/2023	10:30:00 PM	480.7	308.3	13.1	309	13
4/3/2023	10:35:00 PM	476.5	294.7	9.7	295.6	9.4
4/3/2023	10:40:00 PM	467.3	291.5	9.5	291.1	9.3
4/3/2023	10:45:00 PM	457.1	290.6	10.4	291.2	10.2
4/3/2023	10:50:00 PM	450.8	288.5	11.3	288.6	11
4/3/2023	10:55:00 PM	441.9	289.2	12.2	288.9	12
4/3/2023	11:00:00 PM	433.8	296.5	8.6	298	8.4
4/3/2023	11:05:00 PM	425.5	294.4	6.4	294.6	6.2
4/3/2023	11:10:00 PM	414	280.8	7.8	280.6	7.6
4/3/2023	11:15:00 PM	406.1	267.8	7.7	268.9	7.5
4/3/2023	11:20:00 PM	394.3	243	6.8	242.1	6.7
4/3/2023	11:25:00 PM	383.3	248.3	6.8	247.9	6.7
4/3/2023	11:30:00 PM	374.3	252.3	8.9	252.2	8.7
4/3/2023	11:35:00 PM	362.2	257.2	10.2	257	10
4/3/2023	11:40:00 PM	348	257.6	8.5	257.5	8.3
4/3/2023	11:45:00 PM	327.7	262.8	12.7	263.4	12.4
4/3/2023	11:50:00 PM	306.2	260.1	10.3	260.1	10.1
4/3/2023	11:55:00 PM	289	260.7	11.2	260.6	10.9
	Average	199.8	219	9.1	246.4	5.9
	Max	658.6	312.9	20	333.6	19.7
	Max Hour	26639.44091	6565.408407	36.88399487	6674.844386	35.73414622
	Min	28.2	19.9	0	19.8	0.5
	Count	288	288	288	288	288
	Total	57571	53916.4	2627	53856.6	2548.7

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	12:00:00 AM	21.2	<	3.8	<	3.7
4/3/2023	12:05:00 AM	19	<	4.3	<	4.3
4/3/2023	12:10:00 AM	16.1	<	4.8	<	4.8
4/3/2023	12:15:00 AM	15.9	<	4.3	<	4.2
4/3/2023	12:20:00 AM	17.3	<	2.7	<	2.5
4/3/2023	12:25:00 AM	17.5	<	3.8	<	3.8
4/3/2023	12:30:00 AM	15.8	<	3.7	<	3.7
4/3/2023	12:35:00 AM	15.1	<	2.7	<	2.6
4/3/2023	12:40:00 AM	15.4	<	2.3	<	2.3
4/3/2023	12:45:00 AM	15	<	3	<	3
4/3/2023	12:50:00 AM	16.8	<	2.6	<	2.6
4/3/2023	12:55:00 AM	16.5	<	1.7	<	1.6
4/3/2023	1:00:00 AM	15.6	<	2.8	<	2.7
4/3/2023	1:05:00 AM	14	<	2	<	1.8
4/3/2023	1:10:00 AM	12.8	<	3.1	<	2.8
4/3/2023	1:15:00 AM	14.1	<	4	<	4
4/3/2023	1:20:00 AM	13.5	<	1.5	<	1.2
4/3/2023	1:25:00 AM	13.9	<	1.5	<	1.3
4/3/2023	1:30:00 AM	13.1	<	2.5	<	2.4
4/3/2023	1:35:00 AM	15.2	<	3.8	<	3.7
4/3/2023	1:40:00 AM	16.1	<	3.8	<	3.7
4/3/2023	1:45:00 AM	13.8	<	3	<	2.9
4/3/2023	1:50:00 AM	13.1	<	3.6	<	3.5
4/3/2023	1:55:00 AM	15.2	<	3	<	2.9
4/3/2023	2:00:00 AM	16.5	<	4.3	<	4.3
4/3/2023	2:05:00 AM	16.3	<	2.2	<	2.1
4/3/2023	2:10:00 AM	15.4	<	3.5	<	3.4
4/3/2023	2:15:00 AM	16.1	<	2.9	<	2.9
4/3/2023	2:20:00 AM	15.5	<	2.3	<	2.1
4/3/2023	2:25:00 AM	15.5	<	3.5	<	3.4
4/3/2023	2:30:00 AM	14.1	<	2.7	<	2.7
4/3/2023	2:35:00 AM	14.7	<	3.7	<	3.6
4/3/2023	2:40:00 AM	16.7	<	5.4	<	5.3
4/3/2023	2:45:00 AM	16	<	4.5	<	4.4
4/3/2023	2:50:00 AM	17.8	<	4.5	<	4.4
4/3/2023	2:55:00 AM	20.4	<	2.8	<	2.3
4/3/2023	3:00:00 AM	17.3	<	3.9	<	3.9
4/3/2023	3:05:00 AM	16.8	<	2.6	<	2.3
4/3/2023	3:10:00 AM	17.8	<	4.1	<	4.1
4/3/2023	3:15:00 AM	16.1	<	4.3	<	4.2
4/3/2023	3:20:00 AM	14.4	<	4	<	3.9
4/3/2023	3:25:00 AM	11.1	<	2.5	<	2.4
4/3/2023	3:30:00 AM	12.1	<	3.2	<	3.1
4/3/2023	3:35:00 AM	13.3	<	3	<	2.9
4/3/2023	3:40:00 AM	12.2	<	2.8	<	2.8
4/3/2023	3:45:00 AM	16	<	3.2	<	3.1
4/3/2023	3:50:00 AM	18.5	<	4	<	3.9
4/3/2023	3:55:00 AM	16	<	3.6	<	3.6
4/3/2023	4:00:00 AM	16	<	3.6	<	3.5
4/3/2023	4:05:00 AM	14.9	<	2.8	<	2.8
4/3/2023	4:10:00 AM	15	<	3	<	2.9
4/3/2023	4:15:00 AM	13.7	<	1.7	<	1.7
4/3/2023	4:20:00 AM	13.6	<	2.8	<	2.8

Site: Zuni Hills						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	4:25:00 AM	16.1	<	2.3	<	2.2
4/3/2023	4:30:00 AM	15.8	<	1.3	<	1.2
4/3/2023	4:35:00 AM	12.4	<	1.8	<	1.8
4/3/2023	4:40:00 AM	14	<	3.9	<	3.9
4/3/2023	4:45:00 AM	14.7	<	3.5	<	3.4
4/3/2023	4:50:00 AM	12.6	<	2.3	<	2
4/3/2023	4:55:00 AM	16.1	<	2.9	<	2.9
4/3/2023	5:00:00 AM	15.6	<	2.2	<	2.1
4/3/2023	5:05:00 AM	20.7	<	1.8	<	1.7
4/3/2023	5:10:00 AM	20.7	<	2.7	<	2.6
4/3/2023	5:15:00 AM	19.3	<	2.8	<	2.8
4/3/2023	5:20:00 AM	19.7	<	2.7	<	2.7
4/3/2023	5:25:00 AM	15.7	<	1.7	<	1.6
4/3/2023	5:30:00 AM	20.5	<	2.2	<	2.2
4/3/2023	5:35:00 AM	22.5	<	2.7	<	2.7
4/3/2023	5:40:00 AM	24.4	<	2.7	<	2.7
4/3/2023	5:45:00 AM	28.7	<	2.7	<	2.6
4/3/2023	5:50:00 AM	31.2	<	3.9	<	3.9
4/3/2023	5:55:00 AM	32.7	<	4.1	<	4
4/3/2023	6:00:00 AM	34.8	<	3.9	<	3.9
4/3/2023	6:05:00 AM	35.5	<	3.3	<	3.2
4/3/2023	6:10:00 AM	33.4	<	3.2	<	3.1
4/3/2023	6:15:00 AM	34.1	<	2.6	<	2.5
4/3/2023	6:20:00 AM	33.2	<	2.8	<	2.7
4/3/2023	6:25:00 AM	36.1	<	2.2	<	2.1
4/3/2023	6:30:00 AM	38.6	<	2.8	<	2.8
4/3/2023	6:35:00 AM	41.8	<	3.7	<	3.7
4/3/2023	6:40:00 AM	40.9	<	3.7	<	3.7
4/3/2023	6:45:00 AM	30.5	<	3.7	<	3.7
4/3/2023	6:50:00 AM	26.1	<	3.8	<	3.7
4/3/2023	6:55:00 AM	29.9	<	4.4	<	4.2
4/3/2023	7:00:00 AM	49.2	<	3.5	<	2.4
4/3/2023	7:05:00 AM	57.1	<	3.5	<	3.4
4/3/2023	7:10:00 AM	61.1	<	3.8	<	3.7
4/3/2023	7:15:00 AM	66.4	<	3.8	<	3.7
4/3/2023	7:20:00 AM	58.1	<	2.3	<	2
4/3/2023	7:25:00 AM	49.6	<	2.7	<	2.6
4/3/2023	7:30:00 AM	45.2	<	1.5	<	1.5
4/3/2023	7:35:00 AM	39.5	<	1.8	<	0.8
4/3/2023	7:40:00 AM	35.6	<	0.7	<	0.2
4/3/2023	7:45:00 AM	33	<	0.7	<	0.6
4/3/2023	7:50:00 AM	31.7	<	2.2	<	2.1
4/3/2023	7:55:00 AM	32.8	<	2.7	<	2.6
4/3/2023	8:00:00 AM	31.6	<	0.5	<	0.3
4/3/2023	8:05:00 AM	29.3	<	2.5	<	2.4
4/3/2023	8:10:00 AM	31.8	<	0.8	<	0.7
4/3/2023	8:15:00 AM	26.8	<	1.4	<	1.2
4/3/2023	8:20:00 AM	23.9	<	1.4	<	1.1
4/3/2023	8:25:00 AM	22.2	<	3.7	<	3.4
4/3/2023	8:30:00 AM	20.4	<	6.1	<	6
4/3/2023	8:35:00 AM	17.1	<	6.3	<	6.1
4/3/2023	8:40:00 AM	17.3	<	6.6	<	6.4
4/3/2023	8:45:00 AM	18.2	<	7	<	6.7

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	8:50:00 AM	22	<	8.5	<	8.4
4/3/2023	8:55:00 AM	23.3	<	8.3	<	8.1
4/3/2023	9:00:00 AM	25.3	<	8.1	<	7.7
4/3/2023	9:05:00 AM	29.4	<	8.2	<	8
4/3/2023	9:10:00 AM	33.2	<	8.4	<	8.2
4/3/2023	9:15:00 AM	38.5	<	7	<	6.8
4/3/2023	9:20:00 AM	34.8	<	8.5	<	8.3
4/3/2023	9:25:00 AM	33.7	<	8.4	<	8.3
4/3/2023	9:30:00 AM	45.2	<	7.7	<	7.3
4/3/2023	9:35:00 AM	39.8	<	6.3	<	6.2
4/3/2023	9:40:00 AM	34.3	<	6.1	<	5.8
4/3/2023	9:45:00 AM	30.8	<	8.1	<	7.7
4/3/2023	9:50:00 AM	26.9	<	11.9	<	11.7
4/3/2023	9:55:00 AM	22.8	<	12	<	11.7
4/3/2023	10:00:00 AM	25.9	<	13.8	<	13.6
4/3/2023	10:05:00 AM	28.8	<	13.7	<	13.6
4/3/2023	10:10:00 AM	27.8	<	14.4	<	14.1
4/3/2023	10:15:00 AM	27.9	<	<	<	<
4/3/2023	10:20:00 AM	30.3	<	<	<	<
4/3/2023	10:25:00 AM	30.7	<	<	<	<
4/3/2023	10:30:00 AM	29.2	<	<	<	<
4/3/2023	10:35:00 AM	33.1	<	<	<	<
4/3/2023	10:40:00 AM	31.9	<	<	<	<
4/3/2023	10:45:00 AM	31.9	<	<	<	<
4/3/2023	10:50:00 AM	41.9	<	<	<	<
4/3/2023	10:55:00 AM	42.8	<	<	<	<
4/3/2023	11:00:00 AM	38.4	<	<	<	<
4/3/2023	11:05:00 AM	33.8	<	<	<	<
4/3/2023	11:10:00 AM	31.4	<	<	<	<
4/3/2023	11:15:00 AM	31.3	<	<	<	<
4/3/2023	11:20:00 AM	28.4	<	<	<	<
4/3/2023	11:25:00 AM	28.3	<	13.9	<	13.3
4/3/2023	11:30:00 AM	25.7	<	15	<	14.7
4/3/2023	11:35:00 AM	27.1	<	14.7	<	14.3
4/3/2023	11:40:00 AM	36.5	<	16.9	<	16.6
4/3/2023	11:45:00 AM	35.6	<	15.9	<	15.6
4/3/2023	11:50:00 AM	35.5	<	16.9	<	16.6
4/3/2023	11:55:00 AM	42.2	<	16.4	<	16.1
4/3/2023	12:00:00 PM	43.3	<	15.2	<	14.6
4/3/2023	12:05:00 PM	47.8	<	13.1	<	12.8
4/3/2023	12:10:00 PM	44.6	<	12.9	<	11.8
4/3/2023	12:15:00 PM	39.5	<	17.2	<	16.9
4/3/2023	12:20:00 PM	44.3	<	15.9	<	15.7
4/3/2023	12:25:00 PM	42.7	<	14.1	<	13.8
4/3/2023	12:30:00 PM	118.4	<	17.7	<	17.1
4/3/2023	12:35:00 PM	313.5	<	20.1	<	19.8
4/3/2023	12:40:00 PM	204.2	<	18.4	<	18.1
4/3/2023	12:45:00 PM	120.7	<	19.5	<	19.3
4/3/2023	12:50:00 PM	94.7	<	18.8	<	18.6
4/3/2023	12:55:00 PM	74.7	<	17.8	<	17.5
4/3/2023	1:00:00 PM	60.2	<	17.9	<	17.4
4/3/2023	1:05:00 PM	67.2	<	17.6	<	17.4
4/3/2023	1:10:00 PM	61.5	<	15.9	<	15.4

Site: Zuni Hills						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	1:15:00 PM	55.8	<	18.3	<	18.1
4/3/2023	1:20:00 PM	55.9	<	18.7	<	18.6
4/3/2023	1:25:00 PM	47.9	<	17.1	<	16.7
4/3/2023	1:30:00 PM	39.1	<	19.3	<	18.8
4/3/2023	1:35:00 PM	58	<	21.9	<	21.7
4/3/2023	1:40:00 PM	68.8	<	18.9	<	18.6
4/3/2023	1:45:00 PM	58.8	<	19.6	<	19.3
4/3/2023	1:50:00 PM	57.6	<	19.9	<	19.5
4/3/2023	1:55:00 PM	59.3	<	18.8	<	18.6
4/3/2023	2:00:00 PM	58.7	<	18.9	<	18.6
4/3/2023	2:05:00 PM	53.4	<	16.1	<	15.8
4/3/2023	2:10:00 PM	47.3	<	17.3	<	17
4/3/2023	2:15:00 PM	43.2	<	17.8	<	17.5
4/3/2023	2:20:00 PM	48	<	22.5	<	22
4/3/2023	2:25:00 PM	60.3	<	18.5	<	18.2
4/3/2023	2:30:00 PM	45.4	<	19.4	<	19.1
4/3/2023	2:35:00 PM	47.8	<	21.4	<	21
4/3/2023	2:40:00 PM	47.2	<	21.9	<	21.4
4/3/2023	2:45:00 PM	57.8	<	22.3	<	22
4/3/2023	2:50:00 PM	66.3	<	19.3	<	18.9
4/3/2023	2:55:00 PM	83	<	22.8	<	22.5
4/3/2023	3:00:00 PM	105.1	<	23.3	<	22.9
4/3/2023	3:05:00 PM	115.4	<	21.7	<	21.4
4/3/2023	3:10:00 PM	124.6	<	18.8	<	18.3
4/3/2023	3:15:00 PM	116.8	<	19.8	<	19.3
4/3/2023	3:20:00 PM	90	<	20.8	<	20.5
4/3/2023	3:25:00 PM	82.4	<	22.1	<	21.6
4/3/2023	3:30:00 PM	92.5	<	20.5	<	20.2
4/3/2023	3:35:00 PM	88.6	<	19.2	<	18.9
4/3/2023	3:40:00 PM	74	<	21.1	<	20.8
4/3/2023	3:45:00 PM	69.9	<	23.4	<	22.9
4/3/2023	3:50:00 PM	90.4	<	22.7	<	22.4
4/3/2023	3:55:00 PM	112.9	<	20.8	<	20.5
4/3/2023	4:00:00 PM	122.3	<	22.8	<	22.6
4/3/2023	4:05:00 PM	123.1	<	18.4	<	18.1
4/3/2023	4:10:00 PM	104.4	<	24.3	<	24
4/3/2023	4:15:00 PM	115.2	<	18	<	17.7
4/3/2023	4:20:00 PM	127.8	<	23.2	<	22.9
4/3/2023	4:25:00 PM	150.6	<	22.3	<	21.7
4/3/2023	4:30:00 PM	152.7	<	18.8	<	18.5
4/3/2023	4:35:00 PM	133.1	<	16.4	<	16.1
4/3/2023	4:40:00 PM	149.6	<	22.4	<	22
4/3/2023	4:45:00 PM	164.9	<	20.4	<	20.1
4/3/2023	4:50:00 PM	165.7	<	20.1	<	19.8
4/3/2023	4:55:00 PM	156.1	<	20.2	<	19.9
4/3/2023	5:00:00 PM	161.5	<	24.4	<	24
4/3/2023	5:05:00 PM	196.6	<	20.9	<	20.5
4/3/2023	5:10:00 PM	206.8	<	20.6	<	20.4
4/3/2023	5:15:00 PM	222.5	<	20.1	<	19.8
4/3/2023	5:20:00 PM	224.1	<	21.4	<	21
4/3/2023	5:25:00 PM	230.9	<	21.4	<	21.1
4/3/2023	5:30:00 PM	214	<	21	<	20.8
4/3/2023	5:35:00 PM	197.2	<	22.6	<	22.4

Site: Zuni Hills						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
4/3/2023	5:40:00 PM	213.6	<	23.7	<	23.5
4/3/2023	5:45:00 PM	218.4	<	21.6	<	21.1
4/3/2023	5:50:00 PM	222.6	<	20.8	<	20.5
4/3/2023	5:55:00 PM	213.3	<	19	<	18.8
4/3/2023	6:00:00 PM	187.9	<	22.3	<	22.1
4/3/2023	6:05:00 PM	180.8	<	20.8	<	20.6
4/3/2023	6:10:00 PM	173.6	<	20.1	<	19.9
4/3/2023	6:15:00 PM	162.2	<	21.9	<	21.5
4/3/2023	6:20:00 PM	142.6	<	21.3	<	21
4/3/2023	6:25:00 PM	132.3	<	17.5	<	17.2
4/3/2023	6:30:00 PM	123	<	19.3	<	19.1
4/3/2023	6:35:00 PM	126.4	<	26	<	25.6
4/3/2023	6:40:00 PM	148.4	<	21.3	<	21
4/3/2023	6:45:00 PM	130.2	<	18.5	<	18.2
4/3/2023	6:50:00 PM	106.7	<	17.6	<	17.4
4/3/2023	6:55:00 PM	98.6	<	18.7	<	18.5
4/3/2023	7:00:00 PM	98.1	<	16.6	<	16.4
4/3/2023	7:05:00 PM	107.6	<	15.9	<	15.7
4/3/2023	7:10:00 PM	106.5	<	19.7	<	19.5
4/3/2023	7:15:00 PM	103.6	<	17.2	<	16.9
4/3/2023	7:20:00 PM	106	<	15.2	<	15
4/3/2023	7:25:00 PM	107.1	<	13	<	12.8
4/3/2023	7:30:00 PM	105.2	<	16.1	<	15.8
4/3/2023	7:35:00 PM	104.8	<	14.4	<	14.2
4/3/2023	7:40:00 PM	112	<	15.2	<	15
4/3/2023	7:45:00 PM	128.4	<	16.3	<	16.1
4/3/2023	7:50:00 PM	150.8	<	15	<	14.7
4/3/2023	7:55:00 PM	165.2	<	15.2	<	15
4/3/2023	8:00:00 PM	179	<	16.8	<	16.5
4/3/2023	8:05:00 PM	194.9	<	16.3	<	16
4/3/2023	8:10:00 PM	209.3	<	14.8	<	14.6
4/3/2023	8:15:00 PM	209.2	<	14.6	<	14.3
4/3/2023	8:20:00 PM	198.6	<	15.3	<	15.1
4/3/2023	8:25:00 PM	197.4	<	12.8	<	12.6
4/3/2023	8:30:00 PM	190.2	<	12.6	<	12.5
4/3/2023	8:35:00 PM	185.7	<	13.7	<	13.5
4/3/2023	8:40:00 PM	191.3	<	15.1	<	14.1
4/3/2023	8:45:00 PM	251.6	<	23	<	22.8
4/3/2023	8:50:00 PM	383.5	<	22.7	<	22.4
4/3/2023	8:55:00 PM	448.4	<	26.6	<	26.4
4/3/2023	9:00:00 PM	472.6	<	25.1	<	24.9
4/3/2023	9:05:00 PM	476	<	24.6	<	24.3
4/3/2023	9:10:00 PM	453.1	<	19.9	<	19.6
4/3/2023	9:15:00 PM	436.7	<	15.5	<	15.3
4/3/2023	9:20:00 PM	411	<	12.8	<	12.6
4/3/2023	9:25:00 PM	400	<	19.5	<	19.2
4/3/2023	9:30:00 PM	410.6	<	21.3	<	21.1
4/3/2023	9:35:00 PM	417.9	<	19.3	<	19
4/3/2023	9:40:00 PM	411.8	<	19.9	<	19.7
4/3/2023	9:45:00 PM	425.7	<	25.7	<	25.4
4/3/2023	9:50:00 PM	453	<	22.3	<	22.1
4/3/2023	9:55:00 PM	429.2	<	23.5	<	23.3
4/3/2023	10:00:00 PM	402.1	<	21.6	<	21.3

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
4/3/2023	10:05:00 PM	378.9	<	21.7	<	21.5
4/3/2023	10:10:00 PM	373.2	<	23.5	<	23.3
4/3/2023	10:15:00 PM	362.1	<	20.7	<	20.5
4/3/2023	10:20:00 PM	341.4	<	18	<	17.8
4/3/2023	10:25:00 PM	330.8	<	16.3	<	16.1
4/3/2023	10:30:00 PM	319.2	<	19.8	<	19.6
4/3/2023	10:35:00 PM	315.7	<	17.1	<	16.9
4/3/2023	10:40:00 PM	306.8	<	16.7	<	16.6
4/3/2023	10:45:00 PM	287.6	<	16.2	<	16
4/3/2023	10:50:00 PM	281	<	15.6	<	15.4
4/3/2023	10:55:00 PM	275.5	<	15.1	<	14.9
4/3/2023	11:00:00 PM	263.1	<	17.6	<	17.5
4/3/2023	11:05:00 PM	254.8	<	15.3	<	15
4/3/2023	11:10:00 PM	250.4	<	14.5	<	14.3
4/3/2023	11:15:00 PM	251.1	<	15.4	<	15.3
4/3/2023	11:20:00 PM	260.1	<	12.9	<	12.7
4/3/2023	11:25:00 PM	265.8	<	12.9	<	12.7
4/3/2023	11:30:00 PM	262.1	<	13.4	<	13.2
4/3/2023	11:35:00 PM	262	<	15.4	<	15.2
4/3/2023	11:40:00 PM	268	<	16.9	<	16.8
4/3/2023	11:45:00 PM	277.4	<	15.6	<	15.4
4/3/2023	11:50:00 PM	283.9	<	15.7	<	15.6
4/3/2023	11:55:00 PM	285.2	<	13	<	12.8
	Average	103.5		12.1		11.9
	Max	476	0	26.6	0	26.4
	Max Hour					
	Min	11.1	0	0.5	0	0.2
	Count	288	0	274	0	274
	Total					

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	12:00:00 AM	51.2	255.5	3.1	255.7	3.1
7/21/2023	12:05:00 AM	52.3	258.6	2.2	258.1	2.2
7/21/2023	12:10:00 AM	52.1	287	1.1	285.8	1.1
7/21/2023	12:15:00 AM	51.1	287.6	1.1	287.5	1.1
7/21/2023	12:20:00 AM	50.4	255.8	1.3	256.3	1.2
7/21/2023	12:25:00 AM	45	259.5	1.6	260	1.6
7/21/2023	12:30:00 AM	40.4	252.6	1.5	250.6	1.5
7/21/2023	12:35:00 AM	42.1	301.5	0	305.1	0.6
7/21/2023	12:40:00 AM	41.1	325.8	1.8	326.6	1.8
7/21/2023	12:45:00 AM	40	7.9	2	8.3	1.9
7/21/2023	12:50:00 AM	40.4	11.2	1.7	12.5	1.6
7/21/2023	12:55:00 AM	44.1	334	1.7	334.3	1.7
7/21/2023	1:00:00 AM	47.6	343.3	2.4	343.3	2.4
7/21/2023	1:05:00 AM	48	331.7	2.6	331.3	2.6
7/21/2023	1:10:00 AM	49.2	331	2.9	330.9	2.9
7/21/2023	1:15:00 AM	52	316.5	3	316.7	3
7/21/2023	1:20:00 AM	55	301.3	3.1	301.2	3.1
7/21/2023	1:25:00 AM	56.4	295.1	2.8	295.2	2.8
7/21/2023	1:30:00 AM	57.4	291.5	3	291.4	3
7/21/2023	1:35:00 AM	57.7	281.9	3.5	282.1	3.5
7/21/2023	1:40:00 AM	56.8	282.2	4.3	282.3	4.2
7/21/2023	1:45:00 AM	54.4	278.8	3.7	279	3.7
7/21/2023	1:50:00 AM	50.8	265.1	2.7	266.4	2.7
7/21/2023	1:55:00 AM	45.2	233.1	2.1	233.3	2
7/21/2023	2:00:00 AM	49.9	218.9	1.8	219.1	1.8
7/21/2023	2:05:00 AM	70.6	227.9	2.9	228.8	2.9
7/21/2023	2:10:00 AM	74.3	238.6	3.4	238.7	3.4
7/21/2023	2:15:00 AM	62.1	234.3	3.7	234.3	3.7
7/21/2023	2:20:00 AM	53.2	240	3.1	240.3	3.1
7/21/2023	2:25:00 AM	49.2	240	2.6	240.3	2.5
7/21/2023	2:30:00 AM	56.4	248.5	2.1	248.8	2.1
7/21/2023	2:35:00 AM	70.9	232.4	1.9	233	1.8
7/21/2023	2:40:00 AM	86.3	198	2.1	199.6	2
7/21/2023	2:45:00 AM	85.6	195.2	1.3	194.3	1.3
7/21/2023	2:50:00 AM	79.3	176.6	1	178.2	0.9
7/21/2023	2:55:00 AM	71.7	170	1	171.7	0.9
7/21/2023	3:00:00 AM	64.1	227.6	1.3	228.9	1.3
7/21/2023	3:05:00 AM	56.5	244	2.3	243.5	2.2
7/21/2023	3:10:00 AM	60	249.8	3.3	249.9	3.2
7/21/2023	3:15:00 AM	76.4	260.3	3.7	260.5	3.7
7/21/2023	3:20:00 AM	82.8	262.4	4.2	262.5	4.2
7/21/2023	3:25:00 AM	74.2	260.8	4.3	260.8	4.3
7/21/2023	3:30:00 AM	61.9	262.4	4.4	262.6	4.4
7/21/2023	3:35:00 AM	54.1	256.6	3.7	256.7	3.6
7/21/2023	3:40:00 AM	54.9	242	2.5	242.7	2.5
7/21/2023	3:45:00 AM	57.4	201.3	0	204.3	0.7
7/21/2023	3:50:00 AM	68.9	151.5	0	157.7	0.4
7/21/2023	3:55:00 AM	100.1	202.4	0	192.9	0.4
7/21/2023	4:00:00 AM	106.3	44.1	1.7	43	1.6
7/21/2023	4:05:00 AM	104.1	37.9	2.7	37.6	2.7
7/21/2023	4:10:00 AM	105	50.6	3.1	50.7	3
7/21/2023	4:15:00 AM	107.4	27.2	1.8	33.5	1.7
7/21/2023	4:20:00 AM	102.2	286	2.9	277.4	2.7

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	4:25:00 AM	98.7	240	6.3	240.1	6.1
7/21/2023	4:30:00 AM	120.5	241.6	13.3	241.5	13.1
7/21/2023	4:35:00 AM	192.6	241.1	11.4	241.3	11.3
7/21/2023	4:40:00 AM	285.3	243.2	9.2	243	9.1
7/21/2023	4:45:00 AM	330.3	243.6	9.2	243.5	9
7/21/2023	4:50:00 AM	343.1	252.5	12.7	252.7	12.5
7/21/2023	4:55:00 AM	359	256.1	14.2	256.3	14
7/21/2023	5:00:00 AM	388	253.2	16.7	253.1	16.5
7/21/2023	5:05:00 AM	439.9	257.4	13.3	257.4	13
7/21/2023	5:10:00 AM	456.6	262.8	12.9	263.2	12.8
7/21/2023	5:15:00 AM	445.8	269.6	14.1	269.8	13.9
7/21/2023	5:20:00 AM	424.9	272.8	13.5	272.8	13.4
7/21/2023	5:25:00 AM	398.4	271.7	14.1	272	13.9
7/21/2023	5:30:00 AM	383.8	269.2	14.9	269.5	14.8
7/21/2023	5:35:00 AM	376.8	267.2	14.5	267.5	14.3
7/21/2023	5:40:00 AM	378.4	268.7	14.4	268.8	14.2
7/21/2023	5:45:00 AM	377.4	268.8	14.3	269.2	14.2
7/21/2023	5:50:00 AM	374.2	269.1	14.9	269.5	14.8
7/21/2023	5:55:00 AM	372.6	268.8	15.7	269	15.6
7/21/2023	6:00:00 AM	373	263.6	15.7	263.9	15.5
7/21/2023	6:05:00 AM	394.8	265.9	16	266.1	15.9
7/21/2023	6:10:00 AM	425.4	263.3	17	263.5	16.8
7/21/2023	6:15:00 AM	476.6	268.2	17.8	268.3	17.6
7/21/2023	6:20:00 AM	509.8	267.1	16	267.6	15.8
7/21/2023	6:25:00 AM	495.2	270.1	14.5	270.3	14.3
7/21/2023	6:30:00 AM	463	270.6	14.4	271	14.3
7/21/2023	6:35:00 AM	425.7	264.2	12.3	264.1	12
7/21/2023	6:40:00 AM	393.9	274.9	12.9	275	12.8
7/21/2023	6:45:00 AM	370.7	267	11.7	267.3	11.5
7/21/2023	6:50:00 AM	353	270.9	13	271	12.9
7/21/2023	6:55:00 AM	336.3	268.2	13.3	268.3	13.1
7/21/2023	7:00:00 AM	320.1	270.7	13	270.8	12.9
7/21/2023	7:05:00 AM	311.2	271.5	13.4	271.8	13.3
7/21/2023	7:10:00 AM	300.8	272.9	14.3	273.3	14.2
7/21/2023	7:15:00 AM	291.7	274.5	14.4	274.7	14.3
7/21/2023	7:20:00 AM	284.7	277.3	12.8	277.5	12.6
7/21/2023	7:25:00 AM	273.5	273.3	14	273.8	13.8
7/21/2023	7:30:00 AM	261.9	273.7	14	273.7	13.8
7/21/2023	7:35:00 AM	252.2	274	15.1	274.4	14.9
7/21/2023	7:40:00 AM	240.2	273.2	13.7	273.7	13.6
7/21/2023	7:45:00 AM	224.5	272.5	13	272.2	12.8
7/21/2023	7:50:00 AM	212.2	279.1	13.2	279	13
7/21/2023	7:55:00 AM	203.8	274.4	13.2	274.3	13.1
7/21/2023	8:00:00 AM	198.8	279.8	12.5	279.6	12.4
7/21/2023	8:05:00 AM	190.1	279.2	12.3	279.6	12.1
7/21/2023	8:10:00 AM	181.7	286.9	11.2	286.2	11.1
7/21/2023	8:15:00 AM	176.5	288.7	14.5	288.8	14.3
7/21/2023	8:20:00 AM	170.2	289.6	12.6	289.5	12.5
7/21/2023	8:25:00 AM	169.7	294.2	14.1	294.4	14
7/21/2023	8:30:00 AM	169.1	292	11.8	291.1	11.6
7/21/2023	8:35:00 AM	167	288.2	13	288.3	12.8
7/21/2023	8:40:00 AM	161.6	288.7	12.9	288.8	12.7
7/21/2023	8:45:00 AM	156.1	279	11.3	279.5	11.1

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	8:50:00 AM	146.1	276	12.5	276	12.4
7/21/2023	8:55:00 AM	135.5	277.8	12.5	277.8	12.4
7/21/2023	9:00:00 AM	130.9	272	12.5	272.5	12.4
7/21/2023	9:05:00 AM	128	273.3	10.9	273.7	10.8
7/21/2023	9:10:00 AM	125.7	265.6	8.9	266.7	8.6
7/21/2023	9:15:00 AM	120.9	258.8	8.4	258.6	8.2
7/21/2023	9:20:00 AM	118.5	257.3	8.2	257.1	8
7/21/2023	9:25:00 AM	121.6	260.1	6.2	258.9	5.9
7/21/2023	9:30:00 AM	122.4	272.8	8.4	273.6	8.2
7/21/2023	9:35:00 AM	123.9	240.2	7.2	240.4	7.1
7/21/2023	9:40:00 AM	120.1	242.8	8.6	242.9	8.3
7/21/2023	9:45:00 AM	132.3	255.1	8.4	257	7.8
7/21/2023	9:50:00 AM	144.4	270.6	8.2	271.2	8
7/21/2023	9:55:00 AM	141.7	239.4	6.1	239.8	5.7
7/21/2023	10:00:00 AM	132.7	224.2	5.7	233.4	5.3
7/21/2023	10:05:00 AM	141.1	258.4	8.7	258.4	8.5
7/21/2023	10:10:00 AM	148.2	253	5.5	250	5
7/21/2023	10:15:00 AM	146.4	264.6	5.5	264.8	5.3
7/21/2023	10:20:00 AM	142.4	266	5.2	267.5	4.9
7/21/2023	10:25:00 AM	136.5	272.2	5.8	273.3	5.5
7/21/2023	10:30:00 AM	132.4	293.6	5	292.4	4.9
7/21/2023	10:35:00 AM	128.6	274.2	5.4	274.3	5
7/21/2023	10:40:00 AM	125.9	236.4	5.1	233.1	4.7
7/21/2023	10:45:00 AM	126.2	242.3	3.5	254	2.7
7/21/2023	10:50:00 AM	128.1	275.9	6.6	276.6	6.5
7/21/2023	10:55:00 AM	131.5	279	8.6	278.8	8.3
7/21/2023	11:00:00 AM	132.5	263.2	7.2	263.6	7
7/21/2023	11:05:00 AM	130.3	233.7	3.7	243.2	3.2
7/21/2023	11:10:00 AM	127.2	207	2.1	214.6	1.5
7/21/2023	11:15:00 AM	125.4	244.7	3.4	249.2	3
7/21/2023	11:20:00 AM	129.8	213.5	3.9	225.1	2.2
7/21/2023	11:25:00 AM	129.2	273.4	3.3	275.1	0.9
7/21/2023	11:30:00 AM	121.8	203.5	4.2	191	3.3
7/21/2023	11:35:00 AM	126.4	257.4	6.9	254.3	6.3
7/21/2023	11:40:00 AM	131.4	224.7	4.9	220.4	3.9
7/21/2023	11:45:00 AM	133.5	208.1	5.3	203.9	4.4
7/21/2023	11:50:00 AM	133.7	283.7	6.6	283.9	6.4
7/21/2023	11:55:00 AM	129	309.1	4.1	309.2	4
7/21/2023	12:00:00 PM	125.3	339.4	2.4	321	1.8
7/21/2023	12:05:00 PM	120.4	175.5	5.3	175.5	5
7/21/2023	12:10:00 PM	118.5	166.5	4.7	170.7	4.2
7/21/2023	12:15:00 PM	120.8	241.9	2.8	239.2	2.4
7/21/2023	12:20:00 PM	121.2	254.4	5.2	252.6	3.5
7/21/2023	12:25:00 PM	122.6	191.7	5.7	190.9	5.4
7/21/2023	12:30:00 PM	123.4	169.6	4.9	171.6	4.7
7/21/2023	12:35:00 PM	122.1	92	3.7	91.8	3.5
7/21/2023	12:40:00 PM	124.9	176.9	3.7	188.7	3.2
7/21/2023	12:45:00 PM	130.8	241.6	7.3	239.2	7
7/21/2023	12:50:00 PM	131	200.9	2.7	223.5	1.1
7/21/2023	12:55:00 PM	133	264.6	3.5	256.2	2.6
7/21/2023	1:00:00 PM	130.2	257.9	9	258.6	8.8
7/21/2023	1:05:00 PM	121	252.7	6.8	252	6.4
7/21/2023	1:10:00 PM	115.9	268	8.6	268	8.2

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	1:15:00 PM	116.6	287.2	9.5	286.3	8.9
7/21/2023	1:20:00 PM	115.2	251.1	7	258.1	6.5
7/21/2023	1:25:00 PM	112.5	261.9	7.8	265	7.5
7/21/2023	1:30:00 PM	98.5	258.5	6.2	257.4	6
7/21/2023	1:35:00 PM	90.7	281.2	6.3	281.9	5.9
7/21/2023	1:40:00 PM	85.8	238.6	10	238.7	9.7
7/21/2023	1:45:00 PM	85.7	273	9.5	271.9	9.1
7/21/2023	1:50:00 PM	90.3	261.8	9.8	263	9.5
7/21/2023	1:55:00 PM	88	264.4	10.1	265.6	9.8
7/21/2023	2:00:00 PM	85	271.5	11.8	272.6	11.2
7/21/2023	2:05:00 PM	78.5	265.3	13.8	265.2	13.6
7/21/2023	2:10:00 PM	83.4	261	9.4	263.1	9
7/21/2023	2:15:00 PM	91.6	262.2	9.3	262.5	8.6
7/21/2023	2:20:00 PM	96.9	276	12.6	276.8	12.4
7/21/2023	2:25:00 PM	97.7	255.4	10.6	252.2	9.6
7/21/2023	2:30:00 PM	92.7	263.6	10.8	263.9	10.5
7/21/2023	2:35:00 PM	91.9	263.7	9.3	264.3	9.1
7/21/2023	2:40:00 PM	88	270.7	12	271.5	11.8
7/21/2023	2:45:00 PM	81.5	262.1	10.1	262.5	9.8
7/21/2023	2:50:00 PM	81.4	261.9	10.7	260.8	10.3
7/21/2023	2:55:00 PM	80.8	260.3	11.9	260.3	11.7
7/21/2023	3:00:00 PM	80.5	267	11.5	267.4	11.2
7/21/2023	3:05:00 PM	75.4	268.2	11.2	268	10.9
7/21/2023	3:10:00 PM	78.1	254.6	9.4	254.1	9
7/21/2023	3:15:00 PM	84.1	267.2	13.4	268.3	13
7/21/2023	3:20:00 PM	81.7	259.1	10.4	260.5	10
7/21/2023	3:25:00 PM	78.7	274.9	13.5	274.3	13.2
7/21/2023	3:30:00 PM	70.1	259.1	11.7	259.6	11.3
7/21/2023	3:35:00 PM	68.5	258.3	9.8	257.3	9.3
7/21/2023	3:40:00 PM	60.4	270.9	12.9	270.8	12.4
7/21/2023	3:45:00 PM	52.1	256.4	12.6	256.2	12.4
7/21/2023	3:50:00 PM	53.1	263.8	11.3	265.7	10.9
7/21/2023	3:55:00 PM	51.2	257.2	11.2	257.3	10.7
7/21/2023	4:00:00 PM	49	256.7	13.4	256.8	13
7/21/2023	4:05:00 PM	53.6	243.5	13.6	243.5	13.4
7/21/2023	4:10:00 PM	66.4	254.5	13.3	255.8	12.8
7/21/2023	4:15:00 PM	73.6	261.8	13	262.2	12.7
7/21/2023	4:20:00 PM	74.3	259.8	14.2	260.5	14
7/21/2023	4:25:00 PM	65.7	247.1	13.2	247.5	13
7/21/2023	4:30:00 PM	59	261.2	12.3	261.3	12
7/21/2023	4:35:00 PM	53.8	265.4	12.6	265.6	12.4
7/21/2023	4:40:00 PM	59.1	275.8	15.1	276.3	15
7/21/2023	4:45:00 PM	57.1	262.9	13.4	262.5	13.2
7/21/2023	4:50:00 PM	56.3	266	12.2	265.9	11.9
7/21/2023	4:55:00 PM	55.3	276.2	13.2	276.1	13
7/21/2023	5:00:00 PM	42.5	268.5	12.3	268.5	12.1
7/21/2023	5:05:00 PM	28.6	266.4	12.6	267.4	12.4
7/21/2023	5:10:00 PM	31.9	265.5	13.2	265.6	13
7/21/2023	5:15:00 PM	39.7	255.2	12.3	254.8	12
7/21/2023	5:20:00 PM	47.5	254.3	11.9	254.1	11.8
7/21/2023	5:25:00 PM	55.4	257.4	11.7	257.4	11.5
7/21/2023	5:30:00 PM	58.4	255.8	9.8	256.5	9.6
7/21/2023	5:35:00 PM	56.3	249	10.5	248.7	10.3

## Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	5:40:00 PM	55.5	253.2	10	252.4	9.9
7/21/2023	5:45:00 PM	59.8	253	10.9	252.8	10.8
7/21/2023	5:50:00 PM	63.2	258.4	11.5	258.7	11.4
7/21/2023	5:55:00 PM	67.8	251.1	10.9	251.4	10.7
7/21/2023	6:00:00 PM	67.8	250.1	10.9	249.8	10.7
7/21/2023	6:05:00 PM	64.7	258.3	9.7	258.7	9.5
7/21/2023	6:10:00 PM	59.2	254.6	9.7	254.7	9.6
7/21/2023	6:15:00 PM	54.2	254.5	9.1	254.3	9
7/21/2023	6:20:00 PM	49.9	255.1	8.9	254.9	8.8
7/21/2023	6:25:00 PM	46.5	257.3	9.5	257.6	9.3
7/21/2023	6:30:00 PM	44.9	252.6	10.1	251.9	10
7/21/2023	6:35:00 PM	42	254.7	9.6	254.8	9.4
7/21/2023	6:40:00 PM	41.5	253.7	9	253.3	8.8
7/21/2023	6:45:00 PM	41.8	252.2	7.1	252.5	6.9
7/21/2023	6:50:00 PM	43.9	262.5	8	262.6	7.8
7/21/2023	6:55:00 PM	46.6	270.3	7.7	270.7	7.6
7/21/2023	7:00:00 PM	46.5	272.1	7.8	272.3	7.8
7/21/2023	7:05:00 PM	44.5	284.9	8.2	285.4	8
7/21/2023	7:10:00 PM	45.1	308.8	8.4	307.7	8.3
7/21/2023	7:15:00 PM	46.3	332.9	9	333.2	8.9
7/21/2023	7:20:00 PM	48.3	346.2	9.4	346.1	9.1
7/21/2023	7:25:00 PM	56.3	346.5	13	346.9	12.8
7/21/2023	7:30:00 PM	70.9	353.9	9.4	354.8	9.1
7/21/2023	7:35:00 PM	81.8	349.4	10.6	349.3	10.4
7/21/2023	7:40:00 PM	84.4	358.1	7.8	357.8	7.5
7/21/2023	7:45:00 PM	83.4	349.9	6.1	350.6	6
7/21/2023	7:50:00 PM	81.7	350	5.2	350.2	5
7/21/2023	7:55:00 PM	77.9	351.4	4.4	352.4	4.3
7/21/2023	8:00:00 PM	74.5	335.4	4.4	337.2	4.3
7/21/2023	8:05:00 PM	70.4	9	5.2	6.6	4.7
7/21/2023	8:10:00 PM	65.4	358.6	5.1	358.7	4.9
7/21/2023	8:15:00 PM	64.2	0.3	3.5	359.5	3.4
7/21/2023	8:20:00 PM	61.1	4.3	4.5	4.3	4.4
7/21/2023	8:25:00 PM	60.1	5	5.2	4.6	5.1
7/21/2023	8:30:00 PM	60	21.1	7.9	21.3	7.8
7/21/2023	8:35:00 PM	58.7	46.3	13.4	47.1	13.1
7/21/2023	8:40:00 PM	71.4	45.5	15.1	45.2	15
7/21/2023	8:45:00 PM	159.7	44.7	13.6	44.6	13.4
7/21/2023	8:50:00 PM	313.6	53.3	12.6	52.9	12.4
7/21/2023	8:55:00 PM	364.6	73.1	9.1	72.3	9
7/21/2023	9:00:00 PM	364.6	70.3	9.1	70	8.9
7/21/2023	9:05:00 PM	345.4	69.2	10.7	69.5	10.6
7/21/2023	9:10:00 PM	319	61.8	8.3	62.3	8.2
7/21/2023	9:15:00 PM	290.2	65.6	8.3	65.7	8.2
7/21/2023	9:20:00 PM	258.9	70.6	7.8	70.6	7.7
7/21/2023	9:25:00 PM	226.8	72.3	6.1	72.5	5.9
7/21/2023	9:30:00 PM	197.5	86.4	6.3	85.7	6.1
7/21/2023	9:35:00 PM	170.2	86.6	6.5	86.9	6.3
7/21/2023	9:40:00 PM	149.4	81.3	6.3	81.7	6.2
7/21/2023	9:45:00 PM	135.1	83.4	6.2	83.8	6.1
7/21/2023	9:50:00 PM	125.3	69.4	6.6	69.7	6.5
7/21/2023	9:55:00 PM	119.1	62.6	7	62.8	6.9
7/21/2023	10:00:00 PM	116.3	72.3	6.3	72	6.3

Site: West 43rd Avenue

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	10:05:00 PM	113.4	82	6.5	82	6.4
7/21/2023	10:10:00 PM	107.9	106.2	5.4	105.1	5.2
7/21/2023	10:15:00 PM	103.8	123.4	5.3	123.2	5.2
7/21/2023	10:20:00 PM	98.2	116.2	5.8	116.3	5.6
7/21/2023	10:25:00 PM	91.7	134.3	6.4	134.2	6.1
7/21/2023	10:30:00 PM	83.3	148.1	8.6	147.8	8.4
7/21/2023	10:35:00 PM	72.6	145.8	10.1	145.6	10
7/21/2023	10:40:00 PM	64.9	145.1	10.9	144	10.8
7/21/2023	10:45:00 PM	83.2	156.7	21.1	156.2	20.5
7/21/2023	10:50:00 PM	217.6	159.5	18.6	159.6	18.2
7/21/2023	10:55:00 PM	815.1	150.9	15.6	151	15.3
7/21/2023	11:00:00 PM	1711.9	155.6	16.8	155.9	16.4
7/21/2023	11:05:00 PM	2056.4	154	22.3	154	21.8
7/21/2023	11:10:00 PM	2443.5	156.1	21.3	155.5	20.9
7/21/2023	11:15:00 PM	2777.9	158	21.1	158.2	20.6
7/21/2023	11:20:00 PM	2825.8	162.3	21.2	162.3	20.8
7/21/2023	11:25:00 PM	2780.4	162.6	18.5	162.7	18.1
7/21/2023	11:30:00 PM	2463.4	176.9	19.2	176.5	18.7
7/21/2023	11:35:00 PM	2053.4	181.2	15.2	180.3	14.6
7/21/2023	11:40:00 PM	1650.7	180.9	18.4	179.9	17.9
7/21/2023	11:45:00 PM	1360.7	180.7	18.2	180.1	17.7
7/21/2023	11:50:00 PM	1151.2	179.1	18.2	178	17.8
7/21/2023	11:55:00 PM	995.8	182.8	16.9	181.9	16.4
Average		216.9	261	8.8	259.3	5.4
Max		2825.8	358.6	22.3	359.5	21.8
Max Hour		171535.1092	5820.927452	23.87581446	5669.745795	23.59950784
Min		28.6	0.3	0	4.3	0.4
Count		288	288	288	288	288
Total		62481.9	67031.4	2557.8	67459.3	2490.6

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	12:00:00 AM	12.8	<	1.4	<	1.3
7/21/2023	12:05:00 AM	32.4	<	0.4	<	0.4
7/21/2023	12:10:00 AM	10.2	<	1.7	<	1.6
7/21/2023	12:15:00 AM	23.7	<	2.1	<	2
7/21/2023	12:20:00 AM	8.9	<	2.1	<	2
7/21/2023	12:25:00 AM	3.4	<	2.4	<	2.3
7/21/2023	12:30:00 AM	12.4	<	2.2	<	2
7/21/2023	12:35:00 AM	11.7	<	2.6	<	2.5
7/21/2023	12:40:00 AM	11.1	<	3.3	<	3.2
7/21/2023	12:45:00 AM	18.5	<	2.4	<	2.4
7/21/2023	12:50:00 AM	12.2	<	3	<	3
7/21/2023	12:55:00 AM	12	<	2.8	<	2.8
7/21/2023	1:00:00 AM	11.4	<	2.4	<	2.3
7/21/2023	1:05:00 AM	11.4	<	1.6	<	1.5
7/21/2023	1:10:00 AM	45.9	<	0	<	0
7/21/2023	1:15:00 AM	24.2	<	0.1	<	0
7/21/2023	1:20:00 AM	15.5	<	1.1	<	1
7/21/2023	1:25:00 AM	19.3	<	0.9	<	0.9
7/21/2023	1:30:00 AM	31.7	<	1	<	1
7/21/2023	1:35:00 AM	58.4	<	0.9	<	0.5
7/21/2023	1:40:00 AM	13.6	<	0.3	<	0.3
7/21/2023	1:45:00 AM	31.4	<	1.2	<	1.2
7/21/2023	1:50:00 AM	25.8	<	0.2	<	0.2
7/21/2023	1:55:00 AM	21.3	<	1.5	<	1.5
7/21/2023	2:00:00 AM	42.1	<	2.1	<	1.8
7/21/2023	2:05:00 AM	34.4	<	2.3	<	2.2
7/21/2023	2:10:00 AM	29.2	<	2.5	<	2.4
7/21/2023	2:15:00 AM	14.1	<	2.7	<	2.7
7/21/2023	2:20:00 AM	9.2	<	3	<	3
7/21/2023	2:25:00 AM	23.3	<	2.8	<	2.8
7/21/2023	2:30:00 AM	20.7	<	4.1	<	4.1
7/21/2023	2:35:00 AM	35.1	<	5.4	<	5.3
7/21/2023	2:40:00 AM	23.5	<	5	<	4.9
7/21/2023	2:45:00 AM	9	<	2.7	<	2.7
7/21/2023	2:50:00 AM	7.4	<	0.7	<	0.7
7/21/2023	2:55:00 AM	17.4	<	0.9	<	0.9
7/21/2023	3:00:00 AM	29.1	<	0.6	<	0.6
7/21/2023	3:05:00 AM	83	<	1.6	<	1.5
7/21/2023	3:10:00 AM	48.4	<	2.7	<	2.6
7/21/2023	3:15:00 AM	-1.2	<	4.2	<	4
7/21/2023	3:20:00 AM	-15.2	<	4.2	<	4.1
7/21/2023	3:25:00 AM	-3.5	<	5.3	<	5.3
7/21/2023	3:30:00 AM	11	<	5.4	<	5.4
7/21/2023	3:35:00 AM	21.7	<	5	<	5
7/21/2023	3:40:00 AM	35.7	<	4.1	<	4.1
7/21/2023	3:45:00 AM	22.6	<	3.8	<	3.8
7/21/2023	3:50:00 AM	28.9	<	2.9	<	2.9
7/21/2023	3:55:00 AM	32.9	<	4.3	<	4.3
7/21/2023	4:00:00 AM	47.1	<	5.9	<	5.8
7/21/2023	4:05:00 AM	48.8	<	4.8	<	4.7
7/21/2023	4:10:00 AM	59.4	<	5.2	<	5.1
7/21/2023	4:15:00 AM	50	<	5	<	4.9
7/21/2023	4:20:00 AM	40.2	<	3.8	<	3.7

