

Mobile Monitoring in El Segundo to Assess Potential Emissions From Hyperion

08/04/2021

Overview

Mobile measurements using South Coast AQMD's Optical Remote Sensing (ORS) Mobile Laboratory were conducted in El Segundo on 08/04/2021

Instantaneous (~10s) measurements of:

- Gaseous Air Toxics
 - Benzene, toluene, ethylbenzene, xylenes (BTEX)
- Other Pollutants
 - Methane, total VOC's

Instantaneous (~30s) measurements of H₂S at selected locations using a portable hand-held analyzer

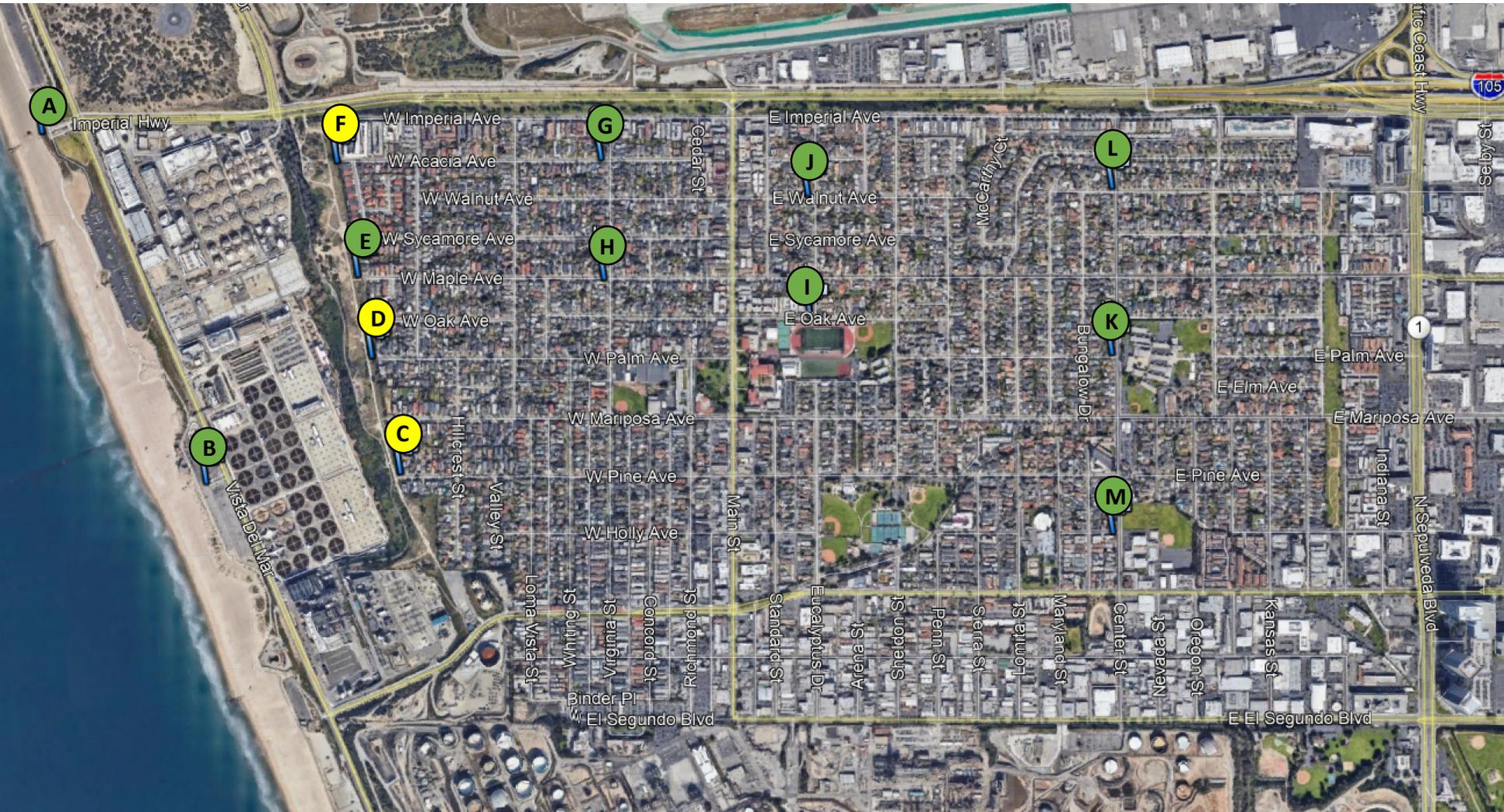
South Coast AQMD Optical Remote Sensing Laboratory



