

**40355 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Air Monitoring and Sampling Results
September 13, 2012**

This data report discusses real-time air monitoring data collected between September 12th 06:00 and September 13th 06:00 in support of mitigation and remediation operations conducted near Stolthaven’s facility near Braithwaite, LA.

Real-time air monitoring during entry activities resulted in reports of detections exceeding the chemical specific action level required for donning of respiratory protection. All workers not present in respiratory protection prior to initiating these tasks were present in respiratory protection during these events until the task was completed, or after air concentrations reached a level below which respiratory protection was required. Workers having VOC detections above the chemical specific action level and not in respiratory protection notified CTEH personnel and took appropriate action to prevent further exposures.

Real-time air monitoring for VOCs, LEL, methyl acrylate, and styrene was conducted using stationary AreaRAEs and hand-held instruments such as the MultiRAE, and colorimetric detector tubes. Table 1 and Table 2 display data summaries for AreaRAE and handheld MultiRAE data respectively. Appendix 1 shows incident site maps.

Analytical air sampling was conducted for the purpose of collecting potential airborne contaminant concentrations daily from fixed locations surrounding the Stolthaven facility. The following data discuss cumulative analytical air monitoring results collected between September 1st, 2012 through September 7th, 2012. Analytical air sampling results indicate no detections of styrene. Methyl acrylate was detected at a concentration of 9.8 ppb as a TIC (tentatively identified compound) via EPA TO15 on September 1st, 2012. The analyte, 1-octene, was detected at a maximum concentration of 1,600 ppb (as a tentatively identified compound, TIC) at fixed analytical Station 3 on September 1st, 2012. Concentrations for all analytes were below the ambient air standard derived by dividing the selected chemical specific occupational exposure value by 42 according to LDEQ Title 33 (LDEQ, 2007).

**Table 1
AreaRAE Summary – September 12th 06:00 to September 13th 06:00**

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	LEL	5490	0	0.0 – 0.0 %
	VOC	5490	1	0.1 – 0.1 ppm
Unit 2	LEL	5485	0	0.0 – 0.0 %
	VOC	5485	0	0.0 – 0.0 ppm
Unit 3	LEL	5630	0	0.0 – 0.0 %
	VOC	5630	11	0.1 – 0.1 ppm
Unit 4	LEL	5636	0	0.0 – 0.0 %
	VOC	5636	44	0.1 – 0.2 ppm

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 9	LEL	5641	0	0.0 – 0.0 %
	VOC	5641	0	0.0 – 0.0 ppm
Unit 11	LEL	5257	0	0.0 – 0.0 %
	VOC	5257	0	0.0 – 0.0 ppm
Unit 12	LEL	5359	0	0.0 – 0.0 %
	VOC	5359	0	0.0 – 0.0 ppm
Unit 13	LEL	5562	0	0.0 – 0.0 %
	VOC	5562	3	0.1 – 0.7 ppm

***Detections may include drift events** - Drift is defined as any interference in the electrochemical sensor's ability to accurately report the concentration of a chemical in the atmosphere. Humidity and temperature changes throughout the monitoring period are typical sources of drift.

**Table 2
Hand-held MultiRAE Real-time Summary – September 12th 06:00 – September 13th 06:00**

Community				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
LEL	189	0	NA	< 1.0 %
VOC	189	0	NA	< 0.1 ppm
Entry Activities				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
LEL	250	0	NA	< 1.0 %
VOC	413	18	5.4 ppm	36 ppm ¹
Methyl Acrylate	4	0	NA	<2.0 ppm
Styrene	2	0	NA	<0.5 ppm
Work Area				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
LEL	224	0	NA	< 1.0 %
VOC	209	0	NA	< 0.1 ppm

