



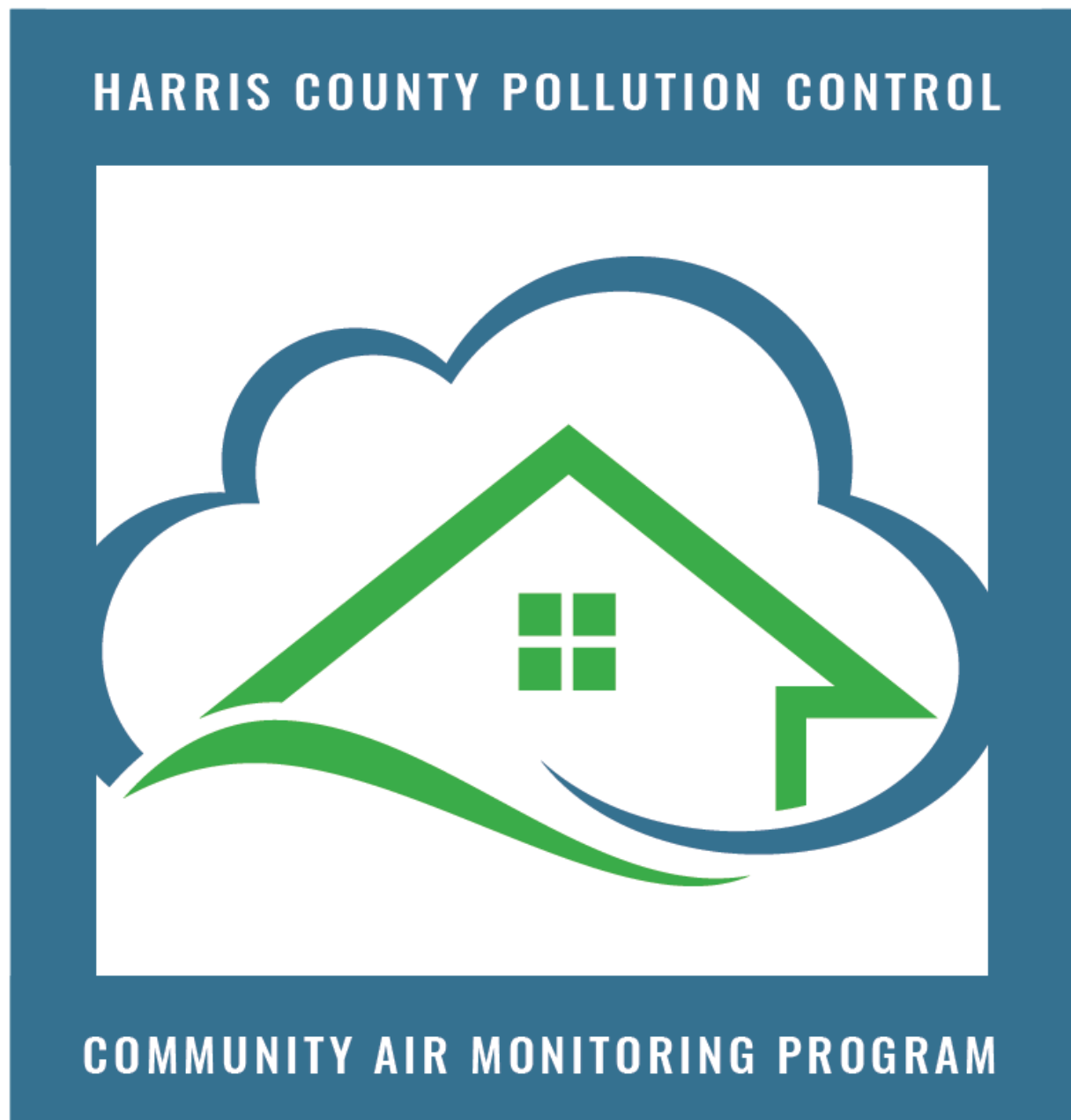
Harris County
Pollution Control

Community Air Monitoring Program

April 28, 2022

Matt Van Vleck

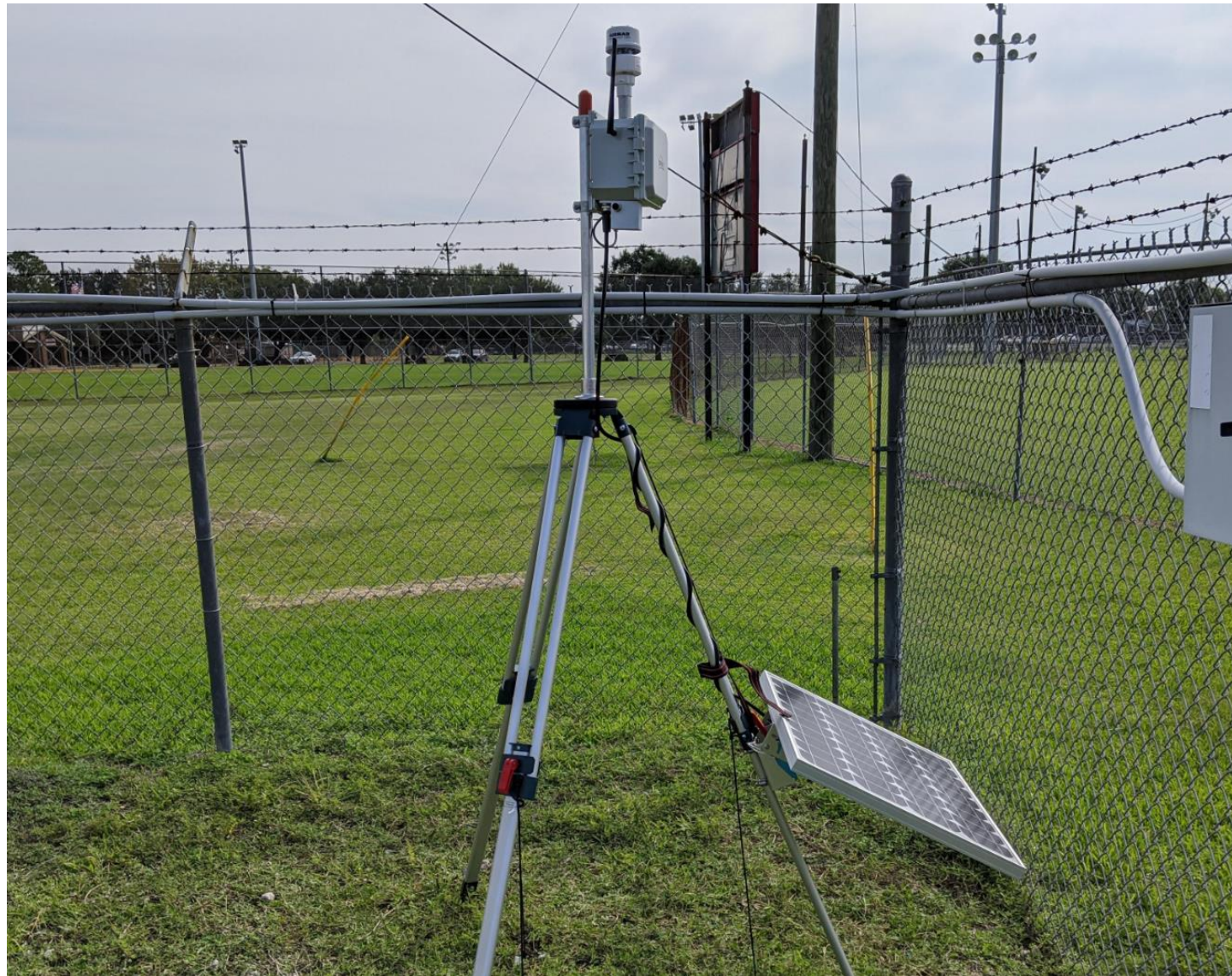
CAMP Logo



The Harris County Community Air Monitoring Program (CAMP) is designed to:

- ❖ Measure pollution levels that affect environmental health and public health across Harris County.
- ❖ Identify emission sources that adversely impact local communities.
- ❖ Inform the public and elected officials on priorities related to clean air and environmental sustainability.
- ❖ Highlight patterns and trends that may support environmental regulatory activities.