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	4:25:00 AM	45.8	<	4.5	<	4.3
7/21/2023	4:30:00 AM	45.1	<	6.4	<	6.3
7/21/2023	4:35:00 AM	49.9	<	14	<	13.8
7/21/2023	4:40:00 AM	62.7	<	9.1	<	9
7/21/2023	4:45:00 AM	54	<	6.3	<	6.2
7/21/2023	4:50:00 AM	55.9	<	7.4	<	7.2
7/21/2023	4:55:00 AM	70	<	2.8	<	2.6
7/21/2023	5:00:00 AM	67.7	<	2	<	1.9
7/21/2023	5:05:00 AM	75.8	<	4.4	<	4.3
7/21/2023	5:10:00 AM	84.2	<	1.7	<	1.7
7/21/2023	5:15:00 AM	82.8	<	2	<	1.8
7/21/2023	5:20:00 AM	131.6	<	2.8	<	2.7
7/21/2023	5:25:00 AM	139.5	<	4	<	2.1
7/21/2023	5:30:00 AM	72.5	<	1	<	0.8
7/21/2023	5:35:00 AM	82.7	<	1.3	<	1
7/21/2023	5:40:00 AM	160.6	<	4.6	<	4.4
7/21/2023	5:45:00 AM	265.2	<	6.1	<	5.9
7/21/2023	5:50:00 AM	277.8	<	4.9	<	4.7
7/21/2023	5:55:00 AM	246.6	<	2.8	<	2.6
7/21/2023	6:00:00 AM	238.6	<	2.9	<	2.4
7/21/2023	6:05:00 AM	246.9	<	2.7	<	2.2
7/21/2023	6:10:00 AM	288.3	<	0.5	<	0.4
7/21/2023	6:15:00 AM	280.5	<	1.1	<	1.1
7/21/2023	6:20:00 AM	296	<	2	<	1.9
7/21/2023	6:25:00 AM	307.3	<	2.1	<	2.1
7/21/2023	6:30:00 AM	353.6	<	2.5	<	2.5
7/21/2023	6:35:00 AM	358.1	<	2.9	<	2.8
7/21/2023	6:40:00 AM	324.7	<	3.4	<	3.3
7/21/2023	6:45:00 AM	230.7	<	4.2	<	4.2
7/21/2023	6:50:00 AM	229.8	<	3.8	<	3.6
7/21/2023	6:55:00 AM	246	<	1.2	<	0.5
7/21/2023	7:00:00 AM	316.6	<	1.9	<	0.8
7/21/2023	7:05:00 AM	318.5	<	4.2	<	3.6
7/21/2023	7:10:00 AM	342.4	<	10.3	<	10
7/21/2023	7:15:00 AM	323.8	<	7.9	<	7.7
7/21/2023	7:20:00 AM	306.8	<	11.7	<	11.4
7/21/2023	7:25:00 AM	291.2	<	10.5	<	10.3
7/21/2023	7:30:00 AM	285	<	10	<	9.8
7/21/2023	7:35:00 AM	283.2	<	14.6	<	14.5
7/21/2023	7:40:00 AM	278.4	<	10.8	<	10.7
7/21/2023	7:45:00 AM	274.9	<	12.4	<	12.2
7/21/2023	7:50:00 AM	261.9	<	9.8	<	9.6
7/21/2023	7:55:00 AM	252.5	<	7.9	<	7.4
7/21/2023	8:00:00 AM	261.7	<	4.7	<	4.6
7/21/2023	8:05:00 AM	264.2	<	5.8	<	5.2
7/21/2023	8:10:00 AM	251.2	<	3	<	2.8
7/21/2023	8:15:00 AM	246.8	<	4.6	<	4.3
7/21/2023	8:20:00 AM	272.8	<	7.9	<	7.5
7/21/2023	8:25:00 AM	274.3	<	4.5	<	4.2
7/21/2023	8:30:00 AM	277.4	<	9	<	8.7
7/21/2023	8:35:00 AM	291.7	<	8.1	<	7.8
7/21/2023	8:40:00 AM	293.6	<	7.6	<	7.4
7/21/2023	8:45:00 AM	284.3	<	8.2	<	7.9

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	8:50:00 AM	277.9	<	7.1	<	6.9
7/21/2023	8:55:00 AM	270.2	<	7.7	<	7.5
7/21/2023	9:00:00 AM	265.7	<	7.6	<	7.4
7/21/2023	9:05:00 AM	262.6	<	8.5	<	8.4
7/21/2023	9:10:00 AM	256.6	<	7.7	<	7.5
7/21/2023	9:15:00 AM	255.7	<	8.1	<	7.9
7/21/2023	9:20:00 AM	250.3	<	7.8	<	7.5
7/21/2023	9:25:00 AM	250	<	8.6	<	8.4
7/21/2023	9:30:00 AM	259.2	<	7.5	<	7.3
7/21/2023	9:35:00 AM	230.9	<	4.8	<	4.2
7/21/2023	9:40:00 AM	222.7	<	6.8	<	6.5
7/21/2023	9:45:00 AM	213.4	<	6.7	<	6.3
7/21/2023	9:50:00 AM	222.9	<	7.6	<	7.3
7/21/2023	9:55:00 AM	214.3	<	6.4	<	6.2
7/21/2023	10:00:00 AM	195.4	<	7	<	6.2
7/21/2023	10:05:00 AM	214.5	<	7.5	<	7.4
7/21/2023	10:10:00 AM	207	<	8	<	7.7
7/21/2023	10:15:00 AM	183.8	<	5.6	<	5.1
7/21/2023	10:20:00 AM	203.1	<	8.2	<	7.9
7/21/2023	10:25:00 AM	208.8	<	7.5	<	7.3
7/21/2023	10:30:00 AM	196.4	<	8	<	7.3
7/21/2023	10:35:00 AM	194.5	<	6.6	<	6
7/21/2023	10:40:00 AM	186	<	6	<	5.9
7/21/2023	10:45:00 AM	184.7	<	7.4	<	7.1
7/21/2023	10:50:00 AM	202.2	<	7	<	6.9
7/21/2023	10:55:00 AM	179.3	<	6.8	<	6.5
7/21/2023	11:00:00 AM	167.2	<	5.1	<	4.9
7/21/2023	11:05:00 AM	170	<	7.3	<	7
7/21/2023	11:10:00 AM	179.4	<	4.5	<	4.1
7/21/2023	11:15:00 AM	202.9	<	7.9	<	7.6
7/21/2023	11:20:00 AM	186.1	<	7.5	<	7.3
7/21/2023	11:25:00 AM	189.5	<	8.6	<	8.3
7/21/2023	11:30:00 AM	179.2	<	8.6	<	8.4
7/21/2023	11:35:00 AM	183.7	<	7.1	<	6.7
7/21/2023	11:40:00 AM	168.4	<	5.9	<	4.7
7/21/2023	11:45:00 AM	140.8	<	5.6	<	5.4
7/21/2023	11:50:00 AM	134.5	<	5	<	4.3
7/21/2023	11:55:00 AM	163.7	<	5.4	<	4.7
7/21/2023	12:00:00 PM	140.9	<	8.3	<	7.9
7/21/2023	12:05:00 PM	155.2	<	6	<	4.3
7/21/2023	12:10:00 PM	145.3	<	3	<	2.5
7/21/2023	12:15:00 PM	166.5	<	6.1	<	5.3
7/21/2023	12:20:00 PM	155.9	<	8	<	7.7
7/21/2023	12:25:00 PM	141.3	<	8.6	<	8.5
7/21/2023	12:30:00 PM	150.4	<	6.8	<	6.6
7/21/2023	12:35:00 PM	158.3	<	5.3	<	4.4
7/21/2023	12:40:00 PM	166.2	<	4.5	<	4.2
7/21/2023	12:45:00 PM	158.7	<	7.4	<	7.1
7/21/2023	12:50:00 PM	149.7	<	5	<	4.3
7/21/2023	12:55:00 PM	155.6	<	4.2	<	3
7/21/2023	1:00:00 PM	168.5	<	4.8	<	4.6
7/21/2023	1:05:00 PM	149.9	<	5.4	<	5
7/21/2023	1:10:00 PM	140.6	<	3.8	<	3.5

## Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	1:15:00 PM	147.7	<	3.5	<	3.2
7/21/2023	1:20:00 PM	168.1	<	5.3	<	5.2
7/21/2023	1:25:00 PM	144.5	<	7.8	<	6.9
7/21/2023	1:30:00 PM	150.8	<	5	<	4.7
7/21/2023	1:35:00 PM	196.7	<	3.9	<	2.9
7/21/2023	1:40:00 PM	166.5	<	6.8	<	6.4
7/21/2023	1:45:00 PM	144.1	<	6.1	<	5.2
7/21/2023	1:50:00 PM	143.4	<	5.9	<	5.7
7/21/2023	1:55:00 PM	139.6	<	4.9	<	4.1
7/21/2023	2:00:00 PM	125.4	<	8.3	<	7.7
7/21/2023	2:05:00 PM	106.5	<	7.7	<	7.4
7/21/2023	2:10:00 PM	120.9	<	4.5	<	4.3
7/21/2023	2:15:00 PM	124.8	<	9.7	<	9.3
7/21/2023	2:20:00 PM	110.7	<	5.6	<	5.2
7/21/2023	2:25:00 PM	113.7	<	6.6	<	6.4
7/21/2023	2:30:00 PM	107	<	6.9	<	6.7
7/21/2023	2:35:00 PM	117.7	<	9	<	8.2
7/21/2023	2:40:00 PM	113.7	<	10.8	<	10.3
7/21/2023	2:45:00 PM	101.4	<	9	<	7.9
7/21/2023	2:50:00 PM	102.7	<	7	<	6.5
7/21/2023	2:55:00 PM	104	<	8.8	<	8.3
7/21/2023	3:00:00 PM	85.9	<	4.3	<	4.1
7/21/2023	3:05:00 PM	83.8	<	10.6	<	10.2
7/21/2023	3:10:00 PM	75.4	<	6.8	<	6.4
7/21/2023	3:15:00 PM	75	<	4.7	<	4.5
7/21/2023	3:20:00 PM	58.3	<	6.9	<	6.7
7/21/2023	3:25:00 PM	23.3	<	7.8	<	7.5
7/21/2023	3:30:00 PM	-3.8	<	6.4	<	5.8
7/21/2023	3:35:00 PM	14.3	<	7.5	<	6.7
7/21/2023	3:40:00 PM	1.3	<	7.6	<	7.1
7/21/2023	3:45:00 PM	12	<	11.9	<	11.4
7/21/2023	3:50:00 PM	37.6	<	8.3	<	8.1
7/21/2023	3:55:00 PM	23.7	<	11.4	<	11
7/21/2023	4:00:00 PM	30.9	<	8.3	<	8.1
7/21/2023	4:05:00 PM	30.5	<	11.2	<	10.8
7/21/2023	4:10:00 PM	40.3	<	8	<	7.9
7/21/2023	4:15:00 PM	31.1	<	7	<	6.7
7/21/2023	4:20:00 PM	28.7	<	10.1	<	9.6
7/21/2023	4:25:00 PM	37.7	<	7.6	<	7.3
7/21/2023	4:30:00 PM	47.8	<	8.8	<	8.3
7/21/2023	4:35:00 PM	39.1	<	10.8	<	10
7/21/2023	4:40:00 PM	67.9	<	10.2	<	10
7/21/2023	4:45:00 PM	178.1	<	8	<	7.4
7/21/2023	4:50:00 PM	123.8	<	8	<	7.7
7/21/2023	4:55:00 PM	70.4	<	8.5	<	8.2
7/21/2023	5:00:00 PM	50.6	<	8.2	<	7.9
7/21/2023	5:05:00 PM	44.2	<	10.1	<	9.8
7/21/2023	5:10:00 PM	34	<	10	<	9.5
7/21/2023	5:15:00 PM	31.6	<	9	<	8.9
7/21/2023	5:20:00 PM	34.7	<	7.6	<	7.5
7/21/2023	5:25:00 PM	40.6	<	6.8	<	6.6
7/21/2023	5:30:00 PM	51.2	<	8.3	<	8.1
7/21/2023	5:35:00 PM	60.8	<	6.7	<	6.6

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	5:40:00 PM	53.6	<	8.3	<	8.2
7/21/2023	5:45:00 PM	43.4	<	6.1	<	6
7/21/2023	5:50:00 PM	36.9	<	6.1	<	5.8
7/21/2023	5:55:00 PM	34.6	<	8.3	<	8
7/21/2023	6:00:00 PM	44.4	<	8.2	<	8.2
7/21/2023	6:05:00 PM	47.1	<	6	<	5.8
7/21/2023	6:10:00 PM	51.1	<	5.8	<	4.9
7/21/2023	6:15:00 PM	65.2	<	16	<	15.8
7/21/2023	6:20:00 PM	139.4	<	17.4	<	16.5
7/21/2023	6:25:00 PM	271	<	16.8	<	16.4
7/21/2023	6:30:00 PM	872.8	<	20.2	<	19.9
7/21/2023	6:35:00 PM	781.3	<	17.1	<	16.8
7/21/2023	6:40:00 PM	550.8	<	18	<	17.1
7/21/2023	6:45:00 PM	487.2	<	18.9	<	18.5
7/21/2023	6:50:00 PM	290	<	18.2	<	17.4
7/21/2023	6:55:00 PM	174.6	<	18.8	<	18.2
7/21/2023	7:00:00 PM	151.6	<	19.1	<	18.8
7/21/2023	7:05:00 PM	116.1	<	16.9	<	16.7
7/21/2023	7:10:00 PM	76.7	<	17.3	<	17
7/21/2023	7:15:00 PM	60.6	<	17	<	16.8
7/21/2023	7:20:00 PM	56.1	<	13.6	<	13.3
7/21/2023	7:25:00 PM	41.4	<	15.3	<	15
7/21/2023	7:30:00 PM	27.6	<	12.6	<	12.4
7/21/2023	7:35:00 PM	18.7	<	13	<	12.8
7/21/2023	7:40:00 PM	15.5	<	12.3	<	12
7/21/2023	7:45:00 PM	16.5	<	11.6	<	11.4
7/21/2023	7:50:00 PM	17.5	<	9.9	<	9.6
7/21/2023	7:55:00 PM	25.8	<	7.2	<	7
7/21/2023	8:00:00 PM	27.5	<	7	<	6.7
7/21/2023	8:05:00 PM	24.7	<	7.4	<	7.2
7/21/2023	8:10:00 PM	15.9	<	6.9	<	6.6
7/21/2023	8:15:00 PM	13.2	<	8.7	<	8.4
7/21/2023	8:20:00 PM	14.8	<	7.5	<	7.1
7/21/2023	8:25:00 PM	13	<	5.6	<	5.5
7/21/2023	8:30:00 PM	15.3	<	7	<	6.7
7/21/2023	8:35:00 PM	9	<	7	<	6.7
7/21/2023	8:40:00 PM	7.7	<	6.6	<	6.5
7/21/2023	8:45:00 PM	13	<	6.3	<	6.2
7/21/2023	8:50:00 PM	13.8	<	5.7	<	5.5
7/21/2023	8:55:00 PM	8.6	<	6.7	<	6.5
7/21/2023	9:00:00 PM	2.5	<	7.1	<	7
7/21/2023	9:05:00 PM	15.1	<	6.1	<	6
7/21/2023	9:10:00 PM	17.9	<	6.3	<	6.2
7/21/2023	9:15:00 PM	20.8	<	6.1	<	6
7/21/2023	9:20:00 PM	30.3	<	5.3	<	5.2
7/21/2023	9:25:00 PM	43	<	4.7	<	4.6
7/21/2023	9:30:00 PM	59.9	<	4.8	<	4.8
7/21/2023	9:35:00 PM	71.7	<	4.6	<	4.6
7/21/2023	9:40:00 PM	87.9	<	4	<	3.9
7/21/2023	9:45:00 PM	65.9	<	3.4	<	3.4
7/21/2023	9:50:00 PM	54	<	2.6	<	2.5
7/21/2023	9:55:00 PM	47.1	<	2.2	<	2.2
7/21/2023	10:00:00 PM	33.7	<	1.9	<	1.8

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	10:05:00 PM	29.8	<	2.4	<	2.4
7/21/2023	10:10:00 PM	38.6	<	2.7	<	2.6
7/21/2023	10:15:00 PM	39.6	<	4.3	<	4.3
7/21/2023	10:20:00 PM	30.6	<	5.9	<	5.8
7/21/2023	10:25:00 PM	36.7	<	5.8	<	5.8
7/21/2023	10:30:00 PM	42.6	<	4.2	<	4.1
7/21/2023	10:35:00 PM	43.5	<	2.6	<	2.6
7/21/2023	10:40:00 PM	41.2	<	1.5	<	0.7
7/21/2023	10:45:00 PM	57.3	<	3.5	<	3.5
7/21/2023	10:50:00 PM	46.9	<	4.4	<	4.4
7/21/2023	10:55:00 PM	52.6	<	2.8	<	2.6
7/21/2023	11:00:00 PM	44.1	<	0.8	<	0.7
7/21/2023	11:05:00 PM	43.5	<	3	<	3
7/21/2023	11:10:00 PM	46.4	<	5.4	<	5.4
7/21/2023	11:15:00 PM	51.8	<	3.4	<	1.3
7/21/2023	11:20:00 PM	87.1	<	3.4	<	2.2
7/21/2023	11:25:00 PM	77.5	<	6	<	5.6
7/21/2023	11:30:00 PM	122.5	<	13	<	12.7
7/21/2023	11:35:00 PM	297.2	<	11.7	<	11.3
7/21/2023	11:40:00 PM	483.5	<	11.9	<	11.7
7/21/2023	11:45:00 PM	562.2	<	8	<	7.9
7/21/2023	11:50:00 PM	564.6	<	9.2	<	9
7/21/2023	11:55:00 PM	520.2	<	10.1	<	9.8
	Average	125.5		6.4		6.1
	Max	872.8	0	20.2	0	19.9
	Max Hour					
	Min	-15.2	0	0	0	0
	Count	288	0	288	0	288
	Total					

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	12:00:00 AM	71.7	142.6	3.4	142.7	3.4
7/26/2023	12:05:00 AM	66.2	145.2	3.2	145.8	3.2
7/26/2023	12:10:00 AM	61.4	161	2.6	160.7	2.6
7/26/2023	12:15:00 AM	56	169.6	3.2	169.8	3.2
7/26/2023	12:20:00 AM	48.8	180.7	2.4	180.6	2.3
7/26/2023	12:25:00 AM	42.1	186.8	2.3	186.5	2.3
7/26/2023	12:30:00 AM	39.2	194.7	3.5	194.8	3.4
7/26/2023	12:35:00 AM	39.5	197.4	2.5	197.2	2.4
7/26/2023	12:40:00 AM	38.4	169.9	1.8	171	1.8
7/26/2023	12:45:00 AM	36.5	129.6	2.1	129.3	2
7/26/2023	12:50:00 AM	36.2	90.5	3.2	89.7	3.2
7/26/2023	12:55:00 AM	38.2	84.8	4.7	84.4	4.6
7/26/2023	1:00:00 AM	39.1	82.5	5.3	82.4	5.2
7/26/2023	1:05:00 AM	37.5	116.8	2.7	118	2.6
7/26/2023	1:10:00 AM	34.9	141.8	2.3	142.6	2.3
7/26/2023	1:15:00 AM	35.5	110.6	1.6	109.1	1.5
7/26/2023	1:20:00 AM	37.9	149.1	1.4	148.7	1.3
7/26/2023	1:25:00 AM	37.4	139.5	1.7	138.8	1.7
7/26/2023	1:30:00 AM	35.7	120.1	2.8	120.1	2.8
7/26/2023	1:35:00 AM	36.2	138.4	3.8	138.6	3.8
7/26/2023	1:40:00 AM	39.6	91.3	2.8	89.3	2.7
7/26/2023	1:45:00 AM	41.5	128.3	3.9	130.3	3.8
7/26/2023	1:50:00 AM	40	133.6	4.4	133.5	4.4
7/26/2023	1:55:00 AM	38.5	158.7	3.1	158	3.1
7/26/2023	2:00:00 AM	39.9	176.1	3.3	175.4	3.3
7/26/2023	2:05:00 AM	42.4	171.9	2.7	172.2	2.7
7/26/2023	2:10:00 AM	42	156.9	1.4	158.6	1.4
7/26/2023	2:15:00 AM	39.5	139	1.1	139.2	1.1
7/26/2023	2:20:00 AM	38.9	138.7	1.8	138.4	1.8
7/26/2023	2:25:00 AM	41.1	152.7	2	153.6	1.9
7/26/2023	2:30:00 AM	41.9	163.6	2.8	163.9	2.8
7/26/2023	2:35:00 AM	40.1	156.5	2	157.5	2
7/26/2023	2:40:00 AM	38	168.9	1.5	172.7	1.3
7/26/2023	2:45:00 AM	38.3	216.1	2.4	216.5	2.4
7/26/2023	2:50:00 AM	39	215.2	2.6	215.3	2.6
7/26/2023	2:55:00 AM	37.7	200.8	1.9	209.4	1.9
7/26/2023	3:00:00 AM	35.5	138.7	1.3	138.4	1.2
7/26/2023	3:05:00 AM	35.4	154.2	1.7	154.3	1.6
7/26/2023	3:10:00 AM	36.9	180.6	1.3	177.8	1.3
7/26/2023	3:15:00 AM	36.8	203.4	0	198.2	0.3
7/26/2023	3:20:00 AM	34.9	185.5	1	191.2	1
7/26/2023	3:25:00 AM	33.1	185.1	0	214.1	0.4
7/26/2023	3:30:00 AM	34.5	47.3	1.3	38.5	1.2
7/26/2023	3:35:00 AM	36.6	32	3.6	32.6	3.6
7/26/2023	3:40:00 AM	36.7	38.7	4.2	38.5	4.2
7/26/2023	3:45:00 AM	37.2	47.4	2.8	47.4	2.7
7/26/2023	3:50:00 AM	41.6	63.3	2.8	64	2.8
7/26/2023	3:55:00 AM	47.8	80.5	2.1	79.8	2
7/26/2023	4:00:00 AM	51.9	87.6	1.3	87.7	1.2
7/26/2023	4:05:00 AM	53.2	34.3	1.6	31.4	1.5
7/26/2023	4:10:00 AM	53.8	35.9	2.7	36.1	2.7
7/26/2023	4:15:00 AM	55.2	55.4	3.3	55.8	3.3
7/26/2023	4:20:00 AM	59.6	65.9	3.6	64.6	3.6

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	4:25:00 AM	62.5	80.1	2.8	81.4	2.7
7/26/2023	4:30:00 AM	60.4	82.8	4.3	83.9	4.3
7/26/2023	4:35:00 AM	57	91.6	5.1	91.3	5
7/26/2023	4:40:00 AM	55.5	84.3	5	83.8	4.9
7/26/2023	4:45:00 AM	54.6	86.9	4.7	86.4	4.6
7/26/2023	4:50:00 AM	54.5	107.1	5	107.8	4.9
7/26/2023	4:55:00 AM	52.5	113.9	6.5	113.3	6.4
7/26/2023	5:00:00 AM	49.3	111	7.5	111	7.3
7/26/2023	5:05:00 AM	54.1	107.7	6.6	107.6	6.6
7/26/2023	5:10:00 AM	66.2	108.4	6.1	108.5	6
7/26/2023	5:15:00 AM	79.6	106.2	4.2	107.1	4.2
7/26/2023	5:20:00 AM	86.5	124.1	3.1	123.8	3
7/26/2023	5:25:00 AM	98	119	3.4	118.9	3.3
7/26/2023	5:30:00 AM	106.7	96.5	2.1	97.7	2
7/26/2023	5:35:00 AM	114.7	75.6	2.6	75.8	2.5
7/26/2023	5:40:00 AM	116.7	66.6	2.1	66.4	2.1
7/26/2023	5:45:00 AM	113.6	60.9	4	60.9	4
7/26/2023	5:50:00 AM	113.7	63.7	4.5	63.6	4.5
7/26/2023	5:55:00 AM	111.4	68	4.8	68.8	4.7
7/26/2023	6:00:00 AM	109.1	71.6	4	71.4	3.9
7/26/2023	6:05:00 AM	128.5	82.1	4.9	82.4	4.8
7/26/2023	6:10:00 AM	134.5	84.6	4.4	84.5	4.3
7/26/2023	6:15:00 AM	130.3	92.5	4.8	93	4.7
7/26/2023	6:20:00 AM	126.3	94.5	5.7	95	5.6
7/26/2023	6:25:00 AM	131.2	93.7	6.1	94	6
7/26/2023	6:30:00 AM	140.9	97.3	5.8	97.8	5.7
7/26/2023	6:35:00 AM	141.1	96.3	8.2	96.5	8.1
7/26/2023	6:40:00 AM	143.5	104	7.5	104.2	7.4
7/26/2023	6:45:00 AM	150.8	105.3	7.5	105.4	7.4
7/26/2023	6:50:00 AM	154.8	113.3	6.8	113.3	6.7
7/26/2023	6:55:00 AM	149.5	112.8	6.3	112.5	6.2
7/26/2023	7:00:00 AM	140.2	109.6	6	109.8	5.9
7/26/2023	7:05:00 AM	134.5	113.7	6.2	113.5	6.1
7/26/2023	7:10:00 AM	141.9	109.9	7	109.7	6.9
7/26/2023	7:15:00 AM	177	109.4	7.3	109.4	7.2
7/26/2023	7:20:00 AM	193	115.3	7.2	115.4	7.1
7/26/2023	7:25:00 AM	183.4	120.4	7.6	120.5	7.5
7/26/2023	7:30:00 AM	170.7	120.5	7.9	120.7	7.9
7/26/2023	7:35:00 AM	154.7	117.7	7.1	118.9	7
7/26/2023	7:40:00 AM	133.9	122.7	4.5	122.8	4.4
7/26/2023	7:45:00 AM	115.3	125	4.3	126.1	4.1
7/26/2023	7:50:00 AM	104.9	116.7	5.4	116.9	5.1
7/26/2023	7:55:00 AM	97.8	139.5	5.2	138.9	5.1
7/26/2023	8:00:00 AM	88.3	128.7	4.5	128.4	4.4
7/26/2023	8:05:00 AM	80.6	118.7	3.4	118	3.2
7/26/2023	8:10:00 AM	80.1	140.7	2.6	140.8	2.4
7/26/2023	8:15:00 AM	79.6	151.4	3.6	151.2	3.5
7/26/2023	8:20:00 AM	74.4	185.9	3.2	184.9	3.1
7/26/2023	8:25:00 AM	69.8	163.3	2.3	161	2.2
7/26/2023	8:30:00 AM	74	146.7	2.8	147.3	2.6
7/26/2023	8:35:00 AM	75.4	139	2.7	139.3	2.7
7/26/2023	8:40:00 AM	73.4	177.7	2.7	182.5	2.4
7/26/2023	8:45:00 AM	70.7	199.6	2.6	202.4	2.4

## Site: Higley

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	8:50:00 AM	73.4	220.8	1.6	216.1	1.4
7/26/2023	8:55:00 AM	74.4	210.2	3.6	210.1	3.3
7/26/2023	9:00:00 AM	70.3	191.9	2.6	190.8	2.5
7/26/2023	9:05:00 AM	68.9	228.3	4.6	227.7	4.4
7/26/2023	9:10:00 AM	74.3	232.9	4.1	234.7	4
7/26/2023	9:15:00 AM	73.2	217.4	3.2	221.6	2.8
7/26/2023	9:20:00 AM	65	231.4	5.6	230.8	5.4
7/26/2023	9:25:00 AM	60.7	231.6	6.2	231.1	6.1
7/26/2023	9:30:00 AM	61.1	233.8	6.5	233.7	6.3
7/26/2023	9:35:00 AM	57.2	224.1	6.4	225.9	6.1
7/26/2023	9:40:00 AM	51.1	228	6.7	228.8	6.6
7/26/2023	9:45:00 AM	50.6	228.7	6.6	229.9	6.4
7/26/2023	9:50:00 AM	51.5	186.2	4.1	189.4	3.8
7/26/2023	9:55:00 AM	46.5	181.7	4.1	174.2	3.7
7/26/2023	10:00:00 AM	44.1	212.4	6	214	5.5
7/26/2023	10:05:00 AM	47.3	231.1	7.9	230.3	7.7
7/26/2023	10:10:00 AM	47.9	235.5	5.7	234.5	5.6
7/26/2023	10:15:00 AM	45.5	225	4.2	224.4	4
7/26/2023	10:20:00 AM	47.7	200.5	5.7	203.3	5.5
7/26/2023	10:25:00 AM	55.6	157.2	3.2	162.8	2.8
7/26/2023	10:30:00 AM	57.8	202.7	5.5	205.2	5.2
7/26/2023	10:35:00 AM	56.7	213.3	4.1	215.7	3.6
7/26/2023	10:40:00 AM	61	216.4	4.6	216.3	4
7/26/2023	10:45:00 AM	65.9	210.1	5.5	209.8	5.3
7/26/2023	10:50:00 AM	64.3	180.1	5.7	182.9	5
7/26/2023	10:55:00 AM	62.1	200.1	4.8	196	4.3
7/26/2023	11:00:00 AM	65.3	181.3	4.2	176	3.3
7/26/2023	11:05:00 AM	65.4	132.7	3.2	131.7	2.9
7/26/2023	11:10:00 AM	59.4	231.9	7.7	234.6	7.5
7/26/2023	11:15:00 AM	56.8	242.8	4.8	242.9	4.5
7/26/2023	11:20:00 AM	59.7	192.3	4.1	225.3	3.5
7/26/2023	11:25:00 AM	59.5	200.7	2.8	228.8	2.5
7/26/2023	11:30:00 AM	56.3	233.7	1.6	242.1	1.1
7/26/2023	11:35:00 AM	56.6	252.9	5.7	250.6	5.4
7/26/2023	11:40:00 AM	61.6	229	5.2	229	5
7/26/2023	11:45:00 AM	56.9	240.2	5.4	238.1	5.2
7/26/2023	11:50:00 AM	51.1	239.8	7.6	237.6	6.9
7/26/2023	11:55:00 AM	54.3	216.3	6.1	216.8	6
7/26/2023	12:00:00 PM	54.2	250.4	7.5	249.8	7
7/26/2023	12:05:00 PM	49.1	290	8.7	290.3	8.6
7/26/2023	12:10:00 PM	47	308.5	4.5	306.4	4.3
7/26/2023	12:15:00 PM	47.1	241.5	7.3	236.5	6
7/26/2023	12:20:00 PM	45.2	256.6	4.8	249.6	2.7
7/26/2023	12:25:00 PM	40.6	277.3	5.2	277	4.8
7/26/2023	12:30:00 PM	44	250.2	6.7	252.4	6.1
7/26/2023	12:35:00 PM	49.1	270.6	7.2	274.7	6.9
7/26/2023	12:40:00 PM	46.6	233.5	6.8	234.1	6.6
7/26/2023	12:45:00 PM	43.5	244.1	6.8	241.2	6.3
7/26/2023	12:50:00 PM	46.2	287.9	5.6	287.9	5.3
7/26/2023	12:55:00 PM	46.3	297.8	4.1	296.8	3.7
7/26/2023	1:00:00 PM	40.3	301.3	4.5	297.7	3.4
7/26/2023	1:05:00 PM	40.9	287.7	4.5	281.4	4
7/26/2023	1:10:00 PM	44.7	302.2	4.2	300.9	3.6

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	1:15:00 PM	42.2	294.3	7	283.4	6.6
7/26/2023	1:20:00 PM	39.4	282.8	7.6	277.3	7.1
7/26/2023	1:25:00 PM	44.4	252.5	6.4	257.7	5.7
7/26/2023	1:30:00 PM	47.4	286.1	6.8	283.6	6.6
7/26/2023	1:35:00 PM	44.4	285.2	9.2	286.6	8.8
7/26/2023	1:40:00 PM	44.4	300.6	6.3	299.1	6.1
7/26/2023	1:45:00 PM	48.6	256.6	7.9	255.2	7.6
7/26/2023	1:50:00 PM	47	258.5	6.9	258.2	6.6
7/26/2023	1:55:00 PM	42.1	300.2	7.3	291.5	6.9
7/26/2023	2:00:00 PM	42.8	315.8	7.7	304.2	6.8
7/26/2023	2:05:00 PM	47.3	286.3	8.8	285	8.2
7/26/2023	2:10:00 PM	46.7	308.7	8.7	304.1	8.4
7/26/2023	2:15:00 PM	45.2	294.3	9.1	293.8	8.9
7/26/2023	2:20:00 PM	45.9	286.5	8.9	285	8.5
7/26/2023	2:25:00 PM	45.8	283	10.1	284.1	9.9
7/26/2023	2:30:00 PM	41.7	283.9	7	283.6	6.8
7/26/2023	2:35:00 PM	41	279.9	8.3	282.8	7.9
7/26/2023	2:40:00 PM	44.1	304.7	6.6	300	6.4
7/26/2023	2:45:00 PM	42.7	291.7	5.8	288.4	5.4
7/26/2023	2:50:00 PM	38.8	289.4	10.2	290.8	10
7/26/2023	2:55:00 PM	42.1	282.2	7.8	278.6	7.6
7/26/2023	3:00:00 PM	44.8	275.2	10.6	276.5	10
7/26/2023	3:05:00 PM	41.7	280.6	10.8	281.2	10.3
7/26/2023	3:10:00 PM	40.4	287.5	11.4	287.8	11.2
7/26/2023	3:15:00 PM	48.7	257.9	9.2	262.4	8.8
7/26/2023	3:20:00 PM	64.4	265.6	11.1	266	10.4
7/26/2023	3:25:00 PM	64	269.5	10.2	269.2	9.9
7/26/2023	3:30:00 PM	61.3	276.2	10.7	275.4	10.5
7/26/2023	3:35:00 PM	58.8	278.2	7.8	278	7.6
7/26/2023	3:40:00 PM	52.4	259.5	7.4	257.4	7.1
7/26/2023	3:45:00 PM	44.9	279.4	9.2	282.2	8.7
7/26/2023	3:50:00 PM	44	285.1	12.5	283.3	12.3
7/26/2023	3:55:00 PM	44.6	289.3	8.8	287.1	8.5
7/26/2023	4:00:00 PM	40.6	305.2	8.8	300.2	8.4
7/26/2023	4:05:00 PM	38.8	281.4	9.3	283.4	9
7/26/2023	4:10:00 PM	39.9	283.6	11	283.2	10.5
7/26/2023	4:15:00 PM	39.8	304	7.3	296.3	6.9
7/26/2023	4:20:00 PM	34.7	281.1	10.2	280.6	9.9
7/26/2023	4:25:00 PM	33.6	274.3	9	275.4	8.5
7/26/2023	4:30:00 PM	34.9	273.8	9.3	274.5	8.8
7/26/2023	4:35:00 PM	32.6	273.1	8.9	274.7	8.4
7/26/2023	4:40:00 PM	29.2	292.7	11.1	291.5	10.8
7/26/2023	4:45:00 PM	31.5	317.8	4.6	304.7	4
7/26/2023	4:50:00 PM	32.1	315.1	6.9	301.3	6.4
7/26/2023	4:55:00 PM	27.3	289.4	8.3	288.6	8
7/26/2023	5:00:00 PM	24.6	300.8	8.9	299.3	8.7
7/26/2023	5:05:00 PM	26.7	273.3	9.3	274.5	9
7/26/2023	5:10:00 PM	27.8	290.4	8.1	290.7	8
7/26/2023	5:15:00 PM	25	276	7.5	278.9	7
7/26/2023	5:20:00 PM	24.9	265.2	7.2	265.4	6.9
7/26/2023	5:25:00 PM	28	293.8	7.4	292.3	7.2
7/26/2023	5:30:00 PM	27.5	308.3	7.9	302.6	7.6
7/26/2023	5:35:00 PM	24.7	305.5	5.4	302.8	5.2

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sub>3</sub> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	5:40:00 PM	26.1	293.2	6.1	289.5	5.9
7/26/2023	5:45:00 PM	28.6	293.5	6.9	290.9	6.7
7/26/2023	5:50:00 PM	26.2	287.4	7	285.6	6.8
7/26/2023	5:55:00 PM	24	282.9	9.8	282.8	9.6
7/26/2023	6:00:00 PM	25.8	294	8.9	294.1	8.8
7/26/2023	6:05:00 PM	26.9	292.3	8.4	292.5	8.3
7/26/2023	6:10:00 PM	24.4	288.1	8	288.4	7.9
7/26/2023	6:15:00 PM	23.9	302.6	6	301.7	5.7
7/26/2023	6:20:00 PM	26.4	295.6	8.6	295.7	8.5
7/26/2023	6:25:00 PM	26.6	290.6	7.1	290.8	7
7/26/2023	6:30:00 PM	24.1	285	6.5	285.6	6.4
7/26/2023	6:35:00 PM	25.1	289.2	8.3	288.2	8.2
7/26/2023	6:40:00 PM	28.4	281.1	6.6	281.3	6.4
7/26/2023	6:45:00 PM	27.8	284.3	6.9	284.8	6.8
7/26/2023	6:50:00 PM	25.1	280	7.1	279.6	7
7/26/2023	6:55:00 PM	25.5	277.6	7.3	277.4	7.3
7/26/2023	7:00:00 PM	28.6	282.9	7.2	283.1	7
7/26/2023	7:05:00 PM	27.3	276	5.7	275.9	5.6
7/26/2023	7:10:00 PM	25.2	271.8	6.3	271.5	6.3
7/26/2023	7:15:00 PM	26.5	274.1	5.9	274	5.8
7/26/2023	7:20:00 PM	28.5	277.7	5.6	278.3	5.5
7/26/2023	7:25:00 PM	27	279.6	5.7	279.3	5.6
7/26/2023	7:30:00 PM	24.9	280.6	6.2	280.3	6.1
7/26/2023	7:35:00 PM	27.4	277.6	5	277.6	4.9
7/26/2023	7:40:00 PM	29.7	275	5.1	274.8	5
7/26/2023	7:45:00 PM	28	273.5	5.8	273.6	5.7
7/26/2023	7:50:00 PM	25.5	272.5	5.3	272.3	5.3
7/26/2023	7:55:00 PM	27.2	265.2	5.4	266.1	5.3
7/26/2023	8:00:00 PM	31.2	255.2	6.3	255.3	6.3
7/26/2023	8:05:00 PM	32.1	260.3	6.9	260.4	6.7
7/26/2023	8:10:00 PM	32	261.4	5.7	261	5.6
7/26/2023	8:15:00 PM	35.8	265.6	3.8	265.9	3.7
7/26/2023	8:20:00 PM	39.4	262.7	3.9	262.6	3.9
7/26/2023	8:25:00 PM	38.1	257	4	258.1	3.9
7/26/2023	8:30:00 PM	36	228.6	3.7	230.6	3.3
7/26/2023	8:35:00 PM	40.2	240.1	4	240.1	3.9
7/26/2023	8:40:00 PM	46	242.6	4.9	242	4.8
7/26/2023	8:45:00 PM	44.1	245.2	5.2	245.9	5.1
7/26/2023	8:50:00 PM	40.2	247.5	4.6	248	4.5
7/26/2023	8:55:00 PM	40.8	238.9	5.2	238.9	5.1
7/26/2023	9:00:00 PM	42.4	230.9	5.5	231	5.4
7/26/2023	9:05:00 PM	40.7	205.1	3.7	205.2	3.7
7/26/2023	9:10:00 PM	39.8	198.4	5.4	198.6	5.3
7/26/2023	9:15:00 PM	43	182.2	3.9	183.4	3.7
7/26/2023	9:20:00 PM	48.1	163.3	8.7	164.4	8.4
7/26/2023	9:25:00 PM	54.5	172.2	16.8	171	16
7/26/2023	9:30:00 PM	93.9	175.3	16.4	176.1	15.8
7/26/2023	9:35:00 PM	293.3	141	16.3	140.5	15.9
7/26/2023	9:40:00 PM	1169.5	141.8	23.8	141.5	23
7/26/2023	9:45:00 PM	2894.2	127.6	31.1	128.1	30.5
7/26/2023	9:50:00 PM	4555	130	29.1	130	28.8
7/26/2023	9:55:00 PM	5125	130.4	29.5	129.9	29.2
7/26/2023	10:00:00 PM	4617.3	126.8	27.1	126.7	26.7

Site: Higley						
Date	Time	PM <sub>10</sub> (µg/m <sup>3</sup> )	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	10:05:00 PM	3766.2	118.3	27.8	118.4	27.4
7/26/2023	10:10:00 PM	2893.5	118.5	26.4	118.4	25.9
7/26/2023	10:15:00 PM	2135.7	129.7	21.2	130.2	20.7
7/26/2023	10:20:00 PM	1550	139.1	19.3	139.2	19
7/26/2023	10:25:00 PM	1107.5	150.5	10.5	147.4	9.9
7/26/2023	10:30:00 PM	786.5	154.6	9.3	156	8.7
7/26/2023	10:35:00 PM	555.4	124.6	16.2	124.3	15.8
7/26/2023	10:40:00 PM	388.7	119.7	19.1	119.6	18.7
7/26/2023	10:45:00 PM	274	123.8	14.6	122.9	14.2
7/26/2023	10:50:00 PM	194.5	119	5.5	122.7	0.6
7/26/2023	10:55:00 PM	142.3	4.2	6.4	1.9	5.9
7/26/2023	11:00:00 PM	115.8	12.6	13.1	12.2	11.9
7/26/2023	11:05:00 PM	106.6	24.1	14.5	24.5	14.1
7/26/2023	11:10:00 PM	99	44.6	9.9	41.4	9.4
7/26/2023	11:15:00 PM	77.3	334.1	3.2	324.4	1.1
7/26/2023	11:20:00 PM	68.8	63.6	5.3	95	3.2
7/26/2023	11:25:00 PM	50.8	135.8	13.5	136.7	13
7/26/2023	11:30:00 PM	33.1	121.6	18.6	122.2	18.4
7/26/2023	11:35:00 PM	24.1	108.5	13.6	109	13.4
7/26/2023	11:40:00 PM	22.1	116.5	12.1	116.5	11.9
7/26/2023	11:45:00 PM	17.4	100.3	15.3	100.6	15
7/26/2023	11:50:00 PM	10.6	87.7	20.1	87.5	19.3
7/26/2023	11:55:00 PM	20.4	68.6	20.4	68.8	20.1
Average		165.3	207	6.6	205.2	1.4
Max		5125	334.1	31.1	324.4	30.5
Max Hour		360257.3448	6592.675765	24.36151846	6493.778775	23.67709337
Min		10.6	4.2	0	1.9	0.3
Count		288	288	288	288	288
Total		47622.7	55860.8	1919.5	55872.7	1844.3

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	12:00:00 AM	19.9	<	2.1	<	2
7/26/2023	12:05:00 AM	22.4	<	2.6	<	2.6
7/26/2023	12:10:00 AM	37.9	<	1.2	<	0.7
7/26/2023	12:15:00 AM	18.6	<	2.3	<	2.1
7/26/2023	12:20:00 AM	10.3	<	2.2	<	2.2
7/26/2023	12:25:00 AM	12.7	<	2.5	<	2.5
7/26/2023	12:30:00 AM	18	<	1.6	<	1.6
7/26/2023	12:35:00 AM	22	<	2.6	<	2.6
7/26/2023	12:40:00 AM	21.9	<	3.8	<	3.8
7/26/2023	12:45:00 AM	20	<	2.7	<	2.7
7/26/2023	12:50:00 AM	23.6	<	0.5	<	0.5
7/26/2023	12:55:00 AM	33.1	<	0	<	0
7/26/2023	1:00:00 AM	36.7	<	3.6	<	3.6
7/26/2023	1:05:00 AM	30.9	<	4	<	4
7/26/2023	1:10:00 AM	23	<	3.7	<	3.7
7/26/2023	1:15:00 AM	30.8	<	3.2	<	3.2
7/26/2023	1:20:00 AM	32.9	<	1.5	<	1.4
7/26/2023	1:25:00 AM	31.1	<	1.4	<	1.3
7/26/2023	1:30:00 AM	27.7	<	2.2	<	2.1
7/26/2023	1:35:00 AM	22.5	<	2.8	<	2.7
7/26/2023	1:40:00 AM	19.1	<	3.4	<	3.4
7/26/2023	1:45:00 AM	17.3	<	3.7	<	3.7
7/26/2023	1:50:00 AM	14.6	<	4.1	<	4
7/26/2023	1:55:00 AM	12.8	<	3	<	3
7/26/2023	2:00:00 AM	16.9	<	2	<	1.9
7/26/2023	2:05:00 AM	22	<	3	<	2.8
7/26/2023	2:10:00 AM	21.9	<	2.7	<	2.6
7/26/2023	2:15:00 AM	23.3	<	2.6	<	2.5
7/26/2023	2:20:00 AM	24.1	<	4.3	<	4.1
7/26/2023	2:25:00 AM	24.4	<	3.9	<	3.8
7/26/2023	2:30:00 AM	23.1	<	3.4	<	3.2
7/26/2023	2:35:00 AM	21.3	<	2.9	<	2.7
7/26/2023	2:40:00 AM	19.8	<	3.3	<	2.5
7/26/2023	2:45:00 AM	20.2	<	3.2	<	3
7/26/2023	2:50:00 AM	20.5	<	3.2	<	3.1
7/26/2023	2:55:00 AM	22.2	<	2.6	<	2.5
7/26/2023	3:00:00 AM	22.1	<	3.5	<	3.4
7/26/2023	3:05:00 AM	21.7	<	3.3	<	3.3
7/26/2023	3:10:00 AM	20.5	<	3.1	<	3
7/26/2023	3:15:00 AM	25.2	<	3.5	<	3.4
7/26/2023	3:20:00 AM	28.2	<	3.4	<	3.3
7/26/2023	3:25:00 AM	27.4	<	2.1	<	2.1
7/26/2023	3:30:00 AM	24.3	<	2.5	<	2.5
7/26/2023	3:35:00 AM	25.4	<	3.6	<	3.5
7/26/2023	3:40:00 AM	19.8	<	3.6	<	3.1
7/26/2023	3:45:00 AM	38.2	<	2.9	<	2.8
7/26/2023	3:50:00 AM	23.5	<	2.9	<	2.8
7/26/2023	3:55:00 AM	22.2	<	2.5	<	2.5
7/26/2023	4:00:00 AM	34.3	<	1.9	<	1.9
7/26/2023	4:05:00 AM	63.6	<	2.8	<	2.7
7/26/2023	4:10:00 AM	17.7	<	3.5	<	2.6
7/26/2023	4:15:00 AM	33.2	<	2	<	1.8
7/26/2023	4:20:00 AM	35.4	<	0.6	<	0.6

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	4:25:00 AM	29	<	1.3	<	1.2
7/26/2023	4:30:00 AM	15.2	<	1.6	<	1.6
7/26/2023	4:35:00 AM	27.7	<	1.5	<	1.5
7/26/2023	4:40:00 AM	38.8	<	1.9	<	1.9
7/26/2023	4:45:00 AM	36.9	<	2.4	<	2.3
7/26/2023	4:50:00 AM	21.9	<	3.4	<	3.4
7/26/2023	4:55:00 AM	23.8	<	3.3	<	3.3
7/26/2023	5:00:00 AM	32.8	<	2	<	1.9
7/26/2023	5:05:00 AM	35.4	<	3.9	<	3.8
7/26/2023	5:10:00 AM	40.1	<	3.1	<	2.9
7/26/2023	5:15:00 AM	33.5	<	2	<	1.9
7/26/2023	5:20:00 AM	40.3	<	1.6	<	1.3
7/26/2023	5:25:00 AM	33	<	3.4	<	3.4
7/26/2023	5:30:00 AM	28.3	<	0.7	<	0.7
7/26/2023	5:35:00 AM	45.3	<	1.6	<	1.5
7/26/2023	5:40:00 AM	21.8	<	2	<	1.8
7/26/2023	5:45:00 AM	24.7	<	1.5	<	1.5
7/26/2023	5:50:00 AM	32.6	<	2.7	<	2.6
7/26/2023	5:55:00 AM	45.4	<	4.2	<	4.2
7/26/2023	6:00:00 AM	48.7	<	4	<	4
7/26/2023	6:05:00 AM	53.7	<	4	<	4
7/26/2023	6:10:00 AM	49.9	<	3.5	<	3.5
7/26/2023	6:15:00 AM	57.7	<	2.8	<	2.6
7/26/2023	6:20:00 AM	113.5	<	1.9	<	1.7
7/26/2023	6:25:00 AM	150.6	<	1.5	<	1.3
7/26/2023	6:30:00 AM	128.1	<	2.5	<	2.4
7/26/2023	6:35:00 AM	130.7	<	2.7	<	2.5
7/26/2023	6:40:00 AM	191.9	<	1.5	<	1.5
7/26/2023	6:45:00 AM	165.5	<	0.9	<	0.7
7/26/2023	6:50:00 AM	96.9	<	2.2	<	2.2
7/26/2023	6:55:00 AM	68.8	<	2	<	2
7/26/2023	7:00:00 AM	56	<	1.1	<	0.9
7/26/2023	7:05:00 AM	78.8	<	2.4	<	2.4
7/26/2023	7:10:00 AM	99.8	<	3.4	<	3.3
7/26/2023	7:15:00 AM	45.9	<	2.9	<	2.8
7/26/2023	7:20:00 AM	23.9	<	2.6	<	2.3
7/26/2023	7:25:00 AM	31.9	<	2.1	<	2
7/26/2023	7:30:00 AM	29.4	<	3.3	<	3.2
7/26/2023	7:35:00 AM	41.4	<	4.4	<	4.4
7/26/2023	7:40:00 AM	46.3	<	4.9	<	4.8
7/26/2023	7:45:00 AM	59.9	<	3.7	<	3.5
7/26/2023	7:50:00 AM	63.4	<	5.6	<	5.4
7/26/2023	7:55:00 AM	56.9	<	3.8	<	3.7
7/26/2023	8:00:00 AM	49.8	<	3.4	<	3.2
7/26/2023	8:05:00 AM	47.7	<	2.7	<	2.4
7/26/2023	8:10:00 AM	52.8	<	2.9	<	2.7
7/26/2023	8:15:00 AM	48.3	<	3.2	<	3.1
7/26/2023	8:20:00 AM	52.7	<	4.8	<	4.7
7/26/2023	8:25:00 AM	61.3	<	5.3	<	5
7/26/2023	8:30:00 AM	60.2	<	4.1	<	3.9
7/26/2023	8:35:00 AM	37.7	<	4.2	<	3.9
7/26/2023	8:40:00 AM	47.2	<	3.4	<	2.9
7/26/2023	8:45:00 AM	61	<	5	<	4.9

