



Maricopa County

Air Quality Department

Air Monitoring Division

2007 Data Review and Special Projects

Ben Davis



2007 Data Review and Special Projects

- Review of 2007 NAAQS
- Sites and monitors
- Data on the internet
- Mobile monitoring
- Questions

2007 Data Completeness for Criteria Pollutants

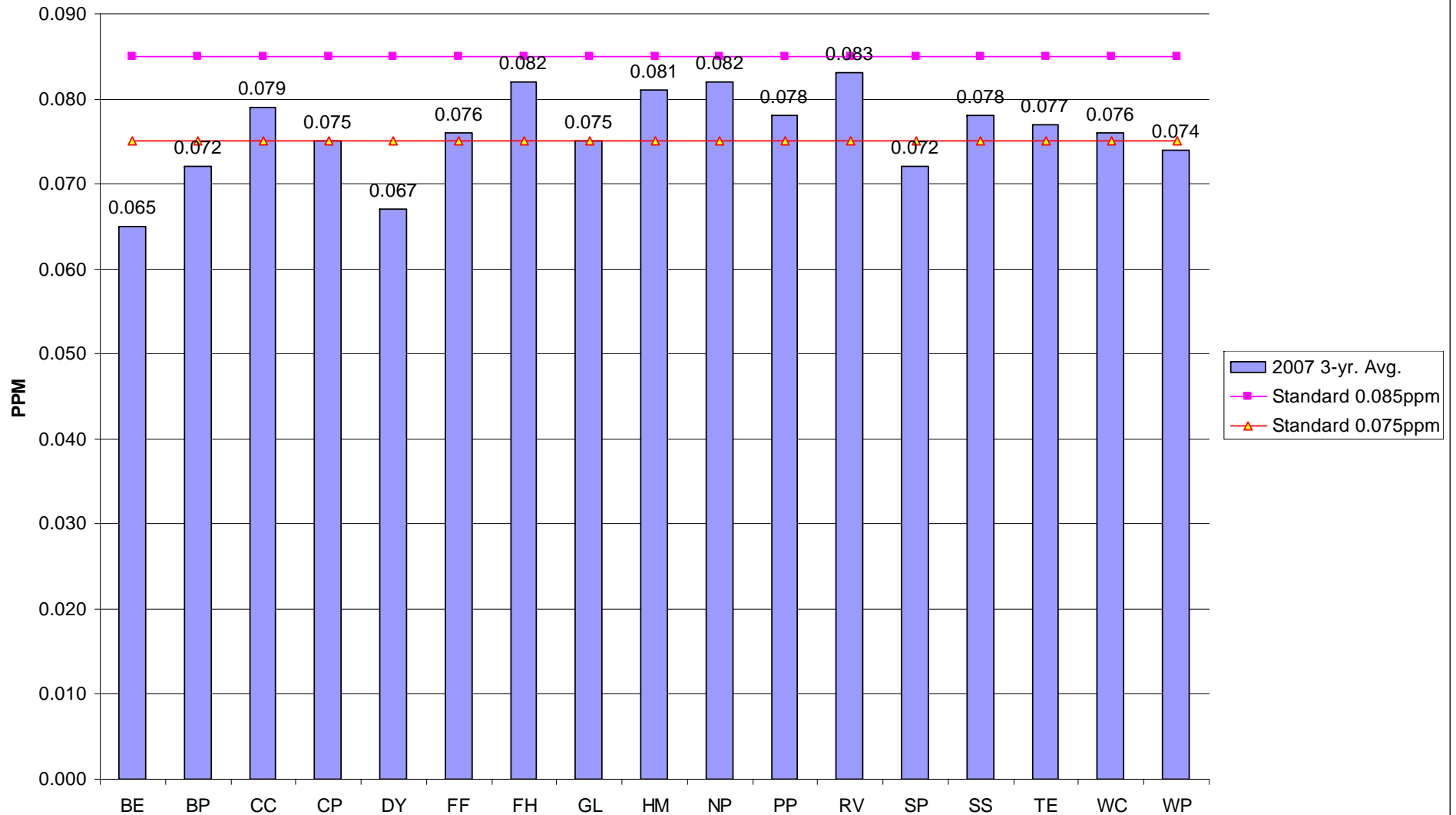
	Number of Actual Samples	Number of Scheduled Samples	Data Completeness (Actual/Schedule)
Carbon Monoxide	79101	80832	97.9%
Ozone	114044	116304	98.1%
PM _{2.5} (1 in 3 day)	423	436	97.0%
PM _{2.5} (continuous)	16454	17520	93.9%
PM ₁₀ (1 in 6 day)	416	420	99.0%
PM ₁₀ (continuous)	71296	72336	98.6%
Nitrogen Dioxide	40843	43800	93.2%
Sulfur Dioxide	17056	17520	97.4%
Total	339,633	349,168	97.3%*