NA = not applicable

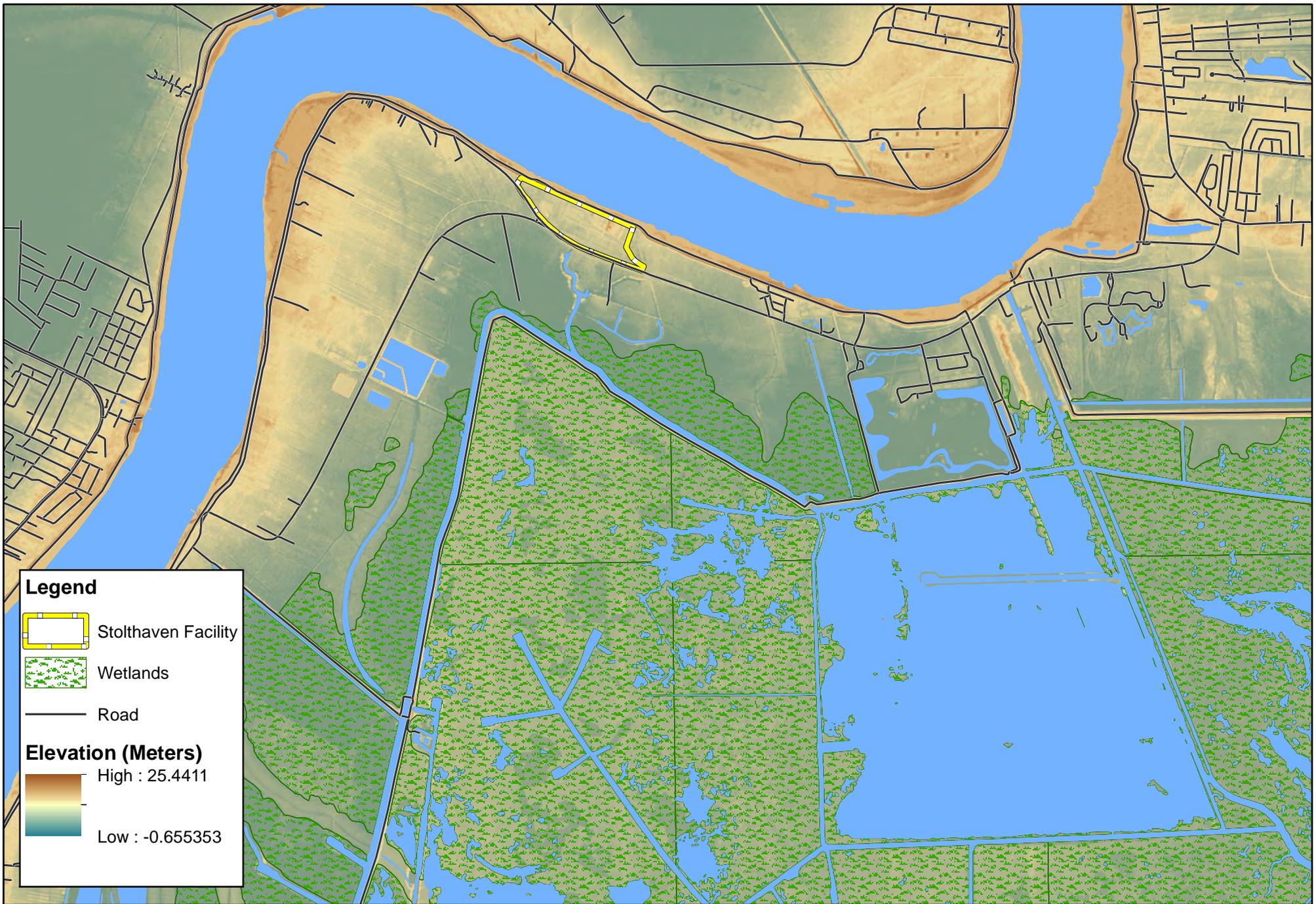
* In addition to the tabulated real-time data, additional air monitoring for the purpose of worker protection was performed throughout the work area. These data are used for task-specific decision-making, but may not be recorded in the tabulated data represented above.

¹ – VOC reading of 36.0 ppm related to use of hand-sprayed electrical cleaner, and not site-related chemicals of concern.

References:

LDEQ. Title 33: Environmental Quality. Part III. Air. Baton Rouge, LA: Louisiana Department of Environmental Quality; 2007 Jun.