Monitoring Equipment



Sensit SPOD

- Volatile organic compounds (VOC)
- Particulate Matter (PM1, PM2.5, PM10)
- Wind Speed, Wind Direction, Temperature, Humidity
- Canister Samples

Sensit SPOD

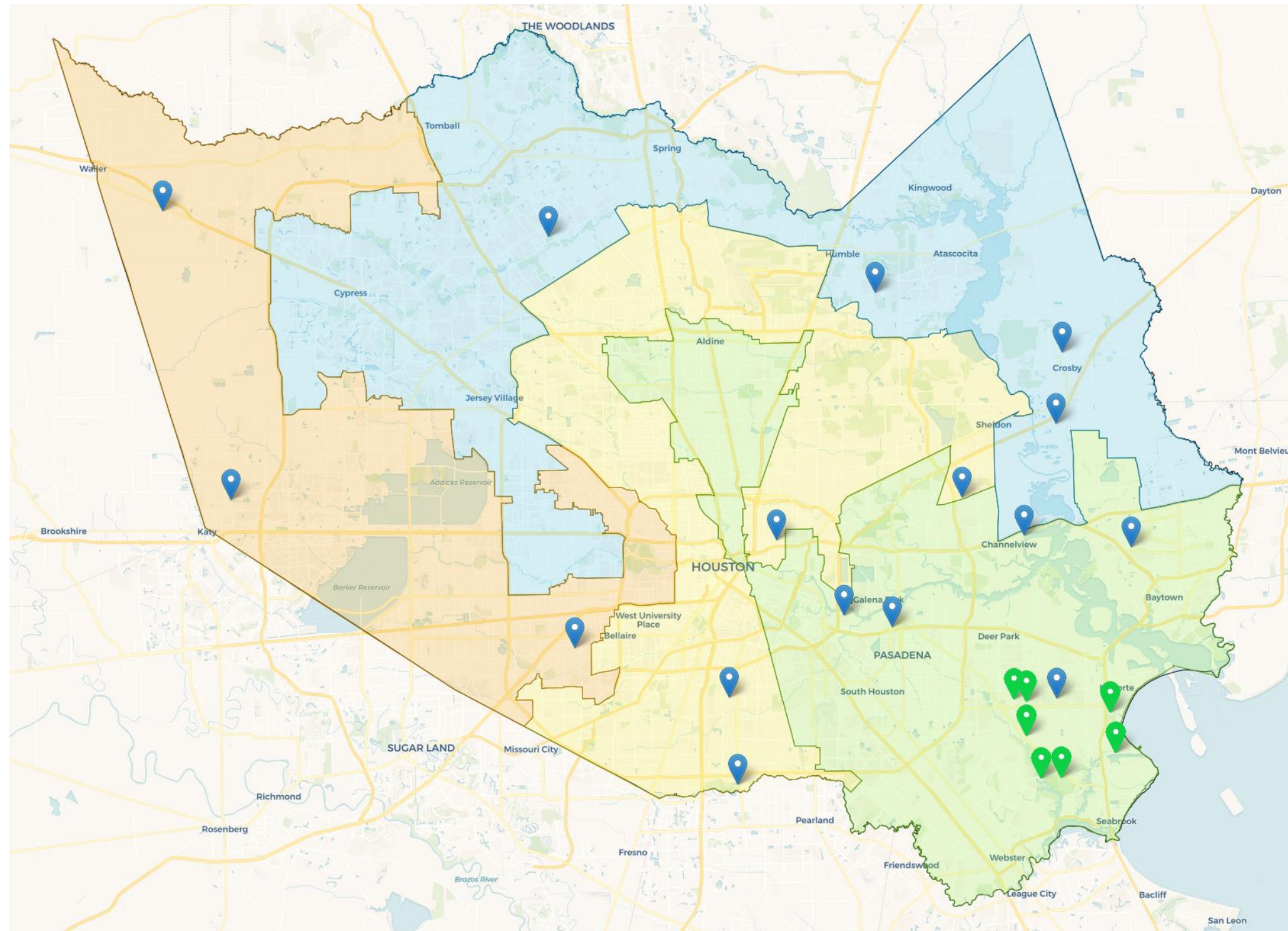


Tripod mounted in Hockley Park

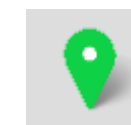


Mounted to existing utility structure in Lindsay Lyons Park