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2007 NAAQS Exceedances and Violations Summary

Carbon Monoxide	No exceedances or violations of the 1-hr or 8-hr NAAQS standard were logged.
Nitrogen Dioxide	No exceedances or violations of NAAQS were logged.
Ozone	No exceedances or violations of the NAAQS were logged.
PM₁₀	There were 11 unique days when at least one monitor exceeded the standard. There were 19 individual exceedances of the 24-hour standard which occurred at 7 different sites. There were 7 violations of the 24-hour standard.
PM_{2.5}	No exceedances or violations of the NAAQS were logged.
Sulfur Dioxide	No exceedances or violations of NAAQS were logged.

2007 Violation of the Existing and Proposed 8-hr Ozone Standard



2007 Summary of PM_{2.5}

Summary FRM Monitors

Site Name	24-hr Avg. •Max (µg/m ³)	24-hr Avg. 2 nd High (µg/m ³)	98 th Percentile Value	Annual Avg. (µg/m ³)	Number of Samples
Mesa	24.3	19.7	18.3	9.72	117
South Phoenix	32.2	30.3	29.2	12.27	118
West Phoenix	33.0	31.3	27.2	10.89	119

Summary Continuous Monitors

Site Name	24-hr Avg. Max (µg/m ³)	24-hr Avg. 2 nd High (µg/m ³)	98 th Percentile Value	Annual Avg. (µg/m ³)	Number of Samples
Durango Complex (continuous)	59.75	41.62	30.75	14.20	7824
West Phoenix (continuous)	73.64	63.95	35.71	13.60	8630

Note that data from our continuous monitors are not accepted for compliance purposes. This data is displayed here for comparison purposes only.

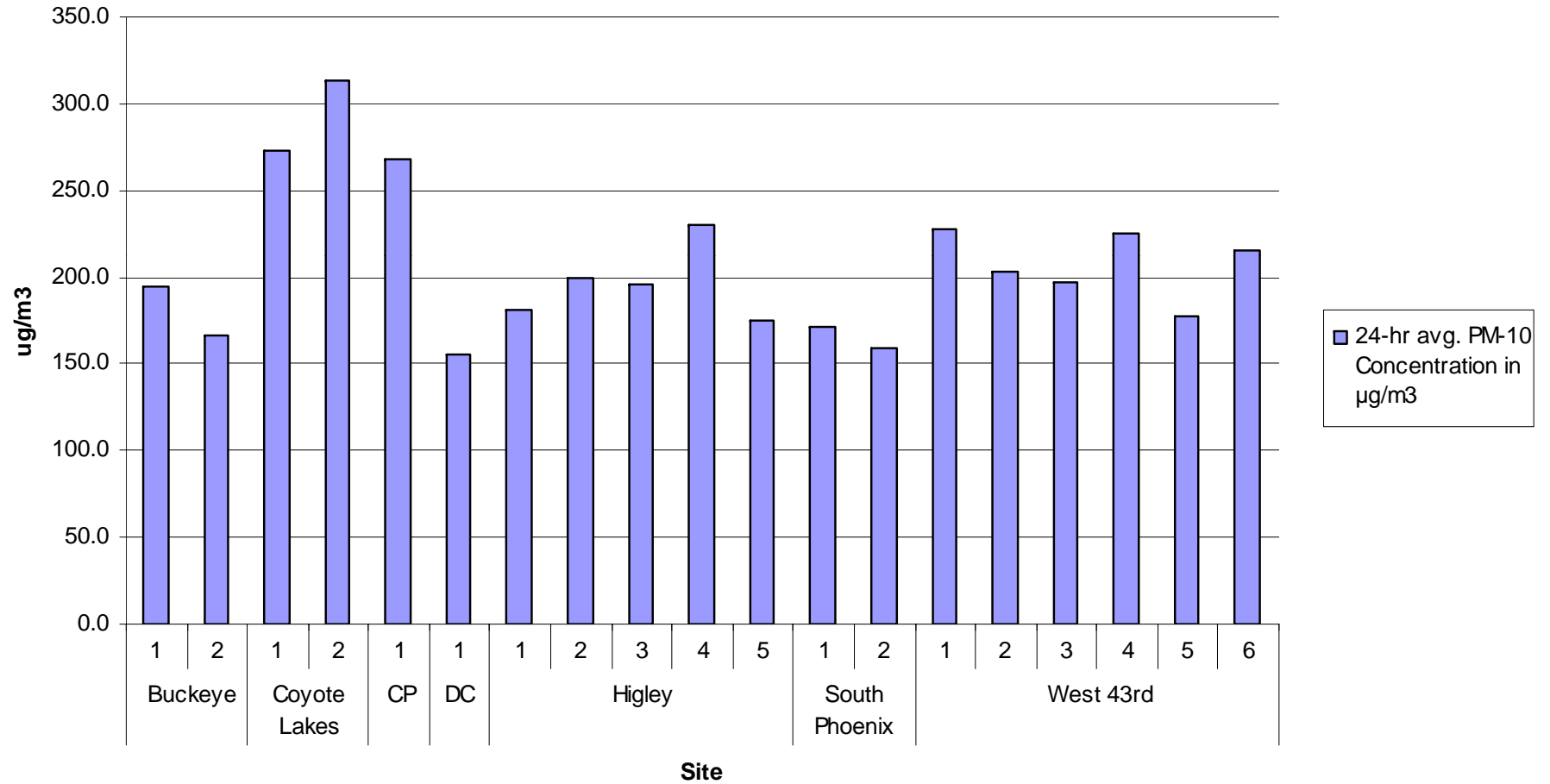
2007 Violations of the 24-hr PM₁₀ Standard