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	8:50:00 AM	52.8	<	4.5	<	4.4
7/26/2023	8:55:00 AM	48.5	<	4.4	<	4.3
7/26/2023	9:00:00 AM	45	<	3.9	<	3.8
7/26/2023	9:05:00 AM	70.1	<	4.1	<	3.9
7/26/2023	9:10:00 AM	70	<	5.2	<	4.7
7/26/2023	9:15:00 AM	48.7	<	5.3	<	5.1
7/26/2023	9:20:00 AM	49.6	<	6.8	<	6.7
7/26/2023	9:25:00 AM	54.3	<	7.1	<	7
7/26/2023	9:30:00 AM	56.8	<	6.1	<	6
7/26/2023	9:35:00 AM	59.4	<	7.5	<	7.3
7/26/2023	9:40:00 AM	49.9	<	7.2	<	6.9
7/26/2023	9:45:00 AM	59.4	<	7.3	<	7.1
7/26/2023	9:50:00 AM	50.5	<	7.9	<	7.7
7/26/2023	9:55:00 AM	53.2	<	7.8	<	7.6
7/26/2023	10:00:00 AM	63.5	<	7.7	<	7.3
7/26/2023	10:05:00 AM	52.4	<	8.6	<	7.6
7/26/2023	10:10:00 AM	38.4	<	7.8	<	7.6
7/26/2023	10:15:00 AM	60.8	<	8.3	<	8.1
7/26/2023	10:20:00 AM	53.6	<	6.4	<	6
7/26/2023	10:25:00 AM	53.5	<	6.3	<	6.1
7/26/2023	10:30:00 AM	55.7	<	5.6	<	5.4
7/26/2023	10:35:00 AM	53.1	<	6.7	<	6.4
7/26/2023	10:40:00 AM	37.6	<	7.2	<	7.1
7/26/2023	10:45:00 AM	28.1	<	6.2	<	5.9
7/26/2023	10:50:00 AM	41.5	<	4.9	<	4.5
7/26/2023	10:55:00 AM	61.7	<	6.5	<	6.4
7/26/2023	11:00:00 AM	69.1	<	7.7	<	7.5
7/26/2023	11:05:00 AM	73.8	<	10.1	<	9.8
7/26/2023	11:10:00 AM	95.5	<	7.6	<	7.2
7/26/2023	11:15:00 AM	94.5	<	8.9	<	8.6
7/26/2023	11:20:00 AM	86.6	<	8.4	<	8.3
7/26/2023	11:25:00 AM	63.7	<	6.3	<	6
7/26/2023	11:30:00 AM	41.2	<	8.2	<	7.8
7/26/2023	11:35:00 AM	46.6	<	4.3	<	4.1
7/26/2023	11:40:00 AM	60.6	<	7.5	<	7.2
7/26/2023	11:45:00 AM	48.3	<	4	<	3.4
7/26/2023	11:50:00 AM	31.2	<	5.7	<	4.8
7/26/2023	11:55:00 AM	71.3	<	5.4	<	5
7/26/2023	12:00:00 PM	92	<	5.4	<	4.7
7/26/2023	12:05:00 PM	99.8	<	6.9	<	6.1
7/26/2023	12:10:00 PM	113.6	<	7.8	<	7.6
7/26/2023	12:15:00 PM	100.8	<	6.3	<	5.4
7/26/2023	12:20:00 PM	85.6	<	9.9	<	9.7
7/26/2023	12:25:00 PM	117.8	<	7.1	<	6.5
7/26/2023	12:30:00 PM	170.6	<	9.1	<	7.6
7/26/2023	12:35:00 PM	115.2	<	9	<	7.8
7/26/2023	12:40:00 PM	132.3	<	10.3	<	9.9
7/26/2023	12:45:00 PM	178.9	<	7.7	<	7.3
7/26/2023	12:50:00 PM	161.8	<	7.5	<	6.6
7/26/2023	12:55:00 PM	118.5	<	10.2	<	9.6
7/26/2023	1:00:00 PM	124.1	<	9.3	<	9.1
7/26/2023	1:05:00 PM	101.5	<	9.5	<	8.9
7/26/2023	1:10:00 PM	67.1	<	7.6	<	6.8

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	1:15:00 PM	63.6	<	11.2	<	10.8
7/26/2023	1:20:00 PM	72.5	<	11.9	<	11.2
7/26/2023	1:25:00 PM	85.2	<	6.7	<	6.1
7/26/2023	1:30:00 PM	73.6	<	8.2	<	7.4
7/26/2023	1:35:00 PM	66.7	<	10.3	<	4.8
7/26/2023	1:40:00 PM	16.2	<	10.9	<	10.7
7/26/2023	1:45:00 PM	9.6	<	11.8	<	11.6
7/26/2023	1:50:00 PM	13.6	<	10.4	<	10
7/26/2023	1:55:00 PM	18.8	<	5.8	<	5.4
7/26/2023	2:00:00 PM	35	<	6	<	5.4
7/26/2023	2:05:00 PM	53.7	<	10	<	9.4
7/26/2023	2:10:00 PM	44.7	<	8.3	<	7.9
7/26/2023	2:15:00 PM	34.6	<	7.5	<	6.8
7/26/2023	2:20:00 PM	35.6	<	5.2	<	4.2
7/26/2023	2:25:00 PM	41.6	<	8.3	<	8.2
7/26/2023	2:30:00 PM	136.2	<	5.1	<	4.9
7/26/2023	2:35:00 PM	276.6	<	8.6	<	7.7
7/26/2023	2:40:00 PM	179.6	<	12.2	<	12
7/26/2023	2:45:00 PM	121.7	<	9	<	8.7
7/26/2023	2:50:00 PM	58.4	<	4.8	<	4.3
7/26/2023	2:55:00 PM	44.9	<	5.5	<	5.1
7/26/2023	3:00:00 PM	40.3	<	7.4	<	7.2
7/26/2023	3:05:00 PM	54.5	<	11.4	<	11.2
7/26/2023	3:10:00 PM	145.4	<	10.7	<	10.5
7/26/2023	3:15:00 PM	91.5	<	8.8	<	6.8
7/26/2023	3:20:00 PM	54.7	<	8.9	<	8.6
7/26/2023	3:25:00 PM	32.3	<	9.7	<	9.3
7/26/2023	3:30:00 PM	23.5	<	7.2	<	6.6
7/26/2023	3:35:00 PM	25.2	<	7.2	<	6.9
7/26/2023	3:40:00 PM	49	<	7.1	<	6.9
7/26/2023	3:45:00 PM	45.4	<	8.7	<	8.6
7/26/2023	3:50:00 PM	36.1	<	8.4	<	7.9
7/26/2023	3:55:00 PM	59.4	<	11.8	<	11.6
7/26/2023	4:00:00 PM	169.8	<	10.7	<	10.5
7/26/2023	4:05:00 PM	259.4	<	10	<	9.7
7/26/2023	4:10:00 PM	153.3	<	6.3	<	5.8
7/26/2023	4:15:00 PM	83.7	<	5.1	<	3.2
7/26/2023	4:20:00 PM	392.9	<	8.5	<	8.3
7/26/2023	4:25:00 PM	425.5	<	10.6	<	10.3
7/26/2023	4:30:00 PM	207.3	<	10.8	<	10.5
7/26/2023	4:35:00 PM	103.2	<	8	<	7.8
7/26/2023	4:40:00 PM	106.6	<	11.7	<	11.3
7/26/2023	4:45:00 PM	77.9	<	6.8	<	6.7
7/26/2023	4:50:00 PM	43.8	<	7.6	<	7.3
7/26/2023	4:55:00 PM	30.5	<	8.2	<	7.5
7/26/2023	5:00:00 PM	19.2	<	8.4	<	8.2
7/26/2023	5:05:00 PM	13.9	<	9.7	<	9.6
7/26/2023	5:10:00 PM	18.4	<	6	<	5.8
7/26/2023	5:15:00 PM	24.4	<	8	<	7.7
7/26/2023	5:20:00 PM	18.9	<	9.1	<	8.6
7/26/2023	5:25:00 PM	22.5	<	9.9	<	9.8
7/26/2023	5:30:00 PM	37.6	<	7.1	<	7
7/26/2023	5:35:00 PM	47.1	<	7.9	<	7.7

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	5:40:00 PM	34.9	<	9.3	<	9.1
7/26/2023	5:45:00 PM	33.4	<	8.7	<	8.5
7/26/2023	5:50:00 PM	33.3	<	8.7	<	8.5
7/26/2023	5:55:00 PM	32.8	<	9.1	<	8.8
7/26/2023	6:00:00 PM	145.5	<	8.4	<	8.3
7/26/2023	6:05:00 PM	220.2	<	8.3	<	8.1
7/26/2023	6:10:00 PM	304.6	<	9.1	<	8.8
7/26/2023	6:15:00 PM	200.2	<	7.2	<	7.1
7/26/2023	6:20:00 PM	96.8	<	11	<	10.9
7/26/2023	6:25:00 PM	52.7	<	10.5	<	10.4
7/26/2023	6:30:00 PM	41.8	<	9.3	<	9.2
7/26/2023	6:35:00 PM	38.2	<	10.6	<	10.4
7/26/2023	6:40:00 PM	31.6	<	9.7	<	9.6
7/26/2023	6:45:00 PM	28.2	<	8.5	<	8.4
7/26/2023	6:50:00 PM	40.8	<	8.6	<	8.5
7/26/2023	6:55:00 PM	115.8	<	9.8	<	9.7
7/26/2023	7:00:00 PM	333	<	9.9	<	9.8
7/26/2023	7:05:00 PM	231.3	<	10.2	<	10
7/26/2023	7:10:00 PM	114.3	<	7.8	<	7.7
7/26/2023	7:15:00 PM	65.4	<	8.7	<	8.6
7/26/2023	7:20:00 PM	93.4	<	8.1	<	7.9
7/26/2023	7:25:00 PM	108	<	8.5	<	8.4
7/26/2023	7:30:00 PM	156.5	<	8.8	<	8.7
7/26/2023	7:35:00 PM	97.1	<	8.8	<	8.7
7/26/2023	7:40:00 PM	54.9	<	6.7	<	6.6
7/26/2023	7:45:00 PM	82.7	<	8.1	<	8.1
7/26/2023	7:50:00 PM	129.1	<	8.1	<	8
7/26/2023	7:55:00 PM	79.6	<	7.2	<	7.1
7/26/2023	8:00:00 PM	47.7	<	7	<	7
7/26/2023	8:05:00 PM	35.3	<	6.6	<	6.5
7/26/2023	8:10:00 PM	32.4	<	6	<	5.9
7/26/2023	8:15:00 PM	36.2	<	5.8	<	5.8
7/26/2023	8:20:00 PM	49.1	<	5.8	<	5.7
7/26/2023	8:25:00 PM	51.8	<	6.2	<	6.1
7/26/2023	8:30:00 PM	47.6	<	5.1	<	5.1
7/26/2023	8:35:00 PM	46.3	<	4	<	3.7
7/26/2023	8:40:00 PM	42.3	<	6.9	<	6.5
7/26/2023	8:45:00 PM	31	<	8.3	<	7.9
7/26/2023	8:50:00 PM	3.7	<	7.4	<	7.2
7/26/2023	8:55:00 PM	16.2	<	5.5	<	5.4
7/26/2023	9:00:00 PM	28.9	<	6.3	<	6
7/26/2023	9:05:00 PM	27.7	<	5.9	<	5.6
7/26/2023	9:10:00 PM	14.8	<	6.4	<	6
7/26/2023	9:15:00 PM	18.1	<	8.3	<	8
7/26/2023	9:20:00 PM	23.1	<	4.6	<	4.4
7/26/2023	9:25:00 PM	21.1	<	5.5	<	5.3
7/26/2023	9:30:00 PM	25.3	<	7.3	<	7.2
7/26/2023	9:35:00 PM	18.9	<	7.9	<	7.7
7/26/2023	9:40:00 PM	14.6	<	6.4	<	6.3
7/26/2023	9:45:00 PM	10.1	<	5.6	<	5.4
7/26/2023	9:50:00 PM	7.5	<	5.8	<	5.6
7/26/2023	9:55:00 PM	8.1	<	4.5	<	4.4
7/26/2023	10:00:00 PM	12.9	<	4	<	3.8

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sup>3</sup>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	10:05:00 PM	19.8	<	4	<	3.8
7/26/2023	10:10:00 PM	13.1	<	5.1	<	4.9
7/26/2023	10:15:00 PM	10.9	<	4.1	<	3.9
7/26/2023	10:20:00 PM	13.3	<	2.2	<	2
7/26/2023	10:25:00 PM	21.3	<	1.8	<	1.6
7/26/2023	10:30:00 PM	50	<	3.1	<	3
7/26/2023	10:35:00 PM	69.4	<	5.5	<	5.4
7/26/2023	10:40:00 PM	48.4	<	23	<	22.1
7/26/2023	10:45:00 PM	560.2	<	27.5	<	27
7/26/2023	10:50:00 PM	5137.3	<	32.9	<	32.4
7/26/2023	10:55:00 PM	5704.6	<	24.6	<	24.1
7/26/2023	11:00:00 PM	3053.5	<	29.6	<	28.9
7/26/2023	11:05:00 PM	1760.3	<	24.1	<	23.7
7/26/2023	11:10:00 PM	980.2	<	15.3	<	15
7/26/2023	11:15:00 PM	479.4	<	14.5	<	14.2
7/26/2023	11:20:00 PM	205.1	<	10.3	<	9.8
7/26/2023	11:25:00 PM	120.3	<	9.8	<	9.5
7/26/2023	11:30:00 PM	88.2	<	5.8	<	5.5
7/26/2023	11:35:00 PM	71.4	<	7.5	<	6.5
7/26/2023	11:40:00 PM	100.8	<	5	<	5
7/26/2023	11:45:00 PM	72.2	<	5.1	<	5
7/26/2023	11:50:00 PM	51.6	<	3.7	<	3.7
7/26/2023	11:55:00 PM	33.9	<	6.7	<	5.8
	Average	121.4		6.3		6.0
	Max	5704.6	0	32.9	0	32.4
	Max Hour					
	Min	3.7	0	0	0	0
	Count	288	0	288	0	288
	Total					

Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	12:00:00 AM	83.7	242.5	3.9	242.7	3.8
8/31/2023	12:05:00 AM	79.2	251	5.2	250.7	5.1
8/31/2023	12:10:00 AM	74.7	249.7	4.3	250.4	4.2
8/31/2023	12:15:00 AM	70.4	260.1	3.8	258.2	3.7
8/31/2023	12:20:00 AM	66.4	271.9	3.2	270.6	3.1
8/31/2023	12:25:00 AM	62.8	276.2	3.6	274.5	3.3
8/31/2023	12:30:00 AM	58.7	296.4	4.3	296.2	4.2
8/31/2023	12:35:00 AM	57.4	300.7	4.8	299.8	4.4
8/31/2023	12:40:00 AM	53.6	315.7	3.5	314.9	3.3
8/31/2023	12:45:00 AM	52.1	300.5	4.6	301.7	4.3
8/31/2023	12:50:00 AM	52.3	295.5	3.8	295.7	3.6
8/31/2023	12:55:00 AM	52.5	293.1	3.6	295.8	3.4
8/31/2023	1:00:00 AM	50.7	313	3.2	310.7	3
8/31/2023	1:05:00 AM	48.3	302.3	3.9	298.8	3.6
8/31/2023	1:10:00 AM	44.1	13.5	3.9	13.4	3.8
8/31/2023	1:15:00 AM	44	24.8	3.4	22.9	3.2
8/31/2023	1:20:00 AM	52.4	21.9	3.8	23.4	3.6
8/31/2023	1:25:00 AM	65.3	34.7	5.1	35.3	4.9
8/31/2023	1:30:00 AM	78.8	39.5	3.4	39.3	3.4
8/31/2023	1:35:00 AM	91.8	50.6	4.4	50.7	4.3
8/31/2023	1:40:00 AM	108.7	45.3	5.4	45.5	5.3
8/31/2023	1:45:00 AM	128.3	38.3	4.2	38.3	4
8/31/2023	1:50:00 AM	146	47.8	4.4	47.4	4.3
8/31/2023	1:55:00 AM	161.8	57.5	4.6	57.3	4.5
8/31/2023	2:00:00 AM	171.5	64.8	5.2	63.9	5.1
8/31/2023	2:05:00 AM	175.7	57.5	4.1	56.8	4
8/31/2023	2:10:00 AM	176.5	73.5	3.1	74.4	3
8/31/2023	2:15:00 AM	172.6	79.7	3.8	81.4	3.7
8/31/2023	2:20:00 AM	163.3	74	3	74.6	2.9
8/31/2023	2:25:00 AM	152	58.5	2.2	60.3	2.1
8/31/2023	2:30:00 AM	142.4	67.4	2.8	66.4	2.8
8/31/2023	2:35:00 AM	134.9	68.8	4	69.1	3.9
8/31/2023	2:40:00 AM	128.4	73.5	5.3	74	5.1
8/31/2023	2:45:00 AM	117	83.4	4.8	84.2	4.7
8/31/2023	2:50:00 AM	103.4	102.7	4.4	101.4	4.2
8/31/2023	2:55:00 AM	90.5	96.9	3.4	95.3	3.2
8/31/2023	3:00:00 AM	81.5	55.3	5.4	54.9	5.3
8/31/2023	3:05:00 AM	75.9	52.4	5.5	52.3	5.4
8/31/2023	3:10:00 AM	72.9	52.4	5.7	52.6	5.6
8/31/2023	3:15:00 AM	69.7	45.2	4.5	46.2	4.4
8/31/2023	3:20:00 AM	69.2	46.6	4.7	47.6	4.6
8/31/2023	3:25:00 AM	69.4	66.6	4.5	66.7	4.3
8/31/2023	3:30:00 AM	68.2	59.3	3.9	59.2	3.8
8/31/2023	3:35:00 AM	64.9	43.8	3.6	44.4	3.5
8/31/2023	3:40:00 AM	61.3	20.4	2.5	24.9	2.3
8/31/2023	3:45:00 AM	59.2	19.9	3.3	18.8	3.1
8/31/2023	3:50:00 AM	58.3	23.5	3.3	23.9	3.1
8/31/2023	3:55:00 AM	57.5	30.4	4.1	30.5	4
8/31/2023	4:00:00 AM	56.5	28.7	4.5	28.3	4.3
8/31/2023	4:05:00 AM	54.9	39.2	3.6	38.8	3.5
8/31/2023	4:10:00 AM	53.3	41	3.2	41.2	3
8/31/2023	4:15:00 AM	50.9	40.6	3.5	41.3	3.4
8/31/2023	4:20:00 AM	49.1	27.9	2.1	23.8	2

Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	4:25:00 AM	47.9	38.4	3	38.6	2.9
8/31/2023	4:30:00 AM	46.4	45.7	2.7	47.4	2.7
8/31/2023	4:35:00 AM	45.6	54	3.6	55.4	3.5
8/31/2023	4:40:00 AM	44.9	66.6	3.9	67.3	3.8
8/31/2023	4:45:00 AM	44.2	68.5	3.8	68.8	3.7
8/31/2023	4:50:00 AM	43.1	68.9	3.7	68.8	3.6
8/31/2023	4:55:00 AM	41.8	47.5	3.1	49	2.9
8/31/2023	5:00:00 AM	40.9	24.5	2.9	26.2	2.8
8/31/2023	5:05:00 AM	40.9	31.7	3.7	30.1	3.5
8/31/2023	5:10:00 AM	40.4	47.8	4.5	48.2	4.4
8/31/2023	5:15:00 AM	39.7	54.3	3.2	52.6	3.2
8/31/2023	5:20:00 AM	39.9	117.9	1.3	103.2	0.8
8/31/2023	5:25:00 AM	39.1	117.7	2.6	112.6	2.4
8/31/2023	5:30:00 AM	37.8	49.3	3	50.4	2.9
8/31/2023	5:35:00 AM	37.2	45.6	3.3	46.5	3.2
8/31/2023	5:40:00 AM	37.5	53.1	3.1	53.3	3
8/31/2023	5:45:00 AM	37	54.1	2.1	54.1	2
8/31/2023	5:50:00 AM	36.9	46.1	2.8	45.7	2.8
8/31/2023	5:55:00 AM	35.8	49.4	2.8	49.7	2.8
8/31/2023	6:00:00 AM	35.7	37.4	2.8	37.1	2.7
8/31/2023	6:05:00 AM	35.6	46.8	3.7	47.3	3.6
8/31/2023	6:10:00 AM	35.7	42.2	2.9	42	2.8
8/31/2023	6:15:00 AM	36.3	60.5	3.1	60.2	3
8/31/2023	6:20:00 AM	37	69.3	3.5	69.4	3.4
8/31/2023	6:25:00 AM	37.7	68.7	2.4	68.4	2.3
8/31/2023	6:30:00 AM	37.5	67.3	2.4	67.3	2.4
8/31/2023	6:35:00 AM	37.3	63.9	3.7	63.4	3.6
8/31/2023	6:40:00 AM	37.7	71.9	3	71.9	2.9
8/31/2023	6:45:00 AM	38.8	81	2.5	81.5	2.5
8/31/2023	6:50:00 AM	39.7	69.1	2.9	68.7	2.8
8/31/2023	6:55:00 AM	41.3	90.7	3	90.3	3
8/31/2023	7:00:00 AM	44.2	102.4	3.2	101.8	3.1
8/31/2023	7:05:00 AM	46.8	100.3	2.1	101.8	2
8/31/2023	7:10:00 AM	48.2	113.4	3.5	112.5	3.4
8/31/2023	7:15:00 AM	48.4	100	3.6	100	3.4
8/31/2023	7:20:00 AM	47.8	98.1	3.4	99.2	3.2
8/31/2023	7:25:00 AM	47.9	107.6	2.1	103.8	2
8/31/2023	7:30:00 AM	47.7	117.4	2.5	116.9	2.3
8/31/2023	7:35:00 AM	47.3	134.9	5.8	136.5	5.6
8/31/2023	7:40:00 AM	46.3	140.6	6.4	141.3	6.3
8/31/2023	7:45:00 AM	45	138.5	6	138.4	5.8
8/31/2023	7:50:00 AM	44	126	5.2	128.2	4.9
8/31/2023	7:55:00 AM	44	138.5	6.3	139.1	6.2
8/31/2023	8:00:00 AM	45.5	141.6	5.7	141.4	5.7
8/31/2023	8:05:00 AM	46.5	116.3	5	116.3	4.7
8/31/2023	8:10:00 AM	47.5	119	4.9	118.8	4.7
8/31/2023	8:15:00 AM	48.3	134.3	4.1	138.6	3.8
8/31/2023	8:20:00 AM	49.2	131.2	4	126.8	3.8
8/31/2023	8:25:00 AM	50.7	146.8	4.7	148.6	4.6
8/31/2023	8:30:00 AM	50.8	139	5.8	137.9	5.7
8/31/2023	8:35:00 AM	51	129.1	6.1	130.3	5.8
8/31/2023	8:40:00 AM	51.6	107.2	4.3	110.5	4
8/31/2023	8:45:00 AM	51.1	131	4.7	129.4	4.5

Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	8:50:00 AM	50.1	106.9	3.6	104	3.3
8/31/2023	8:55:00 AM	48.8	123.5	3.4	122.2	3.1
8/31/2023	9:00:00 AM	46.2	158.8	3.6	158.7	3.5
8/31/2023	9:05:00 AM	43	175.5	2.7	166.9	2.2
8/31/2023	9:10:00 AM	40.4	119.2	1.2	141	0.9
8/31/2023	9:15:00 AM	38.8	135.2	4.5	136.4	4.1
8/31/2023	9:20:00 AM	37.4	111.1	2.4	108.9	2.3
8/31/2023	9:25:00 AM	36.9	71.9	2.1	66.6	1.6
8/31/2023	9:30:00 AM	36.2	92	1.4	95.1	1.2
8/31/2023	9:35:00 AM	36.1	137.1	3.3	136.2	3.1
8/31/2023	9:40:00 AM	35.6	149.4	2.3	141.6	2.2
8/31/2023	9:45:00 AM	35.1	<	<	<	<
8/31/2023	9:50:00 AM	33.6	<	<	<	<
8/31/2023	9:55:00 AM	32.7	<	<	<	<
8/31/2023	10:00:00 AM	32.7	<	<	<	<
8/31/2023	10:05:00 AM	34.8	<	<	<	<
8/31/2023	10:10:00 AM	36.2	<	<	<	<
8/31/2023	10:15:00 AM	35.6	<	<	<	<
8/31/2023	10:20:00 AM	36	<	<	<	<
8/31/2023	10:25:00 AM	35.3	<	<	<	<
8/31/2023	10:30:00 AM	34.4	256.5	8.3	255.7	8.1
8/31/2023	10:35:00 AM	36.8	230.8	4.2	245.7	2.9
8/31/2023	10:40:00 AM	40.3	276.6	4.8	271.2	4.4
8/31/2023	10:45:00 AM	43.8	265.6	2.5	265.3	2
8/31/2023	10:50:00 AM	46.5	311.2	3.9	301	3.5
8/31/2023	10:55:00 AM	48.6	261	6.6	259.4	5.9
8/31/2023	11:00:00 AM	47.8	255.8	8.7	258.9	8.1
8/31/2023	11:05:00 AM	43.6	268	7.1	271.8	6.7
8/31/2023	11:10:00 AM	41.5	288.8	9.4	290	8.8
8/31/2023	11:15:00 AM	41.1	252.6	8.3	252.2	8.1
8/31/2023	11:20:00 AM	39.9	236.3	5.8	240.3	4.9
8/31/2023	11:25:00 AM	37.8	221.7	6.5	218.1	5.3
8/31/2023	11:30:00 AM	36	308.8	6.6	314.5	6
8/31/2023	11:35:00 AM	32.8	280	9.1	280.1	8.7
8/31/2023	11:40:00 AM	30.6	277.1	5.9	275.7	5.7
8/31/2023	11:45:00 AM	28.7	305.5	6.5	305.4	6.2
8/31/2023	11:50:00 AM	26	309.2	4.9	313.3	4.4
8/31/2023	11:55:00 AM	23.7	256.5	8.2	257.4	7.9
8/31/2023	12:00:00 PM	22.8	263	7.4	265.8	6.8
8/31/2023	12:05:00 PM	22.8	282.3	11	282.2	10.7
8/31/2023	12:10:00 PM	23.5	274	10	274.5	9.6
8/31/2023	12:15:00 PM	24.7	270.5	8.7	271.4	8.2
8/31/2023	12:20:00 PM	26.8	267.4	9	268.5	8.5
8/31/2023	12:25:00 PM	29.9	275.5	9.8	277.5	9
8/31/2023	12:30:00 PM	32.5	257.6	7.1	257.7	6.3
8/31/2023	12:35:00 PM	32.3	304.4	6.9	301.7	6.1
8/31/2023	12:40:00 PM	31.3	270.3	6.1	271.3	5.5
8/31/2023	12:45:00 PM	29.5	299.8	6.5	299.6	6
8/31/2023	12:50:00 PM	28.3	289.3	4.8	277	4.1
8/31/2023	12:55:00 PM	26.6	286.5	3.3	274.9	1.7
8/31/2023	1:00:00 PM	26.9	254.8	7.7	257.6	7.4
8/31/2023	1:05:00 PM	28.8	252.4	8.5	251.6	8
8/31/2023	1:10:00 PM	31.1	243.2	9.8	240.8	9.3

## Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	1:15:00 PM	34.3	251.7	10.1	253.4	9.7
8/31/2023	1:20:00 PM	35.8	263.3	8.5	263.7	8.2
8/31/2023	1:25:00 PM	36.2	252.9	7.1	253.6	6.9
8/31/2023	1:30:00 PM	34.8	269.3	9.9	269.8	9.5
8/31/2023	1:35:00 PM	32.9	279.4	8.9	278.8	8.4
8/31/2023	1:40:00 PM	30.5	279	8.9	279.5	8.6
8/31/2023	1:45:00 PM	28.6	259.9	7.5	260.2	7.2
8/31/2023	1:50:00 PM	28.4	264.1	9.7	264	9
8/31/2023	1:55:00 PM	27.6	260.8	10.2	261.3	10
8/31/2023	2:00:00 PM	27.4	271.5	7.8	271.2	7.1
8/31/2023	2:05:00 PM	26.7	274.7	10.4	274.8	9.8
8/31/2023	2:10:00 PM	27	301.4	8.4	302.4	8
8/31/2023	2:15:00 PM	28.2	251.9	8.7	250.8	8.2
8/31/2023	2:20:00 PM	28.8	273	8.1	272.6	7.9
8/31/2023	2:25:00 PM	27.5	277.7	6.6	274.6	6.2
8/31/2023	2:30:00 PM	28.9	263.7	8.4	264	8.1
8/31/2023	2:35:00 PM	29.8	282.6	10.4	283.9	9.8
8/31/2023	2:40:00 PM	30.3	262.4	10.9	261	10.5
8/31/2023	2:45:00 PM	30.4	282.4	9.2	277.4	8.7
8/31/2023	2:50:00 PM	29.4	267.3	8.6	266.7	8.1
8/31/2023	2:55:00 PM	30	265.3	11	265.2	10.7
8/31/2023	3:00:00 PM	31.2	261.2	11.5	260.9	11.3
8/31/2023	3:05:00 PM	32.5	255.2	9.3	258.2	9
8/31/2023	3:10:00 PM	32.9	270.8	9.5	269.1	9.2
8/31/2023	3:15:00 PM	33.1	272	9.7	273	9.3
8/31/2023	3:20:00 PM	35	274	11.9	273.6	11.5
8/31/2023	3:25:00 PM	37.4	271.3	13.5	271.1	13
8/31/2023	3:30:00 PM	40.2	284.8	10.3	286	9.8
8/31/2023	3:35:00 PM	43	264.5	13	264.9	12.2
8/31/2023	3:40:00 PM	48.9	251.1	13.1	245.8	12.1
8/31/2023	3:45:00 PM	54.2	265.5	13.2	264.5	12.8
8/31/2023	3:50:00 PM	55.5	258	11	257.9	10.7
8/31/2023	3:55:00 PM	56	239.8	13.8	239.8	13.5
8/31/2023	4:00:00 PM	55.5	248	8.1	249.2	7.6
8/31/2023	4:05:00 PM	52.3	264.4	12.2	264.5	11.7
8/31/2023	4:10:00 PM	48.3	251.1	12.9	250.6	12.6
8/31/2023	4:15:00 PM	44.9	251.4	9.5	251.6	9.2
8/31/2023	4:20:00 PM	41.7	257.7	10	256.9	9.8
8/31/2023	4:25:00 PM	38.9	266.7	11.5	266.6	10.9
8/31/2023	4:30:00 PM	36.9	273.5	9.9	273.7	9.1
8/31/2023	4:35:00 PM	35.6	251	9.9	251.9	9.7
8/31/2023	4:40:00 PM	35.3	263.9	9.4	262.3	9.2
8/31/2023	4:45:00 PM	35.2	261.4	9.7	262.4	9.4
8/31/2023	4:50:00 PM	34.6	248.2	11.4	248.1	11.2
8/31/2023	4:55:00 PM	34.7	256.7	9.5	256.1	9.3
8/31/2023	5:00:00 PM	34.6	250	11.4	250.2	11
8/31/2023	5:05:00 PM	35.6	263.5	10.5	261.9	10
8/31/2023	5:10:00 PM	35.8	269.1	9.5	271.4	9
8/31/2023	5:15:00 PM	36.7	262.1	10.3	262.9	10
8/31/2023	5:20:00 PM	38.4	268.1	10.3	267.8	10
8/31/2023	5:25:00 PM	38.3	273.1	9.1	272.7	8.8
8/31/2023	5:30:00 PM	35.4	269.8	7.2	273.3	6.7
8/31/2023	5:35:00 PM	36	259.4	10.7	258.3	10.3

## Site: Central Phoenix

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	5:40:00 PM	39.3	256.4	10.2	256.1	10
8/31/2023	5:45:00 PM	40.7	261.9	11.8	260.9	10.9
8/31/2023	5:50:00 PM	42.5	252.7	10.8	252.9	10.5
8/31/2023	5:55:00 PM	42.7	267.9	12	268.4	11.6
8/31/2023	6:00:00 PM	42.4	257.1	10.9	257.8	10.5
8/31/2023	6:05:00 PM	42.1	263.8	11.6	264.2	11.3
8/31/2023	6:10:00 PM	41.6	263.1	10.7	263.6	10.4
8/31/2023	6:15:00 PM	41.1	262.3	10.3	262.9	9.9
8/31/2023	6:20:00 PM	39.7	266.5	11	265.2	10.7
8/31/2023	6:25:00 PM	38.3	266	10.4	265.3	10.1
8/31/2023	6:30:00 PM	37	262.4	11.7	262.1	11.3
8/31/2023	6:35:00 PM	38	261.1	9.5	261.1	9.2
8/31/2023	6:40:00 PM	39.6	273.3	7.9	273.8	7.7
8/31/2023	6:45:00 PM	40.7	262.2	9.8	261.3	9.5
8/31/2023	6:50:00 PM	41.6	265.1	9.5	265.2	9.3
8/31/2023	6:55:00 PM	42.2	263.4	9.1	264.6	8.8
8/31/2023	7:00:00 PM	41.8	269.7	10.1	268.9	9.8
8/31/2023	7:05:00 PM	41.5	261.2	9.6	260.8	9.4
8/31/2023	7:10:00 PM	42.1	275.1	10	275.6	9.7
8/31/2023	7:15:00 PM	41.6	270.4	11.5	270.4	11.3
8/31/2023	7:20:00 PM	40.4	261.1	9.7	260.9	9.4
8/31/2023	7:25:00 PM	40.3	250	9.9	249.4	9.6
8/31/2023	7:30:00 PM	41.9	258	8.6	258.2	8.1
8/31/2023	7:35:00 PM	42.1	266.1	9.3	266.5	9
8/31/2023	7:40:00 PM	43.1	260.8	7	261.3	6.6
8/31/2023	7:45:00 PM	42.8	261.4	9.7	262.1	9.4
8/31/2023	7:50:00 PM	41.4	255.3	8.9	256.4	8.6
8/31/2023	7:55:00 PM	40.9	240.7	8.1	240.7	7.8
8/31/2023	8:00:00 PM	40.4	250.4	10.3	250.1	10
8/31/2023	8:05:00 PM	38.7	243.8	9.3	243.8	9.1
8/31/2023	8:10:00 PM	36.4	242.3	8.9	242.8	8.6
8/31/2023	8:15:00 PM	34.5	243.1	7.9	242.5	7.7
8/31/2023	8:20:00 PM	33.4	244.9	8.2	243.5	7.9
8/31/2023	8:25:00 PM	32.9	244.6	8.5	244.1	8.1
8/31/2023	8:30:00 PM	34.3	224.7	11	224.3	10.4
8/31/2023	8:35:00 PM	39.9	164.7	20.2	162.8	19.5
8/31/2023	8:40:00 PM	82.8	159.6	28.5	160.2	27.6
8/31/2023	8:45:00 PM	296.7	162.4	34.9	162.6	34.2
8/31/2023	8:50:00 PM	1245.3	165.5	32.9	165.5	32.2
8/31/2023	8:55:00 PM	5291.9	165.1	28.3	165.3	27.6
8/31/2023	9:00:00 PM	2517.6	167.4	31.1	167.5	30.3
8/31/2023	9:05:00 PM	1218.9	161.5	28	161.7	27.2
8/31/2023	9:10:00 PM	1098.3	164.7	24.7	165.2	24.1
8/31/2023	9:15:00 PM	8636	165.9	28.2	166	27.6
8/31/2023	9:20:00 PM	6838.9	166.2	23.9	165.9	23.1
8/31/2023	9:25:00 PM	5132.9	178.1	26.7	178.1	26.2
8/31/2023	9:30:00 PM	3886.5	172.2	17.7	170.2	17
8/31/2023	9:35:00 PM	2914.1	174.3	16.7	174.8	15.8
8/31/2023	9:40:00 PM	2143.9	215.5	18.1	214.4	17.4
8/31/2023	9:45:00 PM	1582.3	210.9	17.8	209.5	16.8
8/31/2023	9:50:00 PM	1161.3	206	15.5	207	15
8/31/2023	9:55:00 PM	835.1	223	12.3	222.2	11.6
8/31/2023	10:00:00 PM	587.6	222.4	16.1	222.6	15.7

Site: Central Phoenix						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	10:05:00 PM	417.7	236.4	21.1	235.5	20.5
8/31/2023	10:10:00 PM	292.7	241.6	17.2	242	16.7
8/31/2023	10:15:00 PM	209.3	236.3	15.2	235.6	14.7
8/31/2023	10:20:00 PM	153.2	239	11.7	238.6	11.2
8/31/2023	10:25:00 PM	116.5	236.9	10.1	235.9	9.8
8/31/2023	10:30:00 PM	88.6	214.8	5.4	214	5.2
8/31/2023	10:35:00 PM	69.6	97.9	7.8	87.7	5.4
8/31/2023	10:40:00 PM	55.4	149.4	6.5	143.5	5.4
8/31/2023	10:45:00 PM	50.8	117.6	1.9	72.3	0.8
8/31/2023	10:50:00 PM	43.4	130.1	2.5	201.2	1
8/31/2023	10:55:00 PM	32	86.2	3.5	88.8	3.1
8/31/2023	11:00:00 PM	25.9	142	5.2	141.7	5.1
8/31/2023	11:05:00 PM	24.6	123.1	4	124.2	3.6
8/31/2023	11:10:00 PM	18.8	108.9	1.8	113.7	1.7
8/31/2023	11:15:00 PM	17.2	46.5	0.9	44.9	0.8
8/31/2023	11:20:00 PM	22.7	14.4	1.5	16.1	0.9
8/31/2023	11:25:00 PM	44.7	294.3	3.3	296.4	3.1
8/31/2023	11:30:00 PM	72.2	319.2	5.3	319.5	5.3
8/31/2023	11:35:00 PM	78.1	315.3	8.5	315.1	8.4
8/31/2023	11:40:00 PM	73.4	317.5	8.3	318.2	8.2
8/31/2023	11:45:00 PM	65.5	322.1	8.6	322.3	8.5
8/31/2023	11:50:00 PM	57.3	326.3	10.9	326.4	10.8
8/31/2023	11:55:00 PM	49.8	316	11.9	316.5	11.7
	Average	207	265	7.6	242.2	3.3
	Max	8636	326.3	34.9	326.4	34.2
	Max Hour	725766.3824	9106.928271	31.02413347	9114.572453	29.74794384
	Min	17.2	13.5	0.9	13.4	0.8
	Count	288	279	279	279	279
	Total	59628.7	51770.7	2141.6	51756	2047.8
	Date Printed:	9/30/2024 12:04				

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	12:00:00 AM	35.9	<	10.6	<	10.5
8/31/2023	12:05:00 AM	31.3	<	10.8	<	10.7
8/31/2023	12:10:00 AM	31.6	<	9.6	<	9.5
8/31/2023	12:15:00 AM	30.8	<	7.8	<	7.6
8/31/2023	12:20:00 AM	31.9	<	8.1	<	8.1
8/31/2023	12:25:00 AM	30.3	<	7.5	<	7.4
8/31/2023	12:30:00 AM	29.8	<	7.6	<	7.5
8/31/2023	12:35:00 AM	29.7	<	7.6	<	7.5
8/31/2023	12:40:00 AM	31.3	<	7.3	<	7.2
8/31/2023	12:45:00 AM	34.3	<	5.6	<	5.6
8/31/2023	12:50:00 AM	34.7	<	6.7	<	6.6
8/31/2023	12:55:00 AM	37.3	<	6.1	<	6
8/31/2023	1:00:00 AM	38	<	4.3	<	4.2
8/31/2023	1:05:00 AM	34.6	<	3.4	<	3.4
8/31/2023	1:10:00 AM	31.3	<	4	<	3.9
8/31/2023	1:15:00 AM	31.4	<	3.2	<	2.8
8/31/2023	1:20:00 AM	31.2	<	3.4	<	3.4
8/31/2023	1:25:00 AM	26.9	<	2.8	<	2.6
8/31/2023	1:30:00 AM	33.2	<	3.7	<	3.6
8/31/2023	1:35:00 AM	31.4	<	3.5	<	3.4
8/31/2023	1:40:00 AM	33.9	<	4.4	<	4.2
8/31/2023	1:45:00 AM	32.9	<	6.4	<	6.2
8/31/2023	1:50:00 AM	27.6	<	8.3	<	8.1
8/31/2023	1:55:00 AM	30.8	<	11.1	<	11
8/31/2023	2:00:00 AM	34.8	<	12	<	11.9
8/31/2023	2:05:00 AM	40.1	<	11.2	<	11.1
8/31/2023	2:10:00 AM	38.3	<	11.2	<	11.2
8/31/2023	2:15:00 AM	34.3	<	11.5	<	11.3
8/31/2023	2:20:00 AM	34.4	<	11.1	<	11
8/31/2023	2:25:00 AM	32.9	<	10.6	<	10.4
8/31/2023	2:30:00 AM	30.9	<	10.9	<	10.8
8/31/2023	2:35:00 AM	28.1	<	9.5	<	9.4
8/31/2023	2:40:00 AM	27.6	<	10.7	<	10.6
8/31/2023	2:45:00 AM	23.4	<	10.2	<	10.1
8/31/2023	2:50:00 AM	24.6	<	9.1	<	9.1
8/31/2023	2:55:00 AM	27.6	<	9	<	9
8/31/2023	3:00:00 AM	27.3	<	8.6	<	8.5
8/31/2023	3:05:00 AM	26.4	<	9.8	<	9.8
8/31/2023	3:10:00 AM	28.6	<	6.9	<	6.8
8/31/2023	3:15:00 AM	30.4	<	8	<	7.9
8/31/2023	3:20:00 AM	32.5	<	6.2	<	6.1
8/31/2023	3:25:00 AM	33.9	<	5	<	4.9
8/31/2023	3:30:00 AM	32.7	<	4.4	<	4.2
8/31/2023	3:35:00 AM	34	<	3.3	<	3.2
8/31/2023	3:40:00 AM	29.3	<	2.6	<	2.3
8/31/2023	3:45:00 AM	27.5	<	0.7	<	0.5
8/31/2023	3:50:00 AM	28.7	<	1.7	<	1.6
8/31/2023	3:55:00 AM	27.2	<	1.4	<	1.3
8/31/2023	4:00:00 AM	27	<	1.5	<	1.3
8/31/2023	4:05:00 AM	28.1	<	0.8	<	0.6
8/31/2023	4:10:00 AM	36.7	<	2	<	2
8/31/2023	4:15:00 AM	38.1	<	2.6	<	2.5
8/31/2023	4:20:00 AM	32.5	<	1.8	<	1.8

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	4:25:00 AM	29.9	<	1.6	<	1.6
8/31/2023	4:30:00 AM	29.5	<	2	<	2
8/31/2023	4:35:00 AM	30	<	2.3	<	2.3
8/31/2023	4:40:00 AM	27.7	<	2.1	<	2
8/31/2023	4:45:00 AM	31.1	<	3.9	<	3.8
8/31/2023	4:50:00 AM	49.3	<	2.7	<	2.6
8/31/2023	4:55:00 AM	61.3	<	1.7	<	1.6
8/31/2023	5:00:00 AM	64.8	<	2.9	<	2.9
8/31/2023	5:05:00 AM	56.8	<	2	<	1.9
8/31/2023	5:10:00 AM	50	<	3.3	<	3.3
8/31/2023	5:15:00 AM	54	<	4.4	<	4.4
8/31/2023	5:20:00 AM	55.4	<	3.9	<	3.9
8/31/2023	5:25:00 AM	59.4	<	3.3	<	3.2
8/31/2023	5:30:00 AM	55.9	<	2.3	<	2.2
8/31/2023	5:35:00 AM	48.8	<	2.7	<	2.7
8/31/2023	5:40:00 AM	44.8	<	3	<	2.7
8/31/2023	5:45:00 AM	43.7	<	3.3	<	3.2
8/31/2023	5:50:00 AM	48.1	<	2.6	<	2.6
8/31/2023	5:55:00 AM	46.3	<	2.2	<	2.1
8/31/2023	6:00:00 AM	42.3	<	2	<	2
8/31/2023	6:05:00 AM	39.7	<	2.1	<	2.1
8/31/2023	6:10:00 AM	39.4	<	1.8	<	1.8
8/31/2023	6:15:00 AM	40.3	<	0.5	<	0.5
8/31/2023	6:20:00 AM	39.2	<	1.5	<	1.4
8/31/2023	6:25:00 AM	44.9	<	1.8	<	1.8
8/31/2023	6:30:00 AM	51.1	<	2.3	<	2.3
8/31/2023	6:35:00 AM	58.5	<	3	<	3
8/31/2023	6:40:00 AM	57.5	<	2.5	<	2.5
8/31/2023	6:45:00 AM	67.5	<	1.4	<	1.4
8/31/2023	6:50:00 AM	74.7	<	2.1	<	2
8/31/2023	6:55:00 AM	80.6	<	3.5	<	3.5
8/31/2023	7:00:00 AM	111.2	<	3.2	<	3.2
8/31/2023	7:05:00 AM	128.3	<	3.3	<	3.2
8/31/2023	7:10:00 AM	123.9	<	2.8	<	2.7
8/31/2023	7:15:00 AM	133.3	<	2	<	1.9
8/31/2023	7:20:00 AM	126.8	<	1.9	<	1.7
8/31/2023	7:25:00 AM	104.3	<	2.5	<	2.4
8/31/2023	7:30:00 AM	83.6	<	2.8	<	2.7
8/31/2023	7:35:00 AM	58	<	3.1	<	3.1
8/31/2023	7:40:00 AM	48.9	<	2.5	<	2.4
8/31/2023	7:45:00 AM	47.8	<	3.1	<	3.1
8/31/2023	7:50:00 AM	43.4	<	4.4	<	4.4
8/31/2023	7:55:00 AM	44	<	3.6	<	3.6
8/31/2023	8:00:00 AM	45	<	3	<	2.9
8/31/2023	8:05:00 AM	48.4	<	3.6	<	3.5
8/31/2023	8:10:00 AM	55.3	<	3.4	<	3.2
8/31/2023	8:15:00 AM	60.9	<	4.1	<	4.1
8/31/2023	8:20:00 AM	50.8	<	4.7	<	4.5
8/31/2023	8:25:00 AM	47.6	<	3.5	<	3.1
8/31/2023	8:30:00 AM	50.7	<	4.8	<	4.7
8/31/2023	8:35:00 AM	53.7	<	3.8	<	3.6
8/31/2023	8:40:00 AM	48.4	<	4.2	<	4.1
8/31/2023	8:45:00 AM	43.7	<	3.5	<	3.4

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	8:50:00 AM	37.7	<	2.3	<	2.2
8/31/2023	8:55:00 AM	33.9	<	4.7	<	4.4
8/31/2023	9:00:00 AM	37.1	<	3.9	<	3.7
8/31/2023	9:05:00 AM	37.2	<	3.4	<	3
8/31/2023	9:10:00 AM	36.6	<	4.8	<	4.5
8/31/2023	9:15:00 AM	40.3	<	2	<	1.2
8/31/2023	9:20:00 AM	34.8	<	3.9	<	3.7
8/31/2023	9:25:00 AM	33.5	<	1.8	<	1.5
8/31/2023	9:30:00 AM	35	<	2.1	<	1.6
8/31/2023	9:35:00 AM	32.3	<	2.9	<	2.8
8/31/2023	9:40:00 AM	29.1	<	2.1	<	1.6
8/31/2023	9:45:00 AM	25.2	<	4.1	<	4
8/31/2023	9:50:00 AM	30.9	<	3.7	<	3.5
8/31/2023	9:55:00 AM	30.2	<	3.5	<	3.1
8/31/2023	10:00:00 AM	30.9	<	3.5	<	2.9
8/31/2023	10:05:00 AM	25.3	<	2.6	<	2.2
8/31/2023	10:10:00 AM	22.9	<	3.1	<	2.4
8/31/2023	10:15:00 AM	28.2	<	6.9	<	6.6
8/31/2023	10:20:00 AM	29.5	<	2.6	<	2.2
8/31/2023	10:25:00 AM	26.3	<	3.6	<	3.4
8/31/2023	10:30:00 AM	24.8	<	5.8	<	5.1
8/31/2023	10:35:00 AM	23.8	<	4.3	<	3.4
8/31/2023	10:40:00 AM	31.5	<	4.8	<	4.6
8/31/2023	10:45:00 AM	33	<	5.4	<	5.1
8/31/2023	10:50:00 AM	27.5	<	5.9	<	5.7
8/31/2023	10:55:00 AM	32.4	<	5.9	<	5.8
8/31/2023	11:00:00 AM	32.3	<	4.4	<	4.2
8/31/2023	11:05:00 AM	37.4	<	1.7	<	1.6
8/31/2023	11:10:00 AM	45.3	<	4.7	<	4.5
8/31/2023	11:15:00 AM	43	<	5.9	<	5.8
8/31/2023	11:20:00 AM	47.4	<	3.4	<	3.2
8/31/2023	11:25:00 AM	54	<	6.1	<	4.4
8/31/2023	11:30:00 AM	48.3	<	8	<	7.8
8/31/2023	11:35:00 AM	43.8	<	8.4	<	8.2
8/31/2023	11:40:00 AM	41.3	<	5	<	4.6
8/31/2023	11:45:00 AM	39.8	<	3.2	<	2.3
8/31/2023	11:50:00 AM	38.8	<	1.6	<	1.4
8/31/2023	11:55:00 AM	38.6	<	3.1	<	0.9
8/31/2023	12:00:00 PM	50.4	<	5.5	<	5.4
8/31/2023	12:05:00 PM	49	<	4.1	<	3.8
8/31/2023	12:10:00 PM	41.3	<	4.4	<	4.1
8/31/2023	12:15:00 PM	38.2	<	4.1	<	0.6
8/31/2023	12:20:00 PM	45.8	<	4.7	<	4.4
8/31/2023	12:25:00 PM	43.7	<	6.2	<	6
8/31/2023	12:30:00 PM	39.6	<	3.5	<	3
8/31/2023	12:35:00 PM	36.3	<	5.7	<	5.3
8/31/2023	12:40:00 PM	34.6	<	4.4	<	3.3
8/31/2023	12:45:00 PM	35.3	<	7.5	<	7
8/31/2023	12:50:00 PM	33.7	<	6.3	<	5.8
8/31/2023	12:55:00 PM	31.7	<	7.9	<	7.6
8/31/2023	1:00:00 PM	32.8	<	8.4	<	8.1
8/31/2023	1:05:00 PM	34.3	<	8.1	<	7.2
8/31/2023	1:10:00 PM	35.6	<	6.7	<	6.5

Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	1:15:00 PM	35.6	<	5.7	<	4.7
8/31/2023	1:20:00 PM	33.3	<	6.2	<	5.6
8/31/2023	1:25:00 PM	39.2	<	7.4	<	7.2
8/31/2023	1:30:00 PM	36.4	<	7.3	<	7.1
8/31/2023	1:35:00 PM	32.2	<	6.3	<	5.8
8/31/2023	1:40:00 PM	31	<	5.4	<	4.1
8/31/2023	1:45:00 PM	30.4	<	5.7	<	5.4
8/31/2023	1:50:00 PM	28.2	<	7	<	6.6
8/31/2023	1:55:00 PM	28.1	<	6.7	<	6.4
8/31/2023	2:00:00 PM	32.6	<	5.9	<	5.6
8/31/2023	2:05:00 PM	31.2	<	4.6	<	4.2
8/31/2023	2:10:00 PM	28.4	<	9.7	<	9.5
8/31/2023	2:15:00 PM	24.4	<	8.2	<	8
8/31/2023	2:20:00 PM	21.3	<	9.6	<	9.2
8/31/2023	2:25:00 PM	18.9	<	10.3	<	10
8/31/2023	2:30:00 PM	18.9	<	5.9	<	5.7
8/31/2023	2:35:00 PM	21.8	<	3.7	<	3.5
8/31/2023	2:40:00 PM	20.5	<	8.5	<	7.8
8/31/2023	2:45:00 PM	18.3	<	8	<	7.5
8/31/2023	2:50:00 PM	20.8	<	8.6	<	8.4
8/31/2023	2:55:00 PM	22.2	<	12.1	<	11.7
8/31/2023	3:00:00 PM	21.8	<	9.6	<	9.5
8/31/2023	3:05:00 PM	23	<	7.1	<	6.5
8/31/2023	3:10:00 PM	24.6	<	10.5	<	9.8
8/31/2023	3:15:00 PM	27.4	<	7.5	<	7.2
8/31/2023	3:20:00 PM	21.4	<	7.3	<	6.8
8/31/2023	3:25:00 PM	23.3	<	11.5	<	10.8
8/31/2023	3:30:00 PM	28.3	<	9.5	<	8.8
8/31/2023	3:35:00 PM	25.7	<	9	<	8.6
8/31/2023	3:40:00 PM	21	<	9.7	<	9.5
8/31/2023	3:45:00 PM	22.8	<	8.5	<	8.4
8/31/2023	3:50:00 PM	28.3	<	6	<	5.7
8/31/2023	3:55:00 PM	35.4	<	8.2	<	7.6
8/31/2023	4:00:00 PM	37.4	<	12.3	<	11.8
8/31/2023	4:05:00 PM	39.1	<	16.6	<	16.4
8/31/2023	4:10:00 PM	45.1	<	11.7	<	11.4
8/31/2023	4:15:00 PM	41.6	<	17.1	<	16.9
8/31/2023	4:20:00 PM	46.7	<	13.7	<	13.4
8/31/2023	4:25:00 PM	42	<	12.7	<	12.4
8/31/2023	4:30:00 PM	45.5	<	12.6	<	12.4
8/31/2023	4:35:00 PM	40.9	<	12.9	<	12.4
8/31/2023	4:40:00 PM	38.5	<	10.9	<	10.7
8/31/2023	4:45:00 PM	34.9	<	11.3	<	10.9
8/31/2023	4:50:00 PM	27.1	<	12.2	<	11.8
8/31/2023	4:55:00 PM	24.6	<	12.1	<	11.9
8/31/2023	5:00:00 PM	34.4	<	14.8	<	14.7
8/31/2023	5:05:00 PM	34.5	<	11.7	<	11.6
8/31/2023	5:10:00 PM	32.2	<	12.4	<	12.2
8/31/2023	5:15:00 PM	31.1	<	14.4	<	14.2
8/31/2023	5:20:00 PM	25.6	<	13.3	<	13.1
8/31/2023	5:25:00 PM	27.9	<	14.2	<	14
8/31/2023	5:30:00 PM	23.9	<	12.1	<	11.9
8/31/2023	5:35:00 PM	22	<	12.6	<	12.4

