

**40355 Braithwaite, LA
Stolthaven Terminal Facility
Summary of Real-time Air Monitoring Results
September 12, 2012**

This data report discusses real-time air monitoring data collected between September 11th 06:00 and September 12th 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. Two detections of LEL were reported via handheld instrument, but were not confirmed and may include drift events.

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 6th, 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. A maximum concentration of 1,600 ppb was detected at fixed analytical Station 3 for 1-octene. Concentrations for all analytes were below the ambient air standard derived by dividing the selected chemical specific occupational exposure value by forty-two according to LDEQ Title 33 (LDEQ, 2007).

**Table 1
AreaRAE Summary – September 11th 06:00 to September 12th 06:00**

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 1	LEL	5460	0	0.0 – 0.0 %
	VOC	5460	0	0.0 – 0.0 ppm
Unit 2	LEL	5305	0	0.0 – 0.0 %
	VOC	5305	0	0.0 – 0.0 ppm
Unit 3	LEL	5254	0	0.0 – 0.0 %
	VOC	5254	49	0.1 – 0.6 ppm
Unit 4	LEL	5633	0	0.0 – 0.0 %
	VOC	5633	0	0.0 – 0.0 ppm

Unit	Analyte	Number of Readings	Number Of Detections	Concentration Range
Unit 9	LEL	5638	0	0.0 – 0.0 %
	VOC	5638	0	0.0 – 0.0 ppm
Unit 11	LEL	5376	1	0.3 – 0.3 %
	VOC	5376	0	0.0 – 0.0 ppm
Unit 12	LEL	5617	46	2.3 – 3.6 %
	VOC	5617	24	0.1 – 0.1 ppm
Unit 13	LEL	5637	0	0.0 – 0.0 %
	VOC	5637	4	0.1 – 0.2 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 11th 06:00 – September 12th 06:00**

Community				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
LEL	244	0	NA	< 1.0 %
VOC	258	0	NA	< 0.1 ppm
Entry Activities				
Analyte	Number of Readings	Number of Detections	Average Concentration of Detections	Highest Concentration
LEL	212	2	2.0 %	3.0 %
VOC	425	28	1.9 ppm	30 ppm
Methyl Acrylate	2	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	76	0	NA	< 1.0 %
VOC	97	2	1.1 ppm	<2.0 ppm
Methyl Acrylate	2	0	NA	<2.0 ppm