CAMP Monitoring Locations

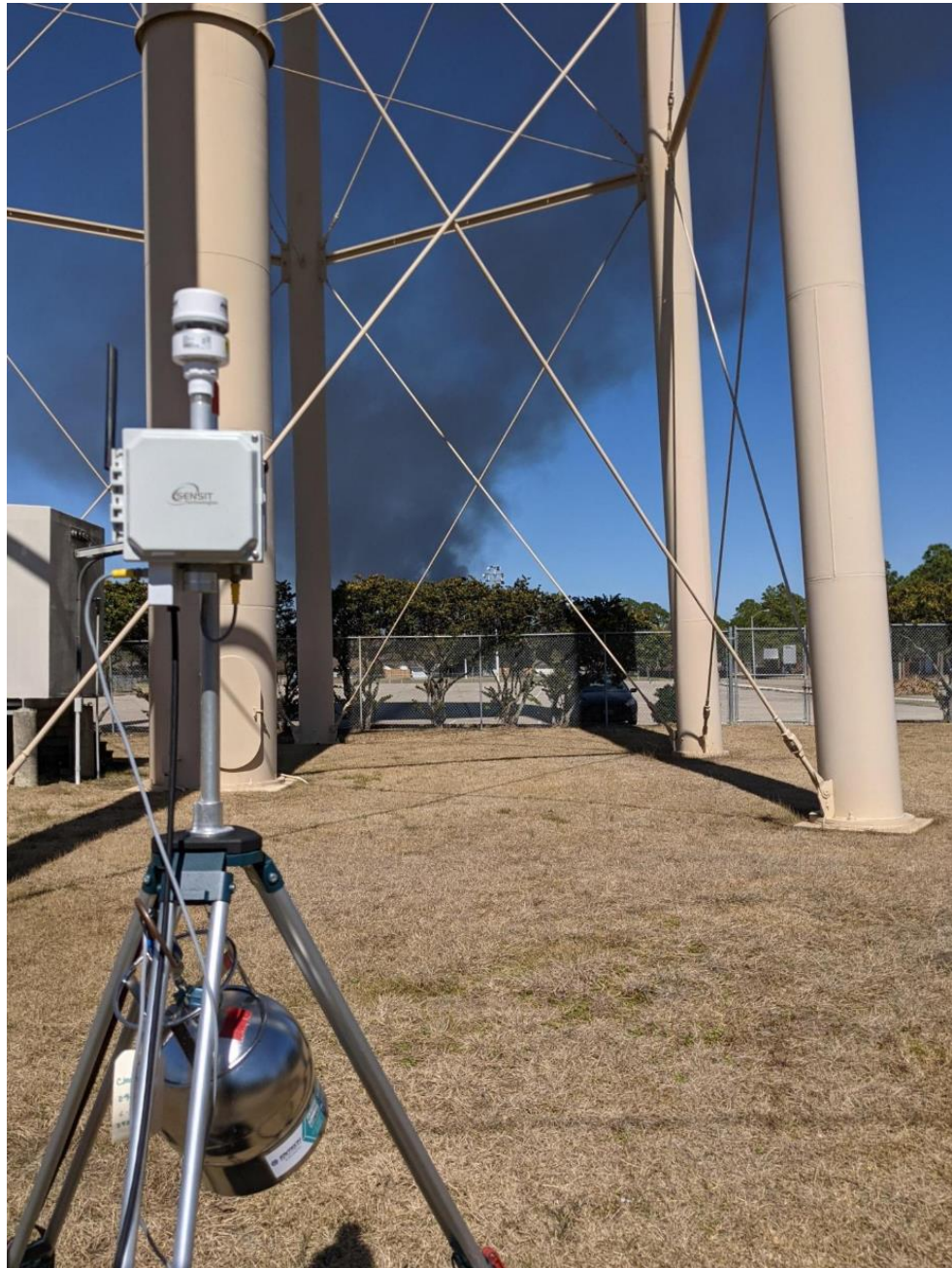


Current monitoring locations

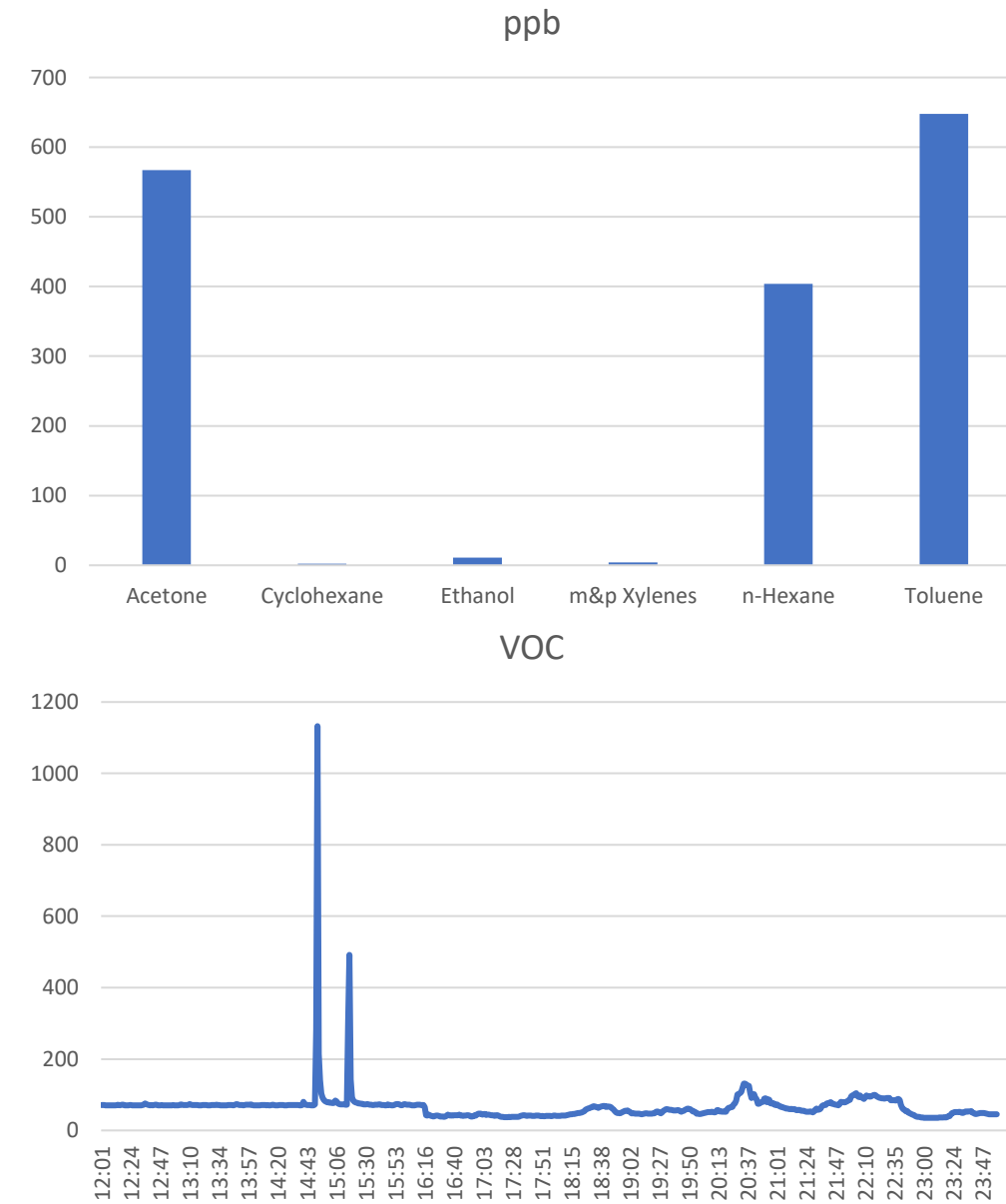


Proposed monitoring locations

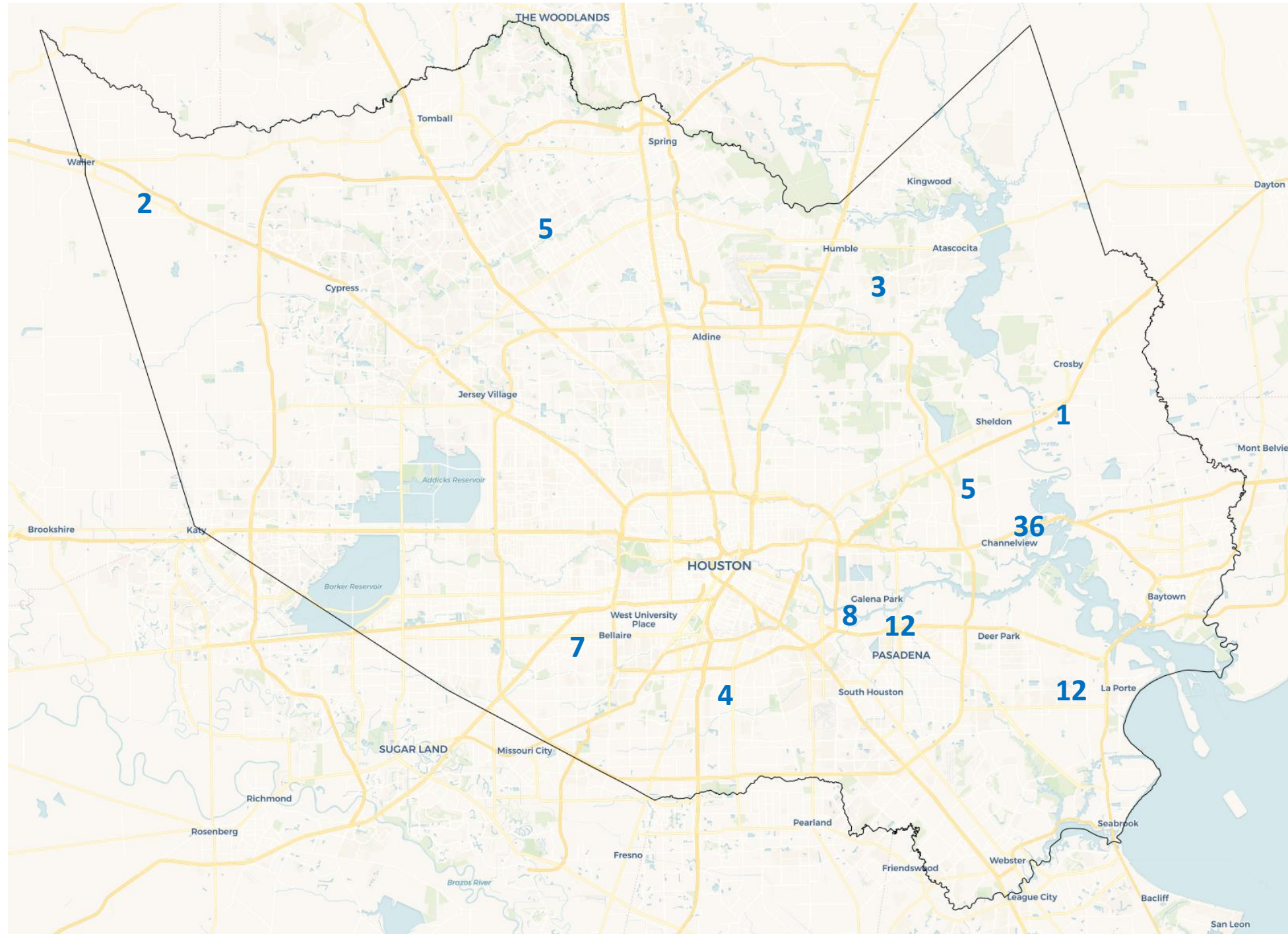
Canisters



High VOC readings trigger canister samples for laboratory analysis.



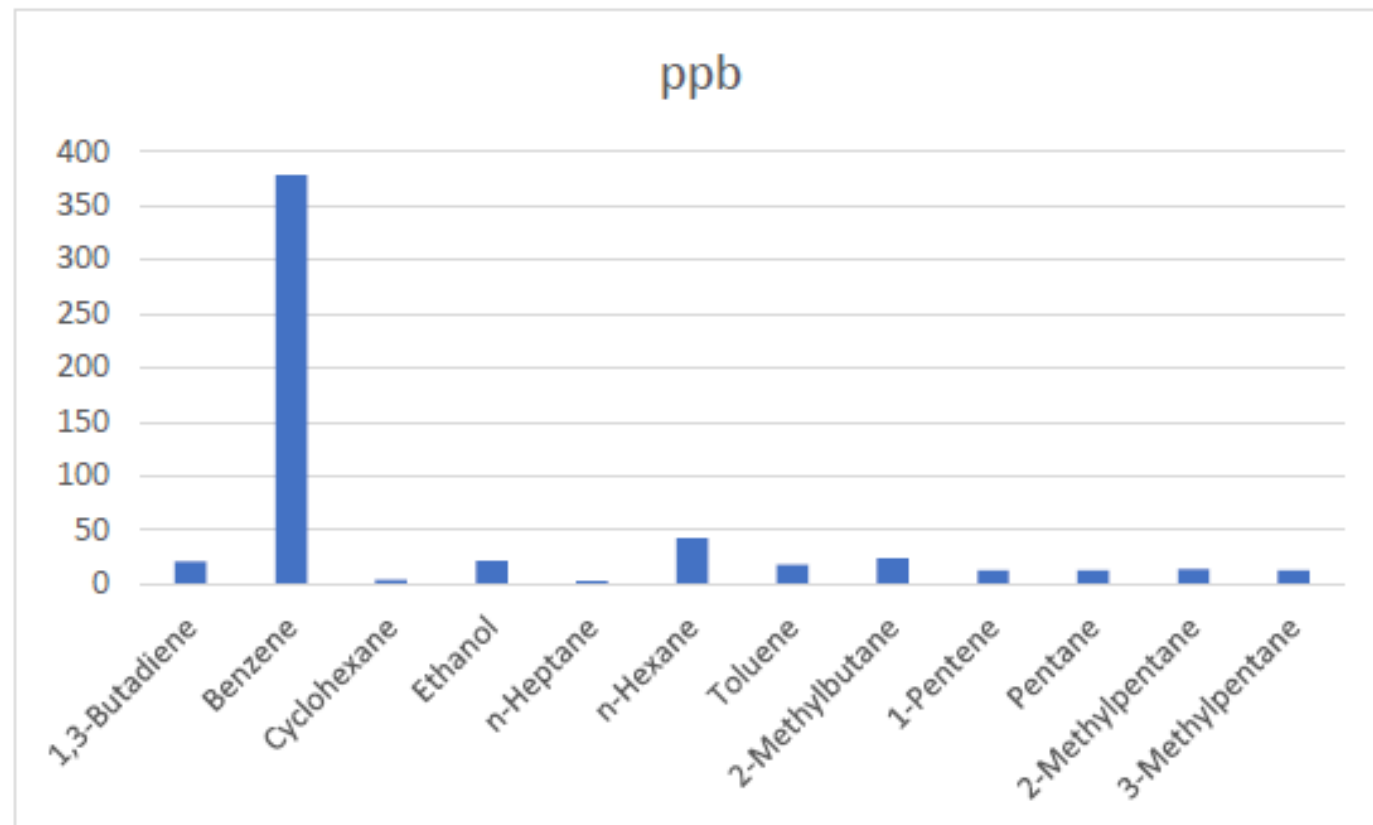