Site	•2005		•2006		•2007		Rate of Expected Exceedances
	24-hr Max. (µg/m ³)	Expected Exceedances	24-hr Max. (µg/m ³)	Expected Exceedances	24-hr Max. (µg/m ³)	Expected Exceedances	
Buckeye	169	2	272*	3	195*	2	2.3
Central Phoenix	116	0	134*	0	267*	1	0.3
Coyote Lakes	N/A	N/A	N/A	N/A	313#*	2#	#
Durango Complex	206	13	240*	9	155*	1	7.6
Dysart	76	0	67	0	111	0	0
Glendale	84	0	60	0	92	0	0
Greenwood	173	6	166*	1	124	0	2.3
Higley	142	0	177*	2.1	230*	5.1	2.4
Mesa	86	0	75	0	110	0	0
North Phoenix	81	0	79	0	78	0	0
South Phoenix	147	0	132	0	171*	7.5	2.5
South Scottsdale	121	0	76	0	73	0	0
West Chandler	94	0	77	0	104	0	0
West 43rd Avenue	233	13.1	260*	18.7	227*	6	12.6
West Phoenix	155	6	147*	0	124	0	2.0

2007 PM₁₀ Violations Following Expected Approval of Exceptional Events

Site	Current AQS 2007 24-hr max (µg/m ³)	Projected 2007 24- hr max if events approved (µg/m ³)	Current AQS 2007 Expected Exceedances	Projected 2007 Expected Exceedances (Approx.)	Projected Rate of Exceedances (2005-2007)
Buckeye	195‡	152	2	0	1.66
Central Phoenix	267‡	149	1	0	0
Coyote Lakes	313#‡	125	2#	0	#
Durango Complex	155‡	152	1	0	7.33
Dysart	111	111	0	0	0
Glendale	92	92	0	0	0
Greenwood	124	124	0	0	2.3
Higley	230‡	150	5.1	0	0.7
Mesa	110	110	0	0	0
North Phoenix	78	78	0	0	0
South Phoenix	171‡	144	7.5	0	0
South Scottsdale	73	73	0	0	0
West Chandler	104	104	0	0	0
West 43rd Avenue	227‡	154	6	0	10.6
West Phoenix	124	124	0	0	2.0