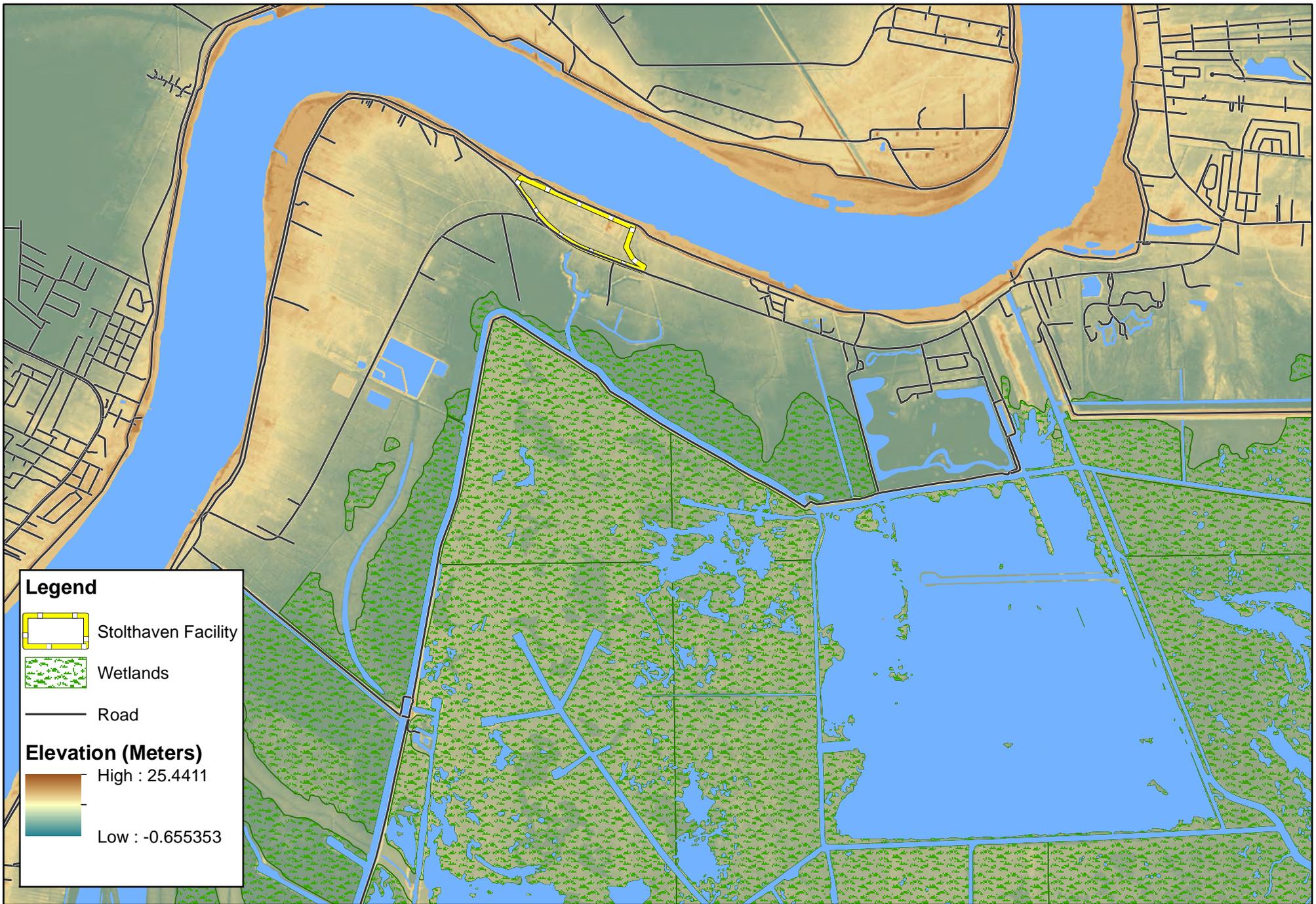
NA = not applicable

* 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.