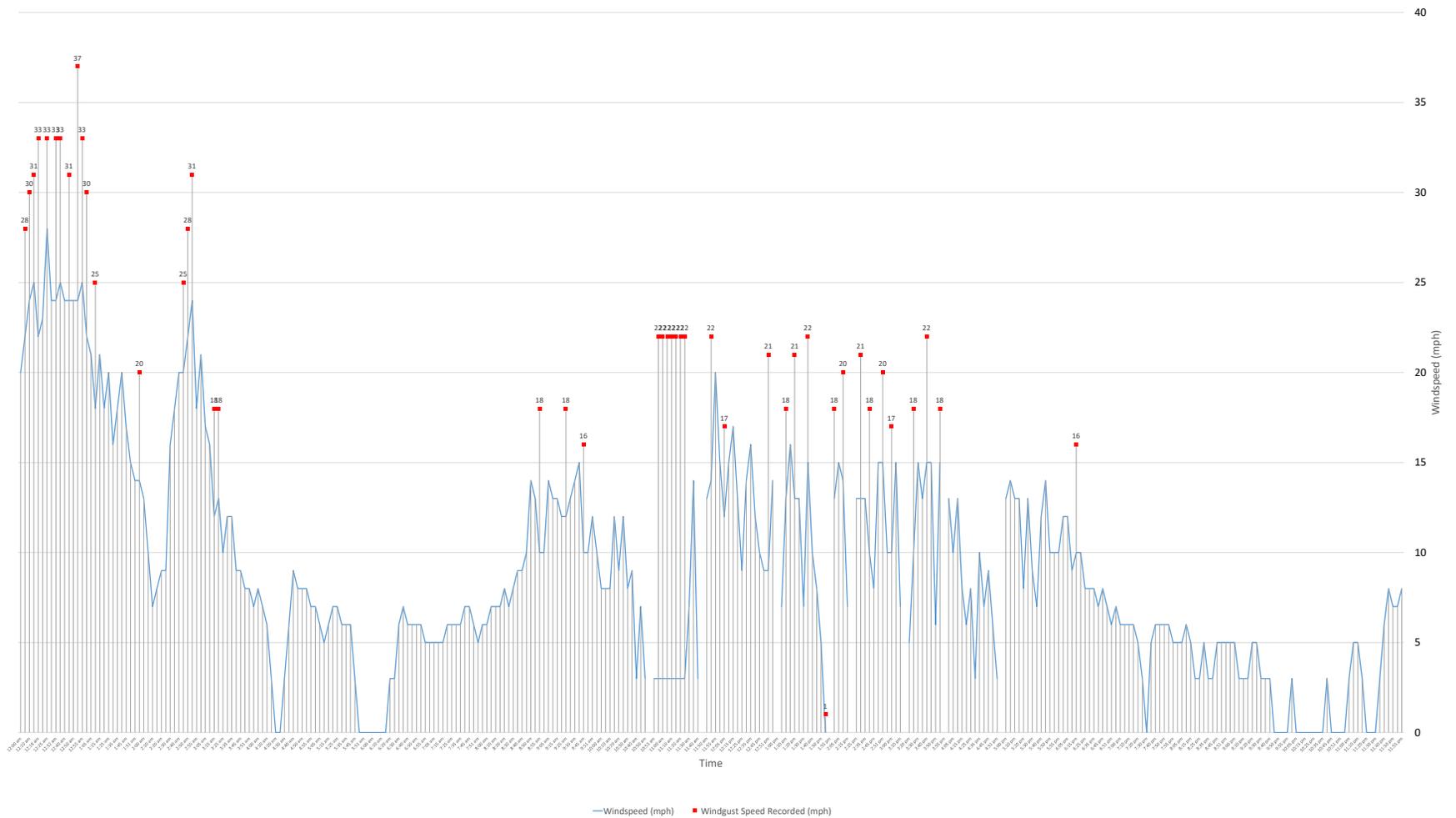
Site: Zuni Hills

<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	5:40:00 PM	21.6	<	11.8	<	11.6
8/31/2023	5:45:00 PM	22.6	<	10.7	<	10.5
8/31/2023	5:50:00 PM	22.7	<	9.1	<	9
8/31/2023	5:55:00 PM	21.7	<	10.7	<	10.5
8/31/2023	6:00:00 PM	26.1	<	11.4	<	11.3
8/31/2023	6:05:00 PM	25.2	<	9	<	8.8
8/31/2023	6:10:00 PM	24.1	<	10.9	<	10.7
8/31/2023	6:15:00 PM	21.7	<	10.1	<	10
8/31/2023	6:20:00 PM	21.5	<	11.3	<	11.2
8/31/2023	6:25:00 PM	21.1	<	10.9	<	10.8
8/31/2023	6:30:00 PM	15.1	<	9.6	<	9.5
8/31/2023	6:35:00 PM	21.1	<	8.8	<	8.7
8/31/2023	6:40:00 PM	22.6	<	8.4	<	8.4
8/31/2023	6:45:00 PM	13.6	<	6.6	<	6.5
8/31/2023	6:50:00 PM	21	<	6	<	5.9
8/31/2023	6:55:00 PM	17.8	<	8.2	<	8.1
8/31/2023	7:00:00 PM	18.8	<	8.1	<	8
8/31/2023	7:05:00 PM	23.2	<	6.7	<	6.6
8/31/2023	7:10:00 PM	17.7	<	5.4	<	5.3
8/31/2023	7:15:00 PM	25.3	<	4.9	<	4.9
8/31/2023	7:20:00 PM	20.5	<	5.5	<	5.4
8/31/2023	7:25:00 PM	27.4	<	4.8	<	4.8
8/31/2023	7:30:00 PM	21.1	<	5.5	<	5.5
8/31/2023	7:35:00 PM	36.8	<	4.6	<	4.6
8/31/2023	7:40:00 PM	33.1	<	4.5	<	4.4
8/31/2023	7:45:00 PM	35.7	<	4	<	4
8/31/2023	7:50:00 PM	27.5	<	4.1	<	4
8/31/2023	7:55:00 PM	32.7	<	4.1	<	4.1
8/31/2023	8:00:00 PM	25.6	<	4.5	<	4.5
8/31/2023	8:05:00 PM	34.7	<	6.3	<	6.3
8/31/2023	8:10:00 PM	29.7	<	6	<	5.9
8/31/2023	8:15:00 PM	32.9	<	8.9	<	8.8
8/31/2023	8:20:00 PM	38.6	<	9.4	<	9.3
8/31/2023	8:25:00 PM	39.8	<	11.7	<	11.6
8/31/2023	8:30:00 PM	37.5	<	13.6	<	13.5
8/31/2023	8:35:00 PM	36	<	13.2	<	13
8/31/2023	8:40:00 PM	35.4	<	10.9	<	10.8
8/31/2023	8:45:00 PM	35.6	<	11.5	<	11.4
8/31/2023	8:50:00 PM	31	<	9	<	8.8
8/31/2023	8:55:00 PM	34.2	<	11.3	<	11.1
8/31/2023	9:00:00 PM	35.7	<	11.8	<	11.6
8/31/2023	9:05:00 PM	45.5	<	13.8	<	13.5
8/31/2023	9:10:00 PM	54.7	<	25.9	<	24.6
8/31/2023	9:15:00 PM	601.5	<	27.4	<	26.9
8/31/2023	9:20:00 PM	5419.3	<	24.8	<	24.1
8/31/2023	9:25:00 PM	6016.6	<	26.4	<	25.9
8/31/2023	9:30:00 PM	4794.4	<	30.2	<	29.6
8/31/2023	9:35:00 PM	4175.4	<	29.9	<	29.4
8/31/2023	9:40:00 PM	2709.3	<	29.5	<	29
8/31/2023	9:45:00 PM	1449.6	<	24.4	<	23.8
8/31/2023	9:50:00 PM	753.9	<	26.8	<	26.2
8/31/2023	9:55:00 PM	412.6	<	22.2	<	21.6
8/31/2023	10:00:00 PM	236.9	<	19.1	<	18.7

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM<sub>10</sub> (µg/m<sub>3</sub>)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
8/31/2023	10:05:00 PM	142.8	<	20.9	<	20.6
8/31/2023	10:10:00 PM	90.8	<	16	<	15.6
8/31/2023	10:15:00 PM	68.6	<	13.7	<	13.3
8/31/2023	10:20:00 PM	50.1	<	11.8	<	11.5
8/31/2023	10:25:00 PM	46	<	8.4	<	8
8/31/2023	10:30:00 PM	42.7	<	7.4	<	7
8/31/2023	10:35:00 PM	47.9	<	11.5	<	10.9
8/31/2023	10:40:00 PM	66.2	<	10.1	<	9.4
8/31/2023	10:45:00 PM	64.5	<	12.8	<	12.5
8/31/2023	10:50:00 PM	72.4	<	11	<	10.7
8/31/2023	10:55:00 PM	82.2	<	11.1	<	10.7
8/31/2023	11:00:00 PM	69.7	<	9.4	<	8.9
8/31/2023	11:05:00 PM	63	<	6.8	<	6.5
8/31/2023	11:10:00 PM	53.4	<	6.6	<	6.4
8/31/2023	11:15:00 PM	44.2	<	5	<	4.9
8/31/2023	11:20:00 PM	38.8	<	4.6	<	4.4
8/31/2023	11:25:00 PM	44	<	3.8	<	3.7
8/31/2023	11:30:00 PM	41.7	<	4.9	<	4.8
8/31/2023	11:35:00 PM	50.1	<	5.7	<	5.6
8/31/2023	11:40:00 PM	52.1	<	6.2	<	6.1
8/31/2023	11:45:00 PM	44.8	<	5.5	<	5.4
8/31/2023	11:50:00 PM	39.1	<	7.1	<	7
8/31/2023	11:55:00 PM	37.3	<	7.4	<	7.4
	Average	129.7		7.3		7.1
	Max	6016.6	0	30.2	0	29.6
	Max Hour					
	Min	13.6	0	0.5	0	0.5
	Count	288	0	288	0	288
	Total					

**Appendix B: NOAA Phoenix Sky Harbor Airport Station Data**

5-Minute Wind Speed at Phoenix Sky Harbor International Airport, 10/12/2021



Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/9/2021	11:55 pm	S	13			10	
7/9/2021	11:51 pm	S	17			10	
7/9/2021	11:50 pm	S	17			10	
7/9/2021	11:45 pm	S	14			10	
7/9/2021	11:40 pm	S	17			10	
7/9/2021	11:35 pm	S	18	G	24	10	
7/9/2021	11:30 pm	S	17			9	
7/9/2021	11:25 pm	S	17			7	Blowing dust
7/9/2021	11:20 pm	SSE	20			5	Blowing dust
7/9/2021	11:15 pm	SSE	22	G	28	5	Blowing dust
7/9/2021	11:14 pm	SSE	22	G	31	5	Blowing dust
7/9/2021	11:10 pm	SSE	21	G	28	1.25	Blowing dust
7/9/2021	11:08 pm	SSE	17	G	26	1	Blowing dust
7/9/2021	11:05 pm	SSE	20	G	25	0.75	
7/9/2021	11:00 pm	SE	20	G	26	0.5	
7/9/2021	10:58 pm	SE	20	G	36	0.5	
7/9/2021	10:55 pm	SE	26			0.25	
7/9/2021	10:51 pm	SE	21	G	46	0.25	
7/9/2021	10:50 pm	SE	25			0.25	
7/9/2021	10:45 pm	SE	30	G	45	1	Blowing dust
7/9/2021	10:40 pm	SE	15	G	21	10	
7/9/2021	10:35 pm	S	5			10	
7/9/2021	10:30 pm	SW	5			10	
7/9/2021	10:25 pm	SW	9			10	
7/9/2021	10:20 pm	WSW	10			10	
7/9/2021	10:15 pm	W	12			10	
7/9/2021	10:10 pm	WSW	8			10	
7/9/2021	10:05 pm	W	9			10	
7/9/2021	10:00 pm	WSW	10			10	
7/9/2021	9:55 pm	WSW	9			10	
7/9/2021	9:51 pm	WSW	9			10	
7/9/2021	9:50 pm	WSW	8			10	
7/9/2021	9:45 pm	WSW	7			10	
7/9/2021	9:40 pm	WSW	9			10	
7/9/2021	9:35 pm	WSW	12			10	
7/9/2021	9:30 pm	WSW	8			10	
7/9/2021	9:25 pm	WSW	10			10	
7/9/2021	9:20 pm	WSW	13			10	
7/9/2021	9:15 pm	WSW	10			10	
7/9/2021	9:10 pm	WSW	12			10	
7/9/2021	9:05 pm	WSW	12			10	
7/9/2021	9:00 pm	WSW	9			10	
7/9/2021	8:55 pm	WSW	10			10	
7/9/2021	8:51 pm	WSW	12			10	
7/9/2021	8:50 pm	WSW	12			10	
7/9/2021	8:45 pm	WSW	12			10	
7/9/2021	8:40 pm	WSW	10			10	
7/9/2021	8:35 pm	WSW	10			10	
7/9/2021	8:30 pm	WSW	10			10	
7/9/2021	8:25 pm	WSW	12			10	
7/9/2021	8:20 pm	WSW	9			10	
7/9/2021	8:15 pm	WSW	12			10	
7/9/2021	8:10 pm	SW	12			10	
7/9/2021	8:05 pm	WSW	8			10	
7/9/2021	8:00 pm	WSW	9			10	
7/9/2021	7:55 pm	WSW	12			10	
7/9/2021	7:51 pm	WSW	10			10	
7/9/2021	7:50 pm	WSW	13			10	
7/9/2021	7:45 pm	SW	14			10	
7/9/2021	7:40 pm	WSW	13			10	
7/9/2021	7:35 pm	WSW	10			10	
7/9/2021	7:30 pm	WSW	13			10	
7/9/2021	7:25 pm	WSW	13			10	

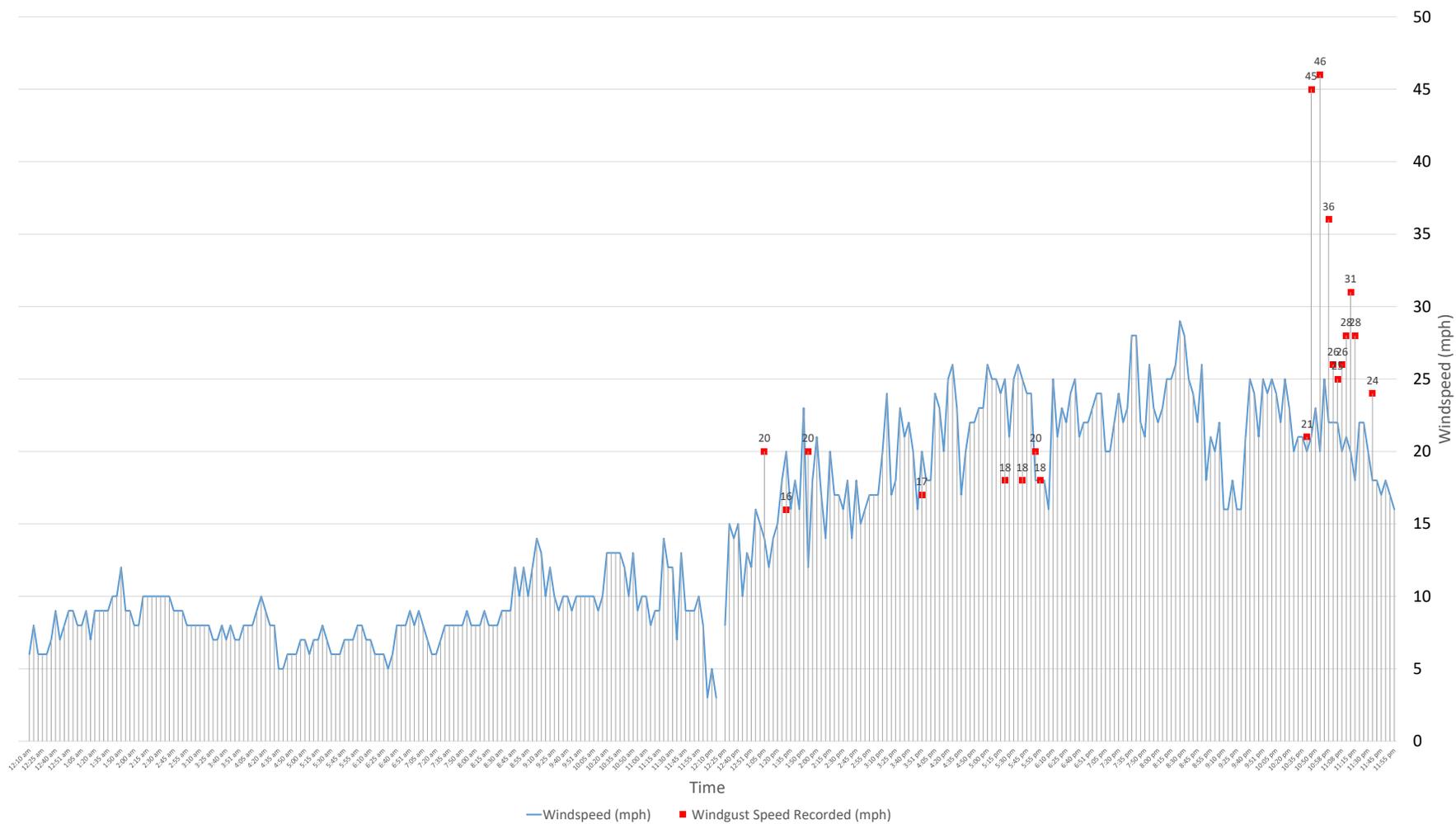
Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/9/2021	7:20 pm	WSW	13			10	
7/9/2021	7:15 pm	WSW	9			10	
7/9/2021	7:10 pm	WSW	14			10	
7/9/2021	7:05 pm	W	13			10	
7/9/2021	7:00 pm	W	10			10	
7/9/2021	6:55 pm	WSW	12			10	
7/9/2021	6:51 pm	WSW	13			10	
7/9/2021	6:50 pm	WSW	12			10	
7/9/2021	6:45 pm	W	12			10	
7/9/2021	6:40 pm	WSW	10			10	
7/9/2021	6:35 pm	W	13			10	
7/9/2021	6:30 pm	WSW	9			10	
7/9/2021	6:25 pm	WSW	12			10	
7/9/2021	6:20 pm	W	13			10	
7/9/2021	6:15 pm	WNW	8			10	
7/9/2021	6:10 pm	W	14			10	
7/9/2021	6:05 pm	WSW	13			10	
7/9/2021	6:00 pm	WSW	9			10	
7/9/2021	5:55 pm	W	12	G	18	10	
7/9/2021	5:51 pm	WSW	7	G	20	10	
7/9/2021	5:50 pm	WSW	8			10	
7/9/2021	5:45 pm	WSW	12			10	
7/9/2021	5:40 pm	W	13	G	18	10	
7/9/2021	5:35 pm	W	13			10	
7/9/2021	5:30 pm	WSW	9			10	
7/9/2021	5:25 pm	WNW	14			10	
7/9/2021	5:20 pm	W	13	G	18	10	
7/9/2021	5:15 pm	WNW	8			10	
7/9/2021	5:10 pm	WSW	12			10	
7/9/2021	5:05 pm	WNW	12			10	
7/9/2021	5:00 pm	WNW	12			10	
7/9/2021	4:55 pm	W	14			10	
7/9/2021	4:51 pm	SW	6			10	
7/9/2021	4:50 pm	WSW	7			10	
7/9/2021	4:45 pm	WSW	14			10	
7/9/2021	4:40 pm	NW	9			10	
7/9/2021	4:35 pm	W	14			10	
7/9/2021	4:30 pm	W	10			10	
7/9/2021	4:25 pm	W	8			10	
7/9/2021	4:20 pm	W	10			10	
7/9/2021	4:15 pm	WSW	14			10	
7/9/2021	4:10 pm	WSW	8			10	
7/9/2021	4:05 pm	WNW	8			10	
7/9/2021	4:00 pm	W	15			10	
7/9/2021	3:55 pm	WNW	14			10	
7/9/2021	3:51 pm	W	13	G	17	10	
7/9/2021	3:50 pm	WSW	9			10	
7/9/2021	3:45 pm	W	6			10	
7/9/2021	3:40 pm	WSW	12			10	
7/9/2021	3:35 pm	SW	3			10	
7/9/2021	3:30 pm	WSW	12			10	
7/9/2021	3:25 pm	NW	8			10	
7/9/2021	3:20 pm	WNW	14			10	
7/9/2021	3:15 pm	W	14			10	
7/9/2021	3:10 pm	WSW	7			10	
7/9/2021	3:05 pm	WSW	9			10	
7/9/2021	3:00 pm	NW	8			10	
7/9/2021	2:55 pm	WNW	9			10	
7/9/2021	2:51 pm	W	14			10	
7/9/2021	2:50 pm	W	14			10	
7/9/2021	2:45 pm	WNW	8			10	
7/9/2021	2:40 pm	WNW	16			10	
7/9/2021	2:35 pm	WSW	12			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/9/2021	2:30 pm	NW	12			10	
7/9/2021	2:25 pm	WSW	12			10	
7/9/2021	2:20 pm	WNW	9			10	
7/9/2021	2:15 pm	WNW	13			10	
7/9/2021	2:10 pm	W	18			10	
7/9/2021	2:05 pm	NW	14			10	
7/9/2021	2:00 pm	WNW	18			10	
7/9/2021	1:55 pm	NW	14			10	
7/9/2021	1:51 pm	WNW	8	G	20	10	
7/9/2021	1:50 pm	W	10			10	
7/9/2021	1:45 pm	WNW	12			10	
7/9/2021	1:40 pm	W	13			10	
7/9/2021	1:35 pm	W	10			10	
7/9/2021	1:30 pm	NW	10	G	16	10	
7/9/2021	1:25 pm	WNW	15			10	
7/9/2021	1:20 pm					10	
7/9/2021	1:15 pm	W	15			10	
7/9/2021	1:10 pm	W	10			10	
7/9/2021	1:05 pm	SW	10	G	20	10	
7/9/2021	1:00 pm	NW	7			10	
7/9/2021	12:55 pm	WNW	7			10	
7/9/2021	12:51 pm	W	8			10	
7/9/2021	12:50 pm					10	
7/9/2021	12:45 pm					10	
7/9/2021	12:40 pm	NNW	3			10	
7/9/2021	12:35 pm	W	12			10	
7/9/2021	12:30 pm	W	8			10	
7/9/2021	12:25 pm					10	
7/9/2021	12:20 pm	N	0			10	
7/9/2021	12:15 pm	SW	7			10	
7/9/2021	12:10 pm	W	10			10	
7/9/2021	12:05 pm	WNW	9			10	
7/9/2021	12:00 pm	WNW	7			10	
7/9/2021	11:55 am	WSW	6			10	
7/9/2021	11:51 am	WNW	9			10	
7/9/2021	11:50 am	WNW	9			10	
7/9/2021	11:45 am					10	
7/9/2021	11:40 am	N	0			10	
7/9/2021	11:35 am	SW	8			10	
7/9/2021	11:30 am	N	0			10	
7/9/2021	11:25 am	ESE	5			10	
7/9/2021	11:20 am	SE	3			10	
7/9/2021	11:15 am	SSE	8			10	
7/9/2021	11:10 am	SSE	8			10	
7/9/2021	11:05 am	NNW	6			10	
7/9/2021	11:00 am	W	3			10	
7/9/2021	10:55 am	W	6			10	
7/9/2021	10:51 am	S	7			10	
7/9/2021	10:50 am	S	9			10	
7/9/2021	10:45 am	S	6			10	
7/9/2021	10:40 am	W	6			10	
7/9/2021	10:35 am	SSW	7			10	
7/9/2021	10:30 am	S	8			10	
7/9/2021	10:25 am	ENE	3			10	
7/9/2021	10:20 am	N	0			10	
7/9/2021	10:15 am	N	0			10	
7/9/2021	10:10 am	N	0			10	
7/9/2021	10:05 am	N	3			10	
7/9/2021	10:00 am	N	0			10	
7/9/2021	9:55 am	WNW	3			10	
7/9/2021	9:51 am		6			10	
7/9/2021	9:50 am	NW	6			10	
7/9/2021	9:45 am	NNW	3			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/9/2021	9:40 am	N	0			10	
7/9/2021	9:35 am	WNW	6			10	
7/9/2021	9:30 am	WNW	3			10	
7/9/2021	9:25 am	NNE	3			10	
7/9/2021	9:20 am	N	3			10	
7/9/2021	9:15 am	NNW	5			10	
7/9/2021	9:10 am	NW	5			10	
7/9/2021	9:05 am	WNW	7			10	
7/9/2021	9:00 am	NNW	6			10	
7/9/2021	8:55 am	N	0			10	
7/9/2021	8:51 am	N	0			10	
7/9/2021	8:50 am	N	0			10	
7/9/2021	8:45 am	N	0			10	
7/9/2021	8:40 am	NW	3			10	
7/9/2021	8:35 am	NW	5			10	
7/9/2021	8:30 am	N	0			10	
7/9/2021	8:25 am	WNW	5			10	
7/9/2021	8:20 am	WNW	5			10	
7/9/2021	8:15 am	WNW	5			10	
7/9/2021	8:10 am	NNE	3			10	
7/9/2021	8:05 am	NE	3			10	
7/9/2021	8:00 am	N	0			10	
7/9/2021	7:55 am	N	3			10	
7/9/2021	7:51 am	N	0			10	
7/9/2021	7:50 am	N	0			10	
7/9/2021	7:45 am	N	0			10	
7/9/2021	7:40 am	NNW	3			10	
7/9/2021	7:35 am	NNW	5			10	
7/9/2021	7:30 am	NNW	7			10	
7/9/2021	7:25 am	N	7			10	
7/9/2021	7:20 am	N	3			10	
7/9/2021	7:15 am	NW	7			10	
7/9/2021	7:10 am	N	7			10	
7/9/2021	7:05 am	NW	7			10	
7/9/2021	7:00 am	NNW	7			10	
7/9/2021	6:55 am	NNW	6			10	
7/9/2021	6:51 am	NNW	7			10	
7/9/2021	6:50 am	NW	6			10	
7/9/2021	6:45 am	NNW	6			10	
7/9/2021	6:40 am	NNW	5			10	
7/9/2021	6:35 am	NW	7			10	
7/9/2021	6:30 am	NW	7			10	
7/9/2021	6:25 am	WNW	3			10	
7/9/2021	6:20 am	W	3			10	
7/9/2021	6:15 am	N	0			10	
7/9/2021	6:10 am	WNW	5			10	
7/9/2021	6:05 am	NW	5			10	
7/9/2021	6:00 am	NW	5			10	
7/9/2021	5:55 am	NW	3			10	
7/9/2021	5:51 am	N	0			10	
7/9/2021	5:50 am	N	0			10	
7/9/2021	5:45 am	N	0			10	
7/9/2021	5:40 am	N	0			10	
7/9/2021	5:35 am	N	0			10	
7/9/2021	5:30 am	WNW	3			10	
7/9/2021	5:25 am	W	7			10	
7/9/2021	5:20 am	WNW	8			10	
7/9/2021	5:15 am	W	8			10	
7/9/2021	5:10 am	W	8			10	
7/9/2021	5:05 am	WNW	8			10	
7/9/2021	5:00 am	WNW	7			10	
7/9/2021	4:55 am	WNW	6			10	
7/9/2021	4:51 am	WNW	7			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/9/2021	4:50 am	WNW	6			10	
7/9/2021	4:45 am	NW	6			10	
7/9/2021	4:40 am	NNW	6			10	
7/9/2021	4:35 am	NW	7			10	
7/9/2021	4:30 am	NW	7			10	
7/9/2021	4:25 am	NW	8			10	
7/9/2021	4:20 am	NW	8			10	
7/9/2021	4:15 am	NW	7			10	
7/9/2021	4:10 am	NW	7			10	
7/9/2021	4:05 am	NW	8			10	
7/9/2021	4:00 am	NW	8			10	
7/9/2021	3:55 am	NNW	8			10	
7/9/2021	3:51 am	NW	7			10	
7/9/2021	3:50 am	NNW	7			10	
7/9/2021	3:45 am	NW	7			10	
7/9/2021	3:40 am	NW	8			10	
7/9/2021	3:35 am	WNW	8			10	
7/9/2021	3:30 am	WNW	8			10	
7/9/2021	3:25 am	W	6			10	
7/9/2021	3:20 am	W	8			10	
7/9/2021	3:15 am	WNW	8			10	
7/9/2021	3:10 am	W	8			10	
7/9/2021	3:05 am	WNW	8			10	
7/9/2021	3:00 am	WNW	7			10	
7/9/2021	2:55 am	W	7			10	
7/9/2021	2:51 am	WNW	6			10	
7/9/2021	2:50 am	WNW	6			10	
7/9/2021	2:45 am	WNW	8			10	
7/9/2021	2:40 am	W	7			10	
7/9/2021	2:35 am	W	7			10	
7/9/2021	2:30 am	W	9			10	
7/9/2021	2:25 am	W	12			10	
7/9/2021	2:20 am	WNW	9			10	
7/9/2021	2:15 am	W	9			10	
7/9/2021	2:10 am	W	7			10	
7/9/2021	2:05 am	W	10			10	
7/9/2021	2:00 am	W	9			10	
7/9/2021	1:55 am	W	10			10	
7/9/2021	1:51 am	W	13			10	
7/9/2021	1:50 am	W	13			10	
7/9/2021	1:45 am	W	12			10	
7/9/2021	1:40 am	W	13			10	
7/9/2021	1:35 am	W	12			10	
7/9/2021	1:30 am	W	14			10	
7/9/2021	1:25 am	W	14			10	
7/9/2021	1:20 am	W	14			10	
7/9/2021	1:15 am	W	15			10	
7/9/2021	1:10 am	W	16			10	
7/9/2021	1:05 am	W	12			10	
7/9/2021	1:00 am	W	14			10	
7/9/2021	12:55 am	W	12			10	
7/9/2021	12:51 am	W	13			10	
7/9/2021	12:50 am	W	13			10	
7/9/2021	12:45 am	W	12			10	
7/9/2021	12:40 am	WSW	14			10	
7/9/2021	12:35 am	WSW	13			10	
7/9/2021	12:30 am	WSW	13			10	
7/9/2021	12:25 am	WSW	12			10	
7/9/2021	12:20 am	WSW	10			10	
7/9/2021	12:15 am	W	14			10	
7/9/2021	12:10 am	WSW	12			10	
7/9/2021	12:05 am	WSW	10			10	
7/9/2021	12:00 am	W	14			10	

### 5-Minute Wind Speed at Phoenix Sky Harbor International Airport, 07-09-2021



Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/10/2021	11:55 pm	ENE	10			10	
7/11/2021	11:51 pm	E	13			10	
7/12/2021	11:50 pm	E	13			10	
7/13/2021	11:45 pm	E	10			10	
7/14/2021	11:40 pm	E	13			10	
7/15/2021	11:35 pm	E	13			10	
7/16/2021	11:30 pm	ENE	8			10	
7/17/2021	11:25 pm					10	
7/18/2021	11:20 pm	SE	5			10	
7/19/2021	11:15 pm	SSE	6			10	
7/20/2021	11:10 pm	S	8			10	
7/21/2021	11:05 pm	S	10			10	
7/22/2021	11:00 pm	S	18			10	
7/23/2021	10:55 pm	SSE	21	G	30	10	
7/24/2021	10:51 pm	SSE	23	G	38	9	
7/25/2021	10:50 pm	SSE	21	G	26	9	
7/26/2021	10:45 pm	SSE	24	G	33	8	
7/27/2021	10:40 pm	SSE	23	G	31	7	
7/28/2021	10:36 pm	SSE	21	G	32	7	
7/29/2021	10:35 pm	SSE	20	G	28	7	
7/30/2021	10:30 pm	SSE	24	G	32	8	
7/31/2021	10:25 pm	S	24	G	30	9	
8/1/2021	10:20 pm	S	26			10	
8/2/2021	10:15 pm	SSW	9			10	
8/3/2021	10:10 pm	SSW	10			10	
8/4/2021	10:05 pm	W	10			10	
8/5/2021	10:00 pm	W	13			10	
8/6/2021	9:55 pm	WSW	13			10	
8/7/2021	9:51 pm	WSW	13			10	
8/8/2021	9:50 pm	WSW	13			10	
8/9/2021	9:45 pm	SW	14			10	
8/10/2021	9:40 pm	SW	14			10	
8/11/2021	9:35 pm	SSW	12			10	
8/12/2021	9:30 pm	S	12			10	
8/13/2021	9:25 pm	S	15			10	
8/14/2021	9:20 pm	S	14			10	
8/15/2021	9:19 pm	S	16			10	
8/16/2021	9:15 pm	S	15			10	
8/17/2021	9:10 pm	SSE	13	G	20	10	
8/18/2021	9:05 pm	S	17			10	
8/19/2021	9:00 pm	S	15			10	
8/20/2021	8:58 pm	SSE	16	G	29	9	Thunder
8/21/2021	8:55 pm	SE	22			7	Lt rain
8/22/2021	8:51 pm	SSE	18	G	38	5	Lt thunder shwr
8/23/2021	8:50 pm	SE	17			4	Lt rain
8/24/2021	8:45 pm	SE	23			4	Rain
8/25/2021	8:40 pm	ESE	30			6	Haze
8/26/2021	8:35 pm	E	23	G	30	10	
8/27/2021	8:30 pm	E	18			10	
8/28/2021	8:25 pm	ENE	29			10	
8/29/2021	8:20 pm	NE	33			8	
8/30/2021	8:15 pm	NE	35			7	
8/31/2021	8:10 pm	NNE	35	G	41	8	Thunder
9/1/2021	8:05 pm	NNE	25			7	
9/2/2021	8:03 pm	NNE	26	G	37	6	Haze
9/3/2021	8:00 pm	NNE	26	G	35	5	Haze
9/4/2021	7:55 pm	NNE	23	G	30	6	Haze, Squalls
9/5/2021	7:51 pm	N	30	G	38	8	Squalls
9/6/2021	7:50 pm	N	21	G	38	10	
9/7/2021	7:45 pm	NNW	3			10	
9/8/2021	7:40 pm	NW	3			10	
9/9/2021	7:35 pm	N	0			10	
9/10/2021	7:30 pm	N	0			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
9/11/2021	7:25 pm	SW	3			10	
9/12/2021	7:20 pm	SW	6			10	
9/13/2021	7:15 pm	WSW	5			10	
9/14/2021	7:10 pm	N	0			10	
9/15/2021	7:05 pm	WSW	6			10	
9/16/2021	7:00 pm	WSW	9			10	
9/17/2021	6:55 pm	SW	12			10	
9/18/2021	6:51 pm	W	10			10	
9/19/2021	6:50 pm	WSW	10			10	
9/20/2021	6:45 pm	W	10			10	
9/21/2021	6:40 pm	W	14			10	
9/22/2021	6:35 pm	W	14			10	
9/23/2021	6:30 pm	W	10			10	
9/24/2021	6:25 pm	WSW	12			10	
9/25/2021	6:20 pm	WSW	13			10	
9/26/2021	6:15 pm	WSW	13			10	
9/27/2021	6:10 pm	W	17			10	
9/28/2021	6:05 pm	W	16			10	
9/29/2021	6:00 pm	W	17			10	
9/30/2021	5:55 pm	WSW	15	G	21	10	
10/1/2021	5:51 pm	WSW	14	G	22	10	
10/2/2021	5:50 pm	W	15			10	
10/3/2021	5:45 pm	W	15			10	
10/4/2021	5:40 pm	W	16			10	
10/5/2021	5:35 pm	W	17			10	
10/6/2021	5:30 pm	W	14			10	
10/7/2021	5:25 pm	W	16			10	
10/8/2021	5:20 pm	W	16			10	
10/9/2021	5:15 pm	WNW	18			10	
10/10/2021	5:10 pm	W	17			10	
10/11/2021	5:05 pm	WNW	20			10	
10/12/2021	5:00 pm	W	15			10	
10/13/2021	4:55 pm	W	18	G	24	10	
10/14/2021	4:51 pm	WSW	15	G	24	10	
10/15/2021	4:50 pm	W	16			10	
10/16/2021	4:45 pm	W	17			10	
10/17/2021	4:40 pm	W	16			10	
10/18/2021	4:35 pm	W	15			10	
10/19/2021	4:30 pm	WNW	18			10	
10/20/2021	4:25 pm	WSW	13			10	
10/21/2021	4:20 pm	W	16	G	24	10	
10/22/2021	4:15 pm	W	15	G	21	10	
10/23/2021	4:10 pm	WSW	13			10	
10/24/2021	4:05 pm	W	17			10	
10/25/2021	4:00 pm	W	14			10	
10/26/2021	3:55 pm	W	12	G	17	10	
10/27/2021	3:51 pm	WNW	15	G	24	10	
10/28/2021	3:50 pm	WNW	17			10	
10/29/2021	3:45 pm	WNW	12			10	
10/30/2021	3:40 pm	W	10			10	
10/31/2021	3:35 pm	WSW	15	G	21	10	
11/1/2021	3:30 pm	SW	13			10	
11/2/2021	3:25 pm	WSW	12			10	
11/3/2021	3:20 pm	W	15	G	21	10	
11/4/2021	3:15 pm	WNW	14	G	20	10	
11/5/2021	3:10 pm	WNW	12			10	
11/6/2021	3:05 pm	W	15			10	
11/7/2021	3:00 pm	W	12			10	
11/8/2021	2:55 pm	W	15			10	
11/9/2021	2:51 pm	WNW	12	G	23	10	
11/10/2021	2:50 pm	WNW	14			10	
11/11/2021	2:45 pm	W	17			10	
11/12/2021	2:40 pm	WSW	14	G	20	10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
11/13/2021	2:35 pm	WSW	10			10	
11/14/2021	2:30 pm	W	16			10	
11/15/2021	2:25 pm	WSW	16			10	
11/16/2021	2:20 pm	W	17			10	
11/17/2021	2:15 pm	WNW	14			10	
11/18/2021	2:10 pm	WSW	13			10	
11/19/2021	2:05 pm	WNW	15			10	
11/20/2021	2:00 pm	W	15			10	
11/21/2021	1:55 pm	WNW	14			10	
11/22/2021	1:51 pm	NW	13	G	23	10	
11/23/2021	1:50 pm	WNW	13			10	
11/24/2021	1:45 pm	WNW	18			10	
11/25/2021	1:40 pm	W	9			10	
11/26/2021	1:35 pm	W	6			10	
11/27/2021	1:30 pm	W	16			10	
11/28/2021	1:25 pm	SSW	9			10	
11/29/2021	1:20 pm	WNW	6			10	
11/30/2021	1:15 pm					10	
12/1/2021	1:10 pm	W	9			10	
12/2/2021	1:05 pm	SSW	8			10	
12/3/2021	1:00 pm	N	0			10	
12/4/2021	12:55 pm	WSW	5			10	
12/5/2021	12:51 pm		7			10	
12/6/2021	12:50 pm	WNW	7			10	
12/7/2021	12:45 pm	WSW	5			10	
12/8/2021	12:40 pm	W	6			10	
12/9/2021	12:35 pm	WSW	8			10	
12/10/2021	12:30 pm	SSW	5			10	
12/11/2021	12:25 pm	W	5			10	
12/12/2021	12:20 pm	WSW	10			10	
12/13/2021	12:15 pm	SW	9			10	
12/14/2021	12:10 pm	WNW	3			10	
12/15/2021	12:05 pm	SSW	8			10	
12/16/2021	12:00 pm	SW	7			10	
12/17/2021	11:55 am					10	
12/18/2021	11:51 am	WSW	9			10	
12/19/2021	11:50 am					10	
12/20/2021	11:45 am					10	
12/21/2021	11:40 am	N	0			10	
12/22/2021	11:35 am	W	9			10	
12/23/2021	11:30 am	WSW	12			10	
12/24/2021	11:25 am	NW	3			10	
12/25/2021	11:20 am	WSW	7			10	
12/26/2021	11:15 am	NW	3			10	
12/27/2021	11:10 am	W	3			10	
12/28/2021	11:05 am	W	9			10	
12/29/2021	11:00 am	W	8			10	
12/30/2021	10:55 am	W	8			6	Haze
12/31/2021	10:51 am	WSW	7			10	Haze
1/1/2022	10:50 am	SW	8			6	Haze
1/2/2022	10:45 am					10	
1/3/2022	10:40 am	S	5			10	
1/4/2022	10:35 am	W	3			10	
1/5/2022	10:30 am	N	5			10	
1/6/2022	10:25 am	NW	5			10	
1/7/2022	10:20 am	WNW	5			10	
1/8/2022	10:15 am	W	6			10	
1/9/2022	10:10 am	W	7			10	
1/10/2022	10:05 am	SSW	13			10	
1/11/2022	10:00 am	SE	7			10	
1/12/2022	9:55 am	S	3			10	
1/13/2022	9:51 am	SSE	8			10	
1/14/2022	9:50 am	SE	7			10	

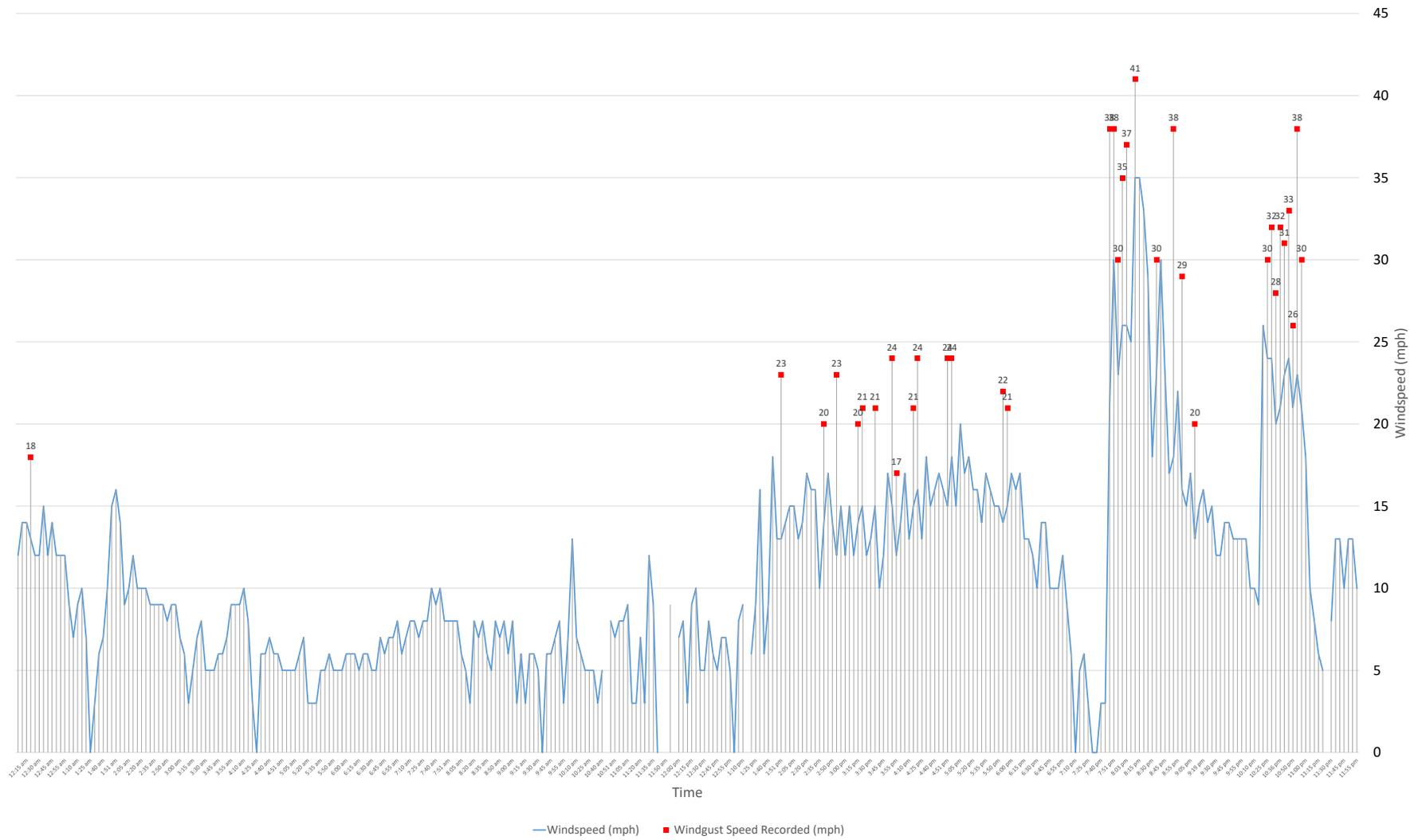
Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
1/15/2022	9:45 am	S	6			10	
1/16/2022	9:40 am	SSW	6			10	
1/17/2022	9:35 am	N	0			10	
1/18/2022	9:30 am	SW	5			10	
1/19/2022	9:25 am	W	6			10	
1/20/2022	9:20 am	WNW	6			10	
1/21/2022	9:15 am	SSW	3			10	
1/22/2022	9:10 am	S	6			10	
1/23/2022	9:05 am	WSW	3			10	
1/24/2022	9:00 am	S	8			10	
1/25/2022	8:55 am	SSE	6			10	
1/26/2022	8:51 am	SSE	8			10	
1/27/2022	8:50 am	SE	7			10	
1/28/2022	8:45 am	SSE	8			10	
1/29/2022	8:40 am	S	5			10	
1/30/2022	8:35 am	SSE	6			10	
1/31/2022	8:30 am	S	8			10	
2/1/2022	8:25 am	S	7			10	
2/2/2022	8:20 am	S	8			10	
2/3/2022	8:15 am	S	3			10	
2/4/2022	8:10 am	SSW	5			10	
2/5/2022	8:05 am	S	6			10	
2/6/2022	8:00 am	S	8			10	
2/7/2022	7:55 am	S	8			10	
2/8/2022	7:51 am	SSE	8			10	
2/9/2022	7:50 am	SSE	8			10	
2/10/2022	7:45 am	S	10			10	
2/11/2022	7:40 am	SSE	9			10	
2/12/2022	7:35 am	SSE	10			10	
2/13/2022	7:30 am	SE	8			10	
2/14/2022	7:25 am	SE	8			10	
2/15/2022	7:20 am	SSE	7			10	
2/16/2022	7:15 am	SSE	8			10	
2/17/2022	7:10 am	SE	8			10	
2/18/2022	7:05 am	SSE	7			10	
2/19/2022	7:00 am	SSE	6			10	
2/20/2022	6:55 am	SE	8			10	
2/21/2022	6:51 am	SSE	7			10	
2/22/2022	6:50 am	SSE	7			10	
2/23/2022	6:45 am	SSE	6			10	
2/24/2022	6:40 am	SSE	7			10	
2/25/2022	6:35 am	SE	5			10	
2/26/2022	6:30 am	SSE	5			10	
2/27/2022	6:25 am	SSE	6			10	
2/28/2022	6:20 am	SE	6			10	
3/1/2022	6:15 am	SE	5			10	
3/2/2022	6:10 am	SE	6			10	
3/3/2022	6:05 am	SE	6			10	
3/4/2022	6:00 am	SSE	6			10	
3/5/2022	5:55 am	SSE	5			10	
3/6/2022	5:51 am	SSE	5			10	
3/7/2022	5:50 am	SE	5			10	
3/8/2022	5:45 am	SSE	6			10	
3/9/2022	5:40 am	SSE	5			10	
3/10/2022	5:35 am	SSE	5			10	
3/11/2022	5:30 am	SSE	3			10	
3/12/2022	5:25 am	SSE	3			10	
3/13/2022	5:20 am	SSE	3			10	
3/14/2022	5:15 am	SSE	7			10	
3/15/2022	5:10 am	SSE	6			10	
3/16/2022	5:05 am	SSE	5			10	
3/17/2022	5:00 am	S	5			10	
3/18/2022	4:55 am	S	5			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
3/19/2022	4:51 am	S	5			10	
3/20/2022	4:50 am	S	6			10	
3/21/2022	4:45 am	S	6			10	
3/22/2022	4:40 am	SSE	7			10	
3/23/2022	4:35 am	SSE	6			10	
3/24/2022	4:30 am	SSE	6			10	
3/25/2022	4:25 am	N	0			10	
3/26/2022	4:20 am	SW	3			10	
3/27/2022	4:15 am	S	8			10	
3/28/2022	4:10 am	S	10			10	
3/29/2022	4:05 am	SSE	9			10	
3/30/2022	4:00 am	S	9			10	
3/31/2022	3:55 am	S	9			10	
4/1/2022	3:51 am	S	7			10	
4/2/2022	3:50 am	S	6			10	
4/3/2022	3:45 am	S	6			10	
4/4/2022	3:40 am	SSW	5			10	
4/5/2022	3:35 am	WNW	5			10	
4/6/2022	3:30 am	NNW	5			10	
4/7/2022	3:25 am	NNW	8			10	
4/8/2022	3:20 am	N	7			10	
4/9/2022	3:15 am	NNW	5			10	
4/10/2022	3:10 am	N	3			10	
4/11/2022	3:05 am	NE	6			10	
4/12/2022	3:00 am	ENE	7			10	
4/13/2022	2:55 am	E	9			10	
4/14/2022	2:51 am	E	9			10	
4/15/2022	2:50 am	E	8			10	
4/16/2022	2:45 am	E	9			10	
4/17/2022	2:40 am	ENE	9			10	
4/18/2022	2:35 am	ENE	9			10	
4/19/2022	2:30 am	ENE	9			10	
4/20/2022	2:25 am	ENE	10			10	
4/21/2022	2:20 am	ENE	10			10	
4/22/2022	2:15 am	E	10			10	
4/23/2022	2:10 am	ENE	12			10	
4/24/2022	2:05 am	NE	10			10	
4/25/2022	2:00 am	NE	9			10	
4/26/2022	1:55 am	E	14			10	
4/27/2022	1:51 am	E	16			10	
4/28/2022	1:50 am	E	15			10	
4/29/2022	1:45 am	NE	10			10	
4/30/2022	1:40 am	N	7			10	
5/1/2022	1:35 am	NNE	6			10	
5/2/2022	1:30 am	N	3			10	
5/3/2022	1:25 am	N	0			10	
5/4/2022	1:20 am	NW	7			10	
5/5/2022	1:15 am	WNW	10			10	
5/6/2022	1:10 am	W	9			10	
5/7/2022	1:05 am	WSW	7			10	
5/8/2022	1:00 am	WSW	9			10	
5/9/2022	12:55 am	W	12			10	
5/10/2022	12:51 am	WSW	12			10	
5/11/2022	12:50 am	SW	12			10	
5/12/2022	12:45 am	W	14			10	
5/13/2022	12:40 am	W	12			10	
5/14/2022	12:35 am	SW	15			10	
5/15/2022	12:30 am	SW	12			10	
5/16/2022	12:25 am	SW	12			10	
5/17/2022	12:20 am	SW	13	G	18	10	
5/18/2022	12:15 am	SSW	14			10	
5/19/2022	12:10 am	SSW	14			10	
5/20/2022	12:05 am	SSW	12			10	