2007 PM-10 24-hr avg Exceedances



Air Monitoring Sites



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West 43rd

Monitor



Coyote Lakes

W SUN VALLEY LN

N 119TH AVE

N 118TH AVE

W BEARDSLEY RD

N COYOTE LAKES PKY

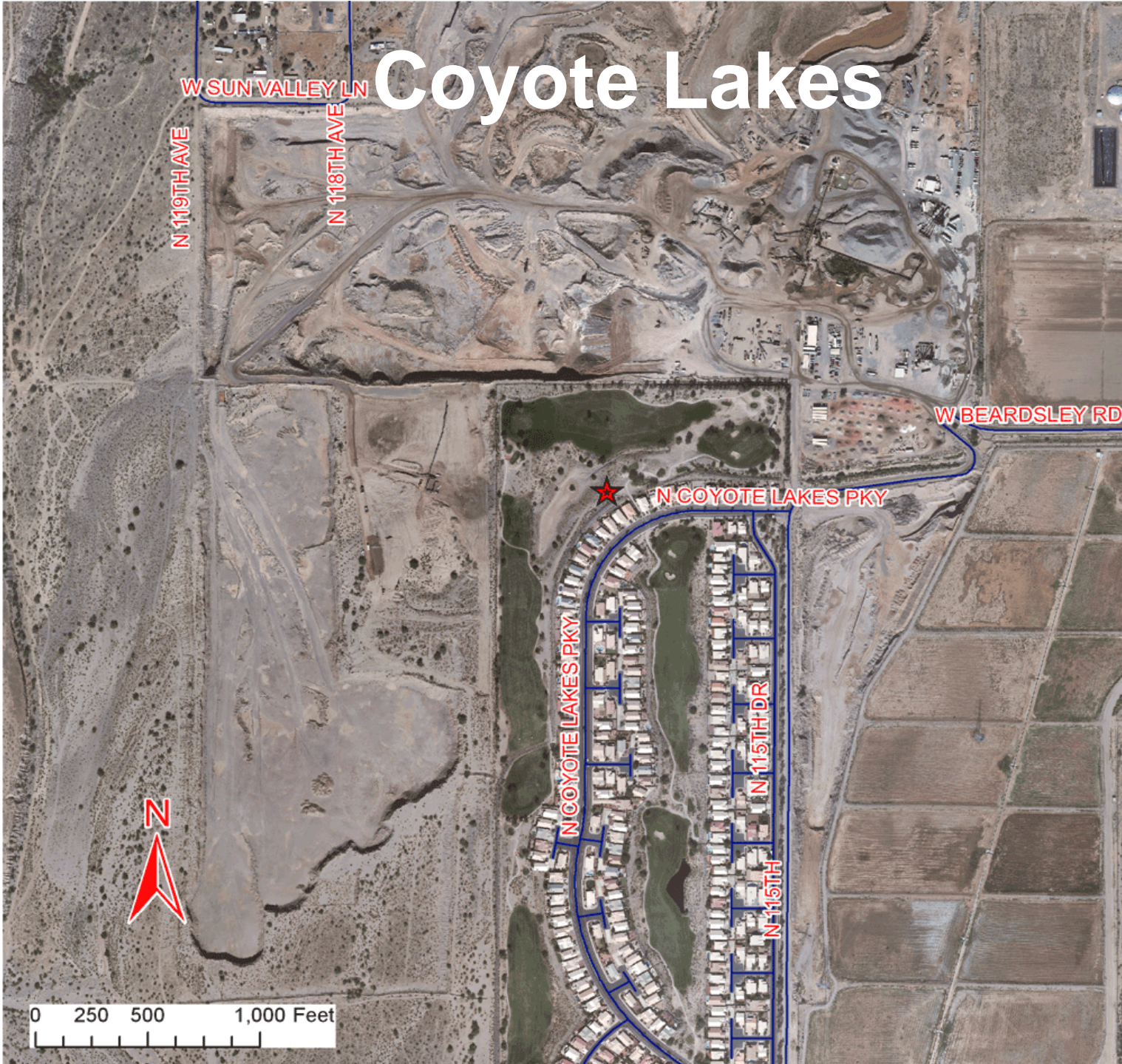
N COYOTE LAKES PKY

N 115TH DR

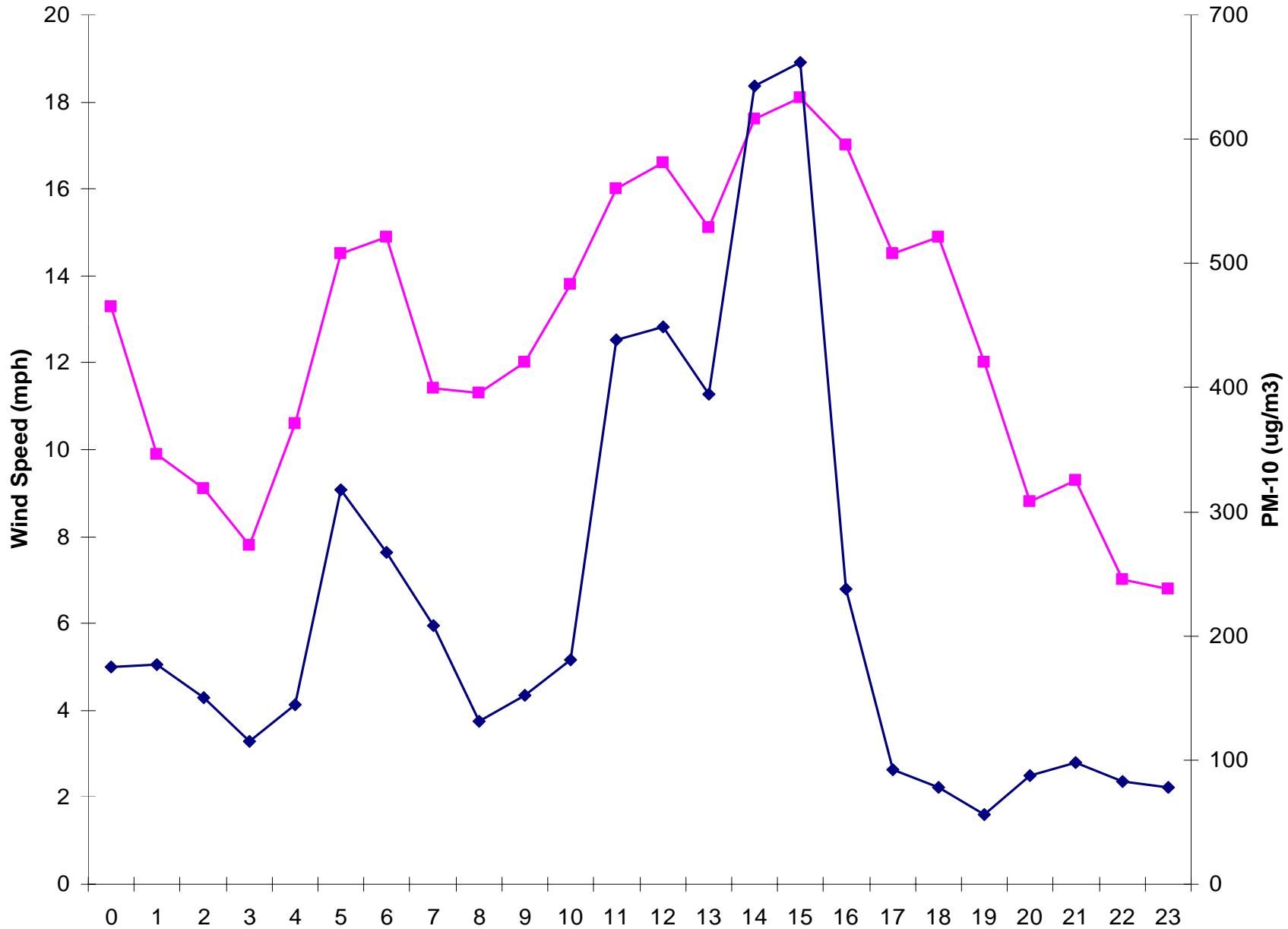
N 115TH



0 250 500 1,000 Feet



West 43rd Site 6/6/07 Wind Speed & PM-10



Video Cameras at West 43rd Site

Smoke stacks



Explosions



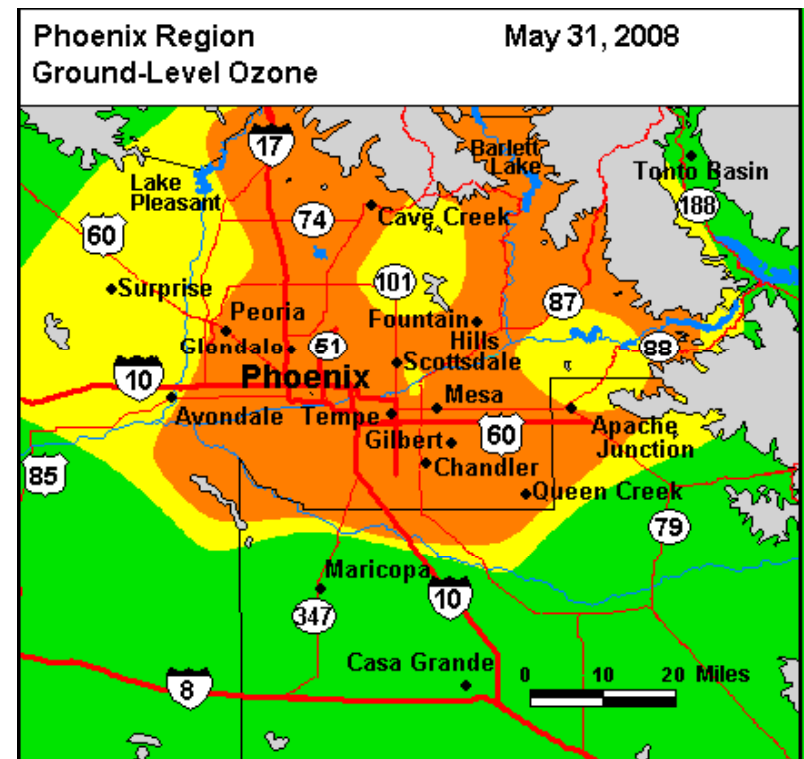
Tolleson Site



- **Location**
 - West Valley at the I-10 and Loop-101 interchange
- **Instruments**
 - PM 10 and PM-2.5
 - Ozone
 - Carbon Monoxide



AIRNOW Ozone Mapping



<http://aqwww.maricopa.gov/AirMonitoring/SitePollutionMap.aspx>