CAMP Canister Samples



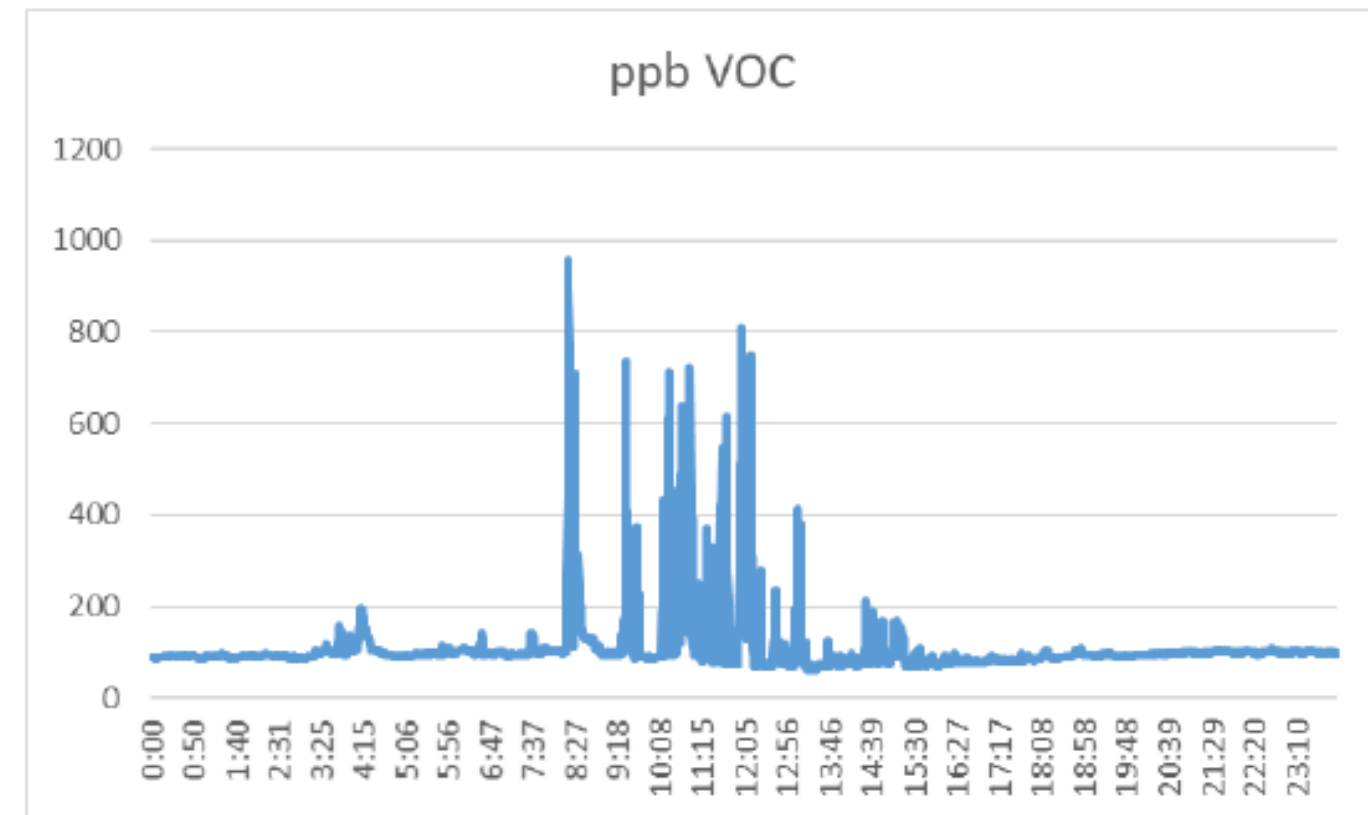
- 95 canister samples collected from August 2020 to March 2022
- 40 second sample duration
- Typical sampling events occur during short duration peaks (<10 minutes) in VOC data
- River Terrace is the most active site
- Canister samples are analyzed using Gas Chromatograph/Mass Spectrometer