SCT060 BKN120

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
5/21/2022	12:00 am	S	15			10	SCT060 BKN120

5-Minute Wind Speed at Phoenix Sky Harbor International Airport, 07-10-2021



Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/11/2021	11:51 pm	W	21	G	28	2.5	Dust
10/11/2021	11:50 pm	W	20	G	28	2.5	
10/11/2021	11:45 pm	W	18	G	24	2.5	
10/11/2021	11:40 pm	W	16			2.5	Blowing dust
10/11/2021	11:35 pm	W	17			2.5	Blowing dust
10/11/2021	11:30 pm	WNW	20			2.5	Blowing dust
10/11/2021	11:28 pm	WNW	21			2.5	Blowing dust
10/11/2021	11:25 pm	WNW	21			2.5	Blowing dust
10/11/2021	11:20 pm	W	20	G	26	2.5	Blowing dust
10/11/2021	11:15 pm	W	22	G	28	3	Blowing dust
10/11/2021	11:10 pm	W	16	G	25	3.5	Blowing dust
10/11/2021	11:05 pm	WSW	14	G	20	4	Haze, Blowing dust
10/11/2021	11:00 pm	WSW	12	G	20	5	Lt rain, Blowing dust
10/11/2021	10:56 pm	W	13			3	Lt rain, Blowing dust
10/11/2021	10:55 pm	WSW	14			2.5	Rain, Blowing dust
10/11/2021	10:51 pm	W	21	G	38	2.5	Hvy rain, Blowing dust
10/11/2021	10:50 pm	W	22			2.5	Hvy rain, Blowing dust
10/11/2021	10:45 pm	W	29	G	37	3	Lt rain, Blowing dust
10/11/2021	10:44 pm	W	28	G	46	3	Lt rain, Blowing dust
10/11/2021	10:40 pm	W	26	G	35	7	
10/11/2021	10:35 pm	SSW	20	G	25	10	
10/11/2021	10:30 pm	SSW	22	G	30	9	
10/11/2021	10:25 pm	S	22	G	35	9	
10/11/2021	10:20 pm	S	17			9	
10/11/2021	10:15 pm	S	24	G	32	9	
10/11/2021	10:10 pm	S	23	G	30	10	
10/11/2021	10:05 pm	S	25	G	32	10	
10/11/2021	10:00 pm	S	23	G	32	10	
10/11/2021	9:55 pm	S	17	G	26	10	
10/11/2021	9:51 pm	S	20	G	33	10	
10/11/2021	9:50 pm	S	21	G	26	10	
10/11/2021	9:45 pm	S	20	G	32	10	
10/11/2021	9:40 pm	S	23			10	
10/11/2021	9:35 pm	S	20			10	
10/11/2021	9:30 pm	S	23			10	
10/11/2021	9:25 pm	S	16			10	
10/11/2021	9:20 pm	S	18			10	
10/11/2021	9:15 pm	S	16			10	
10/11/2021	9:10 pm	S	16			10	
10/11/2021	9:05 pm	S	18			10	
10/11/2021	9:00 pm	S	14			10	
10/11/2021	8:55 pm	S	17			10	
10/11/2021	8:51 pm	SSW	22	G	39	10	
10/11/2021	8:50 pm	S	25	G	38	10	
10/11/2021	8:45 pm	S	21	G	32	10	
10/11/2021	8:40 pm	SSW	20			10	
10/11/2021	8:35 pm	SSW	16	G	22	10	
10/11/2021	8:30 pm	SSW	20	G	25	10	
10/11/2021	8:25 pm	SSW	22	G	29	10	
10/11/2021	8:20 pm	SSW	25	G	36	10	
10/11/2021	8:15 pm	SSW	26	G	33	10	
10/11/2021	8:10 pm	SSW	28	G	36	10	
10/11/2021	8:05 pm	SSW	21	G	36	10	
10/11/2021	8:00 pm	SSW	17	G	24	10	
10/11/2021	7:55 pm	SSW	20	G	26	10	
10/11/2021	7:51 pm	SSW	18	G	32	10	
10/11/2021	7:50 pm	SSW	20			10	
10/11/2021	7:45 pm	SSW	23	G	30	10	
10/11/2021	7:40 pm	SSW	24	G	31	10	
10/11/2021	7:35 pm	SSW	22	G	29	10	
10/11/2021	7:30 pm	SSW	23	G	29	10	
10/11/2021	7:25 pm	SW	18	G	31	10	
10/11/2021	7:20 pm	SSW	18	G	31	10	

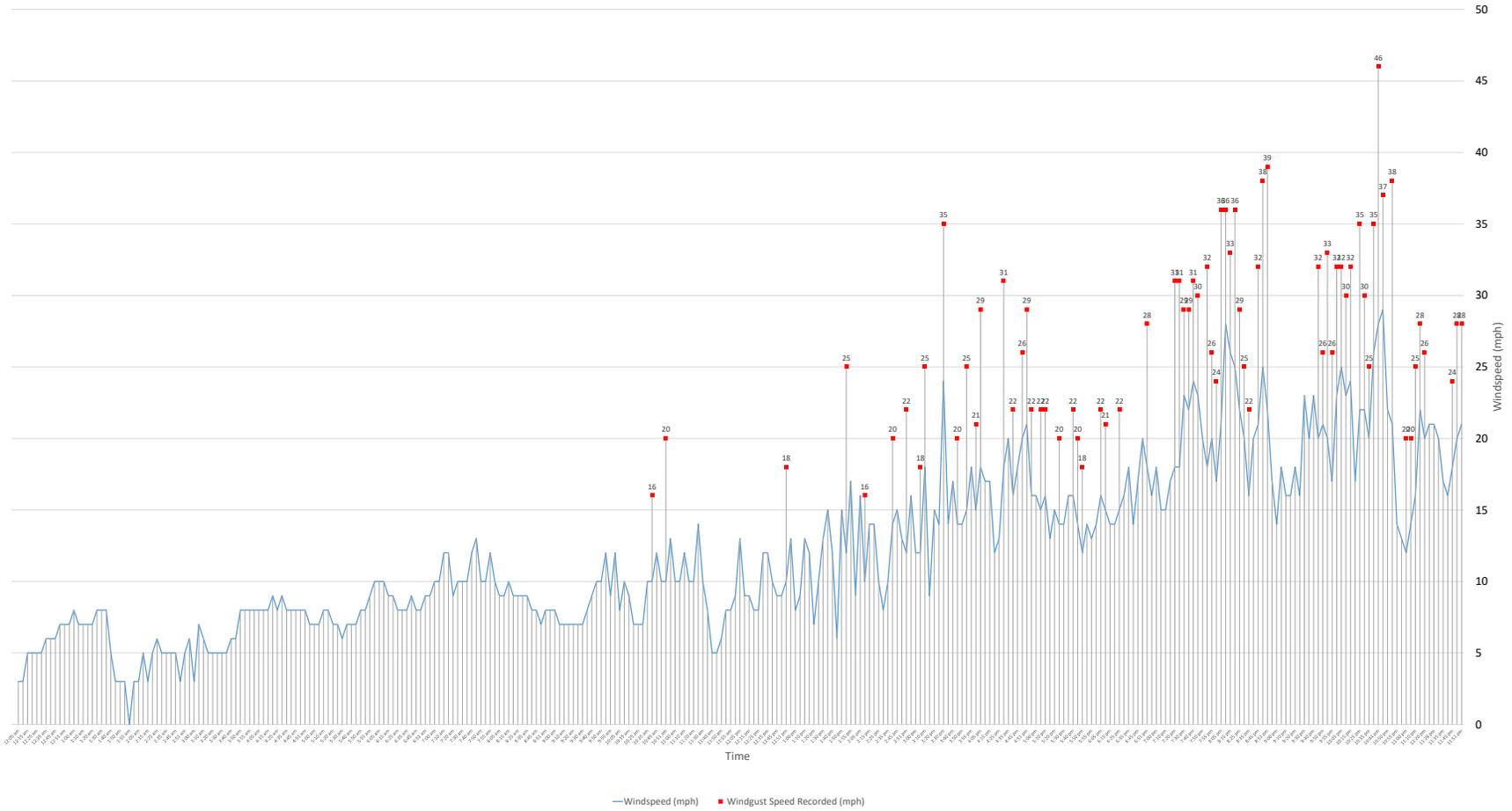
Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/11/2021	7:15 pm	SSW	17			10	
10/11/2021	7:10 pm	SSW	15			10	
10/11/2021	7:05 pm	SSW	15			10	
10/11/2021	7:00 pm	SSW	18			10	
10/11/2021	6:55 pm	SSW	16			10	
10/11/2021	6:51 pm	SSW	18	G	28	10	
10/11/2021	6:50 pm	SSW	20			10	
10/11/2021	6:45 pm	SW	17			10	
10/11/2021	6:40 pm	SSW	14			10	
10/11/2021	6:35 pm	SW	18			10	
10/11/2021	6:30 pm	SSW	16			10	
10/11/2021	6:25 pm	SSW	15	G	22	10	
10/11/2021	6:20 pm	SSW	14			10	
10/11/2021	6:15 pm	SSW	14			10	
10/11/2021	6:10 pm	SSW	15	G	21	10	
10/11/2021	6:05 pm	SSW	16	G	22	10	
10/11/2021	6:00 pm	SSW	14			10	
10/11/2021	5:55 pm	SSW	13			10	
10/11/2021	5:51 pm	SSW	14			10	
10/11/2021	5:50 pm	SSW	12	G	18	10	
10/11/2021	5:45 pm	SSW	14	G	20	10	
10/11/2021	5:40 pm	SSW	16	G	22	10	
10/11/2021	5:35 pm	SSW	16			10	
10/11/2021	5:30 pm	SSW	14			10	
10/11/2021	5:25 pm	SSW	14	G	20	10	
10/11/2021	5:20 pm	SSW	15			10	
10/11/2021	5:15 pm	S	13			10	
10/11/2021	5:10 pm	SSW	16	G	22	10	
10/11/2021	5:05 pm	SSW	15	G	22	10	
10/11/2021	5:00 pm	SSW	16			10	
10/11/2021	4:55 pm	SSW	16	G	22	10	
10/11/2021	4:51 pm	SSW	21	G	29	10	
10/11/2021	4:50 pm	SSW	20	G	26	10	
10/11/2021	4:45 pm	SSW	18			10	
10/11/2021	4:40 pm	SSW	16	G	22	10	
10/11/2021	4:35 pm	S	20			10	
10/11/2021	4:30 pm	SSW	18	G	31	10	
10/11/2021	4:25 pm	SW	13			10	
10/11/2021	4:20 pm	SSW	12			10	
10/11/2021	4:15 pm	SW	17			10	
10/11/2021	4:10 pm	SW	17			10	
10/11/2021	4:05 pm	SW	18	G	29	10	
10/11/2021	4:00 pm	SW	15	G	21	10	
10/11/2021	3:55 pm	SSW	18			10	
10/11/2021	3:51 pm	SW	15	G	25	10	
10/11/2021	3:50 pm	SSW	14			10	
10/11/2021	3:45 pm	SSW	14	G	20	10	
10/11/2021	3:40 pm	SSW	17			10	
10/11/2021	3:35 pm	SSW	14			10	
10/11/2021	3:30 pm	SSW	24	G	35	10	
10/11/2021	3:25 pm	SW	14			10	
10/11/2021	3:20 pm	SW	15			10	
10/11/2021	3:15 pm	SSW	9			10	
10/11/2021	3:10 pm	SW	18	G	25	10	
10/11/2021	3:05 pm	SW	12	G	18	10	
10/11/2021	3:00 pm	S	12			10	
10/11/2021	2:55 pm	SSW	16			10	
10/11/2021	2:51 pm	WSW	12	G	22	10	
10/11/2021	2:50 pm	WSW	13			10	
10/11/2021	2:45 pm	SW	15			10	
10/11/2021	2:40 pm	SW	14	G	20	10	
10/11/2021	2:35 pm	SW	10			10	
10/11/2021	2:30 pm	SSW	8			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/11/2021	2:25 pm	SSW	10			10	
10/11/2021	2:20 pm	SSW	14			10	
10/11/2021	2:15 pm	SW	14			10	
10/11/2021	2:10 pm	SSW	10	G	16	10	
10/11/2021	2:05 pm	SSW	16			10	
10/11/2021	2:00 pm	S	9			10	
10/11/2021	1:55 pm	S	17			10	
10/11/2021	1:51 pm	S	12	G	25	10	
10/11/2021	1:50 pm	S	15			10	
10/11/2021	1:45 pm	WSW	6			10	
10/11/2021	1:40 pm	SW	12			10	
10/11/2021	1:35 pm	SSW	15			10	
10/11/2021	1:30 pm	S	13			10	
10/11/2021	1:25 pm	SSW	10			10	
10/11/2021	1:20 pm	WSW	7			10	
10/11/2021	1:15 pm	SSW	12			10	
10/11/2021	1:10 pm	SW	13			10	
10/11/2021	1:05 pm	SW	9			10	
10/11/2021	1:00 pm	S	8			10	
10/11/2021	12:55 pm	SSW	13			10	
10/11/2021	12:51 pm	S	10	G	18	10	
10/11/2021	12:50 pm	SSE	9			10	
10/11/2021	12:45 pm	SSW	9			10	
10/11/2021	12:40 pm	SSE	10			10	
10/11/2021	12:35 pm	S	12			10	
10/11/2021	12:30 pm	SSW	12			10	
10/11/2021	12:25 pm	S	8			10	
10/11/2021	12:20 pm	SE	8			10	
10/11/2021	12:15 pm	SSE	9			10	
10/11/2021	12:10 pm	S	9			10	
10/11/2021	12:05 pm	S	13			10	
10/11/2021	12:00 pm	SE	9			10	
10/11/2021	11:55 am	SSE	8			10	
10/11/2021	11:51 am	S	8			10	
10/11/2021	11:50 am	S	6			10	
10/11/2021	11:45 am	SSE	5			10	
10/11/2021	11:40 am	SE	5			10	
10/11/2021	11:35 am	SSE	8			10	
10/11/2021	11:30 am	SSE	10			10	
10/11/2021	11:25 am	S	14			10	
10/11/2021	11:20 am	SSE	10			10	
10/11/2021	11:15 am	SE	10			10	
10/11/2021	11:10 am	SSE	12			10	
10/11/2021	11:05 am	SSE	10			10	
10/11/2021	11:00 am	SE	10			10	
10/11/2021	10:55 am	SSE	13			10	
10/11/2021	10:51 am	SSE	10	G	20	10	
10/11/2021	10:50 am	SSE	10			10	
10/11/2021	10:45 am	SSE	12			10	
10/11/2021	10:40 am	SE	10	G	16	10	
10/11/2021	10:35 am	SSE	10			10	
10/11/2021	10:30 am	ESE	7			10	
10/11/2021	10:25 am	SE	7			10	
10/11/2021	10:20 am	SE	7			10	
10/11/2021	10:15 am	ESE	9			10	
10/11/2021	10:10 am	SSE	10			10	
10/11/2021	10:05 am	SE	8			10	
10/11/2021	10:00 am	SE	12			10	
10/11/2021	9:55 am	SSE	9			10	
10/11/2021	9:51 am	SSE	12			10	
10/11/2021	9:50 am	SSE	10			10	
10/11/2021	9:45 am	SE	10			10	
10/11/2021	9:40 am	SE	9			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/11/2021	9:35 am	SE	8			10	
10/11/2021	9:30 am	SSE	7			10	
10/11/2021	9:25 am	SE	7			10	
10/11/2021	9:20 am	ESE	7			10	
10/11/2021	9:15 am	E	7			10	
10/11/2021	9:10 am	E	7			10	
10/11/2021	9:05 am	ESE	7			10	
10/11/2021	9:00 am	ESE	8			10	
10/11/2021	8:55 am	ESE	8			10	
10/11/2021	8:51 am	ESE	8			10	
10/11/2021	8:50 am	ESE	7			10	
10/11/2021	8:45 am	ESE	8			10	
10/11/2021	8:40 am	ESE	8			10	
10/11/2021	8:35 am	ESE	9			10	
10/11/2021	8:30 am	ESE	9			10	
10/11/2021	8:25 am	ESE	9			10	
10/11/2021	8:20 am	ESE	9			10	
10/11/2021	8:15 am	ESE	10			10	
10/11/2021	8:10 am	ESE	9			10	
10/11/2021	8:05 am	E	9			10	
10/11/2021	8:00 am	ESE	10			10	
10/11/2021	7:55 am	E	12			10	
10/11/2021	7:51 am	ESE	10			10	
10/11/2021	7:50 am	ESE	10			10	
10/11/2021	7:45 am	ESE	13			10	
10/11/2021	7:40 am	ESE	12			10	
10/11/2021	7:35 am	E	10			10	
10/11/2021	7:30 am	E	10			10	
10/11/2021	7:25 am	E	10			10	
10/11/2021	7:20 am	E	9			10	
10/11/2021	7:15 am	ESE	12			10	
10/11/2021	7:10 am	ESE	12			10	
10/11/2021	7:05 am	ESE	10			10	
10/11/2021	7:00 am	E	10			10	
10/11/2021	6:55 am	E	9			10	
10/11/2021	6:51 am	E	9			10	
10/11/2021	6:50 am	E	8			10	
10/11/2021	6:45 am	E	8			10	
10/11/2021	6:40 am	E	9			10	
10/11/2021	6:35 am	E	8			9	
10/11/2021	6:30 am	E	8			10	
10/11/2021	6:25 am	ESE	8			10	
10/11/2021	6:20 am	ESE	9			10	
10/11/2021	6:15 am	E	9			10	
10/11/2021	6:10 am	E	10			10	
10/11/2021	6:05 am	E	10			10	
10/11/2021	6:00 am	E	10			10	
10/11/2021	5:55 am	ESE	9			10	
10/11/2021	5:51 am	ESE	8			10	
10/11/2021	5:50 am	ESE	8			10	
10/11/2021	5:45 am	ESE	7			10	
10/11/2021	5:40 am	ESE	7			10	
10/11/2021	5:35 am	E	7			10	
10/11/2021	5:30 am	E	6			10	
10/11/2021	5:25 am	ESE	7			10	
10/11/2021	5:20 am	E	7			10	
10/11/2021	5:15 am	E	8			10	
10/11/2021	5:10 am	E	8			10	
10/11/2021	5:05 am	E	7			10	
10/11/2021	5:00 am	E	7			10	
10/11/2021	4:55 am	ESE	7			10	
10/11/2021	4:51 am	ESE	8			10	
10/11/2021	4:50 am	ESE	8			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/11/2021	4:45 am	E	8			10	
10/11/2021	4:40 am	E	8			10	
10/11/2021	4:35 am	E	8			10	
10/11/2021	4:30 am	E	9			10	
10/11/2021	4:25 am	E	8			10	
10/11/2021	4:20 am	ESE	9			10	
10/11/2021	4:15 am	ESE	8			10	
10/11/2021	4:10 am	ESE	8			10	
10/11/2021	4:05 am	ESE	8			10	
10/11/2021	4:00 am	ESE	8			10	
10/11/2021	3:55 am	ESE	8			10	
10/11/2021	3:51 am	ESE	8			10	
10/11/2021	3:50 am	ESE	8			10	
10/11/2021	3:45 am	ESE	6			10	
10/11/2021	3:40 am	ESE	6			10	
10/11/2021	3:35 am	ESE	5			10	
10/11/2021	3:30 am	ESE	5			10	
10/11/2021	3:25 am	E	5			10	
10/11/2021	3:20 am	E	5			10	
10/11/2021	3:15 am	ESE	5			10	
10/11/2021	3:10 am	ESE	6			10	
10/11/2021	3:05 am	E	7			10	
10/11/2021	3:00 am	E	3			10	
10/11/2021	2:55 am	E	6			10	
10/11/2021	2:51 am	E	5			10	
10/11/2021	2:50 am	ESE	3			10	
10/11/2021	2:45 am	ESE	5			6	Haze
10/11/2021	2:40 am	SE	5			5	Haze
10/11/2021	2:35 am	SE	5			6	Haze
10/11/2021	2:30 am	ESE	5			8	
10/11/2021	2:25 am	ESE	6			10	
10/11/2021	2:20 am	ESE	5			10	
10/11/2021	2:15 am	ESE	3			10	
10/11/2021	2:10 am	SE	5			10	
10/11/2021	2:05 am	ESE	3			10	
10/11/2021	2:00 am	SSE	3			10	
10/11/2021	1:55 am	N	0			10	
10/11/2021	1:51 am	SSE	3			10	
10/11/2021	1:50 am	SSE	3			10	
10/11/2021	1:45 am	ESE	3			10	
10/11/2021	1:40 am	E	5			10	
10/11/2021	1:35 am	E	8			10	
10/11/2021	1:30 am	E	8			10	
10/11/2021	1:25 am	E	8			10	
10/11/2021	1:20 am	E	7			10	
10/11/2021	1:15 am	E	7			10	
10/11/2021	1:10 am	E	7			10	
10/11/2021	1:05 am	E	7			10	
10/11/2021	1:00 am	E	8			10	
10/11/2021	12:55 am	E	7			10	
10/11/2021	12:51 am	E	7			10	
10/11/2021	12:50 am	E	7			10	
10/11/2021	12:45 am	E	6			10	
10/11/2021	12:40 am	E	6			10	
10/11/2021	12:35 am	E	6			10	
10/11/2021	12:30 am	E	5			10	
10/11/2021	12:25 am	E	5			10	
10/11/2021	12:20 am	E	5			10	
10/11/2021	12:15 am	E	5			10	
10/11/2021	12:10 am	E	3			10	
10/11/2021	12:05 am	E	3			10	

5-Minute Wind Speed at Phoenix Sky Harbor International Airport, 10/11/2021



Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/12/2021	11:55 pm	E	8			10	
10/12/2021	11:51 pm	E	7			10	
10/12/2021	11:50 pm	E	7			10	
10/12/2021	11:45 pm	E	8			10	
10/12/2021	11:40 pm	E	6			10	
10/12/2021	11:35 pm	E	3			10	
10/12/2021	11:30 pm	N	0			10	
10/12/2021	11:25 pm	N	0			10	
10/12/2021	11:20 pm	N	0			10	
10/12/2021	11:15 pm	SSW	3			10	
10/12/2021	11:10 pm	SW	5			10	
10/12/2021	11:05 pm	SW	5			10	
10/12/2021	11:00 pm	SW	3			10	
10/12/2021	10:55 pm	N	0			10	
10/12/2021	10:51 pm	N	0			10	
10/12/2021	10:50 pm	N	0			10	
10/12/2021	10:45 pm	N	0			10	
10/12/2021	10:40 pm	W	3			10	
10/12/2021	10:35 pm	N	0			10	
10/12/2021	10:30 pm	N	0			10	
10/12/2021	10:25 pm	N	0			10	
10/12/2021	10:20 pm	N	0			10	
10/12/2021	10:15 pm	N	0			10	
10/12/2021	10:10 pm	N	0			10	
10/12/2021	10:05 pm	N	0			10	
10/12/2021	10:00 pm	SSW	3			10	
10/12/2021	9:55 pm	N	0			10	
10/12/2021	9:51 pm	N	0			10	
10/12/2021	9:50 pm	N	0			10	
10/12/2021	9:45 pm	N	0			10	
10/12/2021	9:40 pm	SW	3			10	
10/12/2021	9:35 pm	SW	3			10	
10/12/2021	9:30 pm	SW	3			10	
10/12/2021	9:25 pm	SW	5			10	
10/12/2021	9:20 pm	SW	5			10	
10/12/2021	9:15 pm	SW	3			10	
10/12/2021	9:10 pm	SW	3			10	
10/12/2021	9:05 pm	SW	3			10	
10/12/2021	9:00 pm	SW	5			10	
10/12/2021	8:55 pm	WSW	5			10	
10/12/2021	8:51 pm	SW	5			10	
10/12/2021	8:50 pm	SW	5			10	
10/12/2021	8:45 pm	SW	5			10	
10/12/2021	8:40 pm	SW	3			10	
10/12/2021	8:35 pm	SSW	3			10	
10/12/2021	8:30 pm	SW	5			10	
10/12/2021	8:25 pm	SW	3			10	
10/12/2021	8:20 pm	SW	3			10	
10/12/2021	8:15 pm	SSW	5			10	
10/12/2021	8:10 pm	SSW	6			10	
10/12/2021	8:05 pm	SSW	5			10	
10/12/2021	8:00 pm	SSW	5			10	
10/12/2021	7:55 pm	SSW	5			10	
10/12/2021	7:51 pm	SW	6			10	
10/12/2021	7:50 pm	SSW	6			10	
10/12/2021	7:45 pm	SSW	6			10	
10/12/2021	7:40 pm	SSW	6			10	
10/12/2021	7:35 pm	SW	5			10	
10/12/2021	7:30 pm	N	0			10	
10/12/2021	7:25 pm	WSW	3			10	
10/12/2021	7:20 pm	W	5			10	
10/12/2021	7:15 pm	W	6			10	
10/12/2021	7:10 pm	W	6			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/12/2021	7:05 pm	WNW	6			10	
10/12/2021	7:00 pm	W	6			10	
10/12/2021	6:55 pm	WNW	7			10	
10/12/2021	6:51 pm	W	6			10	
10/12/2021	6:50 pm	W	7			10	
10/12/2021	6:45 pm	W	8			10	
10/12/2021	6:40 pm	W	7			10	
10/12/2021	6:35 pm	WNW	8			10	
10/12/2021	6:30 pm	W	8			10	
10/12/2021	6:25 pm	W	8			10	
10/12/2021	6:20 pm	WNW	10			10	
10/12/2021	6:15 pm	NW	10	G	16	10	
10/12/2021	6:10 pm	NW	9			10	
10/12/2021	6:05 pm	WNW	12			10	
10/12/2021	6:00 pm	WNW	12			10	
10/12/2021	5:55 pm	WNW	10			10	
10/12/2021	5:51 pm	WNW	10			10	
10/12/2021	5:50 pm	WNW	10			10	
10/12/2021	5:45 pm	WNW	14			10	
10/12/2021	5:40 pm	W	12			10	
10/12/2021	5:35 pm	WNW	7			10	
10/12/2021	5:30 pm	W	9			10	
10/12/2021	5:25 pm	W	13			10	
10/12/2021	5:20 pm	WNW	8			10	
10/12/2021	5:15 pm	W	13			10	
10/12/2021	5:10 pm	WNW	13			10	
10/12/2021	5:05 pm	WNW	14			10	
10/12/2021	5:00 pm	WNW	13			10	
10/12/2021	4:55 pm					10	
10/12/2021	4:51 pm		3			10	
10/12/2021	4:50 pm	SW	6			10	
10/12/2021	4:45 pm	WNW	9			10	
10/12/2021	4:40 pm	W	7			10	
10/12/2021	4:35 pm	WNW	10			10	
10/12/2021	4:30 pm	W	3			10	
10/12/2021	4:25 pm	W	8			10	
10/12/2021	4:20 pm	WSW	6			10	
10/12/2021	4:15 pm	WNW	8			10	
10/12/2021	4:10 pm	WNW	13			10	
10/12/2021	4:05 pm	WNW	10			10	
10/12/2021	4:00 pm	WNW	13			10	
10/12/2021	3:55 pm					10	
10/12/2021	3:51 pm	WNW	15	G	18	10	
10/12/2021	3:50 pm	NW	6			10	
10/12/2021	3:45 pm	WNW	15			10	
10/12/2021	3:40 pm	WNW	15	G	22	10	
10/12/2021	3:35 pm	WNW	13			10	
10/12/2021	3:30 pm	WNW	15			10	
10/12/2021	3:25 pm	W	10	G	18	10	
10/12/2021	3:20 pm	WNW	5			10	
10/12/2021	3:15 pm					10	
10/12/2021	3:10 pm	WSW	7			10	
10/12/2021	3:05 pm	W	15			10	
10/12/2021	3:00 pm	NW	10	G	17	10	
10/12/2021	2:55 pm	W	10			10	
10/12/2021	2:51 pm	W	15	G	20	10	
10/12/2021	2:50 pm	WSW	15			10	
10/12/2021	2:45 pm	NW	8			10	
10/12/2021	2:40 pm	W	10	G	18	10	
10/12/2021	2:35 pm	W	13			10	
10/12/2021	2:30 pm	WNW	13	G	21	10	
10/12/2021	2:25 pm	WNW	13			10	
10/12/2021	2:20 pm					10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/12/2021	2:15 pm	WSW	7			10	
10/12/2021	2:10 pm	W	14	G	20	10	
10/12/2021	2:05 pm	W	15			10	
10/12/2021	2:00 pm	W	13	G	18	10	
10/12/2021	1:55 pm					10	
10/12/2021	1:51 pm	W	9G	2	1	10	
10/12/2021	1:50 pm	WSW	5			10	
10/12/2021	1:45 pm	W	8			10	
10/12/2021	1:40 pm	W	10			10	
10/12/2021	1:35 pm	W	15	G	22	10	
10/12/2021	1:30 pm	WSW	7			10	
10/12/2021	1:25 pm	WNW	13			10	
10/12/2021	1:20 pm	W	13	G	21	10	
10/12/2021	1:15 pm	W	16			10	
10/12/2021	1:10 pm	W	13	G	18	10	
10/12/2021	1:05 pm	WNW	7			10	
10/12/2021	1:00 pm					10	
10/12/2021	12:55 pm	SW	14			10	
10/12/2021	12:51 pm	WSW	9	G	21	10	
10/12/2021	12:50 pm	SW	9			10	
10/12/2021	12:45 pm	SW	10			10	
10/12/2021	12:40 pm	W	12			10	
10/12/2021	12:35 pm	WSW	16			10	
10/12/2021	12:30 pm	SSW	14			10	
10/12/2021	12:25 pm	SW	9			10	
10/12/2021	12:20 pm	SW	13			10	
10/12/2021	12:15 pm	W	17			10	
10/12/2021	12:10 pm	W	15			9	
10/12/2021	12:05 pm	W	12	G	17	9	
10/12/2021	12:00 pm	W	15			9	
10/12/2021	11:55 am	W	20			9	
10/12/2021	11:51 am	SW	14	G	22	10	
10/12/2021	11:50 am	WSW	13			9	
10/12/2021	11:45 am					9	
10/12/2021	11:40 am	WSW	3			9	
10/12/2021	11:35 am	WSW	14			9	
10/12/2021	11:30 am	W	7			9	
10/12/2021	11:25 am	NNE	3	G	22	9	
10/12/2021	11:20 am	NNE	3	G	22	9	
10/12/2021	11:15 am	NNE	3	G	22	9	
10/12/2021	11:10 am	NNE	3	G	22	9	
10/12/2021	11:05 am	NNE	3	G	22	9	
10/12/2021	11:00 am	NNE	3	G	22	9	
10/12/2021	10:55 am	NNE	3	G	22	9	
10/12/2021	10:53 am	NNE	3			9	
10/12/2021	10:51 am					9	
10/12/2021	10:50 am	W	3			9	
10/12/2021	10:45 am	W	7			8	
10/12/2021	10:40 am	S	3			8	
10/12/2021	10:35 am	SSW	9			8	
10/12/2021	10:30 am	SW	8			8	
10/12/2021	10:25 am	W	12			8	
10/12/2021	10:20 am	WSW	9			8	
10/12/2021	10:15 am	W	12			8	
10/12/2021	10:10 am	WSW	8			7	
10/12/2021	10:05 am	WSW	8			7	
10/12/2021	10:00 am	WSW	8			7	
10/12/2021	9:55 am	SW	10			7	
10/12/2021	9:51 am	WSW	12			7	
10/12/2021	9:50 am	WSW	10			7	
10/12/2021	9:45 am	WSW	10	G	16	7	
10/12/2021	9:40 am	W	15			7	
10/12/2021	9:35 am	WSW	14			7	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/12/2021	9:30 am	W	13			7	
10/12/2021	9:25 am	WSW	12	G	18	7	
10/12/2021	9:20 am	WSW	12			7	
10/12/2021	9:15 am	W	13			7	
10/12/2021	9:10 am	WSW	13			7	
10/12/2021	9:05 am	W	14			7	
10/12/2021	9:00 am	W	10			7	
10/12/2021	8:55 am	W	10	G	18	7	
10/12/2021	8:51 am	W	13			7	
10/12/2021	8:50 am	W	14			7	
10/12/2021	8:45 am	SW	10			7	
10/12/2021	8:40 am	W	9			7	
10/12/2021	8:35 am	SW	9			7	
10/12/2021	8:30 am	WSW	8			7	
10/12/2021	8:25 am	WSW	7			7	
10/12/2021	8:20 am	WSW	8			7	
10/12/2021	8:15 am	SSW	7			7	
10/12/2021	8:10 am	WSW	7			7	
10/12/2021	8:05 am	SW	7			7	
10/12/2021	8:00 am	SW	6			7	
10/12/2021	7:55 am	WSW	6			7	
10/12/2021	7:51 am	SW	5			7	
10/12/2021	7:50 am	SW	6			7	
10/12/2021	7:45 am	SW	7			7	
10/12/2021	7:40 am	SW	7			7	
10/12/2021	7:35 am	WSW	6			7	
10/12/2021	7:30 am	W	6			7	
10/12/2021	7:25 am	WSW	6			7	
10/12/2021	7:20 am	SSW	6			7	
10/12/2021	7:15 am	SW	5			7	
10/12/2021	7:10 am	SW	5			7	
10/12/2021	7:05 am	SW	5			7	
10/12/2021	7:00 am	SW	5			7	
10/12/2021	6:55 am	SW	5			7	
10/12/2021	6:51 am	WSW	6			8	
10/12/2021	6:50 am	WSW	6			7	
10/12/2021	6:45 am	WSW	6			8	
10/12/2021	6:40 am	SW	6			8	
10/12/2021	6:35 am	SSW	7			8	
10/12/2021	6:30 am	W	6			9	
10/12/2021	6:25 am	WSW	3			9	
10/12/2021	6:20 am	W	3			9	
10/12/2021	6:15 am	N	0			9	
10/12/2021	6:10 am	N	0			10	
10/12/2021	6:05 am	N	0			10	
10/12/2021	6:00 am	N	0			10	
10/12/2021	5:55 am	N	0			10	
10/12/2021	5:51 am	N	0			10	
10/12/2021	5:50 am	N	0			10	
10/12/2021	5:45 am	SE	3			10	
10/12/2021	5:40 am	SSE	6			10	
10/12/2021	5:35 am	S	6			10	
10/12/2021	5:30 am	SSW	6			10	
10/12/2021	5:25 am	WSW	7			10	
10/12/2021	5:20 am	W	7			10	
10/12/2021	5:15 am	WSW	6			10	
10/12/2021	5:10 am	WSW	5			10	
10/12/2021	5:05 am	WSW	6			10	
10/12/2021	5:00 am	W	7			10	
10/12/2021	4:55 am	W	7			10	
10/12/2021	4:51 am	W	8			10	
10/12/2021	4:50 am	W	8			10	
10/12/2021	4:45 am	W	8			10	

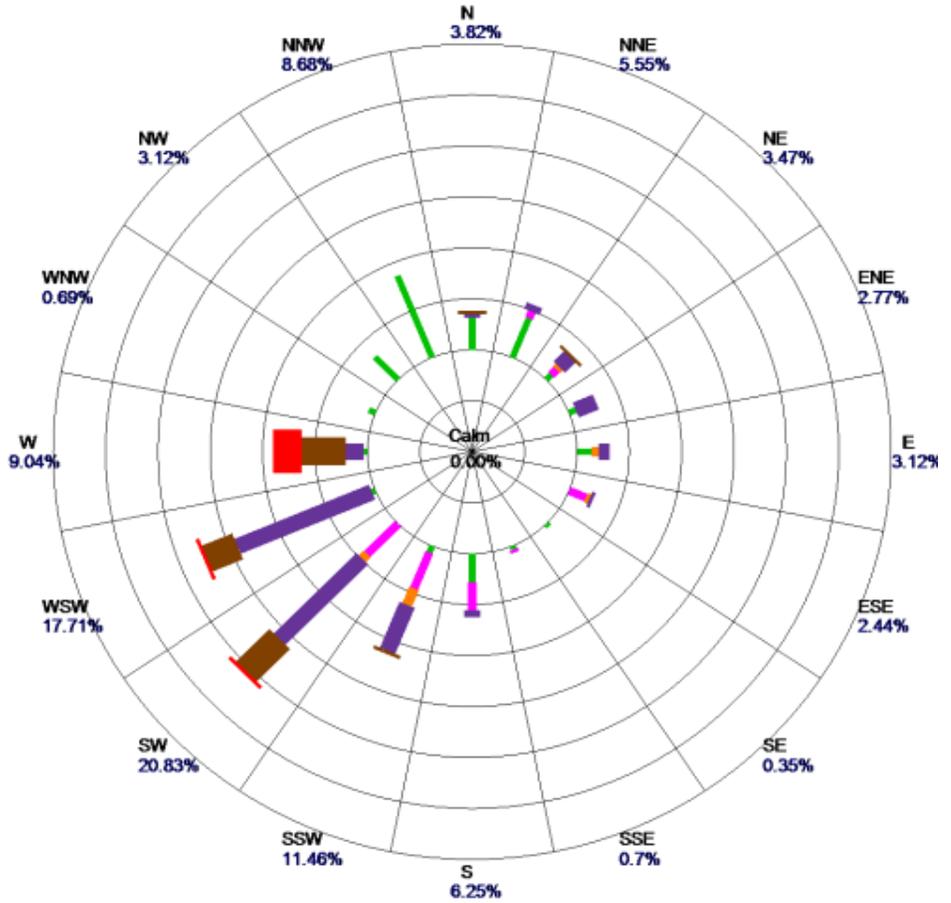
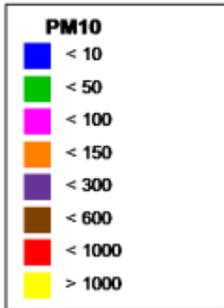
Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
10/12/2021	4:40 am	W	9			10	
10/12/2021	4:35 am	WSW	6			10	
10/12/2021	4:30 am	SW	3			9	
10/12/2021	4:25 am	N	0			9	
10/12/2021	4:20 am	N	0			9	
10/12/2021	4:15 am	SW	3			9	
10/12/2021	4:10 am	WSW	6			9	
10/12/2021	4:05 am	WSW	7			9	
10/12/2021	4:00 am	WSW	8			9	
10/12/2021	3:55 am	WSW	7			9	
10/12/2021	3:51 am	WSW	8			9	
10/12/2021	3:50 am	WSW	8			9	
10/12/2021	3:45 am	WSW	9			9	
10/12/2021	3:40 am	WSW	9			9	
10/12/2021	3:35 am	SW	12			9	
10/12/2021	3:30 am	WSW	12			9	
10/12/2021	3:25 am	WSW	10			9	
10/12/2021	3:20 am	WSW	13	G	18	9	
10/12/2021	3:15 am	WSW	12	G	18	9	
10/12/2021	3:10 am	W	16			8	
10/12/2021	3:05 am	W	17			8	
10/12/2021	3:00 am	W	21			7	
10/12/2021	2:55 am	W	18			6	
10/12/2021	2:51 am	W	24	G	31	6	Dust
10/12/2021	2:50 am	W	22	G	28	6	
10/12/2021	2:45 am	W	20	G	25	6	
10/12/2021	2:40 am	W	20			6	
10/12/2021	2:35 am	W	18			6	
10/12/2021	2:30 am	W	16			6	
10/12/2021	2:25 am	W	9			5	
10/12/2021	2:20 am	W	9			5	
10/12/2021	2:15 am	W	8			5	
10/12/2021	2:10 am	WSW	7			5	
10/12/2021	2:05 am	W	10			5	
10/12/2021	2:00 am	W	13			5	
10/12/2021	1:55 am	W	14	G	20	5	
10/12/2021	1:51 am	W	14			5	Dust
10/12/2021	1:50 am	W	15			5	
10/12/2021	1:45 am	W	17			5	
10/12/2021	1:40 am	W	20			5	
10/12/2021	1:35 am	W	18			5	
10/12/2021	1:30 am	W	16			5	
10/12/2021	1:25 am	W	20			5	
10/12/2021	1:20 am	W	18			5	
10/12/2021	1:15 am	W	21			5	
10/12/2021	1:10 am	W	18	G	25	5	
10/12/2021	1:05 am	W	21			5	
10/12/2021	1:00 am	W	22	G	30	5	
10/12/2021	12:55 am	W	25	G	33	5	
10/12/2021	12:51 am	W	24	G	37	5	Dust
10/12/2021	12:50 am	W	24			5	
10/12/2021	12:45 am	W	24	G	31	5	
10/12/2021	12:40 am	W	24			5	
10/12/2021	12:35 am	W	25	G	33	5	
10/12/2021	12:32 am	W	24	G	33	4	Dust
10/12/2021	12:30 am	W	24			5	
10/12/2021	12:25 am	W	28	G	33	4	
10/12/2021	12:20 am	W	23			4	
10/12/2021	12:18 am	W	22	G	33	4	Dust
10/12/2021	12:15 am	W	25	G	31	2.5	
10/12/2021	12:10 am	W	24	G	30	2.5	
10/12/2021	12:05 am	W	22	G	28	2.5	
10/12/2021	12:00 am	W	20			2.5	



**Appendix C:** Maricopa County Air Quality Department Planning & Analysis Division – Air Quality Monitor Data 5-Minute and 1-Hour PM<sub>10</sub> Wind Roses

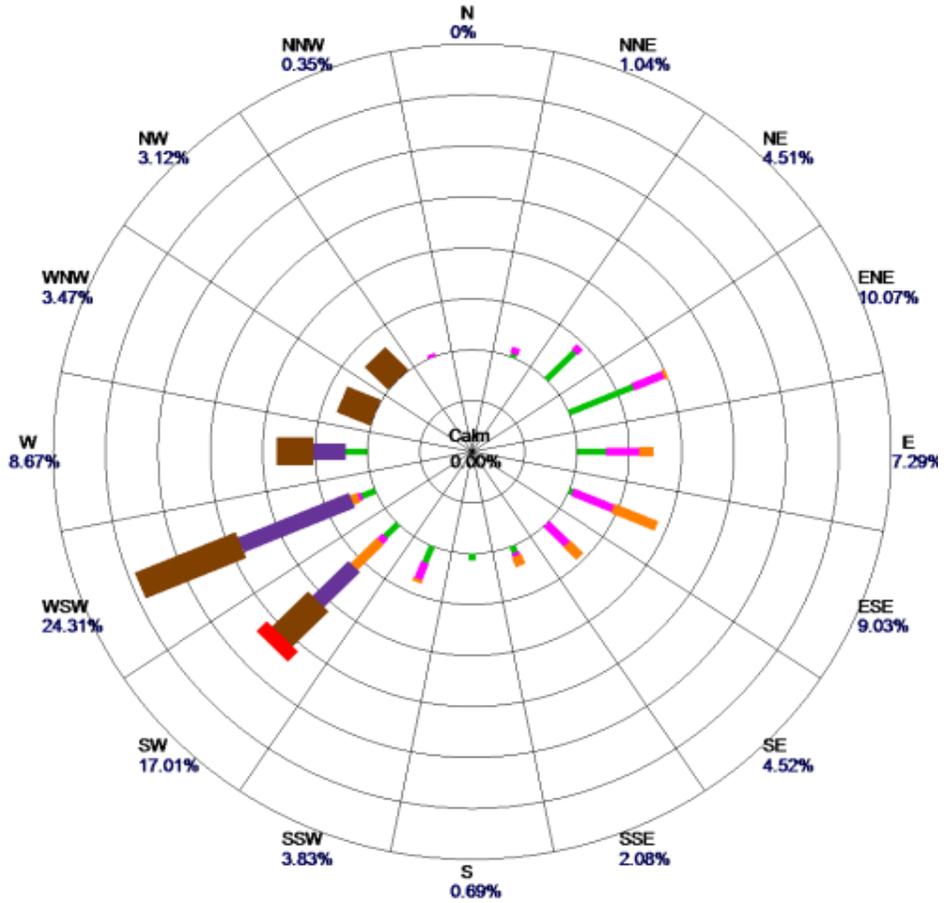
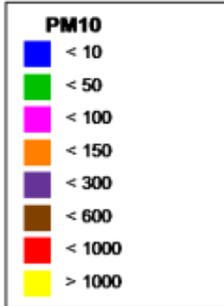
# 5-Minute PM10 Wind Roses for MCAQD Air Quality Monitors

Site: Buckeye  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



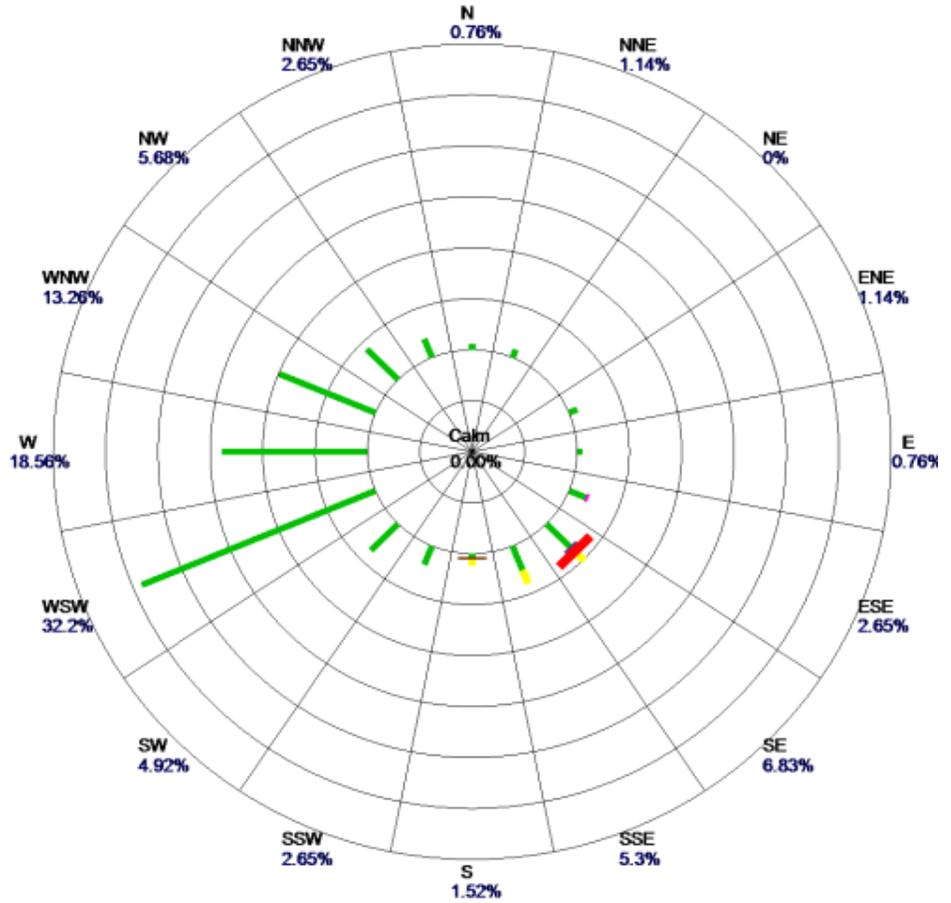
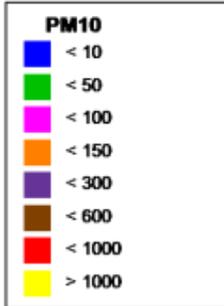
Period: 2023-04-03 00:00 - 2023-04-03 23:59

Site: West 43rd Ave  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



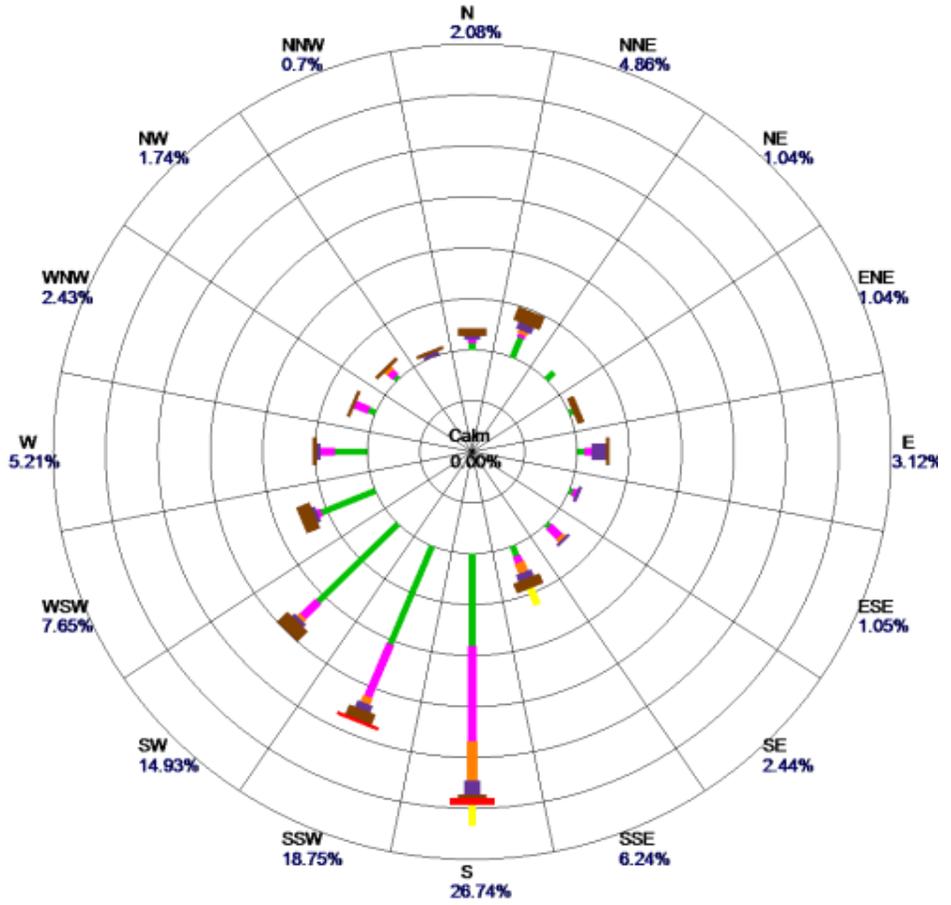
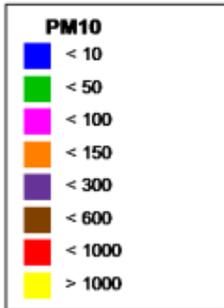
Period: 2023-04-03 00:00 - 2023-04-03 23:59