Maricopa County Interactive Pollution Data

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Site Name: West 43rd Ave
 Site Location: 43rd Ave. and Broadway Rd.
 AQS Code: 04-013-4009



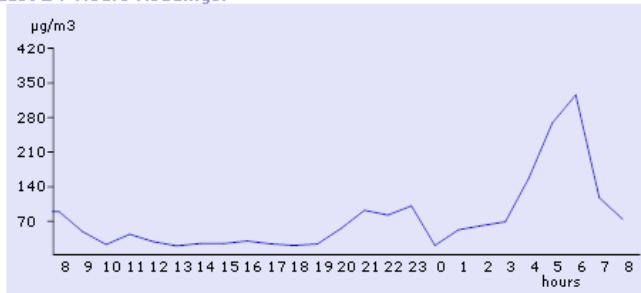
Warning: These data have been obtained from automated instruments and have not been subjected to a quality assurance review to determine their accuracy. They are presented for public awareness and should not be considered final. Conditions such as power outages and equipment malfunctions can produce invalid data. **Please note that not every pollutant is measured at every site.**

Current Data | Historical Data

Particulate Matter 10 micrometers (PM 10)

Date & Time: 6-20-2007 8 AM

Last 24-Hours Readings:



Current Readings

AQI*: 60

Units: µg/m3

Time	Interval	Readings
8:00 AM	24 Hour Average	74.8958
8:00 AM	Hourly Average	74.5000

Official Primary Standards

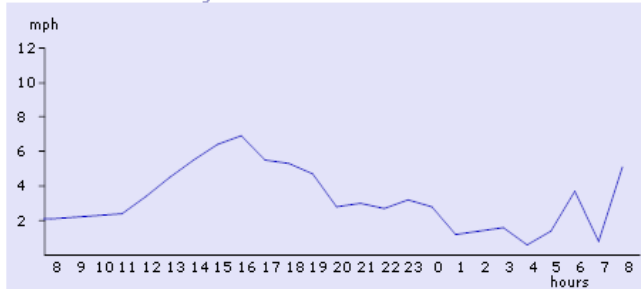
Interval	Readings
24-hour Average	150 µg/m3
Annual Average	50 µg/m3

*Note: the AQI is based off of the 24-hour average.

Wind Speed

Date & Time: 6-20-2007 8 AM

Last 24-Hours Readings:



Current Readings

AQI*: *

Units: mph

Time	Interval	Readings
8:00 AM	Hourly Average	5.1000

Mobile Monitoring



Toxics Analysis (GCMS)



Stack Monitoring



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Questions?



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Place Division Title Here

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