Appendix 1: Incident Maps



**Stolthaven Facility
Shaded Relief of Elevation**



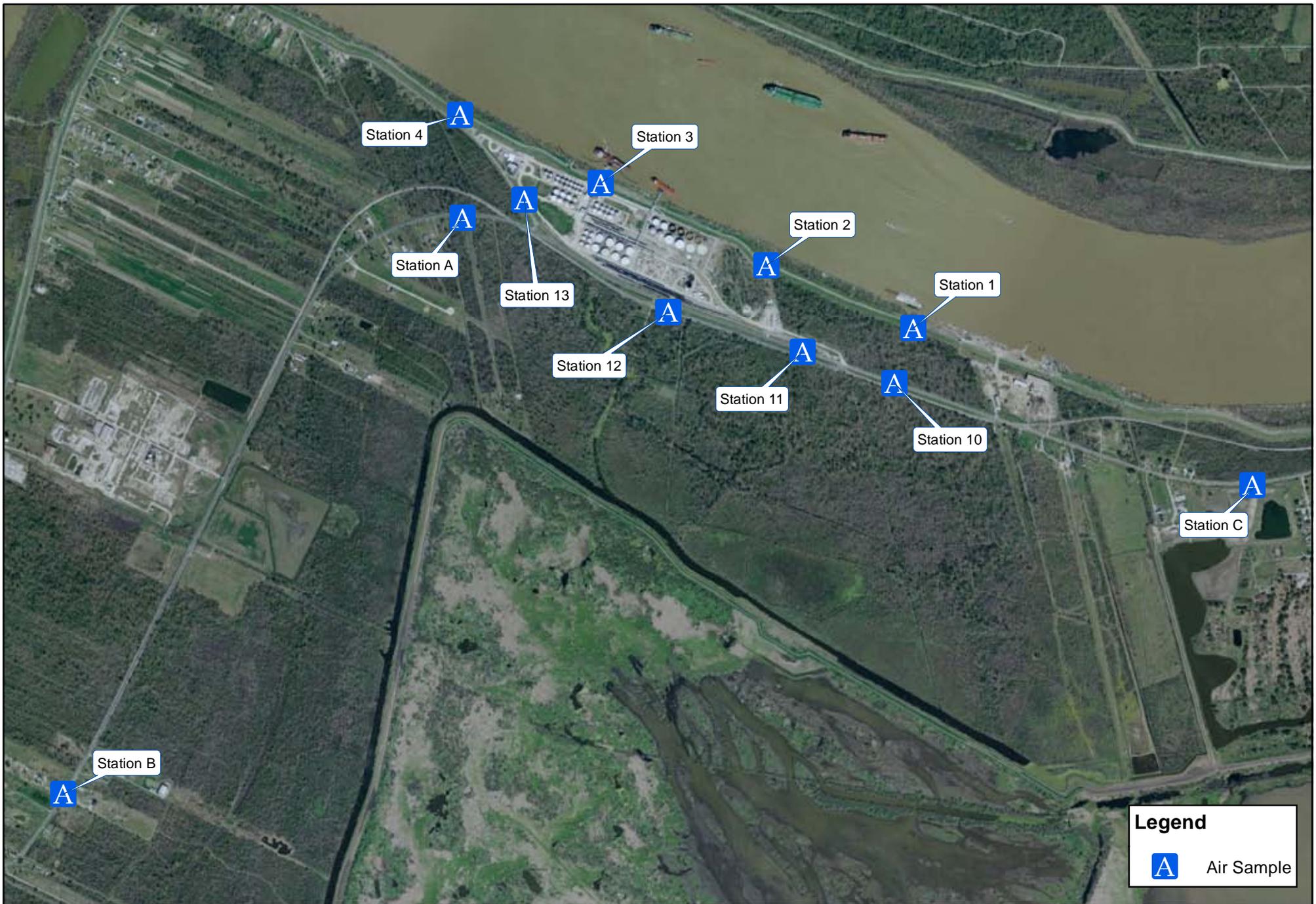
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Braithwaite, LA**