Site: South Scottsdale  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



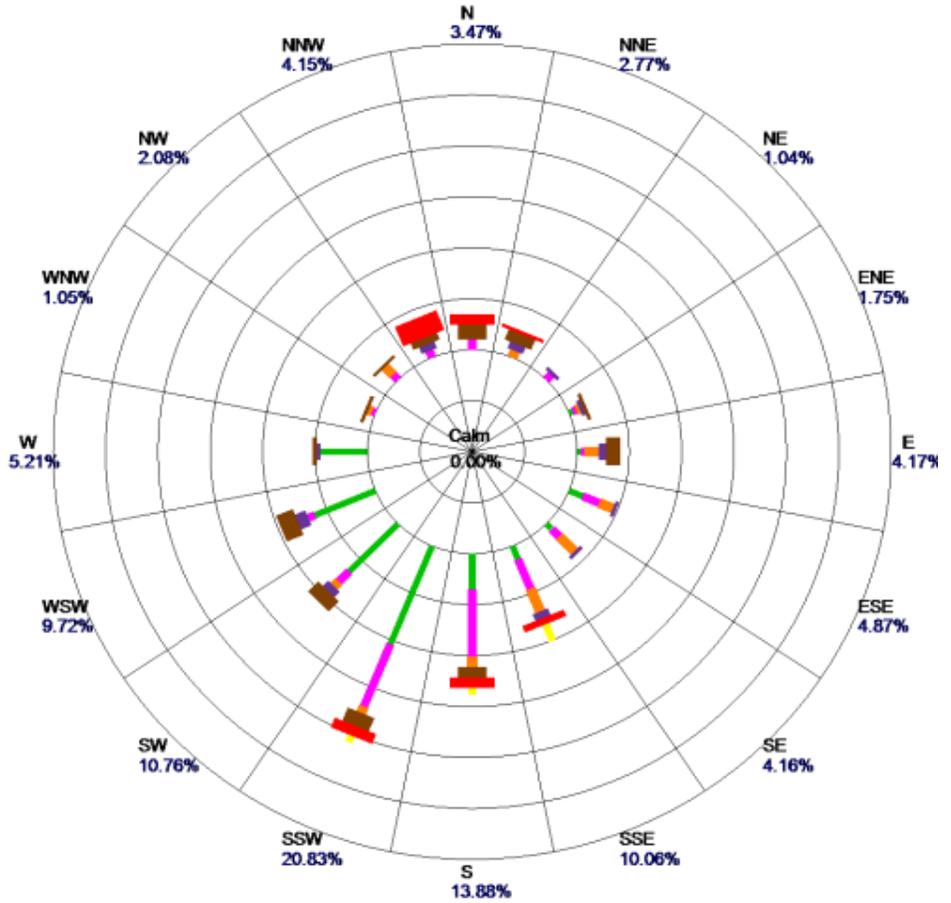
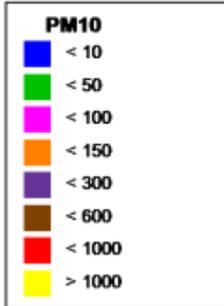
Period: 2021-07-09 00:00 - 2021-07-09 23:59

Site: Dysart  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



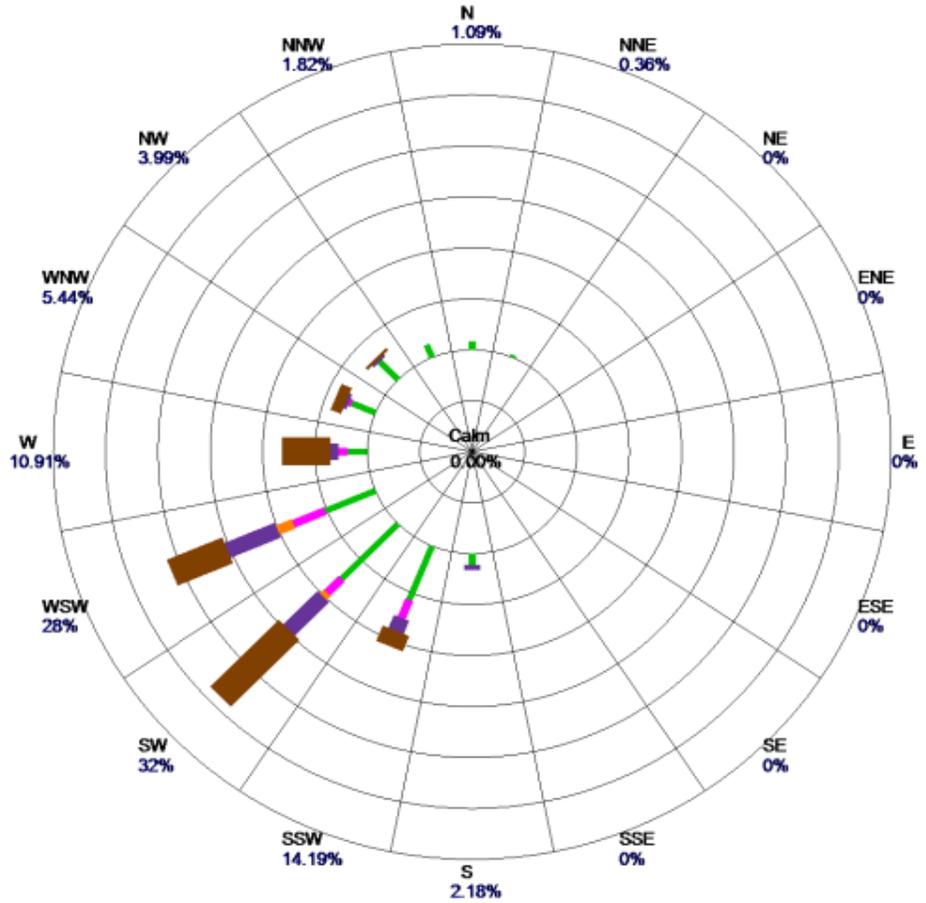
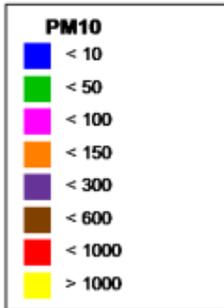
Period: 2021-07-10 00:00 - 2021-07-10 23:59

Site: Zuni Hills  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



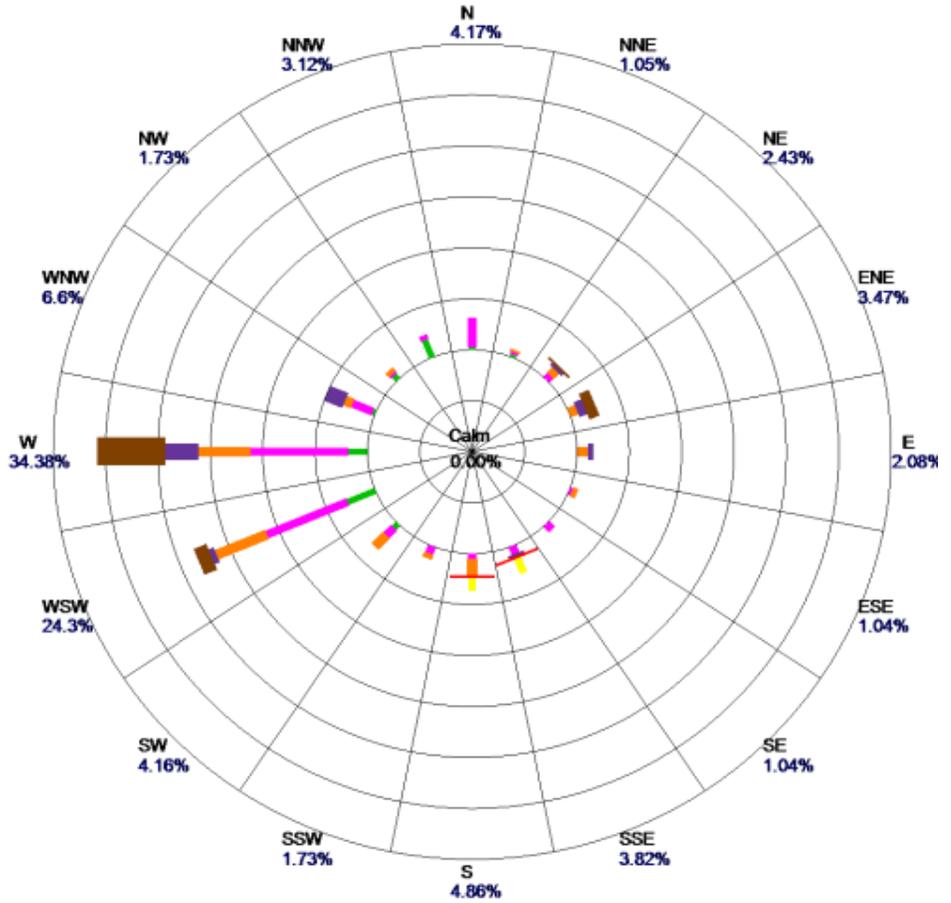
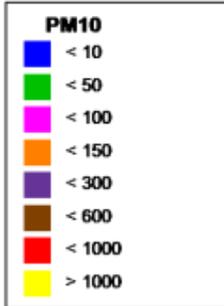
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Site: Buckeye  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



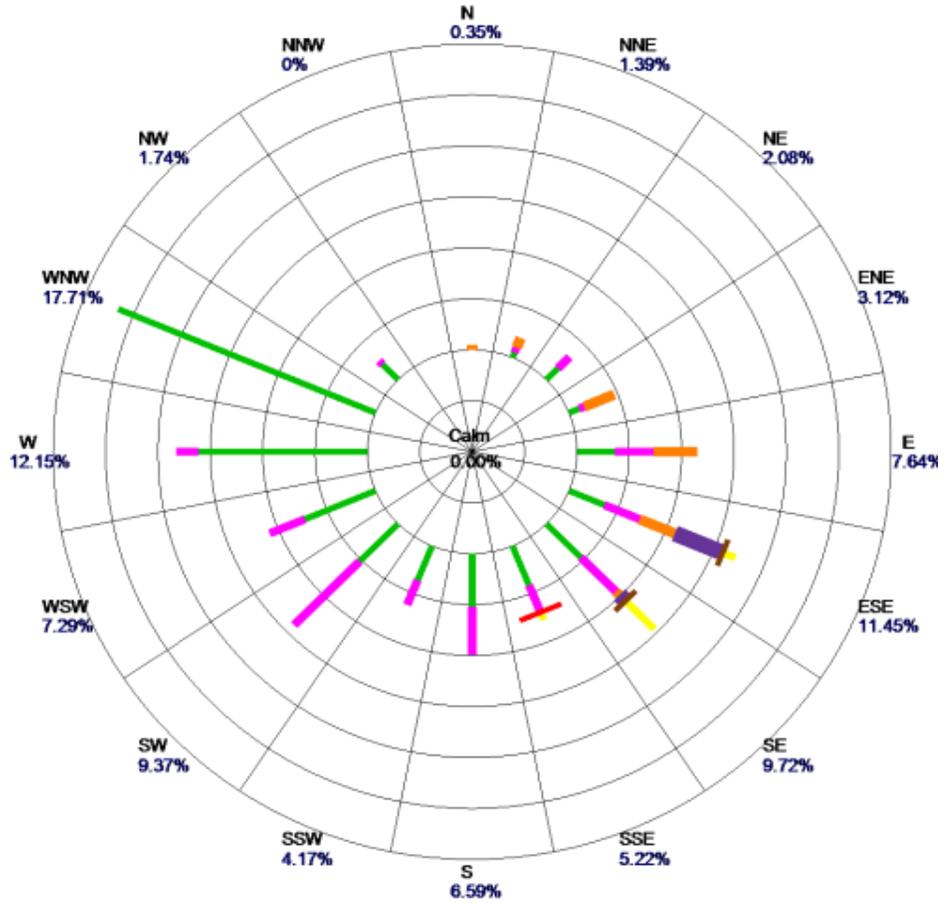
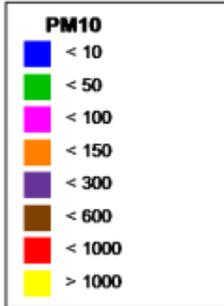
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Site: West 43rd Ave  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



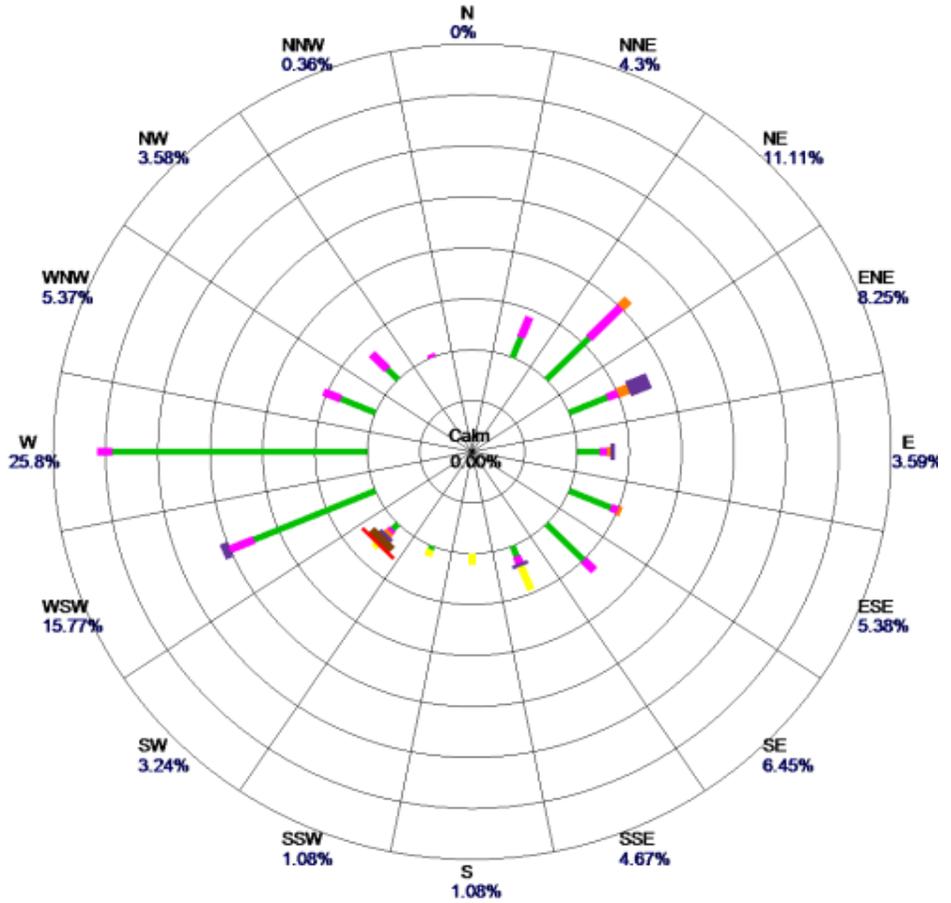
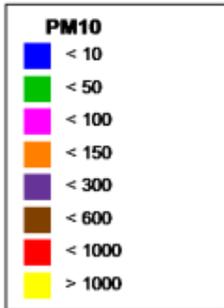
Period: 2023-07-21 00:00 - 2023-07-21 23:59

Site: Higley  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



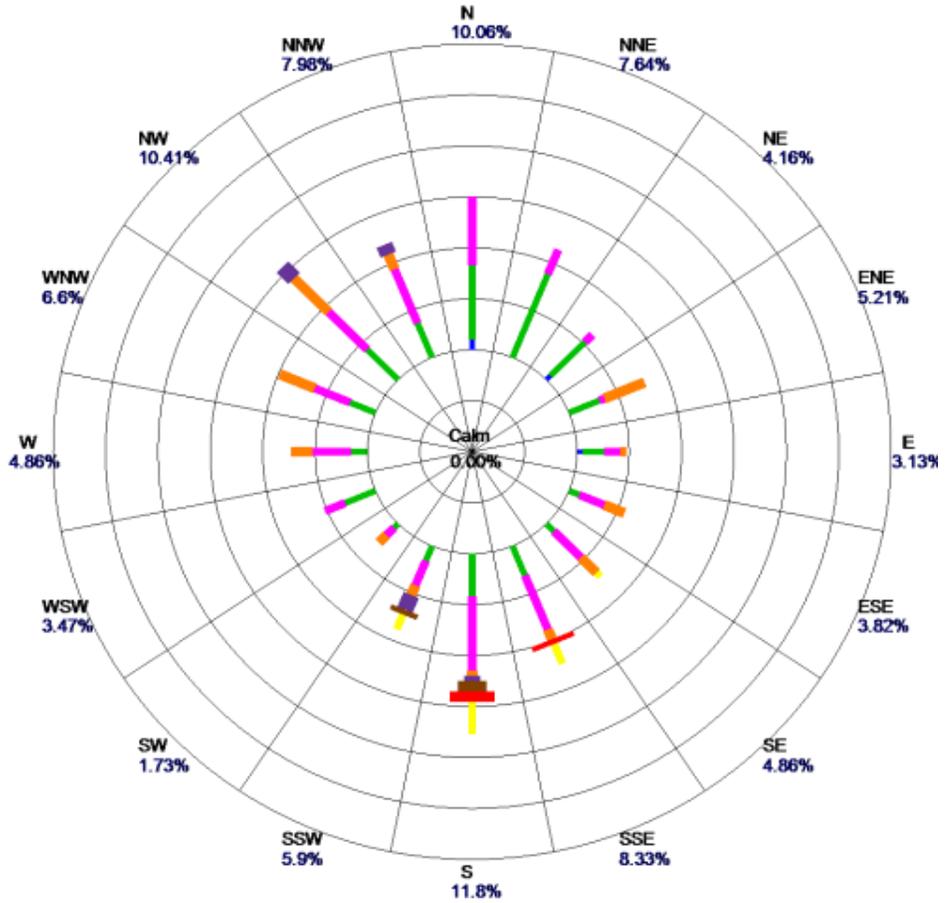
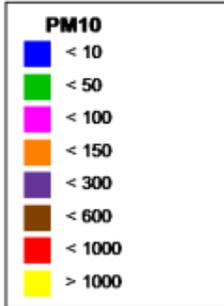
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Site: Central Phoenix  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



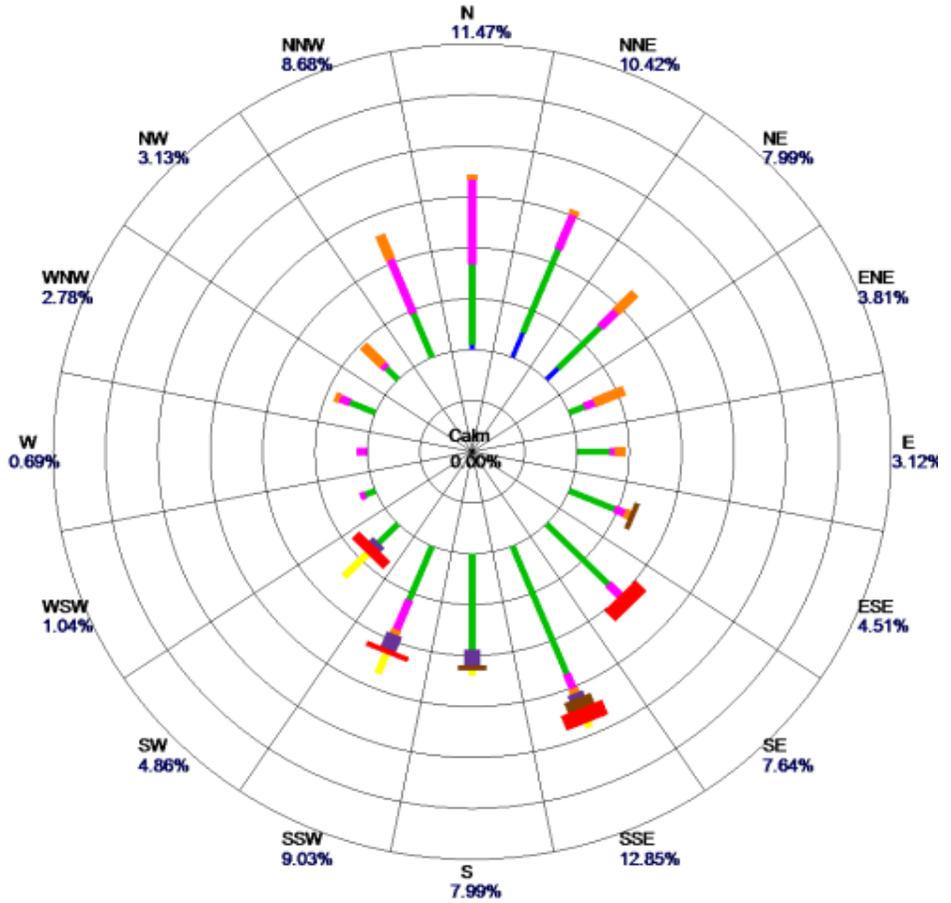
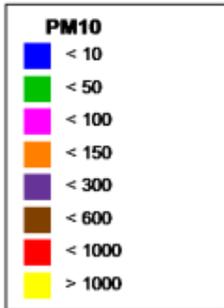
Period: 2023-08-31 00:00 - 2023-08-31 23:59

Site: Dysart  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



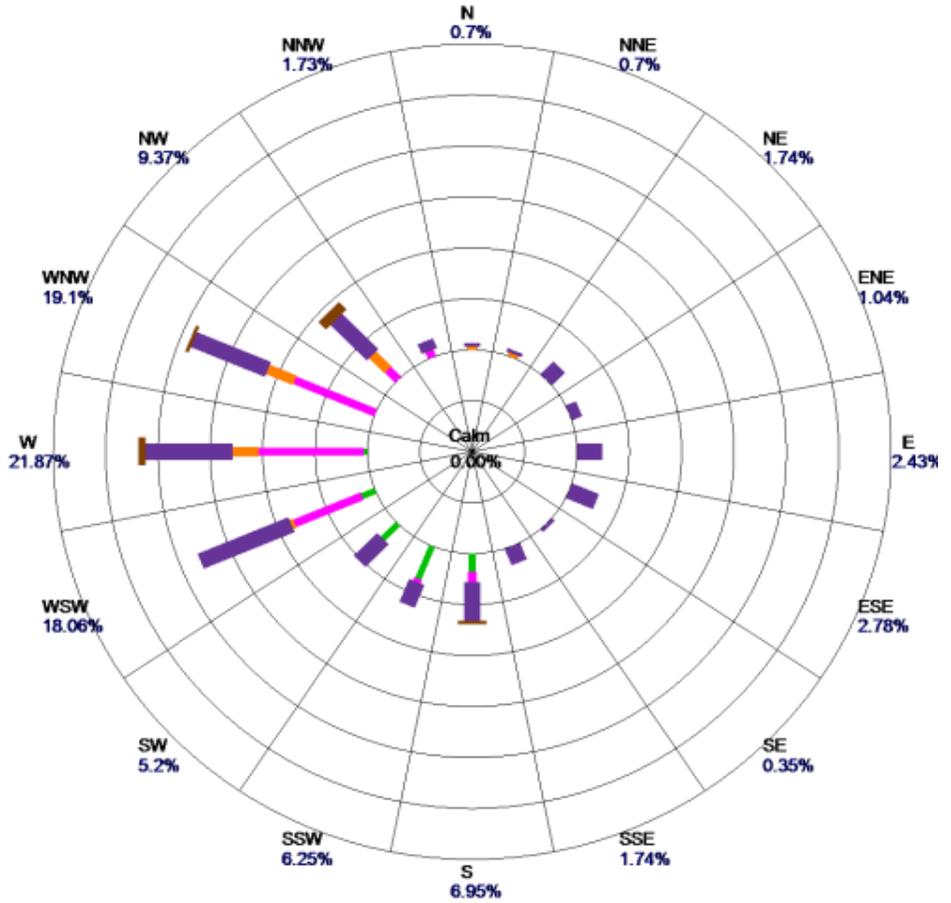
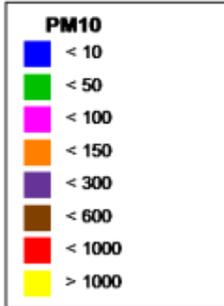
Period: 2022-09-02 00:00 - 2022-09-02 23:59

Site: Zuni Hills  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



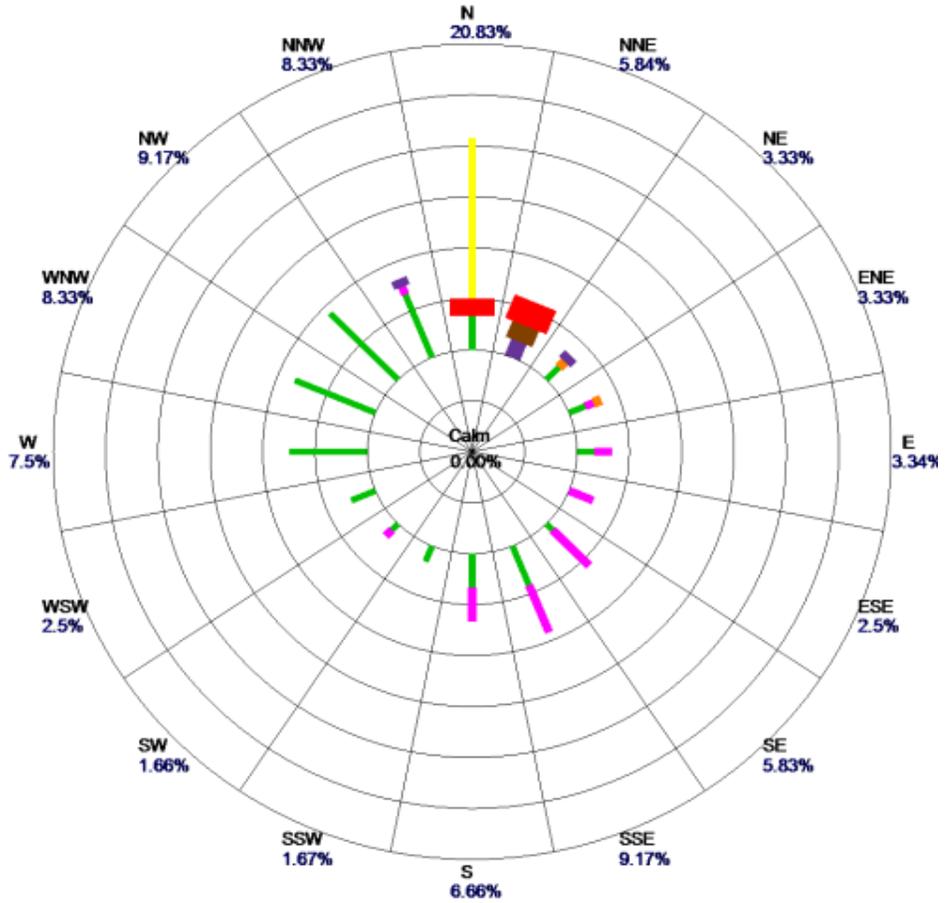
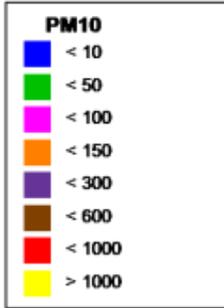
Period: 2022-09-02 00:00 - 2022-09-02 23:59

Site: West 43rd Ave  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



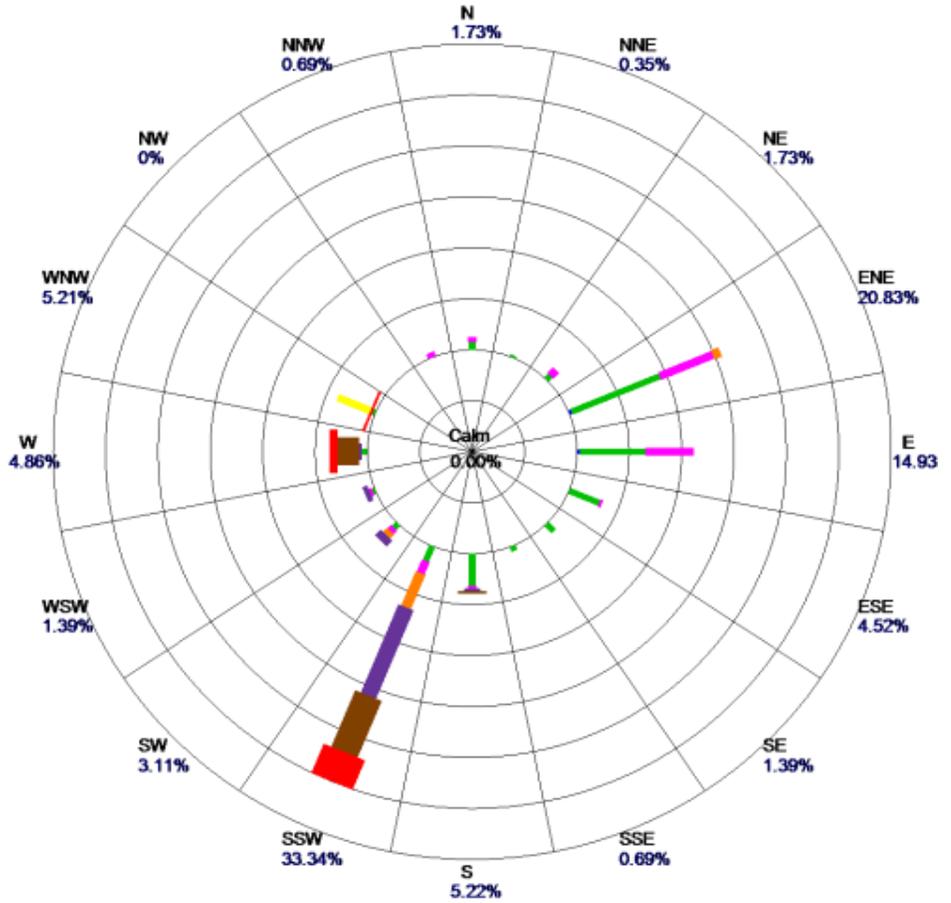
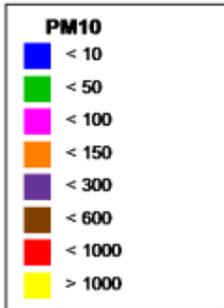
Period: 2023-10-01 00:00 - 2023-10-01 23:59

Site: West 43rd Ave  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



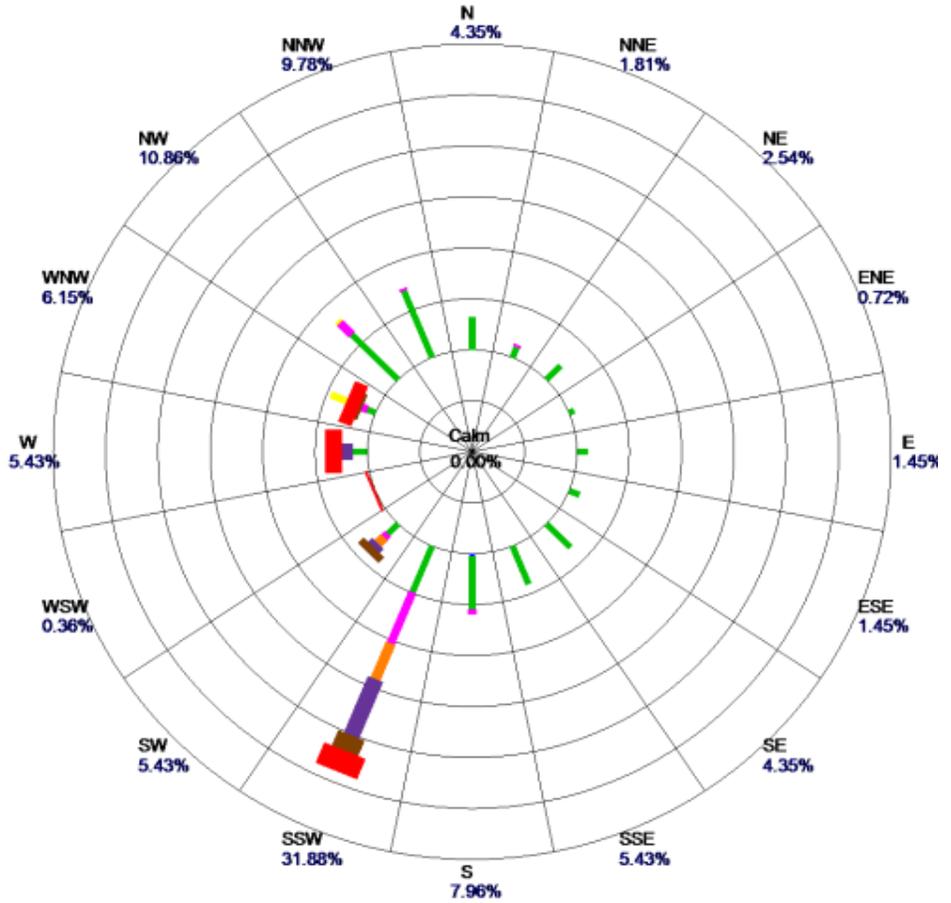
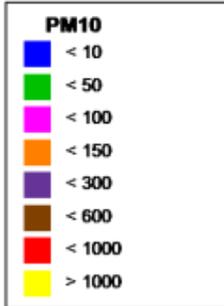
Period: 2022-10-03 00:00 - 2022-10-03 23:59

Site: Buckeye  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



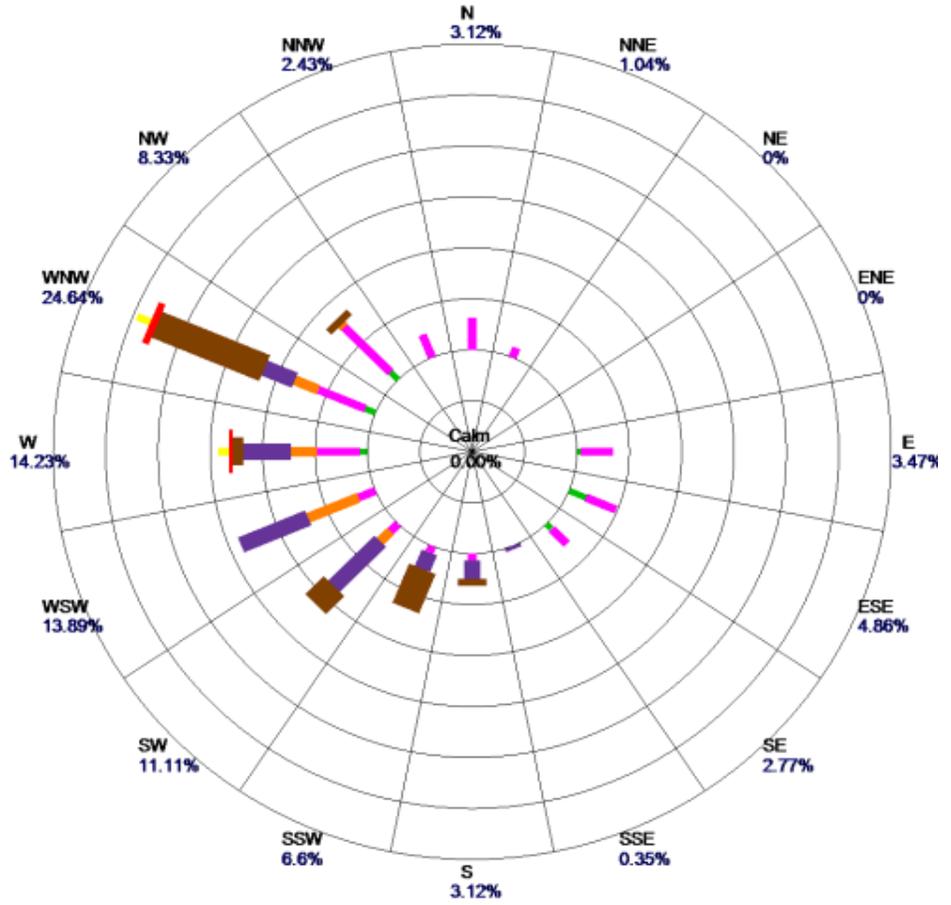
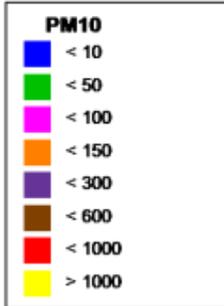
Period: 2021-10-11 00:00 - 2021-10-11 23:59

Site: Dysart  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



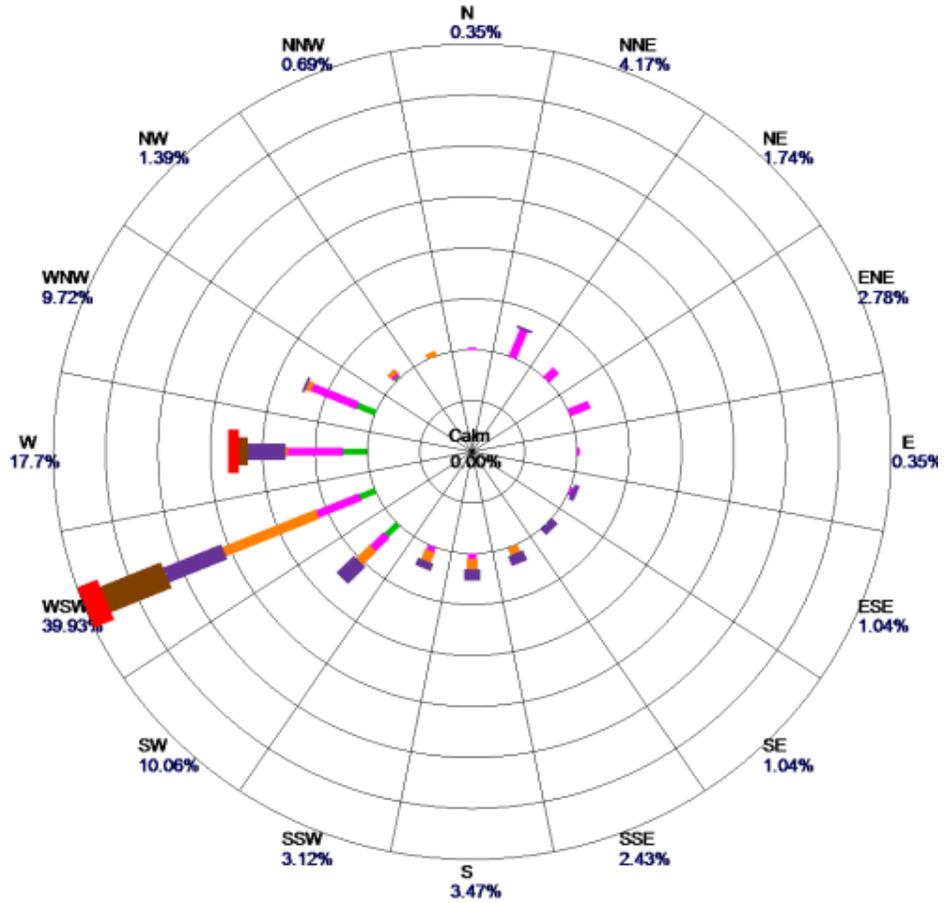
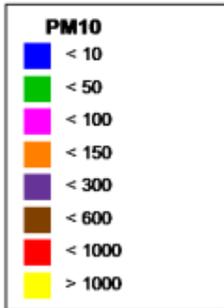
Period: 2021-10-11 00:00 - 2021-10-11 23:59

Site: Higley  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



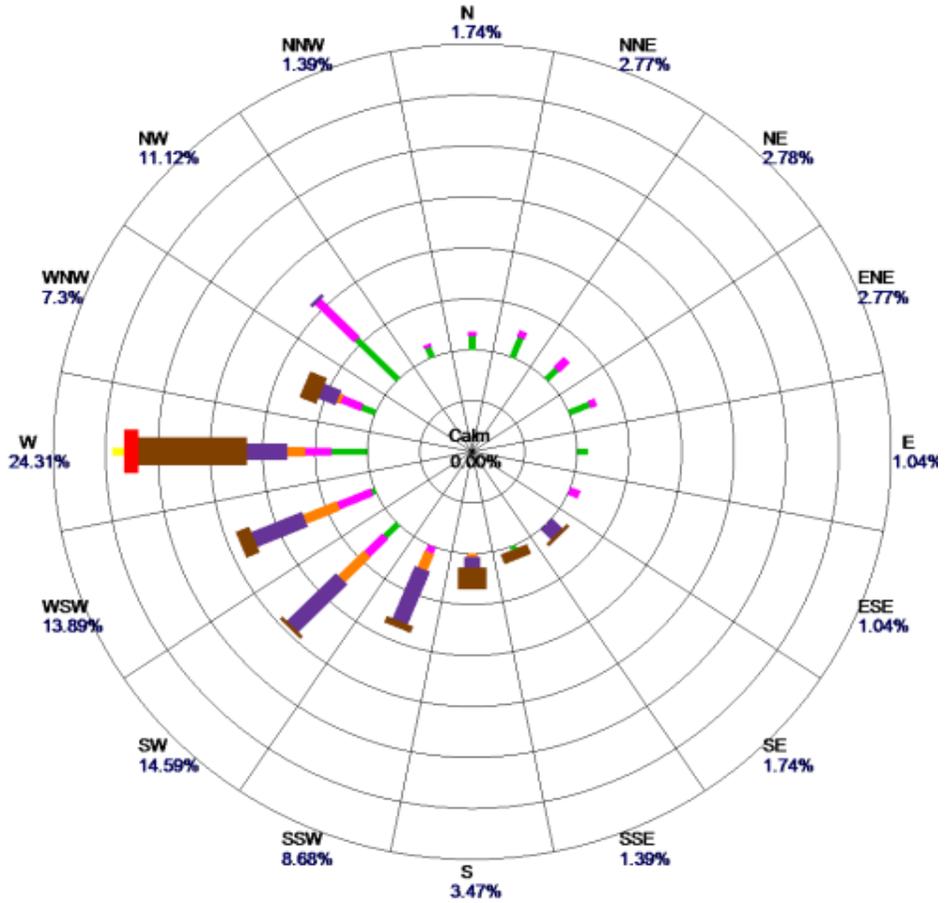
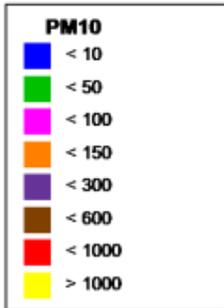
Period: 2021-10-12 00:00 - 2021-10-12 23:59

Site: South Scottsdale  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



Period: 2021-10-12 00:00 - 2021-10-12 23:59

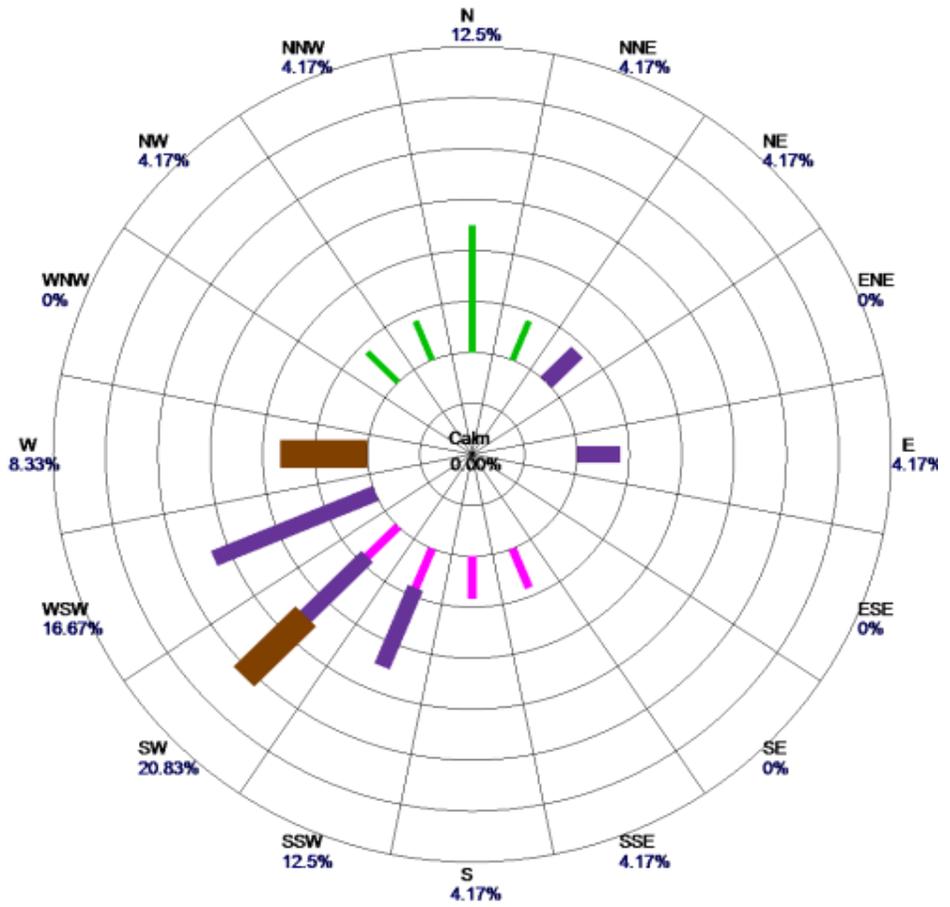
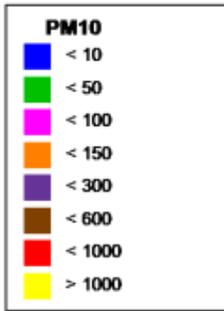
Site: West Chandler  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



Period: 2021-10-12 00:00 - 2021-10-12 23:59

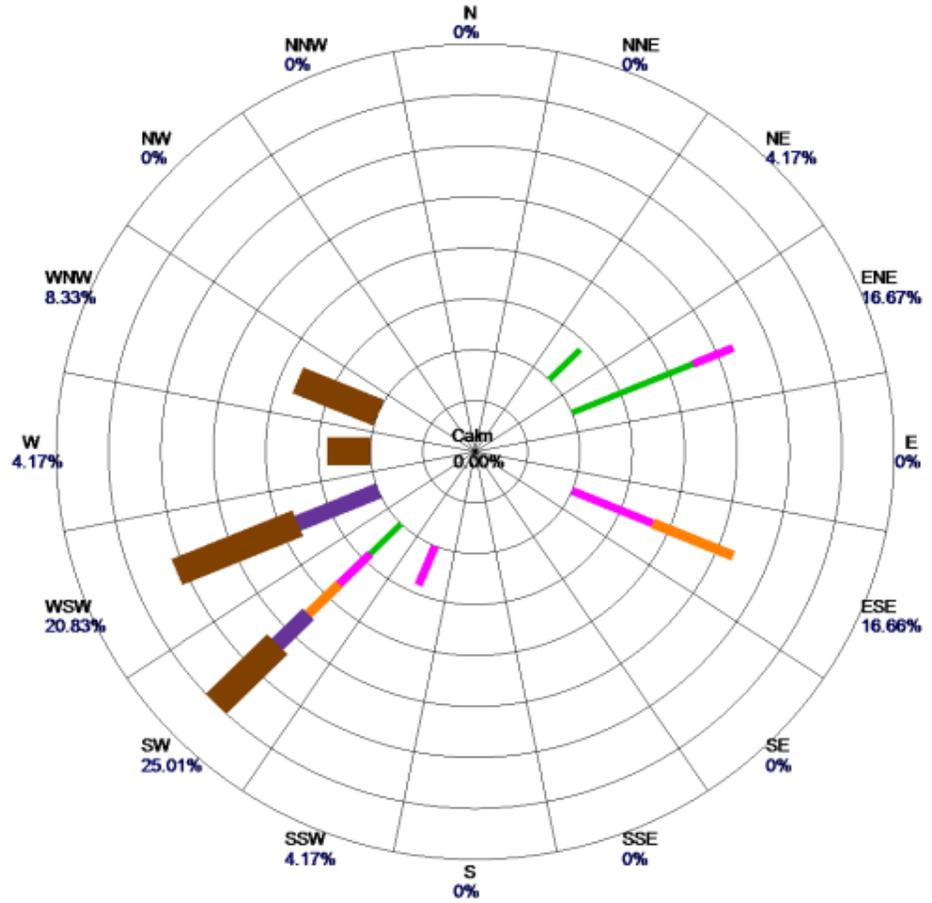
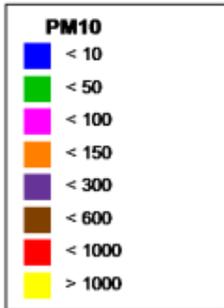
# 1-Hour PM10 Wind Roses for MCAQD Air Quality Monitors

Site: Buckeye  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



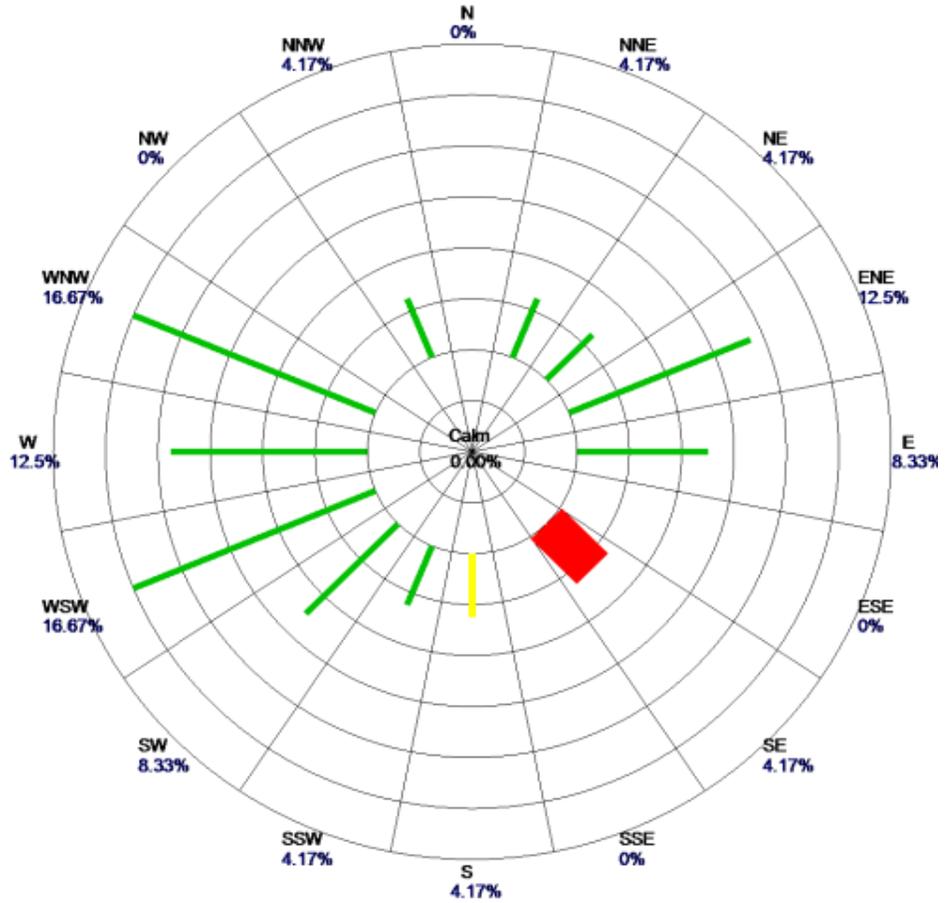
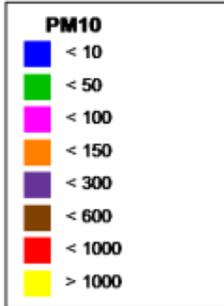
Period: 2023-04-03 00:00 - 2023-04-03 23:59

Site: West 43rd Ave  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



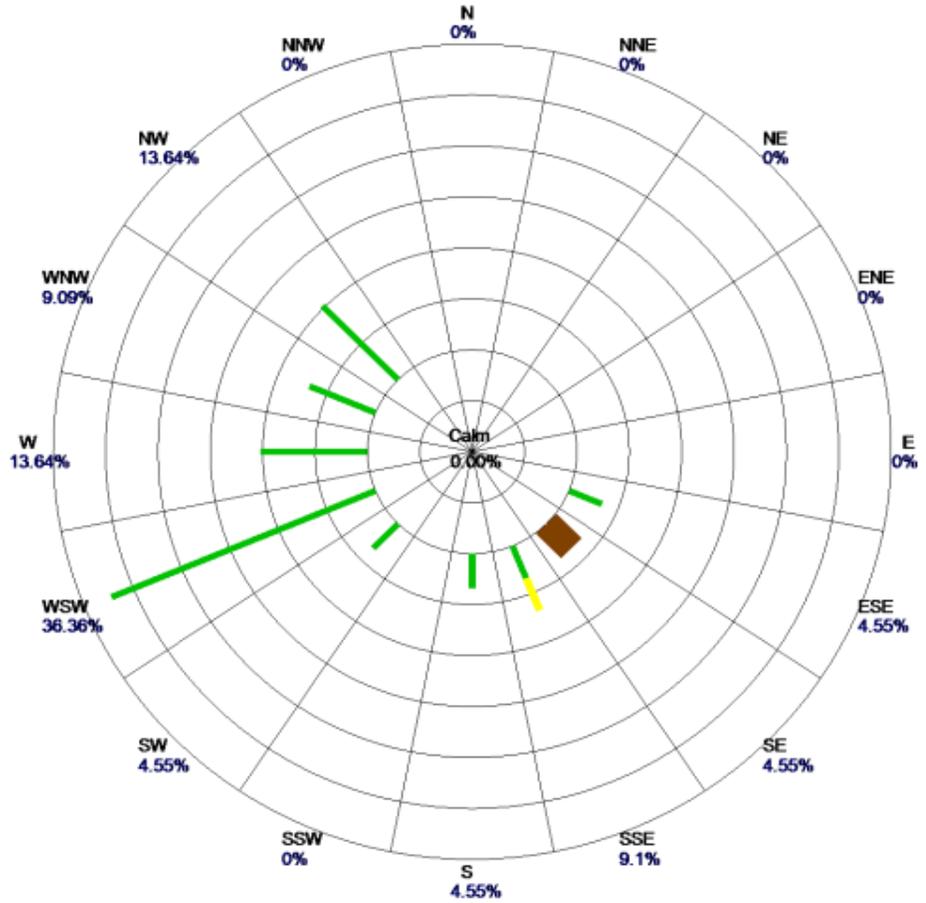
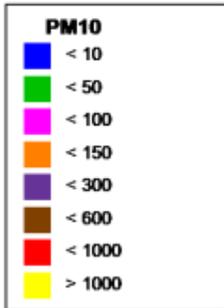
Period: 2023-04-03 00:00 - 2023-04-03 23:59