CAMP Canister Sample Data

River Terrace Park 3/3/2022 11:39 AM



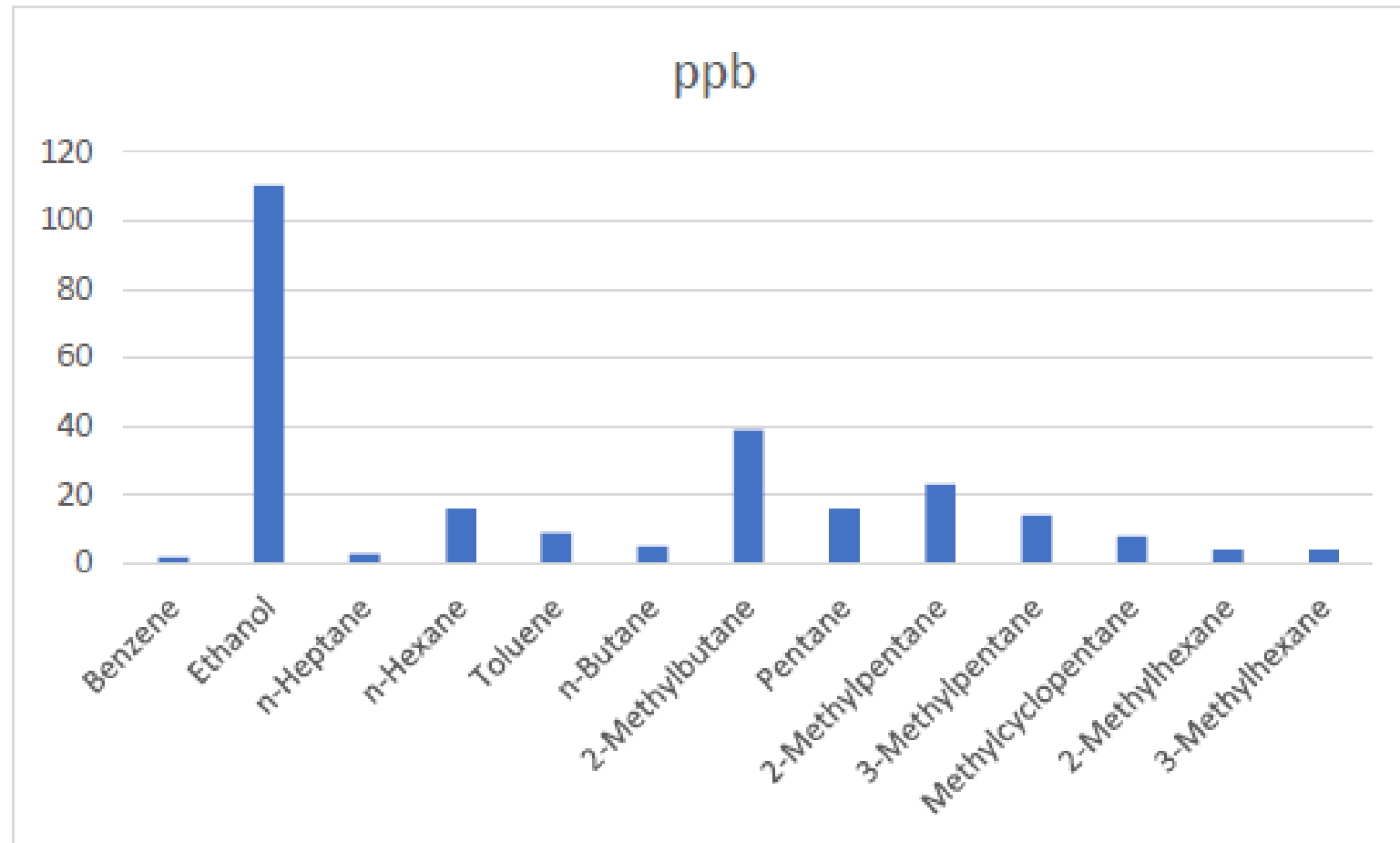
Total Calculated VOC = 566 ppb



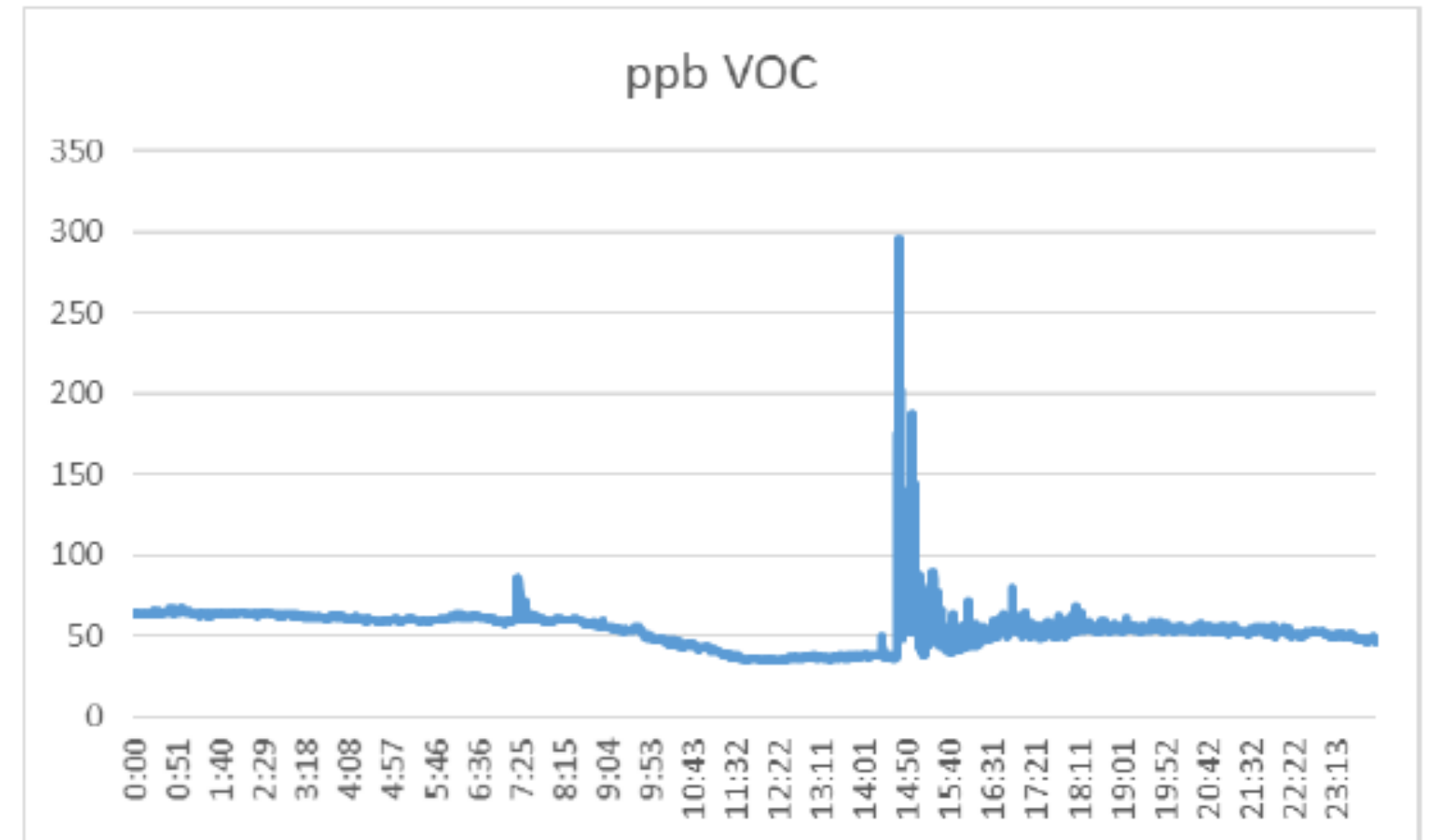
SPOD response. Sample collected at 11:39.

CAMP Canister Sample Data

Meyer Park 2/24/2022 2:54 PM




Total Calculated VOC = 253 ppb



SPOD response. Sample collected at 14:54.

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 **Pollution Control Services Department**

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Do you have a comment or complaint (environmental concern or issue) impacting your community? [Click here](#) to access the online PCS complaint form.

This form is not for emergency use. For emergency calls, please call 713-920-2831.

PCS Public Information Request Form

Do you have a request? [Click here](#) to access the online PCS public information request form. If you prefer to send your request via email, please email us at PCS-Communications@pcs.hctx.net

The Texas Public Information Act (Texas Government Code, Chapter 552), gives you the right to access government records; the officer for public information may not ask you why you want them. All government information is presumed to be available to the public, although certain exceptions may apply. Governmental bodies shall release the requested information as promptly as possible unless the information is exempt from disclosure under the Public Information Act.

Community Air Monitoring Program

The Harris County Community Air Monitoring Program (CAMP) is designed to:



- Measure pollution levels that affect public and environmental health across Harris County.
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- Highlight patterns and trends that may support environmental regulatory activities.

[Click Here To Access The CAMP Dashboard](#)

[Click Here To Access The Houston Regional Monitoring \(HRM\) Dashboard](#)

Data courtesy of Houston Regional Monitoring

[Click Here To Access The CAMP and Houston Regional Monitoring \(HRM\) Locations](#)

Click to view Mobile Air Monitoring Data

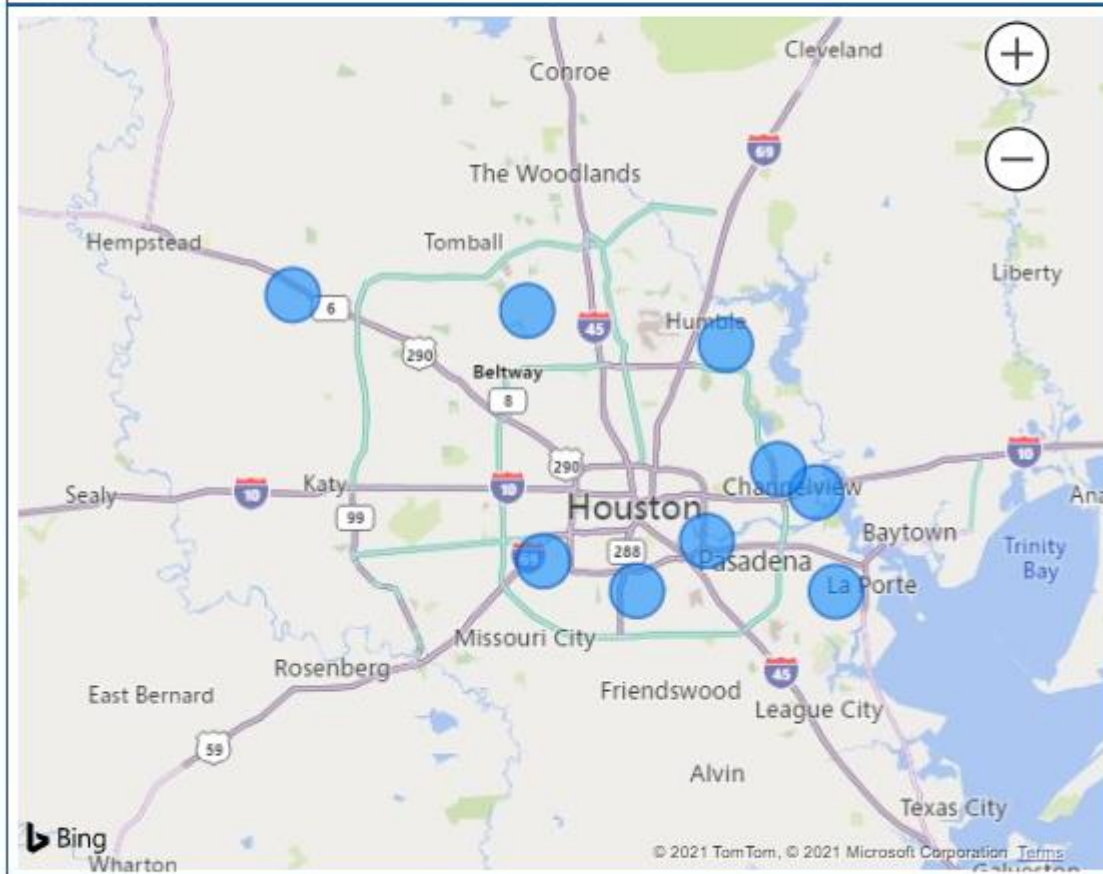
CAMP Dashboard



CAMP Monitoring Dashboard

Select A Location:

All Sites Average Value



VOC (ppb) Updated 09/17/2021 11:59 AM

39.16

Background Value*

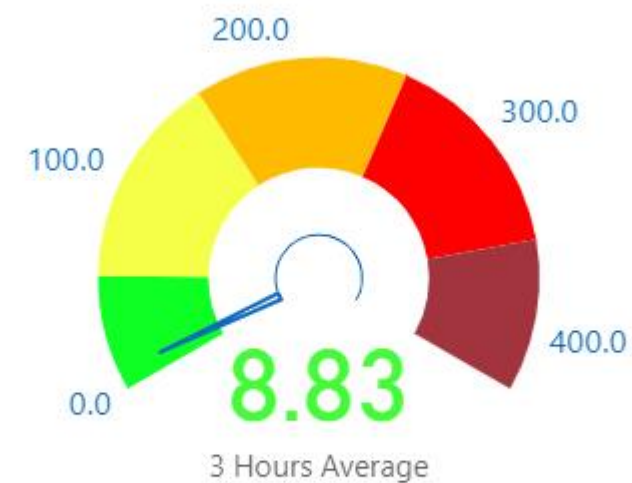
8.56

3 Hours Average

* Yearly average value for each CAMP monitor site

PM (ug/m³) Updated 09/17/2021 11:59 AM

- PM (1.0)
- PM (2.5)
- PM₁₀



Good Moderate Unhealthy for Sensitive Groups Unhealthy Very Unhealthy

Sensor Data



CAMP Monitoring Dashboard History Data

Select Location

River Terrance Park

Select Type

PM (2.5)