Portable hand-held H₂S analyzer

H₂S

08/04/21

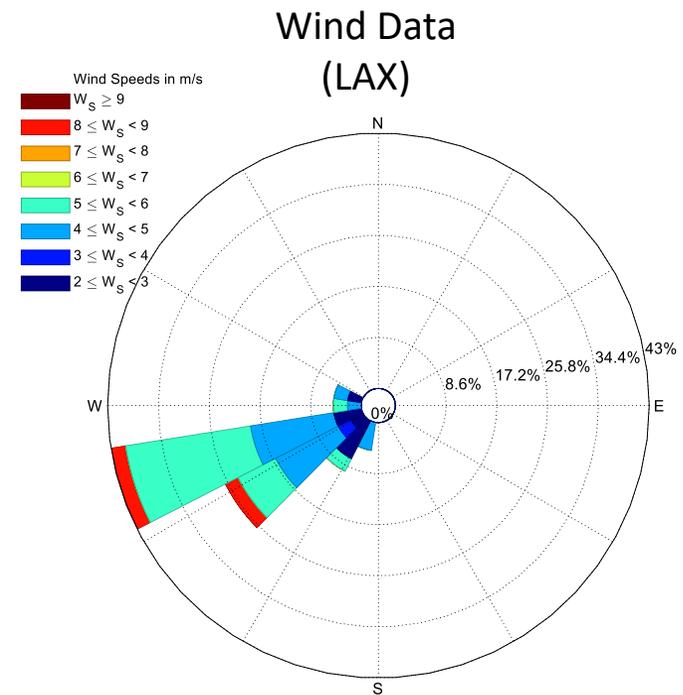
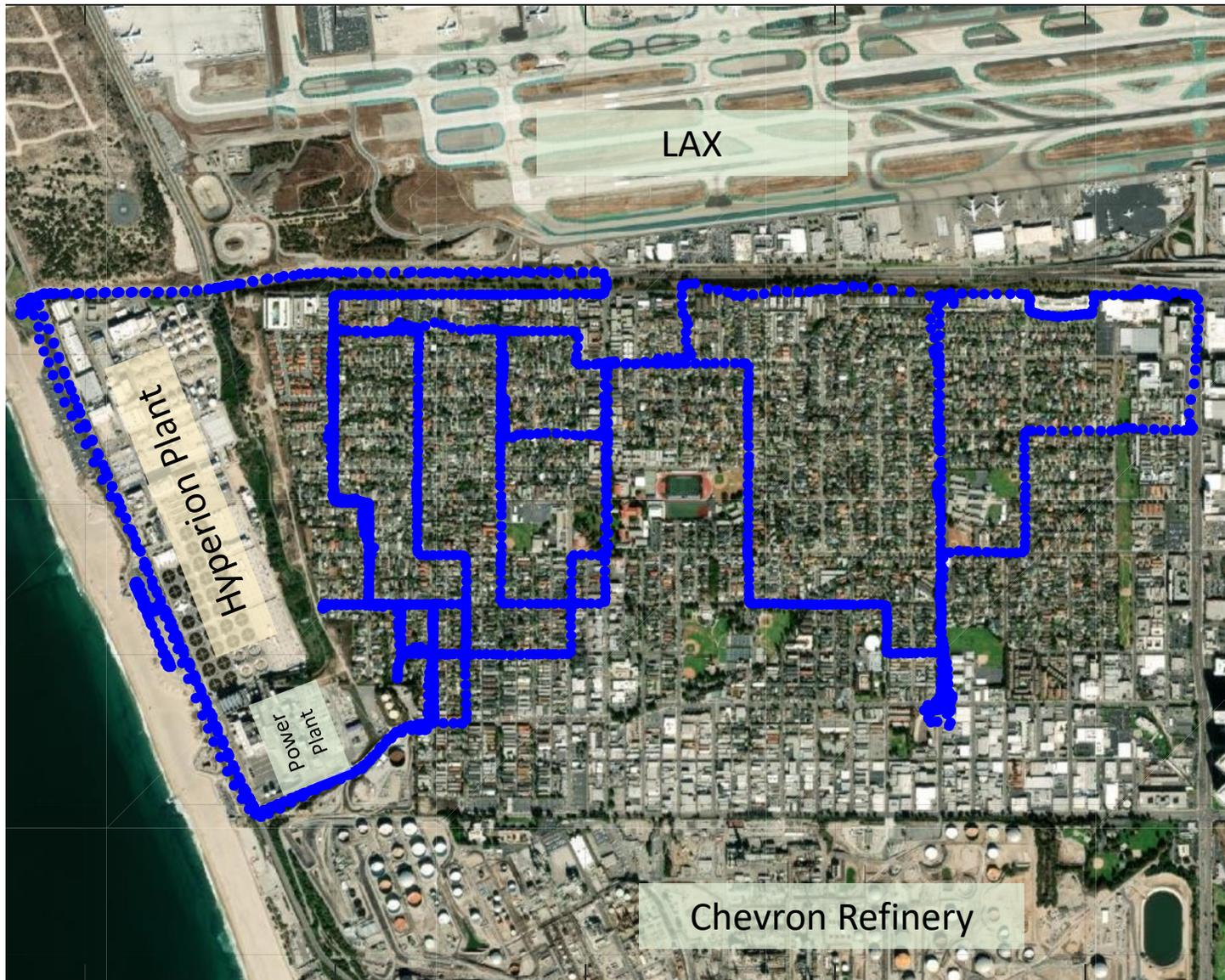