Site: Mesa  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



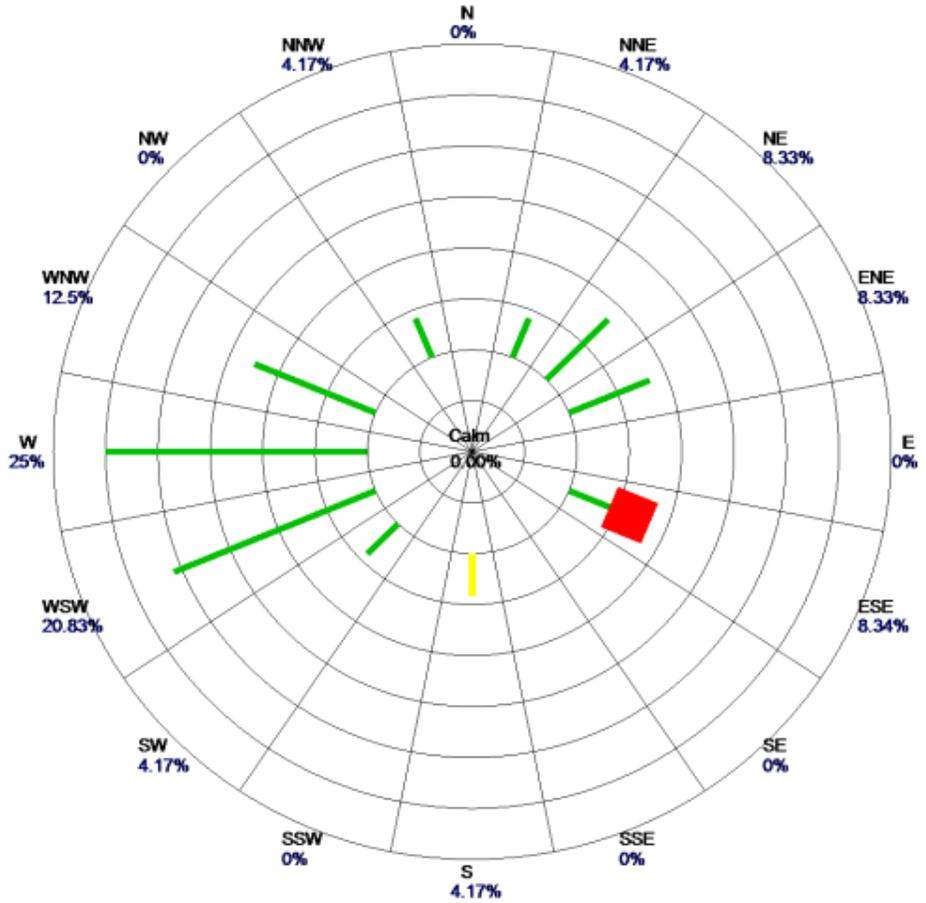
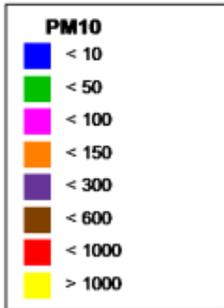
Period: 2021-07-09 00:00 - 2021-07-09 23:59

Site: South Scottsdale  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



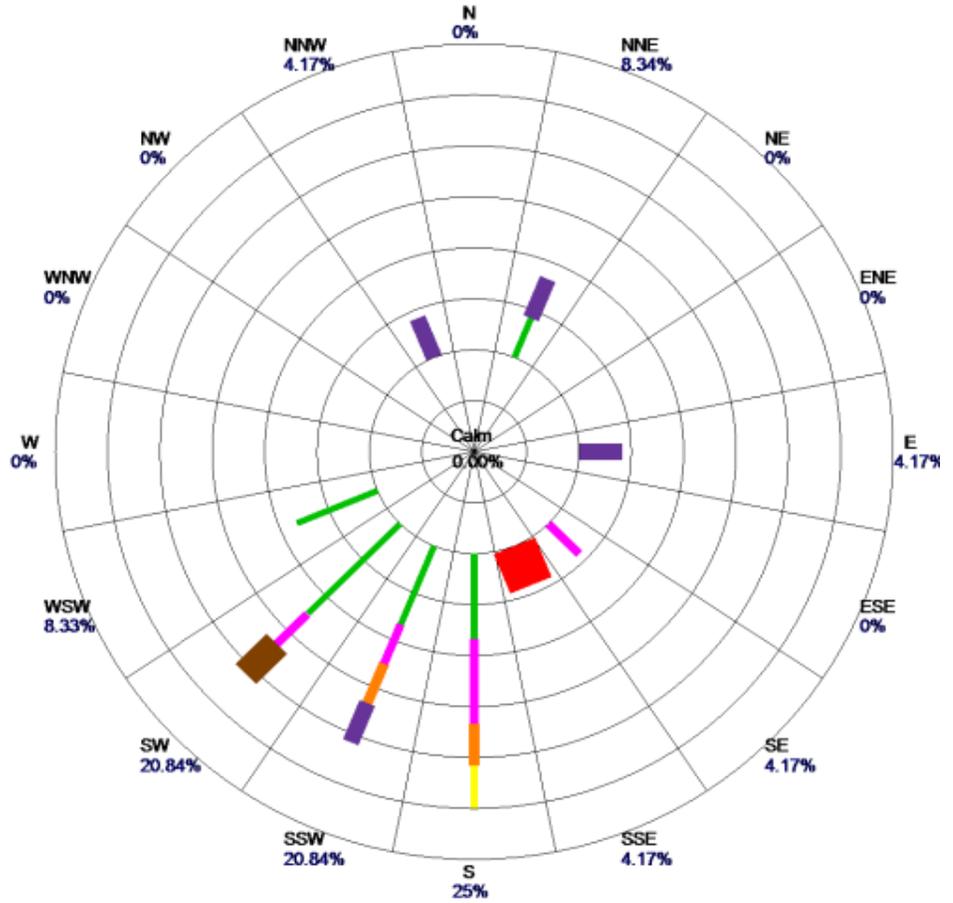
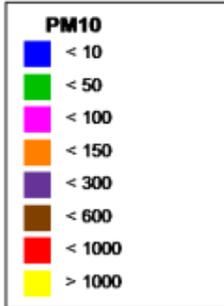
Period: 2021-07-09 00:00 - 2021-07-09 23:59

Site: Tempe  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



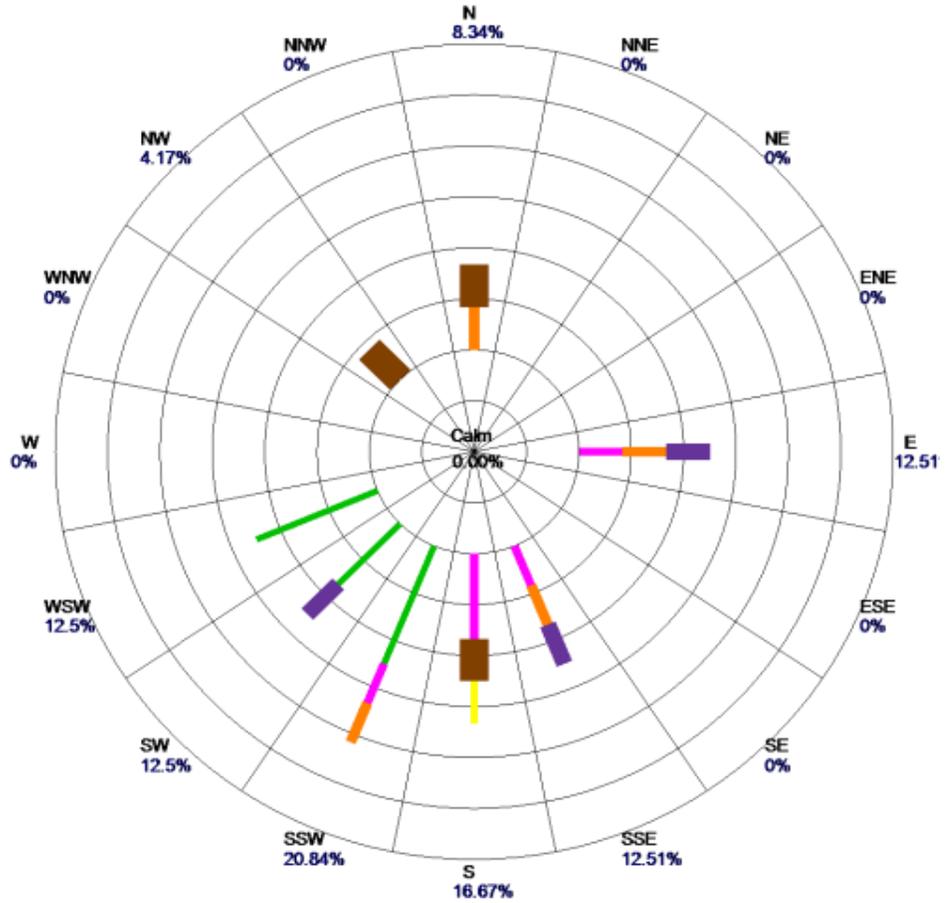
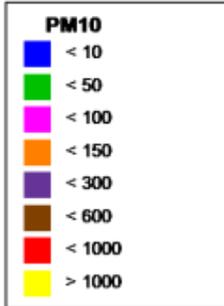
Period: 2021-07-09 00:00 - 2021-07-09 23:59

Site: Dysart  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



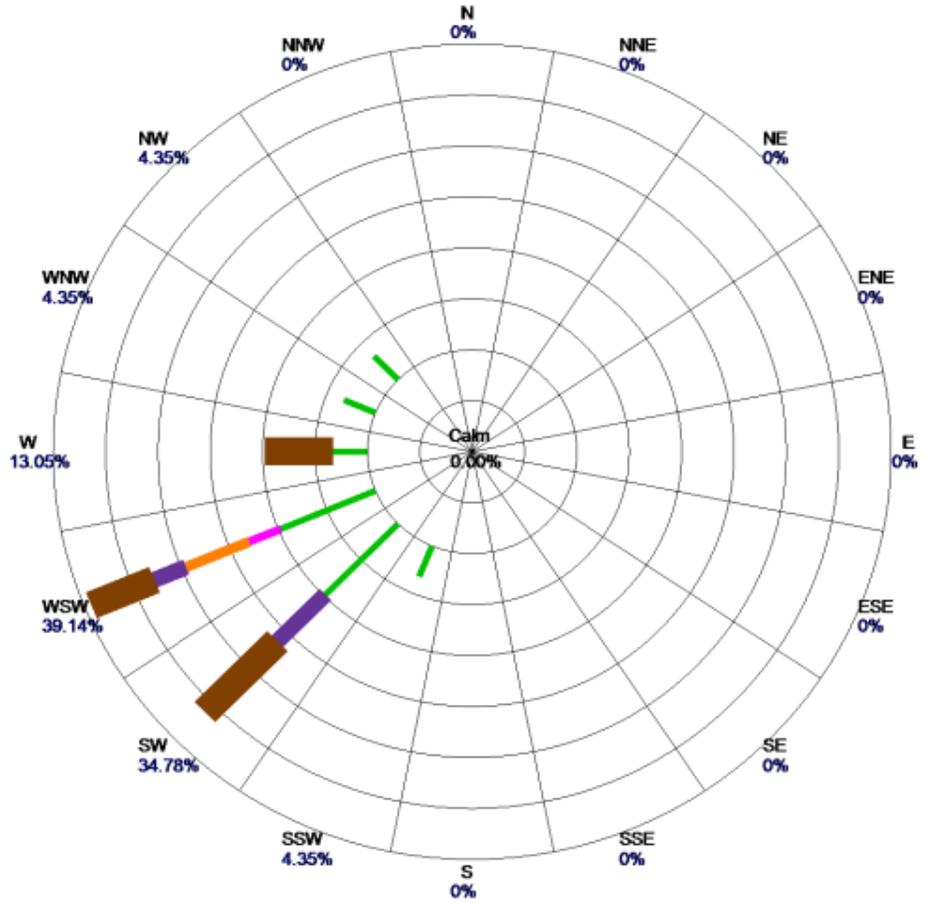
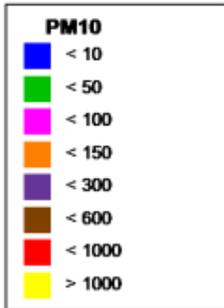
Period: 2021-07-10 00:00 - 2021-07-10 23:59

Site: Zuni Hills  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



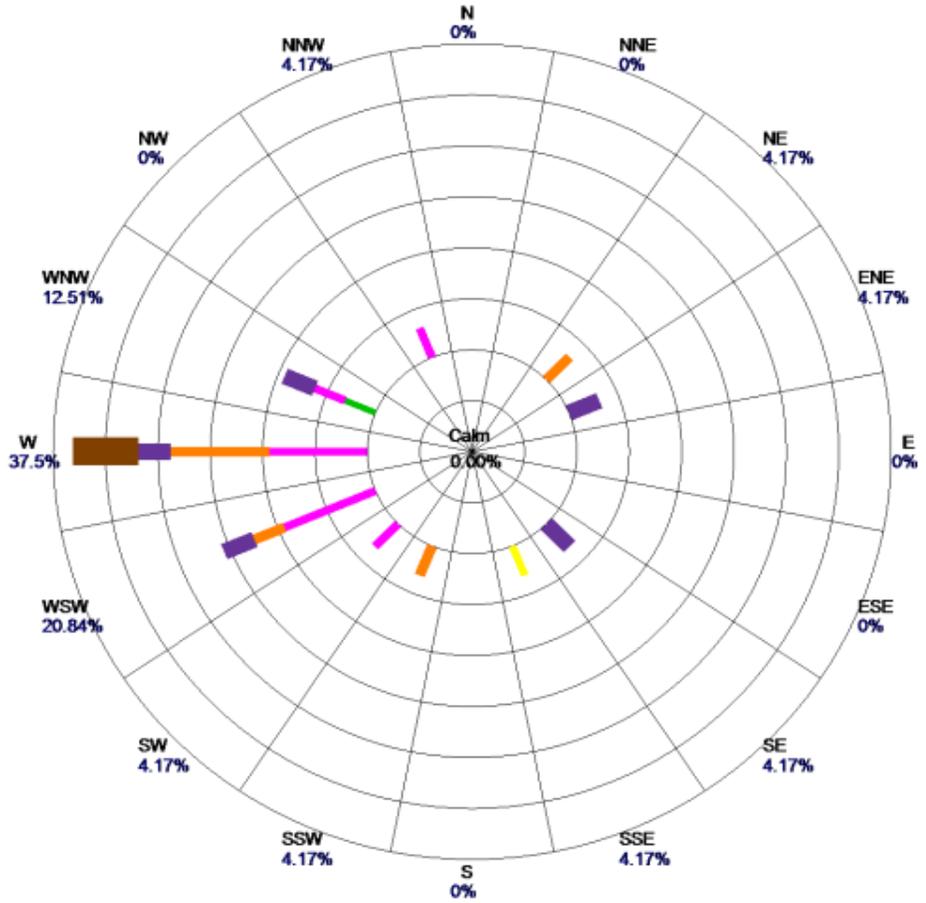
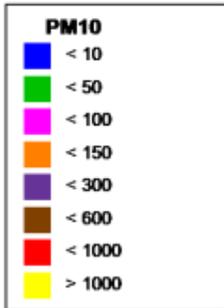
Period: 2021-07-10 00:00 - 2021-07-10 23:59

Site: Buckeye  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



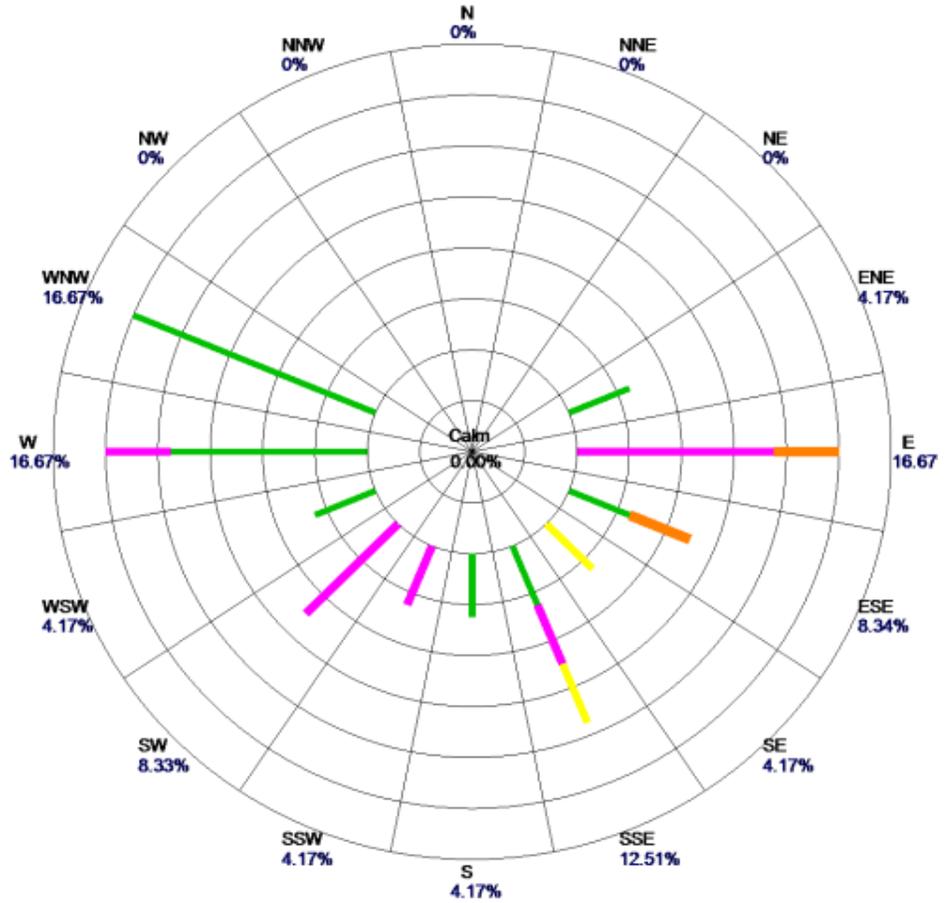
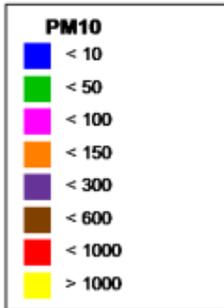
Period: 2021-07-12 00:00 - 2021-07-12 23:59

Site: West 43rd Ave  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



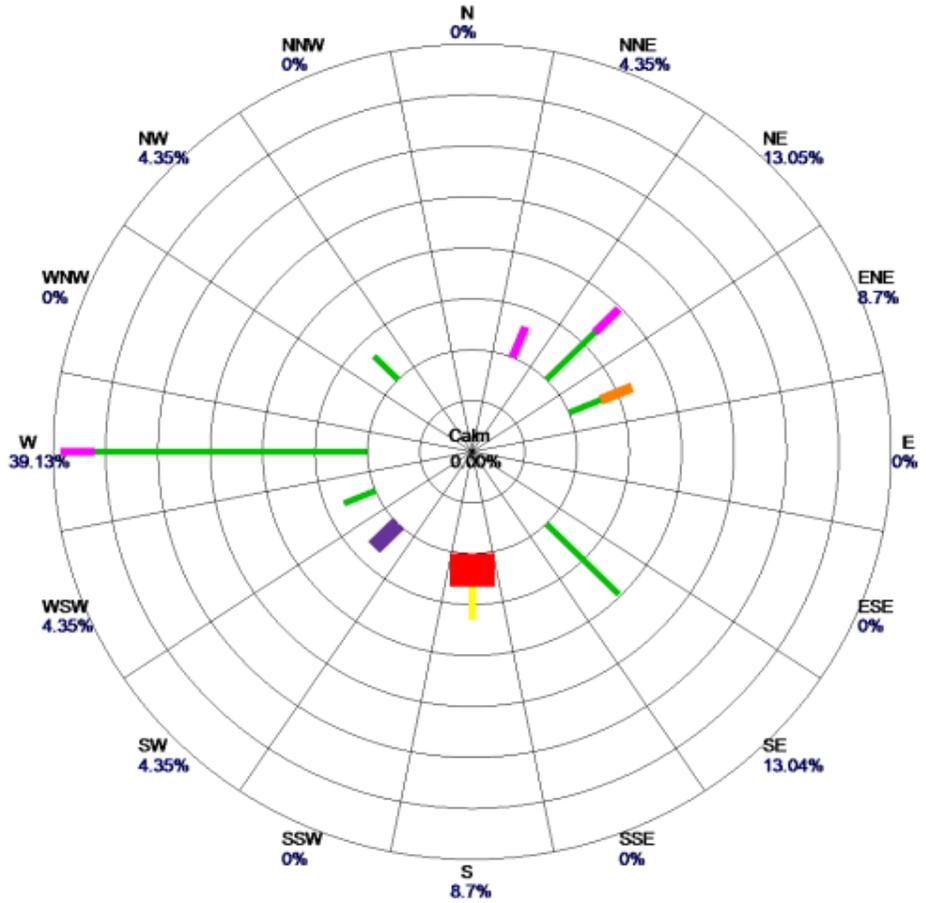
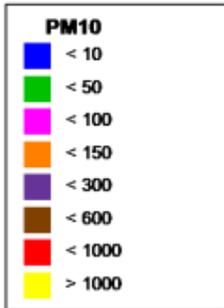
Period: 2023-07-21 00:00 - 2023-07-21 23:59

Site: Higley  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



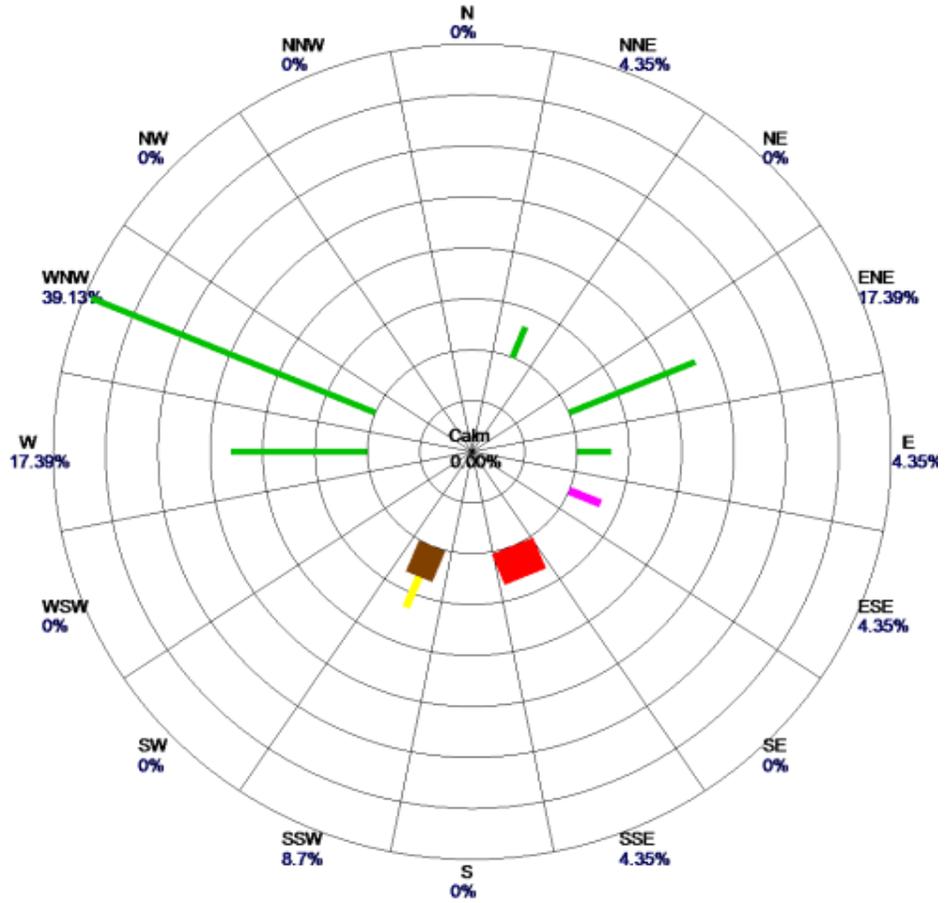
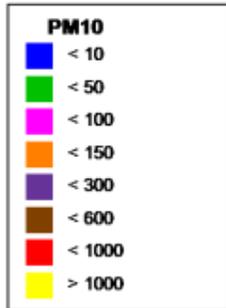
Period: 2023-07-26 00:00 - 2023-07-26 23:59

Site: Central Phoenix  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



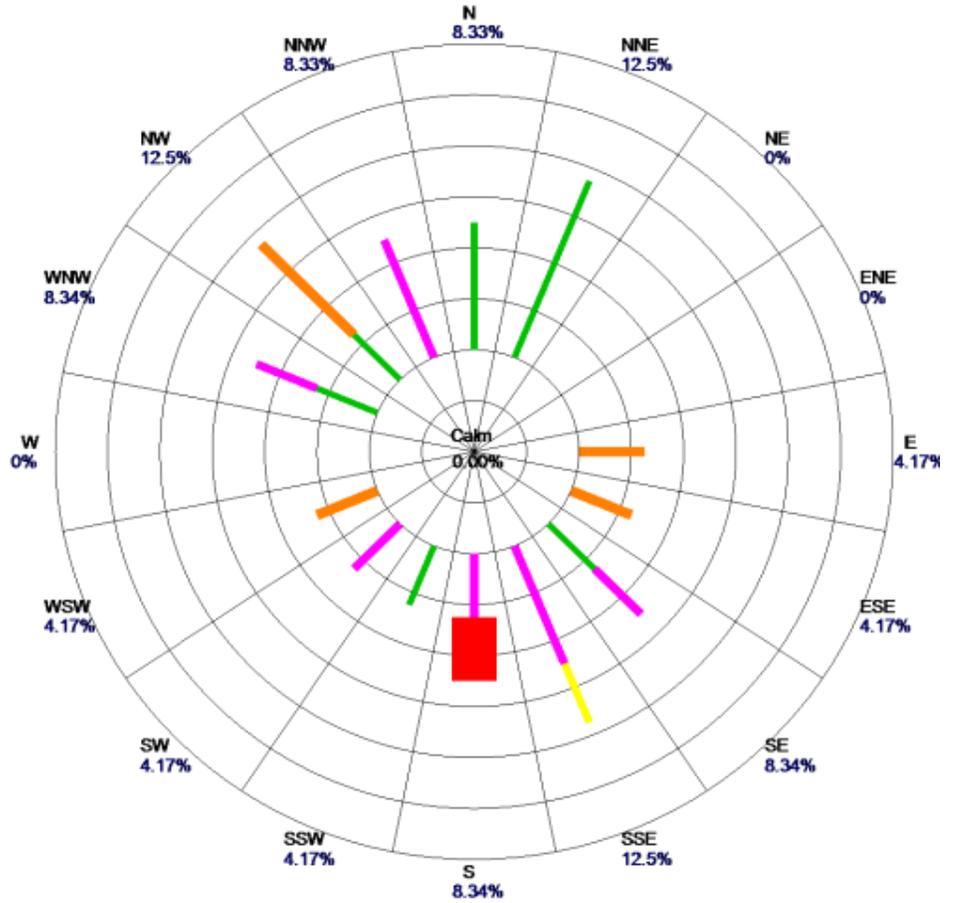
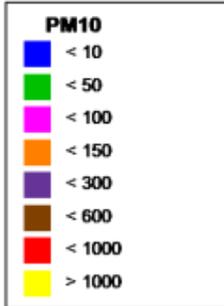
Period: 2023-08-31 00:00 - 2023-08-31 23:59

Site: Durango Complex  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



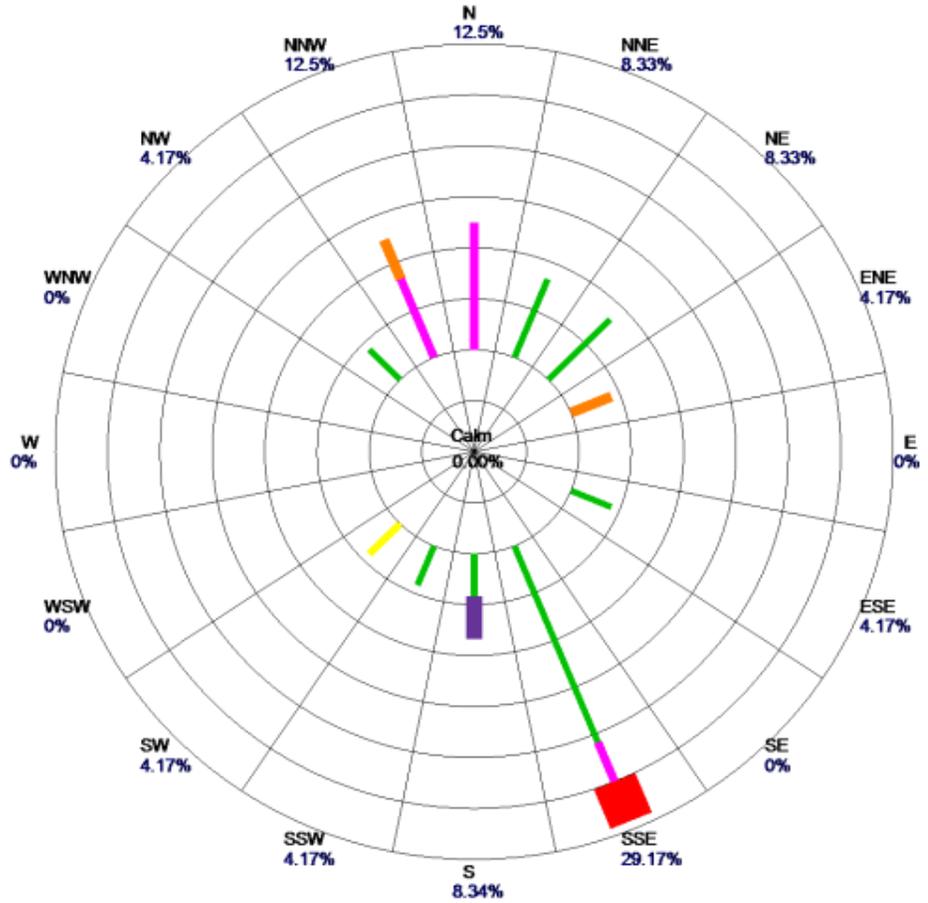
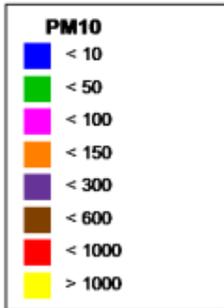
Period: 2023-08-31 00:00 - 2023-08-31 23:59

Site: Dysart  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



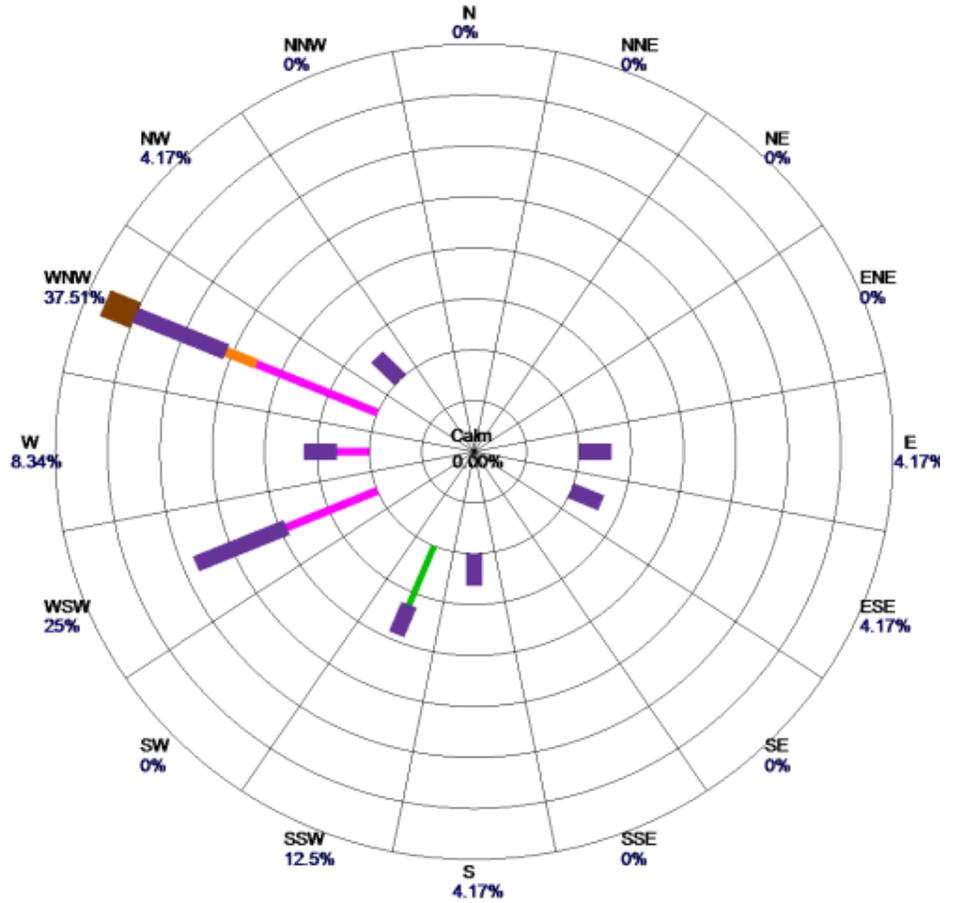
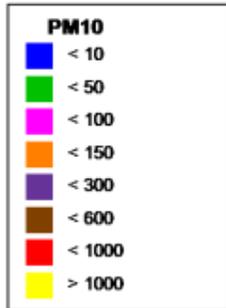
Period: 2022-09-02 00:00 - 2022-09-02 23:59

Site: Zuni Hills  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



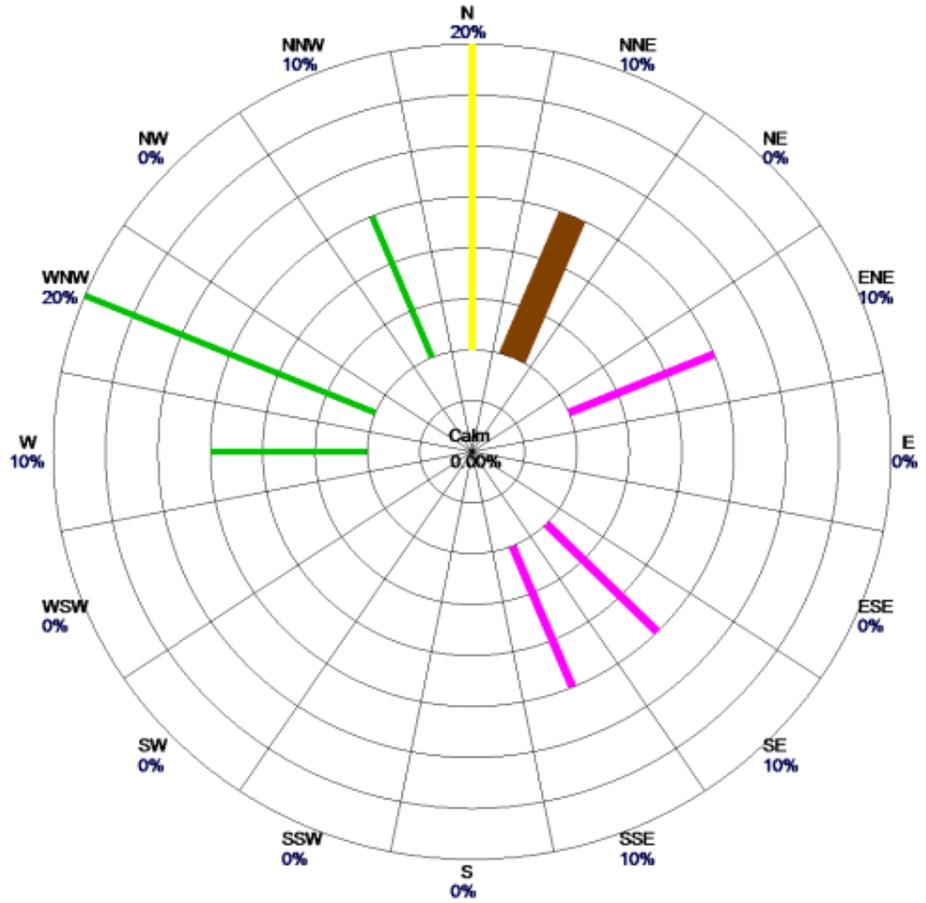
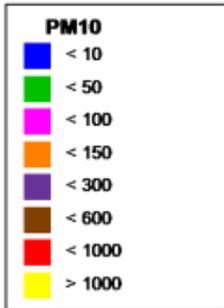
Period: 2022-09-02 00:00 - 2022-09-02 23:59

Site: West 43rd Ave  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



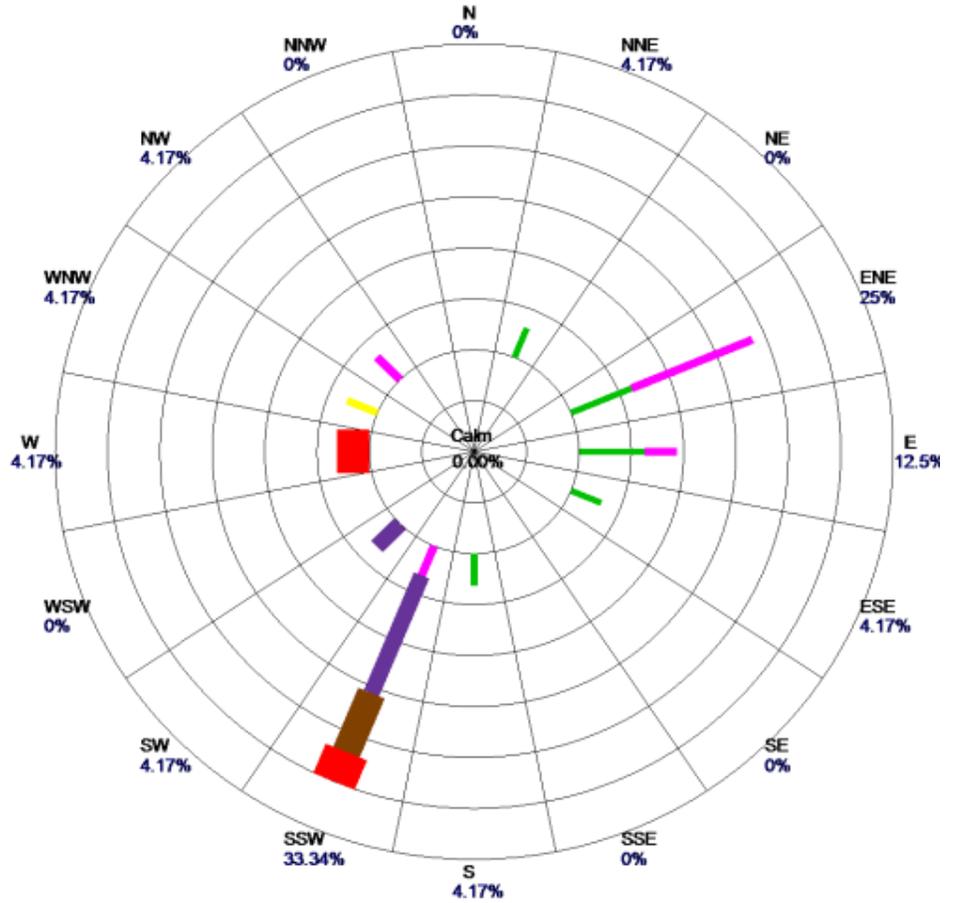
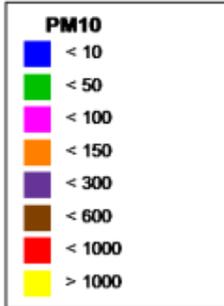
Period: 2023-10-01 00:00 - 2023-10-01 23:59

Site: West 43rd Ave  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



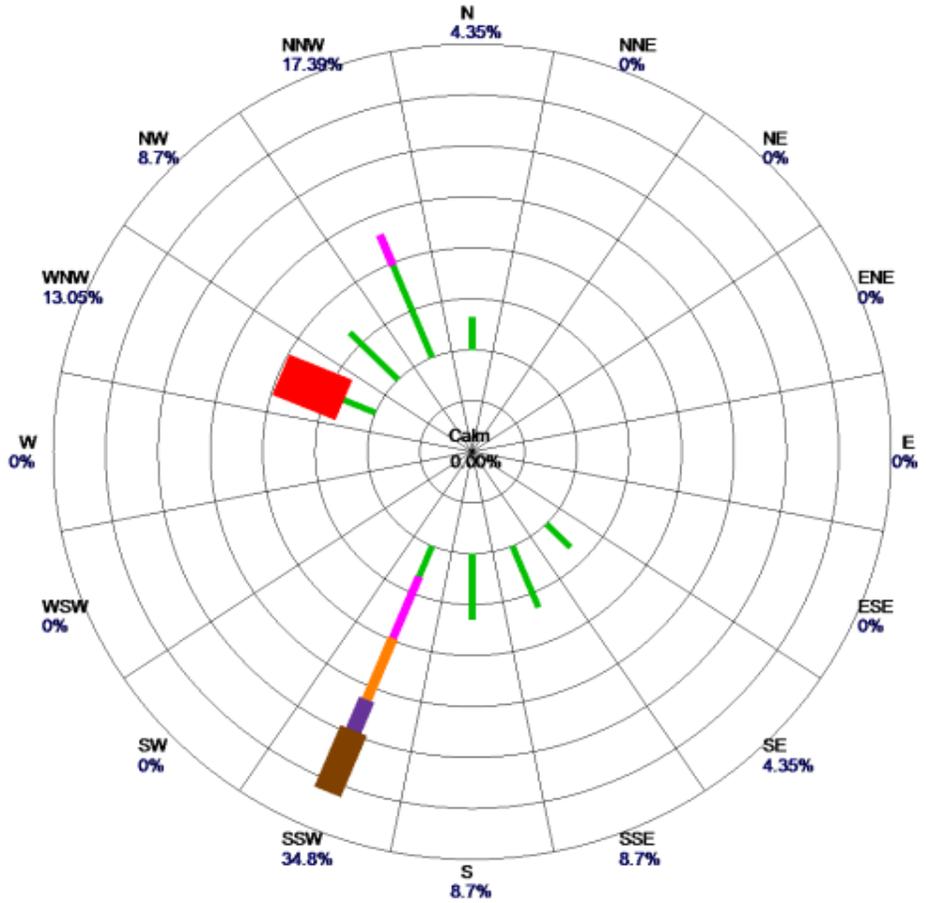
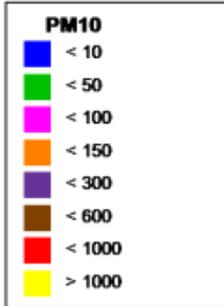
Period: 2022-10-03 00:00 - 2022-10-03 23:59

Site: Buckeye  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



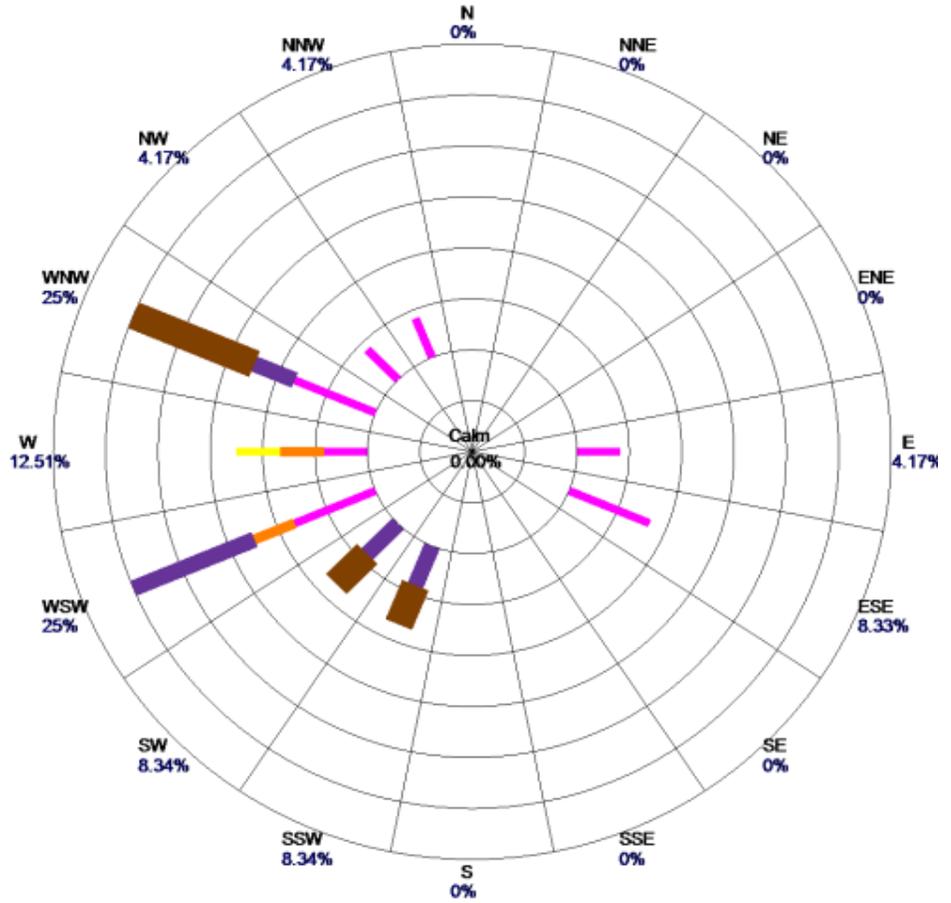
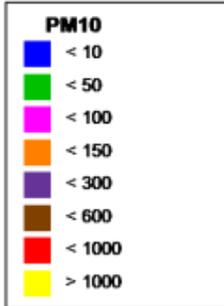
Period: 2021-10-11 00:00 - 2021-10-11 23:59

Site: Dysart  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



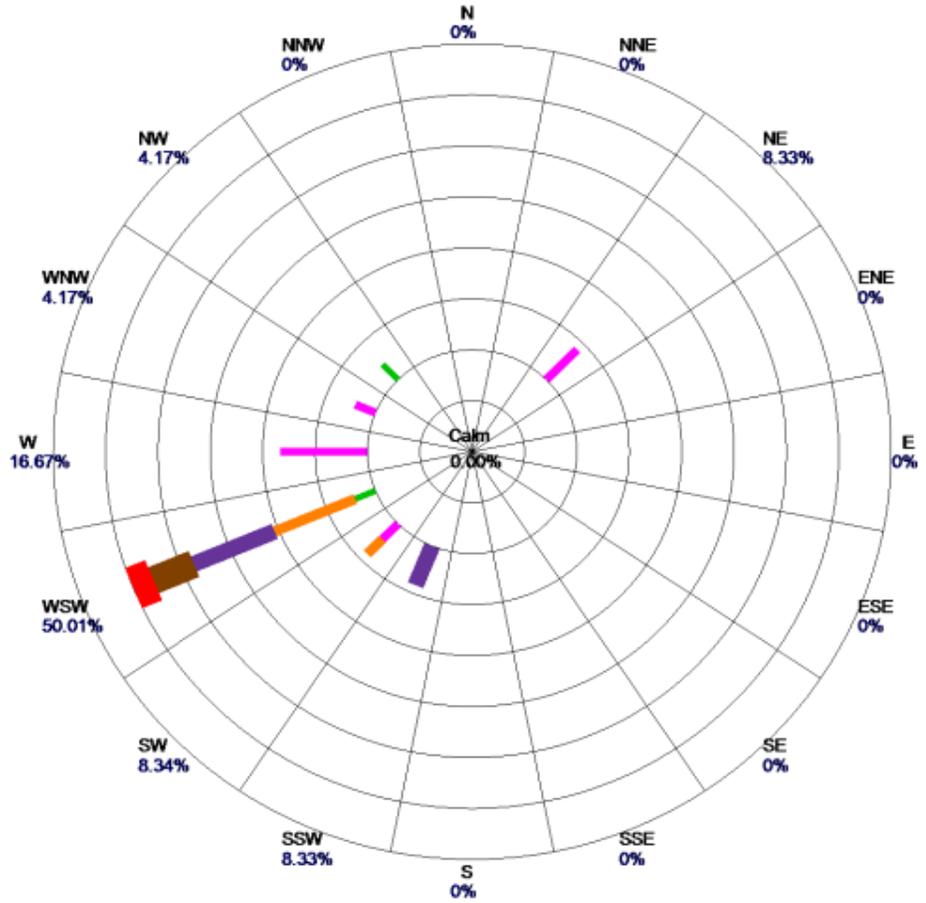
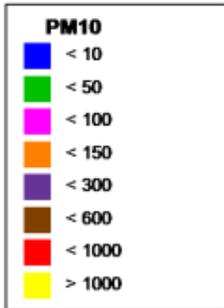
Period: 2021-10-11 00:00 - 2021-10-11 23:59

Site: Higley  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



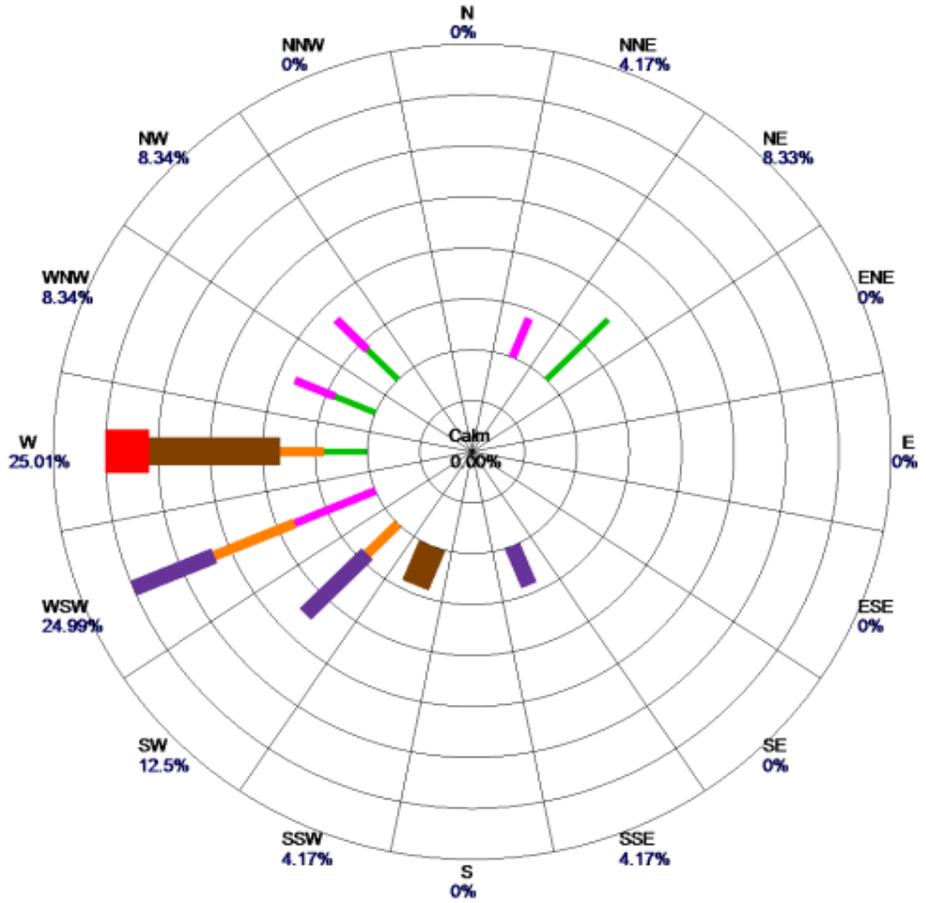
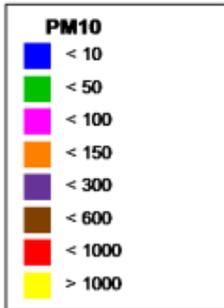
Period: 2021-10-12 00:00 - 2021-10-12 23:59