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**

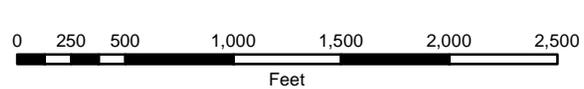


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Legend
 AreaRAE Station

AreaRAE Station Locations
 September 11, 2012



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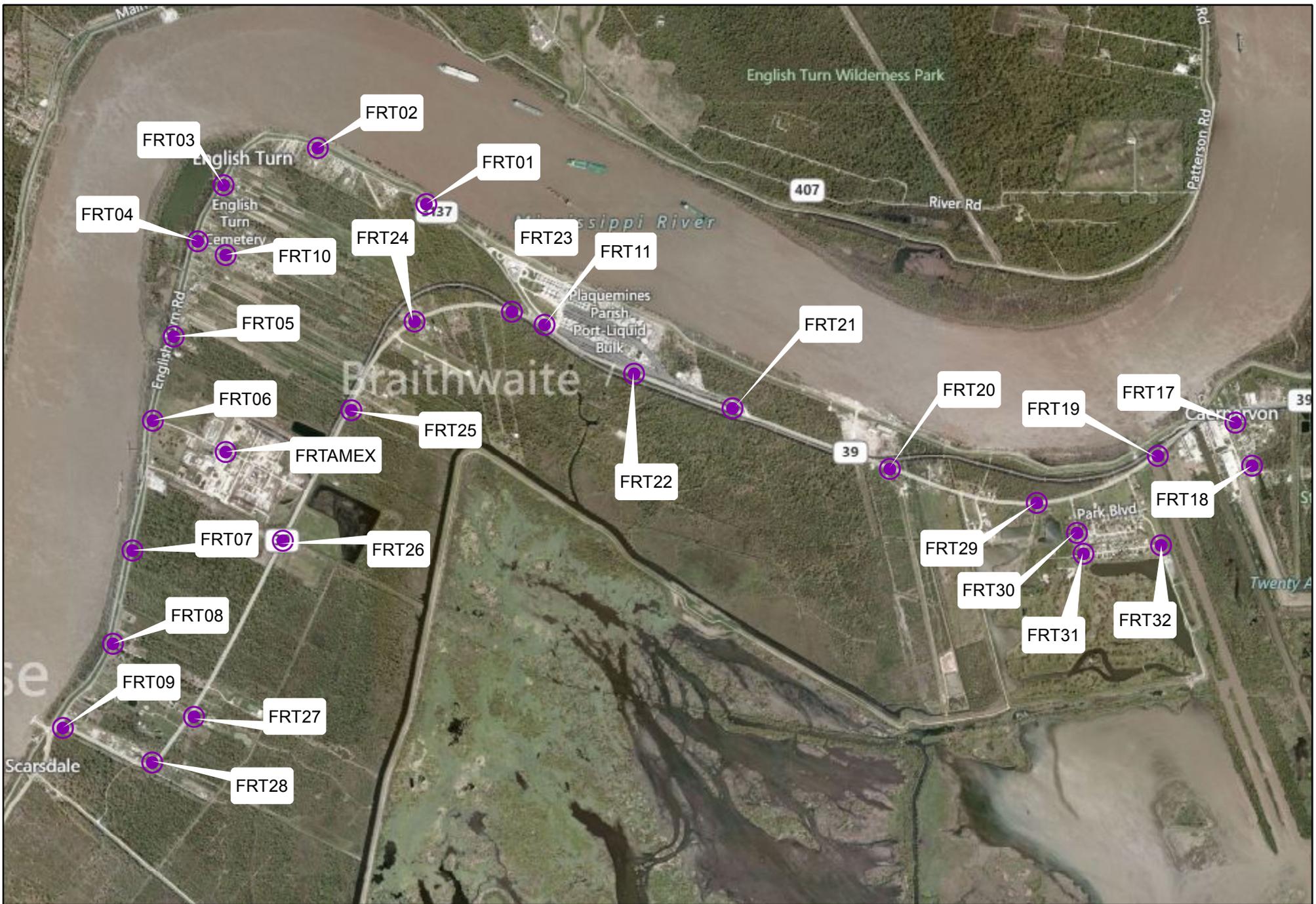
Analytical Air Sampling Locations