Plaquemines Parish

Print Date: 9/11/2012





Legend

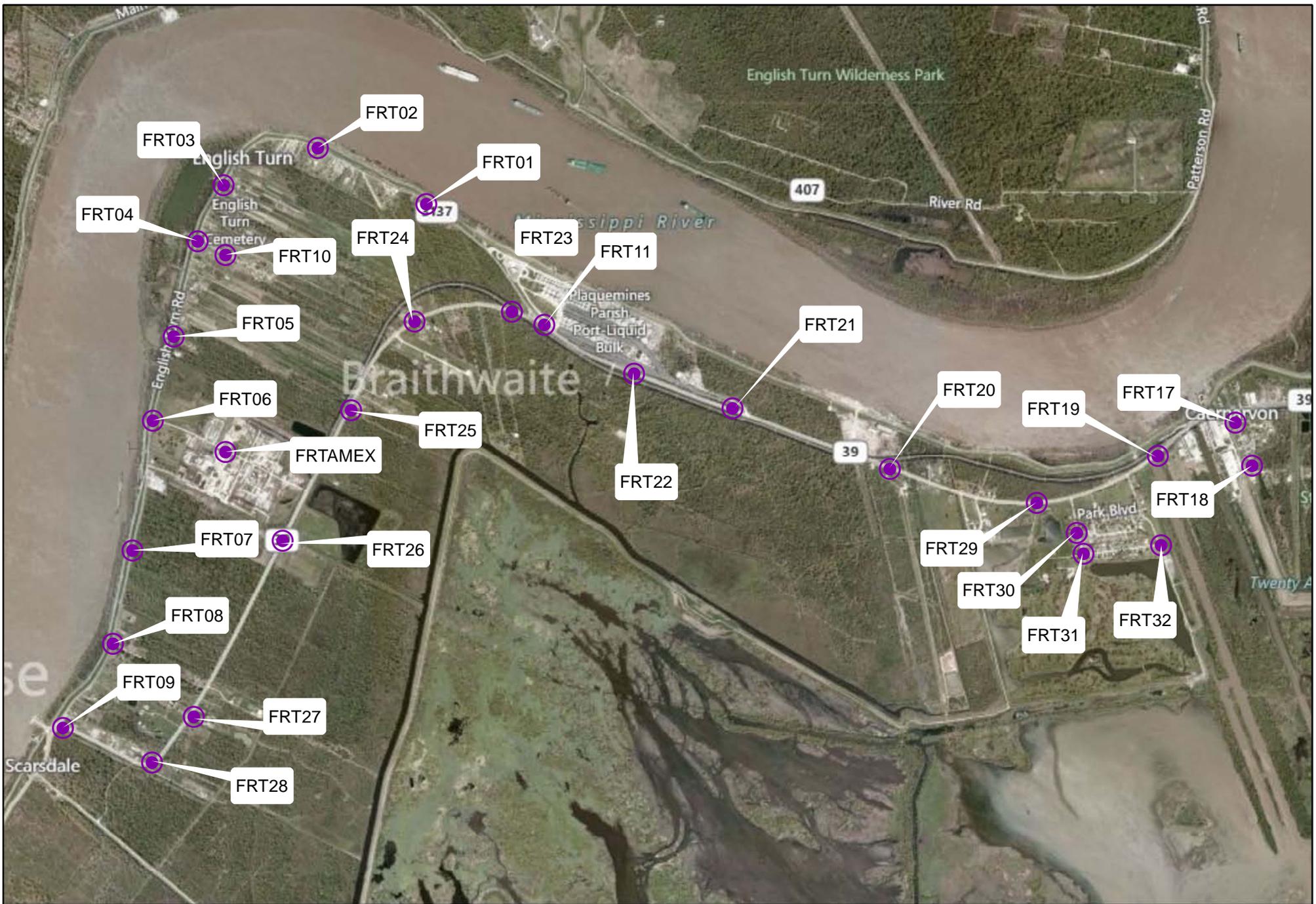
 Air Sample

**Analytical Air
Sampling Locations**

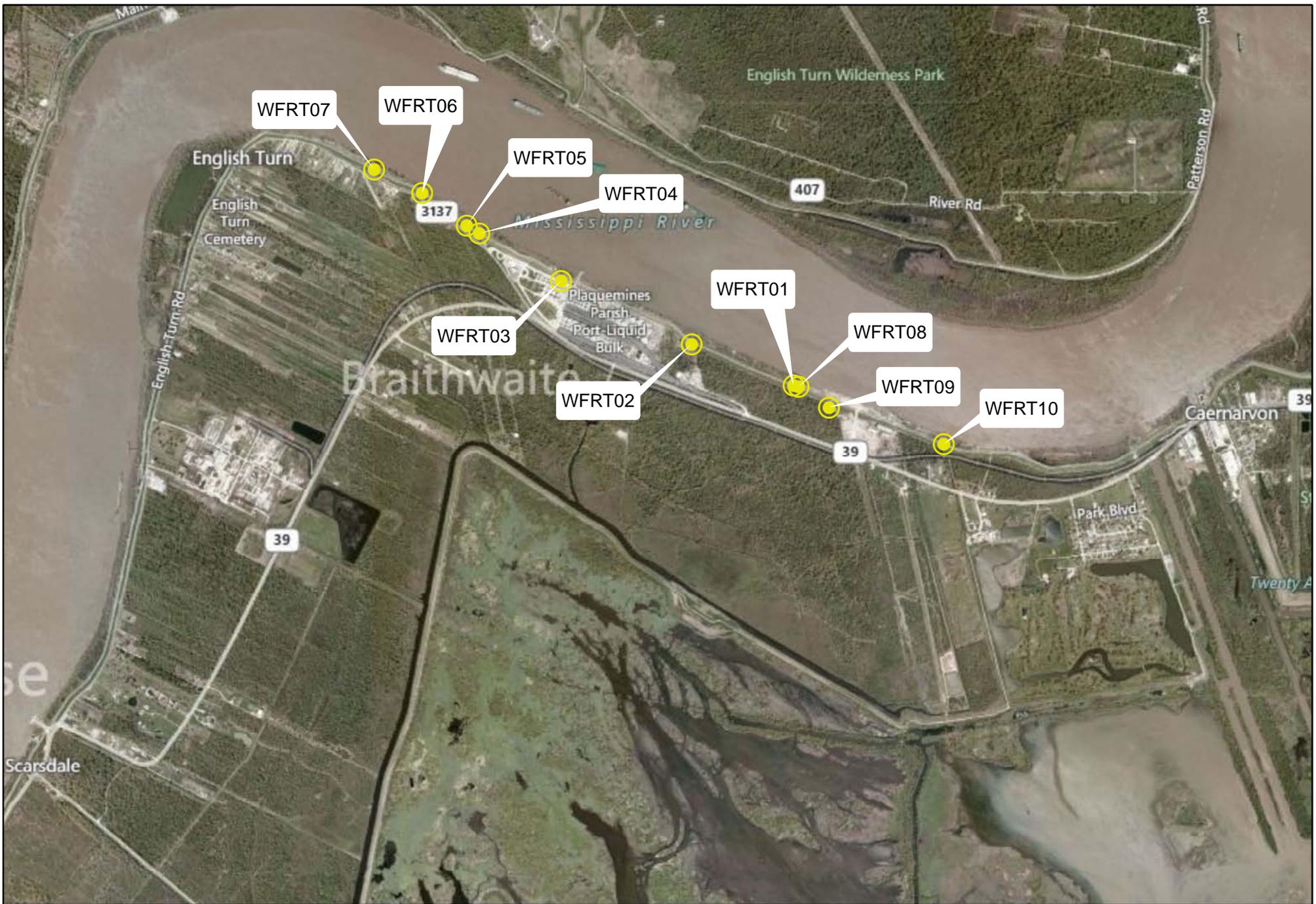


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