Site: South Scottsdale  
Parameter: PM10  
Units: UG/M3  
Direction: FROM Origin



Period: 2021-10-12 00:00 - 2021-10-12 23:59

Site: West Chandler  
 Parameter: PM10  
 Units: UG/M3  
 Direction: FROM Origin



Period: 2021-10-12 00:00 - 2021-10-12 23:59



**Appendix D:** Maricopa County Air Quality Department Planning & Analysis Division – Air Quality Monitor Data for July 20 – 21, 2023

Date	<u>Blue Point</u>	<u>Blue Point</u>	<u>Buckeye</u>	<u>Buckeye</u>	<u>Buckeye</u>	<u>Cave Creek</u>	<u>Cave Creek</u>	<u>Central Phoenix</u>	<u>Central Phoenix</u>	<u>Central Phoenix</u>
	<i>WSMAX</i>	<i>WSPD</i>	<i>PM10</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>PM10</i>	<i>WSMAX</i>	<i>WSPD</i>
	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>
20-jul-2023 00:00	7,7	3,8	57,5	6,2	2,1	2,4	1,1	62	11,4	3,1
20-jul-2023 01:00	6,8	2,7	45,3	4,3	2,2	7,5	3,6	61,4	5	1,9
20-jul-2023 02:00	4,6	1,2	56	4,5	1,4	10,7	5,6	49,5	4,8	1,9
20-jul-2023 03:00	3,3	0,9	53,7	6,1	1,3	9,4	6,3	38,6	4,1	1,5
20-jul-2023 04:00	4,7	0,6	98,9	3,4	0,9	9,5	4,9	37,2	5,2	2,5
20-jul-2023 05:00	4,6	1,6	158,3	4	1,6	8,5	3,8	45,5	5,5	2,6
20-jul-2023 06:00	3,6	1	156,1	3	1,2	7,1	3,5	55,5	4,3	2,2
20-jul-2023 07:00	5	1,1	236	4,6	1,8	6,2	1,8	69,7	7,9	2,9
20-jul-2023 08:00	7,5	3	110,9	5,9	2,6	10,7	4,2	72,8	6,6	0,9
20-jul-2023 09:00	16	5	48,5	8,1	3,6	9,2	3,2	72	11,3	3,4
20-jul-2023 10:00	16,5	5,8	38,5	9,5	4,4	12,3	3,3	61,4	14,3	5,2
20-jul-2023 11:00	17	7,2	32,8	10	4,2	14,3	4	39,7	13,8	5,4
20-jul-2023 12:00	18,7	7,4	39,1	12,8	5,3	19,7	5,1	30,8	16,8	6,6
20-jul-2023 13:00	19,9	7,4	36,5	15,9	6,3	20,8	7,7	27,9	19,1	8,3
20-jul-2023 14:00	19,6	7,6	47,3	17,6	7,3	21,4	7,3	24,9	21	8,8
20-jul-2023 15:00	20,6	8,1	45,6	17,4	8,4	18,9	7,7	40,5	21,9	9,4
20-jul-2023 16:00	26,5	8,2				21,4	9	38,1	23,6	10,5
20-jul-2023 17:00	20,8	8,7		12,8	6,6	20,1	9	38,1	22,6	11
20-jul-2023 18:00	18,4	9,4	40,7	12,4	6	17,6	8	45,1	19	9,7
20-jul-2023 19:00	15,2	6,4	46,4	12,1	6,5	10,1	4,7	61,4	16,8	8,2
20-jul-2023 20:00	8,7	1,8	63,2	11,7	4,5	5,3	3	47,1	18,4	7,2
20-jul-2023 21:00	4,2	1,5	84,8	4,8	2,2	4,5	0,6	29,2	16,9	7,9
20-jul-2023 22:00	5,7	0,6	111,7	10,6	4,1	3,7	1,5	32,7	12,1	6,1
20-jul-2023 23:00	6,8	3	56	7,3	4,1	4,2	1,1	36,5	7,5	4,2
21-jul-2023 00:00	4	0,9	83,5	6,1	2,8	4,5	1,8	38,2	8,4	4,4
21-jul-2023 01:00	3,6	0,4	110	5,4	2,6	4,9	2,1	32,2	7,9	4,3
21-jul-2023 02:00	3,8	1,1	112,8	5,7	1,7	7,3	2,4	33,5	6,1	2,9
21-jul-2023 03:00	3,4	0,4	67,5	13,5	3,2	5,7	0,8	34,8	6,4	2,6
21-jul-2023 04:00	7,8	2	245,9	22,1	8	6,7	1,8	36,4	13,8	2,2
21-jul-2023 05:00	6,3	0,3	349,1	12,3	5,2	18	2,3	196,7	25,7	10,3
21-jul-2023 06:00	6,4	1,7	250,7	9,3	4,1	10,3	1	294	20,9	10,8
21-jul-2023 07:00	16,3	4	284,5	8,3	4	12,3	4,9	240,5	23,8	11
21-jul-2023 08:00	11,8	4,6	197,3	9	4,1	9,5	2,6	160,9	20,1	10,1
21-jul-2023 09:00	12,1	2,5	134,2	9,6	4,3	11,1	3,2	113,1	16,9	6,5
21-jul-2023 10:00	17	5,5	101,7	9,4	3,4	15,1	5,2	112,5	14	4,4
21-jul-2023 11:00	16,6	7,1	80,6	11,8	4,4	13,1	4	127,6	13,7	4,2
21-jul-2023 12:00	16,3	5,8	69,7	10,8	4,7	14,7	5,1	121,9	14,6	4,6
21-jul-2023 13:00	18,8	8,2	53,7	12	5,2	16,8	6,3	97,1	19,7	7,5
21-jul-2023 14:00	19,5	7,7	44,1	13,1	6,7	18,7	6,9	65,1	19,5	8,9
21-jul-2023 15:00	17,5	8	59,2	17	7,3	17,7	7,3	58,3	19	8,9
21-jul-2023 16:00	16,7	7,2	55,8	15	7,2	17,1	7,8	44,9	19,7	9,8
21-jul-2023 17:00	14	5,7	45,1	12,2	6,3	27,8	7,3	42,8	21,5	9,7
21-jul-2023 18:00	11	3,9	64,7	9,2	4,7	39	12	56,5	16,6	8,2
21-jul-2023 19:00	51,7	11,3	69	16,6	1,1	25,6	8,9	87,6	17	6,3
21-jul-2023 20:00	22,5	3,6	178	17,9	6,7	23,5	7,5	162,7	28,4	8,7
21-jul-2023 21:00	34,3	1,4	53,6	11,6	5,7	15,7	7,6	112,3	13,7	4,8
21-jul-2023 22:00	19,6	5,3	44,4	10,7	1,5	10,8	4,8	89,7	34,6	10,2
21-jul-2023 23:00	36,6	18,9	43,1	16,6	2,7	22	3,1	930,9	41,1	17,1

<u>Durango Complex</u>	<u>Durango Complex</u>	<u>Durango Complex</u>	<u>Durango Complex</u>	<u>Dysart</u>	<u>Dysart</u>	<u>Dysart</u>	<u>Eastwood</u>	<u>Eastwood</u>	<u>Eastwood</u>	<u>Fountain Hills</u>
<i>PM10</i>	<i>PM25</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>PM10</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>PM25</i>	<i>WSMAX</i>
<i>UG/M3</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>MPH</i>
30,4	7	7,3	1,5	30,7	6,6	3,7	9,9	3	14,4	5,4
64,1	14,1	7,4	2,6	25,9	8,6	4,5	7,5	3	9,5	4,9
52,4	11,7	4,2	1,5	23,7	7,5	3,9	6,6	2,9	9,7	3,1
40,1	9,1	4,6	0,6	32,6	8	3,8	6,1	1,8	4,9	3,6
58,1	9,1	3,6	0,5	33,3	6,1	3	4,2	1,9	9	2,7
81,8	14,6	5,6	2	73,3	6,2	3	7,8	0,8	10,1	2,3
93,7	14,2	4,1	1,3	59,8	5,9	3,5	6,7	3	12,9	2,2
70,2	13,8	5,7	0,4	53,1	5	2,1	6,7	3	8,9	3,6
68	9,2	8,6	3,4	42	6,1	1,8	8,7	0,8	12,4	10,5
56,8	7,3	13,7	5,7	41,1	6,8	0,4	10,4	4,3	8,5	12,6
37,7	6,2	13,7	6,1	48,8	10	3,1	15,3	5,9	11,2	13,4
28,3	5,1	13,5	5,5	42,2	14,5	3,1	16,4	6,8	7,9	14,9
24,3	6,6	14,9	5,8	43,7	16,6	3,9	18,7	6,8	7,3	17,9
40	6,2	19,2	8,7	34,4	22,8	3,4	20,8	9,5	7,5	19,5
33,6	6,7	20,4	8,9	21,1	20,3	6,3	21,5	8,6	8,8	18,7
23,9	6,1	19,4	8,9	28,7	22,9	7,9	23	10,3	6,7	19,9
26,9	4,3	22,7	10	21,3	21,1	7,2	23,8	11,6	13,8	19,9
31	4,9	24,6	9,7	22,7	18,4	6,1	23,7	11,8	3,7	20,6
26,3	4,9	18,8	8,4	21	15,9	5,9	18,8	10,1	6,8	20,3
21,7	4,9	13,6	4,8	19,1	12,9	4,8	15,3	6,2	7,5	12,1
25,2	5,5	10,3	4,5	15,5	11,5	5,8	9,6	5	6,1	9,7
28,2	5,8	11,4	5,5	18,7	11,3	6,2	11,3	5,1	7,2	7,1
27,5	9,6	11,6	6,2	18,7	10,1	6,2	8,4	4,4	10,8	6,8
20,6	6	9,9	4,7	16,9	11,7	6,3	9	4	10,1	6,7
16,2	5,1	4,6	1,9	26,2	11,1	3,2	9,4	3,6	9	4,5
20	8,4	5,6	2,7	18,7	4,7	2,1	6,9	3,3	3,1	3,5
16,3	7,5	5,8	2,9	19,9	5,1	2,2	6,6	2,8	1,9	5,8
20,4	7,4	3,2	0,4	17,3	7,6	3,5	7,8	1,5	3,5	5,5
50,5	10,4	15,7	3,5	63,8	16,2	3,8	13,7	0,8	9,1	5,8
154,3	10,4	26,3	13	489,6	21,6	10	17,2	7,9	13,5	11
245,4	21,1	28,8	12,1	374,9	16,9	2,7	20,6	10	20,6	9,7
199,1	27,2	21	9,9	309,7	10,8	4,1	19,3	9,4	26	11,3
126,4	15,1	17,6	9,3	269,4	11,3	4,1	18,8	9,8	24,2	10,5
94,8	12,1	15,8	7,6	240,5	13,2	5,5	12,2	5,1	21,3	9,2
86,8	9,9	12,5	4,1	205,4	13,7	5,2	11,4	1,2	18,2	14,6
87	11,9	11,6	3,6	170,5	13,9	4,7	10,6	1,6	15,4	13,7
85,3	14,8	12	3,1	155,2	14,1	4,1	13,1	3,7	20,4	20,9
66,5	12,8	17,1	6,9	139,1	16,2	6	14,5	6	25,7	19,3
48,1	7,8	18,6	8,5	94,9	19,5	7,3	18	8,6	19,5	21,2
42,2	8,2	19	9,8	53,3	16,6	3,4	20,1	9,4	10	17,4
31,2	8,2	21,5	10,4	44,2	16,5	6,3	19	10,8	10	20,1
22,7	4,8	21	9,4	41,1	14,1	4,5	19,8	10,9	6,7	17,4
33,7	7,3	14,9	7,4	185	33,8	8,8	15,8	8,5	2,8	12,4
46,1	7,1	22,5	4,7	55,9	24,7	9,8	19	5,9	5,9	28
70,3	6,1	21,8	4,3	17,5	16,8	6,9	26,6	7,9	10,3	26,1
164,2	16,2	14,7	6,1	25,3	14	3	12,3	6,7	12,9	41,5
69,2	9,2	33,9	8,4	50,6	4,8	0,5	36,4	5,9	16,4	12,7
679,4	38,1	34,2	13,2	307,1	23,4	7,1	31,3	4,5	33,1	24,2

<u>Fountain Hills</u>	<u>Glendale</u>	<u>Glendale</u>	<u>Glendale</u>	<u>Glendale</u>	<u>Higley</u>	<u>Higley</u>	<u>Higley</u>	<u>Mesa</u>	<u>Mesa</u>	<u>Mesa</u>
<i>WSPD</i>	<i>PM10</i>	<i>PM25</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>PM10</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>PM10</i>	<i>WSMAX</i>	<i>WSPD</i>
<i>MPH</i>	<i>UG/M3</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>
1,8	20,5	6,1	6,2	1,4	40,3	9,6	5,3	39,4	9,2	3,9
1,7	25,9	8,4	4,9	1,2	38,5	8,2	4,6	23,8	9,7	3,7
1,4	21,7	7,6	2,6	0,7	77,1	6,6	4,1	18,2	6,1	2,7
1,2	26,3	8,2	3,8	0,6	57,6	5,4	2,2	17,6	4,2	1
0,4	31,8	9,5	4,7	2	46,3	6,7	3,8	18,7	5,5	1,1
0,6	22,4	5,8	3,8	1,3	109,3	6,7	3,5	30,1	5,4	2,1
0,4	26,4	8,6	4	2	114,6	8,2	3,8	42,8	8,2	3,9
0,4	43,9	8,3	5,4	1,9	106,7	7,8	3,7	52,2	8,4	3,9
2,1	45,8	8,8	4,5	0,8	75,1	6,6	2,8	53,8	6,8	3
3,9	41,3	9,1	8	2,2	59,3	6,3	2,2	36,6	7,6	1,6
4,8	42,8	8,5	12,5	4,3	38,3	10,4	2,1	30,2	10,8	3,5
5,6	46,3	6,2	16,7	4,5	34,5	14,1	4,7	37,3	13,6	4,4
6,8	28,1	6,4	17	5,4	41,9	13,9	4,4	33,2	19,2	5
6,2	30,4	9,5	17,6	7,1	31,7	19	5,6	24,1	18,6	5,9
5,9	26,5	7,7	19,7	8,4	21	18,8	6,9	21,8	20	6,7
6,6	23,1	4,9	24,9	9,7	28,2	19,5	7,4	20,5	19,6	8,4
6,1	18,1	3,5	25,1	9,2	28,7	20,3	9,5	15,7	21	8,2
7,3	14,5	3,7	20,6	10,2	31,8	24,6	10	18,7	19,7	7,5
7	11,3	3,8	17,6	8,3	29,8	20,2	9,8	19,7	18,7	6,1
5,2	11,6	3,2	13,3	6,2	26,5	12,8	5,3	15	12,8	4,1
3,8	18,3	4,8	9,9	4,8	31,8	7,8	2,7	12,8	7,9	2,4
1,6	23,7	8,4	6	3,1	38,6	5,9	3,3	18	6,9	2,1
2,1	24,3	8,3	4,1	2	51	6	3,5	14,7	7,5	2,6
0,5	19,1	7,1	4,7	2	51,6	6,2	2,3	14,9	9,5	3,9
1,8	19,1	7,3	4,5	2,8	70	3,9	1,5	23	7,5	2
0,5	23	8,7	4,4	2,1	67,9	4,5	1,9	22,4	2,5	0,5
2	22	7	4,5	2	57,5	11,3	2	28,6	4,3	0,5
1,4	15,6	5,4	4	2	54,5	6,6	2,8	33	7,9	2,2
0,6	15,7	5	25,1	6,1	71,5	9	3,4	30,5	12,7	3
3,5	186,6	16,8	27,8	15,2	82,7	6,3	0,6	29,5	7,4	3,3
1,5	299,3	33,4	23	10,5	104,9	13	2,7	57,7	17,2	5,9
3,7	221,1	31	20,4	8,9	201,1	13,1	5,9	152	19	7,2
2,9	197,9	32	14,7	7,7	217,1	11,4	3,6	147	18	7,5
1,8	164,1	28	14,2	5,9	162,3	9,2	2,9	115,6	15,9	6
3,4	107,9	18,8	12,8	5,6	135,9	9,4	2	105,9	10	3
5,5	85,4	16,9	14,2	6,3	120,6	7,4	1,3	88,7	9,8	2,1
7	68,9	13,6	13,8	6,1	116,6	16,4	3,6	83,3	12	3,4
7,6	74	14,4	16,4	6,7	105,8	15	4,6	87,4	13,7	3,3
7,6	82,7	14,7	17	8,3	103,7	16	4,9	76,4	15,9	5,4
6,9	63,3	10,6	20,1	9,4	97,2	18,2	6,4	53,6	18,4	6,7
5,9	45,4	7,6	20,8	11	54,7	17,5	6,7	39,8	19	7,3
5,6	38,7	7,2	18,8	10	32,2	17,7	7	29,5	17,4	6,7
3,7	42,8	10,5	27,3	3,5	38	13,8	5,1	24	12,5	5,3
6,2	78,6	8,3	21	8,7	46,3	6,4	2,4	28,7	10,1	3,9
3,1	22,8	4,1	14,8	6	85,3	14,3	5,5	51,9	25,5	6,3
4,6	37,1	5,1	14,8	4,4	91,1	14,4	4,7	50,1	12,4	4,5
3,5	39,6	8,7	7,7	3	355,1	33,9	10	42,6	37,2	11,1
6,4	264,6	24,1	31,3	14,7	279,9	24,1	10,5	223,9	28,6	11,4

<u>Mesa</u>	<u>North Phoenix</u>	<u>North Phoenix</u>	<u>North Phoenix</u>	<u>North Phoenix</u>	<u>Pinnacle Peak</u>	<u>Pinnacle Peak</u>	<u>South Phoenix</u>	<u>South Phoenix</u>	<u>South Phoenix</u>	<u>South Phoenix</u>
<i>PM25</i>	<i>PM10</i>	<i>PM25</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>PM10</i>	<i>PM25</i>	<i>WSMAX</i>	<i>WSPD</i>
<i>UG/M3</i>	<i>UG/M3</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>
5,2			3,2	1	4,5	1,2	28,8	7,1	11,2	2,7
4			3,3	1,1	4,6	1,1	37,6	7,6	6,2	2,5
4,5			2,4	0,1	7,5	2,5	39,8	7,1	4,1	1,2
5,4			1,8	0,1	6,2	2,9	41,1	7,2	2,2	0,5
7,1			3,3	1	5,3	3,4	56,2	10,3	2,8	0,2
6,5			2,7	0,8	7,6	2,7	85,3	13,1	3,2	0,6
8,5			3,4	0,9	7,7	3,2	111,3	16,9	5,3	1,2
9,9			8,9	3	10,4	3,5	90,3	13,4	6,6	2,7
12,9			9,4	4,1	9,1	4,2			7,9	1
9,2			10	3,5	12,4	5,3			11,3	4,9
7,3			9,7	2,7	13,2	4,5			12,1	5,3
6,7			11,8	3,2	12,2	4,3	31,5	5,5	12,8	5,3
12,3			14,3	4,7	15,7	4,8	26,6	6,2	16,1	5,8
8,4			16,6	5,5	20,7	6,1	26,2	6	19,2	7,6
6,9			14,3	4,6	20,6	7,3	24,1	5,1	19	7,4
6,1			20,2	5,7	20	7,4	22,8	3,1	21,6	9,3
4,1			16,6	5,5	22,9	7	30,7	4,1	21,7	9,6
5,1			19,3	6,5	19,4	7,3	25,7	3,8	19,8	9
5,7			14,5	4,9	14,5	5,4	26,8	5,7	19,6	8
4,5			9,4	3,5	12,7	4,2	22,8	5,9	12	4,4
3,3			6,3	2,1	8,5	3,5	24	4,5	6,5	2,8
8,4			5	0,6	7,1	1,1	22,6	5,5	7,1	3,5
6,1			4,4	1,4	3,1	1,4	17,8	4,2	5,9	2,4
5,6			2,1	0,5	4,4	2,6	23,1	6,3	3,5	1
8,2			2,1	0,3	4,7	3,5	22,6	6	3,5	0,4
7,3			2,3	0,4	5,9	3,2	19,4	4,9	5,8	2
8,7			1,9	0,2	7,1	3,5	25,1	6,3	5,7	2,4
12			5,5	1,4	11,6	4,1	24,1	6,6	3	0,2
9,4			16,1	3,7	10,5	4,2	36,1	8,5	10,6	0,4
7			15,7	4,4	23,2	6,2	76,9	11,8	15,1	6,8
9			19,8	5,7	11,7	3,9	184,7	17,9	17,5	8,2
21,2			12,8	4,3	10,7	4,2	203,6	24,1	20,6	10,2
24,1			10,9	4,4	12,1	4,1	149,7	20,8	17,2	9
19,4			10,4	3,3	11,2	3,5	102,7	15,9	15,5	4,5
19,5			11,9	3,5	12,8	4,4	91,3	14,7	13,9	3,5
16,7			11,4	3,7	12,2	4,4	94,4	14,3	11,5	2
15,9			12,6	3,9	13,9	4,6	89,3	13,8	12,2	3,4
15,2			13,1	4,5	14,7	6	71,8	10,7	14,5	5
15,1			14,9	5,3	17	6,4	54,6	8,8	18,5	7,8
12			12,4	4,7	18,4	6,6	33,6	-1	20	8,3
9,1			15,7	5,5	16,8	6,2	37,3	4,5	20,5	8,6
5,9			15,4	5,2	16,4	5,5	28,9	4,4	17,5	9
6,8			20,4	4	19,1	5,2	27,5	4,3	15,4	7,2
9,4			20,7	7,4	18,6	7,4	41,3	7,7	15,2	4,6
11,6			23,6	8,3	33,2	12,4	82,2	9,3	23,8	6
10,9			15,5	6,3	21,4	6,4	166,6	14,6	9	4
11,4			26,2	5,9	12,9	3,6	73,2	10,7	36	9,1
24,1			30,5	9,2	24,7	5,3	581,1	43,8	33,1	14,1

<u>South Scottsdale</u>	<u>South Scottsdale</u>	<u>South Scottsdale</u>	<u>Tempe</u>	<u>Tempe</u>	<u>Tempe</u>	<u>Tempe</u>	<u>Thirty-Third</u>	<u>Thirty-Third</u>	<u>West 43rd Ave</u>	<u>West 43rd Ave</u>
<i>PM10</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>PM10</i>	<i>PM25</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>WSMAX</i>	<i>WSPD</i>	<i>PM10</i>	<i>WSMAX</i>
<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>UG/M3</i>	<i>MPH</i>	<i>MPH</i>	<i>MPH</i>	<i>MPH</i>	<i>UG/M3</i>	<i>MPH</i>
66,2	7,9	2,2	41,8	7,4	7,4	1,5	4,5	0,6	61,9	8,2
50,8	6,8	1,4	38,8	7,8	4,1	0,4	4,8	0,6	91,9	5,8
32,4	2,5	0,5	24,2	7	1,7	0,1	2,6	0,5	85,5	4,6
33	3,2	1,2	15,6	4,1	2,4	0,2	5	0,6	97,7	5,5
33,4	3,8	1,5	13,2	4,3	2,7	0,8	7,6	1,9	102,9	4,9
39,9	4,3	1,7	25,6	8,4	3,1	1,4	8,1	2,8	191,9	3,8
56,2	5,2	2,3	37,8	10,2	4,4	1,6	8,4	2,1	236,2	5,4
69,5	7,6	3,1	39,7	10,3	5,6	2	7,4	2	112	6,2
60,9	7,5	2,9	38,5	6,9	5,2	1,2	8,3	2,6	97,1	10,2
41	8,9	2,9	36,2	8,2	7,7	1,1	13	3,1	120,4	14,3
51,6	10,8	3,5	37,4	9,6	10,1	2,6	13,8	5,8	90,3	14,3
46,3	14,7	5,1	53,7	10	12,7	3,5	13,6	4	49,8	14,3
37,3	16,6	5,2	30,2	4,9	15,8	3,7	14	3,8	33,9	17,7
27,4	16,8	6,8	25,5	7,1	14	4	16,5	4,6	58,3	21,9
23,7	21,1	8,3	22	7,6	17,6	4,6	19,4	5,1	57,1	20,7
30,9	19,2	7,9	22	9,6	15,6	4,8	17,7	5,2	88,7	23,8
31,7	23	8,3	19,4	3,7	16,7	5	19,9	5,7	109,2	24
31	21,4	9,6	23,3	8,7	17,6	4,9	17,9	5,8	77,8	22,2
31,3	19,4	8,6	26,2	4,6	16,6	4,4	15,7	4,7	42,3	19,2
35	13,4	6,6	23,2	3,4	12,2	3	9,9	3,2	67,3	13,7
35,8	12,6	4,9	38,5	4,6	6,7	1,9	9,4	2,8	184,2	10,9
29,6	13,6	5	19,8	5,9	7,5	1,8	6,8	2,2	69,5	12,5
27,6	7,5	4,3	16,3	6,3	6,1	1,6	7,8	1,9	39	8,4
33,3	7,6	4,5	15	5,2	5	1,2	7	2,5	48,4	9,2
37,6	8,7	5	21,4	6,9	4,1	1,2	6,9	2,9	45,9	4
31,8	7,9	4,4	23,1	10	1,5	0	5,6	2,3	52,5	5,6
32,6	6,2	1,1	24,8	11,9	2,7	0,3	6,6	2,2	67,4	4,6
54	10,2	1,6	21,6	9,1	5,3	0,9	7,8	3	67,6	6,2
57,6	11,2	1	28,9	10,1	6,5	0,8	20,5	3,7	187,9	22,6
71,8	17,6	4,6	31	8,2	8,2	2,5	18,4	5	401,4	25,1
255,6	17,1	4,9	104,6	15,3	16,4	4	17,8	5,6	418,1	27,3
250,8	17,1	7,5	165,4	21,7	18,6	6,1	17,9	6,5	264,7	21,1
206,8	16,9	6,7	132,2	22,8	15,8	5,2	16,6	5,1	168,5	20,7
190,7	12,8	5,3	96,2	17,8	11,1	3,7	15,6	5,3	127,5	19,9
137,6	13,1	3,7	85,5	17,1	9,2	1,4	13,5	4,7	135	14,8
107,9	14,3	4,4	95	18,1	8,9	1,7	12	3,2	129,2	13,7
109,4	14,4	4,8	97,9	17,5	10,9	1,9	14,3	4,2	124,5	15,3
107,6	15,6	6	86,1	14,1	12,7	2,3	15,4	4,6	104,2	16,3
78,7	18,1	7,2	70	15,5	13,4	3,9	15	4,5	87,5	20,9
67,5	19,7	7,6	58	8,8	18,3	4,5	16	4,7	69,5	20,5
54,3	17,2	7,3	38,6	2,8	15,7	4,5	15,2	5,1	60,3	22,3
51,7	19,4	7,6	33,6	5,3	14	4,3	16,3	4,8	50,5	19,8
56,5	15,9	6,1	26,6	7,1	9,5	3,3	19,9	3,9	50,2	15,9
68,5	10,7	3,6	32,2	7,3	9	2,3	17,2	4,9	63,9	20,3
289,5	27,8	8,7	75,5	10,9	18,6	3,8	27	6,4	118,6	23,5
88,8	12,1	4	84,4	12,3	9,8	2,9	14,2	5,7	225,1	14,6
208	43,4	11,6	39,7	8,3	34,7	6,9	25,2	2,9	164	36,8
654,3	35,6	14,6	308	26,3	31,5	10,7	28,5	8	2022,6	40,1

<u>West 43rd Ave</u>	<u>West Chandler</u>	<u>West Chandler</u>	<u>West Chandler</u>	<u>West Phoenix</u>	<u>West Phoenix</u>	<u>West Phoenix</u>	<u>West Phoenix</u>	<u>Zuni Hills</u>	<u>Zuni Hills</u>	<u>Zuni Hills</u>
WSPD	PM10	WSMAX	WSPD	PM10	PM25	WSMAX	WSPD	PM10	WSMAX	WSPD
MPH	UG/M3	MPH	MPH	UG/M3	UG/M3	MPH	MPH	UG/M3	MPH	MPH
2	43,1	7	3,5	18,4	7,7	4,1	0,9	50,3	5,1	1,4
2,5	42,8	6,2	2,9	21,1	6,7	4,2	1,6	22,1	4,7	2,4
1,7	28,3	5,3	1,9	28,7	9	3,7	1,3	31	4,9	1,5
1,5	29,2	3,2	1	39,6	13,3	3,6	0,9	61,9	5,2	3,2
2,4	39,8	4,8	1	48,4	18,4	4,4	1,7	45,9	7,7	3,8
1,9	40,5	4,3	1,4	37,9	11,7	4,8	1,7	75,9	6,1	2,9
1,9	42,9	4,6	2,5	49,6	12,7	3,5	0,7	106,4	8,3	4,5
1,1	60,8	8	2,7	43,2	11,1	8,2	2,8	35,8	9,4	4,1
4,7	72,9	8,7	1,9	32	9,3	9,6	4	48,1	7,3	3,3
6,8	50,8	6,3	0,9	32,4	7,4	10,2	4,3	57,5	8,6	2,6
6,4	91	10,4	2,4	29,5	8	12,2	4,9	37,3	10,9	2,3
6,2	43	15,4	3	23,3	6,9	12,8	4,8	38,3	16,5	5,6
6,8	36,2	15	3,5	16,7	5,5	17,7	5,2	39	17,5	6,2
8,6	30,5	13,8	2,9	20,3	6,1	24,5	8	41,9	20,1	5,2
10,6	25,1	15,2	3,8	17,8	4,6	18,4	7	31,3	21,7	9,5
12,4	27,6	21,2	6,5	14,5	3,5	19,2	7,4	25,1	21,8	8,9
12,7	27,7	21,4	7,2	21,1	4,7	21,3	8,8	16,5	22,1	9,4
12,9	27,3	22,7	7,4	28	5,6	20,6	9,7	23,3	21,1	9,6
10,7	27,5	19,6	6,5	20	4,3	19	8,2	18,1	19,1	8,6
6,9	32,3	14,3	5,3	17	5,7	16	6,1	13	16,4	7,1
6,2	34,5	6,8	3,3	18,2	5,8	12,5	5,7	6,6	10,2	5,9
6,4	36,4	6,1	3,3	21,8	7,2	10,3	4,5	34,4	8,6	5,4
4,8	33,9	9,2	4,4	27,1	7,2	7,1	3,5	36,2	10	5,7
4	31,6	7,1	2,9	27,8	6,5	6,5	2,8	19,5	7,7	1,8
1,1	33	3,9	0,8	21,6	6,2	7,1	3,6	14,1	5,9	2
2,7	31,8	4,4	1,2	16,1	5,6	7	3,4	25,8	3,8	0,1
2,1	43,7	4,6	0,6	14,1	5,8	6,1	2,9	22,1	6,7	2,5
2,5	37	9,1	3,4	11,8	2,8	6,4	3	24,4	6,7	3,6
5,7	51,7	15,6	2,3	20,6	4,5	16,6	5	52,4	22,4	1,8
14,2	117,6	7,5	0,2	135,1	13,6	21,6	9,6	140,6	11,4	1,3
14,3	122,3	11,8	5	233	24,9	24	10,2	283,4	7,9	1,8
13,5	152,4	13,3	5,6	175,3	23,6	18,4	8,3	294,6	20,1	8,8
12,4	192	9	2,9	121,8	22,7	14,5	6,9	272,2	14,7	3,7
8,1	157,4	7,7	1,1	86,1	16,2	16	7,1	242	14	6,7
5,3	148,4	9,7	0,7	70,5	13,7	15,5	6,5	196,3	15,2	6,6
3,2	127,1	8,1	1,2	67,2	12,6	12,8	4,7	172,1	14,3	5,8
2,5	123,7	9,3	1,5	54	10,9	14,8	4,8	153,7	13,8	5
7,8	122	11,1	1,7	49,2	9	16,1	6,7	155	13,7	4,4
10,6	107,6	13,6	3,7	52,1	11	16,8	7	112,3	18,8	7,1
11,1	85,1	15,1	3,8	48,5	10,9	17,4	7,8	40,6	18,4	6,5
12,9	38,7	15,7	5,7	36,2	6,1	19,2	8,3	60,5	19	8,3
11,2	37,4	21,7	6,4	34,9	7,5	18,8	9	43	14,8	7,6
8,9	29,3	13,4	4,9	33,9	8	20,3	6,8	314,6	33,9	12,4
7,2	37,6	9,1	3	46,4	6,3	23,4	5,2	52	30	13,5
7,4	66,8	17,5	2,8	52,5	4,8	24,6	6,7	14,7	19	6,6
7,2	88,6	9,1	4,2	110,2	8,7	13,4	5	43	11,5	4,5
8,9	414,2	28,8	7	39,8	9,7	28,9	5,6	41,1	9,2	1,4
18,1	423	27	11,1	468,6	34,9	32,8	13,8	241,7	22,5	5,1

## David Shu

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**From:** Wickersham, Lindsay <wickersham.lindsay@epa.gov>  
**Sent:** Thursday, May 15, 2025 9:01 AM  
**To:** Beverly Chenausky  
**Cc:** Transportationconformity; Matthew Poppen; Johanna.Kuspert@maricopa.gov; Gabiou, Dan (FHWA); Arizona FHWA; craig.bolze@peoriaaz.gov; Noel, George (FHWA); Dresser, Christopher (FHWA); axia@azmag.gov; Caitlyn Zaremba; Dean Giles; Tricia Brown; Taylor Zimmer; David Shu; Justin S. Hoppmann; Diana Dunn; ADOTAirNoise - ADOT; Joonwon Joo; Meek, Clifton; Oconnor, Karina; David Lenzer; Simran Singh; Foster, Anissa; Seeds, Amy; Arizona FHWA  
**Subject:** RE: Interagency Consultation: El Mirage Rd; L303 to Jomax Road PE0-0(231)T | T0428 03D

Hi all,

We have reviewed the information provided in the atypical events report titled, “Draft Atypical Events Report, El Mirage Road, SR303L— Jomax Road” dated 2025-04-07, EPA agrees that the following dates (hours): July 10, 2021, October 11, 2021, October 12, 2021, September 2, 2022, October 3, 2022, July 21 2023, July 26, 2023, and August 31, 2023 at monitor: Zuni Hills Monitor (AQS ID: 04-013-4016) are appropriate to exclude from the background concentration under 40 CFR Part 51, Appendix W, Section 8.3.2.c.ii for the 40 CFR Part 53 transportation conformity project being proposed by Maricopa and ADOT (El Mirage Road, SR 303L to Jomax Rd; T0428).

Thank you for the opportunity to review this document and please let us know if you have any questions.

Best,  
Lindsay

Lindsay Wickersham | 415-947-4192  
Physical Scientist | Planning Section | Air and Radiation Division | US EPA - Region 9

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**From:** Wickersham, Lindsay  
**Sent:** Friday, May 9, 2025 4:48 PM  
**To:** Beverly Chenausky <bchenausky@azdot.gov>  
**Cc:** Transportationconformity <transportationconformity@azdeq.gov>; Matthew Poppen <MPoppen@azmag.gov>; Johanna.Kuspert@maricopa.gov; Gabiou, Dan (FHWA) <dan.gabiou@dot.gov>; Arizona FHWA <arizona.fhwa@dot.gov>; craig.bolze@peoriaaz.gov; Noel, George (FHWA) <George.Noel@dot.gov>; Dresser, Christopher (FHWA) <christopher.dresser@dot.gov>; axia@azmag.gov; Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>; Dean Giles <dgiles@azmag.gov>; Tricia Brown <tbrown2@azdot.gov>; Taylor Zimmer <tzimmer@azdot.gov>; David Shu <DShu@aztec.us>; Justin S. Hoppmann <JHoppmann@aztec.us>; Diana Dunn <ddunn@aztec.us>; ADOTAirNoise - ADOT <adotairnoise@azdot.gov>; Joonwon Joo <jjoo@azdot.gov>; Meek, Clifton <meek.clifton@epa.gov>; Oconnor, Karina <OConnor.Karina@epa.gov>; David Lenzer <david.lenzer@burgessniple.com>; Simran Singh <ssingh@aztec.us>; Foster, Anissa <Foster.Anissa@epa.gov>; Seeds, Amy <Seeds.Amy@epa.gov>; Arizona FHWA <arizona.fhwa@dot.gov>  
**Subject:** RE: Interagency Consultation: El Mirage Rd; L303 to Jomax Road PE0-0(231)T | T0428 03D

Hi Beverly,

Thank you for the opportunity to review the updated Modeling files and IAC documents. At this time, we have completed our review of the modeling files and the following documents transmitted on 4/15/2025 via the email below:

- “T0428\_ElMirageRd\_ConsultationDocument\_04142025.pdf”

## **Appendix C**

### **LINK SOURCE TYPE DISTRIBUTION**

From MAG Regional Model

RoadType	SourceType	SourceTypeHourFraction	
4	11	0.001338	
4	21	0.387033	
4	31	0.381478	
4	32	0.074812	Truck % for Urban restricted roadway
4	41	0.00105	types 32-62
4	42	0.000499	23%
4	43	0.000666	
4	51	0.000534	
4	52	0.100093	
4	53	0.005722	
4	54	0.003428	
4	61	0.018411	
4	62	0.024936	
5	11	0.001976	
5	21	0.467036	
5	31	0.46033	
5	32	0.027749	Truck % for urban unrestricted roadway
5	41	0.000367	types 32-62
5	42	0.003889	7%
5	43	0.000233	
5	51	0.000157	
5	52	0.029507	
5	53	0.001687	
5	54	0.001011	
5	61	0.002574	
5	62	0.003486	

Truck Percentage 23% use default MAG truck percentage

RoadType	SourceType	Percent of vehicle type	Adjusted SourceTypeHourFraction
4	11	0.001737	77% 0.001338
4	21	0.502739	77% 0.387033
4	31	0.495523	77% 0.381478
4	32	0.325057	23% 0.074812
4	41	0.004563	23% 0.00105
4	42	0.002167	23% 0.000499
4	43	0.002894	23% 0.000666
4	51	0.002321	23% 0.000534
4	52	0.434902	23% 0.100093
4	53	0.024862	23% 0.005722
4	54	0.014895	23% 0.003428
4	61	0.079996	23% 0.018411
4	62	0.108344	23% 0.024936

Truck Percentage 26% Table 2 for intersection arterials and ramps (SR303L Ramp Intersection)

RoadType	SourceType	Percent of vehicle type	Adjusted SourceTypeHourFraction
5	11	0.002127	74% 0.001567
5	21	0.502545	74% 0.370375
5	31	0.495329	74% 0.365057
5	32	0.392718	26% 0.103285
5	41	0.005193	26% 0.001366
5	42	0.055042	26% 0.014476
5	43	0.003294	26% 0.000866
5	51	0.002228	26% 0.000586
5	52	0.417596	26% 0.109828
5	53	0.023873	26% 0.006279
5	54	0.014302	26% 0.003761
5	61	0.036423	26% 0.009579
5	62	0.04933	26% 0.012974

Start with SourceTypeHourFraction derived from MAG data (based on operating hours)  
 Divide into cars (11,21,31) and trucks (32-62)  
 Determine each source type's percentage of car or truck category (column L)  
 Determine worst case truck percent (column M)  
 Use the percentage in Column L to further breakdown the car percentage or truck percentage by sourcetype

**MOVES input details:**  
 use roadtype 4 for mainline links  
 use roadtype 5 distribution for all arterials and ramps

**From MAG Regional Model**

RoadType	SourceType	SourceTypeHourFraction
4	11	0.001338
4	21	0.387033
4	31	0.381478
4	32	0.074812
4	41	0.00105
4	42	0.000499
4	43	0.000666
4	51	0.000534
4	52	0.100093
4	53	0.005722
4	54	0.003428
4	61	0.018411
4	62	0.024936
5	11	0.001976
5	21	0.467036
5	31	0.46033
5	32	0.027749
5	41	0.000367
5	42	0.003889
5	43	0.000233
5	51	0.000157
5	52	0.029507
5	53	0.001687
5	54	0.001011
5	61	0.002574
5	62	0.003486

Truck % for Urban restricted roadway types 32-62 23%

Truck % for urban unrestricted roadway types 32-62 7%

**Truck Percentage**

22% Table 2 for intersection arterials and ramps

(Happy Valley Road Intersection)

RoadType	SourceType	Percent of vehicle type	Adjusted SourceTypeHourFraction
5	11	0.002127	78% 0.00165
5	21	0.502545	78% 0.389975
5	31	0.495329	78% 0.384375
5	32	0.392718	22% 0.087969
5	41	0.005193	22% 0.001163
5	42	0.055042	22% 0.012329
5	43	0.003294	22% 0.000738
5	51	0.002228	22% 0.000499
5	52	0.417596	22% 0.093542
5	53	0.023873	22% 0.005348
5	54	0.014302	22% 0.003204
5	61	0.036423	22% 0.008159
5	62	0.04933	22% 0.01105

Start with SourceTypeHourFraction derived from MAG data (based on operating hours)  
 Divide into cars (11,21,31) and trucks (32-62)  
 Determine each source type's percentage of car or truck category (column L)  
 Determine worst case truck percent (column M)  
 Use the percentage in Column L to further breakdown the car percentage or truck percentage by sourcetype

**MOVES input details:**  
 use roadtype 4 for mainline links  
 use roadtype 5 distribution for all arterials and ramp:

**From MAG Regional Model**

RoadType	l	SourceType	l	SourceType	HourFraction
4	11	0.001338			
4	21	0.387033			
4	31	0.381478			
4	32	0.074812	Truck % for Urban restricted roadway		
4	41	0.00105	types 32-62		
4	42	0.000499	23%		
4	43	0.000666			
4	51	0.000534			
4	52	0.100093			
4	53	0.005722			
4	54	0.003428			
4	61	0.018411			
4	62	0.024936			
5	11	0.001976			
5	21	0.467036			
5	31	0.46033			
5	32	0.027749	Truck % for urban unrestricted roadway		
5	41	0.000367	types 32-62		
5	42	0.003889	7%		
5	43	0.000233			
5	51	0.000157			
5	52	0.029507			
5	53	0.001687			
5	54	0.001011			
5	61	0.002574			
5	62	0.003486			

**Truck Percentage**

18% Table 2 for intersection arterials and ramps

(Jomax Road Intersection)

RoadType	l	SourceType	l	Percent of vehicle type	Adjusted SourceType	HourFraction
5	11	0.002127	82%	0.00174		
5	21	0.502545	82%	0.411081		
5	31	0.495329	82%	0.405179		
5	32	0.392718	18%	0.071475		
5	41	0.005193	18%	0.000945		
5	42	0.055042	18%	0.010018		
5	43	0.003294	18%	0.000599		
5	51	0.002228	18%	0.000406		
5	52	0.417596	18%	0.076002		
5	53	0.023873	18%	0.004345		
5	54	0.014302	18%	0.002603		
5	61	0.036423	18%	0.006629		
5	62	0.04933	18%	0.008978		

Start with SourceTypeHourFraction derived from MAG data (based on operating hours)  
Divide into cars (11,21,31) and trucks (32-62)

Determine each source type's percentage of car or truck category (column L)

Determine worst case truck percent (column M)

Use the percentage in Column L to further breakdown the car percentage or truck percentage by sourcetype

**MOVES input details:**

use roadtype 4 for mainline links

use roadtype 5 distribution for all arterials and ramp:

---

**From:** Beverly Chenausky <bchenausky@azdot.gov>  
**Sent:** Monday, July 7, 2025 11:50 AM  
**To:** Wickersham, Lindsay  
**Cc:** Transportationconformity; Arizona FHWA; Matthew Poppen; Johanna.Kuspert@maricopa.gov; axia@azmag.gov; Dresser, Christopher (FHWA); Caitlyn Zaremba; Oconnor, Karina; kimberly.butler@maricopa.gov; Kristi.Beck@maricopa.gov; David Shu; Justin S. Hoppmann; Ron Pope (AQD); ADOTAirNoise - ADOT; Dean Giles; craig.bolze@peoriaaz.gov; Taylor Zimmer; Tricia Brown; David Lenzer; Foster, Anissa; Joonwon Joo  
**Subject:** Re: Interagency Consultation: El Mirage Rd; L303 to Jomax Road PE0-0(231)T | T0428 03D  
**Attachments:** I-10 Broadway Curve AQ FHWA Meeting.docx; Develop Link Source Types.xlsx; F0072\_CO HotSpot Methodology Changes Requested During Public Review\_02282020.pdf

Hi Lindsay,

When ADOT had an air quality analysis meeting with FHWA for the I-10 Broadway Curve project in 2020, FHWA disagreed with the ADOT's source type distribution methodology which was using the regional source type data provided by MAG. As you can see in the attached meeting memo, "I-10 Broadway Curve AQ FHWA Meeting.docx", FHWA requested us to develop a new methodology which could be used for project-specific source type distributions.

The project team submitted the attached methodology change request document, "F0072\_CO HotSpot Methodology Changes Requested During Public Review\_02282020.pdf". As you can see the "Link Source Types" in Pg.4, the vehicle types 32-62 were suggested as truck types and FHWA approved the methodology.

Since FHWA approved this source type methodology, we have used the attached spreadsheet tool, "Develop Link Source Types.xlsx" for the following projects including T0428. In the tool, you can find the calculations, "Divide source types into cars (11,21,31) and trucks (32-62)", in the "Adjust for Project Data" tab.

The project-specific truck percentages for the T0428 project were much higher than the regional mix, so FHWA agreed on using the current methodology as applicable in the worst-case scenario. However, ADOT agrees on the recommendation that the source type 32 (Light Commercial Truck) belong to the Light Vehicle category as a more conservative methodology. ADOT will change the current calculations to "cars (11,21,31,32) and trucks (41-62)" for the future projects including the F0719 project (SR 24, SR202L to Ironwood Drive).

If additional clarifications are needed the project team will be available on Thursday, meeting link included below.

ADOT Transportation Conformity Coordination

Thursday, July 10 · 11:00am – 12:00pm

Time zone: America/Phoenix

Google Meet joining info

Video call link: <https://meet.google.com/usc-ivuz-eof>

Or dial: (US) +1 585-667-0052 PIN: 813 049 123#

More phone numbers: <https://tel.meet/usc-ivuz-eof?pin=9640464285692>



**Beverly Chenausky**  
Assistant Environmental Administrator  
**ENVIRONMENTAL PLANNING**

**205 South 17th Ave.**  
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On Wed, Jun 18, 2025 at 9:41 AM Wickersham, Lindsay <[wickersham.lindsay@epa.gov](mailto:wickersham.lindsay@epa.gov)> wrote:

Hi all,

Thank you for the opportunity to review the draft air quality report for this project. The R9 EPA modeler assigned to this project, Anissa Foster (Cc'd) is actively reviewing this documentation and will respond directly with any additional comments or requests for information by June 30, 2025.

I would like to request more information explaining why and how source type 32s are classified as medium duty trucks (i.e. is this occurring in the travel demand model mapping? Why and how is weight used to assign these vehicle classifications, etc). We would like this information to be added to this report for the public and also sent to IAC partners. We believe this extra documentation will bolster our understanding so we can discuss updating this planning assumption for future projects and transportation modeling. We would like to request that this information be provided to us by July 7.

Thank you again, and Anissa will reach out with any additional comments as applicable.

Best,

Lindsay

Lindsay Wickersham | 415-947-4192

Physical Scientist | Planning Section | Air and Radiation Division | US EPA - Region 9

**From:** Beverly Chenausky <[bchenausky@azdot.gov](mailto:bchenausky@azdot.gov)>  
**Sent:** Friday, May 30, 2025 10:33 AM  
**To:** Transportationconformity <[transportationconformity@azdeq.gov](mailto:transportationconformity@azdeq.gov)>; Arizona FHWA <[arizona.fhwa@dot.gov](mailto:arizona.fhwa@dot.gov)>; Wickersham, Lindsay <[wickersham.lindsay@epa.gov](mailto:wickersham.lindsay@epa.gov)>; Matthew Poppen <[MPoppen@azmag.gov](mailto:MPoppen@azmag.gov)>; [Johanna.Kuspert@maricopa.gov](mailto:Johanna.Kuspert@maricopa.gov)  
**Cc:** [axia@azmag.gov](mailto:axia@azmag.gov); Dresser, Christopher (FHWA) <[christopher.dresser@dot.gov](mailto:christopher.dresser@dot.gov)>; Caitlyn Zaremba <[zaremba.caitlyn@azdeq.gov](mailto:zaremba.caitlyn@azdeq.gov)>; Meek, Clifton <[meek.clifton@epa.gov](mailto:meek.clifton@epa.gov)>; Oconnor, Karina <[OConnor.Karina@epa.gov](mailto:OConnor.Karina@epa.gov)>; [kimberly.butler@maricopa.gov](mailto:kimberly.butler@maricopa.gov); [Kristi.Beck@maricopa.gov](mailto:Kristi.Beck@maricopa.gov); David Shu <[DShu@aztec.us](mailto:DShu@aztec.us)>; Noel, George (FHWA) <[George.Noel@dot.gov](mailto:George.Noel@dot.gov)>; Justin S. Hoppmann <[JHoppmann@aztec.us](mailto:JHoppmann@aztec.us)>; Ron Pope (AQD) <[Ron.Pope@maricopa.gov](mailto:Ron.Pope@maricopa.gov)>; ADOTAirNoise - ADOT <[adotairnoise@azdot.gov](mailto:adotairnoise@azdot.gov)>; Dean Giles <[dgiles@azmag.gov](mailto:dgiles@azmag.gov)>; [craig.bolze@peoriaaz.gov](mailto:craig.bolze@peoriaaz.gov); Taylor Zimmer <[tzimmer@azdot.gov](mailto:tzimmer@azdot.gov)>; Tricia Brown <[tbrown2@azdot.gov](mailto:tbrown2@azdot.gov)>; David Lenzer <[david.lenzer@burgessniple.com](mailto:david.lenzer@burgessniple.com)>; Diana Dunn <[ddunn@aztec.us](mailto:ddunn@aztec.us)>  
**Subject:** Interagency Consultation: El Mirage Rd; L303 to Jomax Road PE0-0(231)T | T0428 03D

**Caution:** This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

As discussed in the May 14th meeting, attached the draft air quality report for this project, please provide comments by June 30th, 2025.

**Beverly Chenausky**

Assistant Environmental Administrator

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## **Appendix D**

**PM MOVES AND AERMOD MODELING INPUT AND OUTPUT FILES**

**PM MOVES and AERMOD Modeling Files are Available Upon Request**

**Work Front Link**

**[https://azdot.my.workfront.adobe.com/document/public/view?  
publicToken=Fa7B7fWsjzfHorSguNKC7lLnkzz4laPuImQfZZ5qIJSgvgIBQEc0G3V  
KFNQTH2H-KlzHLws3AImBmiZ0NKauQw==&endcap](https://azdot.my.workfront.adobe.com/document/public/view?publicToken=Fa7B7fWsjzfHorSguNKC7lLnkzz4laPuImQfZZ5qIJSgvgIBQEc0G3VKFNQTH2H-KlzHLws3AImBmiZ0NKauQw==&endcap)**