Site	Time	Maximum Instantaneous H ₂ S (ppb)*
A	6:41 AM	0.0
	5:48 PM	0.0
B	6:47 AM	0.0
	5:54 PM	0.0
C	6:54 AM	0.0
	6:01 PM	5.4
D	6:54 AM	3.8
	6:07 PM	6.2
E	7:04 AM	0.0
	6:12 PM	0.0
F	7:10 AM	0.0
	6:16 PM	6.5
G	7:15 AM	0.0
	6:21 PM	0.0
H	7:19 AM	0.0
	6:25 PM	0.0
I	7:30 AM	0.0
	6:30 PM	0.0
J	7:25 AM	0.0
	6:34 PM	0.0
K	7:36 AM	0.0
	6:39 PM	0.0
L	7:40 AM	0.0
	6:42 PM	0.0
M	7:44 AM	0.0
	6:46 PM	0.0

*Three consecutive readings were taken at each location

Measurements Route

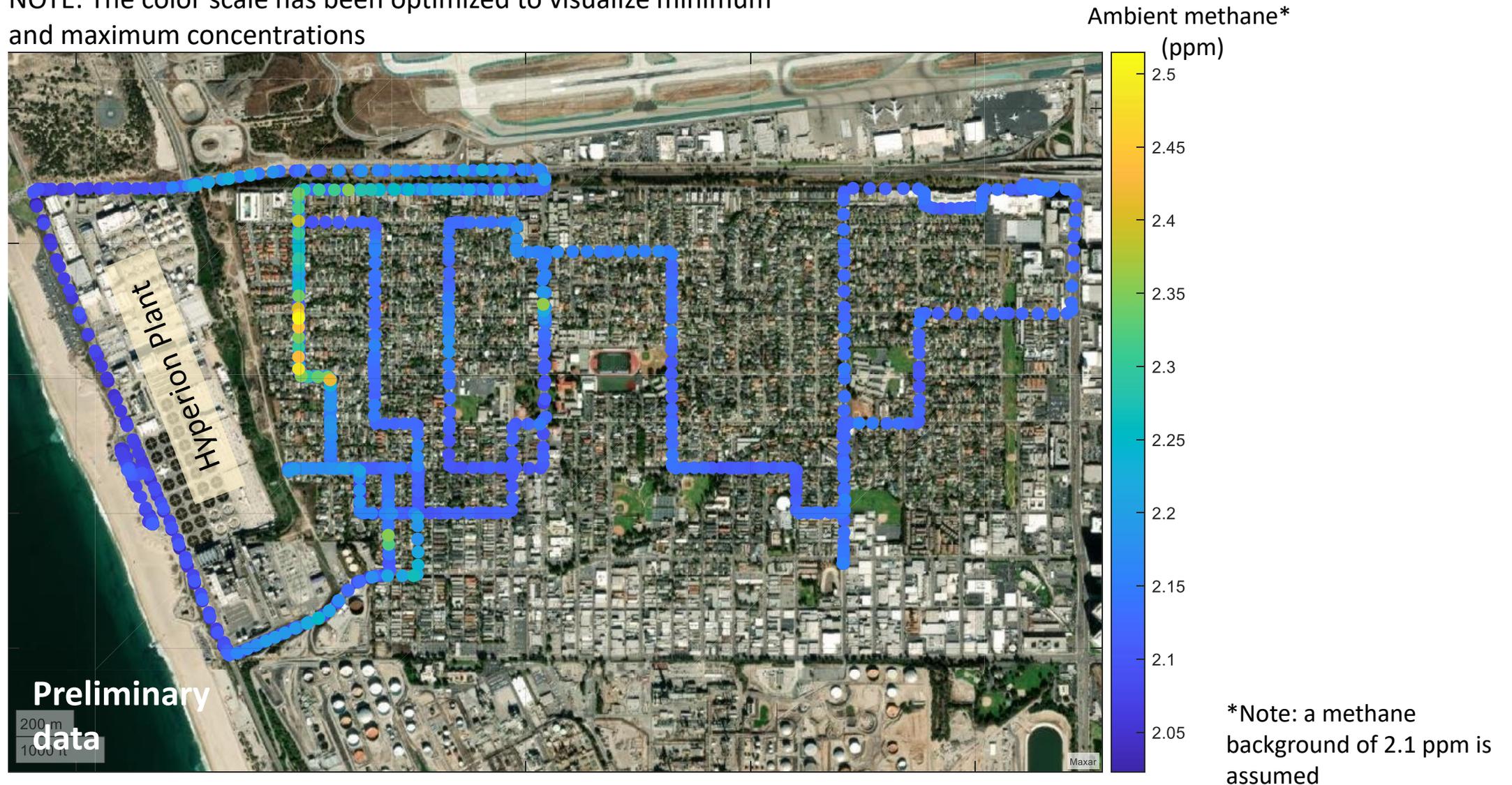
08/04/2021 6:30 am – 10:00 am



Methane

Methane mobile map for a selected transect 08/04/2021 07:48 – 09:55 am

NOTE: The color scale has been optimized to visualize minimum and maximum concentrations



Air Toxics (BTEX)

08/04/2021

Instantaneous measurements between
07:50 – 07:52 am

Benzene=12.7 ppb*

Toluene = 40.0 ppb*

Ethylbenzene=20.2 ppb*

Xylenes (m+p)=46.2 ppb*

This short-term enhancement was not sustained (potentially a transient source, i.e., a passing vehicle). Repeated measurements at this location did not show elevated levels.

No other elevated BTEX observed in the community

*Note: background concentrations of ~0.04 ppb for benzene, 0.17 ppb for toluene, 0.17 ppb for ethylbenzene, and 0.11 for m+p xylenes were assumed based on measurements at South Coast AQMD's St. Anthony air monitoring station during the mobile measurements period.

BTEX (ppb)



NOTE: The color scale has been optimized to visualize minimum and maximum concentrations

Summary

- Mobile monitoring for gaseous air toxics and other air pollutants were conducted on 8/04/21 between 6:30 a.m. and 10:00 a.m.
- Measurements of H₂S at different locations using a hand-held device were conducted between early morning and early evening
- Instantaneous H₂S readings at different locations ranged from 0.0 ppb to 6.5 ppb
- Most of the measured methane and air toxic concentrations were within typical levels found in urban areas
 - Slightly elevated concentrations of methane were observed near the Hyperion facility, but these were within typical ambient methane levels measured in other urban areas
 - One brief elevated measurement of BTEX (with a max instantaneous benzene level of ~13ppb) was detected between 7:50 a.m. and 7:52 a.m. near the intersection of W. Grand Ave and Isla Del Mar (between the Statesboro Power Plant and the Chevron refinery), but was no longer present following repeated measurements at this location (potentially a transient source; i.e., a passing vehicle)