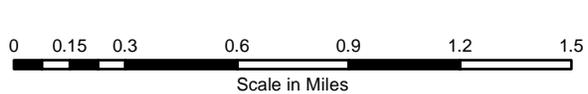
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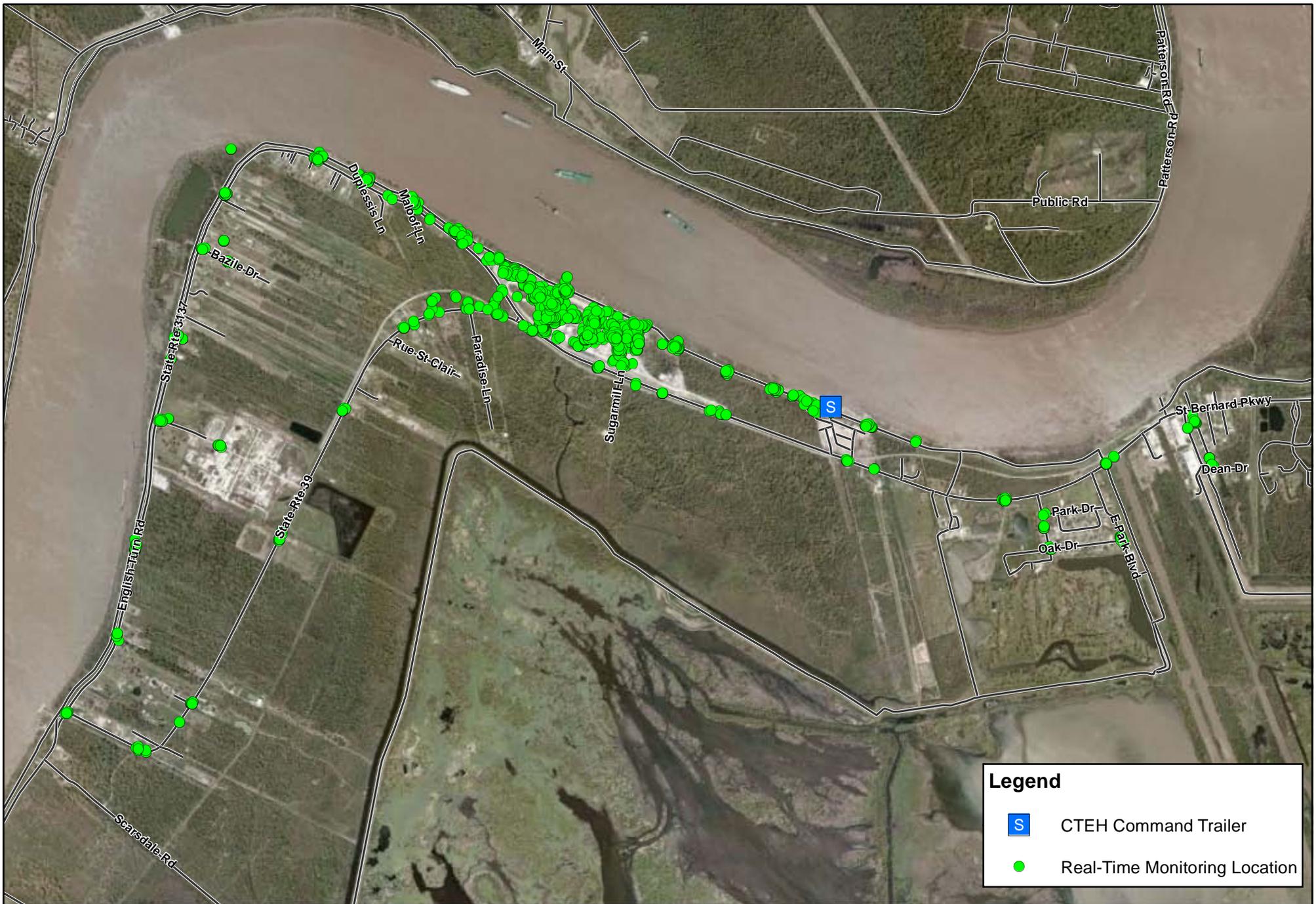
<h1>Community Fixed Real-Time Monitoring Locations</h1>	<p>Scale in Miles</p>		Garner Environmental Braithwaite, LA
		Project No. 40355	Plaquemines Parish
		Print Date: 9/11/2012	



Work Area Fixed Real-Time Monitoring Locations

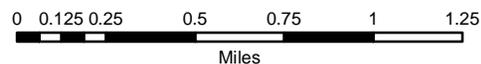


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Real-Time Monitoring Locations