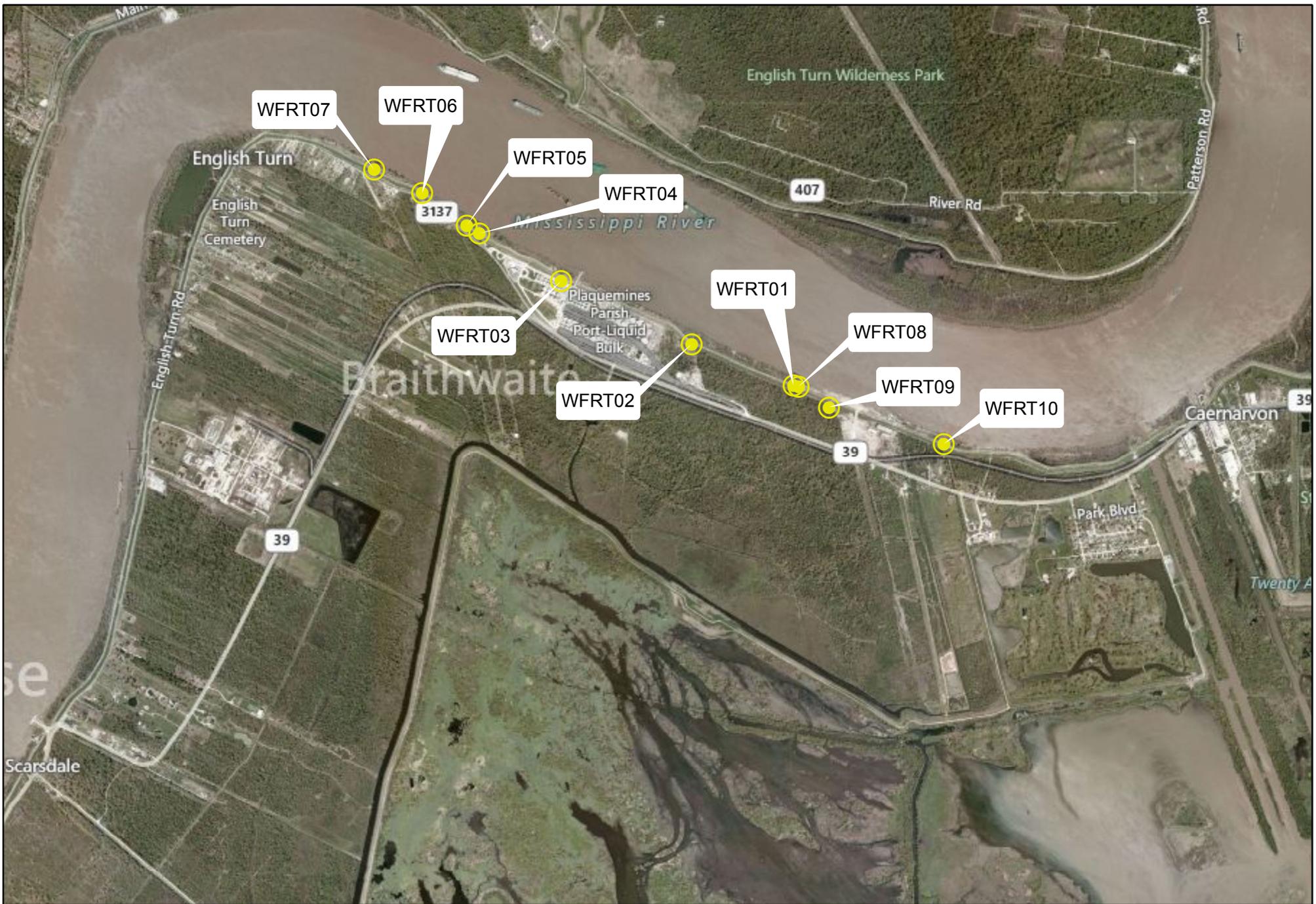
CTEH

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40355

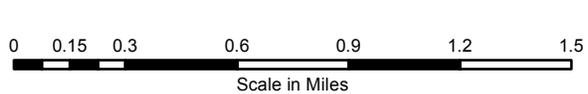
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<h1>Community Fixed Real-Time Monitoring Locations</h1>	<p>Scale in Miles</p>		Garner Environmental Braithwaite, LA
		Project No. 40355	Plaquemines Parish
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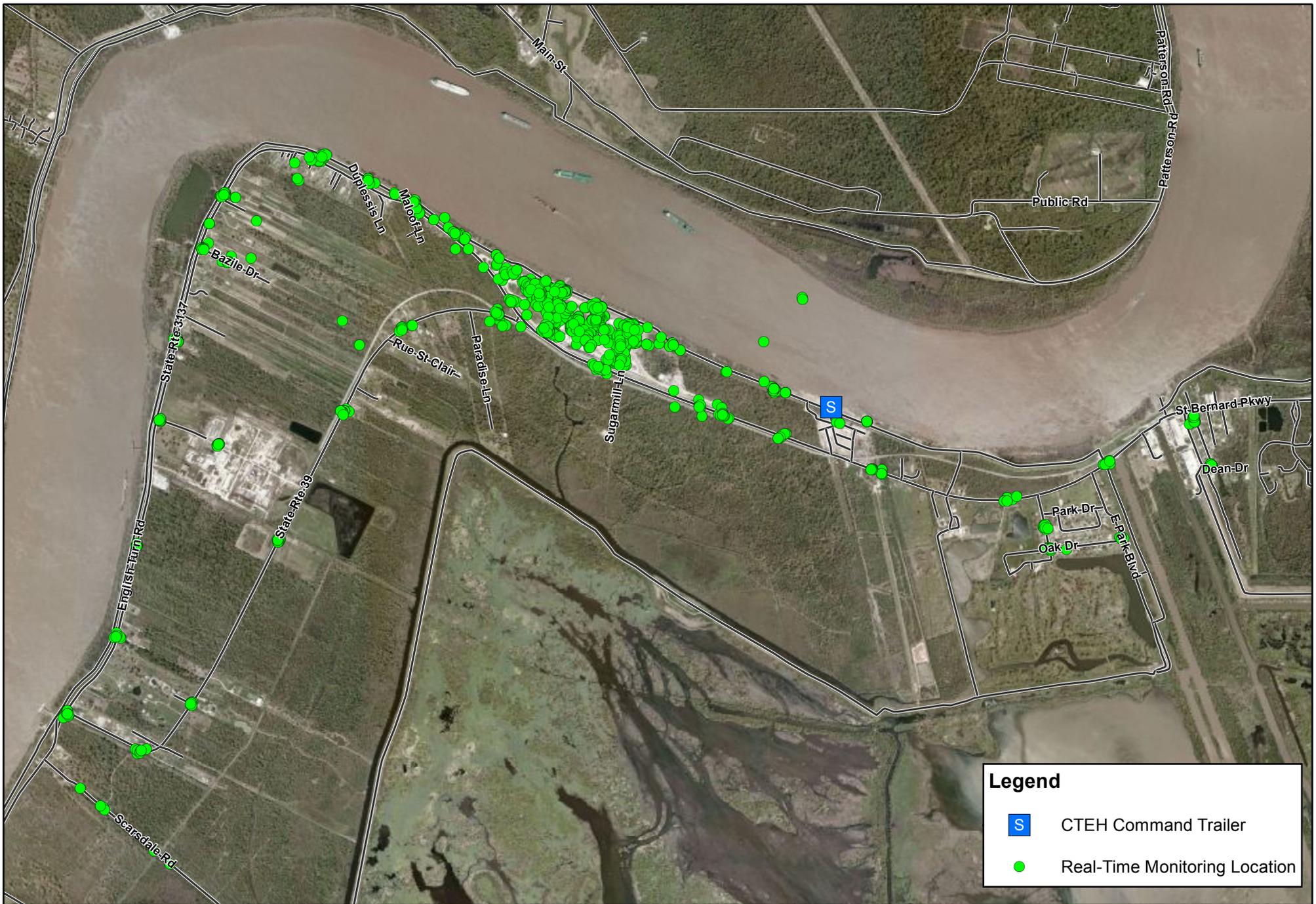


Work Area Fixed Real-Time Monitoring Locations

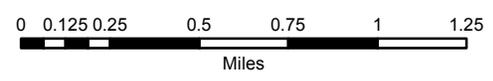


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Real-Time Monitoring Locations
 9/11/12 06:00 to 9/12/12 06:00



Legend

- S CTEH Command Trailer
- Real-Time Monitoring Location

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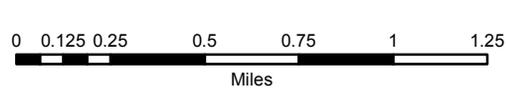


Legend

VOC Concentration

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

**Manually-Logged
VOC Concentrations
9/11/12 06:00 to 9/12/12 06:00**



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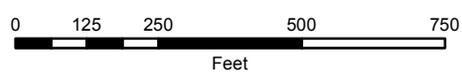


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Methyl Acrylate Reading Location

- Detection
- No Detection

**Methyl Acrylate
Reading Locations**
9/11/12 06:00 to 9/12/12 06:00



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Styrene Reading Location

- Detection
- No Detection

**Styrene
Reading Locations**
9/11/12 06:00 to 9/12/12 06:00



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