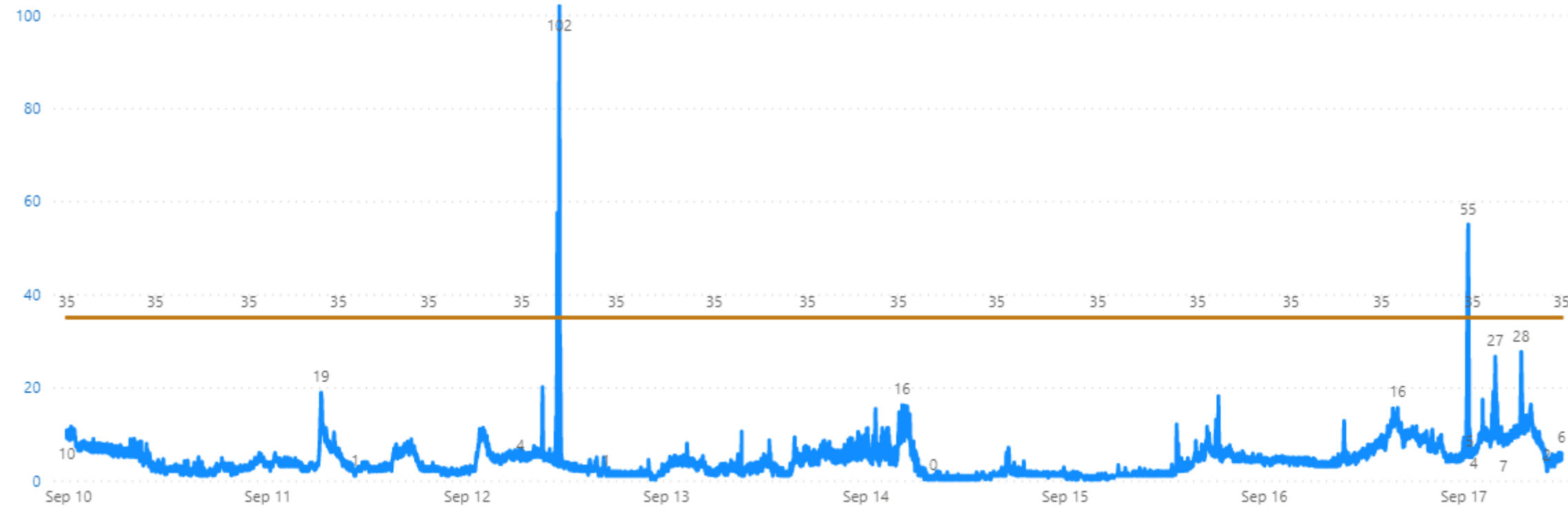
Date Range

9/9/2021 9/17/2021

History Data

Units: ug/m³

● Monitoring Value ● 24 Hr NAAQS



Sensor Data



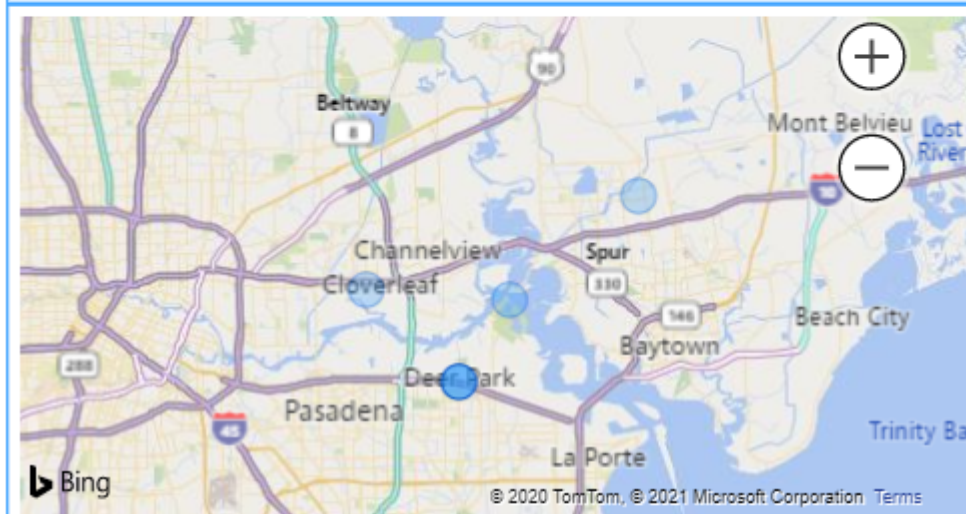
HRM Monitoring Dashboard

1/5/2021

Data provided courtesy of Houston Regional Monitoring

Select Location From Map

Deer Park North



Select Date Range

12/1/2020 1/5/2021

Choose Chemical

Benzene

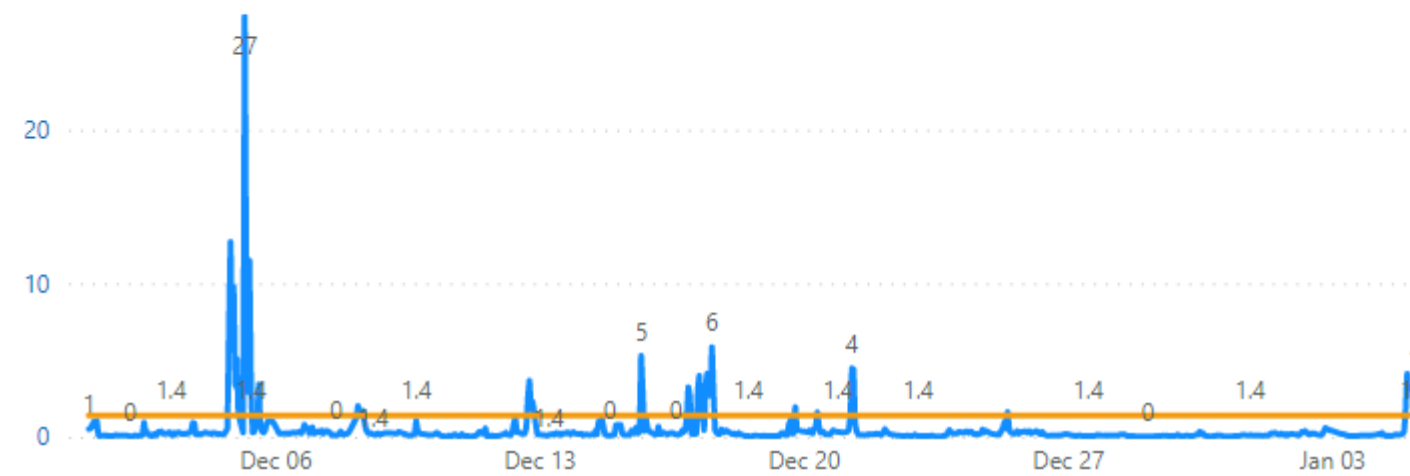
Latest Value

4.03

ppb

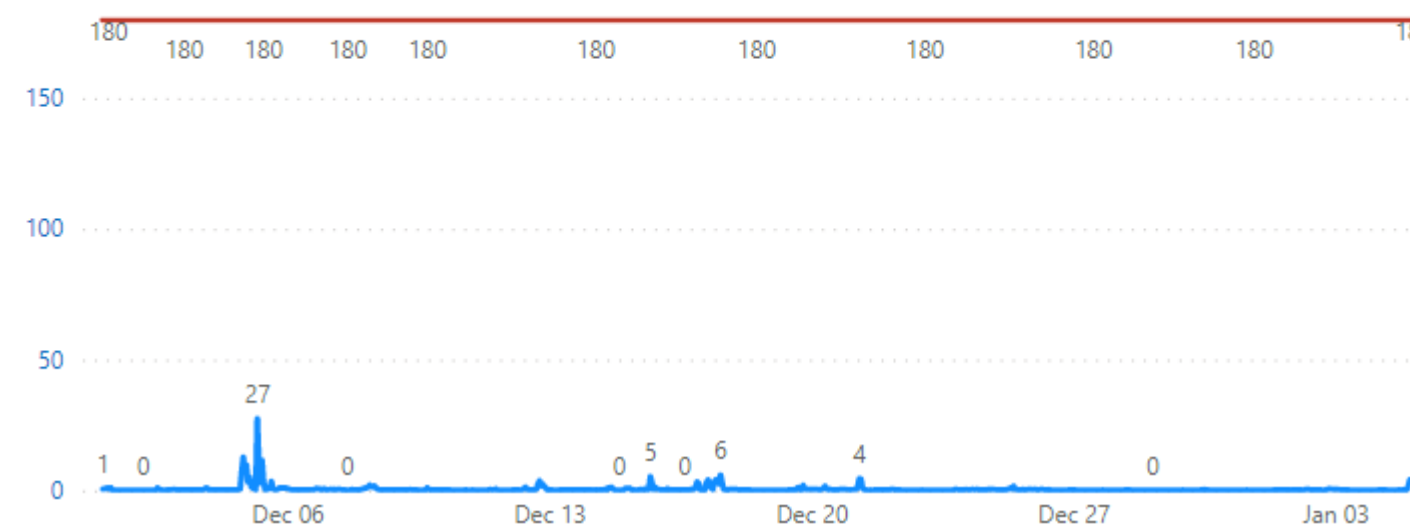
History Value VS Long Term AMCV (Annual)

Monitoring Value Long-Term AMCV (Annual)

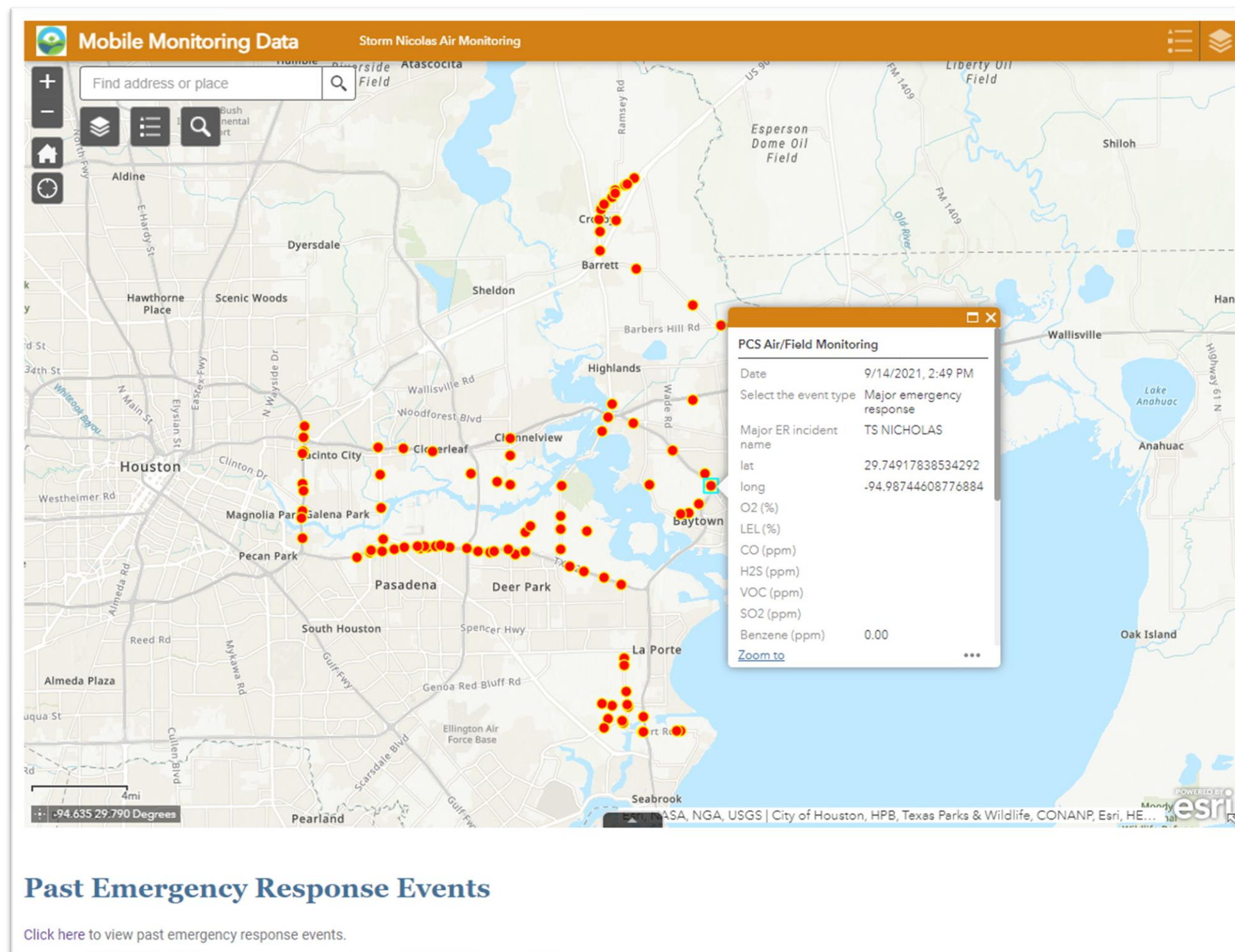


History Value VS Short Term AMCV (1 hour)

Monitor Value Short-Term AMCV (1-Hour)



CAMP Mobile Monitoring



- PCS Emergency Response Section collects mobile air monitoring data.
- The data is published in near-real time on the PCS webpage

CAMP Mobile Monitoring



- Cerex UV Hound
- Rapid identification and quantification of 18 compounds including benzene



- Rae Systems Multirae
- Hand-held VOC detection



- Flir Griffin G510 GC-Mass Spec
- Rapid identification of thousands of compounds



- Dräger X-pid
- Rapid identification and quantification of 19 compounds including benzene, 1,3-butadiene, and ethylene oxide

Rapid Ambient Air Monitoring (RAAM) Vehicle



RAAM

- Entanglement AROMA
- FLIR Griffin
- Cerex UV Hound
- PM monitor

QUESTIONS? COMMENTS?

LET US KNOW!

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Harris County Pollution Control Services Department