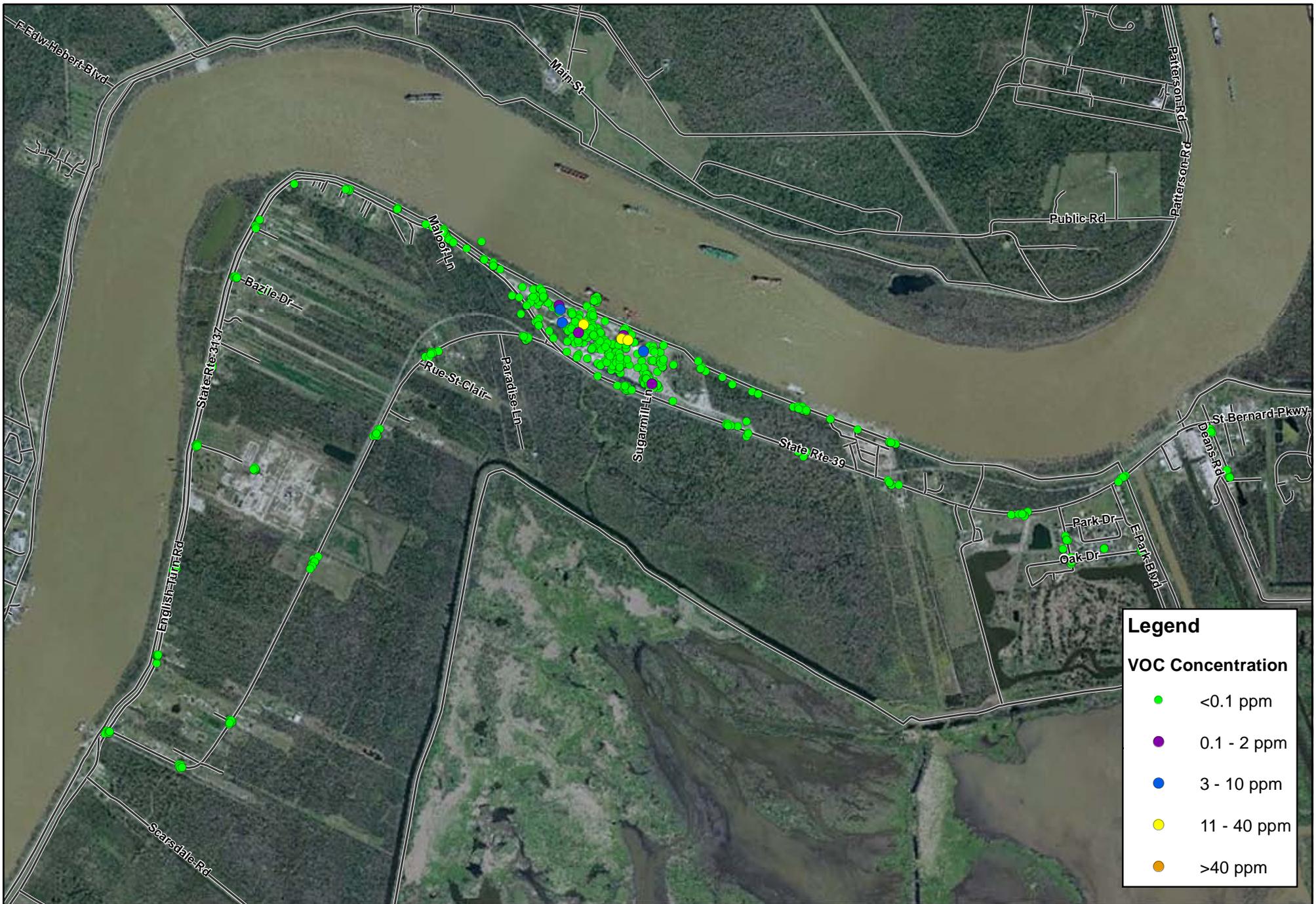
9/12/12 06:00 to 9/13/12 06:00



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- S CTEH Command Trailer
- Real-Time Monitoring Location

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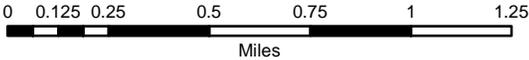


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VOC Concentration

- <0.1 ppm
- 0.1 - 2 ppm
- 3 - 10 ppm
- 11 - 40 ppm
- >40 ppm

**Manually-Logged
VOC Concentrations**
9/12/12 06:00 to 9/13/12 06:00



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Legend

Methyl Acrylate Reading Location

- Detection
- No Detection

**Methyl Acrylate
Reading Locations**
9/12/12 06:00 to 9/13/12 06:00



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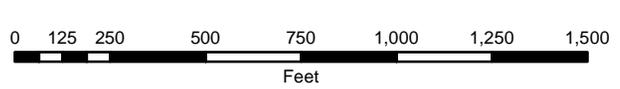


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Styrene Reading Location

- Detection
- No Detection

**Styrene
Reading Locations**
9/12/12 06:00 to 9/13/12 06:00



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